Appendix I

Mitigation Plan

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Mitigation Plan

I.1 Introduction

The mitigation plan for East Link describes Sound Transit's preliminary mitigation commitments, which include all the mitigation measures Sound Transit proposes to implement to avoid or minimize impacts from the *Preferred Alternatives* identified in the Final EIS. If the Sound Transit Board ultimately selects another alternative to build differing from the *Preferred Alternatives*, the mitigation plan will be modified accordingly. The following are the *Preferred Alternatives*:

- Segment A: *Preferred Interstate 90 Alternative (A1)*
- Segment B: *Preferred 112th SE Modified Alternative (B2M)*
- Segment C: *Preferred 108th NE At-Grade Alternative (C11A)* and *Preferred 110th NE Tunnel Alternative (C9T)*
- Segment D: *Preferred NE 16th At-Grade Alternative (D2A)*
- Segment E: *Preferred Marymoor Alternative (E2)*

The mitigation measures described below are based on the potential mitigation measures identified in the Final EIS. Measures associated with the operation of East Link (long-term impacts) are described first; measures associated with construction are described second. These mitigation measures will be tracked in a monitoring program to ensure that the mitigation commitments are being met and addressed.

I.2 Transportation Potential Mitigation Measures

I.2.1 Regional Travel Mitigation Measures

No adverse impacts have been identified and no mitigation is proposed.

I.2.2 Transit Mitigation Measures

No adverse transit impacts have been identified during East Link operations and no mitigation is proposed.

During construction, existing park-and-ride lots (South Bellevue Park-and-Ride and Overlake Transit Center) would either be partially or fully closed. Measures to mitigate the loss of parking at these locations could include the following:

- Route transit riders that use these locations to available spaces at nearby park-and-ride lots, such as the Eastgate or Overlake Village Park-and-Ride Lots.
- Lease parking lots and/or new parking areas within the vicinity of the closed park-and-ride lot.

The South Bellevue Park-and-Ride Lot, Bellevue Transit Center, and Overlake Transit Center would either be partially closed or fully closed during construction. For these and other transit centers impacted during construction, Sound Transit would work with King County Metro and private transit service providers to revise transit service and minimize disruptions to bus facilities and service. Measures to minimize impacts to transit service may include the following:

- Relocate transit stops to adjacent streets.
- Provide a temporary transit center at a nearby off-street location.
- Revise transit services by rerouting buses where appropriate.
- Post informative signage before construction at existing transit stops that would be affected by construction activities.

I.2.3 Highway Operations and Safety Mitigation Measures

No adverse impacts have been identified and no mitigation is proposed during East Link operations.

During East Link construction, Sound Transit would coordinate with the Washington State Department of Transportation (WSDOT) on incident management, construction staging, and traffic control where the light rail construction might affect freeway traffic. Sound Transit would also coordinate with WSDOT to disseminate construction closure information to the public as needed.

I.2.4 Arterials and Local Streets Mitigation Measures

This section discusses mitigation for impacts on intersection level of service (LOS) and parking during project operation, and mitigation for impacts during

project construction. Final mitigation would be coordinated with each affected jurisdiction through subsequent phases of this project.

I.2.4.1 Intersection Level of Service

Arterial and local street mitigation is potentially required at intersections where the intersection LOS with the East Link Project would degrade to levels that do not meet the LOS standards of the jurisdiction compared to the No Build Alternative. The intersections that would potentially be affected and their related improvements are discussed in the following subsections.

Segment A
In Segment A, under *Preferred Alternative A1*, five intersections on Mercer Island would potentially require turn pockets or traffic signal improvements to adjust for the change in travel patterns to and from the island. Improvements at intersections within the City of Mercer Island's jurisdiction include:

- West Mercer Way and 24th Avenue SE: Provide southbound left-turn pocket.
- 80th Avenue SE and SE 27th Street: Install a traffic signal.
- 77th Avenue SE and North Mercer Way: Install a traffic signal.

Improvements at intersections within WSDOT's jurisdiction include:

- 77th Avenue SE and I-90 eastbound off-ramp: Install a traffic signal.
- 76th Avenue SE/North Mercer Way and I-90 Westbound on-ramp: Modify the westbound channelization to provide left-turn pocket and through/right shared lane.

All of these improvements would improve the AM and PM peak hour intersection LOS to the same or better than no-build conditions. Sound Transit would be responsible for implementing improvements at the two intersections within WSDOT's jurisdiction prior to East Link opening service. Sound Transit would contribute its proportionate share of costs to improve intersections within the City of Mercer Island's jurisdiction. Sound Transit's contribution would be determined by the project's ratio of trips at the intersection or another equitable method. Through this contribution, the City of Mercer Island might determine other improvements than the intersection modifications listed that are more compatible with downtown Mercer Island.

Segment B
No adverse impacts on intersection LOS have been identified, and no mitigation is proposed.

Segment C
Under *Preferred Alternative C11A*, an eastbound right-turn pocket would be provided at the 112th Avenue NE and Main Street intersection. Additionally, at the Main Street and 108th Avenue NE intersection (with *Preferred Alternative C11A*) and at the NE 4th Street and 108th Avenue NE intersection (with *Preferred Alternatives C11A* and *C9T*), mitigation to better use the roadway capacity could be implemented, such as providing active traffic management strategies. For example, active signing could be installed to more effectively route vehicles to less congested streets; turn movements could be restricted during congested periods; or adaptive signal controllers could be installed to better respond to changing traffic conditions.

Segment D
Under *Preferred Alternative D2A*, a southbound right-turn pocket at the intersection of 152nd Avenue NE and NE 24th Street would mitigate impacts. This improvement or a similar intersection improvement would be coordinated with the City of Redmond.

Segment E
Under *Preferred Alternative E2*, the following intersections would require mitigation as described below:

- NE 76th Street and 170th Avenue NE: Install a traffic signal.
- SR 202 and NE 70th Street: Provide a southbound right-turn pocket.
- SR 202 and East Lake Sammamish Parkway: Rechannelize to provide an additional southbound through lane.
- NE 70th and 176th Avenue NE: Install a traffic signal.

I.2.4.2 Parking

Mitigation for potential hide-and-ride activities near stations and the best ways to mitigate such activities are specific to each area surrounding a station. The station most likely to generate hide-and-ride impacts is the Rainier Station. At the Mercer Island and South Bellevue Stations the parking analysis determined a low potential for hide–and-ride impacts. However, given the locations of these stations, Sound Transit will evaluate hide-and-ride impacts within one year of East Link commencing operations. If impacts are determined, Sound Transit would implement

appropriate mitigation measures as discussed in this section.

Prior to implementing any parking mitigation measures, Sound Transit would inventory on-street parking around each of the three stations listed up to one year prior to the start of light rail revenue service. These inventories would document the current on-street parking supply within a one-quarter-mile radius of the stations. Based on the inventory results, Sound Transit and the local jurisdiction would work with the affected stakeholders to identify and implement appropriate mitigation measures, if necessary.

Parking control measures could consist of parking meters, restricted parking signage, passenger and truck load zones, and residential parking zone (RPZ) signage. Other parking mitigation strategies could include promotion of alternative transportation services (e.g., encourage the use of bus transit, vanpool or carpool services, walking, or bicycle riding).

For parking controls agreed to with the local jurisdiction and community, Sound Transit would be responsible for the cost of installing the signage or other parking controls and any expansion of the parking controls for one year after opening the light rail system. The local jurisdictions would be responsible for monitoring the parking controls and providing all enforcement and maintenance of the parking controls. The local residents would be responsible for any RPZ-related costs imposed by the local jurisdiction.

I.2.4.3 Construction Mitigation

All mitigation measures associated with the construction of the East Link Project would comply with local regulations governing construction traffic control and construction truck routing. Sound Transit would finalize detailed construction mitigation plans in coordination with local jurisdictions and WSDOT during the final design and permitting phase of the project. Mitigation measures for traffic impacts due to light rail construction could include the following:

- Follow standard construction safety measures, such as installing advance warning signs, installing highly visible construction barriers, and using flaggers.
- Use lighted or reflective signage to direct drivers to truck haul routes and enhance visibility during nighttime work hours.
- Use temporary reflective truck prohibition signs on streets with a high likelihood of cut-through truck traffic.
- In areas with high levels of traffic congestion, schedule traffic lane closures and high volumes of construction traffic during off-peak hours to minimize delays where practical.
- Provide public information through tools such as print, radio, posted signs, websites, and e-mail to provide information regarding street closures, hours of construction, business access, and parking impacts.
- Access closures would be coordinated in person with affected businesses and residents. If access closures are required, property access to residences and businesses would be maintained to the extent possible. If access to the property was not able to be maintained, the specific construction activity would be reviewed to determine if it could occur during non-business hours, or if the parking and users of this access (for example deliveries) could be provided at an alternative location.
- Where necessary, the contractor could be responsible for providing parking areas for construction workers.

Also, please refer to Section I.5 for more construction mitigation measures for businesses.

I.2.5 Nonmotorized Facilities Mitigation Measures

No adverse impacts on nonmotorized facilities have been identified; therefore, no mitigation is proposed during East Link operations.

Sound Transit would provide nonmotorized improvements at East Link stations, as shown in the conceptual engineering drawings in Appendix G1. Sound Transit would work with the local agencies regarding alternatives and stations that are located within the median of roadways so that the most appropriate treatments are provided for safe and effective pedestrian crossings and access. These treatments could include painted crosswalks or signals, street lighting, warning lights, or signage.

During construction, Sound Transit would minimize potential impacts on pedestrian and bicycle facilities by providing detours or clearly delineated facilities within construction areas such as protected walkways and notify the public as determined appropriate by the project.

Multiuse trails that might be affected by construction would generally be kept open for use, but detours would be provided when trails are closed, unless they are closed for short durations or in areas where a

detour option is not feasible. Public notification efforts would be conducted for temporary trail closures during construction.

I.2.6 Freight Mobility and Access Mitigation Measures

No adverse impacts on freight mobility and access have been identified, and no mitigation is proposed during East Link operations.

During East Link construction, adverse truck impacts would likely be associated with business deliveries on arterials and local streets near surface or tunnel construction activities. To minimize these impacts, Sound Transit would work specifically with affected businesses throughout construction to maintain access as much as possible to each business and coordinate with businesses during times of limited access.

During construction associated with I-90, SR 520, or I-405, Sound Transit would coordinate with freight stakeholder groups by providing construction information to WSDOT for use in the state's freight notification system. Sound Transit would provide information in a format required by WSDOT and compensate WSDOT for any direct costs associated with use of the freight notification system for East Link construction.

I.2.7 Navigable Waterways Mitigation Measures

No adverse impacts on navigable waterways have been identified, and no mitigation is proposed during East Link operations.

During construction of *Preferred Alternative E2*, Sound Transit would minimize any impacts on the navigability of the Sammamish River waterway crossing.

A Tribal fishery event on Lake Washington occurs in July. If any barging of construction equipment or materials is required, then Sound Transit would consult with the Muckleshoot Tribe to avoid conflict with the tribal fishing event.

I.3 Acquisitions, Displacements, and Relocations Potential Mitigation Measures

No adverse impacts related to acquisitions, displacements, and relocations have been identified, and no mitigation is proposed. As part of the project, Sound Transit would compensate affected property owners according to the provisions specified in Sound Transit's adopted Real Estate Property Acquisition and Relocation Policy, Procedures, and Guidelines. (Resolution #R98-20-1)Sound Transit would comply with provisions of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Code of Federal Regulations [CFR] Title 49, Part 24), as amended, and the State of Washington's relocation and property acquisition regulations (WAC 468-100 and RCW 8.26). Benefits would vary depending on the level of impact, available relocation options, and other factors. Because of these compliance actions, no mitigation would be necessary.

I.4 Land Use Potential Mitigation Measures

No adverse impacts on land use have been identified, and no mitigation is proposed.

I.5 Economics Potential Mitigation Measures

No adverse economics impacts during East Link operations have been identified, and no mitigation is proposed. To minimize or limit impacts on businesses during construction, Sound Transit would dedicate staff to work specifically with affected businesses. Construction mitigation plans would be developed to address the needs of businesses during construction and could include, but are not limited to, the following elements:

- Provide a 24-hour construction telephone hotline.
- Provide business cleaning services on a case by case basis.
- Provide detour, open for business, and other signage as appropriate.
- Establish effective communications with the public through measures such as meetings and construction updates, alerts, and schedules.
- Promotion and marketing measures to help affected business districts maintain their customer base to the extent possible during construction.
- Maintain access as much as possible to each business and coordinate with businesses during times of limited access.
- Provide a community ombudsman.

Please refer to the arterials and local streets construction mitigation measures in Section I.2.4.3 for additional measures that would help mitigate economics impacts.

I.6 Social Impacts, Community Facilities, and Neighborhoods Potential Mitigation Measures

No adverse social, community facilities, and neighborhoods impacts have been identified, and no mitigation is proposed.

I.7 Visual and Aesthetic Resources Potential Mitigation Measures

No adverse impacts on visual and aesthetic resources during East Link operation have been identified for the *Preferred Alternatives*, and no mitigation is proposed.

During construction, Sound Transit would provide visual screening along the south side of Main Street for the 108th Station construction area for *Preferred Alternative C11A*, or along the south side of the tunnel portal construction area along Main Street for *Preferred Alternative C9T*. Visual screening would include construction of a solid barrier to screen ground-level views into the construction area from adjacent historic properties to the south. When possible, Sound Transit would preserve the existing vegetation. The decision whether to revegetate disturbed areas after construction would be determined based on future use of lands outside the trackway. Nighttime construction lighting would be shielded and directed downward to avoid light spillover onto adjacent sensitive uses.

I.8 Air Quality and Greenhouse Gases Potential Mitigation Measures

No adverse impacts related to air quality or greenhouse gases (GHGs) have been identified during East Link operation, and no mitigation is proposed.

For construction activities, Puget Sound Clean Air Agency (PSCAA) regulates particulate emissions (in the form of fugitive dust). To comply with the PSCAA policy of preventing air quality degradation, the following mitigation measures may be used as necessary and in accordance with standard practice to control particulate matter 10 microns or 2.5 microns or less in size (PM_{10} and $PM_{2.5}$, respectively) and emissions of carbon monoxide (CO) and oxides of nitrogen (NO_x) during construction of the project. Several of these measures would also reduce GHG emissions.

- Spray exposed soil with dust control agent as necessary to reduce emissions of PM_{10} and deposition of particulate matter.
- Cover all transported loads of soils and wet materials before transport, or provide adequate freeboard (i.e., space from the top of the material to the top of the truck) to reduce PM_{10} and deposition of particulate during transportation.
- Provide wheel washes to reduce dust and mud that would be carried off site by vehicles and to decrease particulate matter on area roadways.
- Remove the dust and mud that are deposited on paved, public roads to decrease particulate matter.
- Route and schedule high volumes of construction traffic to reduce congestion during peak travel periods and reduce emissions of CO, NO_x, and carbon dioxide equivalent (CO_2e) where practical.
- Require appropriate emission-control devices on all construction equipment powered by gasoline or diesel fuel to reduce CO and NO_X emissions in vehicular exhaust.
- Use well-maintained heavy equipment to reduce CO and NO_X emissions, which may also reduce GHG emissions.
- Cover, install mulch, or plant vegetation as soon as practical after grading to reduce windblown particulate in the area.

The following other readily available mitigation measures could potentially be used:

- Encourage contractors to employ emissions reduction technologies and practices for both on-road and off-road equipment/vehicles (e.g., retrofit equipment with diesel control technology and/or use of ultra-low sulfur diesel).
- Implement construction truck-idling restriction (e.g., no longer than 5 minutes).
- Locate construction equipment and truck staging zones away from sensitive receptors as practical and in consideration of other factors such as noise.

I.9 Noise and Vibration Potential Mitigation Measures

I.9.1 Noise Mitigation during Operation

Sound Transit is committed to minimizing noise levels at the source. This includes using only state-of-the-art vehicles equipped with wheel skirts to reduce noise. In addition, Sound Transit has committed to a

maintenance program that includes periodic rail grinding or replacement, wheel truing or replacement, vehicle maintenance, and operator training, which all help to reduce noise levels along transit corridors. For noise impacts that still exist after these source noise treatments, noise mitigation measures would be provided that are consistent with Sound Transit's Light Rail Noise Mitigation Policy (Motion No. M2004-08). The FTA manual also defines when mitigation is needed and bases this on the impact's severity, with severe impacts requiring the most consideration. During final design, all impacts and mitigation measures will be reviewed for verification. During final design, if it is discovered that mitigation can be achieved by a less costly means or if the detailed analysis show no impact, then the mitigation measure may be eliminated or modified.

Sound Transit is currently investigating the use of non-audible warnings for gated and ungated at-grade crossings. If non-audible warning devices are found to be viable, this option could be used to reduce or eliminate bell noise at specific crossings. Where practical, grade separation of at-grade light rail crossings would also be considered to eliminate the need for bells or other audible warning devices. In addition, the use of acoustic bell shrouds would be examined during final design. These shrouds direct the bell noise at gated crossings to the intersection.

The mitigation proposed below follows Sound Transit policy. Table I-1 presents noise impacts and mitigation for the *Preferred Alternatives*, and additional details are presented in Attachment 1 to this appendix. Detailed tables of noise and vibration impacts in each segment are provided in Section 4.7 of the Final EIS. The Noise and Vibration Technical Report, Appendix H2, contains additional tables and parcel-scale maps indicating the location of impacts and proposed mitigation measures.

TABLE I-1
Summary of Potential Noise Impacts and Mitigation Measures – *Preferred Alternative*

Alternative	Connection Alternatives	Light Rail Impacts[a]		Traffic Noise Impacts[b]	Proposed Mitigation	Locations Considered for Sound Insulation
		Moderate	Severe			
Segment A						
Preferred Interstate 90 Alternative (A1)	N/A	1	0	0	Potential sound wall	0
Segment B						
Preferred 112th SE Modified Alternative (B2M)	*Preferred Alternative C11A*	79	0	0	Sound walls, special trackwork, and building insulation	10
	Preferred Alternative C9T	66				
Segment C						
Preferred 108th NE At-Grade Alternative (C11A)	*Preferred Alternative B2M*	119	65	0	Sound walls, special trackwork, and building insulation	108
Preferred 110th NE Tunnel Alternative (C9T)	*Preferred Alternative B2M*	62	57	0	Sound walls, special trackwork, and building insulation	50
Segment D						
Preferred NE 16th At-Grade Alternative (D2A)	*Preferred Alternative C11A* or *C9T*	0	0	0	None	0
Segment E						
Preferred Marymoor Alternative (E2)	*Preferred Alternative D2A*	33	148	0	Sound wall, special trackwork, and building insulation	168

[a] **Moderate impact:** In this range of noise impact, the change in the cumulative noise level is noticeable to most people but might not be sufficient to cause strong, adverse reactions from the community. In this transitional area, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation. These factors include the existing noise level, the projected level of increase over existing noise levels, the types and numbers of noise-sensitive land uses affected, the noise sensitivity of the properties, the effectiveness of the mitigation measures, community views, and the cost of mitigating noise to more acceptable levels.

Severe impact: Project-generated noise in the severe impact range can be expected to cause a substantial percentage of people to be highly annoyed by the new noise and represents the most compelling need for mitigation. Noise mitigation will normally be specified for severe impact areas unless there are truly extenuating circumstances that prevent it.

[b] These traffic noise impacts are based on the Federal Highway Administration 66 A-weighted decibel (dBA) equivalent continuous sound level (L_{eq}) impact criteria.

I.9.1.1 Transit Noise Mitigation

The potential mitigation options available for noise from transit operations on the East Link Project are primarily sound walls, special trackwork, lubricated curves, and residential building sound insulation. Sound walls are proposed where feasible and reasonable, as determined by Sound Transit based on specific site conditions. Sound walls would be located on the ground for at-grade profiles and on the guideway structure for elevated profiles. Sound walls are preferred because they are effective at reducing noise. For locations where there is a potential for traffic noise to be reflected off the sound walls, Sound Transit would propose to use absorptive treatments to remedy this issue.

A crossover track uses a frog (a rail-crossing structure) to allow the train to either cross over to another track or continue moving on the same track. A gap is provided on top of the frog so that vehicle wheels can pass regardless of which track is in use. With typical frogs, noise and vibration are generated when the wheels pass over the gap. Special trackwork, such as movable point or spring rail frogs, eliminates the gap between tracks at crossovers that causes noise and vibration at these locations.

Sound Transit is currently investigating the use of non-audible warnings for gated and ungated at-grade crossings. If non-audible warning devices are found to be viable, this option could be used to reduce or eliminate bell noise at specific crossings. Where practical, grade separation of at-grade light rail crossings would also be considered to eliminate the need for bells or other audible warning devices. If bells are used at gated crossings, the bells would be set at the minimum noise level that maintains a safe crossing. Finally, the use of acoustic bell shrouds would be examined during final design; the shrouds would direct the bell noise at gated crossings to the intersection.

When source mitigation measures or sound walls are infeasible or not entirely effective at reducing noise levels below the FTA impact criteria, then residential sound insulation would be evaluated and implemented at impacted properties where the existing building does not already achieve a sufficient exterior-to-interior reduction of noise levels. Many newer buildings, particularly in Downtown Bellevue, have good interior noise reduction and additional sound insulation may not be necessary.

Consistent with FTA methods and criteria, residential properties are considered "noise-sensitive" because people sleep there and "nighttime sensitivity to noise is assumed to be of utmost importance" (FTA, 2006). Accordingly, FTA analysis methods artificially increase measured existing noise and predicted project noise levels by 10 dBA (a perceived doubling of the noise level by most people) between 10:00 p.m. and 7:00 a.m. While noise measurements and impacts are analyzed at the exterior of residential properties, FTA methods clearly emphasize noise sensitivity for residential properties at night, because project noise could affect the ability of people to sleep. During the daytime hours, light rail noise levels are very similar to (in many cases less than) common noise levels in urban settings like Downtown Bellevue or along transportation corridors (like I-90, Bellevue Way, 112th Avenue SE, or I-405) where the predominant noise is from existing traffic (buses, trucks, and heavy traffic volumes). During those times of the day when outdoor uses are most frequent, noise from light rail would typically be less noticeable because of the higher ambient noise levels from traffic and other urban sources.

I.9.1.2 Traffic Noise Mitigation

Traffic noise impacts would be mitigated by sound walls, where determined to be reasonable and feasible. For locations with residual traffic noise impacts caused by the project, sound insulation might also be considered by Sound Transit. Use of FHWA or WSDOT funds to insulate residences from sound for traffic noise abatement is allowed only in specific situations. Federal regulation 23 CFR 772.13(c)(6), and WSDOT and FHWA policies and procedures limit sound insulation for traffic noise abatement to public use or nonprofit institutional structures and only in situations where a barrier is ineffective, unreasonable, and/or infeasible and interior noise levels are above the impact criteria. Sound insulation of residences is allowed only when noise impacts are severe (i.e., above 80 dBA exterior or above 60 dBA interior) and no other type of abatement is possible. In contrast, Sound Transit considers residential sound insulation for any noise impacts related to light rail projects if a sound wall is ineffective, unreasonable, and/or infeasible.

I.9.1.3 Segment A

In Segment A, the only potential noise impact resulting from *Preferred Alternative A1* would be near the transition from the Mount Baker Tunnel to the floating bridge structures. A light rail expansion joint would be required to allow for bridge movement; as a result, increased noise related to this joint could occur. If, after testing of the expansion joint prototype, the expansion joint near the Mount Baker Tunnel were determined to cause a noise impact, then mitigation

would likely be a short, absorbent sound wall along the structure's side or absorbent material applied to the existing traffic safety barriers.

To reduce noise levels on the Rainier Station and Mercer Island Station platforms, Sound Transit would incorporate design measures to reduce freeway noise for patrons waiting at station platforms. (See Exhibits A-1-Na and A-1-Nb in Appendix H2, and Attachment 1 to this appendix.)

I.9.1.4 Segment B

In Segment B, mitigation measures under *Preferred Alternative B2M* when connecting to *Preferred Alternative C11A* would include a sound wall running continuously from the elevated section on I-90 to the retained cut section south of the Winters House along Bellevue Way SE. North of the 112th Avenue SE intersection, a sound wall is proposed at-grade, along the west side of the guideway, to just south of the Bellefield Residential Park Condominiums. A new sound wall would start along the west side of 112th Avenue SE and continue to the Segment C connection. The second sound wall would need to overlap with the first wall and would be effective at reducing traffic noise at the Bellefield Residential Park Condominiums. Openings in the wall would be required for vehicle and pedestrian access to the Bellefield Residential Park Condominiums, reducing the overall effectiveness. Supplemental sound insulation might also be required at approximately six multifamily and four single-family residences.

Noise mitigation for *Preferred Alternative B2M* when connecting to *Preferred Alternative C9T* would be identical to *Preferred Alternative B2M* connecting to *Preferred Alternative C11A* south of 112th Avenue SE. A second wall would be installed just north of the 112th Avenue SE intersection, on the west side of the guideway, to just north of the SE 8th Station. Openings would be required for pedestrian and vehicle access at SE 15th Street and SE 8th Street. Special trackwork would also be used for the crossovers. Approximately ten residences along 112th Avenue SE may also be provided with sound insulation to complete the noise mitigation measures if the sound walls are not effective at mitigating all impacts. (See Exhibits A-2-Na, A-2-Nb, A-3-Na, and A-3-Nb in Appendix H2, and Attachment 1 to this appendix.)

I.9.1.5 Segment C

In Segment C under *Preferred Alternative C11A*, mitigation would include a sound wall along the west side of the alignment beginning near SE 6th Street and continue as a sound barrier to 108th Avenue NE, just south of Main Street. The wall would be located near the tracks on the retained fill and elevated structure to the 108th Station. The sound wall barrier, along with special trackwork at the crossover along 112th Avenue SE, would mitigate all impacts along this section of the corridor. Sound walls and special trackwork for the crossover would also be used to mitigate impacts on the Coast Bellevue Hotel and Lake Bellevue Village Condominiums. Multi-family units located on Main Street, 108th Avenue NE, and NE 6th Street would be mitigated with sound insulation where necessary.

Noise mitigation under *Preferred Alternative C9T* would be similar to that proposed for *Preferred Alternative C11A* and would also include a sound wall along the west side of the alignment beginning near SE 6th Street continuing to the tunnel transition. The wall would likely be located on a retaining wall to the west of the tracks, with final placement determined during final design. This sound wall, along with special trackwork at the crossover along 112th Avenue SE, would mitigate all impacts along this section of the corridor. Sound walls and special trackwork at the crossover would also be used to mitigate impacts on the Coast Bellevue Hotel and Lake Bellevue Village Condominiums. Impacts located on SE 4th Street would be mitigated with a sound wall if possible, otherwise sound insulation would be employed for mitigation. Single- and multi-family units located on Main Street and NE 6th Street would be mitigated with sound insulation where necessary. (See Exhibits A-10-Na, A-10-Nb, A-12-Na, and A-12-Nb in Appendix H2, and Attachment 1 to this appendix.)

I.9.1.6 Segment D

There are no anticipated noise impacts for *Preferred Alternative D2A*, so no noise mitigation is proposed. (See Exhibits A-29-Na and A-29-Nb in Appendix H2, and Attachment 1 to this appendix.)

I.9.1.7 Segment E

Noise mitigation for *Preferred Alternative E2* would include sound walls along the elevated structures from SR 520, near NE 67th Place, to the at-grade transition by Marymoor Park. All remaining noise impacts would occur at highrise apartments on Cleveland Street and a hotel on NE 76th Street. If necessary, sound insulation along with special trackwork for the crossover would be used to mitigate these impacts. (See Exhibits A-34-Na and A-34-Nb in Appendix H2, and Attachment 1 to this appendix.)

I.9.1.8 Wheel Squeal

For curves of 600-foot radius or less, a trackside or vehicle-mounted lubrication system would be used to mitigate wheel squeal noise. For curves of 600- to 1,000-foot radius, the project would be designed to

accommodate a lubrication system if wheel squeal occurs during operations.

I.9.2 Construction Noise Mitigation Measures

Several different jurisdictions are responsible for the regulation of construction noise. In addition, most daytime construction activities would be exempt from the noise control ordinances. When required, Sound Transit or its contractor would seek the appropriate noise variance from the local jurisdiction. Sound Transit would control nighttime construction noise levels by applying noise level limits, established through the variance process, and use noise control measures where necessary. The contractor would have the flexibility of either prohibiting certain noise-generating activities during nighttime hours or providing additional noise control measures to meet these noise limits. Noise control mitigation for nighttime or daytime work may include the following measures, as necessary, to meet required noise limits:

- Install construction site noise barrier wall by noise-sensitive receivers.
- During nighttime work, use smart back-up alarms that automatically adjusts or lowers the alarm level or tone based on the background noise level, or switch off back-up alarms and replace with spotters.
- Use low-noise emission equipment.
- Implement noise-deadening measures for truck loading and operations.
- Conduct monitoring and maintenance of equipment to meet noise limits.
- Use lined or covered storage bins, conveyors, and chutes with sound-deadening material.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Install high-grade engine exhaust silencers and engine-casing sound insulation.
- Prohibit aboveground jack-hammering and impact pile driving during nighttime hours.
- Minimize the use of generators or use whisper quiet generators to power equipment.
- Limit use of public address systems.
- Use movable noise barriers at the source of the construction activity.
- Limit or avoid certain noisy activities during nighttime hours.

Pile driving might be required in Segments B, C, D, and E for construction of elevated profiles and bridges, and might also occur in areas of retained cuts in Segments C and D. To mitigate noise related to pile driving, the use of an augur to install the piles instead of a pile driver would greatly reduce the noise levels. If pile driving is necessary, the only mitigation would be to limit the time of day the activity can occur. Pile driving is not expected at most construction locations.

No segment-specific construction mitigation would be necessary for Segments A, B, or D during allowable daytime construction hours. In Segment C, at the tunnel staging areas near the Surrey Downs neighborhood, a mitigation measure that could be used includes construction of temporary noise barriers adjacent to the construction staging area. Construction in Segment E along SR 520 near NE 51st Street could require moving existing sound walls and, if practical, these would be replaced early in project construction.

I.9.3 Vibration Mitigation during Operation

Vibration and groundborne noise impacts that exceed FTA criteria warrant mitigation when determined to be reasonable and feasible. The locations requiring mitigation would be refined during final design. At some locations, however, light rail trackways or guideways would be within 20 feet of buildings and vibration mitigation would not be effective at reducing the vibration level to below the FTA criteria. At these locations, project design modification and additional information on affected buildings could eliminate these impacts. For instance, the type of building foundation might reduce vibration impacts and therefore, these residual impacts might be eliminated.

In addition, each building would need to be examined in detail to determine where the vibration-sensitive uses are located. For example, the side of a building nearest the proposed alternative might be a vibration-sensitive use. Buildings that are mixed use might not have sensitive uses on lower floors where impacts would occur, and the vibration would not be noticeable by the time it reached higher floors with sensitive uses, such as sleeping quarters. Outdoor-to-indoor vibration testing, which tests how the vibration changes from the soil outside to a sensitive space inside a building, would also help to refine the vibration projections at these locations. A summary of segment-specific vibration mitigation is provided below.

Options for mitigating vibration impacts include the following:

- Ballast mats, which consist of a pad made of rubber or rubberlike material placed on an asphalt or concrete base with the normal ballast, ties, and rail on top. The reduction in groundborne vibration provided by a ballast mat is strongly dependent on the vibration frequency content and the design and support of the mat.
- Resilient fasteners to provide vibration isolation between rails and concrete slabs for direct fixation track, typically on elevated structures or in tunnels. These fasteners include a soft, resilient element between the rail and concrete to provide greater vibration isolation than standard rail fasteners.
- Tire-derived aggregate (TDA), which consists of shredded tires wrapped with filter fabric that is added to the base below the track ties.
- Special trackwork, such as movable point or spring rail frogs, to eliminate the gap between tracks at crossovers that causes noise and vibration at these locations.
- Floating slabs, which consist of thick concrete slabs supported by resilient pads on a concrete foundation; the tracks are mounted on top of the floating slab. Although floating slabs are designed to reduce vibration at lower frequencies than ballast mats, they are extremely expensive and are rarely used, except in the most extreme situations. Most successful floating slab installations are in subways, and their use for at-grade track is less common and often not reasonable.

In Segment A, approximately 1,900 feet of vibration mitigation would be required along the Mount Baker Tunnel area to mitigate groundborne noise impacts at single-family homes along the top of the hillside. No other vibration impacts were identified in Segment A. (See Exhibits A-1-Va and A-1-Vb in Appendix H2.)

In Segment B, mitigation measures under *Preferred Alternative B2M* connecting to *Preferred Alternative C11A* or *C9T* would include up to 600 feet of vibration isolation at the Winters House. Standard vibration mitigation methods, such as resilient fasteners or ballast mats, would reduce the groundborne noise level at the Winters House, but might not eliminate the impact and would be determined in final design. A floating slab might be needed to eliminate the groundborne noise impact. (See Exhibits A-2-Va and A-2-Vb in Appendix H2.)

In Segment C, under *Preferred Alternative C11A*, vibration mitigation would be required at two single-family residences south of Main Street, three multifamily structures along 108th Avenue NE, and the elevated structure by the Coast Bellevue Hotel. Under *Preferred Alternative C9T*, vibration mitigation would also be required at the same two single-family residences and the Coast Bellevue Hotel identified under *Preferred Alternative C11A*, along with five single-family residences near the crossover on 112th Avenue SE. These five single-family residential impacts could be eliminated by the relocation of the crossover or the use of special trackwork to eliminate the gap. Both *Preferred Alternatives C9T* and *C11A* identified groundborne noise impacts at the Meydenbauer Center, a highly sensitive location, where impacts would be mitigated using ballast mats or resilient rail fasteners. (See Exhibits A-4-Va, A-4-Vb, A-5-Va, and A-5-Vb in Appendix H2.)

In Segment D, there would be no vibration or groundborne noise impacts with *Preferred Alternative D2A*, and no vibration mitigation is proposed.

In Segment E, with *Preferred Alternative E2*, an estimated 700 feet of vibration mitigation would be required along SR 520 to mitigate vibration impacts on three single-family residences. (See Exhibits A-13-Va and A-13-Vb in Appendix H2.)

I.9.4 Construction Vibration Mitigation Measures

In general, building damage from construction vibration would only be anticipated from impact pile driving close to buildings. If piling is more than 50 to 100 feet from buildings, or if alternative methods, such as auger cast piling or drilled shafts are used, then damage from construction would not be anticipated. Other sources of construction vibration, including potential ground improvement activities in Segment B such as construction of subsurface stone columns, could generate high enough vibration levels for localized damage to occur, depending on the soil type and distance between the source of vibration and the nearest building. In any locations of concern, preconstruction surveys would be conducted to document the existing condition of buildings, in case there was an issue during or after construction, and vibration monitoring would be implemented during construction to establish levels of vibration. Where levels of vibration exceed preset limits for damage, the contractor would be required to stop work and switch to alternate construction methods.

Measures to minimize short-term annoyance from groundborne vibration and groundborne noise from construction activities such as pile installation or compaction of earth fills include use of alternate methods that result in less vibration or noise, such as

auger cast piles or drilled shafts in place of driven piles, or use of static roller compactors rather than vibratory compactors. The hours and duration of these types of activities can also be restricted to hours when vibrations and noise are less noticeable. Vibration monitoring would be considered for pile driving, tunnel construction, vibratory sheet installation, and other construction activities that have the potential to cause high levels of vibration.

Sound Transit would minimize vibration at the Winters House during construction and prevent damage or limit to minor cosmetic damage by using the following methods:

- Install monitoring equipment and monitor vibration during construction.
- Place limits on the construction vibration levels for the contractor, with the contractor selecting one or more of the following measures or other measures of equivalent effectiveness to limit construction:
  - Using auger-drilling methods
  - Using low vibration or nonimpact methods of installing steel casing required to support construction of drilled shaft or secant pile foundations
  - Using slurry confinement (i.e., temporarily filling the cavity with slurry material to replace the removed soil)
  - Underpinning foundation and employing structural support or soil stabilization if needed
  - Adjusting excavation methods based on monitoring results
  - Installing a shallow temporary supporting wall
  - Monitoring vibration levels associated with equipment to be used for the East Link Project at other construction sites with similar soils before project construction to determine which vibration-minimization method would be necessary
  - Beginning vibration-inducing construction at the site at points more distant from the Winters House to enable the contractor to determine which vibration-minimization method would be necessary
- Photograph and inventory the building to establish existing conditions to determine if any damage is caused by construction, and repair the building in a manner consistent with the U.S. Department of the Interior Secretary's standards for treating historic properties.

I.10 Ecosystem Resources Potential Mitigation Measures

I.10.1 Potential Mitigation for Operational Impacts

I.10.1.1 High-Value Habitat

Project impacts on high-value wildlife habitats regulated by local agencies would be mitigated with habitat replacement or enhancement. The type of habitat to be established would depend on the affected species. The type of habitat to be replaced and mitigation ratios would be determined through discussions with federal, state, and local permitting agencies during final design and project permitting. Sound Transit would adhere to local ordinances regarding tree replacement ratios.

I.10.1.2 Wetlands and Wetland Buffers

Sound Transit has committed to achieving no net loss of wetland function and area on a project-wide basis. Sound Transit would apply the interagency wetland mitigation guidance prepared by Ecology, United States Army Corps of Engineers (USACE), and United States Environmental Protection Agency (EPA) (2006).

Compensatory mitigation sites would be identified within the same drainage basin and compensate for lost functions in-kind. The specific compensatory mitigation sites for unavoidable impacts on wetlands would be determined during final design and project permitting. Compensatory mitigation-to-impact ratios for replacement of wetlands would comply with the requirements of the local critical area ordinances (CAOs) and the interagency wetland mitigation guidance (Ecology et al., 2006).

During field work, Sound Transit determined there are several opportunities for wetland mitigation within the study area close to potentially impacted areas that are expected to meet required mitigation ratios. Additional compensatory mitigation may be required for impacts on existing wetland mitigation sites and would be determined during final design and project permitting.

There are no existing approved mitigation banks in the Kelsey Creek subbasin. However, it is possible that a bank could become certified in the project study area in the future and could be used to mitigate project impacts.

I.10.1.3 Aquatic Habitat

On Sturtevant Creek at the Hospital Station, where realignment of the stream channel would be required (with *Preferred Alternatives C11A* and *C9T*), Sound Transit would reconstruct the new channel with natural stream habitat features. Riparian habitat functions would be improved with native riparian plantings. This reach is currently lacking shade. The newly shaded reach would help lower stream temperatures in the downstream reaches that support salmonids. Specific requirements and details of these measures would be established during final design and project permitting.

For mitigation for the increased culvert length on the Unnamed Tributary to Kelsey Creek (with *Preferred Alternative D2A*), Sound Transit proposes to coordinate with the City of Bellevue to find and develop in-stream habitat improvements on the downstream reaches of Goff Creek in coordination with the City of Bellevue's larger plans to restore and daylight the creek.

I.10.2 Potential Mitigation for Construction Impacts

I.10.2.1 High-Value Habitat

Areas disturbed in the construction staging areas would be revegetated with native vegetation as soon as possible following construction.

Sound Transit would update its survey of bird nests during final design. If a bald eagle nest is found within one-half mile of the proposed construction limits, a bald eagle management plan would be prepared. Under the Migratory Bird Treaty Act (MBTA), nesting migratory bird nests cannot be destroyed during the breeding season. Sound Transit would consult with the U.S. Fish and Wildlife Service on methods to implement during construction to avoid impacts on migratory birds consistent with the MBTA and the Bald and Golden Eagle Protection Act. Such methods would include clearing in the Mercer Slough buffer outside the nesting season for migratory birds.

I.10.2.2 Wetlands and Wetland Buffers

Wetlands and wetland/stream buffer areas disturbed by construction would be protected by best management practices (BMPs) and revegetated as soon as possible after construction. BMPs would be implemented to avoid construction impacts on wetlands and wetland buffers.

Sound Transit would conduct detailed site surveys to establish existing topography and conduct hydrologic monitoring to restore topography. Restoration would include soil amendment and vegetation replacement.

I.10.2.3 Aquatic Habitat

BMPs would be implemented to avoid construction impacts on aquatic resources. Except for the in-water construction in Lake Washington, any in-water work would be isolated from adjacent waters using a coffer dam or other suitable technique. Such isolation is not necessary in Lake Washington due to the type of work done there (welding or bolting metal jackets together).

In-water work would be conducted during approved in-water construction windows. Where ESA-listed species might be present, stream crossings would not require in-water work and the project would not install infrastructure below the ordinary high water mark (OHWM). Disturbed or temporarily cleared riparian vegetation would be replanted with suitable native species. The proposed channel relocation of Sturtevant Creek adjacent to the Hospital Station would follow guidelines found in the Integrated Streambank Protection Guidelines manual (WDFW et al. , 2002) and other current stream design documents. If over-water construction is conducted over the Sammamish River (with *Preferred Alternative E2*) during the migratory period of Endangered Species Act (ESA)-protected species, nighttime lighting would be shielded from the waters below.

Sound Transit would consult with the Tribes to avoid impacting Tribal fisheries from construction work in Lake Washington, barge/boat transit through the Lake Washington ship canal, or through approaches to the Ballard Locks.

I.11 Water Resources Potential Mitigation Measures

A number of regulatory requirements for addressing water resource impacts would be met by the East Link Project design. In addition to these project components, the mitigation measures discussed below would also be applied.

During final design, opportunities for regional management of project stormwater and on-site control of stormwater runoff would be explored. The project design team would work with local jurisdictions to identify opportunities to incorporate low-impact development features into the project. Stormwater management and treatment principles of Low-Impact Development (LID) will be favored over "traditional" stormwater treatment. For *Preferred Alternative B2M*, the retained cut constructed near Mercer Slough would be sealed to prevent groundwater from entering the retained cut but would allow groundwater to flow downgradient beneath the cut. This would maintain the existing groundwater flow

toward the Slough and sustain downgradient wetlands and other surface water features.

For *Preferred Alternative D2A*, the Unnamed Tributary to Kelsey Creek would be relocated into a new 24-inch-wide storm drain. The stream would remain in the existing storm drain until a new storm drain is constructed. Rerouting the tributary would occur during the summer when flows in the stream do not typically exist or are extremely low.

I.12 Energy Impacts Potential Mitigation Measures

No adverse energy impacts have been identified, and no mitigation is proposed.

I.13 Geology and Soils Potential Mitigation Measures

No adverse geology and soils impacts from East Link operation have been identified, and no mitigation is proposed.

Engineering design standards and BMPs would be used to avoid and minimize potential construction impacts. Based on the review of potential impacts, the design and construction process would address seismic hazards, soft soils, settlement, steep-slope hazards, landslide hazards, erosion and sediment control, vibrations, and groundwater.

I.14 Hazardous Materials Potential Mitigation Measures

In order to mitigate potential impacts from all potential sites, including railroad corridor and crossings, Sound Transit would perform a level of environmental due diligence appropriate to the size and presumed past use of the property at all properties along the corridor before they are acquired. Phase 2 Environmental Site Assessments would be conducted where appropriate. Where known hazardous sites are present, Sound Transit would be responsible for the remediation of any contaminated soil and groundwater, including those previously unknown and found during construction. To the extent practical, Sound Transit would limit construction activities that might encounter contaminated groundwater or contaminated soils.

I.15 Electromagnetic Fields Potential Mitigation Measures

Standard design measures are necessary to protect underground utilities against stray currents. These measures would be developed and implemented in consultation with utility owners during final design.

The I-90 section of the project would incorporate measures to prevent stray electrical current from corroding the steel components of the I-90 bridge, as agreed to with WSDOT.

I.16 Public Services Potential Mitigation Measures

No adverse operational public services impacts have been identified, and no mitigation is proposed.

Sound Transit would coordinate with public service providers before and during construction to maintain reliable emergency access and alternative plans or routes to minimize delays in response times. Sound Transit would also coordinate with solid waste and recycling companies and schools if any rerouting of collection or bus routes would need to occur. Postal collection and delivery and solid waste and recycling collection would be maintained at all addresses.

I.17 Utilities Potential Mitigation Measures

No adverse impacts on utilities during light rail operation are anticipated, and no mitigation is proposed. The project includes design measures and coordination with utility providers and the public to minimize impacts on utilities during light rail construction. These measures would include potholing and preconstruction surveys to identify utility locations. Sound Transit would continue to work with utility providers to minimize any potential service interruptions and perform outreach to notify the community of potential service interruptions.

I.18 Historic and Archaeological Resources Potential Mitigation Measures

I.18.1 Archaeological Sites

Sound Transit would conduct preconstruction surveys of selected areas that it would acquire and that have been identified as high potential for cultural resources. Using information from the preconstruction survey, an archaeological resources monitoring and treatment plan (ARMTP) would be prepared to provide additional information that would guide archaeological monitoring during East Link construction. The plan would contain procedures for the inadvertent discovery of archaeological deposits and human remains. The Federal Transit

Administration (FTA) and Sound Transit will consult with Washington Department of Archaeology and Historic Preservation (DAHP) and the Muckleshoot, Snoqualmie, Suquamish, Tulalip, and Duwamish Tribes to review the plan. If prehistoric or historic-period archaeological sites are encountered during construction, Sound Transit would follow the protocols established in the ARMTP and consult with DAHP, interested Indian Tribes, and other interested parties as appropriate.

I.18.2 Historic Buildings and Structures

Through consultation with local jurisdictions and interested parties, minimization measures have been developed and incorporated into the project. FTA has determined in consultation with the State Historic Preservation Office (SHPO), that the project would have an adverse effect, resulting from *Preferred Alternatives B2M and C11A* potential impacts on the Winters House and the potential Surrey Downs historic district. Mitigation would consist of the preparation of a Memorandum of Agreement. A copy of the Draft MOA is provided in Attachment 2 to this appendix.

I.19 Parkland and Open Space Potential Mitigation Measures

Sound Transit would restore disturbed park and open space to pre-project conditions after construction in cooperation with the resource owner. This would include landscaping, paths, and any built features of the park and trail resources. Other measures to mitigate affected parks and open space include providing replacement lands, financial compensation, or park enhancement, where appropriate. During construction, pedestrian access to parks and trails would be routed to the remaining open portions of the facilities. Dust from construction would be mitigated using dust control measures described in Section 4.6, Air Quality. Visual and noise impacts would be mitigated using measures described in Section 4.5, Visual and Aesthetic Resources, and Section 4.7, Noise and Vibration.

As part of the Section 4(f) process, Sound Transit has consulted with the Cities of Seattle, Mercer Island, Bellevue, and Redmond and with King County about potential impacts on parks under their jurisdiction and possible mitigation measures. With the exception of the City of Bellevue, the agencies with jurisdiction over parklands have concurred regarding the scope of potential project impacts and associated mitigation measures. The cities of Seattle, Mercer Island, Redmond, and King County have provided 4(f) letters of concurrency, which are included in Appendix D. Table I-2 includes the mitigation measures that are consistent with the letters of 4(f) concurrency for each affected recreational resource and also includes proposed mitigation for City of Bellevue park impacts. Not all mitigation measures would be necessary or implemented where multiple mitigation options are described in the Table I-2.

Sound Transit has also consulted with the Washington RCO and the National Park Service regarding potential LWCF Section 6(f) and RCO funded property conversion. Appendix D discusses converting these properties and requirements regarding replacement properties.

TABLE I-2
Potential Mitigation for Identified Section 4(f)/6(f) Impacts

Facility Name	Jurisdiction	Potential Mitigation	Associated Alternatives
Segment A, Interstate 90			
Benvenuto Viewpoint	WSDOT, City of Seattle	**Permanent:** ▪ Design station entrance to be compatible with the City's park design. **Temporary:** Restore temporarily disturbed area to existing conditions.	*Preferred Alternative A1*
Park on the Lid	WSDOT	**Permanent:** ▪ Design station entrance to be compatible with the surrounding the park. **Temporary:** ▪ Restore temporarily disturbed areas to existing conditions	*Preferred Alternative A1*

TABLE I-2 CONTINUED
Potential Mitigation for Identified Section 4(f)/6(f) Impacts

Facility Name	Jurisdiction	Potential Mitigation	Associated Alternatives
Segment B, South Bellevue			
Mercer Slough Nature Park	City of Bellevue	**Permanent:** ▪ Acquire replacement land pursuant to Washington State Recreation and Conservation Office (RCO) and Section 6(f) requirements that would be consistent with the natural character of the park. ▪ Have an option to preserve existing vehicle access to Sweylocken boat ramp. **Temporary:** ▪ Provide financial compensation for temporary use of land as agreed to with the City. ▪ Restore temporarily disturbed areas to existing conditions. ▪ Provide temporary parking for users off Bellevue Way and south of the South Bellevue Park-and-Ride or as agreed to with the City. ▪ Relocate blueberry farm retail use during construction. ▪ Maintain blueberry farm operations ▪ Relocate Eastside Heritage Center during construction. ▪ Maintain access or provide detours for trails, and maintain access to Sweylocken boat ramp.	*Preferred Alternative B2M*
Segment C, Downtown Bellevue			
Surrey Downs Park	City of Bellevue	**Permanent:** ▪ Replace impacted acreage with the acquired properties north of the park along 112th Avenue SE and provide landscaping. ▪ Design treatments of the retaining wall and fence along 112th Avenue SE in consultation with the City. ▪ Design and construct a U-turn on 112th Avenue SE at SE 8th Street. Prepare conceptual layout for two northbound-to-southbound U-turn options—one at SE 6th Street and one at Main Street—to accommodate those coming from the south who would want to turn left into the park; the City and Sound Transit would pick one that Sound Transit would design and construct. ▪ Coordinate with the City of Bellevue and community to revise the Surrey Downs Master Plan to address the impacted areas. **Temporary:** ▪ Provide financial compensation for the temporary use of land as agreed with the City. ▪ Restore the temporarily disturbed area with landscaping in accordance with the Surrey Downs Master Park Plan. ▪ Maintain overall access to the park by providing trail and sidewalk connectivity through detours in coordination with the City. ▪ Maintain public parking and access for scheduled baseball/soccer fields (spring, late summer, and fall). ▪ Provide a barrier or fence adjacent to the main construction area. ▪ Improve south driveway to increase traffic flow prior to closure of the north driveway.	*Preferred Alternative C11A* connecting from *Preferred Alternative B2M*
		Permanent: ▪ Replace impacted acreage with the acquired properties north of the park along 112th Avenue SE, and provide landscaping. ▪ Design treatments of the retaining wall and fence along realigned SE 4th Street in consultation with the City. ▪ Coordinate with the City of Bellevue and community to revise the Surrey Downs Master Plan to address the impacted areas. **Temporary:** ▪ Provide financial compensation for the temporary use of land as agreed with the City. ▪ Restore the temporarily disturbed area with landscaping in accordance with the Surrey Downs Master Park Plan. ▪ Maintain overall access to the park by providing trail and sidewalk connectivity through detours in coordination with the City. ▪ Maintain public parking and access for scheduled baseball/soccer fields (spring, late summer, and fall). ▪ Provide a barrier or fence adjacent to the main construction area. ▪ Improve south driveway to increase traffic flow prior to closure of the north driveway.	*Preferred Alternative C9T* connecting from *Preferred Alternative B2M*

TABLE I-2 CONTINUED
Potential Mitigation for Identified Section 4(f)/6(f) Impacts

Facility Name	Jurisdiction	Potential Mitigation	Associated Alternatives
NE 2nd Pocket Parks	City of Bellevue	**Permanent:** • One, or a combination of the following, as agreed to with the City: — Provide financial compensation as agreed to with the City. — Provide replacement land with an equivalent portion of the project's staging area located on the northeast quadrant of the park. — Enhance entire northwest quadrant of the park as a public plaza in conjunction with the station entrance. **Temporary** ▪ Provide financial compensation for the temporary use of land as agreed to with the City. ▪ Restore temporarily disturbed park area to existing conditions. ▪ Preserve pedestrian access to southern park quadrants.	*Preferred Alternative C9T* connecting from *Preferred Alternative B2M*
Segment D, Bel/Red-Overlake			
No parks affected			
Segment E, Downtown Redmond			
Marymoor Park	King County	**Permanent:** ▪ Acquire replacement recreation land equal in value and function to offset the light rail use within the park property. ▪ Evaluate noise impacts on park uses in place, when Segment E is funded, consistent with Federal Transit Administration noise analysis methods and criteria when design is advanced. **Temporary:** ▪ Mitigate temporarily disturbed park lands pursuant to RCO regulations. ▪ Provide financial compensation for temporary use of land outside the light rail right-of-way for construction; restore parkland following construction.	*Preferred Alternative E2* and E2 - Redmond Transit Center Design Option
Bear Creek Trail	City of Redmond	**Permanent:** ▪ Reroute trail during construction, restore disturbed trail area after construction, replace trees. **Temporary:** ▪ Provide financial compensation for the temporary use of land during construction, as agreed with the City. ▪ Maintain access or provide detours for trail during construction. ▪ Restore temporarily disturbed area to existing conditions.	*Preferred Alternative E2*
Redmond Central Connector Trail and Park Corridor	City of Redmond	**Permanent:** ▪ Possible permanent reroute of trail, and replace affected park amenities and associated vegetation as agreed to with the City. **Temporary:** ▪ Provide financial compensation for the temporary use of land during construction as agreed to with the City. ▪ Maintain access or provide detours for trail during construction. ▪ Restore temporarily disturbed area to existing conditions.	*Preferred Alternative E2*
Sammamish River Trail	King County	**Permanent:** ▪ Acquire replacement recreation land equal in value to offset the light rail within the trail right of way per RCO requirements. ▪ Locate guideway columns outside trail clear zone as practical. **Temporary:** ▪ Provide financial compensation for temporary use of land outside of the light rail right-of-way for construction. ▪ Reroute and restore trail to King County standards and specifications during and after construction.	*Preferred Alternative E2*
East Lake Sammamish Trail	King County	**Permanent:** ▪ Provide financial compensation for the light rail use of the trail right-of-way. **Temporary:** ▪ Provide financial compensation for temporary use of land outside of the light rail right-of-way during construction. ▪ Reroute and restore trail to King County standards and specifications during and after construction.	*Preferred Alternative E2*

Attachment 1

Noise Impacts Assessment

Preferred Interstate 90 Alternative (A1)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
Receivers West of Tunnel: Seattle																	
		Sturgus Ave S	18	68	2	No	No	60	Ldn	63	69	--	--	No Wall	N/A	No	60
		Sturgus Ave S	5	68	2	No	No	60	Ldn	63	69	--	--	No Wall	N/A	No	60
		S Atlantic St at 17th Ave S	12	68	2	No	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
		18th and 19th Ave S	6	68	2	No	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
		19th Ave S and Valentine Pl	6	68	2	No	No	60	Ldn	63	69	--	--	No Wall	N/A	No	60
		20th Ave at S Atlantic St	5	68	2	No	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
		20th Ave at S Atlantic St	6	68	2	No	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
		S Atlantic St	6	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
		Judkins Park and Playfield	1	67	3	No	No	61	Leq	69	73	--	--	No Wall	N/A	No	61
Receiver East of the Tunnel: Seattle																	
		Irving Street	2	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
		Irving Street	1	67	2	No	No	60	Ldn	63	68	--	--	No Wall	N/A	No	60
		Lake Washington Blvd	2	67	2	No	No	60	Ldn	63	68	--	--	No Wall	N/A	No	60
		35th Ave S	3	67	2	No	No	58	Ldn	63	68	--	--	No Wall	N/A	No	58
		36th Ave S	2	67	2	No	No	59	Ldn	63	68	--	--	No Wall	N/A	No	59
	1250204665	Lake Washington Blvd	1	67	2	No	Yes	63	Ldn	63	68	1	--	No Wall	Special	No	60
Mercer Island West Shore Landing																	
		60th Ave	1	67	2	No	No	58	Ldn	63	68	--	--	No Wall	N/A	No	58
		60th Ave	1	67	2	No	No	55	Ldn	63	68	--	--	No Wall	N/A	No	55
		60th Ave	2	67	2	No	No	58	Ldn	63	68	--	--	No Wall	N/A	No	58
		60th Ave	1	67	2	No	No	56	Ldn	63	68	--	--	No Wall	N/A	No	56
Mercer Island East Shore Landing																	
		SE 35th Pl	6	67	2	No	No	58	Ldn	63	68	--	--	No Wall	N/A	No	58
		SE 36th Pl	0	67	2	No	No	58	Ldn	63	68	--	--	No Wall	N/A	No	58

Preferred 112th SE Modified Alternative (B2M) to Preferred 108th NE At-Grade Alternative (C11A)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
Receivers North of I-90, Same for all alternatives																	
	1087	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
	1103	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
	1137	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1152/3	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1164	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1172	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1182	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1195	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1203	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
Same as above, second row																	
	1086	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	No Wall	N/A	No	57
	1106	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1136	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1151	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1163	SF residence	1	65	2	No	No	60	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	51
	1175	SF residence	1	65	2	No	No	59	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	50
	1177	SF residence	1	65	2	No	No	60	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	51
	1194	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1202	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
Receivers East of 112th to SE 30th and 111th																	
	1210	SF residence	1	69	2	No	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	1217	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2001	SF residence	1	69	2	No	No	69	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	60
	2003	SF residence	1	69	2	No	No	68	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	59
	2008	Lot	0	69	2	No	No	67	Ldn	64	70	0	--	Potential Sound Wall	N/A	No	58
	2012	SF residence	1	69	2	No	No	67	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2015 E	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	9819	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2017	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2023	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2026	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2030	SF residence	1	69	2	No	No	67	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
Same as above, second row																	
	1209	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2000	SF residence	1	67	2	No	No	62	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	53
	2015 W	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	9820	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	2021	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	2032	SF residence	1	67	2	No	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2036	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2038	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
Triangle North of SE 30th																	
	2040	SF residence	1	69	2	No	Yes	67	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2049	SF residence	1	69	2	No	Yes	68	Ldn	64	70	1	--	Potential Sound Wall	Special	No	57
	2061	SF residence	1	69	2	No	Yes	68	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2073	SF residence	1	69	2	No	Yes	66	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2094	SF residence	1	69	2	Yes	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
	2045	SF residence	1	67	2	No	Yes	61	Ldn	63	68	--	--	Potential Sound Wall	Special	No	51
	2055	SF residence	1	67	2	No	Yes	61	Ldn	63	68	--	--	Potential Sound Wall	Special	No	52
	2050	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
	2054	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2060	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
	2070	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2078	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
Receptors on 112th Ave SE and near Station Area																	
	2095	SF residence	1	69	2	No	No	61	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	53
	2109	SF residence	1	69	2	No	No	60	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	51
	2124	SF residence	1	69	2	Yes	No	60	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	51

Preferred 112th SE Modified Alternative (B2M) to Preferred 108th NE At-Grade Alternative (C11A)

Receiver and Data Input Section						Impact Analysis								Project Mitigation			
Parcel #, Description, Existing Noise Levels and FTA Category						Noise Sources		Project	Analysis	FTA Criteria		Number		Type of mitigation proposed			Mitigated
Area	Parcel	Description	Units	Ldn/Leq	FTA-CAT	Bells	X-Over	Ldn/Leq	Type	Mod	Sev	Mod	Sev	Sound Wall	X-Over	Insulation	Ldn/Leq
	2144	SF residence	1	69	2	Yes	No	58	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	49
	2160	SF residence	1	69	2	Yes	No	59	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2178	Lot	0	69	2	Yes	No	62	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	53
	2193	SF residence	1	69	2	Yes	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	2210	SF residence	1	69	2	Yes	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	2225	SF residence	1	69	2	Yes	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
	2235	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
Same as above, second row																	
	2104	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2116	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2130	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2137	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2146	SF residence	1	65	2	Yes	No	53	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	44
	2166	SF residence	1	67	2	Yes	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2170	SF residence	1	65	2	Yes	No	52	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	43
	2181	SF residence	1	65	2	Yes	No	54	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	45
	2183	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2211	SF residence	1	67	2	No	No	57	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	48
	2230	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	49
Receptors from 23rd St to 25th St																	
	2246	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2252	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2265	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2275	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2284	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2288	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2296	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2300	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	59
	2306	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
Same as above, second row																	
	2254	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2251	SF residence	1	67	2	No	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2271	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	49
	2289	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2297	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2307	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
25th St to 112th "Y"																	
	2317	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2326	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2333	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	2345	SF residence	1	69	2	No	No	51	Ldn	64	70	--	--	No Wall	N/A	No	51
	2351	SF residence	1	69	2	No	No	49	Ldn	64	70	--	--	No Wall	N/A	No	49
	2361	SF residence	1	69	2	No	No	51	Ldn	64	70	--	--	No Wall	N/A	No	51
	2367	SF residence	1	69	2	No	No	48	Ldn	64	70	--	--	No Wall	N/A	No	48
Station change to C9T																	
	2375	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2384	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56
	2397	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2378	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	2385	SF residence	1	69	2	No	No	54	Ldn	64	70	--	--	No Wall	N/A	No	54
	2393	SF residence	1	69	2	No	No	54	Ldn	64	70	--	--	No Wall	N/A	No	54
	2401	SF residence	1	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	2407	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56
	2413	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2421	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	3001	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56
	2414	SF residence	1	67	2	No	No	49	Ldn	63	68	--	--	No Wall	N/A	No	49
	2418	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	3000	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	3004	SF residence	1	67	2	No	No	48	Ldn	63	68	--	--	No Wall	N/A	No	48
MF Units at the 112th "Y"																	
	3010	MF Units at Y	4	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	3010	MF Units at Y	4	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	3010	MF Units at Y	4	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56

Preferred 112th SE Modified Alternative (B2M) to Preferred 108th NE At-Grade Alternative (C11A)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
	3010	MF Units at Y	4	69	2	No	No	49	Ldn	64	70	--	--	No Wall	N/A	No	49
	3010	MF Units at Y	4	69	2	No	No	48	Ldn	64	70	--	--	No Wall	N/A	No	48
	3010	MF Units at Y	4	67	2	No	No	50	Ldn	63	68	--	--	No Wall	N/A	No	50
SF Units forth of Y, south of Bellefield Park																	
	4000	SF up hill on retaining wall, north of Apts	1	60	2	No	No	50	Ldn	58	64	--	--	Potential Sound Wall	N/A	No	44
	4001	SF up hill on retaining wall, north of Apts	1	60	2	No	No	55	Ldn	58	64	--	--	Potential Sound Wall	N/A	No	49
	4004	SF up hill on retaining wall, north of Apts	1	60	2	No	No	63	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	57
	4005	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	63	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	57
	4007	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	62	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	56
	4010	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	63	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	56
	4017	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	63	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	56
	4024	Lot	0	60	2	Yes	No	63	Ldn	58	64	0	--	Potential Sound Wall	N/A	Yes	59
	4025	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	60	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	55
	4029	SF up hill on retaining wall, north of Apts	1	60	2	Yes	No	60	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	55
Bellefield Park																	
	4050	MF units at Bellefield Park	2	64	2	Yes	No	64	Ldn	61	66	2	--	Potential Sound Wall	N/A	No	58
	4050	MF units at Bellefield Park	2	64	2	Yes	No	64	Ldn	61	66	2	--	Potential Sound Wall	N/A	Yes	61
	4050	MF units at Bellefield Park	2	63	2	Yes	No	59	Ldn	60	66	--	--	Potential Sound Wall	N/A	No	56
	4050	MF units at Bellefield Park	2	65	2	No	No	65	Ldn	61	67	2	--	Potential Sound Wall	N/A	No	59
	4050	MF units at Bellefield Park	3	63	2	No	No	62	Ldn	60	66	3	--	Potential Sound Wall	N/A	No	56
	4050	MF units at Bellefield Park	4	64	2	No	No	64	Ldn	61	66	4	--	Potential Sound Wall	N/A	Yes	61
	4050	MF units at Bellefield Park	2	64	2	No	No	63	Ldn	61	66	2	--	Potential Sound Wall	N/A	No	60
	4050	MF units at Bellefield Park	2	63	2	No	No	58	Ldn	60	66	--	--	Potential Sound Wall	N/A	No	53
	4050	MF units at Bellefield Park	2	64	2	No	No	63	Ldn	61	66	2	--	Potential Sound Wall	N/A	No	57
	4050	MF units at Bellefield Park	2	63	2	No	No	62	Ldn	60	66	2	--	Potential Sound Wall	N/A	No	56
SF Units along 111th Place																	
	4065	SF residence	1	62	2	Yes	No	58	Ldn	59	65	--	--	Potential Sound Wall	N/A	No	52
	4063	SF residence	1	66	2	Yes	No	66	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	60
	4067	SF residence	1	66	2	Yes	No	65	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	59
	4074	SF residence	1	66	2	Yes	No	65	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	59
	4079	SF residence	1	65	2	Yes	No	63	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	58
	4084	SF residence	1	65	2	Yes	No	65	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	60
	5000	SF residence	1	65	2	Yes	No	65	Ldn	61	67	1	--	Potential Sound Wall	N/A	Yes	61
	5006	SF residence	1	65	2	Yes	No	66	Ldn	61	67	1	--	Potential Sound Wall	N/A	Yes	61
	5013	SF residence	1	65	2	Yes	No	64	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	60
	5021	SF residence	1	65	2	Yes	No	63	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	60
	5026	SF residence	1	65	2	Yes	No	63	Ldn	61	67	1	--	Potential Sound Wall	N/A	Yes	61
	5036	SF residence	1	65	2	Yes	No	63	Ldn	61	67	1	--	Potential Sound Wall	N/A	Yes	61
	5039	SF residence	1	66	2	Yes	No	63	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	61
	5050	SF residence	1	64	2	Yes	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	58

Preferred 112th SE Modified Alternative (B2M) to Preferred 110th NE Tunnel Alternative (C9T)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
Receivers North of I-90, Same for all alternatives																	
	1087	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
	1103	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	No Wall	N/A	No	61
	1137	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1152/3	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1164	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1172	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1182	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1195	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
	1203	SF residence	1	67	2	No	No	65	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	56
Same as above, second row																	
	1086	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	No Wall	N/A	No	57
	1106	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1136	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1151	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1163	SF residence	1	65	2	No	No	60	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	51
	1175	SF residence	1	65	2	No	No	59	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	50
	1177	SF residence	1	65	2	No	No	60	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	51
	1194	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
	1202	SF residence	1	65	2	No	No	61	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	52
Receivers East of 112th to SE 30th and 111th																	
	1210	SF residence	1	69	2	No	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	1217	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2001	SF residence	1	69	2	No	No	69	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	60
	2003	SF residence	1	69	2	No	No	68	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	59
	2008	Lot	0	69	2	No	No	67	Ldn	64	70	0	--	Potential Sound Wall	N/A	No	58
	2012	SF residence	1	69	2	No	No	67	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2015 E	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	9819	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2017	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2023	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2026	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2030	SF residence	1	69	2	No	No	67	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
Same as above, second row																	
	1209	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2000	SF residence	1	67	2	No	No	62	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	53
	2015 W	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	9820	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	2021	SF residence	1	67	2	No	No	61	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
	2032	SF residence	1	67	2	No	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2036	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2038	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
Triangle North of SE 30th																	
	2040	SF residence	1	69	2	No	Yes	67	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2049	SF residence	1	69	2	No	Yes	68	Ldn	64	70	1	--	Potential Sound Wall	Special	No	57
	2061	SF residence	1	69	2	No	Yes	68	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2073	SF residence	1	69	2	No	Yes	66	Ldn	64	70	1	--	Potential Sound Wall	Special	No	56
	2094	SF residence	1	69	2	Yes	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
	2045	SF residence	1	67	2	No	Yes	61	Ldn	63	68	--	--	Potential Sound Wall	Special	No	51
	2055	SF residence	1	67	2	No	Yes	61	Ldn	63	68	--	--	Potential Sound Wall	Special	No	52
	2050	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
	2054	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2060	SF residence	1	65	2	No	No	57	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	48
	2070	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2078	SF residence	1	67	2	No	No	60	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	52
Receptors on 112th Ave SE and near Station Area																	
	2095	SF residence	1	69	2	No	No	61	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	53
	2109	SF residence	1	69	2	No	No	60	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	51
	2124	SF residence	1	69	2	Yes	No	60	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	51

Preferred 112th SE Modified Alternative (B2M) to Preferred 110th NE Tunnel Alternative (C9T)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
	2144	SF residence	1	69	2	Yes	No	58	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	49
	2160	SF residence	1	69	2	Yes	No	59	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2178	Lot	0	69	2	Yes	No	62	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	53
	2193	SF residence	1	69	2	Yes	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	2210	SF residence	1	69	2	Yes	No	64	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	55
	2225	SF residence	1	69	2	Yes	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
	2235	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	56
Same as above, second row																	
	2104	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2116	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2130	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2137	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2146	SF residence	1	65	2	Yes	No	53	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	44
	2166	SF residence	1	67	2	Yes	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2170	SF residence	1	65	2	Yes	No	52	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	43
	2181	SF residence	1	65	2	Yes	No	54	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	45
	2183	SF residence	1	67	2	Yes	No	56	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	47
	2211	SF residence	1	67	2	No	No	57	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	48
	2230	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	49
Receptors from 23rd St to 25th St																	
	2246	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2252	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2265	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2275	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2284	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	57
	2288	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2296	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
	2300	SF residence	1	69	2	No	No	66	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	59
	2306	SF residence	1	69	2	No	No	65	Ldn	64	70	1	--	Potential Sound Wall	N/A	No	58
Same as above, second row																	
	2254	SF residence	1	65	2	No	No	56	Ldn	61	67	--	--	Potential Sound Wall	N/A	No	47
	2251	SF residence	1	67	2	No	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	50
	2271	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	49
	2289	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2297	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
	2307	SF residence	1	67	2	No	No	58	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	51
25th St to 112th "Y"																	
	2317	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2326	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	Potential Sound Wall	N/A	No	50
	2333	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	2345	SF residence	1	69	2	No	No	51	Ldn	64	70	--	--	No Wall	N/A	No	51
	2351	SF residence	1	69	2	No	No	49	Ldn	64	70	--	--	No Wall	N/A	No	49
	2361	SF residence	1	69	2	No	No	51	Ldn	64	70	--	--	No Wall	N/A	No	51
	2367	SF residence	1	69	2	No	No	48	Ldn	64	70	--	--	No Wall	N/A	No	48
Station change to C9T																	
	2375	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2384	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56
	2397	SF residence	1	69	2	No	No	58	Ldn	64	70	--	--	No Wall	N/A	No	58
	2378	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	2385	SF residence	1	69	2	No	No	54	Ldn	64	70	--	--	No Wall	N/A	No	54
	2393	SF residence	1	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	2401	SF residence	1	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	2407	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2413	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	2421	SF residence	1	69	2	No	No	57	Ldn	64	70	--	--	No Wall	N/A	No	57
	3001	SF residence	1	69	2	No	No	56	Ldn	64	70	--	--	No Wall	N/A	No	56
	2414	SF residence	1	67	2	No	No	49	Ldn	63	68	--	--	No Wall	N/A	No	49
	2418	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	3000	SF residence	1	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	3004	SF residence	1	67	2	No	No	48	Ldn	63	68	--	--	No Wall	N/A	No	48
MF Units at the 112th "Y"																	
	3010	MF Units at Y	4	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	3010	MF Units at Y	4	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	3010	MF Units at Y	4	69	2	No	No	61	Ldn	64	70	--	--	No Wall	N/A	No	61

Preferred 112th SE Modified Alternative (B2M) to Preferred 110th NE Tunnel Alternative (C9T)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
	3010	MF Units at Y	4	69	2	No	No	49	Ldn	64	70	--	--	No Wall	N/A	No	49
	3010	MF Units at Y	4	69	2	No	No	53	Ldn	64	70	--	--	No Wall	N/A	No	53
	3010	MF Units at Y	4	67	2	No	No	55	Ldn	63	68	--	--	No Wall	N/A	No	55
SF Units forth of Y, south of Bellefield Park																	
	4000	SF up hill on retaining wall, north of Apts	1	60	2	No	No	55	Ldn	58	64	--	--	Potential Sound Wall	N/A	No	49
	4001	SF up hill on retaining wall, north of Apts	1	60	2	No	No	60	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	54
	4004	SF up hill on retaining wall, north of Apts	1	60	2	No	No	60	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	54
	4005	SF up hill on retaining wall, north of Apts	1	60	2	No	No	60	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	54
	4007	SF up hill on retaining wall, north of Apts	1	60	2	No	No	59	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	53
	4010	SF up hill on retaining wall, north of Apts	1	60	2	No	No	59	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	53
	4017	SF up hill on retaining wall, north of Apts	1	60	2	No	No	59	Ldn	58	64	1	--	Potential Sound Wall	N/A	No	53
	4024	Lot	0	60	2	No	No	59	Ldn	58	64	0	--	Potential Sound Wall	N/A	No	53
	4025	SF up hill on retaining wall, north of Apts	1	60	2	No	No	55	Ldn	58	64	--	--	Potential Sound Wall	N/A	No	52
	4029	SF up hill on retaining wall, north of Apts	1	60	2	No	No	55	Ldn	58	64	--	--	No Wall	N/A	No	55
Bellefield Park																	
	4050	MF units at Bellefield Park	2	64	2	No	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	54
	4050	MF units at Bellefield Park	2	64	2	Yes	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	54
	4050	MF units at Bellefield Park	2	63	2	Yes	No	56	Ldn	60	66	--	--	Potential Sound Wall	N/A	No	49
	4050	MF units at Bellefield Park	2	65	2	Yes	No	64	Ldn	61	67	2	--	Potential Sound Wall	N/A	No	57
	4050	MF units at Bellefield Park	3	63	2	Yes	No	60	Ldn	60	66	3	--	No Wall	N/A	Yes	60
	4050	MF units at Bellefield Park	4	64	2	Yes	No	63	Ldn	61	66	4	--	No Wall	N/A	Yes	63
	4050	MF units at Bellefield Park	2	64	2	Yes	No	60	Ldn	61	66	--	--	No Wall	N/A	No	60
	4050	MF units at Bellefield Park	2	63	2	Yes	No	56	Ldn	60	66	--	--	Potential Sound Wall	N/A	No	48
	4050	MF units at Bellefield Park	2	64	2	Yes	No	59	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	52
	4050	MF units at Bellefield Park	2	63	2	Yes	No	58	Ldn	60	66	--	--	Potential Sound Wall	N/A	No	52
SF Units along 111th Place																	
	4065	SF residence	1	62	2	Yes	No	55	Ldn	59	65	--	--	Potential Sound Wall	N/A	No	48
	4063	SF residence	1	66	2	Yes	No	60	Ldn	62	68	--	--	Potential Sound Wall	N/A	No	54
	4067	SF residence	1	66	2	Yes	No	61	Ldn	62	68	--	--	Potential Sound Wall	N/A	No	55
	4074	SF residence	1	66	2	Yes	No	62	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	55
	4079	SF residence	1	65	2	Yes	No	62	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	55
	4084	SF residence	1	65	2	Yes	No	62	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	55
	5000	SF residence	1	65	2	Yes	No	65	Ldn	61	67	1	--	No Wall	N/A	Yes	65
	5006	SF residence	1	65	2	Yes	No	65	Ldn	61	67	1	--	No Wall	N/A	Yes	65
	5013	SF residence	1	65	2	Yes	No	64	Ldn	61	67	1	--	No Wall	N/A	Yes	64
	5021	SF residence	1	65	2	Yes	No	63	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	55
	5026	SF residence	1	65	2	Yes	No	62	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	55
	5036	SF residence	1	65	2	Yes	No	62	Ldn	61	67	1	--	Potential Sound Wall	N/A	No	55
	5039	SF residence	1	66	2	Yes	No	62	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	55
	5050	SF residence	1	64	2	Yes	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	53

Preferred 108th NE At-Grade Alternative (C11A) from Preferred 112th SE Modified Alternative (B2M)

Receiver and Data Input Section						Impact Analysis								Project Mitigation			
Parcel #, Description, Existing Noise Levels and FTA Category						Noise Sources		Project	Analysis	FTA Criteria		Number		Type of mitigation proposed			Mitigated
Area	Parcel	Description	Units	Ldn/Leq	FTA-CAT	Bells	X-Over	Ldn/Leq	Type	Mod	Sev	Mod	Sev	Sound Wall	X-Over	Insulation	Ldn/Leq
112th Ave SF at SE 4th																	
	2001	SF Second Line	1	67	2	Yes	Yes	63	Ldn	63	68	1	--	Potential Sound Wall	Special	No	57
	2002	SF Third Line	1	64	2	Yes	Yes	58	Ldn	61	66	--	--	Potential Sound Wall	Special	No	51
	4003	SF Second Line	1	67	2	Yes	Yes	66	Ldn	63	68	1	--	Potential Sound Wall	Special	No	56
	4004	SF Third Line	1	64	2	Yes	Yes	59	Ldn	61	66	--	--	Potential Sound Wall	Special	No	51
SF Residences along 111th PL SE																	
	4005	SF Homes Along SE 111th Pl	1	64	2	No	Yes	68	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4007	SF Homes Along SE 111th Pl	1	64	2	No	Yes	68	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4009	SF Homes Along SE 111th Pl	1	64	2	No	Yes	69	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4011	SF Homes Along SE 111th Pl	1	64	2	No	Yes	67	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4015	SF Homes Along SE 111th Pl	1	64	2	No	Yes	68	Ldn	61	66	--	1	Potential Sound Wall	Special	No	58
	4019	SF Homes Along SE 111th Pl	1	64	2	No	Yes	67	Ldn	61	66	--	1	Potential Sound Wall	Special	No	59
	4024	SF Homes Along SE 111th Pl	1	64	2	No	Yes	66	Ldn	61	66	--	1	Potential Sound Wall	Special	No	59
	4028	SF Homes Along SE 111th Pl	1	64	2	No	No	66	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	59
	4032	SF Homes Along SE 111th Pl	1	64	2	No	No	66	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	59
	4036	SF Homes Along SE 111th Pl	1	64	2	No	No	66	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	59
	4040	SF Homes Along SE 111th Pl	1	64	2	No	No	66	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	59
	4041	SF Homes Along SE 111th Pl	1	64	2	No	No	67	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	58
	4042	SF Homes Along SE 111th Pl	1	64	2	No	No	67	Ldn	61	66	--	1	Potential Sound Wall	N/A	No	58
	4044	SF Homes Along SE 111th Pl	1	67	2	No	No	66	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	57
SF Homes South of Main East of 110th Pl																	
	5009	SF Homes near DT	1	64	2	No	No	64	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	55
	5010	SF Homes near DT	1	64	2	No	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	53
	5011	SF Homes near DT	1	64	2	No	No	58	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
SF Residences on 110th Place SE																	
	5018	SF Homes near DT	1	67	2	Yes	No	67	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	59
	5017	SF Homes near DT	1	64	2	Yes	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	53
	5016	SF Homes near DT	1	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	50
	5015	SF Homes near DT	1	64	2	Yes	No	56	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
	5026	SF Homes near DT	1	67	2	Yes	No	64	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	57
	5025	SF Homes near DT	1	64	2	Yes	No	58	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	51
	5024	SF Homes near DT	1	64	2	Yes	No	56	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
SF Residences along 111th Ave SE																	
	5034	SF Homes near DT	1	64	2	Yes	No	63	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	57
	5033	SF Homes near DT	1	64	2	Yes	No	59	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	53
	5032	SF Homes near DT	1	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	51
	5031	SF Homes near DT	1	64	2	Yes	No	55	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
	5040	SF Homes near DT	1	67	2	Yes	No	64	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	57
	5039	SF Homes near DT	1	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	50
	5038	SF Homes near DT	1	64	2	Yes	No	55	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
SF Residences along 1st Street																	
	5044	SF Homes near DT	1	67	2	Yes	No	64	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	57
	5046	SF Homes near DT	1	67	2	Yes	No	63	Ldn	63	68	1	--	Potential Sound Wall	N/A	No	57
	5042	SF Homes near DT	1	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	50
	3068	SF Homes near DT	1	64	2	Yes	No	56	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	49
	3061	SF Homes near DT	1	64	2	Yes	No	54	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	48
	3076	SF Homes near DT	1	64	2	Yes	No	60	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	53
	3071	SF Homes near DT	1	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	50
	3067	SF Homes near DT	1	64	2	Yes	No	55	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	48
	3060	SF Homes near DT	1	64	2	Yes	No	53	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	48
MF Residences along 108th Ave SE																	
	3075	Duplex Units	2	64	2	Yes	No	57	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	53
	3072	Duplex Units	2	64	2	Yes	No	56	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	52
	3069	Duplex Units	2	64	2	Yes	No	55	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	51
	3063	Duplex Units	2	64	2	Yes	No	54	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	51
	3074	Apartment	8	67	2	Yes	No	59	Ldn	63	68	--	--	Potential Sound Wall	N/A	No	56
110th Ave Corridor																	
	C5021	MF - Sir Gallahad 110th at Main	12	66	2	Yes	No	63	Ldn	62	68	12	--	No Wall	N/A	Yes	63
108th Ave Corridor																	
	C5050	MF Units near Main	12	66	2	Yes	No	65	Ldn	62	68	12	--	No Wall	N/A	Yes	65
	C5051	MF Units near Main	16	66	2	Yes	No	65	Ldn	62	68	16	--	No Wall	N/A	Yes	65

Preferred 108th NE At-Grade Alternative (C11A) from Preferred 112th SE Modified Alternative (B2M)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
	C6015	MF Units near 2nd Pl	20	66	2	Yes	No	67	Ldn	62	68	20	--	No Wall	N/A	Yes	67
Multi-Family Residences along NE 6th St																	
	C8031	MF Bravern	48	67	2	Yes	No	65	Ldn	63	68	48	--	No Wall	N/A	Yes	65
Bellevue Lake Condominiums																	
	10045	Bellevue Lake Condos	8	58	2	No	No	65	Ldn	57	63	--	8	Potential Sound Wall	N/A	No	56
	10045	Bellevue Lake Condos	4	58	2	No	No	64	Ldn	57	63	--	4	Potential Sound Wall	N/A	No	55
	10045	Bellevue Lake Condos	4	58	2	No	No	64	Ldn	57	63	--	4	Potential Sound Wall	N/A	No	55
Hotels																	
	4001	Bellevue Club Rooms	16	68	2	Yes	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
	4001	Bellevue Club Rooms	16	68	2	Yes	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
	4020	Bellevue Hilton South	18	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	4020	Bellevue Hilton North	18	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	10001	Coast Hotel	36	69	2	No	Yes	80	Ldn	64	70	--	36	Potential Sound Wall	Special	No	61
Meydenbauer Center																	
	9005	Performing Arts Center	1	69	1	No	No	64	Leq	70	75	--	--	No Wall	N/A	No	64

Preferred 110th NE Tunnel Alternative (C9T) from Preferred 112th SE Modified Alternative (B2M)

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, Existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
112th Ave SF at SE 4th																	
	2001	SF Second Line	1	67	2	Yes	No	67	Ldn	63	68	1	--	Potential Sound Wall	N/A	Yes	63
	2002	SF Third Line	1	64	2	Yes	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	57
	4003	SF Second Line	1	67	2	Yes	No	67	Ldn	63	68	1	--	Potential Sound Wall	N/A	Yes	63
	4004	SF Third Line	1	64	2	Yes	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	57
SF Residences along 111th PL SE																	
	4005	SF Homes Along SE 111th Pl	1	64	2	Yes	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4007	SF Homes Along SE 111th Pl	1	64	2	Yes	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4009	SF Homes Along SE 111th Pl	1	64	2	Yes	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4011	SF Homes Along SE 111th Pl	1	64	2	Yes	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4015	SF Homes Along SE 111th Pl	1	64	2	Yes	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4019	SF Homes Along SE 111th Pl	1	64	2	No	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	56
	4024	SF Homes Along SE 111th Pl	1	64	2	No	Yes	64	Ldn	61	66	1	--	Potential Sound Wall	Special	No	56
	4028	SF Homes Along SE 111th Pl	1	64	2	No	Yes	66	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4032	SF Homes Along SE 111th Pl	1	64	2	No	Yes	68	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4036	SF Homes Along SE 111th Pl	1	64	2	No	Yes	69	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4040	SF Homes Along SE 111th Pl	1	64	2	No	Yes	69	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4041	SF Homes Along SE 111th Pl	1	64	2	No	Yes	67	Ldn	61	66	--	1	Potential Sound Wall	Special	No	56
	4042	SF Homes Along SE 111th Pl	1	64	2	No	Yes	64	Ldn	61	66	1	--	Potential Sound Wall	Special	No	56
	4044	SF Homes Along SE 111th Pl	1	67	2	No	Yes	65	Ldn	63	68	1	--	Potential Sound Wall	Special	No	57
SF Homes South of Main East of 110th Pl																	
	5009	SF Homes near DT	1	64	2	No	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	55
	5010	SF Homes near DT	1	64	2	No	No	52	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	46
	5011	SF Homes near DT	1	64	2	No	No	48	Ldn	61	66	--	--	Potential Sound Wall	N/A	No	43
SF Residences on 110th Place SE																	
	5018	SF Homes near DT	1	67	2	Yes	No	56	Ldn	63	68	--	--	No Wall	N/A	No	56
	5017	SF Homes near DT	1	64	2	Yes	No	52	Ldn	61	66	--	--	No Wall	N/A	No	52
	5016	SF Homes near DT	1	64	2	Yes	No	50	Ldn	61	66	--	--	No Wall	N/A	No	50
	5015	SF Homes near DT	1	64	2	Yes	No	49	Ldn	61	66	--	--	No Wall	N/A	No	49
	5026	SF Homes near DT	1	67	2	Yes	No	56	Ldn	63	68	--	--	No Wall	N/A	No	56
	5025	SF Homes near DT	1	64	2	Yes	No	51	Ldn	61	66	--	--	No Wall	N/A	No	51
	5024	SF Homes near DT	1	64	2	Yes	No	49	Ldn	61	66	--	--	No Wall	N/A	No	49
Multi-Family Residences along NE 6th St																	
	C8031	MF Bravern	48	67	2	Yes	No	65	Ldn	63	68	48	--	No Wall	N/A	Yes	65
Bellevue Lake Condominiums																	
	10045	Bellevue Lake Condos	8	58	2	No	No	65	Ldn	57	63	--	8	Potential Sound Wall	N/A	No	56
	10045	Bellevue Lake Condos	4	58	2	No	No	64	Ldn	57	63	--	4	Potential Sound Wall	N/A	No	55
	10045	Bellevue Lake Condos	4	58	2	No	No	64	Ldn	57	63	--	4	Potential Sound Wall	N/A	No	55
Hotels																	
	4001	Bellevue Club Rooms	16	68	2	Yes	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
	4001	Bellevue Club Rooms	16	68	2	Yes	No	61	Ldn	63	69	--	--	No Wall	N/A	No	61
	4020	Bellevue Hilton South	18	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	4020	Bellevue Hilton North	18	69	2	No	No	55	Ldn	64	70	--	--	No Wall	N/A	No	55
	10001	Coast Hotel	36	69	2	No	Yes	79	Ldn	64	70	--	36	Potential Sound Wall	Special	No	60
Meydenbauer Center																	
	9005	Performing Arts Center	1	69	1	No	No	65	Leq	70	75	--	--	No Wall	N/A	No	65

Preferred NE 16th At-Grade Alternative (D2A) from Preferred 108th NE At-Grade (C11A) or Preferred 110th NE Tunnel (C9T) Alternative																	
Receiver and Data Input Section						Impact Analysis								Project Mitigation			
Parcel #, Description, Existing Noise Levels and FTA Category						Noise Sources		Project	Analysis	FTA Criteria		Number		Type of mitigation proposed			Mitigated
Area	Parcel	Description	Units	Ldn/Leq	FTA-CAT	Bells	X-Over	Ldn/Leq	Type	Mod	Sev	Mod	Sev	Sound Wall	X-Over	Insulation	Ldn/Leq
D2A	1205	PNB	1	56	3	Yes	No	62	Leq	63	68	--	--	N/A	N/A	No	62

Preferred Marymoor Alternative (E2) from All Segment D Alternatives

Receiver and Data Input Section						*Impact Analysis*								*Project Mitigation*			
Parcel #, Description, existing Noise Levels and FTA Category						**Noise Sources**		**Project**	**Analysis**	**FTA Criteria**		**Number**		**Type of mitigation proposed**			**Mitigated**
Area	**Parcel**	**Description**	**Units**	**Ldn/Leq**	**FTA-CAT**	**Bells**	**X-Over**	**Ldn/Leq**	**Type**	**Mod**	**Sev**	**Mod**	**Sev**	**Sound Wall**	**X-Over**	**Insulation**	**Ldn/Leq**
Along SR520 from Segment D																	
	1708	SF Residence on NE 67th Pl	1	64	2	No	No	64	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	55
	1718	SF Residence on NE 67th Pl	1	66	2	No	No	65	Ldn	62	68	1	--	Potential Sound Wall	N/A	No	56
	1730	SF Residence on NE 67th Pl	1	68	2	No	No	70	Ldn	63	69	--	1	Potential Sound Wall	N/A	No	61
	1733	SF Residence on NE 67th Pl	1	68	2	No	No	70	Ldn	63	69	--	1	Potential Sound Wall	N/A	No	61
	1737	SF Residence on NE 67th Pl	1	68	2	No	No	69	Ldn	63	69	--	1	Potential Sound Wall	N/A	No	60
	1738, 4000	SF Residence on NE 67th Pl	1	68	2	No	No	69	Ldn	63	69	--	1	Potential Sound Wall	N/A	No	60
	4001	SF Residence on NE 67th Pl	1	68	2	No	No	67	Ldn	63	69	1	--	Potential Sound Wall	N/A	No	58
	4002	SF Residence on NE 67th Pl	1	68	2	No	No	65	Ldn	63	69	1	--	Potential Sound Wall	N/A	No	56
	4003	SF Residence on NE 67th Pl	1	68	2	No	No	64	Ldn	63	69	1	--	Potential Sound Wall	N/A	No	55
Second Line homes same area as above																	
	1719	SF Residence on NE 67th Pl	1	64	2	No	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	53
	1728	SF Residence on NE 67th Pl	1	64	2	No	No	62	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	53
	1731	SF Residence on NE 67th Pl	1	64	2	No	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	52
	1736	SF Residence on NE 67th Pl	1	64	2	No	No	61	Ldn	61	66	1	--	Potential Sound Wall	N/A	No	52
Condos along the Bluff																	
	2000	MF units on Bluff above W Lake Samm	4	64	2	No	No	59	Ldn	61	66	--	--	No Wall	N/A	No	59
	2000	MF units on Bluff above W Lake Samm	4	64	2	No	No	58	Ldn	61	66	--	--	No Wall	N/A	No	58
New Condos Between Bear Creek Pkwy and Cleveland St at Brown St																	
	2173	The Cleveland Condominiums	48	64	2	Yes	Yes	66	Ldn	61	66	--	48	No Wall	Special	No	60
	2180	The Cleveland Condominiums	48	64	2	Yes	Yes	69	Ldn	61	66	--	48	No Wall	Special	Yes	61
	5002	Name Unknown	48	64	2	Yes	Yes	67	Ldn	61	66	--	48	No Wall	Special	No	60
Redmond Town Center/Redmond Way Hotels														No Wall			
	6047	Redmond TC Hotel (Lion)	24	64	2	Yes	Yes	65	Ldn	61	66	24	--	No Wall	Special	Yes	63
Marymoor Park																	
	4020	Baseball area	1	68	3	No	No	66	Leq	69	74	--	--	No Wall	N/A	No	66
	4026	Field near crossover	1	68	3	No	Yes	66	Leq	69	74	--	--	No Wall	Special	No	62

Attachment 2

Draft Memorandum of Agreement

DRAFT

MEMORANDUM OF AGREEMENT

AMONG

THE FEDERAL TRANSIT ADMINISTRATION,

WASHINGTON STATE HISTORIC PRESERVATION OFFICER,
AND THE CENTRAL PUGET SOUND REGIONAL TRANSIT AUTHORITY

Implementing

Section 106 of the National Historic Preservation Act

for the

EAST LINK LIGHT RAIL TRANSIT PROJECT
IN THE STATE OF WASHINGTON

WHEREAS, the Central Puget Sound Regional Transit Authority (Sound Transit) proposes to construct and operate the East Link Light Rail Transit Project (Project), an extension of its electric light rail transit system, that will connect the cities of Seattle, Mercer Island, Bellevue, and Redmond, crossing Lake Washington in the center lanes of Interstate 90 (I-90) and operating in a dedicated right-of-way between Seattle and Redmond; and

WHEREAS, the Federal Transit Administration (FTA), the responsible Federal agency, has determined that the Project is an undertaking, as defined in Title 36 Code of Federal Regulations (CFR) §800.16(y), and thus is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. §470f and its implementing regulations, 36 CFR Part 800; and

WHEREAS, Sound Transit is the designated applicant responsible for obtaining the necessary approvals and permits to undertake the Project; and

WHEREAS, FTA and Sound Transit have consulted with the Washington State Historic Preservation Officer (SHPO), interested and affected Indian tribes, and other parties with a demonstrated interest in the effects of the Project on historic properties in accordance with Section 106 of the National Historic Preservation Act (16 USC 4701) and its implementing regulations (36 CFR Part 800.2); and

WHEREAS, FTA and Sound Transit, in consultation with SHPO, have determined the appropriate area of potential effects (APE) for the Project and conducted cultural resource studies constituting a reasonable and good faith effort to identify historic properties and archaeological resources within the APE pursuant to 36 CFR §800.4; and

WHEREAS, the APE and potential historic properties within the APE are described in the Sound Transit East Link Project Historic and Archaeological Resources Technical Report, along with a description and map of the Project; and

WHEREAS, the cultural resource studies resulted in the identification of 16 properties within the APE listed in or eligible for listing in the National Register of Historic Places (NRHP), including a neighborhood (Surrey Downs) that is potentially eligible for listing in the NRHP; and

WHEREAS, as federally recognized tribes, the Muckleshoot Indian Tribe, the Snoqualmie Indian Tribe, the Suquamish Indian Tribe, the Tulalip Tribes of the Tulalip Reservations, and the Confederated Bands and Tribes of the Yakama Nation (the Tribes) have been consulted about the Project and have been invited to concur with this Agreement; and

WHEREAS, the Duwamish Tribal Services (a non-profit organization) has been consulted about the Project and has been invited to concur with this Agreement; and

WHEREAS, FTA and Sound Transit have completed a traditional cultural properties (TCP) archival inventory of the APE using secondary sources and information available in the public domain, and identified no property of cultural interest to the Tribes ; and

WHEREAS, FTA and Sound Transit have consulted about the project with the cities of Seattle, Mercer Island, Bellevue, and Redmond, King County, Washington State Department of Transportation, Federal Highway Administration, and US Army Corps of Engineers, and have invited those entities to concur with this Agreement; and

WHEREAS, FTA and Sound Transit have coordinated the investigations, studies and consultations described above required under Section 106; and

WHEREAS, FTA and Sound Transit have determined that the Project will have an adverse effect, which results from a potential impact on the Winters House, and on the potentially eligible Surrey Downs Historic District, and has the potential to have an impact on undiscovered archaeological resources; and

WHEREAS, FTA and Sound Transit carried out consultations with SHPO, interested and affected Indian tribes, and other consulting parties to identify measures to resolve impacts pursuant to 36 CFR §800.6, resulting in development of this Agreement; and

NOW, THEREFORE, FTA, SHPO, and Sound Transit agree that the Project shall be implemented in accordance with the following stipulations to satisfy FTA's Section 106 responsibilities, and they further agree that FTA shall require that the following terms and conditions be carried out.

STIPULATIONS

FTA and Sound Transit shall implement the following terms and conditions in a timely manner and with adequate resources in compliance with the NHPA (16 USC 470).

During the environmental review for this Project, conceptual engineering plans and conceptual station designs were reviewed for potential impacts on identified historic properties. These conceptual plans and designs, and the potential impacts they describe, are included in the East Link Light Rail Transit Project Final Environmental Impact Statement (FEIS July 2011) and the Archeological and Historic Resources Technical Report to the FEIS. The following stipulations will govern future design, construction, and operation of the Project.

I. WINTERS HOUSE

A. Sound Transit will perform a conditions assessment of the Winters House building to establish existing conditions, including exterior and interior inspection.

B. Sound Transit will install vibration and settlement monitoring devices before undertaking ground-disturbing construction sufficient to provide the necessary monitoring and measurements to alert Sound Transit. Where called for, Sound Transit will adjust construction methods as needed based on monitoring results.

C. Sound Transit will use specific vibration and settlement-reducing construction methods, to be determined by Sound Transit during final design and construction.

D. If warranted, Sound Transit will build a construction barrier around the Winters House building to minimize damage and minimize dust during construction. This will be determined by Sound Transit during final design and construction.

E. Sound Transit will apply dust control measures during construction to minimize dust. After construction, in consultation with SHPO, Sound Transit will clean the outside of the Winters House building and windows in a manner sensitive to the historic property.

F. The Winters House will be closed during construction and Sound Transit will temporarily relocate the tenant. For the duration of the time the Winters House is closed, Sound Transit will provide information to the public regarding how to access the Eastside Heritage Center during construction.

G. If any physical damage occurs to the Winters House building as a result of the Project, Sound Transit, in consultation with SHPO, will make any necessary repairs consistent with U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

H. Sound Transit will install standard methods of vibration reduction, such as resilient fasteners or ballast mats, to reduce groundborne noise below FTA impact criteria. A floating slab will be incorporated in the project, if necessary, to eliminate groundborne noise and vibration impacts. This will be determined by Sound Transit in consultation with FTA during final design and construction.

I. Within six months after construction of the Project is completed, Sound Transit will landscape the area of property between the front (west elevation) of the Winters House and Bellevue Way SE to more closely reflect the landscaping of the historic period, in consultation with the City of Bellevue and SHPO. Sound Transit will preserve, as practical, historic period plants that will be affected by Project construction.

J. Sound Transit will provide interpretive signage on or near the Winters House property in consultation with the City of Bellevue.

II. POTENTIAL SURREY DOWNS HISTORIC DISTRICT

A. To minimize construction impacts, the following minimization measures will be incorporated into the Project during construction adjacent to properties that contribute to the potential Surrey Downs Historic District:

1. Before construction begins, Sound Transit will install a solid construction barrier south of Main Street between the area of construction activity and adjacent contributing properties.

2. During construction, Sound Transit will comply with the City of Bellevue's Noise Ordinance. Other construction impact minimization measures, including dust control, will be implemented as needed.

3. Sound Transit will remove the construction barrier and will install landscaping along the south side of the guideway south of Main Street within six months after completion of construction.

4. As practical, Sound Transit will preserve the evergreen trees located between the contributing historic properties and proposed project south of Main Street and east of 108th Avenue SE.

5. Reasonable mitigation measures shall be employed for construction-related activities occurring on adjacent property used by Sound Transit for "construction staging" to address noise, dust, visual and other such impacts in recognition of the neighboring residential setting.

B. To minimize impacts during operation, the following measures will be incorporated into the Project

1. Sound Transit will install a permanent sound barrier, which may include a berm and/or wall, south of the light rail track along Main Street to prevent noise impacts on contributing properties within the potential Surrey Downs Historic District. The SHPO will be consulted for sound barrier design prior to its construction.

2. Sound Transit will install landscaping along the south side of the guideway south of Main Street to provide a buffer for the boundary of the potential Surrey Downs Historic District where noncontributing properties would be removed for the Project.

III. ARCHAEOLOGY

A. Project archaeologists who meet the Secretary of Interior's professional standards will conduct additional subsurface testing before construction as outlined in the Archaeological Survey Strategy (which is included in the Historic and Archaeological Technical Report).

B. An Archaeological Resources Monitoring and Treatment Plan or an Unanticipated Discovery Plan will be prepared before construction to provide additional information and protocols that will guide archaeological monitoring work during Project construction.

IV. DISPUTE RESOLUTION

A. FTA, Sound Transit, and SHPO are signatories to this agreement and are the parties who are authorized to address and informally resolve disagreements concerning the implementation of this Agreement.

B. If informal resolution cannot be achieved, any signatory to this Agreement may object in writing to FTA or Sound Transit regarding any action carried out or proposed with respect to implementation of this Agreement. The agency receiving the objection shall, within ten working days, initiate consultation with the objecting party to resolve the objection.

C. If after initiating such consultation FTA or Sound Transit determines that the objection cannot be resolved through consultation, FTA shall forward all documentation relevant to the objection to the Advisory Council on Historic Preservation (ACHP), including the agency's proposed response to the objection.

D. Within thirty calendar days after receipt of all pertinent documentation, ACHP shall exercise one of the following options:

1. Advise FTA that ACHP concurs in the agency's proposed response to the objection, whereupon FTA will respond to the objection accordingly; or

2. Provide FTA with recommendations, which the agency shall take into account in reaching a final decision regarding its response to the objection; or

3. Notify FTA that the objection will be referred for comment pursuant to 36 CFR §800.7(a)(4), and proceed to refer the objection and comment.

E. FTA shall take the resulting comment into account in accordance with 36 CFR §800.7(c)(4), with reference only to the subject of the specified dispute; FTA's responsibility to ensure that all actions under this Agreement that are not the subjects of the dispute are carried out will remain unchanged.

V. AMENDMENT AND TERMINATION

A. FTA, Sound Transit, and SHPO are signatories to this agreement and are the parties who are authorized to terminate it by providing 30 calendar days written notice to the other parties. If requested by a signatory, the signatories may meet during the period prior to termination to seek agreement on amendments or other actions that would avoid termination.

B. In the event of termination, FTA shall comply with 36 CFR 800 with regard to all remaining actions under this Agreement.

C. If FTA or Sound Transit proposes to modify this Agreement in a manner that alters the resolution of adverse effects of historic properties, the modified Agreement must be signed by all signatories.

VI. CONSULTATION UNDER SECTION 106

A. FTA notified the ACHP of a potential adverse effect of the Project on properties listed in or eligible for listing in NRHP, affording ACHP an opportunity to comment and/or participate in resolving adverse effects. ACHP has declined to participate in the consultation to resolve adverse effects. The executed MOA will be filed with the ACHP, pursuant to 36 CFR 800.6(b)(I)(iv), when signed by the parties below.

B. Execution and implementation of this Agreement is evidence that FTA and Sound Transit have taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects, and is evidence that FTA and Sound Transit have complied with the consultation requirements under Section 106.

VII. EXECUTION

A. Unless terminated, this MOA shall remain in effect from the date of execution until FTA determines that the terms of this MOA have been satisfactorily fulfilled. Upon such determination, this MOA shall terminate, and FTA shall provide SHPO with written notice of the determination and termination.

B. The undersigned official representatives of the parties affirm and concur with the agreement and enter into this agreement on behalf of their respective parties. Each party represents that the person executing this agreement on its behalf is duly authorized to execute this agreement.

VIII. MISCELLANEOUS

This MOA creates no right of action for any signatory to this agreement or any other party.

Signatories:

FEDERAL TRANSIT ADMINISTRATION

By: _____Date: _____

R.F. Krochalis, Regional Administrator

WASHINGTON STATE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION

By: _____Date: _____

Allyson Brooks, Ph.D., State Historic Preservation Officer

SOUND TRANSIT

By: _____Date: _____

Joni Earl, Chief Executive Officer

Concurring Parties:

CITY OF SEATTLE

CITY OF MERCER ISLAND

CITY OF BELLEVUE

CITY OF REDMOND

KING COUNTY

FEDERAL HIGHWAY ADMINISTRATION

US ARMY CORPS OF ENGINEERS

MUCKLESHOOT INDIAN TRIBE

SNOQUALMIE INDIAN TRIBE

SUQUAMISH INDIAN TRIBE

TULALIP TRIBES OF THE TULALIP RESERVATION

CONFEDERATED BANDS AND TRIBES OF THE YAKAMA NATION

DUWAMISH TRIBAL SERVICES

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION