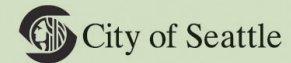


Alaskan Way Viaduct & Seawall Replacement Program



PORTAL AREA DESIGN GUIDELINES

SR 99 BORED TUNNEL ALTERNATIVE

[SELECTED PAGES](#)

SUBMITTED TO: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND CITY OF SEATTLE
PREPARED BY: ROMA DESIGN GROUP IN ASSOCIATION WITH NBBJ

JUNE 18, 2010

Signage and Tolling Support Structures

Signs, tolling gantries, light fixtures and any other required appurtenances along SR 99 should be designed to be perceived as background, not foreground, elements that blend into the surrounding area and the landscaping. Energy efficiency, maintenance, durability and the use of recycled materials are important in furthering sustainability and should be a consideration in design.

1. Sign bridges and tolling gantries on SR 99 shall be rectangular steel MONOTUBE structures sized per structural requirements and comprised of a single tube running over the roadway connected to vertical supports on either side of the highway with 90-degree angles (Figure 14). MONOTUBE structures shall not be used on city streets, even if they are designated as a highway extension, with the only exception being at the intersection of Royal Brougham Way and the access ramps that connect the bored tunnel to SR 519.

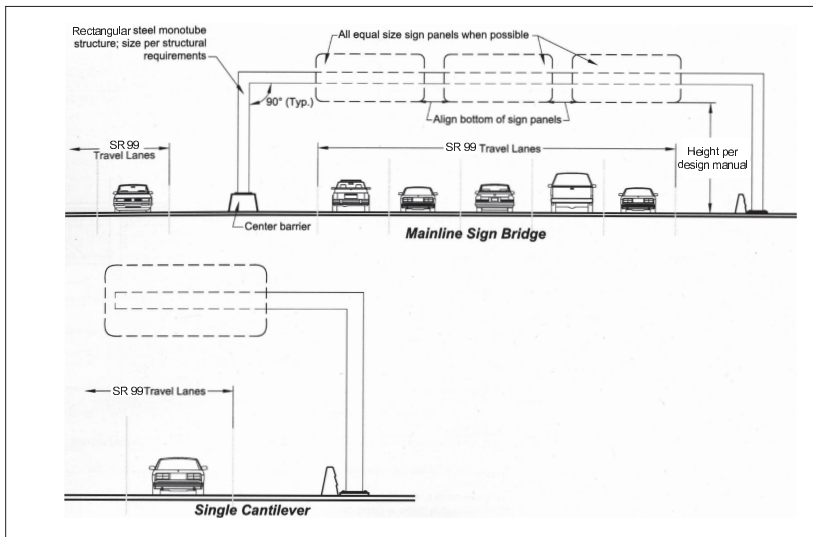


Figure 14: Monotube Structures for SR 99

2. The color of SR 99 sign bridges and tolling structures as well as chain link fences, where required, and including all hardware and utilities connected to them, shall be the Federal Standard Color 595B 20045 (dark brown) in order to allow them to visually recede into the background and for consistency with other vertical elements within the corridor. Equal size sign panels shall be utilized wherever possible.
3. Appropriately scaled signs, such as WSDOT trailblazer signs, shall be used on streets within the city, whether designated as highways and within WSDOT jurisdiction or not. The signage should indicate not only how to get to SR 99, but also to the portside and cityside trails, and the Mountains to Sound Greenway (Figure 15).

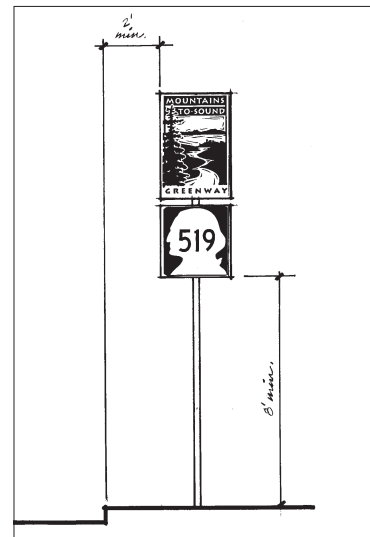


Figure 15: Trailblazer Sign

Pedestrian Barriers and Fences

1. Leftover spaces under overcrossings should be minimized so that they do not create an attractive nuisance and unsightly places prone to illicit activity. If such areas are unavoidable, then they shall be enclosed and made inaccessible. They shall also be designed in a manner that is compatible and integrated with adjacent retaining walls and supporting structures. More specifically, the underside of the elevated SR 99 highway from Atlantic Street to approximately Royal Brougham Way shall be walled-off with precast panels (Figure 16).
2. Chain link fences shall be limited in use and only provided where absolutely necessary and where they are not visible from SR 99, Alaskan Way or other adjacent city streets and public spaces. Where required, fences should be in dark colors so that they recede into the background.

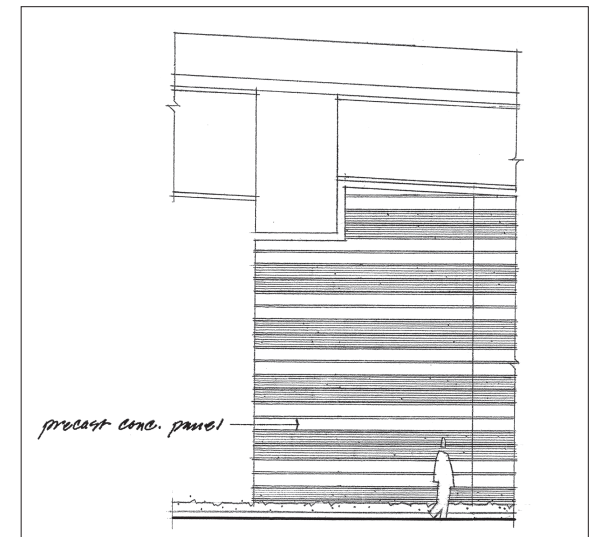


Figure 16: Typical detail of precast enclosure for elevated SR 99

GENERAL GUIDELINES

The general guidelines which follow have been developed for the limited access portions of SR 99 where it meets 6th Avenue, Harrison and Republican Streets. They apply to these areas only and not to city streets, including those portions that may be designated as extensions of SR 519. The guidelines for city streets are discussed subsequently in this document in greater detail. Figures 91 and 92 describe key components of the physical improvements within the North Portal Area.

Landscaping

The overall concept for landscaping is to reinforce the spatial configuration and clarity of the portal area, help to change scale and reinforce a sense of entry into the city and thus provide visual cues for wayfinding and orientation. Furthermore, the landscape concept is intended to ameliorate the extensive hardscape associated with the highway, improve the visual appearance of the area, create a better fit with the surrounding neighborhoods and districts and contribute to the enhancement of the urban forest and environmental quality as a whole. Where feasible, the landscape concepts should be broadened to include best management practices for stormwater management, including treatment and storage. The planting of street trees and other landscape materials on city streets, plazas and in public ways are provided for elsewhere in this document and in keeping with City Standards.

Retaining Walls and Traffic Barriers

The North Portal area requires retaining walls to provide for a transition in grade to the bored tunnel. The architectural treatment of the walls as well as the spanning and supporting structures will be an important consideration in developing a contextually responsive approach to the surrounding environment and to enhance the

aesthetic appearance and quality for the motorist as well as for adjacent development and surrounding activities. In the North Portal area, the retaining walls shall be integrated with the requirements for traffic barriers, to minimize the disruptive effect in changing materials and in maintaining visual integrity and coherence of primary structural elements.

1. Concrete retaining walls shall incorporate a WSDOT standard fractured fin finish as shown in Figure 98. Traffic barriers serve multiple purposes, as crash rails and as guardrails for maintenance workers. But whatever their purpose, they shall be integrated into the construction of the wall to give greater coherency to the structure.
2. For uniformity and safety, concrete barriers adjacent to the roadway of a consistent height shall be provided. Traffic barriers shall be a minimum of 42 inches in height, except when adjacent to a sidewalk or a roadway where bicycles are permitted, where they shall be 54 inches in height.
3. All concrete walls along SR 99 shall be finished with pigmented sealer in Mt. St. Helen's Grey according to Section 9-08.3 of the WSDOT Standard Specifications to control graffiti.

Signage and Tolling Support Structures

Signs, tolling gantries, light fixtures and any other required appurtenances along SR 99 should be designed to be perceived as background, not foreground, elements that blend into the surrounding area and the landscaping. Energy efficiency, maintenance, durability and the use of recycled materials are important in furthering sustainability and should be a consideration in design.

1. Sign bridges and tolling gantries on SR 99 shall be rectangular steel MONOTUBE structures sized per structural requirements and comprised of a single tube running over the roadway connected to vertical supports on either side of the highway with 90-degree angles (Figure 14). MONOTUBE structures shall not be used on city streets, even if they are designated as a highway extension.
2. The color of SR 99 sign bridges and tolling structures as well as chain link fences, where required, and including all hardware and utilities connected to them, shall be the Federal Standard Color 595B 20045 (dark brown) in order to allow them to visually recede into the background and for consistency with other vertical elements within the corridor. Equal size sign panels shall be utilized wherever possible.

Pedestrian Barriers and Fences

1. Leftover spaces under overcrossings should be minimized and, if unavoidable, shall be enclosed and made inaccessible. They shall also be designed in a manner that is compatible and integrated with adjacent retaining walls and supporting structures. More specifically, the underside of the elevated Aurora ramp shall be walled-off with precast panels consistent with the other wall treatments designated for the portal area.
2. An access door should be provided in the enclosed area under the ramps to allow for access for maintenance and, potentially, for storage of service equipment.
3. Chain link fences shall be limited in use and only provided where absolutely necessary and where they are not visible from SR 99, adjacent city streets and public spaces. Where required, fences should be in dark colors so that they recede into the background.