

5.6 Visual Quality

Architectural treatments will be applied to new permanent structures under the I-405 corridor's context sensitive solutions plan to enhance the look of the project. In general, existing topography and vegetation will screen the project from freeway neighbors; however, some people will have their views affected negatively.

When a person views the environment during an everyday commute or on a first-time trip through an area, the visual characteristics strongly influence a response, either positive or negative.

This section describes how WSDOT studied visual quality for the Renton Nickel Improvement Project and examined how construction and operations will affect the views found within the local communities.

What is the current visual character of the study area?

The general character of the study area ranges from built to vegetated landscapes. Several important regional landforms can be seen from the study area including the Cascade Mountains, Mount Rainier, and the Olympic Mountains. Closer views of the landscape adjacent to I-405 and SR 167 are urban or semiurban,² with the exception of the Panther Creek Wetlands along the eastern edge of SR 167, which is more forested.

Several urban parks provide additional areas of natural vegetation, as do the vegetated buffers for the Green River, Springbrook Creek, and Panther Creek drainages. Some natural vegetation and landscaping also occurs within parts of the right-of-way (ROW).



People traveling I-405 will see views change as the corridor improvements are constructed

Please refer to the Renton Nickel Improvement Project Visual Quality Discipline Report in Appendix Y for a complete discussion of the Visual Quality analysis.

How is Visual Quality Determined?

The I-405 Project Team determined the visual quality of existing views using three criteria:

- **Vividness** is the memorability of landscape components as they combine in striking and distinctive visual patterns.
 - **Intactness** is the visual integrity of the natural and human landscape and its freedom from encroaching elements.
 - **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole.
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Source: Visual Impact Assessment for Highway Projects (FHWA-HI-88-054). U.S. Department of Transportation. 1981.

² WSDOT Roadside Classification Plan

What types of construction activities will be seen as this project is built?

- Constructing temporary structures for bridge work
 - Constructing the new Benson Road Bridge over I-405 and demolishing the old structure once the new one is operational
 - Constructing the new noise wall on Talbot Hill.
 - Excavating and removing vegetation outside of the existing roadway
 - Stockpiling materials and equipment in staging areas
 - Operating construction equipment, including hauling trucks, earthworking heavy equipment, and cranes
 - Placing temporary traffic or construction signs and temporary retaining or screening walls
 - Placing temporary barriers to separate traffic from roadway widening construction
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Who are freeway users?

Freeway users experience views from the road. They are the drivers that use I-405 and SR 167 in the study area. These people see the area from the roadway for a relatively short period of time, but see it more clearly because they are closer than freeway neighbors.

Who are freeway neighbors?

Freeway neighbors experience views toward the road. They are the people that live, work, and recreate within sight of the freeway. These people see the study area for much longer periods of time than freeway users, but the views for freeway neighbors are often distant and screened by vegetation and topography.

How will project construction affect visual quality?

Project construction will temporarily affect visual quality by removing vegetation and by bringing medium and heavy-duty equipment into the area. The most noticeable temporary changes to the visual character and quality of the project area will be primarily from the activities listed to the left.

When traffic is slow, drivers view the area for longer periods and will be more affected by the visible presence of medium and heavy-duty construction and demolition equipment. Traffic slowdowns through the study area are not unusual, but their duration and frequency could increase noticeably during construction. Specifically, these slowdowns will occur in the Talbot Hill Neighborhood for construction-related to the noise wall and Benson Road improvements. In addition, light and glare will increase during nighttime construction periods due to lighting needed to operate.

The visual character of the area for nearby businesses and residences will also change as screening vegetation and/or earth is removed.

How will the completed project affect visual quality?

The project will cause minor changes to visual quality for both freeway users and freeway neighbors. These changes are primarily from:

- Increasing the paved highway width on I-405 and adding a southbound auxiliary lane on SR 167 within the study area.
- Constructing retaining walls.
- Replacing Benson Road Bridge over I-405.
- Replacing the I-405 bridges over Springbrook Creek and Oakesdale Avenue with new northbound and southbound bridges.
- Constructing a noise wall within the ROW near the Talbot Hill neighborhood.

The project will primarily affect freeway users who have direct though short-term views of the project. In most cases, existing topography and vegetation will screen the project from freeway neighbors who have a continuous view of the project. However, some freeway neighbors will be able to see the project changes clearly.

To compensate for negative visual effects caused by this project, WSDOT has worked with the affected communities to develop visual guidelines for the I-405 corridor called context sensitive solutions (CSS). These guidelines will provide unity and cohesiveness for the project. For example, replacing the Benson Road Bridge over I-405 will have some positive effects on visual quality because CSS treatments such as architectural piers, railings, and lighting will improve the visual quality of this structure for views toward the road and reduce effects to visual quality for views from the road.

How are Context Sensitive Solutions (CSS) used for this project?

The CSS guidelines incorporate the communities' design preferences. These reflect an I-405 theme of "Culture, Nature, and Progress," with nature being the dominant theme. These guidelines will be applied fully to permanent elements, which are limited on the Renton Nickel Improvement Project. One example of full treatment is the new Benson Road Bridge over I-405.



View toward existing Benson Road



View toward new Benson Road Bridge with CSS treatments

Vegetation removed within the ROW (particularly stands of medium to large size trees) to accommodate the new traffic lanes and associated facilities will negatively affect visual quality in some areas. For I-405, vegetation will be removed to replace the Springbrook Creek and Oakesdale Avenue bridges. Stands of large cottonwood and poplar trees on either side of the new bridge will not be replaced due to ROW limitations in this area. Additional ROW will not be acquired for the sole purpose

of replanting these trees. Some trees and vegetation will also be removed to construct the retaining wall on the slope south of the Tukwila City Hall. For SR 167, trees and vegetation will be removed within the ROW of the southbound auxiliary lane from I-405 to SW 41st Street.

Facilities such as the noise wall and retaining walls will negatively affect visual quality in some areas. The noise wall will extend from west of the intersection of South 14th Street and South 15th Street east to Talbot Road. The wall will be approximately 18 feet high and 2,150 feet long. This wall will block views of downtown Renton for residents along South 14th Street.

Will the project create new sources of light, shadow, or glare?

Overhead lighting in the study area will be similar to existing conditions; therefore, no new effects are expected.

The planned I-405 bridge replacements and widenings will increase shadow and shade effects. In particular, replacement of the I-405 bridge over the Springbrook Creek side channel will increase shadows and shading over Springbrook Trail, which will affect recreational viewer groups using this trail. Also, the I-405 bridge widening over Talbot Road and the Benson Road Bridge replacement over I-405, which includes removing the earthen berm adjacent to southbound I-405, will increase shadow and shade effects for freeway, local traffic, and pedestrian viewers on Talbot Road.

No new sources of glare are anticipated because the new structures will be similar to the existing ones.

What measures are proposed to minimize effects on visual quality during construction?

Measures used to minimize effects on traffic and social resources will also serve to minimize effects on visual quality during construction.



View toward existing Springbrook Creek Side Channel Bridge and trail underneath



View toward new I-405 southbound and northbound bridges over Springbrook Creek and Oakesdale Avenue and trail underneath

What measures are proposed to minimize effects on visual quality during operation?

Guidelines from the Roadside Classification Plan (RCP) and CSS process for the I-405 corridor will be applied to compensate for the negative visual effects caused by the project.

The RCP identifies a treatment level 2 for roadside restoration, which is the treatment level that will be used for this project. Guidelines for treatment level 2 can be found in Appendix B.

For this project, the expected life of the roadside restoration will be affected by future master plan phases. In locations where the future master plan phases will redisturb the roadside, fast-growing vegetation (such as poplars and maples) will be used to quickly achieve the required functions within the expected life of the planting.

The CSS guidelines for the I-405 corridor complement the RCP and provide another layer of compensation for unavoidable negative project effects. The permanent project elements will have the “full” CSS guidelines applied where appropriate and practicable. A list of applicable guidelines is available in Appendix B.

The new Benson Road Bridge over I-405 is the main project feature that will receive the “full” CSS treatments because it is a permanent project element. Temporary project elements will also receive “limited” CSS architectural treatments as described below:

- Apply texture to concrete surfaces to reduce apparent scale and to blend with other elements within the corridor.
- Darken concrete surfaces to aid in reducing reflective sunlight glare and apparent reduction of scale.

The full CSS treatments will be applied during future Master Plan phases for the overall I-405 corridor.

How is the RCP used for this project?

The Roadside Classification Plan (RCP) provides guidance for restoring the roadside and providing needed/ desirable functions such as permanent erosion control, buffering/screening, driver guidance, etc.). For improvement projects such as this, the RCP requires roadside restoration from right-of-way to right-of-way throughout the project limits. In practice, this means that disturbed areas of the roadside are always revegetated to provide site-specific functions/needs. In some situations, as described in the RCP, revegetation and other treatments may be required beyond the disturbed areas to provide the needed/desirable functions.

How do permanent and temporary project elements differ?

Permanent project elements are part of the I-405 Corridor Master Plan. Temporary project elements are not part of the Master Plan and will therefore be reconstructed during future Master Plan phases.

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