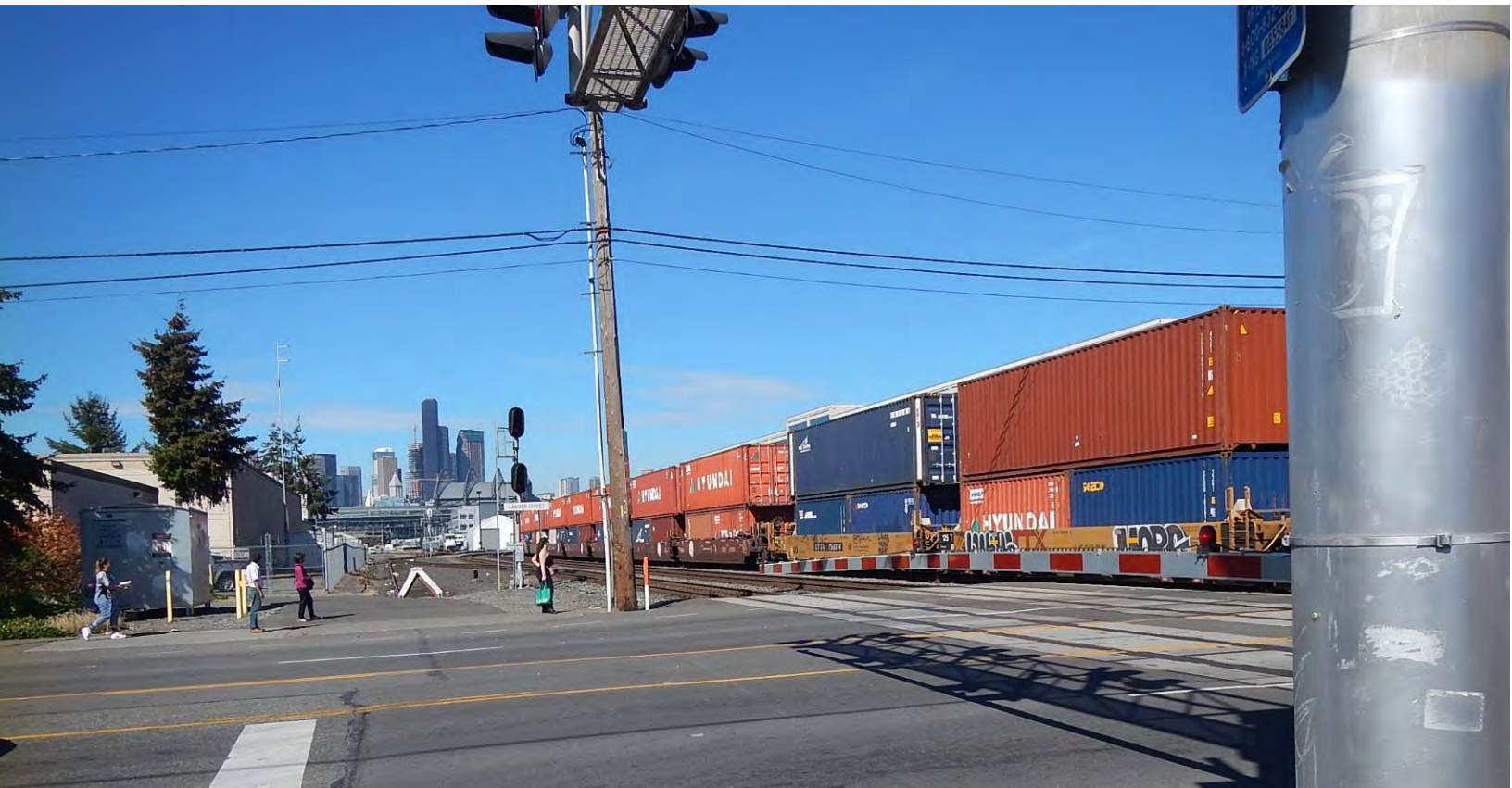


Seattle Department of Transportation

# SOUTH LANDER STREET GRADE SEPARATION PROJECT VISUAL IMPACT ASSESSMENT



January 2017



**Seattle**  
Department of  
Transportation

# CITATION

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# ACRONYMS AND ABBREVIATIONS

City	City of Seattle
FAST	Freight Action Strategy
FHWA	Federal Highway Administration
I-5	Interstate 5
NEPA	National Environmental Policy Act
SDOT	Seattle Department of Transportation
SEPA	State Environmental Policy Act
SMC	Seattle Municipal Code
SODO	South Downtown (Seattle)
SR	State Route
TS&L	type, size, and location
VIA	Visual Impact Assessment
WSDOT	Washington State Department of Transportation



## EXECUTIVE SUMMARY

The Visual Impacts Discipline Report was conducted for the City of Seattle's proposed S Lander St Grade Separation Project to document the existing conditions, the potential impacts of the project, and potential mitigation measures in accordance with the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA). The current visual assessment methodology provided by the Federal Highway Administration (FHWA) recognizes that different levels of evaluation may be appropriate depending on the magnitude of the project and likely public concern. For this project, the Seattle Department of Transportation (SDOT) and the Washington State Department of Transportation (WSDOT) determined that an abbreviated Visual Impact Assessment (VIA) is the appropriate level of documentation.

Construction impacts of the project would include the visual presence of construction equipment, workers, materials, debris, signage, and staging areas. Equipment required to complete the S Lander St Grade Separation Project would include equipment typically used for transportation construction projects such as backhoes, cement mixers, concrete pumps, cranes, forklifts, haul trucks, loaders, oscillators, pavers, service trucks, utility trucks, vibratory equipment, and welders. Some of the required construction equipment would be large because of the need to drill deep holes for installation of bridge shafts and structural components. The introduction of construction equipment and related activities would be disruptive to the viewing population, but because of the limited construction duration (approximately 2 years), the nonresidential nature of the viewing population, and proposed mitigation measures, the impact is not expected to be substantial.

Following construction, the project is not expected to result in negative visual impacts. Based on evaluation of the corridor's existing visual quality and affected populations (viewers), overall, the impact of the proposed grade-separated structure (bridge over the railroad tracks) is likely to be beneficial or neutral. The existing visual resources within the project corridor are generally unexceptional, with views of greatest memorability found 0.5 to 2 miles from the corridor (i.e., downtown Seattle, Port of Seattle cranes, and the forested slope of Beacon Hill). The size and architectural treatments of the proposed structure would fit in the context of the surrounding uses and the greater SODO neighborhood. Motorists, bicyclists, and pedestrians traveling on the bridge would benefit from the enhanced views toward downtown and the introduction of views that formerly were inaccessible. Directional lighting would minimize light and glare, and shadows cast to the north of the project corridor by the new structure would not affect sensitive properties (i.e. residential).





# 1. INTRODUCTION

This report documents a visual assessment conducted for the City of Seattle's proposed S Lander St Grade Separation Project. The analysis was conducted to satisfy the National Environmental Policy Act (NEPA) and will address requirements for the Washington State Environmental Policy Act (SEPA). This report describes the methods used to perform the analysis, the existing conditions in the project area, potential impacts of the project during construction and operation, and potential mitigation measures.

## 1.1 Project Background

The City of Seattle (City) proposes to build a bridge on S Lander St between 1st Ave S and 4th Ave S to provide a grade-separated crossing over the BNSF Railway's railroad tracks that will improve local traffic circulation and safety in the City's SODO neighborhood. S Lander St is an essential east-west corridor that is heavily used by freight and commuter traffic as well as pedestrians, bicycles, and transit. It serves one of the largest manufacturing and industrial centers in the state, including the Port of Seattle's seaport terminals. The street currently intersects with four BNSF tracks at an at-grade crossing located between Occidental Ave S and 3rd Ave S. Available data indicate that more than half of the BNSF rail cars that move through Washington go through the S Lander St crossing, contributing to vehicular delays averaging over 4 ½ hours each day. These delays affect freight, commuters, local businesses, and the public. An overcrossing at this location would eliminate delays caused by train crossings, benefiting mobility and safety in the area.

The City envisioned the S Lander St Grade Separation Project nearly 20 years ago. It was one of the original Freight Action Strategy (FAST) Corridor projects (Texas Transportation Institute 1997), intended to improve railroad crossings along the BNSF Everett-Seattle-Tacoma rail corridor. There are currently two existing grade-separated crossings in the north end of SODO at S Royal Brougham Way and Edgar Martinez Dr (State Route [SR] 519); to the south, the Spokane St Viaduct provides a route that passes above this set of railroad tracks. Between those two locations, S Lander St is the most viable of the remaining grade separation options because of its wide right-of-way, the distance between railroad tracks and adjacent streets, and the relatively small railroad crossing width. These factors allow for a shorter crossing that has sufficient space to reach the necessary clearance requirements over the tracks. The grade separation would be designed to provide the necessary vertical clearance over the railroad tracks while maintaining access to local businesses.

The S Lander St Grade Separation Project is a high-priority project in the Seattle Freight Master Plan and in the 2015 Plan to Move Seattle, the 10-year City strategic plan for increasing safety, reducing congestion, and balancing modal needs. It also supports the Industrial Areas component of the Seattle Comprehensive Plan and was identified as a Tier 1 project by the Seattle Industrial Areas Freight Access Project. These plans have elevated the project as a City priority not only because of its safety, congestion, and multimodal access benefits, but also because of its important role in the regional freight network.

## 1.2 Project Location

The project area is shown in Figure 1-1. The project area extends along S Lander St from 1st Ave S on the west to 4th Ave S on the east. Improvements would generally be made within the existing 100-foot-wide City right-of-way.

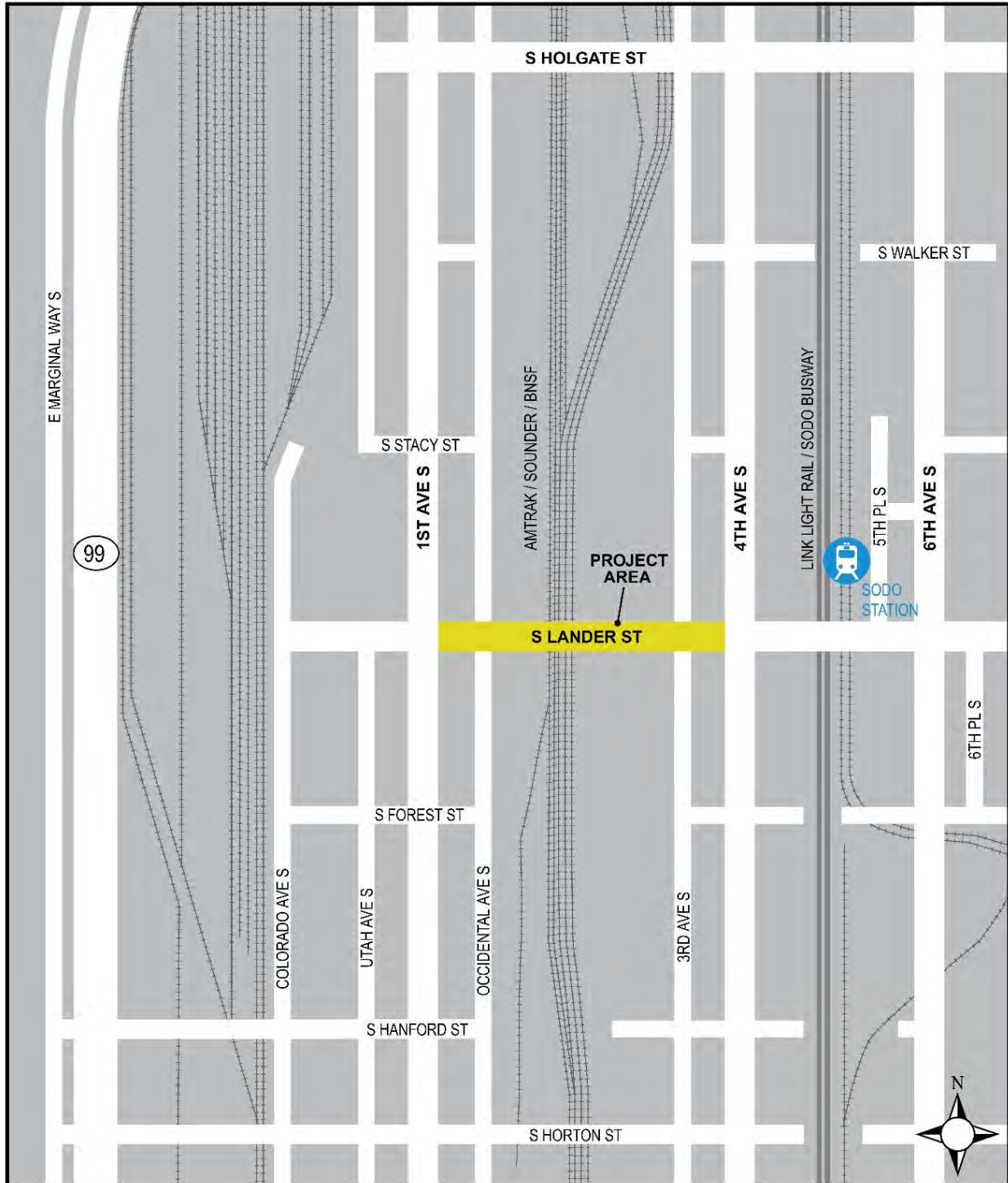


Figure 1-1. Project Area

## 1.3 Purpose and Need for the Project

The primary purpose of the project is to provide a grade separation between the roadway and the BNSF tracks to reduce delays and improve safety for all users. The City’s goals and objectives for the S Lander St corridor have been documented in the Access Duwamish Report in 2000 (City of Seattle and Port of Seattle 2000) as well as in three bridge type, size, and location (TS&L) study in 2016 (COWI 2016).

## 1.4 Project Description

The project would extend from 1st Ave S on the west to 4th Ave S on the east. Both of these roadways serve as major north-south arterials in the existing surface street network. The grade-separated structure would have a four-lane cross section, which would accommodate forecast traffic volumes through the year 2040.

Table 1-1 summarizes the main project design features related to the bridge alignment, local access, and nonmotorized facilities. Each of these elements is described in more detail in the following subsections.

**Table 1-1. Summary of Project Design Features**

Project Element	Description
Bridge alignment	Bridge centerline offset 6 feet north of existing S Lander St centerline.
Bridge profile	To meet the railroad track-clearance requirement of 23.5 feet and a desired maximum grade of 7%, the bridge would be 7 to 8 feet above Occidental Ave S, eliminating its existing intersection with S Lander St.
Cross section	67.5 feet in total width including exterior barriers. Includes two 12-foot lanes, two 11-foot lanes, a 14-foot-wide multi-use path, and a barrier between motorized and nonmotorized vehicles.
Nonmotorized facilities	14-foot-wide two-way shared use path on north side of the bridge.
Local access west of railroad tracks	Dead-end Occidental Ave S on each side of bridge.
Local access east of railroad tracks	Two-Way Connection—two-way surface street along south side of bridge, crossing under bridge to the Seattle Public Schools John Stanford Center for Educational Excellence site.
S Lander St intersections at 1st Ave S and 4th Ave S	Westbound S Lander St approaching 1st Ave S—one left-turn lane, one through lane, and one right-turn lane. Eastbound S Lander St approaching 4th Ave S—one left-turn lane, one through lane, and one through right-turn lane.

### 1.4.1 Bridge Alignment and Cross Section

The proposed bridge alignment is offset 6 feet northward of the existing centerline of S Lander St as shown in Figure 1-2.

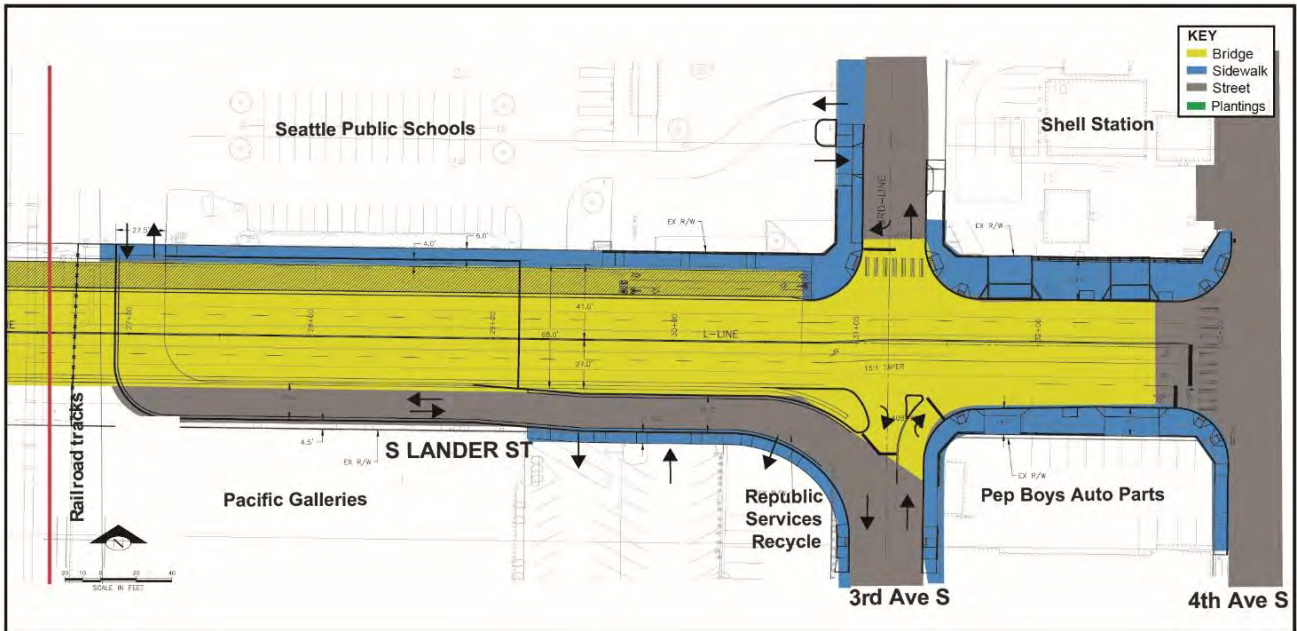
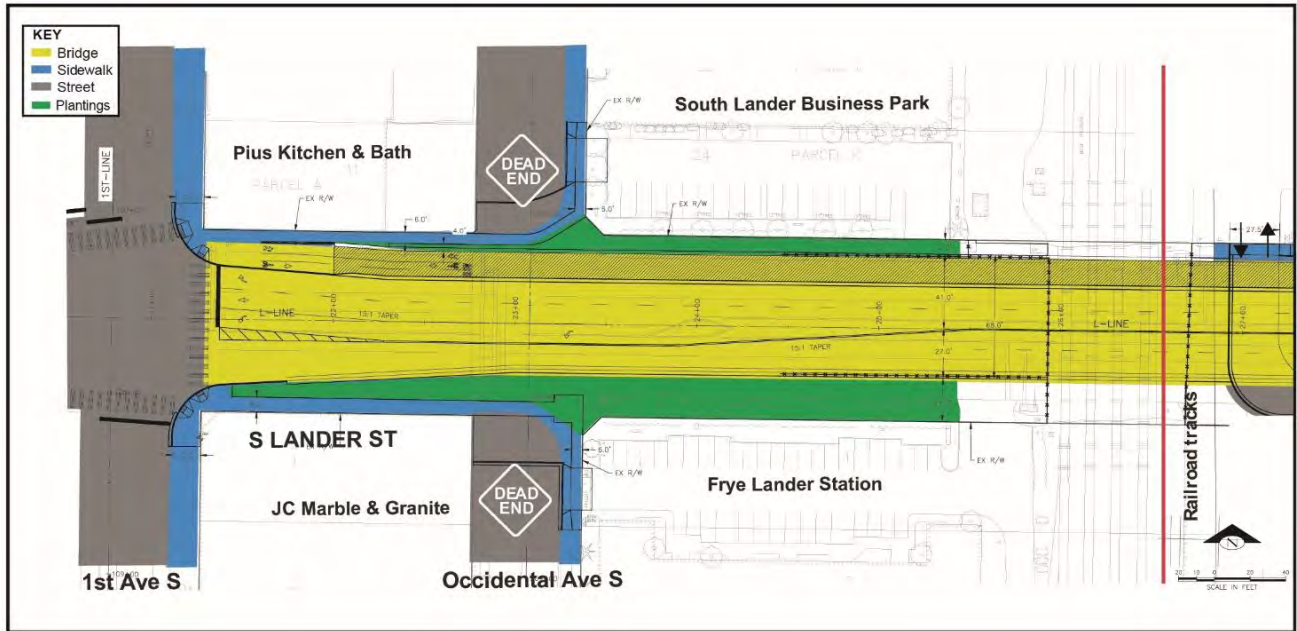
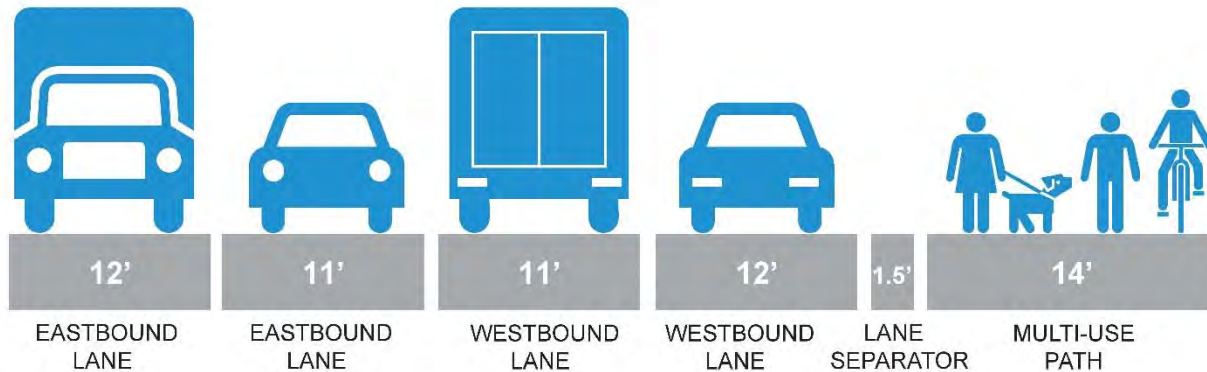


Figure 1-2. Proposed Alignment



A four-lane bridge is proposed for this project. The total width of the bridge would be 67.5 feet, with a cross section that would include a 14-foot-wide multi-use path for nonmotorized traffic (described below), one 12-foot lane (curbside) and one 11-foot lane in each direction, plus a 2-foot shoulder adjacent to the eastbound barrier and a 1.5-foot lane separator between the nonmotorized facilities and vehicle lanes. Figure 1-3 depicts the proposed bridge cross section.



**Figure 1-3. Proposed Bridge Cross Section**

The bridge would be a 4-span structure, with drilled shaft foundations up to 200 feet in depth. Geofoam approaches, up to 20 feet in height, would be used to reduce the loading on the underlying utilities between exterior bridge barriers (not shown).

The proposed bridge must clear all BNSF railroad tracks by 23.5 feet and a future Amtrak rail line by 22.5 feet; the desired maximum grade for the roadway is 7 percent. Given those design parameters, the bridge approaches would meet Occidental Ave S about 7 to 8 feet above the existing street grade, which would eliminate the existing intersection. There would be more horizontal distance between the railroad tracks and 3rd Ave S to the east, and the intersection at S Lander St/3rd Ave S would be retained by raising 3rd Ave S by 2 to 3 feet.

### 1.4.2 Nonmotorized Facilities

The project would create a 14-foot-wide, two-way multi-use path on the north side of the bridge, separated from the vehicle lanes by a 1.5-foot lane separator (see Figure 1-3). This configuration would accommodate the large majority of pedestrians in the corridor who walk along the north side, which is along the direct walking route between the Starbucks Center, the Seattle Public Schools John Stanford Center for Educational Excellence (district headquarters building), and the SODO Link light rail station. The 14-foot width is comparable to other multi-use trails such as the Elliott Bay Trail, the West Seattle Trail across the Spokane St swing bridge, and the SR 520 regional shared-use path across the new floating bridge. The multi-use path on S Lander St would provide capacity for shared use by both pedestrians and bicyclists, space for passing, and separation between vehicular and nonmotorized traffic. On the west, the path would continue to 1st Ave S. On the east, the dedicated path would end at 3rd Ave S; however, a wider sidewalk would be included between 3rd Ave S and 4th Ave S to accommodate the potential increase in bicycle activity.

In addition to the multi-use path on the bridge, sidewalks with a minimum width of 6 feet would be provided at street level adjacent to the Seattle Public School District Headquarters, the access road to 3rd Ave S, and on each side of the roadway between 1st Ave S and Occidental Ave S (see Figure 1-2).

### **1.4.3 Local Access West of Railroad Tracks**

The bridge approaches would be elevated above Occidental Ave S west of the railroad tracks, which would eliminate the ability to connect the street north and south of S Lander St. As a result, Occidental Ave S would be dead-ended north and south of the bridge. Figure 1-2 shows the proposed configuration.

Between 1st Ave S and the railroad tracks, the new structure would eliminate access to businesses from S Lander St because the roadway would be elevated above these sites. The driveways for the South Lander Business Park and Frye Lander Station would need to be moved to Occidental Ave S, with access to the arterial network provided via the S Forest St/1st Ave S intersection to the south and the S Stacy St/1st Ave S intersection to the north. Both of those intersections are signalized and provide access from all directions.

### **1.4.4 Local Access East of Railroad Tracks**

Local access to the Seattle Public Schools, Pacific Galleries, and Republic Services properties located east of the railroad tracks would be provided via a two-way local roadway along the south side of S Lander St at the 3rd Ave S intersection, as shown in Figure 1-2.

### **1.4.5 Intersections at 1st Ave S and 4th Ave S**

The intersection at S Lander St and 1st Ave S would be designed to accommodate three westbound lanes: a left-turn lane, a through lane, and a right-turn lane. The left-turn lane would allow the intersection to operate with protected or protected-permissive left-turn phasing, consistent with current operations. Only one through lane in each direction is necessary for the expected demand. A right-turn-only lane would allow the pedestrian crossing of the intersection's north leg to be separated from right-turn traffic, if necessary. One eastbound departure lane (leaving 1st Ave S) would be wide enough (or would have buffer space) to allow for large truck-turning movements.

The intersection at S Lander St and 4th Ave S would also be designed to accommodate three westbound lanes: a left-turn lane, a through lane, and a through/right-turn lane. The inside eastbound lane on the bridge would transition to the left-turn lane at this intersection, and signage would be provided to alert motorists that they are approaching a turn lane.

## 2. METHODOLOGY

The current visual assessment methodology provided by the Federal Highway Administration (FHWA) recognizes that different levels of evaluation may be appropriate depending on the magnitude of the project and likely public concern. A Visual Impact Assessment Scoping Questionnaire was completed to determine the appropriate level of the Visual Impact Assessment (VIA) as provided in Appendix C of FHWA's 2015 Guidelines for the Visual Impact Assessment of Highway Projects (FHWA 2015). It was determined that an abbreviated VIA was the appropriate level of effort for assessing impacts on visual quality for the S Lander St Grade Separation Project. A memorandum detailing how the project aligns with the abridged approach was submitted to and subsequently approved by the WSDOT on August 22, 2016 (Parametrix 2016).

The following City of Seattle codes, programs, policies, and plans apply to this VIA analysis. The project aligns or is not in conflict with these codes, programs, and policies; therefore, they will not be discussed in detail in this report.

- Seattle Municipal Code (SMC Title 23, Chapter 41; City of Seattle 2016a). Establishes regulations and procedures for the use of land that are consistent with and implement the City's Comprehensive Plan. The section relevant to the aesthetics assessment is SMC 23.41 Design Review. This section encourages better design and site planning to help ensure that new development enhances the character of the city and sensitively fits into neighborhoods, while allowing for diversity and creativity.
- Seattle Environmental Policies and Procedures (SMC Title 25, Chapter 05; City of Seattle 2016b). Establishes the City's procedures and policies for compliance with SEPA. Sections relevant to the aesthetics assessment are:
  - SMC 25.05.675 (K). Light and Glare. Includes policies to minimize or prevent hazards and other adverse impacts created by light and glare.
  - SMC 25.05.675 (G). Height, Bulk, and Scale. Includes policies to provide for compatibility with the general character of development as set forth in Section B of the land use element of the Seattle Comprehensive Plan.
  - SMC 25.05.675 (P). Public View Protection. It is the City's policy to protect public views of significant natural and human-made features (i.e., Mount Rainier, the Olympic and Cascade Mountains, downtown skyline) from specified viewpoints, parks, scenic routes, and view corridors.
  - SMC 25.05.675 (Q). Shadows on Open Spaces. Defines shadow impacts outside of downtown as those that are experienced in publicly owned parks; public schoolyards; private schools that allow public use of schoolyards during non-school hours; and publicly owned street ends in shoreline areas.
- City of Seattle Comprehensive Plan: Managing Growth to Become an Equitable and Sustainable City (City of Seattle 2016c). The plan is a 20-year vision and roadmap for Seattle's future. It guides City decisions on where to build new jobs and houses, how to improve the transportation system, and where to make capital investments such as utilities, sidewalks, and libraries, with an emphasis on managing growth equitably. The elements relevant to the aesthetics assessment are:
  - Land Use Element. Establishes that public facilities that affect building height, bulk, setbacks, open space, landscaping, and screening shall be similar to those required of other development, but also allowed to vary because of structural requirements.

- Neighborhood Plan Element. Contains 33 neighborhood plans that implement the comprehensive plan at the neighborhood level. This project falls within the Greater Duwamish Manufacturing and Industrial Center Plan.
- Urban Design Element. Contains policies that provide a citywide, coherent approach to the City's future actions in regulating, building, and maintaining the quality of the urban design of the city.
- Seattle Pedestrian Master Plan (City of Seattle 2009). The plan establishes policies, programs, design criteria, and projects that will enhance pedestrian safety, comfort, and access in all of Seattle's neighborhoods.
- Seattle Bicycle Master Plan (City of Seattle 2014). The plan establishes policies, programs, design criteria, and projects for an integrated network of bicycle facilities that will enhance cyclist safety, comfort, and access to all of Seattle's neighborhoods.
- City of Seattle Freight Master Plan (City of Seattle 2016d). The plan establishes strategies and actions and project concepts for an efficient, connected freight network to ensure Seattle is prepared for continued growth.

The following sections include an inventory of the affected environment and an analysis of the impacts on existing visual resources, as experienced by viewers during both construction and operation using specific viewpoints for reference. It concludes by describing how the City will use mitigation strategies to avoid or minimize adverse visual impacts.



### 3. AFFECTED ENVIRONMENT

The project corridor is located in the SODO neighborhood of Seattle, which is itself part of the Duwamish Manufacturing/Industrial Center, an area of primarily industrial and commercial land uses located along the Duwamish River valley south of downtown Seattle. Other than live-work loft space, residential uses are not permitted under the existing industrial zoning. No residential land use is known to occur within a half-mile of the project footprint. Because residential properties, which are considered a “sensitive” population from a visual standpoint, are minimal or nonexistent, and the zoning limits residential uses to live-work loft spaces, this VIA is focused on those businesses and features directly within or adjacent to the project footprint. For purposes of this analysis, the term “project area” means the same as “project footprint”.

The section of S Lander St where the project would be constructed is a combination of commercial, institutional, and industrial development. Nearly the entire area is paved, and the surrounding buildings are generally simple structures with limited architectural detailing. A wide railroad right-of-way, which the grade separation would span, runs through the site. The project corridor is visually dominated by the BNSF railroad, roadways, buildings, and powerlines. S Lander St currently intersects four BNSF tracks at an at-grade crossing located between Occidental Ave S and 3rd Ave S, creating a broad, open area largely free of aboveground structures.

The underlying landscape in the project area is generally flat. When not blocked by adjacent buildings, the project area allows longer distance views to landmarks and the surrounding landscape that include some desirable features:

- Views to the east include a forested greenbelt where Beacon Hill rises behind Interstate 5 (I-5).
- To the west the most prominent landmarks are the Starbucks Center and the Port of Seattle freight cranes. The Starbucks Center is a distinctive commercial building designed in the Art Deco style, originally constructed as a catalog fulfillment center for Sears, Roebuck & Company. The building’s central tower, currently featuring a large Starbucks logo, is a focal point for views in this part of the city.
- To the north there are views of Safeco Field and downtown skyscrapers.

Existing buildings in the area are generally low, typically one to three stories, and have large floor plates, resulting in a built environment with a strongly horizontal proportioning and limited vertical relief. Landmarks and buildings adjacent to the project footprint are identified in Figure 3-1.

There are several prominent on-premise signs for businesses within or in close proximity to the project area. These businesses are, from east to west, Republic Services Recycling Center, Pacific Galleries Antique Mall, and Pius Kitchen and Bath. A large billboard is located at the southeast intersection of 3rd Ave S and S Lander St; positioned near the northwest intersection of 3rd Ave S and S Lander St stands a tall flagpole displaying the American flag. Overhead power lines are prominent, including lines parallel with and crossing S Lander St.



Project Footprint  
 AMTRAK/Sounder/BNSF

**Figure 3-1**  
Landmarks and Buildings near  
the Project Footprint

Vegetation is limited in the project area. There are street trees along a portion of the right-of-way, and in some areas there is a landscaped buffer between parking lots and the existing roadway. The vegetation located in or directly adjacent to the right-of-way in the project area is described below from east to west.

- Adjacent to Pacific Galleries Antique Mall property between 3rd Ave S and the BNSF railroad, landscaping consists of approximately 55 feet of hedge north of the mall's parking lot and ten small shrubs between the sidewalk and the mall structure within a span of 180 feet. There are no mature trees in this area.
- Adjacent to the John Stanford Center between 3rd Ave S and the BNSF railroad, landscaping consists of approximately 300 feet of grassy strip with seven small street trees between the road and sidewalk, and low growing shrubs and two small trees in a narrow mulched bed between the sidewalk and parking lot.
- Adjacent to the South Lander Business Park between railroad and Occidental Ave S, landscaping consists of approximately 160 feet of grass strip between the road and sidewalk and low-growing shrubs and six small trees in a grass strip between the sidewalk and parking lot. In an ivy-choked bed north of the sidewalk, a moderately sized native conifer grows just west of the railroad right of way.
- Adjacent to the Frye Lander Station Business Park between railroad and Occidental Ave S, landscaping consists of approximately 200 feet of grass strip and seven small trees between the road and sidewalk, and a grass strip and ivy between the sidewalk and parking lot.
- Adjacent to Pius Kitchen and Bath between Occidental Ave S and 1st Ave S, landscaping consists of approximately 100 feet of grass strip and one small tree.
- Adjacent to JC Marble and Granite between Occidental Ave S and 1st Ave S, there is no vegetation in the public right-of-way outside the road prism.

The existing railroad crossing is a strong visual element in the streetscape. The crossing is wide, with four sets of tracks crossing S Lander St, and includes large crossbucks and gantries supporting warning lights. The railroad right-of-way is also the location that provides the best views toward downtown from the project area.

The buildings surrounding the project area are generally utilitarian and do not provide unusual architectural interest. A few exceptions include the Starbucks Center, mentioned above, and the commercial building where Pius Kitchen and Bath is located at the northeast corner of S Lander St and 1st Ave S.

In summary, the combination of flat terrain, and a wide street with limited street trees and low surrounding buildings creates an overall feeling of openness. Despite the uniformity of scale in the project corridor, there is some visual diversity attributed to the expansive rail right-of-way, mix of building set-backs, variability in building design, and state of repair. The project area allows for views of the downtown skyscrapers and stadiums to the north, the distinctive Port of Seattle freight cranes to the west with the backdrop of the West Seattle ridge and the Beacon Hill ridge to the east.

### **3.1 Affected Population**

The analysis of visual impacts combines an evaluation of the physical changes to the landscape with the anticipated reaction that those changes may cause in viewers. Typically, different projects have different types of viewers, who would likely have different reactions to changes in visual quality. For example, an

infrequent visitor to the project location would be expected to be less sensitive to change in the landscape than someone who viewed the project every day. An analysis of visual impacts also considers how much concern different users might have for quality. For example, a resident looking out the window at a particular project would likely be more concerned about visual quality than a delivery driver who visits the area infrequently, and who is not focused on visual quality as an important contributor to quality of life during working hours.

The first distinction between viewers in the impact analysis is between “travelers” and “neighbors.” Travelers would be temporary viewers traveling along S Lander St, including motorists, pedestrians, and bicyclists. Neighbors include everyone who would be looking toward the project alignment, rather than traveling along it. Neighbors would include a variety of viewers, but the majority would include workers and visitors in nearby buildings, and motorists and pedestrians on nearby streets.

Ongoing public outreach and engagement with adjacent businesses, area stakeholders, and the broader community – the potential viewing population – has occurred on behalf of this project and will continue through construction. The Seattle Department of Transportation (SDOT) met with property owners during the early stages of design and held public open houses between 2003 and 2007. After the project was put on hold for several years due to funding limitations, a new round of open houses was held in June 2016 and September 2016. In addition to an overview of the project, open house attendees were given the opportunity to identify their preferences from a suite of potential urban design options including concepts for railings, retaining walls, handrails, landscaping, columns, and fencing.

### **3.1.1 Neighbors**

The majority of viewers who would be looking at the project are those that visit adjacent buildings (i.e., patrons) or those that work (i.e. employees) in adjacent buildings. The locations of viewers looking from buildings towards the project would vary from building to building. Most viewers in buildings would be looking at the project at a distance of 60 to 150 feet, and would be looking past a parking lot. Some viewers would be closer to the project, where building windows are adjacent to the existing sidewalk. Potential visual impacts have been discussed at several public involvement opportunities for the project. Overall, concerns have been focused on the bulk and scale of the project. The level and type of public interest have suggested that viewers likely to be concerned with the project are employees and owners of commercial and institutional buildings directly adjacent to the project, and located where the new structure would be most prominent as it rises to cross over the railroad right-of-way.

Employees at institutional and commercial buildings would be affected by changes to the visual character of their working environment. They are typically present at their workplace for many hours during the day. While their work may keep them focused on more internal views, access to views of the landscape is generally highly valued, and these viewers would be considered sensitive to changes in visual quality. Employees at commercial businesses adjacent to the project area would have similar sensitivity to changes in their work environment. In addition, commercial businesses are also sensitive to views looking towards their property, which could affect awareness of their business.

Overall, the project has few neighbors who would view it if constructed. There are only eight buildings adjacent to the project area, and they have limited window views. Each of the adjacent buildings is discussed in more detail below.

The building with the most viewers is the John Stanford Center to the north of the project between the railroad tracks and 3rd Ave S. Approximately 700 school district employees work at the facility. Employees and visitors would view the project from the facility’s parking lot, and also from windows facing S Lander St. The John Stanford Center has windows on its second and third floors; views from the



building towards the project would be elevated. Views from inside the building would be separated from the project by a relatively large parking lot; the distance between the building and the project would be more than 125 feet. Existing views from the John Stanford Center primarily include the parking lot and landscaping, the street-facing façade of the Pacific Galleries Antique Mall (Pacific Galleries), Republic Services and its large “Recycling Center” signage, the intersection of S Lander St and 3rd Ave S including Pep Boys Auto east of the intersection, and the railroad and associated appurtenances to the west.

Pacific Galleries is directly adjacent to S Lander St, with no setback between the building and the existing sidewalk. This structure has windows facing S Lander St on the first and second floors, although entry to the building faces east and is accessed from a parking lot to the east of the building. Employees and visitors to the antique mall primarily view the project area from the parking lot and building entry. Once inside the building the focus is generally internal, and window views are not a prominent part of the experience for shoppers. The antique mall has a large identifying sign on the building itself, and a large on-premise sign located in the parking lot.

Two other commercial buildings with storefronts facing S Lander St are the South Lander Business Park and Frye Lander Station, located across S Lander St from one another and adjacent to the railroad right-of-way and east of Occidental Ave S. As with the John Stanford Center, both of these buildings are set back from S Lander St and separated from the project area by a parking lot and landscaping. Viewing distances from the closest point of these buildings to the project area are approximately 65 and 55 feet, respectively. Both buildings are single story; as a result, views to the project area are partially screened by parked cars and landscaping. Current views from the buildings include parking lots, street trees, and landscape strips. Because these buildings are adjacent to the railroad right-of-way, features associated with the railroad crossing are prominent in the views to the east. Other buildings adjacent to the project area include commercial buildings fronting 1st Ave S at the west end of the project area (Pius Kitchen and Bath north of S Lander St, and JC Marble and Granite south of S Lander St), and a Shell service station north of S Lander St and automobile repair facility (Pep Boys Auto) south of S Lander St at the east end of the project area between 3rd and 4th Ave S. Viewers associated with the buildings fronting 1st Ave S generally are not oriented to the project area. The service station and automobile repair facility are set back from S Lander St, and are generally focused on a section of S Lander St that would not be changed substantially by the project.

### **3.1.2 Travelers**

Travelers along the roadway would experience the project area differently than employees and patrons of local commercial and institutional buildings. Travelers move through the project area, and would see the project from different vantage points. For travelers the project area is part of a larger experience as they move through the landscape. Travelers are sensitive to views of the roadway; however, an important part of their experience is also the views available from the roadway to the surrounding landscape.

Most travelers along S Lander St are in motor vehicles, but there are also pedestrians and bicyclists. Compared to neighbors of the project, there would be many more travelers; however, travelers would not experience the project with the same duration and frequency. Many travelers through this area are expected to be regular visitors, either as part of their commute, to visit a local business, or for commercial travel. Travelers through the project area have more opportunities than neighbors to experience the most positive aspects of views from the site, including views to downtown along the railroad right-of-way, views to the forested hillside of Beacon Hill, and views to the landmark Starbucks Center and Port of Seattle cranes to the west.

Travelers through the project area would be expected to be less sensitive to visual quality than neighbors, primarily because of the lower frequency and shorter duration of their exposure to views.

Both primary viewing groups, neighbors and travelers, would likely come to the project area with the expectation that the visual character of the area would be industrial and utilitarian.

## 3.2 Visual Quality

The perception of visual quality can vary between individuals. As described above, the process to evaluate potential impacts to visual quality is based on typical patterns of response to the landscape and to certain types of changes to the landscape. The evaluation of the potential aesthetic impact of a project is based on an evaluation of the likely change the project would create to a value called *visual quality*. The landscape itself has a particular visual character; viewers of the landscape have different sensitivities to aesthetics. Visual quality is a measure of how viewers perceive the aesthetic value of the landscape.

The visual quality evaluation process considers three contributing characteristics of the landscape to describe different aspects of visual quality, then synthesizes those three aspects into a single measure. The three contributing characteristics of visual quality used for visual impact analysis include:

- Natural harmony—the contribution of natural elements of the landscape to the overall visual character of the project area
- Cultural order—the degree to which the built elements of the project area form a consistent and aesthetically pleasing composition
- Project coherence—the degree to which the proposed project complements its setting

Taken together, these three contributing factors are synthesized into a measure of visual quality called *landscape composition and vividness*.

The impact analysis for a project includes evaluation of the existing visual quality of the project setting, the anticipated changes that would result from the project (both positive and negative), and the sensitivity of typical viewers to change. The evaluation of the existing visual quality of the project area focuses on natural harmony and cultural order. Project coherence is discussed further as part of the evaluation of impacts.

### 3.2.1 Natural Harmony

The project setting is almost entirely built. There are street trees in some of the planting strips adjacent to S Lander St that are under-planted with turf or groundcover. Distant views to the forested hillside on the west slope of Beacon Hill and the West Seattle ridge are not prominent from the project site. In general, natural harmony is not a strong contributor to the visual quality of the project area; the natural harmony of the project area would be considered low.

### 3.2.2 Cultural Order

The project area is primarily built out, and constructed elements are the dominant contributor to the visual quality of the project area. As described above, S Lander St is a 100-foot right-of-way with five travel lanes, and parking lanes on each side. Each block adjacent to the roadway includes a single building, although several of the buildings are separated into smaller storefronts. Of the eight buildings adjacent to the project, five are set back from the street and three are built to the back edge of the existing sidewalk.

The wide street and perpendicular rail crossing are the most prominent visual elements along S Lander St. Adjacent buildings are typically ordered and nondescript; they do not provide the type of architectural detailing, visually interesting materials, and pedestrian-oriented site amenities that are

typically associated with visually preferred developed areas. Except at the eastern and western termini of the project area, buildings in the project area are low and have very large floor plates, typically extending for entire blocks. Building colors are generally neutral earth tones, with some brick detailing on the John Stanford Center. At the eastern edge of the project area, adjacent buildings include a Shell service station and an automobile repair facility (Pep Boys Auto), which are more complex than the typical large buildings in the center of the project area. At the western end of the project, two older buildings are located on the northeast and southeast corners of S Lander St and 1st Ave S. These buildings, Pius Kitchen and Bath and JC Marble and Granite, include distinctive materials and detailing reflecting older construction methods.

The built environment is generally ordered and nondescript. Newer buildings, including the John Stanford Center, the two commercial buildings adjacent to the railroad right-of-way, the Shell service station, and Pep Boys Auto, are in good condition and their parking areas and grounds are organized and clean.

Older buildings are generally well-maintained, and nondescript. Except for the monitor-roofed building (Pius Kitchen and Bath) on the northeast corner of the intersection between S Lander St and 1st Ave S, older buildings adjacent to the project have simple massing and detailing.

The architectural character of the buildings in the project area is generally not distinguished by design features that would contribute to exceptional visual character. Massing, proportion, and detailing are simple and utilitarian.

The railroad right-of-way is wide, with gravel paving and scattered railroad-related structures and maintenance items. While the right-of-way provides an exceptional view from the project area to downtown, it also detracts from the sense of landscape order set up by the relatively consistent building massing and scale.

At the landscape level, the extreme horizontal massing of the buildings adjacent to S Lander St, in combination with the width of the street, creates a very open environment that emphasizes the street paving in most views over the character of the building façades. With the strong sense of openness to the sky, the substantial number of overhead wires is a stronger contributor to visual character than in a more typical streetscape where building façades draw more attention.

The visual character of the project area is likely consistent with viewers' expectations for the landscape, and is maintained at a higher level than might be expected for an industrial-commercial area. Views from the project area to desirable focal points, including downtown, the Starbucks Center, and cranes at the Port of Seattle add considerably to the viewer's experience.

### **3.2.3 Landscape Composition and Vividness**

Given the minor contribution of natural character to the overall visual quality of the project area, the final evaluation of the existing landscape composition and vividness is very much consistent with the cultural order of the site.

The horizontal emphasis and the long, plain fronts of the neighboring buildings do not provide the type of visual interest that distinguishes more visually compelling urban areas. Overhead wires and railroad appurtenances detract from the landscape composition and vividness. Strong contributors to composition and vividness are the views to the Starbucks Center, Port of Seattle cranes, and downtown skyline.

The combination of the low vividness of the project area, with the more positive contribution of the attractive focal points outside of the project area, leads to a moderate rating for overall visual quality.





## 4. CONSTRUCTION IMPACTS AND MITIGATION MEASURES

### 4.1 Construction Impacts

Construction impacts include the visual presence of construction equipment, workers, materials, debris, signage, and staging areas. Visual disruption would be experienced by the users (primarily motorists) of S Lander St, business owners and employees, patrons and shoppers, pedestrians, and bicycle commuters. Equipment required to complete the S Lander St Grade Separation Project would include equipment typically used for transportation construction projects such as backhoes, cement mixers, concrete pumps, cranes, forklifts, haul trucks, loaders, oscillator, pavers, service trucks, utility trucks, vibratory equipment, and welders. Some of the required construction equipment would be large because of the need to drill deep holes for installation of bridge shafts and structural components.

Construction materials would be staged in the project footprint. Debris from construction and excavation activities would also be stored within the project footprint until it was hauled away to an appropriate disposal site. These activities would primarily be seen by employees in the adjacent buildings and people traveling through the area.

Disruptions would also include the light and glare from temporary lighting; the loss of mature vegetation located between the curb and sidewalk within the right-of-way of the John Stanford Center and the Frye Lander Station business park; impaired views affecting adjacent business owners, patrons, and their employees; and loss of views outside the construction areas (e.g., Safeco Field, the downtown skyline, Starbucks Center, and various businesses along S Lander St and in the vicinity) due to the visual distraction of construction. Light and glare during construction does not follow the normal pattern of lighting experienced in a streetscape free of construction activities and can be a distraction for drivers particularly.

The introduction of construction equipment and related activities would be disruptive to the viewing population, but because of the limited construction duration (approximately 2 years), the nonresidential nature of the viewing population, and proposed mitigation measures (described in 4.2), the impact is not expected to be substantial.

### 4.2 Construction Avoidance, Minimization, and/or Mitigation

Because construction would occur over the course of several years, it is important to visually inform the public of construction activities while simultaneously mitigating negative aesthetic features.

The following are proposed mitigation measures for the construction phase of the project:

- Project signs should provide public notification of detours, area closures, a public access plan with graphics, including providing visitors to adjacent buildings information on entry points and notification that these buildings are open during construction.
- The project website and other public notification methods should provide continuous updates regarding construction activities and schedule.
- Construction-related light and glare should be minimized through such means as directional lighting or light barriers. Staging and laydown areas should be screened from outside viewing, and maintained in a clean and organized manner.



## 5. OPERATIONAL IMPACTS AND MITIGATION MEASURES

This chapter evaluates the compatibility of the grade-separated structure (bridge) on visual resources located within and adjacent to S Lander St. It also evaluates how the project would affect viewers as measured by their sensitivity to the project. Changes to the visual quality as experienced by viewers is measured as beneficial, adverse, or neutral.

### 5.1 Visual Resources

As described in Section 3.1, Affected Environment, there is nothing overly memorable about the visual resources within the project corridor, with the exception of the Starbucks Center. The most prominent visual features are generally found within the middle ground, located approximately 0.5 to 2 miles from the proposed alignment. These features include Beacon Hill to the east, the downtown skyline to the north, and to a lesser extent the Port of Seattle freight cranes and the eastern ridge of West Seattle.

The size and architectural treatment of the new bridge are expected to fit with the surrounding uses and the greater SODO neighborhood. The bridge would be about 950 feet long, 67.5 feet wide, and at its high point the structure (roadway and solid barriers) would be 48.6 feet above grade. For safety, fencing along the bridge near the high point and over the railroad tracks would extend to a maximum of 15 feet above the solid barriers to a height of 62.6 feet as required by the Federal Railroad Administration. The portion of the bridge extending over the tracks would be of greater height than many of the low-lying structures in the corridor.

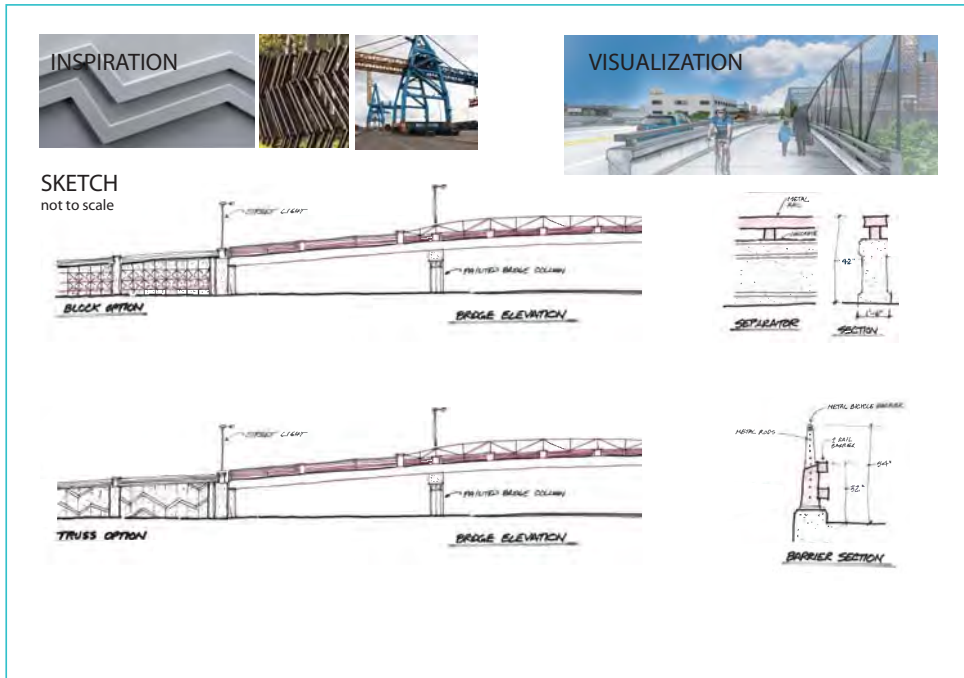
The structure would be designed with either an industrial theme or an Art Deco theme. As shown in Figure 5-1, the industrial theme would be compatible with the surrounding land uses, while the Art Deco theme and overall structural curvature would harmonize with the Starbucks logo adorning the center's pronounced clock tower. The structural curvature of the bridge and associated fence would also be well-matched with the Safeco Field and CenturyLink Field roof lines in the middle ground. The bridge would be constructed primarily of concrete and would reflect the industrial nature of the surrounding landscape; these project materials would be contextual. In addition to roadway lighting, decorative lighting may also be added along the bridge barriers. The determination of the final structural design theme will consider important factors such as public input, further design, constructability, and cost.

Because of the size of the structure, and the need for clearing and grading in excess of the structural footprint for construction, tree removal would be a necessary component of the project. However, given the already limited vegetation and the project's tree replacement ratio of 2:1, the loss of trees would not be highly noticeable in the short term as they become established, and would become an improvement in the long term, with the increased vegetation cover ultimately enhancing the streetscape. The introduction of parking beneath the bridge on the east side of the tracks would introduce additional visual elements. Lighting would be installed under the bridge on the east side where the access road and potential parking area are located.

Overall, while the new bridge would be large in scale and would dominate the visual character of the project area, it would be largely compatible with the existing and future visual character of the SODO neighborhood. Several other east-west grade-separated bridges span the railroad tracks in SODO, and the height of the new structure would not diminish the character of surrounding buildings and infrastructure. Because the surrounding industrial zone generally consists of low-lying rectilinear buildings of limited architectural interest and with inconsistent setbacks, the proposed alignment is likely to have a positive effect on the immediate landscape by improving architectural unity in the

# POTENTIAL URBAN DESIGN OPTIONS

## INDUSTRY THEME



## DECO THEME

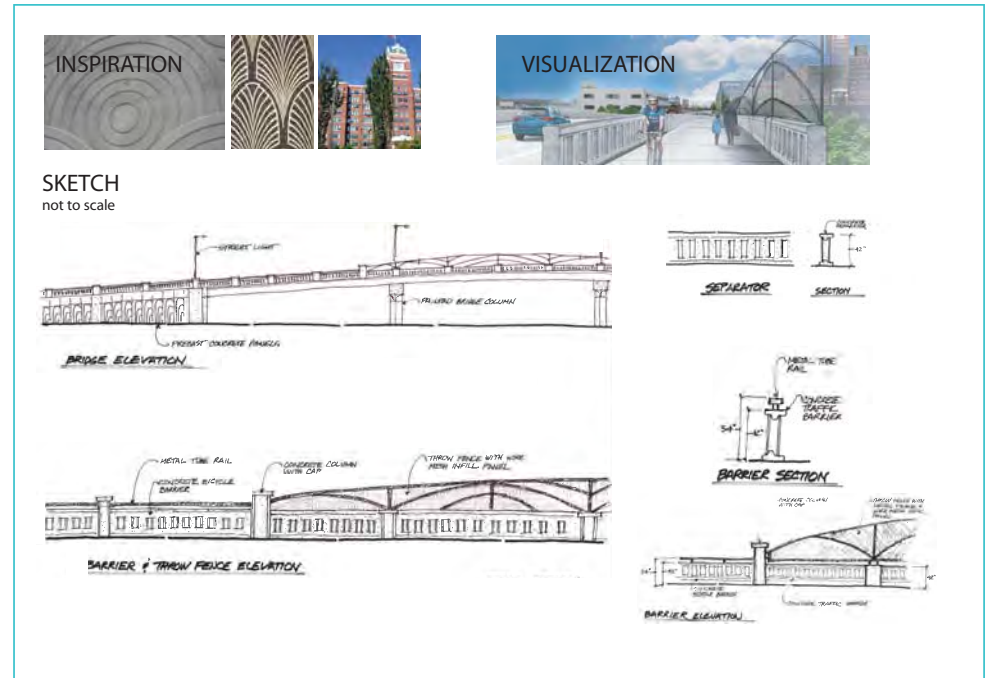


Figure 5-1. Potential Urban Design Options

project area. The bridge would have the potential to become a memorable structure in relation to the overall neighborhood and would improve the availability of views for travelers. Figure 5-2 illustrates the relationship of the new structure to the surrounding neighborhood from a bird's eye view.

## 5.2 Viewers

As described in Section 3.1, the affected population considered in this analysis includes neighbors, defined as those who would be looking at the project, and travelers, defined as those traveling through the project area. Within these categories, different viewers have different degrees of sensitivity. Viewer sensitivity is the outcome of two factors: exposure and awareness. Viewer exposure is evaluated using the following factors:

- Proximity—the viewer's distance from the visual change
- Extent—the number of people that would be exposed to the visual change
- Duration—the amount of time for which the viewer would view the project

Viewer awareness is evaluated using the following factors:

- Attention to the project—i.e., viewers are less sensitive to a routine view than to a unique view
- Focus—the presence of one or more distinct focal points that draw the attention of the viewer
- Protection—formal or informal restrictions on changes to a visual resource, such as view protection ordinances or regulations regarding changes to historic structures

Using these factors, the analysis assesses the visual changes experienced by viewers of the proposed project (travelers and neighbors) as **beneficial, adverse, or neutral**. A change in visual quality is considered beneficial when the project would enhance visual resources or create better views. When the project would degrade visual resources or obstruct and alter desired views, it would be considered adverse. A project is considered neutral when the changes it makes are neither beneficial nor adverse. The following sections provide an analysis of the viewing population's sensitivity to the project.

### 5.2.1 Neighbors Viewer Group

The neighbors viewer group consist primarily of two types of people: 1) visitors (i.e. patrons) of businesses along the corridor, and 2) those that work in these businesses (i.e. employees). Patrons visiting businesses would have a short duration of exposure to the new structure, while employees who work at these businesses would have a greater exposure.

Changed access to businesses along S Lander St would alter the views for pedestrians, motorists, and bicyclists within the neighbor viewer group, as described below (see Figure 5-2 for the overall changed views for neighbors).

- Motorists, pedestrians, and bicyclists accessing the Frye Lander Station would experience a different view when looking north down Occidental Ave S. Instead of the notable view towards downtown, they would see a retaining wall, the bridge structure, and landscaping.
- Motorists, pedestrians, and bicyclists accessing Pacific Galleries from 3rd Ave S would see a raised intersection where 3rd Ave S meets the new bridge grade. Further west, these visitors would see a retaining wall, the bridge structure, and potentially parking underneath the bridge structure instead of views across S Lander St towards the John Stanford Center, railroad, and Shell station.





Figure 5-2. Bird's Eye View of S Lander St Grade Separation looking northwest from 3rd Ave S

- The removal of the sidewalk between the railroad and 3rd Ave S to accommodate the driveway in front of Pacific Galleries would eliminate the views experienced by pedestrians and bicyclists that formerly utilized the sidewalk. Instead, these groups would likely use the multi-use path on the new bridge. Using this path rather than the at-grade sidewalk would enhance desirable views by providing longer-distance views to downtown, the Port of Seattle cranes, and the West Seattle and Beacon Hill ridges.
- Motorists, pedestrians, and bicyclists accessing the South Lander Business Park and John Stanford Center on the north side of S Lander St would generally be experiencing the same views towards downtown as they do today, but would have changed views toward the project (the raised 3rd Ave S intersection and Occidental Ave S dead end, the grade-separated structure, walls, new landscaping, and the potential below-structure parking east of the railroad).
- Pedestrians and bicyclists on at-grade sidewalks would experience a more enclosed effect, primarily on the sidewalks between businesses along S Lander St between 1st Ave S and Occidental Ave S.

Because the patron/visitor viewing population is limited in number and duration, sensitivity to the new bridge would be considered **neutral**. Therefore, no further analysis was performed for this neighbor subgroup. The analysis below considers the degree of impact to those that work in adjacent businesses.

#### ***John Stanford Center for Educational Excellence***

The John Stanford Center has the greatest likelihood for views of the project, because it has a large number of employees and is located immediately north of the new overpass. Employees and visitors would view the project from the facility's parking lot, and also from windows facing S Lander St. Currently, the views towards S Lander St from this building include the S Lander St streetscape, the railroad, and businesses on the other side of the street (e.g., Republic Services Recycling and Pacific Galleries). With the exception of the large, horizontal recycling center signage that can be viewed from most vantage points (notably the second and third stories of the building), existing views towards the project from the John Stanford Center are relatively undistinguished. The introduction of a large, curvilinear structure with unique architectural design would likely enhance the character of the existing views and provide aesthetic benefits with its proportion and detailing. Therefore, the introduction of the structure would overall be **beneficial** to those visiting and working in the John Stanford Center. Figure 5-3 illustrates the current view and the changed view with the project looking southwest from the John Stanford Center.

#### ***South Lander Business Park and Frye Lander Station***

The proposed bridge would diminish the views of the railroad crossing for a limited number of viewers who work in South Lander Business Park and Frye Lander Station. Prominent views from the Frye Lander Station towards the tower of the Starbucks building would remain; however, views of the lower portion of the building would be blocked by the bridge structure. Views of the more prominent downtown skyscrapers to the north, which are currently disrupted by powerlines and the South Lander Business Park, would be eliminated. The new structure and associated retaining walls would reduce the existing feeling of openness created by the broad streetscape and low-lying buildings. However, the proposed landscaping along the retaining walls would soften the vertical prominence of the structure, and the introduction of patterns or other unique wall treatments would add complexity to reduce its perceived scale. During most months of the year, the structure would cast shadows on the South Lander Business Park parking lot and north facing windows. This may be considered bothersome to those working there; however, the number of individuals that would experience shadows is low, and they are workers rather than residents.

Because the railroad is the only prominent view from these locations, and the feeling of openness is somewhat interrupted by existing landscaping, the parking lot setback, and other features within the streetscape that distract the viewer, the introduction of the bridge and other features would improve the perception of built order and enhance memorability compared to the existing landscape. Overall, the introduction of the structure would likely have a **beneficial** or **neutral** effect on this viewer group. Figure 5-4 depicts the current view and the changed view with the project looking south on Occidental Ave S west of South Lander Business Park. The project would not change views to the north at this location.

#### ***Pacific Galleries Antique Mall***

Pacific Galleries is a 42,000-square-foot warehouse that showcases antique and vintage wares in an atmosphere that emulates a streetscape (the aisles are named for Seattle streets). Primary views towards the project are concentrated at the entrance and parking area east of the building. Once inside the warehouse, views are mainly directed towards the store aisles and merchandise. As with South Lander Business Park and Frye Lander Station, the new bridge and associated retaining walls has the potential to reduce the existing feeling of openness created by the broad streetscape and low-lying buildings. From lower-floor windows, views would be of the potential parking area underneath the bridge span and the proposed roadway that would be constructed south of the grade-separated structure. It is expected that these views towards the parking area and new roadway would be interrupted as evidenced by existing merchandise observed in the windows including shelves of objects, antique doors and windows, paintings, and a bright green and pink pattern of painted window squares. The sense of enclosure and view blockage would under most circumstances be more evident for viewers looking outward from inside the building because the building has no setback from the existing right-of-way, but under these circumstances, the sense of enclosure is lessened by the focus of views inward and the interruption of views outward by store merchandise. Views looking north from the parking area would be blocked by the bridge, which would be highly prominent because of its location just to the north of the current sidewalk edge.

Although the introduction of the project may change visual character by reducing openness currently experienced by the broad streetscape and low-lying buildings, the degree of sensitivity to this change is low given that the viewer's attention is mostly directed inward, towards the mall, not the windows, which function more as passive lighting than providing views looking outwards. In addition, the number of viewers is relatively small, and the duration of their presence in the project area is short. Given these circumstances, the visual change experienced by the viewers associated with Pacific Galleries is considered **neutral**. Figure 5-5 depicts the current view and the changed view with the project looking west from the southeast corner of 3rd Ave S.

#### ***Pius Kitchen and Bath, JC Marble and Granite, Shell Gas Station, Pep Boys Auto***

The other buildings adjacent to the project area include commercial buildings (Pius Kitchen and Bath and JC Marble and Granite) at the west end of the project area that are focused on 1st Ave S, rather than S Lander St, and a service station (Shell) and automobile repair facility (Pep Boys Auto) at the east end of the project area. Because viewers on 1st Ave S generally are not oriented to the project area, the service station and automobile repair facility are set back from S Lander St, and all four businesses are at the terminus of the project and therefore most views would generally be unchanged, the introduction of a new grade-separated structure would have a **neutral** effect. Figure 5-6 depicts the current view and the changed view with the project looking east from the northwest intersection of 1st Ave S and S Lander St.



Existing View



Proposed View



**Figure 5-3. Existing View and Proposed View looking southwest from the John Stanford Center for Educational Excellence**



Existing View



Proposed View



**Figure 5-4. Existing View and Proposed View looking south from the Intersection of Occidental Ave S and South Lander Business Park**



Existing View



Proposed View



Figure 5-5. Existing View and Proposed View looking west from the southeast corner of the S Lander St and 3rd Ave S Intersection



Existing View



Proposed View



Figure 5-6. Existing View and Proposed View looking east from the northwest corner of 1st Ave S and S Lander St

## 5.2.2 Travelers Viewer Group

The traveler viewer group would have the greatest exposure to the project. These viewers include pedestrians, bicyclists, and people in vehicles. In 2014, the average daily traffic count consisted of approximately 13,000 vehicles, 1,400 pedestrians, and 100 bicyclists (SDOT 2015). With the introduction of the bridge structure, views currently experienced by this user group would change. These changes include an increased breadth of views, a reduction in utility line visual interruptions, reduced duration of views for drivers, reduced views to adjacent businesses, and minor changes in light and shadows.

The elevation of the bridge would markedly enhance views for travelers, particularly at the center of the structure. Middle-ground views at the railroad crossing, which are already prominent, would expand, particularly views towards downtown. Views towards the Port of Seattle freight cranes and West Seattle would introduce greater visual interest to the experience of travelers headed west along the proposed bridge. Many of the current views along S Lander St include above-ground utility lines and railroad crossing infrastructure, which would be supplanted by more aesthetically pleasing middle-ground views. Although some power lines would need to be raised by approximately 2 feet to meet railroad clearance requirements, the volume of above-ground telecommunication and power lines would generally be reduced by the project. Figure 5-2 provides a bird's-eye view to give an understanding of how the structure would be elevated at or above adjacent buildings, thus providing more expansive views for travelers.

Because the bridge would eliminate delays caused by railroad operations, the duration of prominent views (i.e., downtown skyline, Starbucks tower) experienced by travelers, primarily motorists, would be reduced compared to existing conditions. The reduced duration of views would be experienced by motorists traveling west with views towards Starbucks, viewers traveling east toward Beacon Hill, and motorists that have views toward downtown during railroad crossing wait times.

Viewer exposure to at-grade businesses along S Lander Way would be reduced. Pacific Galleries would have the greatest change in visibility. Pacific Galleries has two large on-premise signs: a north-facing, horizontally prominent sign on front of the gallery, and a large freestanding sign in the northeast corner of the gallery's parking lot. Travelers would have diminished views of the north-facing sign coming from both directions. Travelers approaching the bridge from the east would retain their view of the freestanding sign in the parking lot and travelers from the west would have diminished views. Other prominent signs in the project area would remain visible, including signs for Republic Services Recycling Center and Pius Kitchen and Bath. A large billboard located at the southeast intersection of 3rd Ave S and S Lander St and the flag pole on the John Stanford Center would also remain visible. Overall, the greatest reduction in business visibility would be of views toward the Pacific Galleries building and signage, which would be a negative impact for that commercial business.

The traveler user group is not expected to experience significant light and glare effects because of the project. The lighting for the new S Lander St alignment would be composed of LED fixtures mounted on steel poles and placed on the north side of the bridge. Decorative lighting may be placed along the bridge barriers and would be oriented to shine directly on the structure. The potential parking area below the bridge and in the vicinity of Seattle School District property and Pacific Galleries would be illuminated by underdeck light fixtures that would point downward. On the west side, the underside of the structure would be fenced off; no lighting is anticipated at this time, but it may be considered during final design. The fence on the south side of the grade-separated structure would cast a shadow; however, due to the short duration of perceptibility, it would have little to no effect to motorists and bicyclists, the only users that would likely experience the shadow. The shadow cast by the multi-use path would be below the perceptible height experienced by most non-motorized users.

Overall, the streetscape that currently dominates travelers' views would become less intrusive and of shorter duration, and views toward more visually distinct elements in the middle ground would increase. Therefore, the overall change from travelers' point of view is considered to be **beneficial**.

### 5.3 Operational Avoidance, Minimization, and/or Mitigation

Impacts to visual quality could be avoided by choosing a design option that would maintain the appearance of the existing visual resources. However, under these circumstances avoidance is infeasible because the purpose of this project is to provide a grade separation between S Lander St and the BNSF tracks. This can only be practicably accomplished by constructing a bridge that clears the tracks by 23.5 feet (as required by BNSF) with a reasonable grade (7 percent) for the approaches. The S Lander St location is the most viable of the grade separation options the City has studied in the SODO neighborhood because it has a wide right-of-way, the appropriate distancing between the railroad tracks and adjacent streets, and a relatively small railroad crossing width.

As described in Section 3.1, the design has been developed in concert with early input from the public to coordinate the aesthetic expectations for the project. It addresses a number of visual, design, architectural, signage, and lighting parameters for the project. Adherence to these design standards will help ensure that the visual composition of the bridge and appurtenances would respect the character of the existing built elements and the surrounding streetscape. Because avoidance is infeasible, the following strategies have been incorporated into the project with the goal of improving visual cohesiveness and interest and minimizing or mitigating for visual impacts:

- Consistent treatment of sidewalk, curb, median, and crosswalks to provide visual unity and to reinforce the sense of direction.
- Consistent signage and traffic control to ensure readability for motorists, bicyclists, and pedestrians.
- Directional street lighting supports and fixtures on the bridge to minimize excess light exposure to adjacent businesses. Lighting would also be provided underneath the bridge structure for enhanced safety, including the potential parking area east of the bridge.
- Introduction of landscape materials, street trees, and other vegetation treatments that would soften the concrete piers, barriers, and columns along at-grade pedestrian routes, including the placement of trees so that they do not block views of Safeco Field or the downtown skyline, where applicable. Trees removed to accommodate the proposed structure would be replaced at a 2:1 ratio.
- Architectural treatments reflecting the neighborhood's character to large-scale features such as concrete wall approaches, columns, concrete barriers, at-grade pedestrian railings, girders, and fencing.

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