

City of Bellevue **Development Services Department Land Use Division Staff Report**

Proposal Name:

East Link South Bellevue Segment

Proposal Address:

I-90 to approximately SE 4th Street, including the

South Bellevue Park and Ride

Proposal Description:

Design and Mitigation Permit approval to construct the East Link regional light rail transit facilities (RLRT facilities) and regional light rail transit system (RLRT system) in the South Bellevue area of the City of

Bellevue.

File Number:

14-134626 LD

Applicant:

Sound Transit

Decisions Included:

Design and Mitigation Permit (Process II)

Planner:

Matthews Jackson Planning Manager

State Environmental Policy Act

Final Environmental Impact Statement (FEIS) was

issued for the East Link RLRT project on July 15,

2011

Director's Recommendation:

Approval with Conditions

Michael A. Brennan, Director

Development Services Department

By: Carel V Hellend

Carol V. Helland, Land Use Director

Notice of Application:

August 28, 2014

Notice of Decision:

January 21, 2016 February 4, 2016

Appeal Deadline:

For information on how to appeal a proposal, visit the Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City Clerk's Office by 5 PM on the date noted for appeal of the decision.

CONTENTS

I.	Request/Proposal Description		Pg. 2
II.	Zoning and ContextF	Pg. 10	
III.	Consistency with Zoning Requirements	Pg. 12	
IV.	Design Standards and Guidelines		Pg. 12
V.	Public Notice and Comment		Pg. 50
VI.	Technical Review		Pg. 53
VII.	State Environmental Policy Act (SEPA)		Pg. 57
VIII.	Changes as a Result of Project Review		Pg. 66
IX.	Decision Criteria		Pg. 66
Χ.	Decision		Pg. 69
XI.	Conditions of Approval		Pg. 69

ATTACHED:

- A. CAC Context Setting Advisory Document
- B. South Bellevue Segment CAC Pre-Development Advisory Document
- C. South Bellevue Segment CAC Design and Mitigation Permit Advisory Document
- D. Wetland, Stream, and Jurisdictional Ditch Delineation Report
- E. East Link Light Rail Extension Critical Areas Report and Mitigation Plan
- F. Plans and Drawings

I. REQUEST/PROPOSAL DESCRIPTION

A. Background

The Central Puget Sound Regional Transit Authority ("Sound Transit" or the "Applicant") is proposing to construct the first phase of Sound Transit 2, a new Regional Light Rail Transit (RLRT) Facility between Seattle and the east side of Lake Washington, known as the East Link Project (East Link). The East Link project was approved by voters under the Sound Transit 2 plan in 2008. Since initial approval in 2008, Sound Transit has worked closely with the City of Bellevue (City) to design a RLRT facility that meets regional and City needs while following the voter-approved alignment. A complete project history, including description of City engagement benchmarks, can be found in Section 1.1 of the project narrative (the "Narrative").

Allowed Use

The proposed East Link RLRT facility is considered a permitted use under LUC 20.10.440 when the City Council has included the alignment location and profile of the RLRT system and facility in a resolution, ordinance, or development agreement (see LUC 20.10.440 "Transportation and Utilities" Footnote 25). The Bellevue City Council passed Resolution No. 8576 including the alignment location and profile on April 22, 2013, and the East Link RLRT facility as proposed in this application is consistent with the Council resolution. The alignment proposed by Sound Transit with this application is allowed subject to approval of a Design and Mitigation Permit. The use is also allowed, as established under LUC 20.10.440, in the Shoreline Overlay District and the Critical Areas Overlay District under LUC 20.25E.060 and LUC 20.25H.050.A. The South Bellevue segment passes through the shoreline overlay district associated with Mercer Slough and its associated wetlands.

B. Review Process

Design and Mitigation Permits are governed by Land Use Code (LUC) 20.25M. The Design and Mitigation Permit is a Process II administrative decision made by the Director of the Development Services Department or designee. An appeal of any Process II decision is heard and decided upon by the City of Bellevue Hearing Examiner.

Scope of Design and Mitigation Permit Approval

Design and Mitigation Review is a mechanism by which the City shall ensure that the design and proposed mitigation for temporary and permanent impacts of an RLRT system and facilities is consistent with:

- a. The Comprehensive Plan including without limitation Light Rail Best Practices; and the policies set forth in LUC 20.25M.010.B.7; and
- b. Any previously approved development agreement or Conditional Use

Permit issued pursuant to subsection B.1 or B.2 of this section; and

 All applicable standards and guidelines contained in City Codes including the procedures related to involvement of a CAC as required by LUC 20.25M.035.

Light Rail Permitting Citizen Advisory Committee (CAC) (LUC 20.25.030.C.2)

Formation of a Citizen Advisory Committee (CAC) for the East Link Project was identified as necessary in the Light Rail Best Practices Final Committee Report dated June 17, 2008. The process to involve the CAC in the review of Design and Mitigation Permits is described below.

CAC Purpose (LUC 20.25M.035.A)

- 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
- 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 ongoing 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 subsection E of this section and LUC 20.25M.040 and 20.25M.050; 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.

CAC Scope of Work (LUC 20.25M.035.C)

The CAC is advisory to the decision maker for the design and mitigation permits, and its scope includes:

- 1. Becoming informed on the proposed RLRT system or facility project;
- Accepting comments from the public during CAC meetings for incorporation into the consolidated advice provided by the CAC to the Regional Transit Authority and the City of Bellevue;
- Participating in context setting to describe the communities, urban and historic context, and natural environment through which the alignment passes;

East Link South Bellevue Segment Staff Report 14-134626 LD Page **4** of **83**

- 4. Providing early and ongoing advice to the Regional Transit Authority on how to incorporate context sensitive design and mitigation into schematic designs for proposed project elements including stations, linear track elements, landscape development, walls (including concrete and masonry and tunnel portal), park and rides, traction power substations and other features of the RLRT system or facility; and
- 5. Providing advisory guidance to permit decision makers as described in more detail below regarding any RLRT system or facility design and mitigation issues prior to any final decision on required Design and Mitigation Permits, including written guidance as to whether the proposal complies with the policy and regulatory guidance of subsection E of this section and LUC 20.25M.040 and 20.25M.050.

CAC Work Product (LUC 20.25M.035.D.3)

The work of the CAC at each review stage culminates in a CAC advisory document that describes the phase of review and CAC feedback. The 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.

The Advisory Document prepared by the CAC for the Context Setting phase of review described in LUC 20.25M.035.C.3 is included with the staff report as Attachment A. The advisory document prepared following the Context Setting Phase of CAC review provided "context" to which Sound Transit was requested to respond when designing elements and features of the East Link light rail system and facility. The advisory document also provided the "context" by which permit compliance is judged in Section IV of the Staff Report below. The CAC advisory document for the South Bellevue Segment Design and Mitigation Permit was provided to the department director on July 2, 2015, and is included with the staff report as Attachment B. The advice provided by the CAC is included in the analysis of consistency with Light Rail Overlay design standards and guidelines contained in Section IV below.

C. Project Description General Bellevue RLRT Alignment

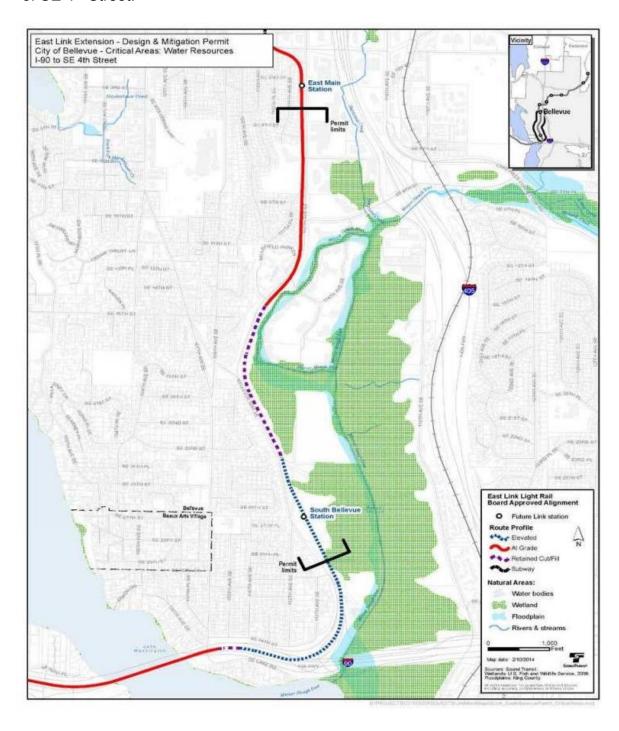
The East Link Project includes approximately 14 miles of light rail track/guide way and 10 stations serving Seattle, Mercer Island, South Bellevue, downtown Bellevue, Bel Red (Bellevue), and the Overlake area in Redmond. Elements of the East Link project located within City boundaries include approximately 6 miles of new light rail track (at grade, below grade, and elevated) from I-90 to SR 520, six stations (at grade and elevated), two parking (park and ride) facilities, and other structures, facilities, and development associated with the RLRT.



South Bellevue Segment

The alignment for the South Bellevue Segment commences at the WSDOT Interstate 90 (I-90) right of way at approximately the intersection of SE 30th Street and Bellevue Way SE, where the alignment is elevated. The elevated alignment continues north on the east side of Bellevue Way SE where it enters the South Bellevue Station on the location of the current South Bellevue Park and Ride. The station includes a parking garage with capacity for approximately 1,500 cars, a surface drop off parking lot, bus and paratransit passenger loading areas, and bus/paratransit layover. The alignment continues north from the station on the east side of Bellevue Way SE and west side of Mercer Slough Nature Park in an elevated guideway that transitions to a lidded trench near the Winters House. The Winters House parking lot access is revised to accommodate access to the blueberry farm and a future blueberry farm retail building. As the alignment proceeds north out of the trench, it follows along the

east side of Bellevue Way SE and 112th Avenue SE at the elevation of the existing street. At this point, 112th Avenue SE will be reconstructed to cross over the light rail guideway to create a grade separation in a road-over-rail configuration. The guideway proceeds north, along the west side of 112th Avenue SE past a signal house, the Surrey Downs Park, and through an at grade crossing of SE 4th Street. Access will be maintained for emergency vehicles only via a moveable gate system across SE 4th Street. The guideway remains at grade to the terminus of the segment approximately 500 feet north of SE 4th Street.



D. South Bellevue Station

Concept: The concept for the South Bellevue Station is to provide a facility that serves as a major gateway to the city and is designed to be integrated with and complementary to the unique location adjacent to Mercer Slough Nature Park. Station and site design is also intended to mitigate potential negative impacts to adjacent neighborhoods and park users by enhanced landscaping, significant tree retention, and extensive art treatments.

<u>Site Description</u>: Design for the South Bellevue Station site was done in collaboration with the city and the public during numerous outreach efforts. Many of the significant design features are intended to provide compatibility with the surrounding built environment and Mercer Slough Nature Park. Design features for the site include internal walkways with connections to public sidewalks on Bellevue Way, the use of Sound Transit's art program STart to enhance the aesthetics of the site and structures, landscape treatments intended to reflect the immediate vicinity, design changes intended to enhance the visual appearance of the garage exterior and elevated station, and the limitation of disturbance to areas already developed with the existing park and ride lot.



Station and Parking Garage Design:

South Bellevue Station Renderings

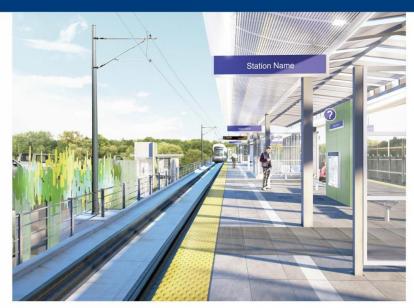
SOUTH BELLEVUE STATION - GARAGE AND STATION PLATFORM RENDERINGS

EAST LINK EXTENSION



NOV. 2014 BUS PLATFORM VIEW

SOUTH BELLEVUE STATION - GARAGE AND STATION PLATFORM RENDERINGS EAST LINK EXTENSION



NOV. 2014 PLATFORM VIEW TO SOUTH





NOV. 2014 S. PARKING ENTRY VIEW

Supporting Structures: The safe and efficient operation of a light rail system relies upon a number of components in addition to the track, guideway, and stations. These essential system elements house the equipment needed to supply power to the vehicles and ensure that warning signals and

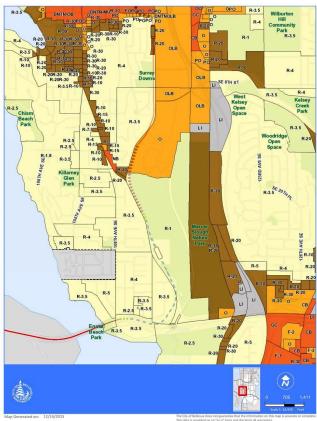
communications equipment function properly.

The traction power substations (TPSS) are located along the alignment and provide electric power needed to operate the light rail. There is one TPSS located south of SE 30th Street in this segment. The overhead contact system (OCS) distribute power supplied from the TPSS to the light rail vehicles. The signal buildings and utility enclosures house equipment used to control safety and operational signals. There are three signal bungalows in this segment, one located just south of Surrey Downs Park, one south of the intersection of SE 30th Street and one signal bungalow/house at SE 4th Street to operate the gate for the emergency access crossing/. The materials used for these supporting structures is intended to compliment the materials used at the station and within the context of their locations along the corridor light rail.

II. ZONING AND CONTEXT

The project alignment for this segment passes through several zoning districts. These districts include R-1, R-3.5, R-4, and Office. The R zones are developed with a mix of low to moderate density single family residential homes. A significant amount of this segment located within the R-1 zone is comprised of the Mercer Slough Nature Park which includes passive and active recreational opportunities. The majority of the area zoned Office is developed with the Bellefield Office Park.

Zoning Map



Southwest Subarea Context (LUC 20.25M.050.B.4)

In addition to complying with all applicable provisions of the Southwest Subarea Plan, the design intent for the RLRT system and facilities that pass through this subarea is to contribute to the major city gateway feature that already helps define Bellevue Way and the 112th corridor. The RLRT system and facility design should reflect the tree lined boulevard that is envisioned for the subarea, and where there are space constraints within the transportation cross-section, design features such as living walls and concrete surface treatments should be employed to achieve corridor continuity. The presence of the South Bellevue Station, when viewed from the neighborhood above Bellevue Way to the west as well as from park trails to the east, should be softened through tree retention where possible and enhanced landscaping and "greening features" such as living walls and trellises. Design features for the alignment passing through this subarea should include landscaping that provides a dense screening when viewed from residential areas and visual relief along transportation rights of way while maintaining sightlines that ensure user safety. The Land Use Code states that the character of this area is defined by:

- a. The expansive Mercer Slough Nature Park;
- b. Historic references to truck farming of strawberries and blueberries;
- Retained and enhanced tree and landscaped areas that complement and screen transportation uses from residential and commercial development; and
- d. Unique, low density residential character that conveys the feeling of a small town within a larger City.

SOUTH BELLEVUE STATION - NEIGHBORHOOD CONTEXT PLAN EAST LINK EXTENSION



Finding: The CAC advised that the following additional context and design considerations should be considered when evaluating the East Link project in the Southwest Bellevue Subarea for context sensitivity during future CAC and permit review phases. The following items pertain to the South Bellevue Segment.

- a. The alignment transition from the I-90 right-of-way to the South Bellevue Station should be reflected as a "Grand Entry" into Bellevue. This gateway area defines Bellevue as a "City in a Park." The gateway serves a number of functions, and should appropriately greet the different users that pass through it, including transit riders, vehicles, residents, bicyclists from the I-90 trail, fish (specifically salmon), and wildlife.
- b. The South Bellevue Station garage should incorporate green/living walls and trellis structures on the roof level in addition to interesting concrete surface treatments to break down mass and scale, and to help blend the garage into the Mercer Slough Nature Park when viewed from the neighborhoods to the west and the park to the east.

III. CONSISTENCY WITH ZONING REQUIREMENTS

Use (LUC 20.25M.030.A)

The proposed East Link RLRT facility is considered a permitted use under LUC 20.10.440 if the City Council has approved the facility system by resolution, ordinance, or development agreement (see LUC 20.10.440 "Transportation and Utilities" Footnote 25). The Bellevue City Council has approved the East Link RLRT facility and alignment through Resolution No. 8576, therefore, it is an allowed use subject to design and mitigation review and shoreline permitting.

IV. DESIGN STANDARDS AND GUIDELINES

20.25M.040 RLRT System and Facilities Development Standards

A. Purpose and Applicability

The RLRT system and facilities are a unique form of essential public facility that is linear in nature, passing through numerous land use and overlay districts, following a route into and out of Bellevue that connects multiple jurisdictions and regional employment and cultural centers. The purpose for including development standards in the Light Rail Overlay is to provide specific requirements for mitigation of impacts created by an RLRT system or facility in land use districts where overlay requirements do not exist or where overlay requirements did not contemplate a light rail use.

B. Dimensional Requirements

Height Limitations – Determined Based on Use Approval Process.

a. Use Approved through Development Agreement. When an RLRT system or facility use has been permitted outright in a City Council resolution, ordinance, or development agreement pursuant to LUC 20.25M.030.B.1, the heights approved by Council action shall be permitted.

Finding: The Bellevue City Council passed Resolution No. 8576 including the alignment and profile for the East Link segments through Bellevue on April 22, 2013. The heights for the structures within this permit are consistent with the intended heights of structures contemplated by Resolution No. 8576 and therefore satisfy Land Use Code requirements for height. Where the RLRT system or facility is proposed to exceed the height limit of the underlying land use district, the Regional Transit Authority must demonstrate:

- i. The requested increase is the minimum necessary for the effective functioning of the RLRT facility; and
- ii. Visual and aesthetic impacts associated with the RLRT facility have been mitigated to the greatest extent feasible.

The South Bellevue Station is located in the R-1 zone. The maximum height in this zone is 35 feet from average existing grade to the peak. The proposed South Bellevue Station and associated parking garage will exceed the base height limit allowed in the code. The station platform is 35.5 feet above average existing grade with a canopy extending approximately another 20 feet. The associated parking garage will also extend approximately 55 feet above the existing grade.

Sound Transit states that the station is elevated to connect with the elevated guideway as it leaves the I-90 right of way. The guideway remains elevated until it leaves the station in order to provide grade separated access for buses and cars beneath the guideway, which was specifically contemplated in Resolution No. 8576. The height increase was minimized to the extent possible without impairing the effective functioning of the facility or the ability for large vehicles to pass safely beneath it.

Visual and aesthetic impacts are largely mitigated by the difference in elevation between the station and parking garage and the elevation at Bellevue Way. There is a grade change of 20 to 23 feet from the street to the structures. The first two levels of the parking garage are located partially below ground on the west side to reduce the overall height impact. The station has been designed to accommodate current and future parking demand within the limits of the developed existing park and ride facility to limit impacts within adjacent neighborhoods.

2. Setbacks.

- a. Requirement. The minimum setback for structures shall apply as set forth for each land use district. In an RLRT transition area, a 30-foot setback is also required from RLRT facility structures and from at-grade or elevated track.
- b. Exceptions. The following RLRT facility components are exempted from the requirement to provide a setback.
 - ii. Noise walls, fences and retaining walls; and
 - ii. Structures allowed in landscape screening areas and installed consistent with the requirements of subsection C.3.b of this section.

Finding: The South Bellevue Segment of East Link is located within the RLRT transition area, therefore, a 30-foot setback is required from RLRT facility structures and from at-grade or elevated track. The plans submitted in support of this permit application verify that proposed RLRT facilities and structures as well as the track satisfy the minimum 30 foot setback requirement. In addition to the setback requirement, specific landscape planting requirements are also applicable in the RLRT transition area. See Section C below for a discussion of landscape requirements.

3. Structure Separation Requirement

In an RLRT transition area, for at-grade or elevated track, a minimum separation of 60 feet is required between the edge of the track-way nearest the existing residential primary structure and an existing residential primary structure.

Finding: The portion of the South Bellevue Segment which runs along the west side of 112th Ave SE is located in the RLRT transition area and requires 60 feet of separation from any portion of an existing primary residential structure to the edge of the nearest track-way. **See Section XI for a related condition of approval.**

C. Landscape Development Requirements (LUC 20.25M.040.C)

1. General

Applicability

In Light Rail Overlay District areas not located within the Downtown Overlay District or Bel-Red Overlay District, landscape development for an RLRT system or facility shall be provided as described in this subsection.

Purpose/Intent

- Purpose/Intent of the Landscape Development Requirements.
 - Landscape screening is intended to provide a dense sight barrier to significantly separate and obscure higher intensity uses from lower intensity uses.
 - Landscape buffers are intended to provide visual relief and softening of transportation facilities where preservation of sight lines is important.
- Additional Provisions.
 - All required landscape development shall be context sensitive and shall be reviewed by the CAC as provided for in LUC 20.25M.035.
 - ii. RLRT systems and facilities proposed under the terms of this overlay should to the maximum extent feasible retain existing significant vegetation in order to soften the visual impact on adjacent properties.
 - iii. All landscape screening and buffers shall comply with the provisions contained in LUC 20.20.520.F.5 through F.8, G, I and J.
 - iv. Landscape development required by this section shall be installed and maintained pursuant to the guidance set forth in the Environmental Best Practices and Design Standards (Bellevue Parks Department 2006), now or hereafter amended.

Finding: As discussed in the context setting CAC Advisory Document, the CAC had extensive review of proposed landscape elements and provided advice for modifications to be incorporated into construction plans. As a priority, the city has worked collaboratively with Sound Transit to retain as much existing vegetation and trees to provide visual relief and to soften the visual impacts of this linear project. According to the updated E320 Tree Removal and Mitigation Analysis Addendum submitted by Sound Transit as part of this application, the following tree impacts and mitigation are proposed.

Table 3.0-1 - E320 Tree Removal and Mitigation Summary

E320 Design Package	Light Rail Overlay Areas	Critical Areas		Critical Area Buffer	
Tree Removal		Coniferous	Deciduous	Coniferous	Deciduous
Total Trees			2,565		
Trees by District	1,292	27	318	173	755
Total Trees Removed			1,468	A time Commission	
Trees Removed by District ¹	779 ² (+14 hazard)	15	66 (+1 hazard)	138 (+2 hazard)	470 (+27 hazard)
Estimate of Total Trees Necessary for Mitigation ³		one de conse	9	95	NOCARUIN 1846 Separt o

Of the 29,326 diameter inches of existing tees located within the Light Rail Overlay Area, 15,948 diameter inches will be removed by the project and 13,378 diameter inches will be retained.

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

E320 Design Package	Corridor, Station, and Park Mitigation Plantings	Environmental Mitigation/Restoration Area Plantings ¹		
Tree Replacement		Coniferous	Deciduous	
Proposed Trees to be Planted ²	847	928	1,731	
Fotal Trees to be Planted		3,506		

The distribution of replacement trees is described as follows:

- 1) Sweyolocken Mitigation site 362 conifers and 1,132 deciduous trees
- 2) RLRT Corridor Plantings include 197 conifers and 307 deciduous trees
- 3) South Bellevue Station and the adjacent park include 100 conifers and 103 deciduous trees
- 4) At the Winters House and Surrey Downs Park 55 coniferous trees and 85 deciduous trees

Landscape Screening of Nonlinear Facility Components

Type and Minimum Depth of Landscaping Screening

- Traction power substations (TPSS) and other above ground nonlinear RLRT facility components shall be screened with 10 feet of Type I landscaping pursuant to the requirements of LUC 20.20.520.G.1.
- ii. Park and ride (public parking lot not serving a primary use) and storage track and support facilities shall be screened with 15 feet of Type I landscaping pursuant to the requirements of LUC 20.20.520.G.1.
- Maintenance of Landscape Screening. Landscape screening is required to be maintained by the Regional Transit Authority for the life of the project. Maintenance of landscape screening may be reassigned pursuant to voluntary written agreement filed with the Development Services Department and King County Recorder's Office or its successor agency.

Finding: Although the RLRT facility is subject to the requirements of LUC 20.25B.040, the TPSS and South Bellevue Station are located in the R-1 zone which does not have to provide a transition area buffer to the adjacent property. Therefore, the requirements above from LUC 20.25M.040 are applicable.

There is one TPSS in this segment just south of SE 30th Street adjacent to the Sweyolocken Pump Station. This TPSS is in WSDOT ROW and outside of review limits for this permit. However, the structure is within an enclosure and it has landscaping around the perimeter. Although the TPSS does not have the full 10 feet of Type I landscaping, it is located within an enclosure which allows the landscaping to be modified or eliminated. Visual impacts are also mitigated by topography as the TPSS sits below the street level.

The South Bellevue Station site is screened with significant landscape improvements. However, Sound Transit has requested an Alternative Landscape Option (ALO) for the 15 feet of required landscaping along Bellevue Way SE. Refer to discussion of alternative landscaping in this section of the staff report. The station area behind the sidewalk includes a bermed landscape buffer which includes, but is not limited to, the following plant material: Venus Dogwood (Cornus Kousa X Nuttallii 'Venus'), Mountain Hemlock (Tsuga Mertensiana), Maidenhar Tree (Ginkgo Biloba 'Fastigiata'), Swordfern, Evergreen Huckleberry, and Sunshine Blueberry.

Landscape Screening and Buffers Adjacent to Linear Alignment

- Type and Minimum Depth of Landscape Screening and Buffers.
 - i. Light rail alignment abutting transportation right-of-way shall include frontage landscaping to soften, and separate where feasible, pedestrian facilities from light rail and transportation uses.

- (1) Pedestrian facilities located between the light rail use and the transportation right-of-way shall be buffered with four feet of frontage landscaping installed in a planter strip pursuant to the following standards:
 - (a) Preferred location of the planter strip is between the light rail alignment and the sidewalk, but may be relocated to the opposite edge of the sidewalk to avoid conflicts between required street trees and the light rail overhead catenary system or underground utilities.
 - (b) Street trees shall be installed in the planter strip and shall be at least three inches in caliper, planted three feet from any street curb, and a maximum of 25 feet on center unless modification is necessary to meet sight distance requirements of BCC 14.60.240.
 - (c) Shrubbery, groundcover and other approved plantings, except turf, are required in the planter strip along the length of the frontage.
- (2) Pedestrian facilities located between the light rail use and property developed in a nonresidential or residential use shall be buffered with four feet of frontage landscaping installed in a planter strip pursuant to the following standards:
 - (a) Preferred location of the planter strip is between the light rail alignment and the sidewalk, but may be relocated to the opposite edge of the sidewalk to avoid conflicts between required street trees and the light rail overhead catenary system or underground utilities.
 - (b) Planter strips located adjacent to landscape screening required pursuant to subsections C.3.a.ii and iii of this section are not required to be physically separated from the required landscape screening area.
 - (c) The requirements of subsections C.3.a.i.(1)(b) through (c) of this section shall be met irrespective of the planter strip location.
 - ii. Outside an RLRT transition area, light rail alignment abutting private property shall be screened with 20 feet of Type I landscaping which meets the requirements of LUC 20.20.520.G.1.
 - iii. Within an RLRT transition area, light rail alignment

abutting private property shall be screened with 30 feet of Transition Area Design District landscaping which meets the planting requirements of LUC 20.25B.040C.2.c. Landscape screening provided under the terms of this subsection shall be placed within the required 30-foot setback from the RLRT track alignment.

Finding: A combination of planter strips and other landscaping has been proposed by Sound Transit in compliance with these requirements except as noted in the ALO request. Planter strips have been provided along the linear corridor alignment and as mitigation for the ALO request the city has worked with Sound Transit to identify additional enhancement areas to provide an equal or better result based on context. Due to a variety of reasons including City of Bellevue Transportation lighting criteria, constraints within the right of way section, and clear zone requirements for light rail tracks and guideway, a request to modify the requirement for street trees is included as part of the ALO. Refer to ALO discussion below.

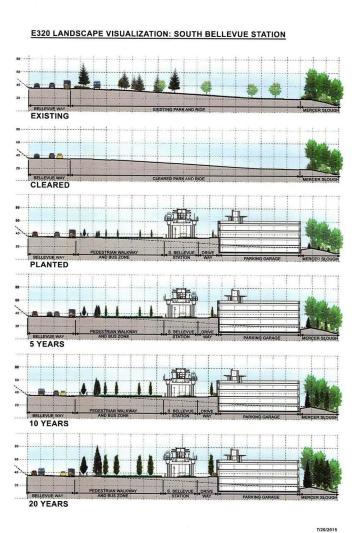
Sound Transit has provided a 30 feet of Transition Area Design District landscaping within the RLRT transition area adjacent to the residential development on the west side of 112th Ave SE north of the road over rail crossover. Placement of trees was done in consideration of light rail tree clear zone requirements. Trees to be planted in the buffer include Western Red Cedar (Thuja Plicata), Douglas Fir (Pseudotsuga Menziesii), Greenspire Littleleaf Linden (Tilia Cordata 'Grenspire"), and Red Sunset Maple (Acer Rubrum 'Franksred').

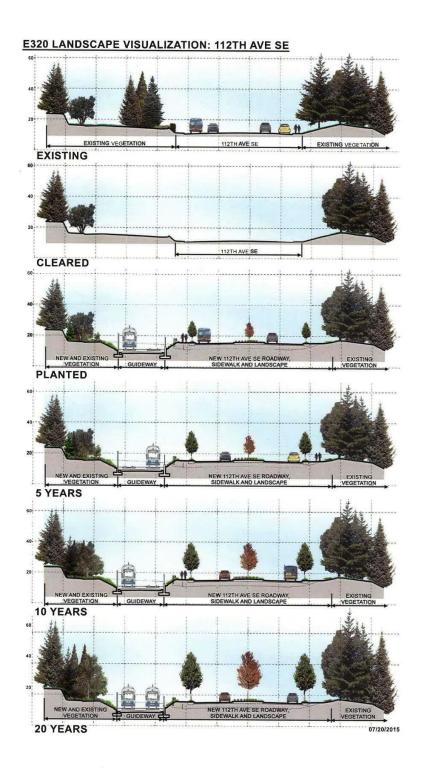
- Non-Plant Material Allowed in Landscape Buffer and Screening Areas.
 Fences, walls, noise attenuation barriers, sidewalks and multi-purpose
 paths, structures with a footprint of 100 square feet or less and less than
 10 feet in height, and landscape features such as decorative paving,
 grating, sculptures, or rock may be located within a required landscape
 buffer or screening area; provided, that the area devoted to such a
 feature may not exceed 20 percent of the required area.
- Ownership of Landscape Screening. Landscape screening located within the required 30-foot setback from the RLRT track alignment is owned by the Regional Transit Authority. The landscape screening located outside the required setback from the RLRT track alignment may be located on property owned in fee by a Regional Transit Authority, on an easement, or on private property where access entry was secured for landscape installation.
- Maintenance of Landscape Screening. Landscape screening is required to be maintained by the Regional Transit Authority for the life of the project. Maintenance of landscape screening may be reassigned to the underlying property owners pursuant to a voluntary written agreement filed with the Development Services Department and King County

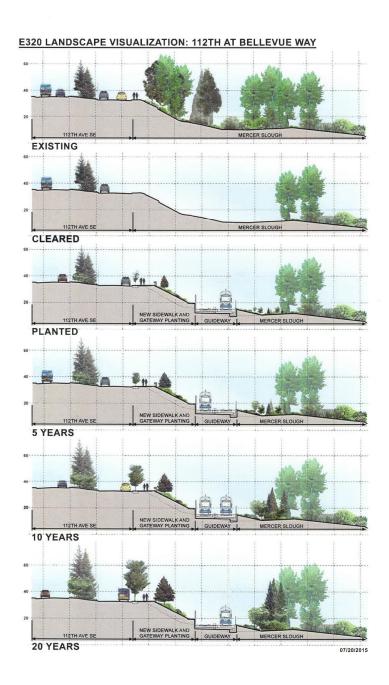
Recorder's Office or its successor agency.

Finding: The allowed non-plant material that is located within landscape areas constitutes much less than 20 percent of each area. There are numerous noise walls located within the 30 foot RLRT Transition Area Buffer. Sound Transit will own the landscaping in the 30 foot buffer and maintenance will be provided by Sound Transit unless a voluntary written agreement has been filed. **See related conditions of approval in Section XI.**

At the request of the city, Sound Transit has provided visual simulations of the growth of proposed landscaping over a period of 20 years.







Alternative Landscape Option (ALO) (20.25M.040.C.4)

Alternative landscape screening and buffering requirements may be approved by the Director if the requirements of LUC20.20.520. J are met and the following supplemental requirements are met.

Sound Transit has requested to modify the 15 foot Type I landscape requirement per LUC 20.25M.040.C.2.ii at the South Bellevue Station site. Due to site and design constraints, only four feet of landscape screening could be provided along the street frontage on Bellevue Way SE. In addition to the reduction in the landscape buffer at the street frontage, there is an isolated section of landscaping on the north side of the station along Bellevue Way SE in the multi-purpose path that is less than 15 feet wide.

Per LUC 20.25M.040.C.3.1.i.1.b, street trees are required at a maximum of 25 feet on center unless a modification is necessary to meet sight distance requirements. This translates to a requirement of 435 trees along Bellevue Way SE and 112th Ave SE within the South Bellevue Segment. Sound Transit has proposed to plant 214 street trees, 221 trees less than that strictly required by the code, due to several limiting factors which include the following:

- Bellevue Transportation requirements indicate a minimum 25 foot clearance between street trees and street lights. This requirement eliminates approximately 47 street trees.
- Bus stops along the alignment require a clear zone eliminating approximately 4 street trees.
- Utility conflicts along the alignment require eliminating approximately 6 street trees.
- Proximity to the light rail tracks and overhead contact wires along the alignment require a clear zone eliminating approximately 110 street trees.
- Roadway intersections and sight distance requirements eliminate approximately 14 street trees.
- Crosswalks along the alignment require eliminating approximately 2 street trees.
- Driveways along the alignment require eliminating approximately 17 street trees.
- Between station WB 498+50 and WB 500+50, a planting strip is not provided over the lid, eliminating approximately 5 street trees.
- Between station WB 474+00 and WB 479+00, a planting strip is not provided along the "Y", eliminating approximately 16 street trees. This area may be revised as part of an Alternative Landscape Option to include larger trees behind the sidewalk.

Finding: Sound Transit has collaborated with the city to develop alternative landscaping to mitigate for these reductions that provides a context sensitive result. The requested modification is reasonable in light of city requirements and the Sound Transit Board and City Council approved facilities and alignment. Providing the full 15 feet of street frontage landscaping would inhibit the bus circulation within the station and would require additional property acquisition which would impact critical areas in the vicinity of mixed use path. To mitigate for the reduction of the 15 street frontage landscaping, Sound Transit has provided additional landscape improvements within the South Bellevue Station site and at the Winters House.

To mitigate for the reduction in street trees, Sound Transit has proposed to plant 153 new trees as well as other streetscape improvements as follows:

- In the meadow area just south of the south station entrance on Bellevue Way plant 3 mature (approximate height of 15-20 feet) Sequoia specimen trees.
- At the south east side of the Bellevue Way / 112th Ave SE intersection (Wye) locate clusters of 8 foot to 10 foot tall Shore Pines (20 total) immediately behind the multipurpose path instead of using a generic cross hatch symbol representing restoration plant material. Also identify locations and types of large native shrubs and groundcover located between clusters of Shore Pines.
- In the existing 112th Ave SE roadway median east of Bellevue Way, replace existing plant material/groundcover and add a new irrigation system (29,845 square feet). Remove and replace 2 trees based on City request. Add 108 new trees to infill gaps in the median planting.
- At the south east corner of the SE 8th Street/112th Ave SE intersection add 8 new street trees on city ROW. Provide new irrigation and relocate median irrigation controls to this area.
- North of the SE 8th intersection, for a distance of approximately 425 linear feet, rebuild sidewalk along east side of 112th Ave SE a minimum of 6 feet (wide enough to avoid silva cell installation) behind curb and plant 14 new street trees. Existing trees back of sidewalk to remain where feasible.

These five areas of landscape enhancements along the street frontage (including 153 new trees) in addition to the significant new tree planting adjacent to the light rail alignment (559 new trees: 157 coniferous and 402 deciduous trees) provide a significant alternative to the quantity of street trees required by the strict application of the code.

In order to maintain the tree lined boulevard characteristics defined in the CAC Context Advisory Document and to achieve a gateway design, the proposed ALO was developed in a manner meeting these goals. The installation of specimen trees near the South Bellevue Station was identified in CAC advice. The holistic treatment of the median at the Y of Bellevue Way and 112th Ave SE and areas in the vicinity will provide an enhanced opportunity to provide a gateway at this prominent intersection. The landscaping that will result from this ALO is equal to or better than the strict application of the code because of the context of the immediate environment. See Section XI for related landscape planting and maintenance conditions of approval.

CAC Design and Mitigation Permit Advice

Landscaping

- The CAC recommends the inclusion of a living wall, green roof, or
 planter boxes with hanging vegetation be installed on the upper levels
 of the north, south, and west sides of the garage to help soften the
 edges of the structure as well as communicate the idea of a grand
 entry into Bellevue. The addition of paint that complements any living
 vegetation treatment is also recommended by the CAC.
- The CAC recommends that additional landscaping options to help screen exposed noise walls should be included in the landscape plans. This should include a climbing vegetation option where there is limited space for additional landscaping.
- The CAC recommends that Sound Transit include additional appropriate landscaping to screen the guideway.
- The CAC recommends that more mature vegetation be incorporated into the design of the light rail corridor. This can be achieved by planting some large specimen trees at the point where the trains enter the South Bellevue Station (meadow), on the east side of the Y of Bellevue Way and 112the Ave SE, and in the median in 112th Ave SE.
- The CAC recommends the installation of landscaping around the light poles on the roof deck of the parking garage.

Finding: In order to satisfy CAC advice recommending more mature evergreen vegetation and the inclusion of featured or signature tree(s), Sound Transit has proposed to plant three large Sequoia trees in the meadow south of the South Bellevue Station. This permit has been conditioned to require the installation of a living wall or green roof for the South Bellevue Station parking garage. Additional landscaping, as

discussed in the ALO request also satisfies CAC advice. The City of Bellevue Development Services and Parks Department will coordinate with Sound Transit for additional landscape improvements. **See Section XI for a related condition of approval.**

Fencing

Fencing shall be required to meet the applicable requirements of LUC 20.20.400 when overlay standards and/or design guidelines have not been incorporated by reference in LUC 20.25M.010.D. Any fencing shall be context sensitive.

Security and safety fences should be designed to meet City's codes.
 These fences should be designed to minimize blocked views to maintain the idea of a city in a park.

Finding: No prohibited fences will be approved with this application. The required security fencing has been designed to have a more residential character and color.

Light and Glare

- To protect adjoining uses and vehicular traffic in the right-of-way, the following provisions shall apply to the generation of light and glare from RLRT facilities:
 - a. All exterior lighting fixtures in parking areas and driveways shall utilize cutoff shields or other appropriate measures to conceal the light source from adjoining uses and rights-of-way. Other lights shall be designed to avoid spillover glare beyond the site boundaries.
 - b. Interior lighting in parking garages shall utilize appropriate shielding to prevent spillover upon adjacent uses and the right-of-way.
- The CAC recommends light standards on the deck of the South Bellevue Station Garage are as low as feasible to avoid light pollution into the neighborhoods in the vicinity.

Finding: In order to prevent light spillover or trespass Sound Transit is using LED lights for their poles that are designed with technology to reduce backlight and to focus light in a fixed area on the surface of the garage.

Mechanical Equipment

Mechanical equipment shall be required to meet the applicable requirements of LUC 20.20.525 when overlay standards and/or design guidelines have not been incorporated by reference in LUC 20.25M.010.D. Any mechanical equipment screening shall be consistent with the landscape

development requirements of subsection C of this section and shall be context sensitive. **See Section XI for a related condition of approval.**

Parking and Circulation

- 1. Minimum/Maximum Parking Requirements. RLRT facilities do not generate parking demand that requires the provision of accessory parking. The provisions of LUC 20.20.590 shall not apply.
- 2. Employee Vehicle Parking. Parking spaces shall be provided as necessary to accommodate vehicles of security and operational personnel who service an RLRT facility.
- Parking and Circulation Improvements and Design. RLRT facilities that provide parking for the public shall meet the requirements of LUC 20.20.590.K.
- 4. Parking Management Plans. The Regional Transit Authority shall submit a plan for managing parking and drop-off issues that arise when each station becomes operational, irrespective of whether parking is provided.

Finding: The parking garage will provide approximately 1,500 parking stall within a five level garage. These stalls are designed to satisfy the parking area and circulation improvements and design requirements of LUC 20.20.590.K. Surface stalls for drop off and bus layover are designed to satisfy the function of the facility. **See Section XI for a related condition of approval requiring a parking management plan.**

Recycling and Solid Waste Collection

- 1. Solid waste and recyclable material collection areas shall be provided for workers maintaining and operating an RLRT facility consistent with the terms of LUC 20.20.725.
- Solid waste and recyclable material collection receptacles shall also be provided for the public who access the station and park and ride facilities of an RLRT system.
- The CAC recommends that Sound Transit work with its sustainability group to evaluate a system wide compost collection bin option at its stations.

Finding: Sound Transit provides both waste and recycling bins at each of their stations, including the South Bellevue Station. These are available to both workers and members of the public and are typical small ground-based units that do not require additional screening.

Critical Areas

- The CAC recommends that Sound Transit work collaboratively with the City
 of Bellevue to develop public information sign(s) at the South Bellevue
 Station that would inform transit users and visitors of wildlife and habitat
 within Mercer Slough Nature Park.
- The CAC recommends that Sound Transit adhere to all best management practices and complies with all applicable local, state, and federal regulations related to wildlife including but not limited to migratory birds

Resources Defined/Intent

As required by the Washington State Growth Management Act (RCW 36.70A) the City of Bellevue regulates critical areas through the Critical Areas Overlay District under City of Bellevue Land Use Code (LUC) section 20.25H. The Critical Areas Overlay District is a mechanism by which the City recognizes the existence of natural conditions which affect the use and development of property. Through this part, the City designates and classifies ecologically sensitive and hazard areas and imposes regulations on the use and development of affected property in order to protect functions and values and ensure public health, safety and welfare. Critical Areas promulgated by RCW 36.70A and established by LUC 20.25H include Streams, Wetlands, Geologic Hazard Areas, Areas of Special Flood Hazard, Shorelines, and Habitat for Species of Local Importance.

Several significant segments of the South Bellevue (E320) segment cross through or are adjacent to regulated critical areas and their buffers. This section of the staff report outlines the results of extensive field study, identifies anticipated impacts, presents proposed mitigation measures as required to offset impacts, and imposes conditions intended to ensure appropriate long term objectives and desired outcomes are achieved.

Critical Areas Land Use Permit

Although the proposed project will impact critical areas and critical area buffers a Critical Areas Land Use Permit is not required. In accordance with LUC 20.25M.030.C.3.j when a proposed RLRT facility (or associate infrastructure and mitigation) is to be located wholly or partially in a defined and regulated critical area (or buffer), a Critical Areas Land Use Permit is not required and analysis of project compliance with LUC 20.30P is not applicable. Compliance with the requirements of LUC 20.25H (Critical Areas Overlay District) shall be demonstrated and bundled with the project Design and Mitigation Permit. In addition to performance standards and criteria established in the Critical Areas Overlay District, compliance with criteria established in LUC 20.25M.030.C.3.j is also required.

Shoreline Substantial Development Permit/Shoreline Critical Areas In addition to the restrictions on development imposed through the Critical Areas Overlay District, segments of the project are located within areas regulated as Shorelines and are subject to the rules of LUC 20.25E (Shoreline Overlay District). In many instances, there is overlap and portions of the project are regulated under both the rules of the Shoreline Overlay District and the Critical Areas Overlay District. To address compliance with the State of Washington Shoreline Management Act (SMA) and the City of Bellevue Shoreline Master Program, Sound Transit applied for and received Shoreline Substantial Development Permit (SSDP) and Shoreline Variance (Variance) for the East Link project. SSDP and Variance permits were issued by the City of Bellevue Development Services Department (DSD) on November 6, 2014 under files 13-135764-WG and 13-135765-LS. Impacts regulated under Shoreline Overlay District rules are addressed in these permits. The conditions of approval of the SSDP and Variance are incorporated by reference into this Design and Mitigation Permit.

In all cases, the findings and conditions of approval associated with this Design and Mitigation Permit regarding protection of Critical Areas matches or exceeds the requirements of the SDDP and Variance permits. The table below outlines how impacts to Critical Areas resources are addressed under the Shoreline Permits and Design and Mitigation Permit. Impacts regulated under Shoreline Overlay District rules are addressed in the SSDP/Variance staff report. Impacts regulated under Critical Areas Overlay District rules are addressed in this project Design and Mitigation Permit staff report.

Impacts by District

	Impact Shoroline Critical Areas			
Impact	Shoreline Overlay District Addressed in Shoreline Substantial	Critical Areas Overlay District* Addressed in Design and Mitigation Permit		
	Development Permit			
Shoreline Wetland Impacts	Х	Х		
Non-Shoreline Wetland Impacts		х		
Wetland Buffer Impacts		Х		
Stream Impacts		Х		
Stream Buffer Impacts		Х		
Shoreline Buffer Impacts		Х		
Shoreline Overlay Impacts	Х			
Floodplain Impacts		Х		
Geologic Hazard Area Impacts		Х		
Tree Removal Impacts	Х	Х		

^{*}Impacts regulated under the Critical Areas Overlay District are addressed in the project Design and Mitigation Permit as required by LUC 20.25M.

Critical Areas Field Study Reports and Critical Areas Report Defined

i. Wetland, Stream, and Jurisdictional Ditch Delineation Report

The South Bellevue (E320) Segment design package intersects wetland resources, stream resources, geologic hazard areas, and habitat for species of local importance. The applicant, Sound Transit, has consulted with Anchor QEA (a qualified consultant - LUC 20.25H.030, LUC 20.25H.250.B, and LUC 20.50.042) to develop a Wetland, Stream, and Jurisdictional Ditch Delineation Report (the 'Delineation Report' - See Attachment D) that documents the presence, location, and quality of stream and wetland critical areas within proximity of the proposed Sound Transit RLRT facility. The Delineation Report was developed for the entirety of the Sound Transit East Link RLRT alignment, from Lake Washington/I-90 to the Redmond border and its associated design packages. This report also includes a summary of jurisdictional ditches, although this section is not relevant to City of Bellevue permit review (the City of Bellevue Land Use Code does not regulate jurisdictional ditches), this section was included as the Delineation Report is also used with application for state and federal permit and the applicant opted to create one report for the whole project that is universal across all required permit paths.

The Delineation Report was developed after extensive field work to locate and characterize wetlands and streams within proximity to the proposed East Link alignment. City of Bellevue Development Services Department Land Use Division staff were involved closely with the development of this report and inconsistencies with application of delineation practice and interpretation of City of Bellevue Land Use Code Critical Areas requirements were resolved through correspondence and field meeting with the applicant and consultant, including engagement of the State Department of Ecology where needed.

The Report analyzes regulatory requirements, includes detailed maps depicting the location of the subject resources, and memorializes the study methodology. This report was used in support of the project Critical Areas Report (see below) and is the fundamental baseline establishing existing wetland and stream conditions in the project vicinity. **The project Delineation Report is included as Attachment D**.

ii. East Link Light Rail Extension Critical Areas Report and Mitigation Plan

The East Link Light Rail Extension Critical Areas Report and Mitigation Plan (the 'Critical Areas Report' – See Attachment E) was developed following completion of the project Delineation Report (see above). The Critical Areas Report documents existing conditions within the vicinity of the project alignment, identifies anticipated impacts to known resources, analyzes regulatory requirements, presents mitigation measures designed to offset and abate identified impacts, and includes long term mitigation objectives and contingencies. The Critical Areas Report presents a plan for regulatory compliance and establishes a vision for long term outcomes.

It is anticipated that additional analysis may be needed as the project design is refined through continued project design efforts (e.g. CAC, City Council, Design and Mitigation Permit, Engineering, etc.), and the Critical Areas Report was specifically designed to allow for updates as new information becomes available or to address minor project changes. The most recent version of this report was issued in June of 2015 and submitted to the City's Permit Center as a revision to the Design and Mitigation Permit.

With this Design and Mitigation Permit, compliance with Critical Areas requirements established in LUC 20.25H and LUC 20.25M is demonstrated through the project Critical Areas Report. This section of the staff report is a summary of the findings of the Critical Areas Report. Where statements of compliance with Critical Areas requirements are made in this staff report, they are based on information and analysis presented in the Critical Areas Report. Impacts associated with Sound Transits South Bellevue (E320) Segment (also referred to as the E320 Contract Design Package) are outlined in Appendix F.2 of the Critical Areas Report. The Critical Areas Report is included as Attachment E.

Analysis of Technically Feasible Alternatives – Not Required

As an Essential Public Facility (EPF), the proposed East Link RLRT facility is an allowed use within the Critical Areas Overlay District (LUC 20.25H) established by LUC 20.25H.055.B, Footnote 12. In accordance with LUC 20.25M.040.I.2, as an EPF, when an RLRT facility alignment location and profile is approved by the City Council pursuant to resolution or ordinance. analysis of technically feasible alternatives is not required and LUC 20.25H.055.C.2.a does not apply. Sound Transit (the applicant) is not required to demonstrate that the selected alignment location and profile is the alternative with the least impact to critical areas, because the Bellevue City Council passed Resolution No. 8576 including the alignment location and profile on April 22, 2013, and the East Link RLRT facility as proposed in this application is consistent with the Council resolution. Although Sound Transit is not required to consider alternative alignments, in accordance with LUC 20.25M.030.C.3.j.i the design must result in the least possible impact on critical areas based upon the agreed upon alignment chosen by the Bellevue City Council and Sound Transit Board. The applicant has provided an analysis of design considerations that complies with this requirement as part of the project Critical Areas Report (included as **Attachment E**).

Compliance with Performance Standards and Criteria

As the proposed Sound Transit RLRT facility intersects with critical areas, compliance with applicable performance standards and criteria must be demonstrated. Applicable performance standards are outlined in LUC 20.25H.055.B and further refined in LUC 20.25M.030.C.3.j and LUC 20.25M.040.I. A Critical Areas Land Use Permit is not required and compliance with LUC 20.30P does not apply. The applicant has provided an analysis of compliance with applicable performance standards that complies

with this requirement as part of the project Critical Areas Report (included as **Attachment E**).

Modification of Standards

Due to the complex design of an RLRT facility, strict application of critical areas rules may not be feasible or practical. In many instances application of prescriptive rules may cause for an adverse or un-intended effect or outcome. To address situations where conflict has been identified, a modification of critical areas standards is allowed, with the criteria established by LUC 20.25M.060, and LUC 20.25M.040.I.1 which together provides for modification of the requirements of LUC 20.25H.

Mitigation Plan

Although a Critical Areas Land Use Permit is not required, as specified by LUC 20.25M.030.C.3.j (see discussion above), a mitigation plan meeting the requirements of LUC 20.25H.210 must be submitted with the Design and Mitigation Permit application. The applicant has submitted a mitigation plan, designed by a qualified professional, included as part of the project Critical Areas Report (see **Attachment E**) and meeting the requirements of LUC 20.25H.210.

Linear Project

Sound Transit's East Link project is linear. As a linear project, East Link intersects multiple resource areas classified as Critical Areas by the City's Land Use Code Critical Areas Overlay District. For the purpose of this Design and Mitigation Permit, analysis is focused on impacts and mitigation measures associated with the South Bellevue Segment. Due to association with a larger linear project, the point of origin and the point of termination of the project limits are dictated by the larger linear alignment. The South Bellevue (E320) Segment must be compatible and connect with the segments to the north and south, and must follow the alignment established by planning efforts made by Sound Transit and the City of Bellevue. Construction of the South Bellevue (E320) segment of Sound Transit's East Link facility is reliant on a critical areas mitigation plan that establishes consolidated mitigation for the entire East Link Segment through Bellevue. Specific portions of the overall East Link mitigation package will be constructed within the South Bellevue (E320) Segment, while other mitigation measures required due to impacts associated with the South Bellevue (E320) Segment will be constructed outside the limits of the South Bellevue (E320) Segment.

Deployment of the mitigation plan is dependent on installation of mitigation associated with the phased construction approach taken by Sound Transit for the entire Bellevue segment of the East Link project. See associated conditions of approval requiring implementation of the complete mitigation plan.

Watershed Basins

The South Bellevue (E320) segment of the East Link project is entirely located

within the larger Kelsey Creek (Mercer Slough) basin. Drainage for this facility must account for varying topography and varying levels of urbanization.

Project Area

The South Bellevue (E320) segment project area is located along and adjacent to areas of protected natural resources and through highly urbanized area in order to maximize ridership. The area surrounding the South Bellevue (E320) Segment is characterized by natural resource areas, residential uses, and office uses. Natural resources in this area are consolidated primarily within the Mercer Slough system. Throughout the planning process and final design, Sound Transit has made significant efforts to avoid and minimize impacts to the critical areas within and adjacent to the project area. Focused design meetings have been conducted in order to determine how design techniques can be incorporated into the Project so that impacts to critical areas are avoided and/or minimized. Some examples of avoidance and minimization techniques include:

- Realigning the guideway to avoid critical areas.
- Proposing retaining walls instead of fill slopes in areas that are within or adjacent to critical areas. This technique was used in several areas along Bellevue Way and 112th to minimize shoreline/wetland impacts.
- Reducing hardscape elements (sidewalks, driveways, roads, etc.) to avoid impacts except where such avoidance conflicts with city code requirements for expanded sidewalks.
- Bridging over streams and waterbodies.

It is estimated that the avoidance and minimization efforts pursued by the design team resulted in a reduction of greater than 50% of the potential critical area impact within the project area.

Critical Areas – Existing Conditions

Methodology

To identify the presence of critical areas within the vicinity of the proposed project alignment, the applicant first gathered background information and performed a corridor walk through, then performed fieldwork based on anticipated resource locations. Background analysis and field work followed standard protocol for identification and characterization of the critical areas. Specific methodology for identification, characterization, and documentation of critical areas and anticipated impacts is presented in the project Critical Areas Report (see **Attachment E**).

Wetlands (LUC 20.25H.095)

Wetland Functions: Wetlands provide important functions and values for both the human and biological environment—these functions include flood

control, water quality improvement, and nutrient production. These "functions and values" to both the environment and the citizens of Bellevue depend on their size and location within a basin, as well as their diversity and quality. While Bellevue's wetlands provides various beneficial functions, not all wetlands perform all functions, nor do they perform all functions equally well (Novitski et al., 1995). However, the combined effect of functional processes of wetlands within basins provides benefits to both natural and human environments. For example, wetlands provide significant stormwater control, even if they are degraded and comprise only a small percentage of area within a basin.

Existing Conditions: Five wetland units were identified within the vicinity of the South Bellevue (E320) segment as listed in Table 1 below. Wetland buffers were identified through application of LUC 20.25H.095.C. Buffers are listed in Table 2 below. Complete descriptions of these wetland units are included in the project Delineation Report (Attachment D) and in the project Critical Areas Report (Attachment E).

Table 1 - E320 Wetland Units

Wetland Name	Size (acres)	Drainage Basin	USFWS Classification	Hydrogeomorphic Classification Used for Rating
Mercer Slough	350ª	Mercer Slough	PFO, PSS, PEM, PAB	Depressional, Lake- Fringe, Riverine, Slope
Alcove Creek	0.64ª	Mercer Slough	PFO, PSS, PEM	Depressional, Riverine
Bellefield South	0.29	Mercer Slough	PFO, PSS, PEM	Riverine, Slope
Bellefield North	0.11	Mercer Slough	PFO, PSS	Riverine, Slope
8th Street	0.13ª	Mercer Slough	PFO, PSS, PEM	Depressional

Notes:

a Approximate total wetland area, includes delineated area plus estimated wetland area extending outside Project area. PFO = palustrine forested

PSS = palustrine scrub-shrub

DEM = polystrine amargant

PEM = palustrine emergent

PAB = palustrine aquatic bed

USFWS = U.S. Fish and Wildlife Service

Table 2 - E320 Wetland Buffers

Wetland Name	State (Ecology) and Local (Bellevue) Rating	Bellevue Buffer Widths (feet)
Mercer Slough	Ш	110
Alcove Creek	II	75
Bellefield South	II	75
Bellefield North	II	75
8th Street	III	60

Note:

Ecology = Washington State Department of Ecology

2. Streams and Riparian Areas (LUC 20.25H.075)

Stream Functions: Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow. Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi- canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated buffers or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or re-vegetated (May 2003). Until the newly planted buffer is established the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows in to riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

Existing Conditions: Four stream corridors were identified within the vicinity of the South Bellevue (E320) segment as listed in Table 3 below. Stream buffers were identified through application of LUC 20.25H.075.C and are listed in Table 4 below. Complete descriptions of these stream corridors are included in the project Delineation Report (**Attachment D**) and in the project Critical Areas Report (**Attachment E**).

Table 3 - E320 Stream Corridors

Stream	OHWM Length ¹ (feet)	Drainage Basin ²
Stream A	260	Mercer Slough
Stream B	83	Mercer Slough
Wye Creek	150	Mercer Slough
Alcove Creek	226	Mercer Slough

Notes:

Table 4 – E320 Stream Corridor Buffers

Stream	Local Stream Rating ¹	Buffer Width (feet)	
Stream A	Type N	50	
Stream B	Type N	50	
Wye Creek	Type F	100	
Mercer Slough	Type S	100	
Alcove Creek	Type F	100	

Note:

3. Habitat for Species of Local Importance (LUC 20.25H.150)

Habitat Functions: Urbanization, the increase in human settlement density and associated intensification of land use, has a profound and lasting effect on the natural environment and wildlife habitat (McKinney 2002, Blair 2004, Marzluff 2005 Munns 2006), is a major cause of native species local

¹ Calculations provided by HJH for open channel areas that were delineated.

² City of Bellevue 2013b.

OHWM = ordinary high water mark

¹ BCC (City of Bellevue 2013a).

extinctions (Czech et al 2000), and is likely to become the primary cause of extinctions in the coming century (Marzluff et al. 2001a). Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities (Knopf et al. 1988), which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact, species richness peaks for some groups, including songbirds, at an intermediate level of development (Blair 1999, Marzluff 2005).

Protected wild areas alone cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes (genetic drift, inbreeding, colonization) can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales (Shaughnessy and O'Neil 2001). As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation (Rojas 2007). Urban habitat is a vital link in the process of wildlife conservation in the U.S.

Existing Conditions: The mosaic of vegetation communities within the project area provides habitat for a variety of terrestrial and aquatic wildlife. Wildlife relies on vegetation for food, shelter, and cover from predators. Wildlife diversity is generally related to the structure and composition of plant species within vegetative communities. In general, vegetation communities that contain few species or vegetative layers (herbaceous vegetation, shrubs, or trees) support a low diversity of wildlife, whereas vegetation communities that are more complex and contain a wide variety of plant species and vegetative layers can support a greater diversity of wildlife. Forested and riparian areas with well-developed shrub layers are likely to support the greatest number of species and populations of wildlife (Brown 1985).

Wildlife habitats in the broader East Link project area range in quality from low in commercial and residential areas to high in the wetland habitat and forested riparian habitat associated with Mercer Slough. The majority of habitat in the project area is developed and therefore provides habitat for disturbance-tolerant species typical of urban areas.

The City recognizes 23 species of local importance (LUC 20.25H.150; City of Bellevue 2013a). As part of the analysis of species of local importance, Anchor QEA reviewed information from the WDFW PHS database on state priority species and habitats that may occur in or near the project area (WDFW 2013a). Species of local importance that could occur within the Project area were identified based on observations during the site visits, the WDFW PHS data, the presence of potential suitable habitat for priority species within the project area, and WDFW management recommendations

for priority species (Larsen 1997, Larsen et. al. 2004, WDFW 2013a).

Of the 23 species considered locally important by LUC 20.25H.150, the applicant's consultant identified potential suitable habitat within the South Bellevue (E320) Segment for 18 species. These species are listed in Table 5 below. Complete descriptions of these species and project area habitat features are included in the project Delineation Report (**Attachment D**) and in the project Critical Areas Report (**Attachment E**).

Common Name (Scientific Name)	Suitable Habitat	Potential Suitable Habitat Present Within Project Area	State Status	Federal Status
Amphibians				
Oregon spotted frog (Rana pretiosa)	Ponds and lakes with dense emergent vegetation	Yes (Mercer Slough habitat)	Endangered	Threatened
Western toad (Bufo boreas)	Still water in ponds and small lakes	Yes (Mercer Slough habitat)	Candidate	Species of concern
Birds				
Bald eagle (Haliaeetus leucocephalus)	Mature trees near water and prey sources	Yes (Mercer Slough habitat)	Sensitive	Species of concern
Common loon (<i>Gavia</i> immer)	Marine and large lakes and rivers	No (Lake Washington outside Project area)	Sensitive	None
Great blue heron (Ardea herodias)	Fresh and salt-water wetlands, rivers	Yes (Mercer Slough)	Priority	Monitor
Green heron (Butorides striatus)	Fresh water wetlands with forested habitat	Yes (Mercer Slough)	None	None
Merlin (Falco columbarius)	Prairies and conifer forests	No	Candidate	None
Osprey (Pandion haliaetus)	Marine coasts, lakes, and rivers	Yes (Mercer Slough)	None	None
Peregrine falcon (Falco peregrinus)	Cliffs and vegetated slopes	No	Sensitive	Species of concern
Pileated woodpecker (Dryocopus pileatus)	Forest with snags and downed wood	Yes (Mercer Slough and mature trees)	Candidate	None
Purple martin (<i>Progne</i> subis)	Large dead trees or artificial nesting structures near wetlands, ponds, or marine systems	Yes (Mercer Slough and mature trees)	Candidate	None
Red-tailed hawk (Buteo jamaicensis)	Open habitat near forests	Yes (Mercer Slough and mature trees)	None	None
Vaux's swift (<i>Chaetura</i> vauxi)	Old growth forest	No	Candidate	None
Western Grebe (Aechmophorus occidentalis)	Large lakes	No (Lake Washington outside Project area)	Candidate	None

Fish/Salmon		•	•	
Bull trout (Salvelinus confluentus)	Marine, rivers, and streams	Yes (Mercer Slough)	Candidate	Threatened
Chinook salmon (Oncorhynchus tshawytscha)	Marine, rivers, and streams	Yes (Mercer Slough)	Candidate	Threatened
Coho salmon (Oncorhynchus kisutch)	Marine, rivers, and streams	Yes (Mercer Slough)	Candidate	Species of concern
River lamprey (Lampetra ayresi)	Rivers and streams	Yes (Mercer Slough)	None	Species of concern
Mammals				
Keen's myotis (<i>Myotis</i> keenii)	Mature coniferous forest	Yes (Mercer Slough habitat and mature trees)	Candidate	None
Long-eared myotis (Myotis evotis)	Mature coniferous forest	Yes (Mercer Slough habitat and mature trees)	Monitored	None
Long-legged myotis (Myotis volans)	Mature coniferous forest	Yes (Mercer Slough habitat and mature trees)	Monitored	None
Western big-eared bat (Plecotus townsedii)	Mature coniferous forest	Yes (Mercer Slough habitat and mature trees)	None	None
Reptiles				
Western pond turtle (Clemmys marmorata)	Ponds, sloughs, small lakes	Yes (Mercer Slough habitat)	Endangered	Species of concern

Note:

Sources: City of Bellevue 2013, WDFW 2013, Larsen 1997, and Larsen et al. 2004.

4. Areas of Special Flood Hazard (LUC 20.25H.175)

Areas of Special Flood Hazard are found within proximity of the South Bellevue (E320) Segment. However, the project has been designed to avoid impacting known Areas of Special Flood Hazard. The East Link Project would generally employ elevated guideways to cross water bodies at a number of locations. Columns to support the elevated guideway will be located outside of stream channel floodways or floodplains. Using the elevation listed on the associated FEMA FIRM maps, the Sweyolocken mitigation site and the Coal Creek mitigation site are within the 100-year floodplain. Minor grading activities (e.g., filling in agricultural ditches, removing culverts) are proposed in these areas, but earthwork improvements within the 100-year floodplain will be balanced or decreased. Based on the Coal Creek Stream Enhancement Project Hydraulic Effects Memorandum (Attachment D - Critical Areas Report Appendix H) and FEMA Habitat Assessment (Attachment E – Critical Areas Report Appendix G) developed for the project, there will be no rise in the Base Flood Elevation (BFE) in either location.

5. Geologic Hazard Areas (LUC 20.25H.120)

Geologic Hazard Area Functions: Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provide a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

Existing Conditions:

There are regulated steep slope areas in the South Bellevue (E320) segment where project structures will be located on or below the surface of the steep slope, the steep slope critical area buffer, or the structure setback area. These areas are regulated because of their location within or adjacent to habitats for species of local importance. A list of regulated slope areas is included in the project Critical Areas report (Attachment E)

Steep slope areas impacted by the South Bellevue (E320) segment and not associated with habitat areas are regulated strictly from an engineering perspective and are not discussed in this staff report. Retaining walls and slopes minimize the project footprint and extent of topography modification. Structure design in steep slope areas, buffers, and structures setbacks is based on geotechnical analyses and recommendations that avoid risk to the light rail transit facilities, users, and neighboring properties. Similar to road or highway construction, these areas require specialized engineering and are addressed through the project engineering reports and geotechnical analysis. Impacts associated with habitat resources located within steep slope areas are addressed in the habitat resources section of the project Critical Areas Report included as Attachment E.

6. Shoreline Critical Areas (LUC 20.25H.115)

Lake Washington and Mercer Slough and their associated buffers are classified as Shoreline Critical Areas (LUC 20.25E.017.D). For that portion of the East Link RLRT alignment in shoreline jurisdiction, the Shoreline Overlay District area is the same as the Shoreline Critical Area. The only area where the Shoreline Overlay District does not overlap the Shoreline Critical Area is

in the vicinity of 112th Ave SE due to the measurement of the shoreline critical areas buffer. The Shoreline Overlay District includes the area 200 feet landward of the ordinary high water mark and any associated wetland. The Shoreline Critical Area only includes the waters of Lake Washington, underlying lands, and associated wetlands. In this instance, along 112th Ave SE, the Shoreline Critical Area is equivalent to the area of the Mercer Slough and three small associated wetlands, but the Shoreline Overlay District extends 200 feet landward from the OHWM of the west channel of Mercer Slough.

Further south, along the east side of Bellevue Way, the Shoreline Critical Area boundary is the edge of the Mercer Slough wetland system. This wetland edge is also the edge of the "Shoreline Overlay District" since it is an associated wetland of Mercer Slough and therefore does not include a 200 foot offset (which offset is measured from OHWM).

In all cases, Shoreline Critical Area and Shoreline Critical Area Buffer are located wholly within areas regulated by the Critical Areas Overlay District and are addressed through the Critical Areas impacts analysis in this Design and Mitigation Permit, as demonstrated in the table above.

Critical Areas – Identified Impacts

Methodology

To identify potential impacts to critical area resources associated with the South Bellevue (E320) Segment, known resource areas were identified, characterized, and mapped. The project alignment and preliminary engineering was overlaid and contrasted with known resource areas. Where the proposed alignment and facility features were identified to overlay resource areas, engineering was adjusted and attempts to avoid impacts were made. Where impacts were unavoidable mitigation was required. This section of the staff report identifies unavoidable impacts associated with the South Bellevue (E320) segment. A discussion outlining mitigation measures follows.

Wetland Impacts

Of the five wetland units catalogued in the vicinity of the South Bellevue (E320) segment, all were identified as having permanent unavoidable impacts caused to either the wetland unit or the buffer. A full discussion of impacts to wetlands, wetland buffers, wetland vegetation, and temporary impacts is included in the project Critical Areas Report (see **Attachment E**). Mitigation for permanent impacts is addressed below.

Table 5 – Wetland Impacts

Site	Drainage Sub- basin	Permanent Impact (acres)	Permanent Vegetation Conversion (acres)	Temporary Impact (acres)	Permanent Buffer Impact (acres)	Temporary Buffer Impact (acres)
Mercer Slough	Mercer Slough	0.17ª	0.32	0.22	4.10	4.43
Alcove Creek	Mercer Slough	0.00	0.00	0.01	0.09	0.08
Bellefield South	Mercer Slough	0.05	0.00	0.04	0.20	0.01
Bellefield North	Mercer Slough	0.01	0.00	0.02	0.24	0.04
8th Street	Mercer Slough	0.13	0.00	0.00	0.00	0.00
Total Wetland Impacts:		0.43	0.32	0.29	4.63	4.56

Note:

a This includes .02 acre of impact from pin piles, which is not regulated by the U.S. Army Corps of Engineers.

Wetland Structure Setbacks: As a linear essential public facility Sound Transit's East Link alignment is treated as transportation infrastructure right of way. Pursuant to LUC 20.25H.095.C.2.b, the East Link guideway is not considered a structure for application of LUC 20.25H and, similar to highway bridges, is therefore not required to comply with structure setback requirements.

Stream Impacts

Of the five stream corridors catalogued in the vicinity of the South Bellevue (E320) segment, two are anticipated to be affected by the project. Impacts may occur within the stream channel or within the stream buffer and may be permanent or temporary. Impacts to area streams are outlined in Table 6 below. A full discussion of impacts to streams and stream buffers, including temporary impacts, is included in the project Critical Areas Report (see **Attachment E**). Mitigation for permanent impacts is addressed below.

Table 6 – Stream Impacts

Stream	Local Stream Rating	Permanent Impacts (sf)	Temporary Impacts (sf)	Permanent Buffer Impacts ¹ (acres)	Temporary Buffer Impacts (acres)
Wye Creek	Type F	420	110	0.09	0.11
Alcove Creek	Type F	236	33	0.00	0.00
Total	Total Stream Impacts:		143	0.09	0.11

Notes:

1 Areas only include stream buffer where there is no wetland buffer overlap. Overlapping buffer areas are counted as wetland buffers and included in Table 2-4.

sf = square feet

Stream Structure Setbacks: As a linear essential public facility Sound Transit's East Link alignment is treated as transportation infrastructure right of way. Pursuant to LUC 20.25H.075.C.2.b, the East Link guideway is not considered a structure for application of LUC 20.25H and, similar to highway bridges, is therefore not required to comply with structure setback requirements.

Impacts to Habitat for Species of Local Importance

The primary potential construction impact on potential habitat for species of

local importance (fish and wildlife habitat, wetlands, streams, and upland vegetation communities) will be removal and loss of habitat. In general, the severity of impact varies depending on the type and quantity of affected vegetation. For example, losing plant communities that offer limited wildlife habitat, such as fragmented ornamental vegetation in commercial and residential areas, results in less of an adverse effect than losing more complex vegetation associations, such as the forested areas and wetlands within and adjacent to Mercer Slough.

The majority of clearing and grading associated with the project will include areas of existing impervious surfaces and managed grass, fragmented and isolated tree and shrub vegetation within a densely developed urban area, and fringe areas along Mercer Slough. For the Mercer Slough Wetland complex, 0.17 acre of permanent wetland impacts and 4.10 acres of permanent wetland buffer impacts have been identified. Outside of the edge of Mercer Slough, the majority of the vegetation communities in the project area are landscaped and do not include understory vegetation that provides habitat for amphibian, bird, reptile, and mammal species. Wildlife species that would likely occupy habitat in these developed areas include birds and small mammals typically associated with urban residential and commercial development.

A full discussion of impacts to habitat for species of local importance is included in the project Critical Areas Report (see **Attachment E**). Mitigation for permanent impacts, including habitat, is addressed below.

Impacts to Geologic Hazard Areas

The Project will not adversely impact geologic conditions in the South Bellevue (E320) segment. Retaining walls and slopes minimize the project's footprint and extent of topographic modification. Structure design in steep slope areas is based on geotechnical analyses and recommendations that avoid risk to the light rail transit facilities, users, and neighboring properties. Additional development in the area would increase the amount of infrastructure placed in localized geologically sensitive areas such as steep slopes or seismic hazard areas. However, all of these projects must be constructed in accordance with state and local laws that require design and construction to meet seismic standards. A full discussion of impacts to geologic hazard areas is included in the project Critical Areas Report (see **Attachment E**). Mitigation for permanent impacts, including impacts to slopes associated with habitat features, is addressed below.

Cumulative Impacts

Sincere efforts have been made to avoid and minimize potential impacts to critical areas within the larger East Link Project area. These avoidance and minimization efforts have successfully eliminated any long-term impacts to geologic hazard areas, areas of special flood hazard, and species and habitats of local importance to the City of Bellevue; however, some impacts to habitat features, wetlands, and streams are anticipated.

Mitigation for potential impacts to these critical areas is proposed within the City of Bellevue in areas within or adjacent to the larger East Link project area, and not limited to the South Bellevue (E320) segment project area. Mitigation concepts 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. A complete mitigation analysis is included in the project Critical Areas Report included as **Attachment E**.

Construction and operation of the East Link Project may coincide with other development projects that also affect the critical areas identified in this report. However, adverse cumulative impacts are not anticipated due to regulatory considerations, habitat enhancement efforts for natural resources in the project area, and Sound Transit's commitment to no net loss of wetland function and area.

Critical Areas – Mitigation Measures

a. Mitigation Plan

Compensatory mitigation is required for those impacts that cannot be addressed through avoidance and minimization or through the restoration of temporarily disturbed areas. In response to mitigation requirements, the applicant (Sound Transit), has developed a comprehensive mitigation plan meeting the requirements of LUC 20.25H.210. The applicant's mitigation plan is included as part of the project Critical Areas Report (see **Attachment E**).

Mitigation is primarily proposed to address identified impacts to critical areas such as wetlands, streams, and their buffers. Mitigation for wetland, stream, and buffer impacts will occur at five sites within the City of Bellevue (Sweyolocken, Mercer Slough Buffer Creation/Enhancement, Sturtevant Creek, West Tributary, and Coal Creek). All but the Coal Creek mitigation site are adjacent to the rail alignment where impacts occur. All mitigation sites are publically owned. Sound Transit will construct the mitigation sites concurrently with the other elements of the Project. All five mitigation sites will be protected in perpetuity through existing or new covenants/Native Growth Protection Easements or Tracts. These areas will be maintained by Sound Transit for a minimum of 5 years to ensure that the vegetation communities are established and that the mitigation goals, objectives, and performance standards are met. The protective covenants will ensure that, once established, the ecological functions of the sites are protected from future land use actions.

Mitigation for potential impacts from tree and/or vegetation removal on steep slopes affecting habitat associated with species of local importance will be addressed with additional tree plantings within the affected area, as well as within the Sweyolocken, Mercer Slough, and West Tributary mitigation sites. These three mitigation sites are also adjacent to impacted steep slope and steep slope buffers associated with habitat for species of local importance. In

each instance, non-native plants will be replaced with native plants and plant diversity will be increased.

The Coal Creek project site is less than 2 miles from the rail alignment. The work at this site will be implemented within one year of the impacts to the Unnamed Tributary to Kelsey Creek as part of the South Bellevue (E320) segment. The mitigation sites were selected based on their ability to replace the ecological functions that will be impacted by the Project. A complete mitigation analysis is included in the project Critical Areas Report included as **Attachment E**. City staff have reviewed the proposed mitigation plan and have concluded that the plan, as presented, meets mitigation requirements and provides a sufficient level of functional lift to offset known anticipated impacts.

Critical Areas - Conclusion

The applicant has provided documentation necessary to demonstrate compliance with the requirements of the City of Bellevue Critical Areas Overlay District. Staff have reviewed documentation provided by the applicant and have determined the proposed South Bellevue (E320) segment, including mitigation measures proposed throughout the East Link project, is in compliance with the City of Bellevue Critical Areas requirements. **See Section XI for related condition of approval.**

Use of City Right-of-Way

No at-grade RLRT facility or system shall be permitted in the City of Bellevue rights-of-way without prior City approval.

Finding: The applicant is required to apply for and receive an approved Right of Way Use Permit from the City of Bellevue prior to work or hauling in the Right of Way. **See related condition of approval in Section XI.**

20.25M.050 Design Guidelines

A. Design Intent

LUC 20.25M.030.B and C require City permit approvals to be consistent with the Comprehensive Plan including Light Rail Best Practices which emphasizes the need for context sensitivity in design. Subsection B of this section is intended to provide guidance to any CAC formed pursuant to LUC 20.25M.035.B regarding the existing and planned contexts within which RLRT systems or facilities are proposed. The information contained in this subsection is intended to provide a framework for the CAC's work, and to help the CAC determine whether a context sensitive outcome has been achieved through the incorporation of location-appropriate design features in required light rail permits.

Context and Design Considerations - By Subarea

The design intent for the Regional Light Rail Train system and facility segment that passes through this subarea is to contribute to the major City gateway feature that already helps define Bellevue Way and the 112th Corridor. The Regional Light Rail Train system or facility design should reflect the tree-lined boulevard that is envisioned for the subarea, and where there are space constraints within the transportation cross-section, design features such as living walls and concrete surface treatments should be employed to achieve corridor continuity. The presence of the South Bellevue park and ride and station when viewed from the neighborhood above and Bellevue Way to the west, as well as from park trails to the east, should be softened through tree retention where possible and enhanced landscaping and "greening features" such as living walls and trellises.

Finding: As discussed in Section I of this staff report, the concept for the South Bellevue Station is to provide a facility that serves as a major gateway to the city and is designed to be integrated with and complementary to the unique location adjacent to Mercer Slough Nature Park. Station and site design is also intended to mitigate potential negative impacts to adjacent neighborhoods and park users by enhanced landscaping, significant tree retention, and extensive art treatments. The extensive use of art and landscaping including natural drainage features reflects the unique location of the South Bellevue Station adjacent to Mercer Slough Nature Park. Enhancement of the median at the intersection of Bellevue Way SE and 112th Ave SE will provide a significant gateway feature and contribution to the tree lined boulevard discussed in the subarea.

Additional General Design Guidelines

 The CAC recommends that more earth tones and color variety be incorporated into the proposed art treatments and other station and corridor elements. Earth tones means tans, browns, beige, rusts, reds and orange.

Finding: Sound Transit has indicated that the artists for the station are evaluating options for additional color and earth tones in proposed art treatments. The station rendering located in this staff report reflects proposed earth tones and color varieties for the station.

The CAC recommends less hard edges in the design of the South Bellevue Station. One suggestion would be to incorporate more organic shapes into the design to soften hard lines.

Finding: Sound Transit has attempted to incorporate more organic shapes in the design using art treatments at both the station, parking garage, and guideway.

 The CAC recommends Sound Transit evaluate the possibility of using an artistic design for the mesh screening at the South Bellevue Station Garage.

Finding: Sound Transit has proposed a green artistic treatment for the mesh screening on the garage. Final color combinations are still in development.

 The CAC recommends that Sound Transit extend the proposed art treatment on the guideway noise walls and additional colors be incorporated into the design.

Finding: Sound Transit has shown an art treatment on a portion of the guideway noise walls that reflects CAC pre-advisory advice. The CAC has requested additional color variety which is under development. Sound Transit has also indicated that an extension of the art treatment is in preliminary design.

 The CAC recommends that Sound Transit use a stacked stone or brick type pattern with variegated earth tones for noise walls. Ashlar stone walls are one recommendation from the CAC. The CAC also recommends evaluation of art opportunities to help buffer any negative visual impacts of areas of tall noise walls.

Finding: See Section XI for a condition of approval related to noise wall design.

- The CAC recommends Sound Transit work with the City of Bellevue to install way finding kiosk(s) at the South Bellevue Station and as appropriate along the alignment to direct people to available resources and recreational opportunities within Mercer Slough Nature Park.
- The CAC recommends that a small viewing platform be created on the top garage deck to allow for views into the Mercer Slough Nature Park.

Finding: See related condition of approval regarding wayfinding and view platform in Section XI.

 The CAC recommends that variable seating heights be provided at all light rail stations in Bellevue.

Finding: See related condition of approval regarding seating heights in Section XI.

 The CAC recommends that Sound Transit use round catenary poles instead of H poles from the South Bellevue Station to the tunnel portal at the intersection of 112th Ave SE and Main Street.

Finding: See related condition of approval regarding catenary pole design in Section XI.

- The CAC recommends that Sound Transit conduct additional noise analysis for impacts to users of Mercer Slough, as a sensitive receptor including the installation of sound panels on the east side of the guideway as noise mitigation for users of Mercer Slough.
- The CAC recommends that Surrey Downs Park be evaluated as a sensitive receptor.
- The CAC recommends that night noise impacts be thoroughly evaluated and monitored as a result of extended hours of train movements to and from the OMSF.
- The CAC recommends that noise impacts due to additional traffic to and from the South Bellevue Park and Ride (SBPR) on Bellevue Way be addressed.
- The CAC recommends that construction noise be analyzed and mitigated for the five year duration of construction staging activities at the SBPR and for the construction traffic and construction related noise due to night time work.
- Prior to construction, the CAC recommends that Sound Transit offer "Residential Sound Packages" for the frontline homes along Bellevue Way SE and 112th Ave NE where noise walls are not planned, feasible, or effective, or where construction sequencing prevents the early installation of the noise walls. This should include the frontline homes at both street level and along the top of the hillside on Bellevue Way SE per attached Exhibit A.
- The CAC recommends that both audio and visual cues be included in station design.

Finding: Departures by the Director from specific recommendations included within the CAC's 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 LUC 20.25M.035.E which states that advice provided by the CAC shall be objectively based upon the policies, regulations, guidelines and other documents adopted for the RLRT system and facility to ensure that the final project is designed to achieve a context sensitive outcome.; (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 Advisory Document shall be

addressed in the recommendation or decision by the Director and rationale for the departures shall be provided.

Additional Noise Analysis and Residential Sound Packages

- Mercer Slough Noise Analysis and Mitigation. Additional Noise analysis was undertaken to assess the impacts of light rail vehicle operation in the vicinity of Mercer Slough Nature Park. Noise assessment for Mercer Slough can be found in the ATS Consulting, June 29, 2015, "Noise Assessment, East Link LRT Project E320 Contract-Mercer Slough Nature Park," and the ATS Consulting, January 30, 2015, "Noise Impact Assessment, East Link LRT Project E320 Contract-Mercer Slough Nature Park." Predicted noise impacts for the South Bellevue segment are evaluated in the State Environmental Policy Act (SEPA) section below. Installation of sound panels on the east side of the guideway is not found to be a reasonable or appropriate application of SEPA authority. Refer to Section VII below.
- Surrey Downs Noise Analysis. Several members of the public commented that Sound Transit did not include Surrey Downs Park as a sensitive noise receiver as part of its noise analysis. This is a Federal Transit Administration criterion that is not applicable to the city review of this design and mitigation permit.
- Night Noise Analysis. Additional noise analysis was undertaken to evaluate the noise associated with expanded night hours of train movements to and from the Operation and Maintenance Satellite Facility (OMSF). The night time noise assessment can be found in the ATS Consulting, January 30, 2015, "City of Bellevue Noise Impact Assessment, East Link LRT Project E320 and E335 Contracts-Mitigation to Meet Nighttime Ambient," and the ATS Consulting, February 23, 2015, "City of Bellevue Noise Impact Assessment, East Link LRT Project E320 and E335 Contracts-Mitigation to Meet Nighttime Ambient-Revision #2." Refer to Condition D.15 for Monitoring requirements imposed to confirm that operating light rail train noise levels meet the Design and Mitigation Permit approval requirements.
- Traffic Impacts. Sounds created by motor vehicles are exempt from the provisions of the Noise Control Code pursuant to BCC 9.18.020.A.7, and recommendations to address the associated noise falls outside the authority granted to the Permit Review CAC. See Section V for more discussion of traffic impacts.
- Construction Noise. Construction related sound is exempt from the provisions of the Noise Control Code during the hours of 7a.m. and 6p.m. on weekdays and 9a.m. and 6p.m. on Saturdays which are not legal holidays pursuant to BCC 9.18.020.C. Noise predictions for construction-related sound will be evaluated and assessed for appropriate mitigation measures

after Sound Transit has selected a contractor if a Construction Noise Expanded Exempt Hours Permit is submitted. The need for residential sound packages would be evaluated at the time any request is made for expanded exempt construction hours. This approach is consistent with the expanded exempt construction hour request made by Sound Transit for the south tunnel portal. In that case, residential sound packages were required for some home based on predicted construction noise levels. Refer to Condition A.1 for permitting, outreach, notification and monitoring requirements applicable to future Expanded Exempt Hours permits.

Visual Cues

The CAC made a recommendation that the South Bellevue Station should have both audio and visual cues at the station. The segment of East Link within the City of Bellevue constitutes six miles of a much larger regional system. Sound Transit provides audio cues at all of its stations but has not provided visual cues elsewhere in the system. The director has determined that the safety cues should be consistent with the remainder of the regional system and requiring Sound Transit to provide another system only within Bellevue is unreasonable.

V. PUBLIC NOTICE AND COMMENT

Application Date: June 20, 2014

Application Completeness Date: July 18, 2014 Notice of Application published: August 28, 2014 Public Notice Signs installed: August 28, 2014

Minimum Comment Period ended: September 11, 2014

Although the minimum required public comment period ended on September 11, 2014, comments were accepted up to the date of this decision. This permit application was discussed with the public and CAC at numerous CAC meetings and open houses. Staff received several written and numerous comments regarding the South Bellevue Segment during CAC review. Those comments are summarized below.

CAC Purpose, Scope of Work, and Work Product

During several CAC meetings the public raised questions regarding the scope of CAC work and the range of topics that could be included in CAC advisory documents. There was also concern that staff was limiting CAC authority beyond what is expressed in the Land Use Code.

Finding: The excerpts from the Land Use Code regarding CAC purpose, scope of work, and work product are included in Section I of this staff report. Significant time was spent early in the CAC process going over the CAC's role as having a citizens' committee directly involved in discretionary permitting has not been done in the past. East Link is also a large and complex project which has impacts and benefits across the city. The CAC acknowledged that although some items may

East Link South Bellevue Segment Staff Report 14-134626 LD Page **51** of **83**

have been out of their scope per the land use code, they still wanted them included in the South Bellevue Advisory Document. Staff went over each item of advice at CAC meetings and provided multiple opportunities for advice to be deleted, added, or modified. The advice contained in the advisory documents is solely that of the CAC members.

Tunnel and Trench Alignment

Several public comments were received regarding an alternative alignment that would include a tunnel through the South Bellevue Segment and a trench station at the South Bellevue Station to avoid impacts at the surface. There was also comment about providing a trench crossing at SE 4th Street to avoid losing access into the neighborhood to the west.

Finding: As discussed in Section I, the Sound Transit Board approved alignment was approved by the Bellevue City Council when it passed Resolution No. 8576 including the alignment location and profile on April 22, 2013, and the East Link RLRT facility as proposed in this application is consistent with the Council resolution. Changes to the alignment were outside of the CAC scope and are not included in CAC advice.

Noise

Many commenters expressed significant concern regarding noise from train operations and construction and the negative impacts that might have on residential properties in the vicinity.

Finding: A detailed discussion regarding noise is located in Section VII of this report. Since a significant majority of properties along the alignment have existing ambient noise levels exceeding city code requirements, our third party noise consultant concurred with Sound Transit's noise consultant that mitigating predicted noise levels to ambient was an appropriate method for analysis. There are numerous conditions of approval in Section XI regarding noise including, but not limited to, noise wall construction and timing, train maintenance, and monitoring and contingency.

Park Impacts

The CAC received several comments related to impacts to the Mercer Slough Nature Park and Surrey Downs Park. Those impacts include park conversion to non-park use, visual access into the park, pollution, critical areas, and noise.

Finding: Impacts to Mercer Slough Nature Park associated with the approved alignment have been identified in permit submittal documents including the critical areas report which is part of this record. Where impacts could not be avoided, they have been minimized and mitigated to the extent technically feasible. The conversion of a small area of the Mercer Slough Nature Park to a non-park use was approved by the Recreation and Park Funding Board unanimously due to the fact that a much larger area adjacent to the existing park will be included within park boundaries. The city requested additional noise analysis from Sound Transit regarding noise impacts to park users and that was reviewed by staff and the city

East Link South Bellevue Segment Staff Report 14-134626 LD Page **52** of **83**

third party noise consultant. The data showed that noise impacts would be minimal in the areas identified as areas where park users are most likely to be in proximity to the rail alignment. Since the train is electric there will not be any exhaust pollution impacting the park.

Several members of the public commented that Sound Transit did not include Surrey Downs Park as a sensitive noise receiver as part of its noise analysis. This is a Federal Transit Administration criteria that is not applicable to the city review of this design and mitigation permit. The city was provided ambient and predicted noise levels for all properties located in proximity to the alignment.

Tree Removal and Replacement

Significant concern was expressed by several commenters regarding the amount of tree removal and lack of tree replacement as mitigation. There was also concern that any tree replacement cannot mitigate the loss of mature existing trees. Several commenters noted that the removal of the quantity of trees reflected in the plans will damage the existing tree lined boulevard that exists now. One commenter noted that the existing trees provide seasonal color and species selected for replacement should continue to provide that.

Finding: A summary of tree removal and tree replacement is located in Section IV of this staff report. Although it is necessary to remove a significant amount of trees in the South Bellevue Segment to facilitate light rail construction, there will be a significant amount of replacement trees as mitigation. Sound Transit has provided visuals depicting expected tree growth along the alignment over a twenty year time horizon. These are included in Section IV. These will be a mixture of evergreen and deciduous trees that will include seasonal color. Development Services and Parks and Community Services staff has worked with Sound Transit to enhance the gateway character and tree lined boulevard context through approval of the alternative tree retention option also discussed in Section IV.

Traffic Impacts

Several commenters expressed concern that both construction and expanded parking at the South Bellevue Station would have negative impacts on traffic on Bellevue Way and within the neighborhoods to the west due to cut through vehicles.

Finding: Staff acknowledges that there will be unavoidable impacts due to construction activities related to light rail. The city and Sound Transit will continue to work together to minimize these impacts as the project moves towards construction. Although construction related parking and traffic was not within the scope of CAC review, they have noted their comments within their advice to the Director.

Landscape Maintenance

Questions were raised regarding the maintenance of landscaping and the use of herbicides in close proximity to the slough.

East Link South Bellevue Segment Staff Report 14-134626 LD Page **53** of **83**

Finding: Landscape maintenance responsibilities are discussed in Section IV and there is a related condition of approval regarding Sound Transit landscaping responsibilities in Section XI. No herbicides will be used in the vicinity of Mercer Slough or related wetlands as they are prohibited per critical areas performance standards located in LUC 20.25H.

South Bellevue Station Garage Design

Several commenters felt that the design of the South Bellevue Station and Garage had an industrial feel because of too many hard edges. Some felt that a green roof or living wall could help the structures reflect their proximity to Mercer Slough Nature Park.

Finding: Based on the advice of the CAC, there is a condition of approval in Section XI requiring the use of living vegetation on three sides of the parking garage. In addition, several other elements intended to smooth the edges of the garage have been incorporated into the design of the structures. The extensive art treatment at both the station and garage as well as the noise barrier walls attached to the elevated guideway also soften the feel of the structures.

VI. TECHNICAL REVIEW

A. Clearing & Grading

The Clear and Grade Reviewer reviewed the plans and materials submitted for this project and determined that clearing and grading portion of this Design and Mitigation Permit application can be approved. The future Clearing and Grading Permit application for this development must comply with City of Bellevue Clearing and Grading Code. (BCC 23.76)

B. Utilities

The Utilities Department approval of this Design and Mitigation Permit is based on the conceptual design only. Refer to Conditions of Approval regarding utilities in Section XI of this report.

C. Transportation

Project Area

This staff report covers segment E320 of the East Link light rail line in the City of Bellevue, extending along Bellevue Way SE/112th Avenue SE from I-90 to the East Main Station at 112th Avenue SE/SE 4th Street. This review focuses on the transit guideway, the South Bellevue Station, and the adjacent park and ride lot.

Access

Public access to the proposed project will be provided via a light rail station located on Bellevue Way SE at 112th Avenue NE. Pedestrians will be able to enter or exit the light rail station at each end when boarding or alighting from an East Link train. A 1500 stall park and ride garage with bicycle parking will be located adjacent to the station on the east side, and will be accessed by driveways off Bellevue Way.

Some adjacent properties will have their vehicular access revised as part of the street revisions associated with construction of the light rail line. Some driveways will be reconstructed, realigned, or closed. Access from SE 4th Street to 112th Avenue SE will be restricted to emergency vehicles only, and access to Surrey Downs Park will be served through the neighborhood. Access modifications will be addressed in the construction permits for the various roadway revisions associated with the light rail line.

Street Infrastructure Improvements

Generally, the design of street infrastructure improvements associated with a development must conform to the requirements of the Americans with Disabilities Act, the Transportation Development Code (BCC 14.60), the Transportation Department Design Manual, and any requirements stated in a City of Bellevue Staff Report. However, for East Link, formal agreements between the City and Sound Transit have already established some unique procedures and requirements. Prior to review and approval of this permit application (14-134626 LD), design plans for East Link segment E320 went through multiple rounds of review and comment by City staff, with responses from Sound Transit staff and consultants. Comments regarding design details have been made and evaluated, and the plans have been revised as appropriate.

Construction plans for East Link must generally comply with City standards regarding features such as curbs, sidewalks, bike lanes, street widening or realignment, driveway approaches, streetlights, signals, street trees, sight triangles, grades, turning geometry, and undergrounding of overhead wires. However, the City has already reviewed and agreed to accept specific variations from City standards during the aforementioned review and comment process. For some significant variations from City standards, especially for variations from ADA standards, the City will document its acceptance through a formal process known as Deviations, Exceptions, and Maximum Extent Feasible (MEF), with input and documentation from Sound Transit's design team as needed. Use of the Deviations, Exceptions, and MEF process will be at the City's discretion. Minor variations will not require that process. Such issues outside the guideway and station will be dealt with in the construction permits for the various roadway revisions associated with the light rail line.

Specific variations from City standards include the following:

1. <u>Driveway approaches</u>: New or revised driveways are required at the park and ride lot connecting to Bellevue Way SE. In addition, other work for the project may require revisions to existing driveways. In some locations, City standards for driveway width, grade, geometry, or other aspects cannot be met without impacts on adjacent property or adjacent utilities. In these situations, Sound Transit's design team has attempted to meet the needs for driveway functionality as much as feasible while minimizing deviations from City standards.

- 2. The Americans with Disabilities Act (ADA): City standards require compliance with ADA for all sidewalks, sidewalk ramps, and crosswalks. This includes meeting specific requirements for cross slope, longitudinal slope, and changes in level for all public sidewalks. However, the natural lay of the land sometimes makes it infeasible to meet all ADA requirements at a reasonable cost within the space available. At the City's discretion, the Deviation, Exception, and Maximum Extent Feasible process may be used when ADA standards cannot be met. Due to the length of time between plan review and completion of construction, some ADA standards may change. If so, Sound Transit must make a reasonable effort to comply with the latest ADA standards at the time of construction.
- 3. Fixed Objects: City standards state that no fixed objects, including fire hydrants, trees, and streetlight poles, are allowed within 10 feet of a driveway edge, defined as Point A in standard drawings Dev-7A, 7D, 7F, Fixed objects are defined as anything with breakaway characteristics stronger than a 4-inch by 4-inch wooden post. During previous review cycles, some locations were identified where the City agreed to accept a streetlight pole or other fixed object located at less than 10 feet from Point A at a driveway edge in order to avoid other conflicts.
- **4.** <u>Tree and Streetlight Separation:</u> Generally, street trees and street lights must be at least 25 feet apart. However, in some locations, less separation may have been approved during previous review cycles.
- **5.** Other: Throughout the review and construction processes, other variations from City standards may be identified. The Deviation, Exception, and Maximum Extent Feasible process will be followed when determined necessary by the City.

Easements

Sidewalk and utility easements shall be granted to the City as needed to encompass the full width of any City sidewalks located outside the City right of way on streets affected by this project. Easements encompassing the location of traffic signal and streetlight facilities may also be required if located outside right of way or sidewalk easements. Easements encompassing retaining walls behind sidewalks may be required where retaining walls are necessary to support a City sidewalk or street. Existing utility easements affected by this project shall be identified, and negative impacts on such easements shall be mitigated or easements relinquished. The granting of easements to the City shall utilize forms and procedures acceptable to the City.

Right of Way Dedication

New right of way shall be dedicated to the City to the back of any new or existing curb line along any City street where the new or existing curb will not be within existing City right of way. Dedication of new right of way to the City shall utilize forms and procedures acceptable to the City.

Holiday Construction and Traffic Restrictions

From November 15th to January 5th, construction activities such as hauling and lane closures may be restricted during certain hours in some areas due to holiday traffic. The dates, times, and locations of these restrictions, if any, will be conditioned in the Right-of-Way Permit(s) to be obtained by Sound Transit or its contractors.

Use of the Right of Way During Construction

Applicants or contractors often request use of the right of way and of pedestrian easements for materials storage, construction trailers, hauling routes, fencing, barricades, loading and unloading and other temporary uses as well as for construction of utilities and street improvements. A Right of Way Use Permit for such activities must be acquired prior to issuance of any construction permit including any demolition permit. Sidewalks may not be closed except as specifically allowed by a Right of Way Use Permit.

Pavement Restoration

The City of Bellevue has established the Trench Restoration Program to provide developers with guidance as to the extent of resurfacing required when a street has been damaged by trenching or other activities. Under the Trench Restoration Program, every street in the City of Bellevue has been examined and placed in one of three categories based on the street's condition and the period of time since it has last been resurfaced. These three categories are, "No Street Cuts Permitted," "Overlay Required," and "Standard Trench Restoration." Each category has different trench restoration requirements associated with it. Damage to the street can be mitigated by placing an asphalt overlay well beyond the limits of the trench walls to produce a more durable surface without the unsightly piecemeal look that often comes with small strip patching. The pavement restoration requirements for any street segment may change over time as the condition of the pavement changes. Before doing any construction work in a street, the developer or contractor will be required to obtain a Right of Way Use Permit, which will specify the trench and pavement restoration requirements for street segments likely to be affected.

Transportation Impact Fees

The City of Bellevue charges transportation impact fees for developments that generate at least one new PM peak hour trip. However, under Bellevue City Code 22.16.070.B.3, "public transportation facilities" are exempt from payment of City of Bellevue transportation impact fees. Furthermore, Bellevue City Code 22.16.020.C says that "Development does not include buildings or structures constructed by a regional transit authority." Therefore, transportation impact fees will not be required for any buildings or structures constructed by Sound Transit for the East Link light rail line.

Traffic Standards Code

Bellevue's Traffic Standards Code (BCC 14.10) requires that development proposals generating 30 or more new p.m. peak hour trips undergo a traffic impact analysis to determine if the concurrency requirements of the state Growth

East Link South Bellevue Segment Staff Report 14-134626 LD Page **57** of **83**

Management Act are maintained. This application is exempt from the requirements of the TSC per BCC 14.10.020.I (2) which identifies public transportation facilities as exempt from the requirements of that chapter. **See Section XI for transportation related conditions of approval.**

D. Fire

The Fire Reviewer reviewed the plans and materials submitted for this project and determined that the fire-related portion of this Design and Mitigation Permit application can be approved.

VII. STATE ENVIRONMENTAL POLICY ACT (SEPA)

Sound Transit, the Washington State Department of Transportation and the Federal Transit Administration jointly conducted environmental review of the East Link Project. A Draft Environmental Impact Statement (Draft EIS) was prepared and issued on December 12, 2008. A Supplemental Draft Environmental Impact Statement (SDEIS) was prepared to supplement the 2008 Draft EIS and address new information, new alternatives, and design modifications for the East Link project. The SDEIS was issued on November 11, 2010. The Final EIS identifying the preferred East Link alignment was issued for the East Link RLRT project on July 15, 2011. Following issuance of the FEIS a SEPA addendum was issued on March 26, 2013. These documents are collectively referred to as the "East Link FEIS."

The East Link FEIS and supporting documentation fulfill State Environmental Policy Act requirements for the South Bellevue Segment and are incorporate by this reference under the terms of BCC 22.02.037 and WAC 197-11-600. Technical information was submitted by Sound Transit with the South Bellevue Segment application and other additional information was required by the environmental coordinator. The following amendments to the environmental documents are required by the City of Bellevue under its substantive SEPA authority to condition proposals pursuant to RCW 43.21C.060, WAC 197-11-660 and BCC 22.02.140 and the limitations and requirements contained therein. The East Link FEIS together with the supporting documentation are available for review in the City of Bellevue Records Room, Lobby Floor, Bellevue City Hall, 450 110th Ave NE.

NOISE

Predicted noise impacts in the South Bellevue segment were evaluated by Sound Transit during environmental review of the East Link project, and with additional specificity as a component of this Design and Mitigation Permit review process. Noise impacts fell into two broad categories that included light rail vehicle operation noise and project construction noise. Operational noise was further categorized into specific noise sources that included train operations and stationary noise sources.

During review of the South Bellevue segment application, staff reviewed the East Link FEIS documents prepared by Sound Transit including predicted noise levels for the RLRT system and facility. Staff also reviewed the noise analysis prepared on behalf of Sound Transit and submitted with the South Bellevue segment application

that updated the information that was contained in the East Link FEIS, noise analysis prepared for the first Design and Mitigation Permit application that was issued for the Bel Red (E340) segment, and additional analysis prepared in response to revision requests made by City staff during review of the South Bellevue (E320) segment Design and Mitigation Permit application. Studies reviewed for the preparation of this staff report are available in the project file and include:

- HJH Final Design Partners, November 13, 2013, Package E320 Noise and Vibration Report 60% Submittal
- HJH Final Design Partners, June 17, 2014 Contract 320 Noise Impact Assessment Using Bellevue City Code-Operations.
- ATS Consulting, January 30, 2015, "City of Bellevue Noise Impact Assessment, East Link LRT Project E320 and E335 Contracts-Mitigation to Meet Nighttime Ambient."
- ATS Consulting, January 30, 2015, "Noise Impact Assessment, East Link LRT Project E320 Contract-Mercer Slough Nature Park."
- ATS Consulting, February 23, 2015, "City of Bellevue Noise Impact Assessment, East Link LRT Project E320 and E335 Contracts-Mitigation to Meet Nighttime Ambient-Revision #2."
- East Link Bel Red Segment Design and Mitigation approval (and supporting noise analysis), April 23, 2015.
- ATS Consulting, June 29, 2015, "Noise Assessment, East Link LRT Project E320 Contract-Mercer Slough Nature Park."
- Sound Transit, December 23, 2015, Revised E320 Predicted Train Noise Levels Tables – FTA."

The above-listed information was provided to Julie Wiebusch for peer review on behalf of the City of Bellevue. Ms. Wiebusch is a principal and acoustician with the Greenbusch Group, who has been hired to assist the City with its technical review of noise related issues arising in the context of the Sound Transit permit review process. The results of Ms. Wiebusch's expert technical review are contained in the East Link Light Rail Project-South Bellevue to Overlake Transit Center Contract 320-South Bellevue to E. Main Station Final Noise Impact Assessment Peer Review dated November 25, 2015. A copy of this peer review document is available for review in the project file.

Noise generators associated with future operation of the East Link project through South Bellevue were described in the following categories: train operations (wheel/rail interface noise, train-mounted warning devices, track crossovers and wheel squeal) and stationary noise sources (station public address systems, audible warnings for at-grade crossings, electrical transformers and traction power substations). Based on review of the studies listed above, the Bellevue Noise Control Code applies to operational noise, stationary noise and construction noise anticipated for the South Bellevue Segment (E320) as described below.

TRAIN OPERATIONS

Train operations are expected to generate noise associated with operation of a light rail train from rail-wheel contact, wheel squeal and train mounted warning devices.

Vehicle Wheel/Rail Noise

The peer review contained in the project file evaluates predicted train operation noise against Bellevue City Code (BCC) limits on noise. The primary noise generator from operating light rail vehicles is the noise from the wheel/rail interface. Gaps in the trackwork at crossovers and switches can also create noise when a train passes over them. Trains have electric motors and other equipment, but these do not contribute substantially to noise from passing trains. When expected noise is considered together with the legal limitations on City authority to apply conditions that unreasonably burden a development project, the City has concluded that a light rail motor vehicle maintained and operated in good working condition should be required to meet existing ambient noise levels when the rail operation occurs in a Class A (residential) EDNA. The rationale for this conclusion is provided below.

The South Bellevue E320 Segment is the only portion of East Link which passes through a Class A (residential) EDNA (Environmental Designation for Noise Abatement). Under the Bellevue Noise Control Code (Chapter 9.18 BCC), the maximum permissible noise level in this area is 55 dBA during the daytime hours and 45 dBA between 10:00 PM and 7:00 AM. BCC 9.18.030(B). However, noise from train operations is exempt from the maximum noise limits in the Noise Control Code between the hours of 7:00 a.m. and 10:00 p.m. BCC 9.18.020.B.5.

Within the E320 Segment, the existing ambient noise levels during nighttime hours are in excess of the Code limits and currently range between the low 50s dBA and the high 70s dBA (measured in one-hour Leq). See Memorandum dated February 23, 2015 from Steven Wolf of ATS Consulting. This is due largely to traffic sounds from I-90, I-405, and local traffic along Bellevue Way and 112th Avenue.

To mitigate the impacts of its proposal, Sound Transit proposes to construct noise walls on the west side of its tracks that will reduce noise from train operations to ambient noise levels or lower at all properties in residential use in the South Bellevue segment. These noise walls, including their length and height, are depicted in the mitigation map that is Exhibit O to the Amended and Restated Umbrella Memorandum of Understanding between the City and Sound Transit dated May 6, 2015, and were included in the South Bellevue 60% design drawings in response to a revision request from City staff.

The South Bellevue segment will also run on the west side of Mercer Slough Nature Park, an outdoor public facility including hiking trails, boating and other amenities. The Park also is within the Class A EDNA, and subject to the same nighttime noise limits even though the Park is not in residential use and is only open during daylight hours. The East Link Project FEIS determines that only the interior of the Park over 350 feet from the light rail alignment is considered noise sensitive under the FTA

East Link South Bellevue Segment Staff Report 14-134626 LD Page **60** of **83**

criteria described in its guidance document "Transit Noise and Impact Assessment (FTA, May 2006)."

The Memorandum dated June 29, 2015 from Steven Wolf of ATS Consulting demonstrates that, during daylight hours when the Park is in use, noise from light rail operations will exceed ambient noise levels at three of four modelled locations during the 8:30 a.m. to 3:00 p.m. period. Noise from train operations is exempt from the maximum limits in the noise code between the hours of 7:00 a.m. and 10:00 p.m., however, and Sound Transit does not propose noise walls on the east side of its tracks to reduce noise from train operations to ambient levels on the trails near the periphery of the Park.

The facts and circumstances created by the presence of the light rail system in the South Bellevue Segment are unique, and not anticipated in the City's Noise Control Code. In light of these unique facts and circumstances, the Department determines and concludes, pursuant to its authority under the State Environmental Policy Act (SEPA), that it is not reasonable or appropriate to require Sound Transit to construct additional noise walls to bring noise from train operations below ambient noise levels at the residential properties west of the tracks. The Department also determines and concludes that it is not reasonable or appropriate to require Sound Transit to construct noise walls east of the tracks to lower noise from train operations since the Park is mostly not in use when the nighttime noise limits in the code apply, since the periphery of the Park is already subject to high ambient noise levels from traffic on nearby streets and highways, and the noise levels in the interior noise-sensitive areas of the park are below ambient.

The City's Environmental Procedures Code directs the Department to use its substantive SEPA authority when there are "[u]nusual circumstances related to a site or to a proposal," BCC 22.02.140.C, which is the case here. SEPA's policies and procedures are "supplementary" to all City regulations, per RCW 43.21C.060:

The policies and goals set forth in this chapter are supplementary to those set forth in existing authorizations of all branches of government of this state, including state agencies, municipal and public corporations, and counties.

The City's Comprehensive Plan is one of the City's substantive SEPA policies per BCC 22.02.140.B.1 of the City's Environmental Procedures Code, and the City's Comprehensive Plan is the City's "foundational policy document" (Introduction & Vision page 1). Environmental Policy 95 anticipates the unique situation created by the presence of a light rail system along Bellevue Way and 112th Avenue (emphasis added):

EN-95. Require a noise analysis for transportation projects in or near residential areas if existing or projected noise levels exceed city-adopted standards, and *implement reasonable and effective* noise mitigation measures when appropriate.

East Link South Bellevue Segment Staff Report 14-134626 LD Page **61** of **83**

> Mitigation for light rail vehicle operation noise in excess of the noise walls proposed by Sound Transit, and the other mitigation set forth below, would not result in any discernible benefit to persons on the receiving residential properties or within the Park, and therefore would not be reasonable and effective or appropriate.

> In order to ensure that noise levels are maintained at or below the ambient level during operations, the applicant will be required to maintain light rail vehicles in a well-operating manner. To ensure the light rail vehicles are maintained over time, an Operations and Maintenance Program is required to meet FTA and City prescribed noise levels. At a minimum, this program must include rail grinding and replacement of worn rails including cross over switches, vehicle wheel truing and replacement, vehicle maintenance and operator training. In addition, all light rail vehicles must be designed with wheel skirts to reduce noise from the rail-wheel interface. This condition is reasonable, necessary to ensure that operations are maintained consistent with impacts predicted in the East Link FEIS and subsequent noise analysis, and supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

The requirements imposed in the conditions of approval to mitigate for noise generated by proposed light rail vehicle operation, and monitoring of performance once the trains are operational, will ensure that noise generated from light rail vehicle operation will be consistent with ambient noise levels existing at the time this approval was granted. These conditions are reasonable, necessary to ensure that operations are maintained consistent with impacts predicted in the East Link FEIS and supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

Wheel Squeal Noise

Noise generation related to wheel squeal on tight radius curves falls outside the scope of what would typically be expected from a well-operating light rail vehicle or system, and could compromise the long term compliance with ambient noise levels existing at the time of City review. Wheel squeal was reported in the Final EIS documents to occur predominantly along curved track segments with a radius of less In the South Bellevue segment, the curve between the I-90 than 600 feet. alignment and the South Bellevue station has a design radius of less than 600 feet. In order to mitigate for noise generation expected to occur on curved track segments, a lubrication system is required on all curves with a radius of 600-feet or less. For curves with a radius between 600 to 1,250 feet, the project must be designed to accommodate a lubrication system if wheel squeal is detected during noise monitoring required to be undertaken during system testing and for a period of two years after fare operations begin. This condition is reasonable, necessary to ensure that operations are maintained consistent with impacts predicted in the East Link FEIS, and supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

Train-Mounted Warning Devices

Train-mounted warning devices are exempt from application of the Noise Control Code pursuant to BCC 9.18.020.A.10 because they are classified as protective warning devices in the applicable excerpted section of the code provided below.

9.18.020 Exemptions.

A. The following sounds are exempt from the provisions of this chapter:

. . . .

10. Sounds created by safety and protective warning devices where noise suppression would render the device ineffective;

As a result of the Collaborative Design Process, there are no pedestrian crossings in E320. As a result, no bells and horns will emanate from light rail vehicles along the E320 segment except when entering and leaving the South Bellevue Station or if necessary for emergency purposes.

Where required, trains will operate with a high bell, low bell and horn. The horn is only used for emergency situations that are infrequent and unpredictable. The trainmounted bell is proposed to be used for arrivals and departures at a station. Trainmounted bells should operate at a sound level that is the minimum necessary for the warning device to be effective. The applicant is proposing to use the high bell with a sound pressure level of 80dBA at 50 feet during the daytime hours from 6 a.m. to 10 p.m. The low bell will have a sound pressure level of 72 dBA at 50 feet and is proposed for use during nighttime hours from 10 p.m. to 6 a.m. In order to minimize the intrusion of the warning sound onto adjacent properties, the applicant will be required to provide operator training on bell and horn operation protocols. In addition, the train-mounted warning devices will be required to direct sound forward of the vehicle in its direction of travel. This condition is reasonable, necessary to ensure that operations are maintained consistent with the Bellevue Noise Control Code, and supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

STATIONARY NOISE SOURCES

Noise generated from stationary sources proposed as a component of the South Bellevue segment includes eight electrical transformers, one traction power substation located on the Sweyolocken Pump Station Access Road, and the public address (PA) system at the South Bellevue Station.

Wayside pedestrian audible warning devices were proposed for at-grade crossings in the original Sound Transit design for the South Bellevue segment, but the at-grade crossings have since been removed. Early in the project development, it was acknowledged by the City that the sounds created by safety and protective warning

devices for at-grade crossings would be exempt from the provisions of the Noise Control Code. BCC 9.18.030.A.10. In order to <u>avoid</u> the exempt noise impacts on surrounding neighborhoods created by at-grade crossings, the City of Bellevue and Sound Transit negotiated revisions to the project that eliminated at-grade crossings in the South Bellevue segment through the use of elevated and in-trench track and road-over-rail design solutions. Construction of these design solutions will avoid the creation of the exempt noise, and create an improved condition over what would have been achievable under the terms of the Noise Control Code.

Bellevue City Code includes maximum permissible noise levels applicable to stationary noise sources proposed for the South Bellevue segment. For receiving properties located within Class A EDNAs found in South Bellevue, noise sources are limited to 55 dBA during daytime hours and 45 dBA from 10:00 p.m. to 7:00 a.m. (BCC 9.18.030.B)

Electrical Transformers

A 112.5 KVA transformer will be used at the South Bellevue station. Manufacturer's sound level data of a transformer between 51 KVA and 150 KVA is less than 50 dBA at 3 feet. The noise level at the nearest receiving property is predicted using the following equation:

 $Leq(1hr) = Leq_{ref} - 20*log(dist/3)$

where Leq_{ref} is the reference noise level of 50 dBA at 3 feet and *dist* is the distance from the transformer to the property line of the receiving property.

Note that this prediction methodology assumes the transformers operate continuously. Noise from the transformers would also be diminished at the property line as the distance from the transformer increases. The transformers are expected to comply with the terms of the Noise Control Code once operational. In order to ensure compliance with predicted sound levels, the applicant will be required to install the transformers consistent with manufacturer specifications. Monitoring of the stationary noise will be required to commence upon the initiation of system testing. Additional noise baffling may be required by the DSD director if maximum permissive noise levels are exceeded at receiving properties when the stationary noise source is placed into operation. This condition is reasonable, necessary to ensure that operations are maintained consistent with the Bellevue Noise Control Code, and is supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

Traction Power Substations

The TPSS in E320 is within Washington State Department of Transportation Right of Way. The primary noise sources on TPSS units are the air conditioning units. The noise levels from the TPSS units were predicted using the manufacturers measured sound levels for the Bard wall mounted package air conditioner model

W38A1. The manufacturers measured noise level at a distance of 50 ft. from the unit is 50 dBA, which is consistent with a noise measurement ATS Consulting performed at a TPSS unit from the Gold Line, a RLRT system in Los Angeles, CA. The predictions for this analysis assume that the air conditioner unit would be operating continuously, which is a worst-case assumption. The TPSS in E320 is located within WSDOT Limited Access ROW and outside the limits of this Design and Mitigation Permit application.

Public Address System

The PA system is an anticipated source of noise associated with the South Bellevue Station. The South Bellevue Station is the only station located within the Contract E320 limits. The stationary noise sources associated with the South Bellevue Station are electrical transformers and a PA system. These noise sources are subject to the City of Bellevue's noise limits. The nearest receiving properties to the station are the single family residences west of Bellevue Way. The parcel with their property line closest to the station is EL112. The station itself and the nearest receiving properties are located in a Class A EDNA zone.

The noise limits and predicted noise levels for the transformer and PA announcements for the closest parcel are shown in **Table IX-1**. The predictions assume that the transformer will be operating continuously and the announcements from the PA system will be intermittent and will have a duration of 90 seconds in a one-hour time period. The predicted noise levels are below the City of Bellevue's noise limit.

Table IX-1: Predicted Noise Levels from the South Bellevue Station

Noise Source	Receiver	Distance to property line	Predicted Noise Level, Leq(1hr)	City of Bellevue Nighttime Noise Limit, Leq(1hr)
Electrical transformer	EL112	180 ft.	19	45
PA Announcements	EL112	180 ft.	28 dBA	45

In an enclosed environment such as a transit station sound can continue to reflect for a period of time after a source has stopped emitting sound. This prolongation of the sound is called reverberation. Reverberation time (TR60) is defined as the time required, in seconds, for the average sound in a room to decrease by 60 decibels after a source stops generating sound. Reverberation time is the primary descriptor of an acoustic environment.

Reverberation time is affected by the size of the space and the amount of reflective or absorptive surfaces within the space. A space with highly absorptive surfaces will absorb the sound and stop it from reflecting back into the space. This would yield a

East Link South Bellevue Segment Staff Report 14-134626 LD Page **65** of **83**

space with a short reverberation time. In general, larger spaces have longer reverberation times than smaller spaces. Therefore, a large space will require more absorption to achieve the same reverberation time as a smaller space.

Reverberation time for the transit stations are calculated using the Sabin Formula:

 $RT_{60} = 0.049 * V/a$

where V is the volume of the space (ft³) and a is the total room absorption at a given frequency in sabins. It is important to note that the absorption and surface area must be considered for every material within a space in order to calculate sabins. The number of sabins is determined by multiplying the noise reduction coefficients of different surfaces within the station by the surface area of that material.

This calculation method is used to determine if the design of a transit station will achieve the Sound Transit Design Criteria of a maximum reverberation time of 1.5 seconds or less in those public areas where the transit patrons rely on the public address system for information and directions. Typically these spaces are the platform and mezzanine areas of the station. The FTA and BCC do not have a criteria relating to station reverberation time. The ST Design Criteria are the only criteria that apply to the acoustical design of the stations.

Mitigation measures for station noise at South Bellevue Station including using low level speakers at listener ear height and a reader board for announcements in place of the public address (PA) system during nighttime and early morning hours (10 p.m. to 7 a.m.) and lowering the noise level of the audible warning devices during these same nighttime hours. In order to ensure compliance with the maximum permissible noise levels, the applicant will be required to direct sound to the platform area and comply with required noise levels at receiving properties to minimize noise levels audible on adjacent properties. Monitoring of the stationary noise will be required to commence upon the initiation of system testing. Additional noise reduction measures (such as reduction of reflective surfaces or the addition of acoustically absorptive surfaces in the station platform area) may be required by the DSD director if the PA system does not comply with maximum permissive noise levels on adjacent properties. This condition is reasonable, necessary to ensure that operations are maintained consistent with the Bellevue Noise Control Code, and is supported by evidence and the opinions of the City's technical expert Julie Wiebusch and the Greenbusch Group. Refer to Condition of Approval contained in Section XI of this staff report.

Construction Noise

Expanded hours may be approved by the Land Use Director per BCC 9.18.020.C pursuant to a Construction Noise Expanded Exempt Hours permit. Restricting the construction hours will reduce noise impacts to neighboring properties. Expanded construction hours during evening or early morning hours shall be limited to those activities which require a continuous 24 hour period or other activities which will negatively impact utility service or the transportation system. In addition, the

contractor must use the best available noise abatement technology consistent with feasibility during construction. If approval of expanded exempt hours is requested, the applicant will be required to provide a construction hotline, develop a plan for public outreach, provide notice prior to the commencement of construction, monitor noise and periodically review practices during the course of the exemption period. Refer to Condition of Approval regarding construction hours and use of best available noise abatement technology in Section XI of this report.

VIII. CHANGES TO PROPOSAL DUE TO PUBLIC, CAC, AND CITY REVIEW

Many changes have been made to the proposal prior to permit application during the collaborative design process at the pre-development stage. As discussed throughout this staff report numerous changes or conditions of approval have been placed on this application due to staff and CAC review. The majority of changes are detailed in Section IV and VII of the staff report.

IX. DESIGN AND MITIGATION PERMIT DECISION CRITERIA (LUC 20.25M.030.C.3)

Below is a discussion of how the proposal has met the decision criteria for the Design and Mitigation Permit request. Compliance with each of these criteria has been demonstrated in the project application and supporting documents, and is discussed in various places in this Staff Report.

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

Finding: 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. The materials provided by Sound Transit during the pre-development and Design and Mitigation Permit review phases resulted in advisory documents consistent with LUC 20.25M.035.C.5. The final Design and Mitigation Permit CAC recommendation was transmitted to the Development Services Department director on July 15, 2015. Agenda packet materials and minutes from the CAC meetings are available for review in the project file.

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

Finding: 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).

The alignment location and profile for East Link was approved by the Bellevue City Council and the Sound Transit Board. The design of this proposal using this alignment is consistent with the Comprehensive Plan and 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. Details of project compliance are provided detailed throughout this staff report including consistency with context requirements, design standards, and design guidelines.

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

Finding: Compliance with all elements of the Light Rail Overlay District has been demonstrated by the analysis included in this Design and Mitigation Permit staff report.

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

Finding: As discussed above in Staff Report Section IV, 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

Finding: The South Bellevue Segment of East Link must comply with all applicable context setting requirements as discussed in this staff report. Sound Transit has demonstrated that the design of the South Bellevue Segment responds to the physical characteristics of the vicinity and is intending to provide a significant regional resource that will reflect the unique character of the City of Bellevue.

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

Finding: Adequate public facilities are available to serve East Link in South

East Link South Bellevue Segment Staff Report 14-134626 LD Page **68** of **83**

Bellevue. There is on-going coordination with city and private utility providers to ensure adequate service is maintained. Utility work is currently underway on 112th Ave SE ahead of Sound Transit construction to avoid conflicts and insure continued delivery of necessary utility services. Sound Transit and the City of Bellevue are coordinating with Puget Sound Energy on the replacement of power poles and emergency access for maintenance work that is impacted by the rail alignment.

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

Finding: 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 as discussed in detail in Sections II, III, IV, VI, VII, and VIII of this staff report.

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

Finding: While the project was not permitted by development agreement or conditional use permit pursuant to LUC 20.25M.030.B, the alignment and light rail facilities approved by the Bellevue City Council and the Sound Transit Board are reflected in this proposal and are consistent with the applicable terms of the Memorandum of Understanding.

i. The proposal provides mitigation sufficient to eliminate or minimize longterm 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.

Finding: Sound Transit has been required to avoid, minimize, and mitigate anticipated long-term impacts to properties located near the light rail system and facilities by adhering to required landscape development requirements, noise mitigation conditions, and compliance with critical areas protection and mitigation as discussed in detail in Sections IV and VII.

- 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

East Link South Bellevue Segment Staff Report 14-134626 LD Page **69** of **83**

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.

Finding: Mitigation and restoration requirements per LUC 20.25H have been incorporated into the design of the East Link project and a detailed discussion of critical areas compliance is located in Section IV of this staff report. Impacts to critical areas in the South Bellevue Segment are discussed in detail in Section IV of this staff report. A receiving mitigation site to mitigate for impacts to wetlands and streams along the entire East Link alignment is located in the Bel Red Segment and another site is located outside of the project area in the Coal Creek Basin.

X. DECISION

After conducting the various administrative reviews associated with the proposal, including applicable Land Use consistency, City Code, and Standard compliance reviews, the Director does hereby **APPROVE WITH CONDITIONS** the East Link South Bellevue Segment Design and Mitigation Permit.

XI. CONDITIONS OF APPROVAL:

Applicable

Compliance with City Codes and Documents

Codes.

The applicant shall comply with all applicable Bellevue City Codes, Standards, and Ordinances, including, but not limited to the following:

and Contact Person

Standards

Ordinances	and Jontaet Ferson
Clearing & Grading Code – BCC 23.76	Tom McFarlane, 425-452-5207
Construction Codes – BCC Title 23	Bldg. Desk, 425-452-4121
Fire Code – BCC 23.11	Travis Ripley, 425-452-6042
Land Use Code – BCC Title 20	Matt Jackson, 425-452-2729
Environmental Procedures Code –	Matt Jackson, 425-452-2729
BCC Title 22.02	
Noise Control – BCC 9.18	Matt Jackson, 425-452-2729
Right of Way Use Code – BCC 14.30	Tim Stever, 425-452-4294
Sign Code – BCC Title 22	Matt Jackson, 425-452-2727
Transportation Code – BCC 14.60	Chris Dreaney, 425-452- 5264
Utility Code – BCC Title 24	Art Chi, 425-452-4119

The following conditions are imposed on the applicant under the authority referenced:

A. GENERAL CONDITIONS: The following conditions apply to all phases of development.

1. Noise and Construction Hours

The proposal will be subject to normal construction hours of 7 a.m. to 6 p.m., Monday through Friday and 9 a.m. to 6 p.m. Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Upon written request to DSD, work hours as stated in Chapter 9.18 BCC can be extended if the criteria for extension of work hours can be met and the appropriate mitigation employed. If extended work hour approval is granted, the following conditions shall be attached to the Construction Noise Expanded Exempt Hours Permit (LY) approval in addition to any specific criteria required for the requested exemption.

- Sound Transit or its agent shall establish a 24 hour construction hotline to provide a single point of contact for construction inquiries and complaints per the terms included in the permit submittal. However, complaints received by Code Compliance during work hours and City of Bellevue Police during evening hours will be directed back to the 24 hour hotline. The City of Bellevue and Sound Transit will maintain logs of complaint activity and that information will be shared between agencies.
- A plan for public outreach shall be undertaken by Sound Transit public outreach staff. Once the construction permit is issued for the South Bellevue segment, Sound Transit will be responsible for implementing the public outreach plan and a pro-active program of notification and communication identified in the permit application including, but not limited to, an "informational" public meeting attended by both agencies and construction contractor a minimum of 30 days prior to the start of any heavy civil construction, early written notice of construction activities, hosting public meetings, and communicating with businesses in the vicinity. Sound Transit's contractor will be required to participate in all public outreach activities and meetings.
- A minimum of 14 days prior to the commencement of the construction activity in the South Bellevue segment, Sound Transit or its agent shall provide notice to the City of Bellevue and properties within 1,000 feet of the active construction areas. The form of the communication shall be developed by consensus between the two agencies. Copies of the notice shall be provided to the Development Services Department when they are provided to affected property owners.

The City of Bellevue or its agent shall conduct a one year review of construction noise levels and mitigation and may modify the terms and conditions of this approval as needed if it is determined that the current approval and current conditions are not adequately protecting the public health and safety or reasonably controlling or mitigating the construction noise, or that there are more reasonable methods of doing so based on best management practices.

AUTHORITY: Bellevue City Code 9.18.020.C & 9.18.040 REVIEWER: Matthews Jackson, Development Services

Department

2. Record of Decision Commitments

Sound Transit shall implement the Record of Decision Commitments and EIS Mitigation Recommendations contained in the noise analysis listed in the Noise section of this staff report.

AUTHORITY: Comprehensive Plan Policies TR-75.17 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

3. Conceptual Utilities Approval

Utility Department approval of this Design and Mitigation Permit application is based on the conceptual design only. Changes to the site layout may be required to accommodate the utilities after utility engineering is approved.

AUTHORITY: Bellevue City Code 24.02, 24.04, 24.06

REVIEWER: Arturo Chi, Utilities Department

4. Utilities Developer Extension Agreements

The water, sewer, and storm drainage systems shall be designed per current City of Bellevue Utility Codes and Utility Engineering Standards. All design review, plan approval, and field inspection shall be performed under the Utility Developer Extension Agreements.

AUTHORITY: Bellevue City Code 24.02, 24.04, 24.06

REVIEWER: Arturo Chi, Utilities Department

5. Holiday Construction & Traffic Restrictions

Construction activities such as hauling and lane closures between November 15th and January 5th may be restricted during some hours in some areas, due to holiday traffic. Any such restrictions will be conditions of a Right of Way Use Permit.

AUTHORITY: Bellevue City Code 14.30.060

REVIEWER: Tim Stever, Transportation Department

B. PRIOR TO CLEARING & GRADING PERMIT: These conditions must be complied with on plans submitted with the <u>Clearing & Grading or Demolition permit application</u>:

1. Right-of-Way Use Permit

Prior to issuance of any construction or clearing and grading permit, the applicant shall secure applicable right-of-way use permits from the City's Transportation Department, which may include:

- a) Designated truck hauling routes.
- b) Truck loading/unloading activities.
- c) Location of construction fences.
- d) Hours of construction and hauling.
- e) Requirements for leasing of right of way or pedestrian easements.
- f) Provisions for street sweeping, excavation and construction.
- g) Location of construction signing and pedestrian detour routes.
- h) All other construction activities as they affect the public street system.

In addition, the applicant shall submit for review and approval a plan for providing pedestrian access during construction of this project. Access shall be provided at all times during the construction process, except when specific construction activities such as shoring, foundation work, and construction of frontage improvements prevent access. General materials storage and contractor convenience are not reasons for preventing access.

The applicant shall secure sufficient off-street parking for construction workers before the issuance of a clearing and grading, building, a foundation or demolition permit.

AUTHORITY: Bellevue City Code 11.70 & 14.30 REVIEWER: Tim Stever, Transportation Department

2. Construction Plans

Civil engineering plans produced by a qualified engineer must be approved by the Transportation Department and other City departments prior to issuance of any clearing and grading permit. The design of all street frontage improvements, driveway accesses, and other work within any street right of way must be in conformance with the Americans with Disabilities Act, the Transportation Development Code, the Transportation Department Design Manual, and specific requirements stated elsewhere in this document, except where deviations from such requirements have been approved by the City during previous review cycles or may be approved though subsequent review. At the City's discretion, deviations from standard requirements may be approved through the Deviations, Exceptions, and MEF process. All relevant standard drawings from the

Transportation Department Design Manual should be copied exactly into the engineering plans. Requirements for the engineering plans include, but are not limited to:

- a) Traffic signs and markings.
- b) Curb, gutter, sidewalk, and driveway approach design.
- c) Handicapped ramps, crosswalk revisions, and crosswalk equipment such as pushbuttons.
- d) Installation or relocation of streetlights, traffic signals, and related equipment.
- e) Sight distance. (Show the required sight triangles and include any sight obstructions, including those off-site.)
- f) Location of fixed objects in any sidewalk or near any driveway approach.
- g) Trench restoration within any right of way or access easement.

AUTHORITY: Bellevue City Code 14.60, Transportation Department

Design Manual, and Design Manual Standard Drawings

REVIEWER: Chris Dreaney, Transportation Department

3. Specimen Trees

Prior to issuance of the clearing and grading permit, the applicant shall coordinate with the City of Bellevue Parks and Community Services and Development Services staff to identify locations for specimen trees. <u>The Parks Department shall inspect all plant material prior to planting.</u>

Parks and Community Services Department Contacts:

- Tom Kuykendall, tkuykendall@bellevuewa.gov or (425) 452-7925; or
- Melissa Kerson, mkerson@bellevuewa.gov or (425) 452-4100

AUTHORITY: Land Use Code 20.20.520 and BCC 24.02.205 REVIEWER: Matthews Jackson, Development Services

Department

4. Alternative Landscape Option

Prior to issuance of a clearing and grading permit, submit a revised landscaping plan that reflects the proposed ALO graphics submitted on July 31, 2015 including subsequent modifications. Any additional modifications to landscaping plans, including tree retention, must be submitted to Development Services for review.

AUTHORITY: Land Use Code 20.25M.040.C.4

REVIEWER: Matthews Jackson, Development Services

Department

C. PRIOR TO ISSUANCE OF BUILDING PERMIT: Unless specified otherwise below, these conditions must be complied with on plans submitted with the Building Permit Application:

1. Building and Site Plans – Station and Other Structures

The building grade and elevations for the station and any other structures that require a building permit shall be consistent with the curb and sidewalk grade shown in the approved civil engineering plans. During construction, city inspectors may require additional survey work at any time in order to confirm proper elevations. Building plans, landscaping plans, and architectural site plans must comply with vehicle and pedestrian sight distance requirements wherever relevant.

AUTHORITY: Bellevue City Code14.60.060, 110, 120, 150, 180,

181, 190, 240, 241

REVIEWER: Chris Dreaney, Transportation Department

2. Mechanical Equipment

Any mechanical equipment screening shall be consistent with the landscape development requirements of LUC 20.25M.C and shall be context sensitive. Any installed mechanical units shall be reviewed at final inspection and a decision shall be made at that time whether addition screening will be required.

AUTHORITY: Land Use Code 20.25M.040.F

REVIEWER: Matthews Jackson, Development Services

Department

3. Planting in Right-of-Way/Streetscape

- a) Planting shall be done according to the Parks and Community Services Department Best Management Practices and Design Standards in place at the time of construction.
- b) A Parks Department representative shall be on-site to inspect street trees **prior to planting** and **at the time of planting** to observe the installation. Contact Parks Department Resource Management at (425) 452-6855 at least 24 hours before planting to schedule the inspection.

AUTHORITY: Land Use Code 20.25M.040.C.1.c.iv

REVIEWER: Matthews Jackson, Development Services

Department

Tom Kuykendall, Parks and Community Services

Department

4. Lighting

To protect adjacent properties and vehicular traffic in the right-of-way, all exterior lighting fixtures shall utilize cutoff shield or other appropriate measures to conceal the light source. There shall be no light spillover glare beyond the site boundaries. The lighting on the top of the garage at the South Bellevue Station shall utilize appropriate shielding to prevent light spillover.

The applicant shall submit manufacturers' cut-sheets/information for all exterior lighting fixtures to demonstrate that cutoff shields or other appropriate measures are being used to conceal the light source from adjacent properties and rights-of-way.

AUTHORITY: Land Use Code 20.25M.

REVIEWER: Matthews Jackson, Development Services

Department

5. Living Wall, Green Roof, and/or Planter Boxes

In order to help soften the edges of the proposed parking garage at the South Bellevue Station, Sound Transit submit revised plans to the building permit which indicates the inclusion of a living wall, green roof, or planter boxes with hanging vegetation on the upper levels of the north, south, and west sides of the structure.

AUTHORITY: Land Use Code 20.25M.050.B.1

REVIEWER: Matthews Jackson, Development Services

Department

6. Noise Wall Materials

Prior to building permit issuance for noise walls, Sound Transit shall submit revised plans that indicate a stacked stone or brick type pattern with variegated earth tones for noise walls. The design should reflect Ashlar stone walls or an equivalent. Areas where noise walls exceed ten feet in height should incorporate an art treatment where technically feasible.

AUTHORITY: Land Use Code 20.25M.050.B

REVIEWER: Matthews Jackson, Development Services Department

7. South Bellevue Station Wayfinding and Viewing Platform

Sound Transit shall coordinate with the City of Bellevue to identify appropriate wayfinding opportunities for potential park users and identify incorporate a location on the top deck of the parking garage for a viewing platform large enough to accommodate two adults.

AUTHORITY: Land Use Code 20.25M.050.B

REVIEWER: Matthews Jackson, Development Services Department

8. Variable Seating Heights

In order to accommodate the broad range of light rail rider ages and mobility, Sound Transit shall incorporate variable seating heights within the South Bellevue Station. Building permit plans shall reflect seat locations and types.

AUTHORITY: Land Use Code 20.25M.050.C

REVIEWER: Matthews Jackson, Development Services

Department

D. PRIOR TO TRAIN OPERATION: The following conditions are required by City Code and supported by City Policy and shall be complied with <u>prior to train operation</u>:

1. Street Tree Infrastructure Improvements

All street infrastructure improvements and other required transportation elements, including street light and traffic signal revisions, must be constructed by the applicant, or relocated as needed, and accepted by the Transportation Department Inspector. All required improvements must be constructed per the approved plans or per direction of the Transportation Department inspector or as decided in formal agreements between the City of Bellevue and Sound Transit. Vehicle and pedestrian sight distance requirements shall be achieved wherever relevant.

AUTHORITY: Bellevue City Code 14.60, Comprehensive Plan

Policy UT-39, Transportation Department Design Manual, and Transportation Department Standard

Drawings.

REVIEWER: Chris Dreaney, Transportation Department

2. Pavement Restoration

Pavement restoration associated with street improvements or to repair damaged street surfaces shall be provided as prescribed by Right of Way Use Permits issued prior to or at the time of construction.

AUTHORITY: Bellevue City Code14.60. 250; Design Manual Design

Standard #23

REVIEWER: Tim Stever, Transportation Department

3. Easements

New sidewalk / utility easements shall be granted to the City to include all areas to the back of the future City sidewalk that are not within existing sidewalk easements or within existing or future right of way. Easements to include retaining walls will be provided wherever a retaining wall is necessary to support a City street, sidewalk, or related feature. New easements shall be granted to the City for the location of signal and street light hardware and related facilities that would not be within existing or future right of way or sidewalk easement areas. Any existing utility

East Link South Bellevue Segment Staff Report 14-134626 LD Page **77** of **83**

easements impacted by this development must be mitigated or easements relinquished.

AUTHORITY: Bellevue City Code 14.60.100

REVIEWER: Chris Dreaney, Transportation Department

4. Dedication of Right of Way

New right of way shall be dedicated to the City to the back of any new or existing curb line along any City street where the new or existing curb will not be within existing City right of way. Dedication of new right of way to the City shall utilize forms and procedures acceptable to the City.

AUTHORITY: Bellevue City Code 14.60.090

REVIEWER: Chris Dreaney, Transportation Department

5. Landscape Maintenance

The applicant shall maintain all installed landscaping per the terms of Section 32 90 00 of the South Bellevue Contract Specifications Volume 2 (4 of 4) which establishes the provision of adequate and proper care for plant materials and landscape areas within the Contract limits for a minimum period of 1 year (365 days) to ensure healthy, vigorous growth of planted material. The Contractor is responsible to maintain the irrigation system for the entire planting establishment period.

AUTHORITY: Land Use Code 20.20.520.K

REVIEWER: Matthews Jackson, Development Services

Department

6. Ownership and Maintenance of Landscape Screening Within RLRT Transition Area

Landscape screening located within the required 30-foot setback from the RLRT track alignment is owned by the Regional Transit Authority. The landscape screening located outside the required setback from the RLRT track alignment may be located on property owned in fee by a Regional Transit Authority, on an easement, or on private property where access entry was secured for landscape installation.

Landscape screening is required to be maintained by the Regional Transit Authority for the life of the project. Maintenance of landscape screening may be reassigned to the underlying property owners pursuant to a voluntary written agreement filed with the Development Services Department and King County Recorder's Office or its successor agency.

AUTHORITY: Land Use Code 20.25M.040.C.3.c and d REVIEWER: Matthews Jackson, Development Services

Department

Noise Conditions

The following conditions are reasonable, necessary to ensure that operations are maintained consistent with impacts predicted in the East Link FEIS and other additional documents, supported by evidence and the opinions of the City's technical expert Julie Wiebusch of the Greenbusch Group, and are imposed under the Bellevue City Code or SEPA authority referenced:

7. Sound Transit shall implement the Record of Decision Commitments and EIS Mitigation Recommendations contained in the noise analysis listed in the Noise section of this staff report.

AUTHORITY: Comprehensive Plan Policies TR-75.17 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

8. Light Rail Vehicle Design and Operation

Light rail vehicles designed for use on the portion of East Link that passes through Bellevue shall be designed and operated to meet FTA and City required noise levels through the use of wheel skirts (that cover the wheel wells and reduce noise from the rail-wheel interface) or other equivalent measures.

AUTHORITY: Bellevue City Code 9.18.020.B.5 and 9.18.020.G;

Comprehensive Plan Policies EN-88, TR-75.17 and

TR-118

REVIEWER: Matthews Jackson, Development Services

Department

9. Operations and Maintenance Program

The applicant shall maintain an Operations and Maintenance Program for all East Link trackwork and light rail vehicles operating in Bellevue to meet FTA and City required noise levels. This program shall at a minimum include:

- Rail grinding and replacement of worn rails.
- Vehicle wheel truing and replacement. Grind down flat spots ("wheel flats") on the vehicle wheels, which can be caused by hard braking and can cause increases in the noise levels produced by the light rail vehicles.
- Vehicle Maintenance. Perform maintenance on items such as air conditioning units, bearings, wheel skirts, and other mechanical units on the light rail vehicles.
- Operator Training. Train operators to operate vehicles to avoid hard breaking which can cause wheel flats and may also damage the track, and to identify potential wheel flats and other mechanical problems so that timely maintenance can be performed.

The applicant shall prepare a report as part of Condition D.15 below and

East Link South Bellevue Segment Staff Report 14-134626 LD Page **79** of **83**

shall submit the report to the City of Bellevue Development Services Director describing the operations and maintenance program.

AUTHORITY: Bellevue City Code 9.18.020.A.10, 9.18.020.B.5 and

9.18.020.G; Comprehensive Plan Policies EN-88, TR-

75.17, TR-75.33 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

10. Track Design and Construction to Address Wheel Squeal

Light rail trackwork designed for use on the portion of East Link that passes through Bellevue shall be designed and operated to include rail lubricators to reduce the potential for wheel squeal on curves with a radius of 600 feet or less. Curves with a radius of greater than 600 feet up to 1,250 feet shall be built to easily accommodate lubricators in the event that wheel squeal occurs during operations.

AUTHORITY: Bellevue City Code 9.18.020.B.5 and 9.18.020.G;

Comprehensive Plan Policies EN-88, TR-75.17, TR-

75.33 and TR-118.

REVIEWER: Matthews Jackson, Development Services

Department

11. Train Mounted Warning Devices. Train-mounted warning devices are a safety warning device. The applicant shall provide operator training on bell and horn operation protocols. To minimize noise levels, train mounted warning devices on light rail vehicles operating in Bellevue shall direct sound forward of the vehicle in its direction of travel, and train-mounted bell sound levels shall be reduced during nighttime hours of 10 p.m. to 6 a.m. while retaining their safety effectiveness.

AUTHORITY: Bellevue City Code 9.18.020.A.10 and 9.18.020.G;

Comprehensive Plan Policies EN-88, TR-75.17, TR-

75.33 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

12. Electrical Transformers

Sound levels associated with stationary noise sources shall comply with City required noise levels at receiving properties. Additional mitigation may be required if monitoring consistent with Condition 15 below indicates that actual sound levels are not consistent with the Bellevue Noise Control Code.

AUTHORITY: Bellevue City Code 9.18.030; Comprehensive Plan

Policies EN-88, TR-75.17, and TR-118.

REVIEWER: Matthews Jackson, Development Services

Department

13. Public Address System

Public address system speakers shall direct sound to the platform area and shall comply with required City noise levels at receiving properties. Additional measures may include that the public address system have an adjustable sound level and sound levels be reduced to within 10 dBA of ambient noise levels or as required to meet the applicable speech intelligibility criteria adopted by the National Fire Protection Association (NFPA). Additional noise mitigation may be required if monitoring consistent with Condition 15 below indicates that actual sound levels are not consistent with the Bellevue Noise Control Code.

AUTHORITY: Bellevue City Code 9.18.030; Comprehensive Plan

Policies EN-88, TR-75.17, TR-75.13 and TR-118.

REVIEWER: Matthews Jackson, Development Services

Department

14. Wayside Audible Warning Devices

Wayside audible warning devices are a safety warning device. Sound levels shall be designed to meet the soft tone bell AREMA standard (75 dBA to 85 dBA at 10 feet) or as required to retain the safety effectiveness of the warning device. A copy of the AREMA Recommended Design Criteria is available in the project file.

AUTHORITY: Bellevue City Code 9.18.020.A.10 and 9.18.020.G;

Comprehensive Plan Policies EN-88, TR-75.17, TR-

75.33 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

15. Monitoring and Contingency Plan

At least 6 months prior to commencing vehicle testing and system startup, Sound Transit shall submit for approval by the Director of the Development Services Department, a 3-year noise and vibration monitoring program for the Project to confirm that operating light rail train noise and vibration levels meet FTA ROD criteria and Design and Mitigation Permit requirements applicable at the time of this approval. Such program shall also include a noise complaint and resolution process to be approved by the Director. The 3-year period shall begin at the start of vehicle testing and system start-up prior to revenue service. Sound Transit shall monitor once during vehicle testing and system start-up and once each year for two years after revenue service begins for a total of three rounds of monitoring. Monitoring shall be conducted at representative locations where impacts and mitigation have been identified in the Design and Mitigation permit process. If measured levels show that noise or vibration attributable to the Project exceed FTA criteria or Design and Mitigation Permit requirements applicable at the time of approval, and track or light rail vehicle modifications are not sufficient to

bring the Project within compliance, Sound Transit shall submit a mitigation plan within 60 days with appropriate reasonable mitigation for approval by the Director to achieve compliance. Such mitigation techniques may include, but shall not be limited to, adjustments to bells and auditory devices at stations; installation of noise walls along the guideway, rights-of-way or property boundaries; installation of track lubricators or noise insulation packages; acoustic grinding of rails or installation of rail dampers; noise baffling of stationary noise sources; and reduction of reflective surfaces or addition of acoustically absorptive surfaces. Upon approval of such mitigation plan by the Director, Sound Transit shall work to expedite installation of the approved corrective mitigation. One additional round of monitoring will be conducted to confirm compliance at the location of any exceedances if identified in the last year of the monitoring program.

AUTHORITY: Bellevue City Code 9.18.020.A.10, 9.18.020.B.5,

9.18.030 and 9.18.020.G; Comprehensive Plan Policies EN-88, TR-75.17, TR-33 and TR-118.

REVIEWER: Matthews Jackson, Development Services

Department

16. Noise Walls

Permanent noise walls (other than those that are required on the light rail guideway) shall be given priority in the sequence of construction and installed as early as technically feasible and practical in the construction process in order to ensure that the permanent noise walls also provide some benefits during construction of the Project. The City, Sound Transit and their contractors will consult on the appropriate sequence and timing for installation of permanent noise walls. Alternative solutions that achieve an effective level of noise mitigation may be considered. The final timing of installation of the noise walls or alternatives shall be established in the clearing and grading permit for each related contract package. These noise walls, including their length and height, are depicted in the mitigation map that is Exhibit O to the Amended and Restated Umbrella Memorandum of Understanding between the City and Sound Transit dated May 6, 2015.

AUTHORITY: Comprehensive Plan Policies TR-75.17 and TR-118

REVIEWER: Matthews Jackson, Development Services

Department

East Link South Bellevue Segment Staff Report 14-134626 LD Page **82** of **83**

17. Structure Separation Requirement Within RLRT Transition Area

No portion of any primary residential structure may be closer than 60 feet from the nearest edge of the track-way within the RLRT transition area prior to train operations. This condition becomes void once train operations are commenced.

AUTHORITY: Land Use Code 20.25M.040.B.3

REVIEWER: Matthews Jackson, Development Services

Department

18. OCS Pole Design

Sound Transit shall use round catenary poles instead of H poles from the South Bellevue Station to the tunnel portal at the intersection of 112th Ave SE and Main Street.

AUTHORITY: Land Use Code20.25M.050.B.1

REVIEWER: Matthews Jackson, Development Services Department