

4.5 Visual and Aesthetic Resources

4.5.1 Introduction to Resources and Regulatory Requirements

Visual and aesthetic environments are the landscape's natural and cultural features that can be seen and that contribute to the public's appreciation and enjoyment of it. The visual environment encompasses elements from both the built and natural environments; these can include solitary built and natural landmarks (such as buildings, trees, and bodies of water) or entire landscapes. Impacts on the visual environment are defined in terms of the extent to which the project's presence would change the perceived visual character and quality of the environment.

This description of the existing visual conditions and assessment of changes associated with the East Link Project is based on the visual assessment system developed by the Federal Highway Administration (FHWA). The approaches and terminology used in this assessment are found in FHWA's *Visual Impact Assessment for Highway Projects* (FHWA, 1981). Appendix F4.5, Attachment 1, describes this assessment and how the existing visual quality categories were established and the degree to which the segment alternatives impacted visual quality categories. Sound Transit also assessed the project's consistency with visual resource goals and policies of relevant local comprehensive plans.

The study area for visual resources consists of the alternative viewsheds. Viewsheds are the areas from which the alternatives could be viewed. In general, the viewsheds for the East Link Project encompass the foreground viewing distance (within 0 to 0.5 mile from the viewer) but might vary depending upon elements in the landscape (such as terrain, vegetation, and buildings) that can block views of objects.

4.5.2 Affected Environment

Assessment activities for the affected environment included conducting site visits, examining aerial photographs, reviewing conceptual engineering drawings of the proposed alternatives, and preparing an existing conditions inventory. Preparing the existing conditions inventory relied in part on materials from other technical areas that influence the visual environment. These related technical areas are Land Use (Section 4.2); Social Impacts, Community Facilities, and Neighborhoods (Section 4.4); Ecosystem Resources (Section 4.8); and Parkland and Open Space (Section 4.17).

The existing conditions inventory described the existing visual character of the study area, identified the types of viewer groups that would see the alternatives, described their sensitivity to changes in the viewed environment (viewer sensitivity), and categorized the existing visual quality using three categories based on the FHWA system. The visual quality categories helped to assess changes in the visual environment that would occur with the East Link Project. Following are the three visual quality categories:

- **Low Visual Quality.** Areas that have low visual quality might have features that seem visually out of place, lack visual coherence, do not have compositional harmony, and contain eyesores.
- **Medium Visual Quality.** These areas are commonly occurring landscapes that are generally pleasant appearing but might lack enough distinctiveness, memorability, drama, and compositional harmony to place them in the high visual quality category.
- **High Visual Quality.** To be in this category, areas must be memorable, distinctive, unique (in a positive way), and intact – they can be natural, parklike, or urban (with urban areas displaying strong and consistent architectural and urban design features).

Exhibits 4.5-1 through 4.5-5 show the existing visual quality categories (low, medium, and high) by project segment (see Appendix F4.5, Attachment 1 for explanations of specific sections of alternative routes). In addition to categorizing the overall visual quality, Sound Transit selected a series of locations to provide more site-specific information. Because it is not possible to include all the important viewing locations near a proposed project, representative locations – or key observation points (KOPs) – are selected. KOPs are used to describe existing visual conditions and to analyze the effects of a proposed action on visual resources. The KOP locations were chosen after field reconnaissance of the alternative routes and after meetings with the planning departments of the Cities of Bellevue and Redmond.

In addition, important community features, identified in public workshops, were considered in determining KOP locations. Exhibits 4.5-1 through 4.5-5 depict the KOPs selected for the East Link Project.

More detailed information related to the KOPs, including photographs of the existing conditions at these locations as well as simulations of various alternatives, is provided in Appendix F4.5.



Source: Data from City of Seattle (2002), King County (2006), Sound Transit (2007), and CH2M Hill (2008).

Visual Quality

- █ High
- █ Medium
- █ Low

- Key Observation Point (KOP)
- Traction Power Substation
- Proposed Station
- Central Link Alignment and Station

- At-Grade Route
- - - Elevated Route
- Retained-Cut Route
- Retained-Fill Route
- - - Tunnel Route

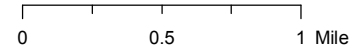
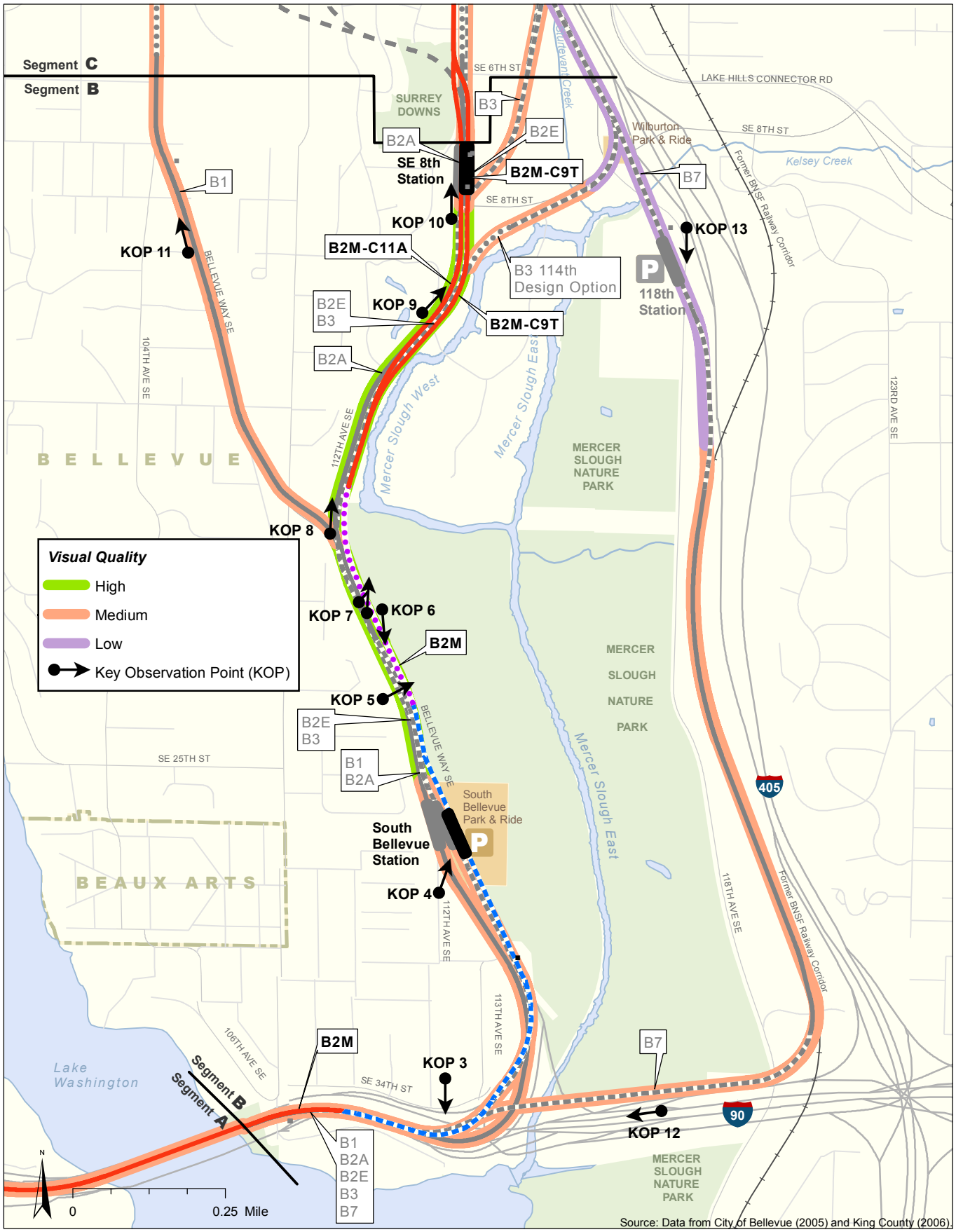


Exhibit 4.5-1
Visual Quality
Segment A
 East Link Project



Visual Quality

- █ High
- █ Medium
- █ Low
- → Key Observation Point (KOP)

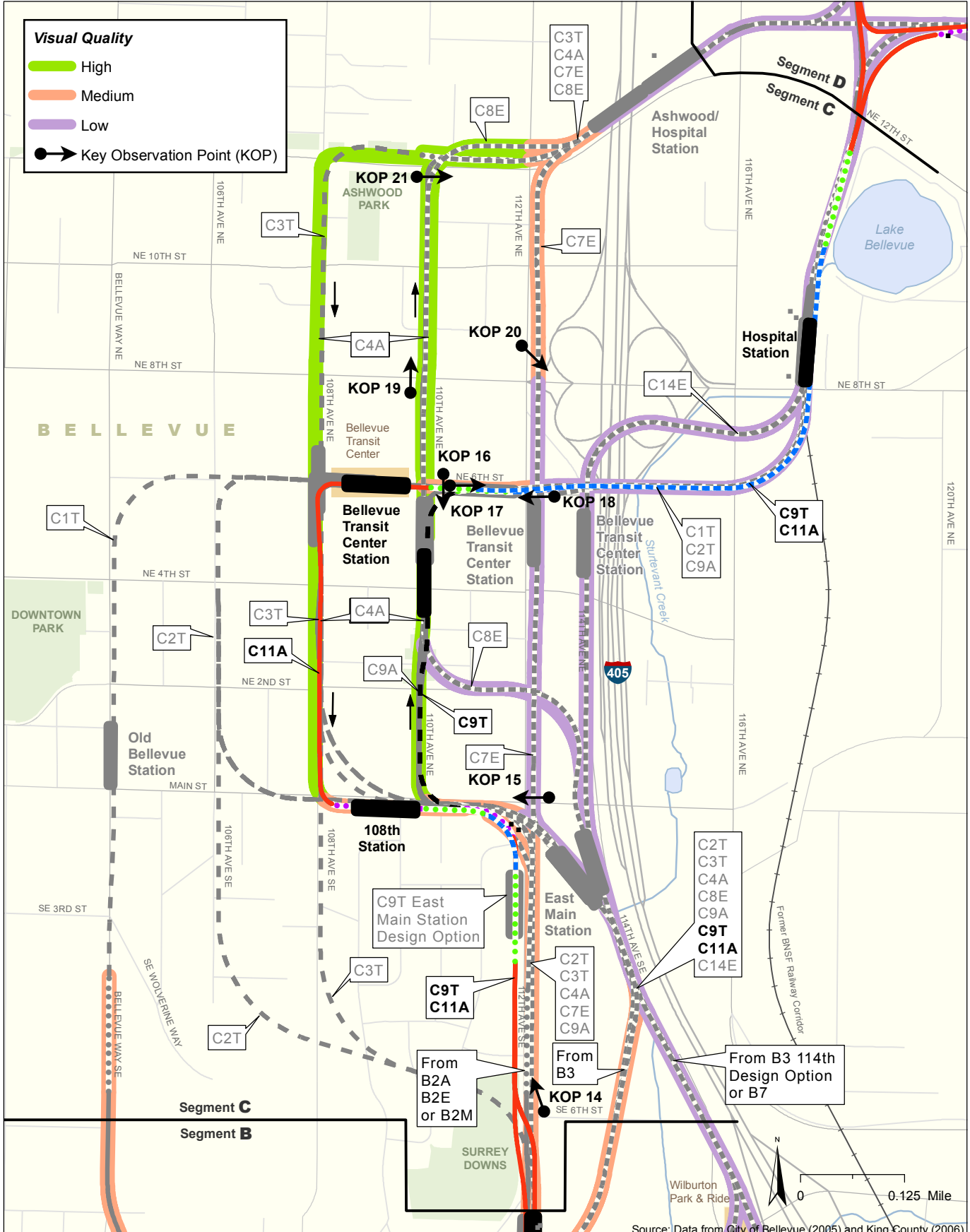
- Preferred Alternative**
- █ At-Grade Route
 - █ Elevated Route
 - █ Retained-Cut Route
 - █ Retained-Fill Route
 - █ Tunnel Route

- Other Alternatives**
- █ At-Grade Route
 - █ Elevated Route
 - █ Retained-Cut or Retained-Fill Route
 - █ Tunnel Route

- Traction Power Substation
- Proposed Station
- P New and/or Expanded Park-and-Ride Lot

Exhibit 4.5-2
Visual Quality
Segment B
 East Link Project

Source: Data from City of Bellevue (2005) and King County (2006).



Source: Data from City of Bellevue (2005) and King County (2006)

Preferred Alternative C9T

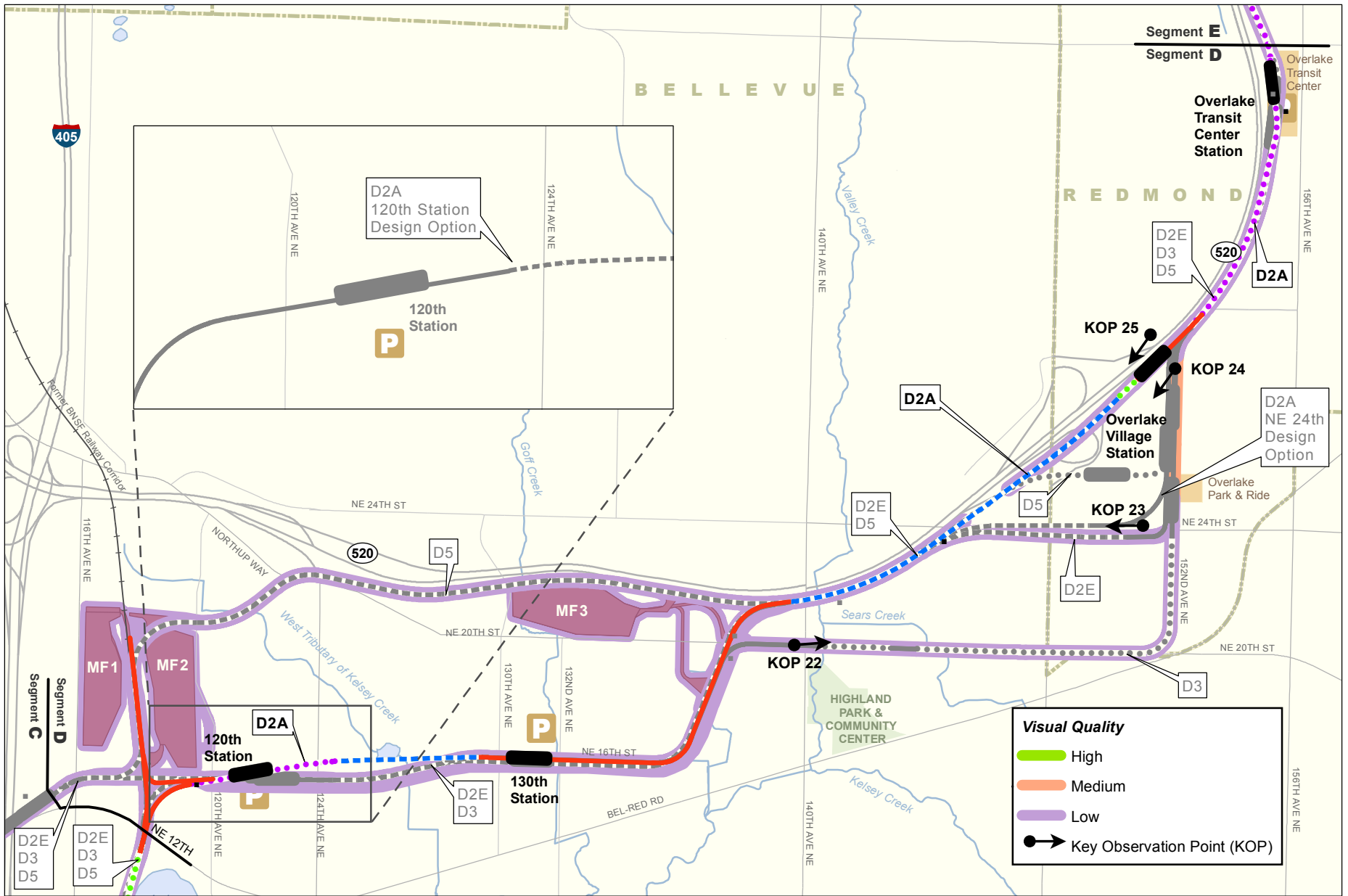
- At-Grade Route (Red line)
- Elevated Route (Blue dashed line)
- Retained-Cut Route (Purple dotted line)
- Retained-Fill Route (Green dotted line)
- Tunnel Route (Black dashed line)

Other Alternatives C14E

- At-Grade Route (Grey line)
- Elevated Route (Grey dashed line)
- Retained-Cut or Retained-Fill Route (Grey dotted line)
- Tunnel Route (Grey dashed line)

■ Traction Power Substation
 ■ Proposed Station
 P New and/or Expanded Park-and-Ride Lot

**Exhibit 4.5-3
Visual Quality
Segment C
East Link Project**



Source: Data from City of Bellevue (2005), City of Redmond (2005), and King County (2006).

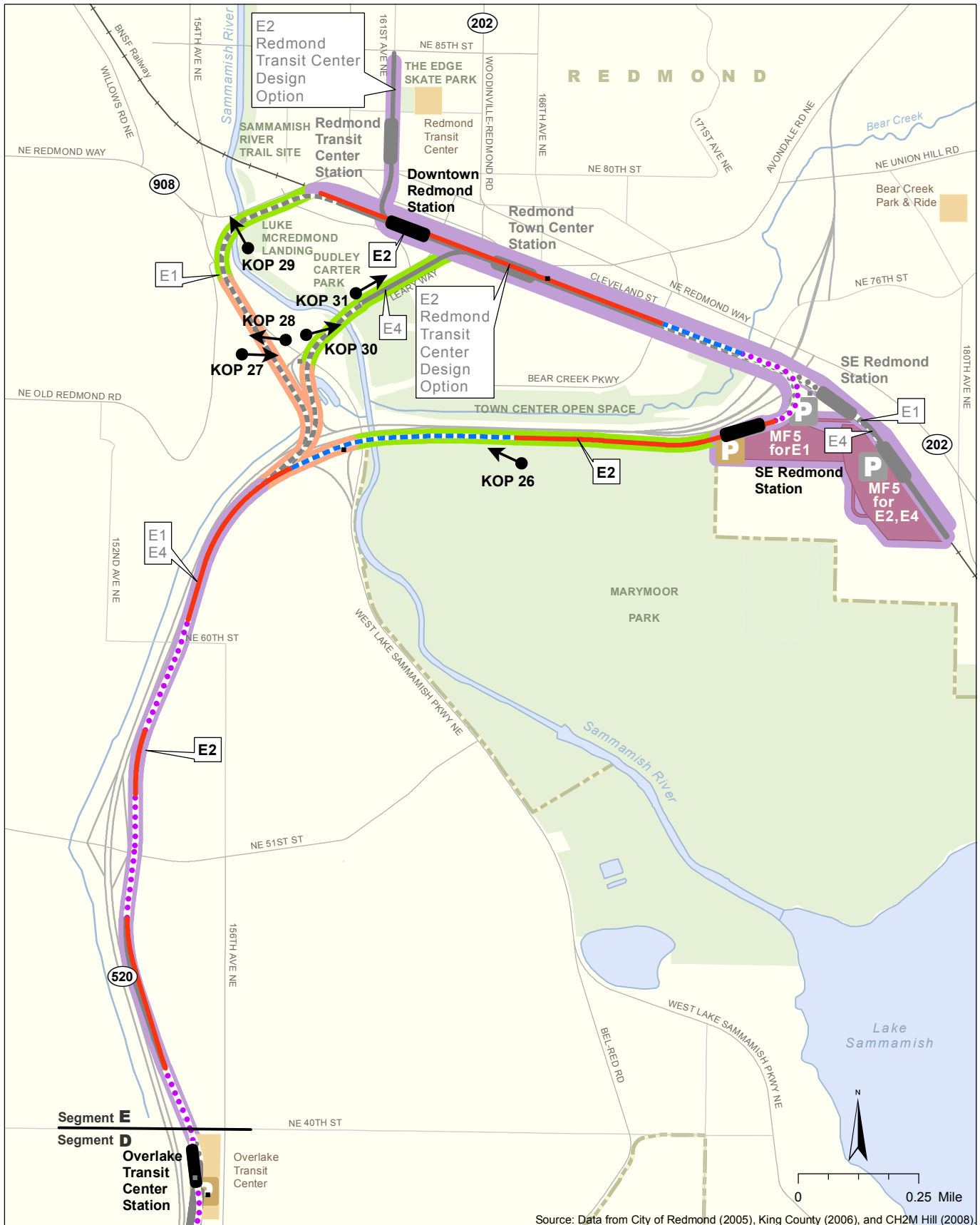
- Preferred Alternative** **D2A**
- At-Grade Route
 - Elevated Route
 - Retained-Cut Route
 - Retained-Fill Route
 - Tunnel Route

- Other Alternatives** **D3**
- At-Grade Route
 - Elevated Route
 - Retained-Cut or Retained-Fill Route
 - Tunnel Route

- Traction Power Substation
- Proposed Station
- Maintenance Facility and Access Track
- New and/or Expanded Park-and-Ride Lot



Exhibit 4.5-4
Visual Quality
Segment D
 East Link Project



Source: Data from City of Redmond (2005), King County (2006), and CH2M Hill (2008).

<ul style="list-style-type: none"> ● Key Observation Point (KOP) Visual Quality High Medium Low 	<ul style="list-style-type: none"> ■ Traction Power Substation ■ Proposed Station P New and/or Expanded Park-and-Ride Lot Maintenance Facility and Access Track 	<p>Preferred Alternative E2</p> <ul style="list-style-type: none"> — At-Grade Route — Elevated Route — Retained-Cut Route — Retained-Fill Route — Tunnel Route 	<p>Other Alternatives E1</p> <ul style="list-style-type: none"> — At-Grade Route — Elevated Route — Retained-Cut or Retained-Fill Route — Tunnel Route
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Exhibit 4.5-5
Visual Quality Segment E
 East Link Project

A wide variety of people (viewers) would see potential changes to the visual environment from the alternatives. Depending on the land uses in the project vicinity, viewers include commuters along major arterials, residents in nearby yards or buildings, park users and/or recreationists, and in commercial areas, workers or customers.

Viewers can be categorized as having low, average, or high sensitivity to changes in the viewed environment. Viewer sensitivity is strongly influenced by a viewer's activity, awareness of his or her surroundings, and amount of time spent looking at a view. People such as residents or regular park users who see a landscape multiple times for long periods of time would be aware of changes in the landscape. They would likely appreciate or be familiar with a landscape's aesthetic qualities and are assumed to have high viewer sensitivity. People who view a landscape infrequently, view it for short periods of time (often as they pass through it), or are not attentive to it due to focusing on other activities (such as driving or working) are often less sensitive to changes and are assumed to have low viewer sensitivity. Viewers with average viewer sensitivity include workers and customers who might expect a somewhat pleasant visual setting for the establishments they work in or frequent but are in the locations for purposes other than enjoying its scenery or visual quality.

The visual quality of an area can indicate how responsive an area's most sensitive viewers would likely be to changes in the visual environment. For example, viewers with high viewer sensitivity in areas that are categorized as having high visual quality would be expected to react more to changes in the visual environment than they would in areas that have medium or low visual quality.

The following subsections describe the visual character, visual quality, viewers, and viewer sensitivity for each project segment and for areas near the maintenance facilities.

4.5.2.1 Segment A

The Seattle portion of Segment A passes through mixed land use types – mainly industrial, transportation, and commercial – that have a generally utilitarian appearance and character. Much of the Seattle subarea of Segment A was categorized as having low visual quality. The exception is the hillside area west of the Interstate 90 (I-90) eastbound tunnel that contains residences and two parks (Judkins Park and Sam Smith Park); this area has a pleasant residential character that was categorized as being of medium visual quality. Some routes connecting to

Segment A, including I-5 and I-90, have been identified by the City of Seattle as scenic routes or scenic routes with protected view rights-of-way. Subsection P (Public View Protection) of Seattle Municipal Code 25.05.675 (Specific environmental policies) states that it is the City's policy to protect public views of significant natural and built features, such as Mount Rainier, the downtown skyline, and historic landmarks, from these routes.

The visual quality of the tunneled portions of I-90 was categorized as low. Although the I-90 Floating Bridge and the East Channel Bridge offer memorable and vivid views for people using them, the structures themselves are utilitarian in appearance and are visual encroachments when viewed from Lake Washington or its shoreline. The section of I-90 that is the I-90 floating bridge has been categorized as medium. The portion of I-90 that passes through the Mercer Island retained cut is more attractive than typical freeways due to extensive landscaping and wall treatments. As a result, it was categorized as medium visual quality.

4.5.2.2 Segment B

The character and visual quality of south Bellevue is varied. All Segment B alternatives pass south and southeast of residences in the Enatai neighborhood. A few residences in this area have views to the south and southeast that include Lake Washington and adjacent areas, Mount Rainier, and I-90. Because of the presence and proximity of I-90, this viewshed has been categorized as having medium visual quality. With the exception noted below, most of Bellevue Way SE passes by single-family residential and mixed (i.e., small commercial, churches, and multifamily) land uses that have a pleasant, but not out-of-the-ordinary, appearance with medium visual quality.

Bellevue Way SE between I-90 and the South Bellevue Park-and-Ride has a medium visual quality. The portion of Bellevue Way SE between the north end of the South Bellevue Park-and-Ride and the intersection with 112th Avenue SE, however, was categorized as having high visual quality. The east side of Bellevue Way SE passes by Mercer Slough Nature Park, the Mercer Slough Blueberry Farm, and the Winters House and parking lot. Areas along both sides of the road contain considerable vegetation, particularly the slope west of the Bellevue Way SE. This vegetation screens views into much of Mercer Slough Nature Park from most of Bellevue Way SE. Bellevue Way north of the intersection with 112th Avenue SE is of medium visual quality with no distinctive visual attributes.

The portion of 112th Avenue SE between its intersection with Bellevue Way SE and SE 8th Street has a high visual quality. The areas adjacent to 112th Avenue SE have a “boulevardlike” appearance with well-maintained landscaping and memorable views of Mercer Slough West within the Mercer Slough Nature Park and otherwise suburban residences and the Bellefield Office Park.

The portion of the BNSF Alternative (B7) route that traverses Mercer Slough Nature Park passes over or near wetlands and streams. However, the I-90 bridge and associated structures are visual encroachments; therefore, overall visual quality was categorized as medium. Most views to the north from the I-90 Trail are blocked by vegetation, and most views to the south are blocked by I-90 freeway structures. Parts of the route that follows the former BNSF Railway corridor have a visual connection with the Mercer Slough Nature Park and/or pass through forested areas and have medium visual quality. Views along the portion of the route that is adjacent to I-405 and along 118th Avenue SE are visually dominated by I-405 and nearby large parking lots and were categorized as having low visual quality.

4.5.2.3 Segment C

Downtown Bellevue is an area in transition. Areas adjacent to Bellevue Way SE and 112th Avenue SE leading from Segment B into Downtown are likewise in transition. The areas are not particularly memorable, distinctive, or unique and, thus, have a medium visual quality category. The portion of Main Street that the alternatives would pass through includes low-rise retail and commercial buildings (some of which occupy residential buildings) and also has a medium visual quality category.

Much of Downtown Bellevue is continuing to evolve from areas of low-rise automobile-oriented commercial complexes to dense, large-scale, mixed-use mid- and high-rise buildings that have a highly urban character. A number of these types of developments exist or are being built along 108th and 110th Avenues NE and contribute to the high visual quality of the two streets. In addition to 108th and 110th Avenues NE, part of NE 12th Street has a high visual quality due to the presence of McCormick Park, Ashwood Park, the King County Bellevue Regional Library, and other new projects.

Outside of the Downtown Bellevue core, portions of the alternatives pass next to or over I-405. The routes east over I-405 pass through low-rise nonretail and retail commercial complexes with extensive parking areas are of low visual quality category. The

alternative routes that parallel I-405 (or are within a block of it) to the west pass through areas along 114th Avenue SE (and NE) and 112th Avenue SE (and NE) that contain a variety of building types. These complexes are generally located away from the streets and are surrounded by parking lots. The visual presence of nearby I-405 is strong in most of these areas and has either low or medium visual quality.

4.5.2.4 Segment D

Much of Segment D passes through areas that contain a mixture of warehouses, industrial facilities, storage and parking lots, and “big-box” and other retail establishments set back from the street behind large areas of parking. As a result, the existing visual quality of most of Segment D is low. The area generally has a utilitarian appearance and character, although future land use plans that have been adopted by both the Cities of Bellevue and Redmond might improve the appearance by using more pedestrian-oriented urban development, street trees, and landscaping. There are a few areas of mature street trees that provide continuity and uniformity. As a result, a section of Segment D along 152nd Avenue NE in the Overlake area has been categorized as medium visual quality.

4.5.2.5 Segment E

The Downtown Redmond segment has a wide range of visual character and quality. The portion of the segment that follows SR 520 from Overlake Transit Center to the edge of the Sammamish River valley passes through a mixture of land uses (office, commercial, and residential). The visual character varies by location, but all areas are visually dominated by the presence of the freeway. As a result, areas along SR 520 were categorized as having low visual quality. Other areas in Segment E that were categorized as low visual quality include the business parks, industrial areas, developing areas along the former BNSF Railway, and industrial areas near Downtown Redmond. The portions of NE Redmond Way and Leary Way NE that pass over the Sammamish River have views of the river and parklands and serve as entries into parts of Downtown Redmond and were categorized as having high visual quality. The Sammamish River (and trail) also has high visual quality, as does the portion of SR 520 located between Marymoor Park and Redmond Town Center due to the views offered from it and its low horizontal presence on the landscape that is screened by areas of vegetation.

4.5.2.6 Maintenance Facilities

The maintenance facilities would be located in Segment D or E in or near areas that are currently industrial and utilitarian in use, appearance, and

character. These areas were categorized as having low visual quality. The viewer sensitivity for these facilities was categorized as follows: commuters and others traveling on SR 520 or arterials (low), workers and customers (average), and residents (high).

4.5.3 Environmental Impacts

The assessment of potential impacts on the visual environment focused on the following:

1. Consistency with existing visual character
2. Changes in visual quality
3. Likely impact on viewers with high viewer sensitivity
4. Blockage of sensitive views with an emphasis placed on views that are identified by local jurisdictions as requiring protection
5. Creation of shadows
6. Light and glare

Regarding changes in visual quality (Item 2) impacts can be low, medium, or high. A high impact is defined as a reduction of the existing visual quality category by one or more categories. For example, if the visual quality category of an area is reduced from high to medium or changes from medium to low, the impact would be considered high. Impacts that are considered low or medium are not discussed but are noted in Appendix F4.5, Attachment 1.

The impact assessment emphasized areas where changes in the visual environment (Items 1 and 2) would be noticed by people with high viewer sensitivity (Item 3) and/or where sensitive views (Item 4) would be affected. For a view to be considered sensitive, it would need to be identified by a local jurisdiction (in comprehensive plans, ordinances, or other directives) as requiring protection or identified during scoping or agency review as requiring protection. The last two items, shading and light and glare, were assessed by examining engineering plans for likely impacts and examining the visual simulations of project features.

4.5.3.1 No Build Alternative

With the No Build Alternative, no new facilities would be constructed and no properties would be acquired that would change the existing visual environment. Under this alternative, the visual environment would remain essentially the same except as changes occur over time in individual properties. The No Build Alternative may contribute to lower density redevelopment, thereby maintaining lower profile commercial development and low to medium visual quality.

4.5.3.2 Impacts during Operation

The East Link Project would have visual impacts of varying degrees throughout the project vicinity, as discussed in the following subsections. Impacts were evaluated assuming that the project would incorporate the following measures used during project planning to avoid and minimize potential visual impacts:

- Selecting and/or modifying routes to avoid or reduce the need to acquire and clear new right-of-way. This measure has already been incorporated to a great degree in identifying route and station alternatives and includes using existing transportation corridors (arterial streets and highways, limited-access highways, and rail corridors), underground profiles, and retained-cut sections.
- Developing design criteria that guide project design issues such as architectural expression being a balanced approach of systemwide elements and contextual elements, systemwide signage for customer ease, and a systemwide art program. Interdisciplinary teams would develop designs, and the community would have opportunities to comment.
- During the design development process, subjecting station and facility designs to appropriate design reviews required by the cities in which they are located.
- Integrating facilities (particularly stations) with existing plans, including plans for redevelopment.
- Minimizing the elevation or height of elevated structures and stations to the extent allowed by required vertical clearances and design standards.
- Minimizing clearing for construction and operation.
- Planting appropriate vegetation within and adjoining the project right-of-way to replace existing street trees and other visually important vegetation that are removed for the project and/or to provide screening for sensitive visual environments and/or sensitive viewers.
- Maintaining remainder parcels and pursuing their redevelopment for land uses, such as residential, commercial, or open space uses, that are consistent with city plans.
- Using source shielding in exterior lighting at stations and ancillary facilities, such as maintenance bases and park-and-ride lots, so light sources (such as bulbs) are not directly visible from residential areas, streets, and highways, and

to limit spillover light and glare in residential areas.

Impacts Common to All Build Alternatives

All the build alternatives would change the visual environments in which they would be built. Construction and operation of the alternatives would require the removal of a variety of visual features such as buildings, street trees, landscaped areas, slopes (replaced with retaining walls), and parking lots. Project components would also be visible to varying degrees, which could change the visual environment in which the components are located. Some of the more potentially visible project components include elevated profiles and/or structures, stations, parking structures, sound walls or berms, and light rail vehicles. Table 4.5-1 lists the main components to be built for the East Link Project, describes their visual characteristics, discusses general types of measures that would be implemented to reduce potential visual impacts, and explains why the measures would be successful in reducing potential impacts.

Potential Impacts by Alternative

Most sections of the alternatives examined in this Final EIS would be consistent with their existing visual surroundings in terms of character and would not change the visual quality category of those surroundings. Table 4.5-2 summarizes areas where the existing visual quality categories would be lowered one or more categories despite the avoidance and minimization measures described in Table 4.5-1. Table 4.5-2 also indicates if there would be potential views blocked that have been identified by local jurisdictions as requiring protection. In addition, alternatives that might cause shading in areas that receive heavy pedestrian use are identified as areas where light and glare associated with the project might be an issue.

Most of the alternatives would not lower the visual quality categories of the areas through which they would pass. Exceptions in each segment are described in subsections below.

The following subsections discuss potential visual changes by segment and alternative. The discussion contains references to visual simulations that are provided in Appendix F4.5. Photographs in the appendix depict the existing views from the KOPs and visual simulations that display how the existing views would change with the alternatives.

Segment A

The overhead catenary support structures would be unique in parts of *Preferred Alternative A1*. The catenary

lines on the floating bridge would be hung from a cross member supported by poles on one or both sides of the tracks; this would not likely impact visual quality along the I-90 corridor. The project and the catenary lines would be compatible in character with the D2 Roadway and I-90 (as shown in Appendix F4.5, Exhibit F4.5-1, Photo 1b). It would be consistent with the transportation-oriented character of the areas it would pass through and would reduce neither the visual quality category nor the viewer experience. The alternative and stations would not block view corridors identified by the City of Seattle or lower the visual quality categories of views from Judkins Park and Sam Smith Park in Seattle or from the Park on the Lid in Mercer Island, which overlook the trackway and stations. The two proposed stations, Rainier Avenue and Mercer Island (see Appendix F4.5, Exhibit F4.5-2, Photo 2b), would be consistent with the visual character of their surroundings. Their scale and design would help the project visually connect with adjacent neighborhoods.

Segment B

From Segment A, *Preferred 112th SE Modified Alternative (B2M)* would follow I-90 south of, and past, the Enatai neighborhood. The top of the elevated guideway, the overhead catenary system (OCS), and passing trains would be seen from some areas but would be consistent with the existing character of the view, which is dominated by the elevated I-90 (see Appendix F4.5, Exhibit F4.5-3, Photo 3b).

Preferred Alternative B2M would not change the view's existing medium visual quality category. *Preferred Alternative B2M* would approach the South Bellevue Park-and-Ride from the I-90 corridor as an elevated structure and would remove existing trees south of the park-and-ride lot (in the southwest corner of Mercer Slough Nature Park). The elevated station and parking structure would be noticed from areas such as Bellevue Way SE, parts of the Mercer Slough Nature Park, and residences west of Bellevue Way SE (to varying degrees) (see Appendix F4.5, Exhibit F4.5-4, Photo 4b).

The presence of station, parking structure, and sound walls along the western edge of the South Bellevue Park-and-Ride would change the appearance of the existing South Bellevue Park-and-Ride area. However, its facilities would be consistent with the transportation-oriented character of the existing park-and-ride lot and nearby I-90 structures and would not lower the existing medium visual quality category to low.

TABLE 4.5-1
Visual Characteristics of Project Components

Project Component	Visual Characteristics
Elevated guideways or structures (piers, straddlebents) ^a	These are often the most visible project components. The bottom parts of elevated guideways range between approximately 18 and 50 feet above grade. In some locations, elevated guideways (and their associated OCS components) can intrude on views, although they might not block them altogether. Elevated stations (and guideways, to a lesser extent) can create shadows that could have negative impacts in some areas under some conditions. However, stations and associated structures, such as elevators, escalators, and walkways, would be designed to be attractive architectural elements or features in the areas where they would be built and would add visual interest to the streetscapes near them.
At-grade trackways	At-grade trackways are generally located in or adjacent to existing streets. They would be designed to be compatible with the roadway or adjacent streetscape.
Overhead catenary system (OCS)	The OCS is a highly visible element from close viewing distances. OCS components (wires and poles) become less visible as viewing distances increase. The structures might intrude on views, but they do not block views due to their thin, cablelike profile and appearance.
Widened streets	Street widening can involve removing buildings, trees, and other vegetation and can require excavating hillsides or filling slopes. In some locations and situations, removing trees and other vegetation would be mitigated by replanting similar plants that over time mature enough to become similar in appearance with the vegetation that was removed.
Stations	Depending upon size, bulk, and whether they would be elevated or at-grade, stations can block views, cast shadows, or add built features to the landscape. Elevated stations are generally more visible than at-grade stations. Stations would be designed to be aesthetically and architecturally compatible with their surrounding areas. During station design, the stations would undergo appropriate design review as required by the cities in which they would be located.
Parking structures	Depending upon size and bulk, parking structures can block existing views. They can be designed or assigned criteria to match surrounding architecture types to help them aesthetically fit with their surroundings. Local landscape regulations would be followed to help parking structures visually and aesthetically better blend into the areas in which they would be located. Sound Transit would incorporate downward-directional lighting to minimize excess light spread on adjacent areas.
Parking lots	Parking lots result in additional hard surface, which are low in visual interest. Some jurisdictions require landscaping that can reduce the visual impact. Local parking lot and relevant landscape regulations would be followed to help parking lots visually and aesthetically better blend into the areas in which they would be located.
Lighting	If not properly designed and shielded, project-related lighting can create glare impacts, increase the level of ambient light in nearby areas, and/or increase skyglow, which can adversely affect nighttime views of the stars. This is true of both project operation and construction. Design-related measures such as shielding and altering light direction would be used where appropriate to reduce potential impacts.
Removed buildings	Removing existing buildings can improve or detract from visual settings, depending on building condition, style, scale, and color. Areas where buildings would be removed would contain project components and/or be revegetated to better blend in with nearby areas.
Removed vegetation	Removing vegetation can open up views that are nonexistent or, conversely, expose other nonaesthetic views, such as additional hard surfaces. When possible, Sound Transit would preserve existing vegetation, replant vegetation, replace trees, and screen to minimize effects of vegetation removal.
Retaining walls	Retaining walls often replace vegetated hillsides with hard materials, such as concrete, that might require surface design treatments to reduce impacts. Where appropriate, walls would be treated with surface design enhancements.
Sound walls	Sound walls are built of solid materials and placed adjacent to or attached to the light rail guideway. When this is not effective, sound walls might be constructed along property lines, sometimes replacing existing fences. The height and location of sound walls are not final in this EIS, and they are not depicted in visual simulations.
Maintenance facility	A maintenance facility can potentially block views or be viewed down upon from adjacent areas; however, the alternative sites for such a facility are located in areas that already have similar land uses, visual character, and structures. Maintenance facilities would be designed to be aesthetically compatible with the surrounding uses and would involve screening using fencing, walls, or vegetation to help them blend in with the areas in which they would be located. During facility design, the exterior of the maintenance facilities would undergo appropriate design review if required by the cities in which they would be located.
Retained cuts	These features would only be visible from nearby areas. Design guidelines and coordination with local jurisdictional design review would be applied to fencing and/or walls located at the top of the cut, which are the most visible components of this feature.
Traction power substations (TPSSs)	The TPSSs would be installed at about 2-mile intervals. They would be completely enclosed small metal buildings, measuring about 20 feet by 60 feet in size, with an additional 10 to 20 feet required around each unit. Where appropriate, they would be screened from public view with a wall or fence. The exterior walls or fences would be landscaped according to the landscape regulations of the jurisdictions in which the facilities are located.

^a Piers are columns holding up the guideway; straddlebents are supports made of two columns and supporting a beam upon which the guideway sits.

TABLE 4.5-2
Summary of Changes to Visual Quality by Alternative

Alternative	Changes in Visual Quality Categories?	Sensitive View Blockage?	Shadows?
Segment A, Interstate 90			
<i>Preferred Interstate 90 Alternative (A1)</i>	No	No	No
Segment B, South Bellevue			
<i>Preferred 112th SE Modified Alternative (B2M) to Preferred Alternative C11A</i>	No	No	No
<i>Preferred 112th SE Modified Alternative (B2M) to Preferred Alternative C9T</i>	No	No	No
Bellevue Way Alternative (B1)	Yes —Removing vegetation and constructing retaining walls along the west side of Bellevue Way SE would lower visual quality from high to medium.	No	No
112th SE At-Grade Alternative (B2A)	Yes —Removing vegetation and constructing retaining walls along Bellevue Way SE would reduce high visual quality to medium for area between South Bellevue Station and 112th Avenue SE intersection. In addition, this alternative would be visible to varying degrees to approximately 15 to 20 residences on the hillside west of Bellevue Way SE.	No	No
112th SE Elevated Alternative (B2E)	Yes —Alternative B2E would have the same impacts on visual quality as Alternative B2A. The elevated alignment along Bellevue Way SE would be visible to varying degrees to approximately 15 to 20 residences on the hillside west of Bellevue Way SE, and it would intrude on eastern views from some of these residences. The elevated alignment would also be seen from some residences along the west side of 112th Avenue SE.	No	No
112th SE Bypass Alternative (B3)	Yes —Similar visual impacts as Alternative B2A would lower visual quality from high to medium along Bellevue Way SE between South Bellevue Station and intersection with 112th Avenue SE.	No	No
B3 - 114th Extension Design Option	Yes —Visual impacts would be the same as those for Alternative B3, but the design option portion would not contribute to any new visual impact.	No	No
BNSF Alternative (B7)	No	No	No
Segment C, Downtown Bellevue			
<i>Preferred 108th NE At-Grade Alternative (C11A)</i>	No (for all connections from Segment B)	No	No
<i>Preferred 110th NE Tunnel Alternative (C9T)</i>	No (for all connections from Segment B)	No	No
C9T - East Main Station Design Option	No (only applicable for connection from Preferred Alternative B2M)	No	No
Bellevue Way Tunnel Alternative (C1T)	No (for all connections from Segment B)	No	No
106th NE Tunnel Alternative (C2T)	No (for all connections from Segment B)	No	No
108th NE Tunnel Alternative (C3T)	Yes —Long-term construction impacts from removing mature trees and constructing the permanent presence of Alternative C3T in McCormick Park would lower visual quality from high to medium.	No	No
At-Grade Couplet Alternative (C4A)	Yes —Impacts would be similar to those for Alternative C3T, but a smaller portion of McCormick Park would be affected, and the route would be permanent feature in park, lowering visual quality from high to medium.	No	No
112th NE Elevated Alternative (C7E)	No	Yes - in limited areas	Yes - in limited areas

TABLE 4.5-2 CONTINUED
Summary of Changes to Visual Quality by Alternative

Alternative	Changes in Visual Quality Categories?	Sensitive View Blockage?	Shadows?
110th NE Elevated Alternative (C8E)	Yes —Elevated structures over 110th Avenue NE would be out of scale with pedestrian-oriented streetscape and would lower the existing high visual quality along 110th Avenue NE from high to medium. There would be the same impact as Alternatives C3T and C4A on McCormick Park from 110th Avenue NE to east end of park, lowering visual quality from high to medium.	Yes, possibly in one limited area	Yes, in limited areas
110th NE At-Grade Alternative (C9A)	Yes - Removing landscaped medians and vegetation along the east side of 112th Avenue SE and widening 112th Avenue SE farther north along with retained-fill transition structures on the elevated portion of the trackway and four straddle bents to cross 112th Avenue SE at Main Street would lower the medium visual quality to low.	No	No
114th NE Elevated Alternative (C14E)	No	Yes, possibly in one limited area	Yes, in limited areas
Segment D, Bel-Red/Overlake			
All Segment D alternatives and design options	No	No	No
Segment E, Downtown Redmond			
<i>Preferred Marymoor Alternative (E2)</i>	No	No	No
E2 - Redmond Transit Center Design Option	No		
Redmond Way Alternative (E1)	Yes —Removing hillside trees and the visual presence of a large-scale elevated horizontal element would temporarily lower visual quality from medium to low in limited areas until replanted trees attained sufficient size to screen views.	No	No
Leary Way Alternative (E4)	Yes —Removing the landscaped strip and mature street trees along portions of the south side of Leary Way would lower visual quality from high to medium.	No	No
Maintenance Facilities			
NE 116th Maintenance Facility (MF1)	No	No	No
BNSF Maintenance Facility (MF2)	No	No	No
SR 520 Maintenance Facility (MF3)	No	No	No
SE Redmond Maintenance Facility (MF5)	No	No	No

North of the South Bellevue Station, the alternative transitions from elevated to retained cut along the east of Bellevue Way SE. This would remove adjacent street trees and vegetation within Mercer Slough Nature Park. Removing the vegetation would change the existing appearance of this portion of Bellevue Way SE but would open views to the east towards Mercer Slough, the blueberry farm, and hills to the east for some nearby residents. A few residents west of Bellevue Way would have of views of *Preferred Alternative B2M's* OCS, but the guideway and trains

would be blocked by nearby vegetation on the hillside west of Bellevue Way SE (see Appendix F4.5, Exhibit F4.5-5, Photo 5b).

North of the blueberry farm, the alignment profile enters a retained cut below the grade of the street and would be less visible to most viewers. Depending on adjacent vegetation and viewing location, viewers might see the catenaries and tops of the retaining walls/fencing and/or sound walls. Fencing above the retained-cut portion of the alternative would be

required on top of a traffic barrier adjacent to the sidewalk. It would range from 6 feet to as high as 8 feet (when the guideway transitions into a retained cut) in height. In some locations sound walls would be installed. Because of the low profile provided by the retained cut and the retention of vegetation along the west side of Bellevue Way SE, *Preferred Alternative B2M* would not lower the existing high visual quality of this portion of Bellevue Way SE to enough to re-categorize it as medium.

Near and in front of the Winters House the retained cut would be covered with an approximately 170-foot-long lid. The lid in front of the Winters House would be landscaped (see Appendix F4.5, Exhibit F4.5-7, Photo 7b). North and south of the lid, a landscaping strip between the street and the sidewalk/retained cut barrier and fence would include street trees and plantings (see Appendix F4.5, Exhibit F4.5-7, Photo 7d). Although some mature vegetation, including larger trees near the house and parking area would be removed, this portion of Bellevue Way SE would maintain its high visual quality category.

Near the intersection of Bellevue Way SE and 112th Avenue SE, a number of deciduous trees would be removed within the construction right-of-way. However, vegetation (including trees) between the construction right-of-way and the intersection would be retained and would partially screen views of the retained cut profile. Because of the low retained cut profile, the alignment would not be readily seen from the intersection (see Appendix F4.5, Exhibit F4.5-8, Photo 8b). If necessary, Sound Transit would replant the area between the intersection and the alignment to enhance the visual buffer of *Preferred Alternative B2M* components. Removing vegetation would change the appearance of the intersection, but would not lower the area's high visual quality category to medium.

North of the intersection of Bellevue Way SE and 112th Avenue SE north to the Segment C boundary, *Preferred Alternative B2M* would have two variations when connecting to *Preferred Alternative C11A* or *C9T*. *Preferred Alternative B2M* connecting to *Preferred Alternative C11A* transitions from the east side of 112th Avenue SE to the median of 112th Avenue SE at approximately SE 15th Street (see Appendix F4.5, Exhibit F4.5-9, Photo 9b). Landscaped medians along 112th Avenue SE north of this location would be removed (landscaped medians south of transition area would remain). People driving or walking along 112th Avenue SE would see the light rail track, catenaries, traffic gates at the rail crossing and a sound wall along the tracks or in front of the residential area west of 112th Avenue SE. Removing the landscaped medians

would change the appearance of this part of 112th Avenue SE, but overall, the existing landscaped boulevard-like character of this part of 112th Avenue SE would be retained. The area's high visual quality would be retained.

Preferred Alternative B2M connecting to *Preferred Alternative C9T* remains on the east side of 112th Avenue SE in a retained cut or at-grade north to the SE 8th Station. The alignment would have a sound wall next to it along the east side of 112th Avenue SE. This alternative would remove some of the landscaped median between SE 15th and SE 8th Streets (see Appendix F4.5, Exhibit F4.5-9, Photo 9c). The remaining portions of the medians as well as adjacent vegetation would continue to contribute to the boulevard-like character of 112th Avenue SE. Although the presence of the alternative and the removed vegetation would be noticeable along this part of 112th Avenue SE, which would somewhat lower visual quality, the changes would not be enough to lower the existing visual quality category of high to medium.

The effects of *Preferred Alternative B2M* and its two variations would be viewed from parts of the Mercer Slough Nature Park, the Mercer Slough Nature Park Periphery Loop Trail (which in this area is the sidewalk adjacent to Bellevue Way SE and 112th Avenue SE), and the Water Trail. Removing street trees and trees located in the construction right-of-way east of Bellevue Way SE and 112th Avenue SE would be most noticeable from the loop trail and portions of the part of the Water Trail in Mercer Slough West. Trees along with the blackberry-covered slope between Mercer Slough and 112th Avenue SE would be removed and a retaining wall (supporting the at-grade alternative) built into the slope. The area between the trackway and the slough would be replanted with native and noninvasive vegetation. People using this portion of the Water Trail might have upward views of the catenaries and east face of the retaining wall, as they currently have upward views of the adjacent Bellefield Office Park, which is a midrise complex of office buildings, parking lots, and driveways that dominates views along this portion of the Water Trail.

The light rail would not be seen in most parts of the Mercer Slough Nature Park due the alternative's low profile and the presence of trees and large shrubs throughout much of the park. Removing large trees as a result of *Preferred Alternative B2M* would not be particularly noticed in most parts of the park due to the previously mentioned vegetation.

All of Segment B alternatives follow I-90 near the Enatai neighborhood and all but one; Alternative B7 curves away from I-90 to connect with Bellevue Way SE and the South Bellevue Park-and-Ride. Three of the Segment B alternatives – B2A, B2E, and B3 – are elevated in this area, and Alternative B1 is at-grade. As with *Preferred Alternative B2M*, these facilities would be consistent with the transportation-oriented character of the I-90 corridor and its associated structures as well as the existing park-and-ride lot and would not lower the area's existing medium visual quality category to low. Because Alternative B1 remains at-grade with the I-90 off-ramp, it would be less visible to the Enatai residents than the other Segment B alternatives. Appendix F4.5, Exhibit F4.5-4, Photos 4c and 4d, depict the changes to the park-and-ride area from these alternatives when viewed from the residential area to the southwest.

In addition to *Preferred Alternative B2M*, Alternatives B2A, B2E, and B3 also travel along Bellevue Way SE and 112th Avenue SE. Unlike *Preferred Alternative B2M*, these alternatives would require varying heights and lengths of retaining wall along the elevated guideway, track, or along the west side of Bellevue Way SE and 112th Avenue SE, and they would remove vegetation along both sides of the roadways. Appendix F4.5, Exhibit F4.5-6, Photos 6b and 6c depict retaining walls along the west side of Bellevue Way associated with Alternatives B1, B2A, and B3. Appendix F4.5, Exhibit F4.5-6, Photo 6d depicts how Alternative B2E would appear from this location. The changes along the west side of Bellevue Way for Alternatives B1, B2A, B2E, and B3 would result in the visual quality category changing from high to medium. This change would likely be seen and noticed by sensitive viewers such as neighborhood residents, visitors to the Mercer Slough Blueberry Farm and the Winters House, and to a lesser degree, people recreating in the Mercer Slough Nature Park (although they would not see these changes from inside the park due to park vegetation that screens views of Bellevue Way SE from most trails). Removing trees and other vegetation along the west side of Bellevue Way SE would open up views to the east for some nearby hillside residents, although project features such as OCSs, guideways, and trains could be seen to varying degrees depending upon location and how much vegetation would be removed (see examples from one location in Appendix F4.5, Exhibit F4.5-5, Photo 5c through 5e).

Unlike *Preferred Alternative B2M*, none of the other Segment B alternatives traveling up Bellevue Way would change the context of the Winters House and its grounds when viewed from Bellevue Way SE. As

mentioned previously, removing vegetation and constructing project elements would change the character of the west side Bellevue Way SE (see Appendix F4.5, Exhibit F4.5-6, Photos 6b and 6c). The following discusses the impacts of each of the other Segment B alternatives.

All of Alternative B1 is at-grade along Bellevue Way and, therefore, would not be visible or not very visible and from residences in the Enatai Neighborhood and west of Bellevue Way SE (see Appendix F4.5, Exhibit F4.5-5, Photo 5c). North of the 112th Avenue SE intersection, Alternative B1 would cause noticeable changes along Bellevue Way SE up to the Segment C boundary (112th Avenue SE). Although this alternative would widen the street, remove some vegetation and buildings, build retaining walls (primarily on the west side of the road) it would generally be consistent with the existing visual character of this part of Bellevue Way SE and would not change the existing medium visual quality category. Alternative B2A transitions from an elevated profile near the South Bellevue Station to at-grade and would be visible from approximately 15 to 20 residences west of Bellevue Way SE and could encroach on views to the east (see Appendix F4.5, Exhibit F4.5-5, Photo 5d). The alternative travels in the median of 112th Avenue SE and would remove the existing median vegetation. It would not, however, widen the road nor remove landscaping on either side of the road until just before the SE 8th Station (see Appendix F4.5, Exhibit F4.5-10, Photo 10b). These changes along Bellevue Way and the portion of 112th Avenue SE where the median would be removed would lower the visual quality from high to medium. North of SE 8th Street, an at-grade station built along 112th Avenue SE would widen the road near the station (but south of Surrey Downs Park in Segment C), remove numerous street trees, and increase the area of asphalt. Although these changes would alter the appearance and character of the intersection area and somewhat reduce its visual quality, Alternative B2A would not reduce visual quality enough to change the existing category from medium to low.

Alternative B2E would change the visual quality category (from high to medium) of the same portion of Bellevue Way SE that would be changed by Alternative B2A. The more extensive elevated profile of Alternative B2E would likely be noticed by more viewers than the at-grade alternatives. From several of the residences west of Bellevue Way SE, the project components would encroach on eastward views of the blueberry farm and Mercer Slough Nature Park (see Appendix F4.5, Exhibit F4.5-5, Photo 5e). North of SE 8th Street, an elevated station would result in a large-

scale component adjacent to an office park and across the street from a residential area (see Appendix F4.5, Exhibit F4.5-10, Photo 10c), which would reduce the visual quality of the viewed landscape for residents but would not block views. The station would not lower the existing medium visual quality to low. A positive aspect of the elevated portions of this alternative would be that the project riders could enjoy elevated views of features such as parts of Mercer Slough and of the Mercer Slough Nature Park.

From Segment A to approximately 112th Avenue SE and SE 8th Street, the changes in visual quality associated with Alternative B3 would be the same as those described previously for Alternative B2A. North of the intersection of SE 8th Street and 112th Avenue SE, Alternative B3 leaves 112th Avenue SE and transitions from at-grade to an elevated structure (see Appendix F4.5, Exhibit F4.5-10, Photo 10d). Its route travels through an area that contains parking lots, office buildings, and an undeveloped open area, thus minimizing the need to remove large trees along 112th Avenue SE. The presence of the elevated profile would be consistent with the nearby structures, including I-405, and would not change the medium visual quality category of the area it would pass through.

The area that the B3 - 114th Extension Design Option passes through is a mixture of uses that includes office buildings, parking lots, an undeveloped area, and a hotel. From where the alignment parallels 114th Avenue SE, it then follows I-405. There is a lack of visual coherence along this route, and the existing visual quality is medium and low (along I-405). Further, this design option would not lower the existing visual quality of these areas.

Alternative B7 would not change the medium visual quality category along its route. The elevated structure crossing over Mercer Slough Nature Park would be noticeable to I-90 Trail users and would introduce a second major structural element into the view from the trail (see Appendix F4.5, Exhibit F4.5-12, Photo 12b). Some portions of the I-90 Trail would continue to be screened by vegetation immediately adjacent to the trail and by vegetation of varying distances north of the trail; this vegetation is very dense and blocks views north of it. Along portions of the trail where viewers would see the elevated structure, it would partially intrude on north views of park vegetation. Sensitive viewers (i.e., recreationists) would notice the light rail structure from portions of Mercer Slough Nature Park beyond the I-90 Trail (they would also see the existing I-90 structures). Due to the existing dominating presence of the I-90 bridge and its associated ramps along this portion of Alternative B7,

as well as due to existing limited views to the north, the alternative's elevated structure would not decrease the area's existing medium visual quality category to low. This alternative would have sound walls along residential areas south of 118th Avenue SE, but it would also not decrease the medium visual quality category of the former BNSF Railway corridor in which it would be located to low. It would be consistent with the character of the portion of the alternative adjacent to 114th Avenue (SE and NE) and I-405 (see Appendix F4.5, Exhibit F4.5-13, Photo 13b).

Segment C

Preferred Alternative C11A from *Preferred Alternative B2M* would remove vegetation along the east side of 112th Avenue SE (including street trees north of SE 6th Street to Main Street). Removing residences and vegetation from Surrey Downs Park to Main Street on the west side of 112th Avenue NE would be noticeable to viewers from adjacent properties and to people travelling on 112th Avenue SE and would create an open space of approximately 50 feet (backed by sound walls) between the light rail and residences that would remain in place. This area would be landscaped and create a more open roadway appearance. The project and its landscaping would maintain the existing medium visual quality category (see Appendix F4.5, Exhibit F4.5-13, Photo 15b).

Most of the 108th Station is in a retained cut and would have a low profile when viewed from Main Street and from the back of the residences to the south of the station area. A landscaped buffer and transition area would be established between the residential neighborhood south of Main Street and the commercial areas and the city center to the north. This would be consistent with the *City of Bellevue Comprehensive Plan* (Policy S-DT-125) regarding transitions between downtown and the residential neighborhood to the southeast of downtown. The consistency with S-DT-125 would depend on coordination with the City of Bellevue for design and function of the linear space. Although *Preferred Alternative C11A* from *Preferred Alternative B2M* would somewhat change the visual appearance of this portion of Main Street, it would not lower the existing visual quality category of medium to low.

From the 108th Station to the at-grade Bellevue Transit Center Station, *Preferred Alternative C11A* would be consistent with the urban setting of 108th Avenue NE. Its right-of-way in the existing street would help it fit into the streetscape. *Preferred Alternative C11A* would change the appearance of 108th Avenue NE, but it would not lower its existing high visual quality category to medium.

A transition structure would be built along NE 6th Street between the Meydenbauer Convention Center and City Hall Plaza (see Exhibit F4.5-18, Photo 18b). Sound Transit would collaborate with the City of Bellevue on aesthetic treatment of ornamental patterns or textures on walls of the transition structure and appropriate fencing. The presence of the transition and elevated structures would change the visual character of portions of NE 6th Street, but it would not change the existing medium visual quality category to low.

The portion of *Preferred Alternative C11A* that would cross over I-405 and connect with the Hospital Station would be consistent with the character of this area and would have little effect on visual quality. From the Hospital Station north to the Segment D boundary, *Preferred Alternative C11A* would not change the low visual quality along this part of the route.

Connections from Alternative B3, B3 - 114th Design Option, or B7 cross over 112th Avenue SE and then transition to retained fill before transitioning to at-grade. The elevated guideway and retained fill would be visible from 112th Avenue SE and Main Street, but the existing medium visual quality category would remain along these connections.

From the connection with *Preferred Alternative B2M*, the at-grade portion of *Preferred Alternative C9T* passes through the eastern edge of Surrey Downs Park and would remove vegetation. A SE 4th Street realignment through Surrey Downs Park would change the appearance of the portion of the park through which it passes (part of which is currently partially used for parking). The visual quality of this area would not be lowered from medium to low after construction and replanting.

North of the park, *Preferred Alternative C9T* is the same as *Preferred Alternative C11A* until approximately one block south of Main Street (see Appendix F4.5, Exhibit F4.5-15, Photo 15c). The area along the alternative route would provide opportunities for landscaping that could serve as a buffer between the trackway and nearby residences and function as a transition area between the neighborhood and the commercial and city center to the north. The transition structure and portal at 112th Avenue SE and Main Street would change the residential and small business character of the portion of its route, but it would maintain the area's existing medium visual quality.

With the C9T - East Main Station Design Option, an at-grade station would be located approximately 600 feet north of Surrey Downs Park on the west side of 112th Avenue SE. The area to the west of (and uphill of) the station would provide opportunities for

landscaping and along with a sound wall could serve as a buffer between the station and nearby residences. The station would be compatible with the arterial and fronting commercial uses.

The portion of *Preferred Alternative C9T* located within the tunnel would not result in any visual impacts. *Preferred Alternative C9T* exits the tunnel along NE 6th Street (see Appendix F4.5, Exhibit F4.5-18, Photo 18c). After exiting the tunnel and continuing east over I-405 to the Hospital Station, the impacts would be similar to those identified for *Preferred Alternative C11A*, although the transition structure would begin at a lower elevation along NE 6th Street (from a tunnel portal) than the at-grade *Preferred Alternative C11A*. Although the *Preferred Alternatives C11A* and *C9T* would not change the visual quality categories of the areas through which they would pass, infringe on protected views, or cast shadows in heavily used pedestrian areas, the other Segment C alternatives would. The alternatives that would lower the existing visual quality category of part of their routes include Alternatives C3T, C4A, C8E, and C9A. Near sensitive receivers, sound walls would be necessary on the elevated guideway where Alternative C9A is elevated at Main Street and where C8E is elevated along 110th Avenue NE. Two elevated alternatives, C8E and C14E, could potentially intrude on sensitive views (Cascade Mountains) identified by the City of Bellevue. One alternative, C8E, would cast shadows in an area that receives heavy pedestrian traffic during part of the day. The following subsections describe the impacts associated with the Segment C alternatives.

The open portion of the retained cut and the tunnel portal portions of Alternative C1T would be noticeable from along Bellevue Way SE would not decrease the area's medium visual quality. The underground portion of Alternative C1T would have no impact on visual character or quality. After exiting the tunnel along NE 6th Street, this alternative would follow the route of *Preferred Alternative C9T* and would have the same impacts on the adjacent areas character and visual quality (see Appendix F4.5, Exhibit F4.5-18, Photo 18d).

Most of Alternative C2T would be underground and would have no impact on visual character or quality. The connection from Alternative B2A would require a retained cut along part of 112th Avenue SE that would not be visible in Surrey Downs. The retained cut would somewhat change the character of areas next to it but would not lower the existing medium visual quality to low.

The connector along Alternative B2E would widen the street, remove existing mature street trees that line

parts of the street. Although the trees partially screen or soften views of parking lots along the east side of the street from residences on the west side, this would not lower the existing medium visual quality category to low. The elevated structure would cast shadows along 112th Avenue SE in the morning period (although less than the existing street trees do). The transition from elevated profile to tunnel along 112th Avenue SE turns west near Main Street before entering the tunnel (see Appendix F4.5, Exhibit F4.5-15, Photo 15d). This portion of Alternative C2T would not lower the existing medium visual quality category to low.

Alternative C2T exits the tunnel at a portal located on SE 6th Street, just south of the Meydenbauer Convention Center (see Appendix F4.5, Exhibit F4.5-18, Photo 18d). This alternative would have the same impacts as those described for *Preferred Alternative C9T* and would not lower the visual quality categories anywhere along the route. The other Alternative C2T connector from Alternative B7 or B3 follows 114th Avenue SE to the transition structure, and it would not change the existing freeway and parking lot dominated character of the route or its low visual quality category.

The impacts related to the Segment B connectors (Alternative B3, B2E, or B7) and for the tunnel described above for Alternative C2T would be the same for Alternative C3T. This alternative exits the tunnel at a portal located on along NE 12th Street and transitions to an elevated alignment over I-405 (see Appendix F4.5, Exhibit F4.5-21, Photo 21b). This alternative would have the same impacts as those described for *Preferred Alternative C9T* and would not permanently lower the visual quality categories anywhere along its route.

Alternative C3T would alter the appearance of McCormick Park between 108th and 112th Avenues NE because of tunnel construction, a permanent section of retained cut (flanked by sound walls on both sides), and a section of elevated structure. Alternative C3T would redesign and rebuild the park once the project is completed. Nearby residents, who have high viewer sensitivity, would be adversely affected by the project for several years until the redesigned park's vegetation (e.g., shrubs and groundcover) began to fill in; trees would take longer to adequately mature. Between the start of construction and several years after the new park is constructed, the visual quality category of the area near the park would be reduced from high to low. Within several years of completing the new park, plants would begin to fill in and visual quality would improve to medium. Visual quality could improve to high after 5 to 10 years, depending

on the park design, growth of trees, and effectiveness of landscaping used to reduce the visual dominance of proposed project structures in the park.

Impacts related to the Segment B connectors (Alternative B3, B2E, or B7) described above for Alternative C2T would be the same with Alternative C4A, except these connectors are elevated across 112th Avenue NE and then transition to at-grade as they connect to the main portion of Alternative C4A. For Alternative C4A, the connector from Alternative B2A is the same as Alternative B2E; therefore, large trees would be impacted and an elevated profile would be introduced along 112th Avenue NE and sound walls would be built west of 112th Avenue SE and south of Main Street. Along 108th and 110th Avenues NE, the at-grade profile in the existing street right-of-way of the couplet would be consistent with the urban environment of Segment C and would not change the high visual quality category (see Exhibit F4.5-16, Photo 16b). The impacts from the portion of the route that passes along NE 12th Street would be similar to those described for Alternative C3T except that Alternative C4A remains at-grade as it enters McCormick Park rather than coming from a portal (see Appendix F4.5, Exhibit F4.5-21, Photo 21c) and a sound wall would be built along the north side of the at-grade alignment from 108th Avenue NE to 110th Avenue NE. The existing high visual quality of the area along NE 12th Street near McCormick Park would be reduced to medium, but as with Alternative C3T, it could be restored to high over time.

As with Alternative B3 and the Alternative B2A, B2E, or B7 connector from Segment B, Alternative C7E would not change visual quality categories between Segment B and Main Street. North of Main Street the elevated guideway structure would pass along 112th Avenue NE through areas categorized as having low or medium visual quality due to buildings being set back from the street behind extensive parking lots, and numerous views of, and access points to I-405. Alternative C7E would not change the existing visual quality categories along the route.

During sunny weather, the elevated structure would cast shadows along parts of 112th Avenue NE until early afternoon, when in some locations shadows would be cast across the street by the adjacent buildings. The intent of the urban design element of the *Bellevue Comprehensive Plan* is to reduce shadows in areas that receive heavy pedestrian use. This area is not a heavy pedestrian-traffic area; therefore, shadows from the overhead structure might not conflict under current conditions.

The Bellevue Transit Center Station with Alternative C7E near the intersection with NE 6th Street is connected to 110th Avenue NE by a raised pedestrian walkway (see Appendix F4.5, Exhibit F4.5-17, Photo 17b). The new structures would be visible in this general area, but they would be visually compatible with the area in terms of scale and design. The raised pedestrian walkway would provide a direct pedestrian connection between the station and Bellevue City Hall's plaza and nearby areas, so relatively few passengers would likely use the sidewalks along the section of 112th Avenue NE under the station and experience its shadows. The Alternative C7E elevated pedestrian walkway might intrude on views of some Cascade Mountain peaks from limited areas near 110th Avenue NE and NE 6th Street.

Farther north, along 112th Avenue NE, Alternative C7E passes the I-405/NE 8th Street interchange area (see Appendix F4.5, Exhibit F4.5-20, Photo 20b) while travelling along the east side of 112th Avenue SE. Alternative C7E passes office, mixed-use, and multifamily buildings, and the presence of the elevated structure would be noticeable to residents (who are sensitive viewers), particularly those on the second and third floors. Its presence, however, would not block visual access to the Cascade Mountains nor Mount Rainier due to relatively lower profile from adjacent residences; further, it would not reduce the medium visual quality of this part of 112th Avenue NE to low because the backdrop for these views are predominantly office buildings and I-405, another large transportation infrastructure.

The elevated structure and station associated with the Alternative B3 or B7 connector to Alternative C8E, including the portion located along NE 2nd Street, would be compatible with the character of I-405 and the existing development through which it passes, and it would not change the area's visual quality category. The visual quality of Alternative C8E's route would change along 110th Avenue NE near the Bellevue Transit Center and NE 6th Street due to the elevated profile (particularly the straddlebents [see notes of Table 4.5-1 for definition]) and elevated station. The elevated station would add a large-scale overhead visual element to an area that is pedestrian-oriented and receives heavy pedestrian use; it would not be consistent with the parklike character of Bellevue City Hall Plaza or the nearby streetscape (see Appendix F4.5, Exhibit F4.5-16, Photo 16c). The visual quality category of this portion of 110th Avenue NE would change from high to medium.

The elevated guideway and station would not block street-level views of Cascade Mountain peaks from along east-west running streets that cross 110th Avenue NE (the peaks that are currently visible and not blocked by buildings to the east and south would generally continue to be visible underneath the elevated elements). Shadows cast by the elevated station (and, to a lesser extent, the elevated guideway) during sunny weather might fall on sidewalks in portions of 110th Avenue NE that receive heavy pedestrian use. The shadows cast onto sidewalks by Alternative C8E would be noticed during times of the day when shadows cast by nearby buildings (particularly the highrise buildings on the west side of 110th Avenue NE) are not present, which along most sidewalks would be late morning to midafternoon. The elevated structures continue north along 110th Avenue NE past office and mixed-use buildings (see Appendix F4.5, Exhibit F4.19, Photo 19b).

The north portion of the Alternative C8E route passes through McCormick Park from 110th to 112th Avenue NE and would temporarily lower the area's visual quality. The impact of Alternative C8E would result primarily vegetation removal (particularly mature trees) and the presence of the elevated structure and straddlebent (see Appendix F4.5, Exhibit F4.5-21, Photo 21d) and would lower the visual quality in this area from high to medium until replanted vegetation became sufficiently mature.

Alternative C9A is similar to Alternative C4A in its connections from Segment B and the portion of the route along 110th Avenue NE. However, the connection from Alternative B2A begins at-grade, transitions to retained fill, and then becomes elevated in the center of 112th Avenue SE, which would widen the street to east and remove vegetation. Four straddlebents would be required to cross over 112th Avenue SE to Main Street. These changes would reduce the existing medium visual quality category of this part of 112th Avenue NE to low. Like *Preferred Alternative C11A*, Alternative C9A would maintain the medium visual quality category along Main Street and along 110th Street NE. This alternative would maintain the existing high visual quality category of 110th Avenue NE.

Alternative C14E parallels I-405 for much of its route, which would be consistent with the corridor's transportation infrastructure character. The elevated structure would not change the existing low visual quality category along this part of its route. The elevated profile would not block views of Cascade Mountain peaks from east-west running streets or areas along 108th Avenue NE (such as the City Hall

Plaza or the Bellevue Transit Center Station). If tent structures are used for the elevated station and pedestrian bridge that provide connection between 112th Avenue NE and the Bellevue Transit Center Station, then views of some Cascade Mountain peaks would be blocked from some viewing areas along 110th Avenue NE, NE 6th Street, and the Bellevue Transit Center (see Appendix F4.5, Exhibit F4.5-17, Photo 17c). The elevated pedestrian bridge and its associated tent structures would be large-scale elements but not out of scale with other nearby buildings or out of character with the general area. The elevated structure, station, and pedestrian bridge would not change the low visual quality category along 114th Avenue NE or the medium category along NE 6th Street. Therefore, relatively few pedestrians would experience its shadows.

Segment D

The City of Bellevue and City of Redmond have adopted plans and policies for areas through which *Preferred Alternative D2A* and the other Segment D alternatives would pass. The new plans and policies would, over time, increase pedestrian-oriented land uses and reflect improved urban design standards. The design of the stations would be subject to appropriate design review by the Cities of Bellevue and Redmond. Although the changes in land use and improved urban design standards will result in many areas becoming more attractive over time along the Segment D alternative, the baseline condition that is used to assess impacts is the existing condition. Because the existing condition is the baseline condition, elevated alternatives would not pass by any areas that currently receive heavy pedestrian use; therefore, shadows cast by them are not considered as potential impacts.

Preferred Alternative D2A would be compatible with the areas it would pass through and would not change visual quality categories of these areas, including the storage track location in the former BNSF Railway north of the Segment C/D break. This alternative would be a mix of at-grade, retained-cut, and elevated profiles. Most of the route passes through areas that are currently industrial, commercial (especially automobile-oriented retail), and transportation (the SR 520 corridor).

All of the stations would be designed to respond to the areas in which they would be built and would either improve the low visual quality of the areas where they would be built or would not change it. Both design options near the 120th Station would also be compatible with nearby areas. The at-grade 120th Station might be more visually compatible with the

urban fabric than the retained-cut station plan, since the retained cut introduces a sense of a barrier. Appendix F4.5, Exhibit F4.5-25, Photo 25b contains a simulation of the Overlake Village Station that would be constructed alongside SR 520 with *Preferred Alternative D2A*. The station and alignment would be consistent with the transportation character of the portion of the route that would parallel SR 520 and would be a positive aesthetic addition to the area.

D2A - NE 24th Design Option passes through the Overlake Village in an area that has tree-lined streets. Near the Overlake Village Station, the alignment passes along the west side of 152nd Avenue NE (see Appendix F4.5, Exhibit F4.5-24, Photo 24b). The alignment and station would remove existing buildings and their associated vegetation, as well as street trees. The at-grade tracks and station would be consistent with the urban character of the area near the station and would not change the medium visual quality category of this area enough to reduce it to low.

All other Segment D alternatives would be compatible with the character of the areas through and by which they would pass. They pass through areas best described as either (or a combination of) industrial, commercial, transportation (along SR 520), automobile-oriented, or big-box store retail. The other Segment D alternatives would have varying impacts on visual character and quality, but none would lower existing visual quality categories from medium (the highest in this area) to low. The following highlights impacts along some of the routes of the other Segment D alternatives.

The elevated portion of NE 16th Elevated Alternative (D2E) would be noticed, but it would not be considered a visual encroachment and would be consistent with character of the areas it would pass by. Appendix F4.5, Exhibit F4.5-23, Photo 23b depicts a location along NE 24th Street where the Alternative D2E profile transitions from elevated to at-grade. Existing street trees would be removed and new ones planted. Although the elevated structure and at-grade profiles would be seen from this location (and other sections of NE 24th Street) and the removed street trees would be evident (until the replanted ones increased in size), the presence of Alternative D2E would not lower visual quality enough to reduce it from medium to low.

NE 20th Alternative (D3) travels along the median of NE 20th Street and enters a retained cut east of 140th Avenue NE and would widen either side of the road (see Appendix F4.5, Exhibit F4.5-22, Photo 22b). Existing sidewalks and adjacent landscaping would be

removed. The appearance of NE 20th Street would change with Alternative D3 and the many parking lots that line the street that are currently somewhat screened by street trees and vegetation would be more clearly seen. The presence of this alternative in conjunction with the vegetation removal would lower the visual quality in this area (which is already categorized as low). Within 5 to 10 years, replanted vegetation would gain enough size to screen views and the overall visual quality of this area would improve.

Much of SR 520 Alternative (D5) parallels the I-405 corridor and would be consistent with the transportation character of the corridor; it would not change the low visual quality category of the corridor. Alternative D5 heads east from I-405 in a retained cut to 152nd Avenue NE, where it transitions to at-grade. Alternative D5 would be consistent with the character of the area through which it passes and would not change the medium visual quality category of the portion of 152nd Avenue NE it travels.

Any station from the last station in Segment C and east could potentially include a storage track. These would be primarily in line with the existing track configuration, except the storage track location proposed in the former BNSF Railway corridor associated with the *Preferred Alternative D2A* north of the Segment C and D break. All storage tracks in Segment D would be consistent with the visual analysis of that alternative. The storage track would reside behind existing industrial building outside of sensitive view areas and, therefore, would not lower the low visual quality category.

Segment E

Preferred Alternative E2 and the other Segment E alternatives parallel SR 520 between from the Overlake Transit Center to Sammamish River, where they diverge and the visual impacts would also vary from this point. The profiles are a combination of at-grade and retained cut and would be compatible with transportation infrastructure character of SR 520. The portions of the alternatives adjacent to SR 520 would not change the low visual quality category of the SR 520 corridor.

The portion of *Preferred Alternative E2* that would pass Marymoor Park would be sited adjacent but south of SR 520, and it would be barely visible from parts of Marymoor Park, (see Appendix F4.5, Exhibit F4.5-26, Photo 26b). *Preferred Alternative E2* would not lower the existing high visual quality category of the park. After leaving the Marymoor Park area, *Preferred Alternative E2* would be visually compatible in scale and urban character with the former BNSF Railway

corridor. Both the *Preferred Alternative E2* and the E2 – Redmond Transit Center Design Option would be consistent with the character of areas in Redmond and might slightly improve the areas visual quality. Widening NE 161st Street for the design option would not lower the visual quality of the urban environment near the Redmond Transit Center.

The remaining Segment E Alternatives would have visual impacts. The Redmond Way Alternative (E1) travels west of West Lake Sammamish Parkway NE, is elevated, and passes through a heavily vegetated hillside located above a small commercial strip and below multifamily building complexes. This portion of the guideway may also include noise barriers. The primary impact of Alternative E1 on visual character and quality would be from strong visual presence of the elevated structure. (see Appendix F4.5, Exhibit F4.5-28, Photo 28b). Tree removal on this hillside would contribute to the visual impact (see Appendix F4.5, Exhibit F4.5-27, Photo 27b). Until replanted trees gained stature in 5 to 10 years, Alternative E1 would temporarily lower the existing visual quality of the section of West Lake Sammamish Parkway NE from medium to low in this area.

The portion of the elevated structure that parallels Redmond Way and crosses the Sammamish River would be seen from the Sammamish River Trail and from Luke McRedmond Landing Park (see Appendix F4.5, Exhibit F4.5-29, Photo 29b). This portion of the alternative would be similar to the bridge in character in terms of scale, form, materials, and color and would not lower the area's high visual quality category along Redmond Way, nor would it lower the visual quality of the former BNSF Railway corridor.

The Leary Way Alternative (E4) would remove mature street trees along the existing landscaped strip and the south side of Leary Way NE starting west of the Leary Way NE bridge over the Sammamish River and continuing east to near the former BNSF Railway (see Appendix F4.5, Exhibit F4.5-30, Photo 30b for the Sammamish River crossing simulation). Alternative E4 continues east along a portion of Leary Way NE that serves as a gateway into Downtown Redmond. The transition of elevated profile to at-grade and widening the tree canopy could lower the visual experience of the entryway and lower the visual quality classification of this part of Leary Way NE from high to medium. Sound Transit has prepared designs that show how proposed landscaping may minimize visual effects (see Appendix F4.5, Exhibit F4.5-31, Photo 31b). The portions of Alternative E4 route along the former BNSF Railway corridor and extending over the SR 520

interchange would be visually consistent with the area's character.

Maintenance Facilities

The maintenance facilities would not be out of character with the land uses around them. Most of the alternative maintenance facility sites are located in areas that are not visible to large numbers of people and have been categorized as having low visual quality. The maintenance facilities would have a perimeter fence and/or landscaping where necessary to screen views. The design of the facilities is subject to appropriate design reviews required by the cities where they would be located.

Maintenance facility alternatives located in the Bel-Red Subarea are compatible with adjacent land uses currently, but the City of Bellevue has adopted future land use plans that would limit future industrial uses in the area. The 116th Maintenance Facility (MF1) might require screening from the adjacent medical- and hospital-oriented uses but would not reduce visual quality. The BNSF (MF2) and the SR 520 (MF3) Maintenance Facilities would be visually consistent with the existing visual character and quality of areas near them. MF3 would be the most visible of the maintenance facilities, because it would be located between NE 20th Street and SR 520. However, as confirmed by several car trips along SR 520 to examine the visibility of MF3 from SR 520, most views from the freeway would be screened by vegetation and on-ramps (which would interrupt views towards the MF3 site from most eastbound lanes and all westbound lanes). MF3 would be seen from NE 20th Street and could be seen from some parts of Viewpoint Park and the Bridle Trails Neighborhood. These views would be considered in the MF3 design and landscaping, would be consistent with the character of the areas near it, and would not lower visual quality. The SE Redmond Maintenance Facility (MF5), which would be perhaps the most visually compatible of the maintenance facilities sites, is surrounded by light industrial land uses with no future plans of changing from these current land uses. The industrial park is already screened by commercial uses and mature growth.

4.5.3.3 Impacts during Construction

Constructing the East Link Project would result in temporary impacts on the visual environment. Construction would last in any given area approximately 2 to 5 years (tunnel construction generally takes longer than at-grade or elevated construction). Removing and demolishing existing buildings and implementing the changes in roads, natural vegetation, and landscaping would change the existing condition of the visual environment to

varying degrees for varying amounts of time. Activities related to building the project would also have similarly temporary impacts on the visual environment and would include exposing and moving equipment and materials; exposing soils, glare, and lights associated with nighttime construction; storing construction materials; and making general visual changes to the viewed landscape during the project construction period. Staging areas as large as 6 acres would be required in Downtown Bellevue and would contain construction equipment, vehicles, and various activities; these areas would be screened from view where appropriate.

In addition, parks would be affected during construction. Similarly, in Segment B, the alternatives would affect Mercer Slough Nature Park. Some of the Segment C alternatives would affect Surrey Downs Park, the pocket parks, and McCormick Park during construction and require rebuilding affected park areas. All Segment E alternatives would affect trails and nearby parks to some extent. Nearby residents and park users would be adversely affected by the loss of the affected parks and project construction for approximately 3 to 5 years and, in some cases, longer for the restored parks' revegetation to mature. The severity of the impacts on the visual environment would depend upon the duration and the intensity of construction activities and their locations.

4.5.3.4 Consistency with Comprehensive Plans

As discussed throughout the visual analysis by alternative, Sound Transit's assessment of the East Link Project's consistency with visual-resource goals and policies of relevant local comprehensive plans found that with two exceptions, none of the general plans or subarea plans contain specific goals and policies for aesthetic or visual resources. However, most of the plans contain guidance relating to maintaining and improving the appearance of the physical environment. The two exceptions are as follows:

- *Bellevue Comprehensive Plan* urban design element that encourages new projects to be designed to avoid shadows and allow access to sunlight, particularly for areas that receive pedestrian use
- Section 20.25A.100.E.6 (View Preservation Corridor) of the City of Bellevue's *Downtown Core Design District Guidelines* that identifies view preservation corridors

Section F4.5.1 (Visual Consistency with Comprehensive Plans) of Appendix F4.5 (Visual Consistency and Key Observation Point Analysis) discusses the consistency of the *Preferred Alternative* (as

well as all others) with the visual resource goals and policies of relevant local comprehensive plans and ordinances. Sound Transit will coordinate with the local jurisdictions to design the project consistent with pertinent policies, design guidelines, and regulations relative to visual and aesthetic resources.

The City of Bellevue developed the Downtown Core Design District to assist in implementing the *Downtown Subarea Comprehensive Plan* policies. Section 20.25A.100.E.6 of the guidelines concerns "View Preservation Corridors," which would retain the opportunity for viewing "Lake Washington, the Seattle skyline, the Olympic Mountains and the Cascade Mountains from the major public open spaces and the major pedestrian corridor." Sound Transit assessed Lake Washington views in Segment B and the Cascade Mountain views in Segment C. Two of the three major public spaces (106th and 110th Avenues NE) in the district would have Segment C alternatives passing through them and were assessed accordingly.

4.5.4 Potential Mitigation Measures

The following sections describe mitigation measures associated with the proposed project alternatives.

4.5.4.1 Mitigation for All Alternative Operational Impacts

As discussed at the beginning of Section 4.5.3.2, the project includes a number of measures to minimize visual impacts and build a visually compatible transit facility. No mitigation measures would be necessary for *Preferred Alternatives A1, B2M, C11A, C9T, D2A, and E2* because there would be no adverse visual quality impacts associated with these alternatives. Mitigation measures specific to identified locations of visual impact are listed below:

- **Bellevue Way SE between the South Bellevue Park-and-Ride and intersection with 112th Avenue SE.** This section of Bellevue Way SE would have impacts from Alternatives B1, B2A, B2E, and B3. The retaining walls would receive design treatments such as texture, patterns, color, and possible plantings. Vegetative screening would be provided by Sound Transit for residences where it would be practical and effective in screening views of the light rail.
- **112th Avenue SE median removal.** Removing the median in 112th Avenue SE north of Bellevue Way for Alternatives B2A and B3 would be mitigated with additional tree plantings east of 112th Avenue SE as practical.
- **112th Avenue SE straddlebents.** The retained fill and straddlebent for the connection from Alternative B2A to Alternative C9A along 112th Avenue SE would be designed to minimize bulk and reduce shadows as practical.
- **110th Avenue NE residential areas north of NE 8th Street.** Sound Transit would design Alternative C8E to minimize bulk and shadows and to improve pedestrian environment by enhancing visual aesthetics of the columns and elevated structure.
- **NE 12th Street near McCormick Park.** Alternatives C3T, C4T, and C8E would visually impacts this area. Sound Transit would develop plans for a redeveloped McCormick Park in conjunction with the City of Bellevue and with input from the community to reestablish a linear landscaped park along the north side of NE 12th Street and to screen project components from the park and nearby residences where appropriate.
- **Bellevue Transit Center Station Tents.** Sound Transit would work with the City of Bellevue to uphold the design of the station for Alternative C14E in conformance with the City's policy to minimize view blockage of the Cascade Mountain peaks along 110th Avenue NE, NE 6th Street, and the Bellevue Transit Center, by altering or lowering the tent-type design.
- **NE Leary Way.** Alternative E4 would be located as close to Leary Way as practical to minimize clearing mature trees. Sound Transit would coordinate with the City of Redmond and provide landscaping between Leary Way and the light rail elevated guideway and at-grade trackway where there is space to do so (see Appendix F4.5, Exhibit F4.5-31, Photo 31b). This would help screen the light rail and reduce the visual impact to the NE Leary Way entry into Downtown Redmond.
- **West Lake Sammamish Parkway NE.** Sound Transit would minimize clearing during construction and, in consultation with the City of Redmond, plant trees and/or other vegetation along the edge of West Lake Sammamish Parkway NE for Alternative E1, as illustrated in Appendix F4.5, Exhibit F4.5-28, Photo 28b (this simulation does not depict the additional planting); this would help to screen views of the columns and structure from the street and from nearby condominiums and reduce the apparent bulk of this part of the elevated structure as illustrated in Appendix F4.5, Exhibit F4.5-27, Photo 27b (this simulation does not depict the additional planting).

4.5.4.2 Mitigation for Construction Impacts

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 following 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.