FINAL ENVIRONMENTAL IMPACT STATEMENT
AND FINAL SECTION 4(f) AND 6(f) EVALUATIONS
SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM

MAY 2011

SR 520, I-5 to Medina: Bridge Replacement and HOV Project

Hazardous Materials Discipline Report Addendum and Errata

Washington State Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

SR 520, I-5 to Medina: Bridge Replacement and HOV Project Final Environmental Impact Statement and Final Section 4(f) and 6(f) Evaluations

Hazardous Materials Discipline Report Addendum and Errata

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List of Exhibits

Acronyms and Abbreviations

HOV	high-occupancy vehicle
LUST	leaking underground storage tank
MOHAI	Museum of History and Industry
NOAA	National Oceanic and Atmospheric Administration
SDEIS	Supplemental Draft Environmental Impact Statement
UST	underground storage tank
WSDOT	Washington State Department of Transportation

Introduction

What is the purpose of this addendum?

This addendum to the SR 520, I-5 to Medina: Bridge Replacement and HOV Project Supplemental Draft Environmental Impact Statement (SDEIS) Hazardous Materials Discipline Report (Washington State Department of Transportation [WSDOT] 2009) presents the environmental consequences of the Preferred Alternative for the SR 520, I-5 to Medina: Bridge Replacement and HOV Project and compares its effects to those of design options A, K, and L as discussed in the SDEIS (WSDOT 2010).

The information contained in the 2009 Hazardous Materials Discipline Report is still pertinent to the Preferred Alternative and its effects, except where this addendum specifically revises it. Text updated to reflect the Preferred Alternative has been cross-referenced using the page numbers contained within the 2009 Hazardous Materials Discipline Report. Where an addendum exhibit updates or adds new data and/or different potential effects to an exhibit contained in the discipline report, the exhibit name is followed by "(Update to Exhibit # of the 2009 Discipline Report)."

Project design and construction information used to analyze potential effects of the Preferred Alternative on hazardous materials is included in the Description of Alternatives Discipline Report Addendum (WSDOT 2011a) and the Construction Techniques and Activities Discipline Report Addendum and Errata (WSDOT 2011b).

An errata sheet is attached to this addendum (Attachment 1) to show revisions and clarifications to the 2009 Hazardous Materials Discipline Report that do not constitute new findings or analysis.

What key issues were identified in the public and agency comments on the SDEIS?

No issues relating to hazardous materials were identified in the public and agency comments that required additional analysis or revisions to the analyses or findings presented in the 2009 Hazardous Materials Discipline Report.

What are the key points of this addendum?

The primary effects on hazardous materials related to the Preferred Alternative are summarized below. In general, many of the effects would be similar to those of SDEIS Option A; differences are shown in bold type below. The expected effects of the Preferred Alternative on hazardous materials are discussed in more detail in the Potential Effects section.

Effects during Construction

- Contaminated soil, sediment, and groundwater could be encountered during construction. **Under the Preferred Alternative, the risk for encountering contaminated soil and**

groundwater is reduced because only three hazardous material sites are affected compared to seven sites identified under Option A.

- Hazardous materials used at the construction sites could be released into the environment.
- Hazardous building materials could be generated through demolition. **Under the Preferred Alternative, the amount of hazardous building material generated through demolition would be decreased** because the National Oceanic and Atmospheric Administration (NOAA) Fisheries Science Center buildings and the Montlake 76 gas station would not be removed.
- Excavations could encounter underground storage tanks (USTs) or leaking underground storage tanks (LUSTs). **Under the Preferred Alternative, the number of USTs that would need to be decommissioned would be decreased** because the Montlake 76 gas station would not be removed.
- Accidental spills of hazardous materials could occur if best management practices were not used.

Effects during Operation

For the Seattle area, the operation of new stormwater treatment facilities under the Preferred Alternative and all the design options would be a benefit to the environment. Project stormwater treatment facilities would collect and treat highway runoff containing traffic-related contaminants such as fuels, lubricants, and heavy-metal compounds from tires and brakes. The Water Resources Discipline Report Addendum and Errata (WSDOT 2011c) includes more information on stormwater treatment facilities and their performance.

Although operation of the bridge maintenance facility would slightly increase the likelihood of potential contaminant releases to Lake Washington, spill pollution prevention and environmental control measures implemented by WSDOT would minimize this risk.

What is the SR 520, I-5 to Medina: Bridge Replacement and HOV Project?

The SR 520, I-5 to Medina: Bridge Replacement and HOV Project would widen the SR 520 corridor to six lanes from I-5 in Seattle to Evergreen Point Road in Medina, and would restripe and reconfigure the lanes in the corridor from Evergreen Point Road to 92nd Avenue NE in Yarrow Point. It would replace the vulnerable Evergreen Point Bridge (including the west and east approach structures) and Portage Bay Bridge, as well as the existing local street bridges across SR 520. The project would complete the regional high-occupancy vehicle (HOV) lane system across SR 520, as called for in regional and local transportation plans.

What is the Preferred Alternative?

The new SR 520 corridor would be six lanes wide (two 11-foot-wide outer general-purpose lanes and one 12-foot-wide inside HOV lane in each direction), with 4-foot-wide inside shoulders and 10-foot-wide outside shoulders across the floating bridge. The typical roadway cross-section across the floating bridge would be approximately 116 feet wide, compared to the existing width of 60 feet. In response to community interests expressed during public review of the January 2010 SDEIS, the SR 520 corridor between I-5 and the Montlake interchange would operate as a boulevard or parkway with a posted speed limit of 45 miles per hour and median planting across the Portage Bay Bridge. To support the boulevard concept, the width of the inside shoulders in this section of SR 520 would be narrowed from 4 feet to 2 feet, and the width of the outside shoulders would be reduced from 10 feet to 8 feet. Exhibit 1 highlights the major components of the Preferred Alternative.

The Preferred Alternative would include the following elements:

- An enhanced bicycle/pedestrian crossing adjacent to the East Roanoke Street bridge over I-5
- Reversible transit/HOV ramp to the I-5 express lanes, southbound in the morning and northbound in the evening
- New overcrossings and an integrated lid at 10th Avenue East and Delmar Drive East
- A six-lane Portage Bay Bridge with a 14-foot-wide westbound managed shoulder that would be used as an auxiliary lane during peak commute hours
- An improved urban interchange at Montlake Boulevard integrated with a 1,400-foot-long lid configured for transit, pedestrian, and community connectivity
- A new bascule bridge across the Montlake Cut that provides additional capacity for transit/HOV, bicycles, and pedestrians
- Improved bridge clearance over Foster Island and the Arboretum Waterfront Trail
- A new west approach bridge configured to be compatible with future high-capacity transit (including light rail)
- A new floating bridge with two general-purpose lanes, and one HOV lane in each direction
- A new 14-foot-wide bicycle/pedestrian path with scenic pull-outs along the north side of the new Evergreen Point Bridge (west approach, floating span, and east approach), connecting regional trails on both sides of Lake Washington
- A new bridge maintenance facility and dock located underneath the east approach of the Evergreen Point Bridge
- Re-striped and reconfigured roadway between the east approach and 92nd Avenue NE, tying in to improvements made by the SR 520, Medina to SR 202: Eastside Transit and HOV Project

- Design features that would also provide noise reduction including reduced speed limit on Portage Bay Bridge, 4-foot concrete traffic barriers, and noise absorptive materials applied to the inside of the 4-foot traffic barriers and lid portals. Quieter concrete pavement would also be used for the new SR 520 main line, and noise walls where recommended by the noise analysis and approved by affected property owners would be included in the design
- Basic and enhanced stormwater treatment facilities

Exhibit 2 summarizes the Preferred Alternative design compared to the existing corridor elements, and compares the Preferred Alternative to design options A, K, and L as described in the SDEIS. For a more detailed description of the Preferred Alternative, see the Description of Alternatives Discipline Report Addendum (WSDOT 2011a).

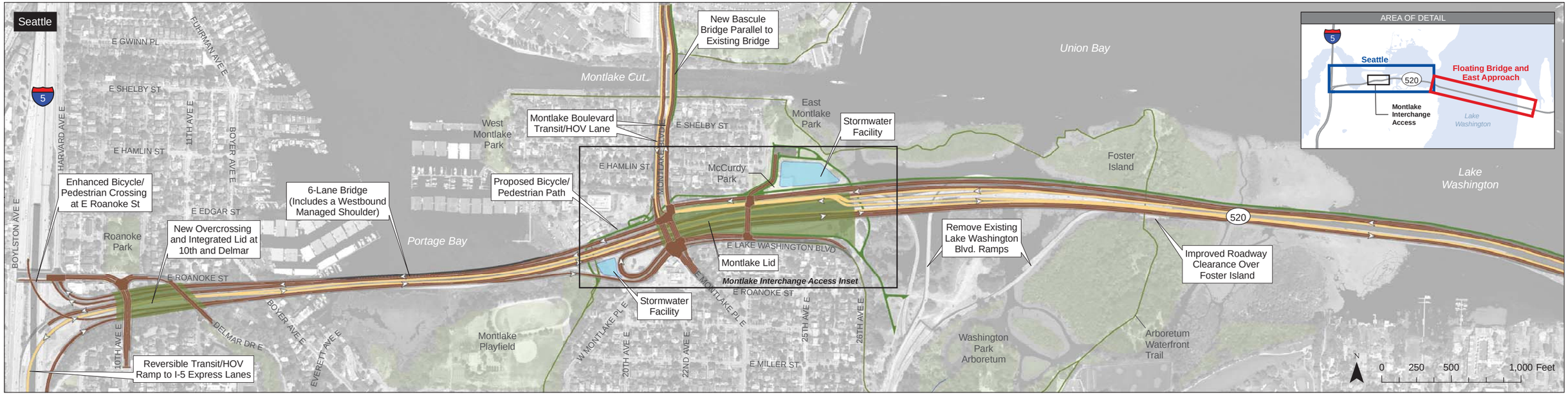
When will the project be built?

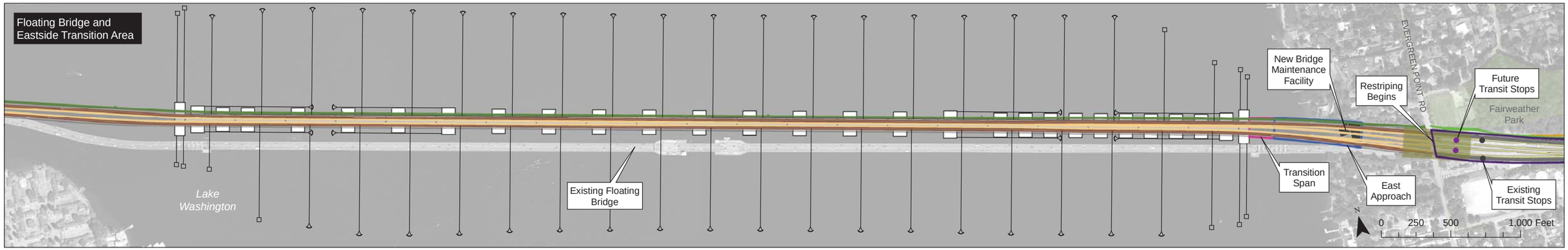
Construction for the SR 520, I-5 to Medina project is planned to begin in 2012, after project permits and approvals are received. To maintain traffic flow in the corridor, the project would be built in stages. Major construction in the corridor is expected to be complete in 2018. The most vulnerable structures (the Evergreen Point Bridge including the west and east approaches, and Portage Bay Bridge) would be built in the first stages of construction, followed by the less vulnerable components (Montlake and I-5 interchanges). Exhibit 3 provides an overview of the anticipated construction stages and durations identified for the SR 520, I-5 to Medina project.

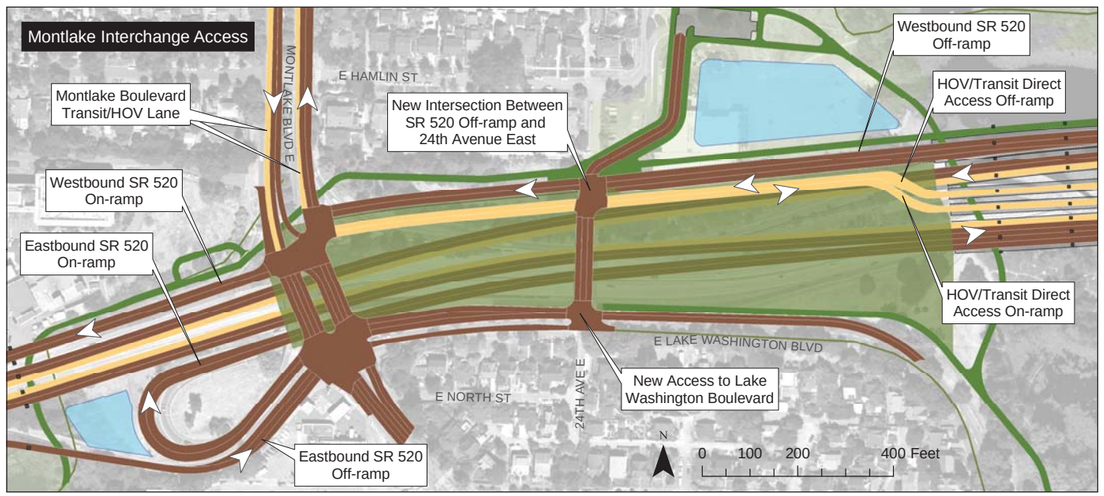
A Phased Implementation scenario was discussed in the SDEIS as a possible delivery strategy to complete the SR 520, I-5 to Medina project in phases over an extended period. FHWA and WSDOT continue to evaluate the possibility of phased construction of the corridor should full project funding not be available by 2012. Current committed funding is sufficient to construct the floating portion of the Evergreen Point Bridge, as well as the new east approach and a connection to the existing west approach. The Final EIS discusses the potential for the floating bridge and these east and west "landings" to be built as the first phase of the SR 520, I-5 to Medina project. This differs from the SDEIS Phased Implementation scenario, which included the west approach and the Portage Bay Bridge in the first construction phase. Chapters 5.15 and 6.16 of the Final EIS summarize the effects for this construction phase. Therefore, this discipline report addendum addresses only the effects anticipated as a result of the updated construction schedule.

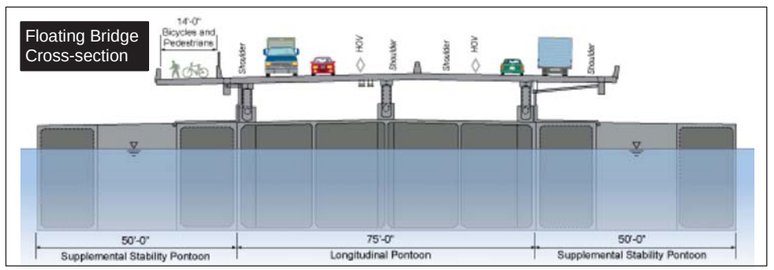
Are pontoons being constructed as part of this project?

WSDOT has completed planning and permitting for a new facility that will build and store the 33 pontoons needed to replace the existing capacity of the floating portion of the Evergreen Point Bridge in the event of a catastrophic failure. If the bridge does not fail before its planned replacement, WSDOT would use the 33 pontoons constructed and stored as part of the SR 520 Pontoon Construction Project in the SR 520, I-5 to Medina project. An additional 44 pontoons would









I-5 to Medina Project Elements

- Column
- Anchor and Cable
- Existing Regional Bicycle/Pedestrian Path
- General-Purpose Lane
- HOV, Direct Access, and/or Transit-Only Lane
- Westbound Managed Shoulder
- Proposed Bicycle/Pedestrian Path
- East Approach
- Transition Span
- Restriping Area
- Stormwater Treatment Facility
- Lid
- Pontoon

Medina to SR 202 Project Elements

- General-Purpose Lane
- HOV Lane
- Bike Path
- Points Loop Trail
- Medina to SR 202 Project Lid

Source: King County (2006) Aerial Photo, King County (2008) GIS Data (Stream), CH2M HILL (2008) GIS Data (Park). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.

Exhibit 1. **Preferred Alternative Project Elements**

I-5 to Medina: Bridge Replacement and HOV Project

Exhibit 2. Preferred Alternative and Comparison to SDEIS Options

Geographic Area	Preferred Alternative	Comparison to SDEIS Options A, K, and L
I-5/Roanoke Area	The SR 520 and I-5 interchange ramps would be reconstructed with generally the same ramp configuration as the ramps for the existing interchange. A new reversible transit/HOV ramp would connect with the I-5 express lanes.	Similar to all options presented in the SDEIS. Instead of a lid over I-5 at Roanoke Street, the Preferred Alternative would include an enhanced bicycle/pedestrian path adjacent to the existing Roanoke Street Bridge.
Portage Bay Area	The Portage Bay Bridge would be replaced with a wider and, in some locations, higher structure with six travel lanes and a 14-foot-wide westbound managed shoulder.	Similar in width to Options K and L, similar in operation to Option A. Shoulders are narrower than described in SDEIS (2-foot-wide inside shoulders, 8-foot-wide outside shoulder on eastbound lanes), posted speed would be reduced to 45 mph, and median plantings would be provided to create a boulevard-like design.
Montlake Area	The Montlake interchange would remain in a similar location as today. A new bascule bridge would be constructed over the Montlake Cut. A 1,400-foot-long lid would be constructed between Montlake Boulevard and the Lake Washington shoreline. The bridge would include direct-access ramps to and from the Eastside. Access would be provided to Lake Washington Boulevard via a new intersection at 24th Avenue East.	Interchange location similar to Option A. Lid would be approximately 75 feet longer than previously described for Option A, and would be a complete lid over top of the SR 520 main line, which would require ventilation and other fire, life, and safety systems. Transit connections would be provided on the lid to facilitate access between neighborhoods and the Eastside. Montlake Boulevard would be restriped for two general-purpose lanes and one HOV lane in each direction between SR 520 and the Montlake Cut.
West Approach Area	The west approach bridge would be replaced with wider and higher structures, maintaining a constant profile rising from the shoreline at Montlake out to the west transition span. Bridge structures would be compatible with potential future light rail through the corridor.	Bridge profile most similar to Option L, and slightly steeper; structure types similar to Options A and L. The gap between the eastbound and westbound structures would be wider than previously described to accommodate light rail in the future.
Floating Bridge Area	A new floating span would be located approximately 190 feet north of the existing bridge at the west end and 160 feet north of the existing bridge at the east end. The floating bridge would be approximately 20 feet above the water surface at the midspan (about 10 to12 feet higher than the existing bridge deck).	Similar to design described in the SDEIS. The bridge would be approximately 10 feet lower than described in the SDEIS, and most of the roadway deck support would be constructed of steel trusses instead of concrete columns.
Eastside Transition Area	A new east approach to the floating bridge, and a new SR 520 roadway would be constructed between the floating bridge and Evergreen Point Road.	Same as described in the SDEIS.

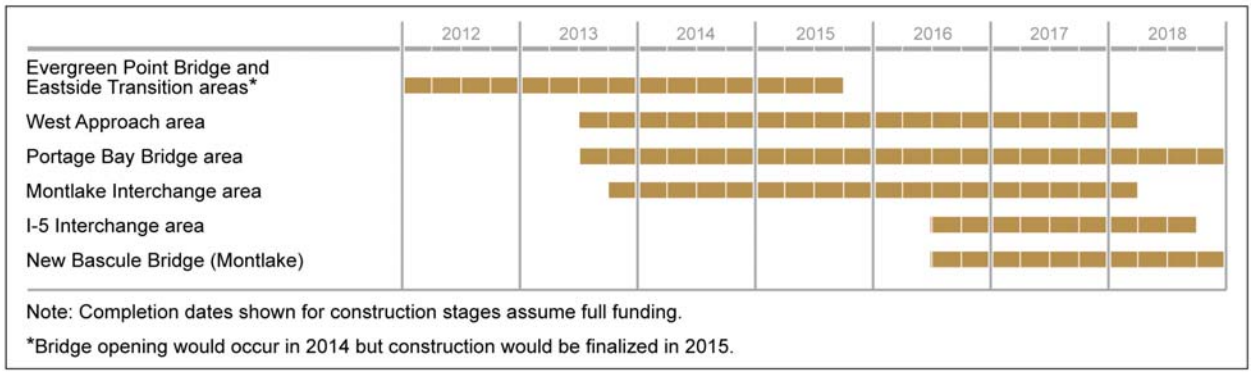


Exhibit 3. Preferred Alternative Construction Stages and Durations

be needed to complete the new 6-lane floating bridge planned for the SR 520, I-5 to Medina project. The additional pontoons would be constructed at Concrete Technology Corporation in the Port of Tacoma, and if available, at the new pontoon construction facility located on the shores of Grays Harbor in Aberdeen, Washington. Final construction locations will be identified at the discretion of WSDOT. For additional information about project construction schedules and pontoon construction, launch, and transport, please see the Construction Techniques and Activities Discipline Report Addendum and Errata (WSDOT 2011b).

Affected Environment

The 2009 Hazardous Materials Discipline Report provides a detailed discussion of the affected environment (see pages 27 through 36).

Potential Effects

The 2009 Hazardous Materials Discipline Report provides a detailed discussion of effects of the No Build Alternative and Options A, K, and L (see pages 37 through 46). The discussion below supplements the Hazardous Materials Discipline Report and discloses the effects of the Preferred Alternative, comparing it with the SDEIS options using new text and new or updated exhibits where appropriate.

How would construction of the Preferred Alternative affect hazardous materials?

Construction effects of the Preferred Alternative would be similar to those described for Option A in the Hazardous Materials Discipline Report (see pages 39 through 44). These effects include the potential for:

- Encountering contaminated soil, sediment, and groundwater
- Releasing hazardous materials used at construction sites into the environment
- Generating hazardous materials and debris through demolition
- Encountering USTs or LUSTs
- Creating accidental spills

Attachment 5 of the 2009 Hazardous Materials Discipline Report describes in detail these types of effects and associated mitigation measures.

Exhibit 4 lists the hazardous materials sites that could affect or be affected by the Preferred Alternative and the SDEIS options during construction. No new sites have been identified since the 2009 Hazardous Materials Discipline Report.

Exhibit 4. Known Hazardous Materials Sites Potentially Affected by Project Construction (Update to Exhibit 14 of 2009 Discipline Report)

Map ID[a]	Site Name	Site Address	Preferred Alternative	Option A	Option K	Option L
2	Shell Oil Products	2756 NE 45th Street				X
2	Village Autocare	2724 NE 45th Street				X
4	Montlake Landfill	NE 45th Street and Montlake Boulevard			X	X
12	National Marine Fisheries - Northwest Fisheries Science Center	2725 Montlake Boulevard		X	X	X
15	Montlake 76 Station	2625 East Montlake Place		X	X	X
17	Seattle Fire Station 22	901 East Roanoke Street		X	X	X
24	Exxon Mobil	2200 24th Avenue East		X		
24	Circle K Station No. 1461/Jay's Dry Cleaners	2350 24th Avenue East		X		
N/A	Miller Street Landfill	Near Washington Park Arboretum, East of 26th Avenue North	X	X	X	X
N/A	Sediments	Lake Washington, Union Bay, Portage Bay	X	X	X	X

[a] See Exhibit 5 for map.

Construction effects of the Preferred Alternative would be similar to those described for the SDEIS design options and could include encountering contaminated soil, sediment, or groundwater; releasing hazardous materials used at construction sites; generating hazardous building materials and debris through demolition; encountering USTs or LUSTs; creating accidental spills; and addressing worker safety and public health issues. As shown in Exhibit 4, construction of the Preferred Alternative would affect fewer properties that are likely to contain some hazardous materials and wastes than options A, K, or L. For this reason, the potential of the Preferred Alternative to produce effects relating to hazardous materials is lower than for the other design options.

Construction effects in the Montlake area would be most similar to those of Option A, with differences near the eastbound off-ramp and westbound on-ramp of the Montlake interchange. As shown on Exhibit 5, the limits of construction for the Preferred Alternative would reduce the construction easements required in this area compared to Option A.

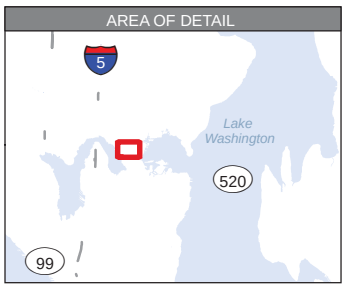
As a result, the Preferred Alternative would not remove the Montlake 76 gas service station or any buildings on the NOAA Northwest Fisheries Science Center property (two contaminated or potentially contaminated sites that Option A would acquire). Since there is no known release reported at the Montlake 76 station parcel and no building demolition and decommissioning of the USTs would occur, the risk for encountering hazardous material at or near this site is greatly reduced.

Similarly, because no buildings would be removed at the NOAA Northwest Fisheries Science Center property, hazardous building materials would not be generated as a result of demolition. The petroleum-contaminated soil under the foundation of the laboratory building and around the pipeline, if present, will remain in place and will not require special disposal. Contaminated groundwater was reported to be cleaned up in 2003, although this was not confirmed during the Department of Ecology file review. Nonetheless, the risk for encountering contaminated material at or near this site during construction activities is greatly reduced. The risk for acquiring cleanup liability due to acquisition of potentially contaminated sites is reduced under the Preferred Alternative.

As shown on Exhibit 5, the limits of construction for the Preferred Alternative would not require construction easements on East Montlake Place East, where the Circle K Station No. 1461 and Exxon Mobil are located. The Circle K Station site would potentially have been affected by Option A because of the presence of contaminated groundwater that may have migrated to the north, towards the construction zone. However, under the Preferred Alternative, construction activities are not planned in the area south of East Roanoke Street. Therefore, contaminants originating from this site are not expected to be encountered during construction activities. Similarly, contaminants originating from the Exxon Mobil site are also not expected to have an effect on construction activities under the Preferred Alternative.

A primary goal in avoiding effects from hazardous materials is to prevent contaminated material or groundwater from being released or spreading into the surrounding environment. Demolition of older buildings, such as the Museum of History and Industry, could disturb hazardous materials like asbestos, lead-based paint, and polychlorinated biphenyls, all of which were commonly used prior to the 1970s. Maintaining public and worker safety will be a priority.

All potentially contaminated sites will be managed using standard hazardous materials mitigation measures, which address procedures, investigations, and mitigation for construction activities such as demolition, decommissioning USTs, handling and disposing of contaminated soils and water, spill prevention, and worker safety and public health. These are included in the 2009 Hazardous Materials Discipline Report attachments.



24 Low- to Moderate-Risk Site (Map ID number correlates to EDR report)

Former Landfill Site

Limits of Construction

Park

N

0 1,000 2,000 Feet

Source: Environmental Data Resources, Inc. (2009) GIS Data (Listed Site), King County (2005) GIS Data (Streams and Streets), King County (2007) GIS Data (Water Bodies), University of Washington (2009) GIS Data (Former Landfill Site), and CH2M HILL (2008) GIS Data (Parks). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.

Exhibit 5. **Locations of Known Hazardous Material Sites, Preferred Alternative (Update to Exhibit 13 of the 2009 Discipline Report)**

I-5 to Medina Bridge Replacement and HOV Project

As described for the SDEIS options, there are two potentially contaminated areas, the Miller Street Landfill and the sediments in Lake Washington, Union Bay, and Portage Bay, that pose unique concerns. Similar to Option A, a construction work bridge would be installed for the Preferred Alternative by driving piles into the northern area of the peninsula where the former Miller Street Landfill was located. Soil would be removed during pile-driving and bridge installation. Based on the age of the landfill site, methane gas is not expected to be a significant issue during construction. During a geoarcheological study in the landfill area, a petroleum odor was identified and samples were collected; the material was determined to be non-hazardous. Overall, the risk is low that hazardous materials would be encountered during construction within the former Miller Street Landfill because the site was used for domestic rather than industrial waste disposal.

Sediment removal would be required during excavation for bridge column footings. Contaminated sediment, if found, would impose limits on reuse and disposal options. WSDOT currently estimates that a total of up to approximately 85,000 cubic yards of in-water sediment could be removed during construction of the Preferred Alternative. This estimate could change as design advances. Existing sediment data for Portage Bay and Lake Washington suggest relatively low concentrations of pollutants such as metals, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and phthalates. Data for Lake Union indicate sediment contaminant concentrations slightly higher than those in Portage Bay and Lake Washington. Because the existing sediment quality data are limited and the samples were not collected from areas that would be directly affected by construction, the risk of encountering contaminated sediments during replacement of the Portage Bay and Evergreen Point bridges is unknown.

Construction Effects on Hazardous Materials Compared to the SDEIS Options

Although its effects on hazardous materials are most similar to those of Option A, the Preferred Alternative would not require relocation of the NOAA Northwest Fisheries Science Center buildings. The alignment of the new Portage Bay Bridge has been shifted slightly southward. This change has resulted in the avoidance of the NOAA Northwest Fisheries Science Center buildings, eliminating the potential for generating hazardous material during building demolition and minimizing the potential for encountering subsurface contaminated material at this site.

In addition, the Montlake interchange has been reconfigured and the lid extended east to beyond 24th Avenue East. This change avoids the Montlake 76 gas station, eliminating the potential to encounter contaminated media at that site during project construction.

Because the construction footprint on East Montlake Place East ends at East Roanoke Street, contaminated groundwater originating from Exxon Mobil and/or the Circle K Station south of McGraw Street is not expected to be encountered during construction.

How would operation of the Preferred Alternative affect hazardous materials?

The operational effects of the Preferred Alternative on hazardous materials would be similar to those described for Option A (see pages 45 and 46 of the Hazardous Materials Discipline Report). These effects are described below.

Seattle Area

The addition of new stormwater treatment facilities would be a benefit of project operation. These facilities would collect and treat polluted runoff from SR 520 that could contain substances such as fuels, lubricants, and heavy-metal compounds from tires and brakes. The Water Resources Discipline Report Addendum and Errata (WSDOT 2011c) includes more information on water quality treatment methods proposed for the Preferred Alternative. No additional effects related to operating the Preferred Alternative were identified.

Lake Washington Area

As with the SDEIS design options, operating a bridge maintenance facility under the Preferred Alternative would introduce the potential for releases to the environment of hazardous materials such as fuels, lubricants, cleaners, paints, and solvents that would be stored at the facility and used during bridge maintenance activities. The risk of releases to the environment would be low, however, because the bridge maintenance facility would incorporate enhanced transfer and storage systems for fuels, lubricants, vessel effluents, and other hazardous materials. The facility would have an onsite diesel storage tank (size undetermined) to supply the emergency power generator. The risks of potential releases from this tank to the environment would be low because spill pollution prevention measures, including appropriate secondary containment, would be implemented during the tank's design and operation. A Spill Prevention, Control, and Countermeasure Plan would be implemented throughout the facility's operation.

Because the existing SR 520 bridge maintenance facility is located inland about 3 miles east of the Evergreen Point Bridge, the proposed new maintenance facility's lakeside location near Evergreen Point would improve response times for accident-related spills of hazardous materials as well as access times for routine bridge inspections and maintenance.

Eastside Transition Area

No additional effects related to operation of the Preferred Alternative were identified in the Eastside transition area.

Operational Effects on Hazardous Materials Compared to the SDEIS Options

Operation of the Preferred Alternative would have no measurably different effects on hazardous materials than Option A.

Mitigation

What has been done to avoid or minimize negative effects from hazardous materials?

Throughout the design process, WSDOT has taken care to avoid and minimize the need for property acquisitions outside of the existing right-of-way or project footprint. Minimizing property acquisition decreases the need for disturbing soils or other environmental media that have the potential to be contaminated or for demolishing structures that could contain hazardous materials (for example, asbestos-containing materials and USTs). The Preferred Alternative has further minimized hazardous material effects as described below:

- The alignment of the new Portage Bay Bridge has been shifted. This change has resulted in the avoidance of the NOAA Northwest Fisheries Science Center buildings. The generation of hazardous building material and debris during building demolition and the potential for encountering subsurface contaminated material are eliminated or minimized.
- The Montlake interchange has been reconfigured and the lid extended east to beyond 24th Avenue East. This change avoids the Montlake 76 gas station, eliminating the potential to encounter contaminated media at that site during project construction.
- Because the construction footprint on East Montlake Place East ends at East Roanoke Street, contaminated groundwater originating from the Exxon Mobil and Circle K stations south of McGraw Street is not expected to be encountered during construction.
- A Spill Prevention, Control, and Countermeasure Plan would be implemented during construction and throughout project operation. In addition, a concrete containment and disposal plan would be implemented during construction to contain hazardous materials and prevent them from leaving the construction site. A contaminant management plan would direct how contaminated soils and groundwater, if encountered, would be managed and disposed of during construction.

What would be done to mitigate negative effects that could not be avoided or minimized?

No significant unavoidable negative effects have been identified for the Preferred Alternative.

Because existing sediment quality data for Lake Washington, Union Bay, and Portage Bay are limited, the risk of encountering contaminated sediments during construction is unknown. Sediment sampling and analysis to characterize sediment quality prior to construction are recommended. Contaminated sediment, if found, would be disposed of at an approved upland facility such as a permitted hazardous or non-hazardous landfill, depending on the level of contamination. The sediments would not be reused or disposed of in open water.

What negative effects would remain after mitigation?

No significant unavoidable negative effects have been identified for the Preferred Alternative.

References

The following references are in addition to those listed in the 2009 Hazardous Materials Discipline Report.

Washington State Department of Transportation (WSDOT). 2009. *Hazardous Materials Discipline Report*. SR 520**:** I-5 to Medina Bridge Replacement and HOV Project. Supplemental Draft Environmental Impact Statement and Section 4(f)/6(f) Evaluation. SR 520 Bridge Replacement and HOV Program. WSDOT, Olympia, WA. December 2009.

WSDOT. 2010. *SR 520, I-5 to Medina: Bridge Replacement and HOV Project Supplemental Draft Environmental Impact Statement and Section 4(f)/6(f) Evaluation*. SR 520 Bridge Replacement and HOV Program. WSDOT, Olympia, WA. January 2010.

WSDOT. 2011a. *Description of Alternatives Discipline Report*. SR 520, I-5 to Medina: Bridge Replacement and HOV Project. WSDOT, Olympia, WA.

WSDOT. 2011b . *Construction Techniques and Activities Discipline Report Addendum and Errata*. SR 520, I-5 to Medina: Bridge Replacement and HOV Project. WSDOT, Olympia, WA.

WSDOT. 2011c. *Water Resources Discipline Report Addendum and Errata*. SR 520, I-5 to Medina: Bridge Replacement and HOV Project. WSDOT, Olympia, WA.

Attachment 1

Errata

Attachment 1
Hazardous Materials Discipline Report Errata

The following table corrects errors and provides clarifications to the Hazardous Materials Discipline Report (WSDOT 2009). Information contained in this table does not change the results or conclusions of any analyses in the 2009 discipline report.

Page	Current Text	Corrected Text/Clarification
3	• Usual and accustomed fishing areas of tribal nations that have historically used the area's aquatic resources and have treaty rights	• Usual and accustomed fishing areas of the Muckleshoot Tribe, which has ~~tribal nations that have~~ historically used the area's aquatic resources and has ~~have~~ treaty rights for their protection and use
36	Samples collected in 2006 indicated that the historical debris at the site consisted of a range of domestic refuse, including glass bottles, ceramics, brick, tile, mammal bones, and various scraps of metal (Onat and Kiers 2007).	Samples collected in 2006 indicated that the historical debris at the site consisted of a range of domestic refuse, including glass bottles, ceramics, brick, tile, mammal bones, and various scraps of metal. In addition, suspected hazardous materials were encountered in 2 out of 14 shovel probes installed within the Miller Street Landfill (Onat and Kiers 2007). However, the materials were determined to be non-hazardous.