

West Approach Bridge North Project overview



The Washington State Department of Transportation (WSDOT) continues to build the SR 520 corridor westward by constructing the West Approach Bridge North Project (WABN), which replaces one of the vulnerable corridor elements. WSDOT received a federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan to fund WABN construction.

To refine the federally approved baseline design, WSDOT convened the Seattle Community Design Process to hear from the public, agency partners, and design professionals, including the Seattle Design Commission (SDC).

WSDOT also collaborated with the city of Seattle through technical working groups focused on WABN design refinements. Our work resulted in a design that achieves the following:

Future Compatibility

- Advances the next phase of full corridor build-out
- Accommodates potential future light rail
- Incorporates community input
- WABN construction at Montlake does not preclude future design decisions for unfunded elements

Bridge and Corridor Safety

- Works to replace existing vulnerable structures on the west side
- Incorporates corridor and local traffic mobility improvements
- Extends a 6-lane corridor from Redmond to Montlake vicinity
- Improves safety for pedestrians and bicyclists by completing the regional shared-use path from Redmond to Seattle

Construction Period

Construction starts in fall 2014, with the new bridge scheduled to open to traffic in summer 2017.

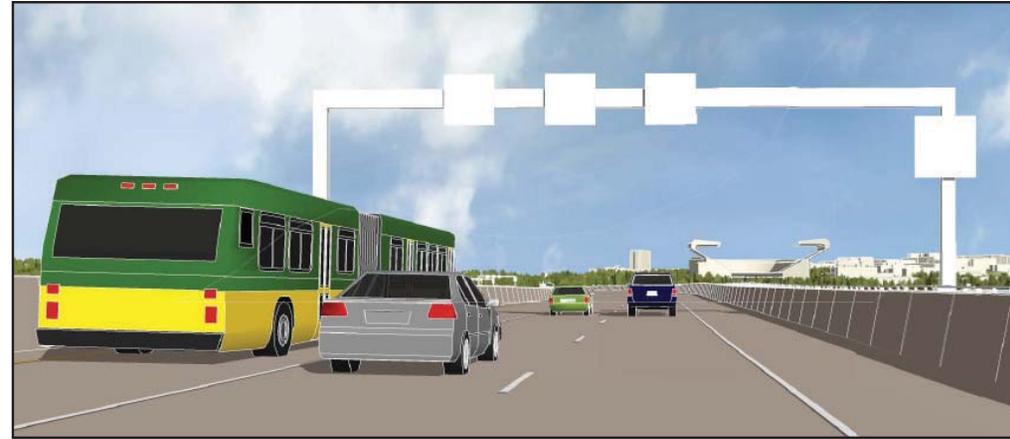
Community and Environmental Benefits

- Advances aquatic, wetland and parks mitigation
- Constructs the permanent regional shared-use path between Redmond and Seattle
- Improves bicycle and pedestrian connectivity
- Maintains existing bus service and access
- Improves transit connectivity and reliability by extending the HOV/transit lane to Seattle
- Reduces concrete volumes by nearly 50 percent as a result of baseline design refinements

West Approach Bridge North Project design visualizations, looking west



WABN will complete the bicycle/pedestrian connection across Lake Washington with a new, 14-foot-wide regional shared-use path.



WABN will have wider, safer lanes and shoulders that allow vehicles to pull off the road in the case of a breakdown.

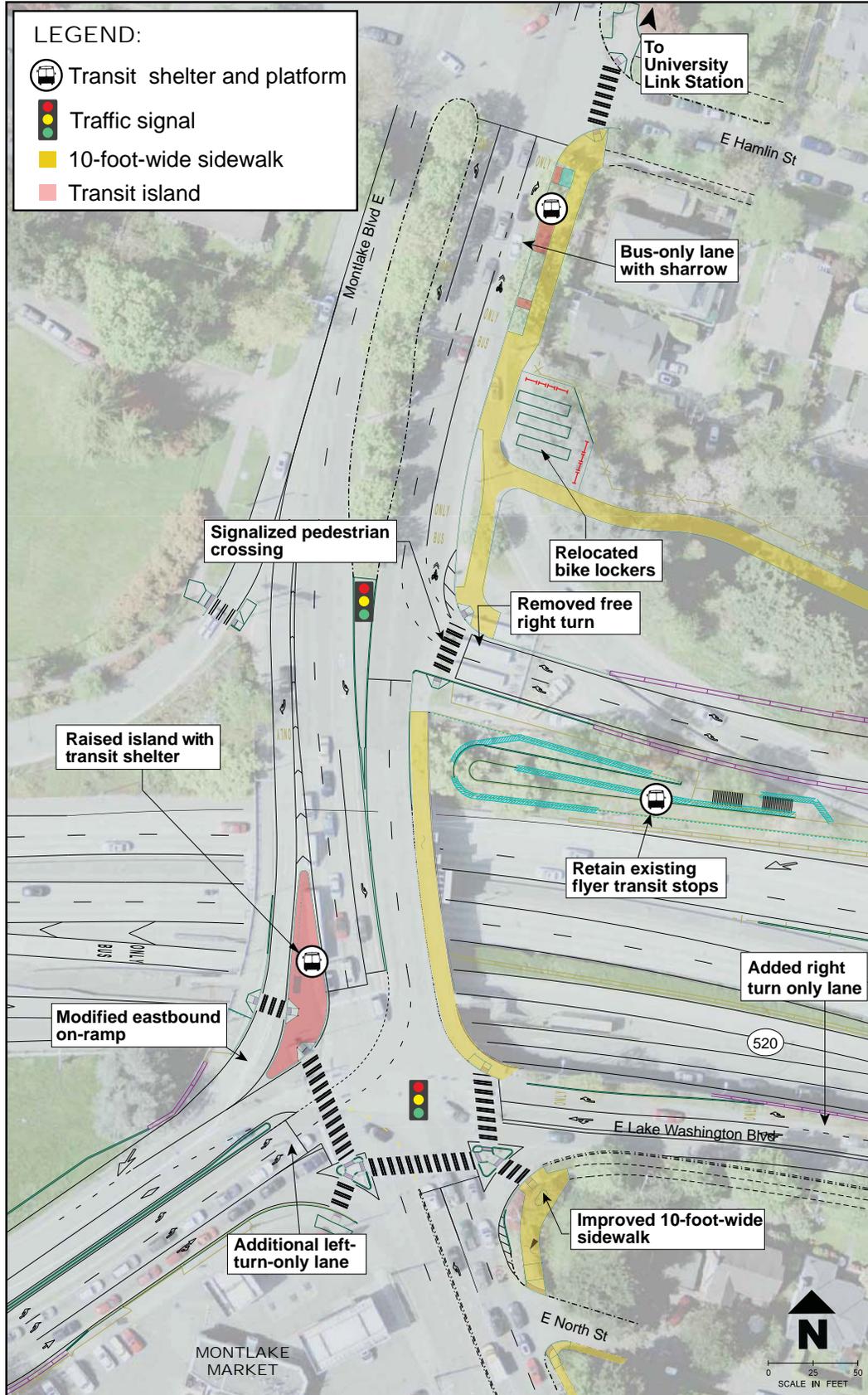


WABN will extend transit/HOV lanes from the Eastside across Lake Washington to Montlake.



WABN's new shared-use path will include "belvederes," or viewpoints, for resting and enjoying the views.

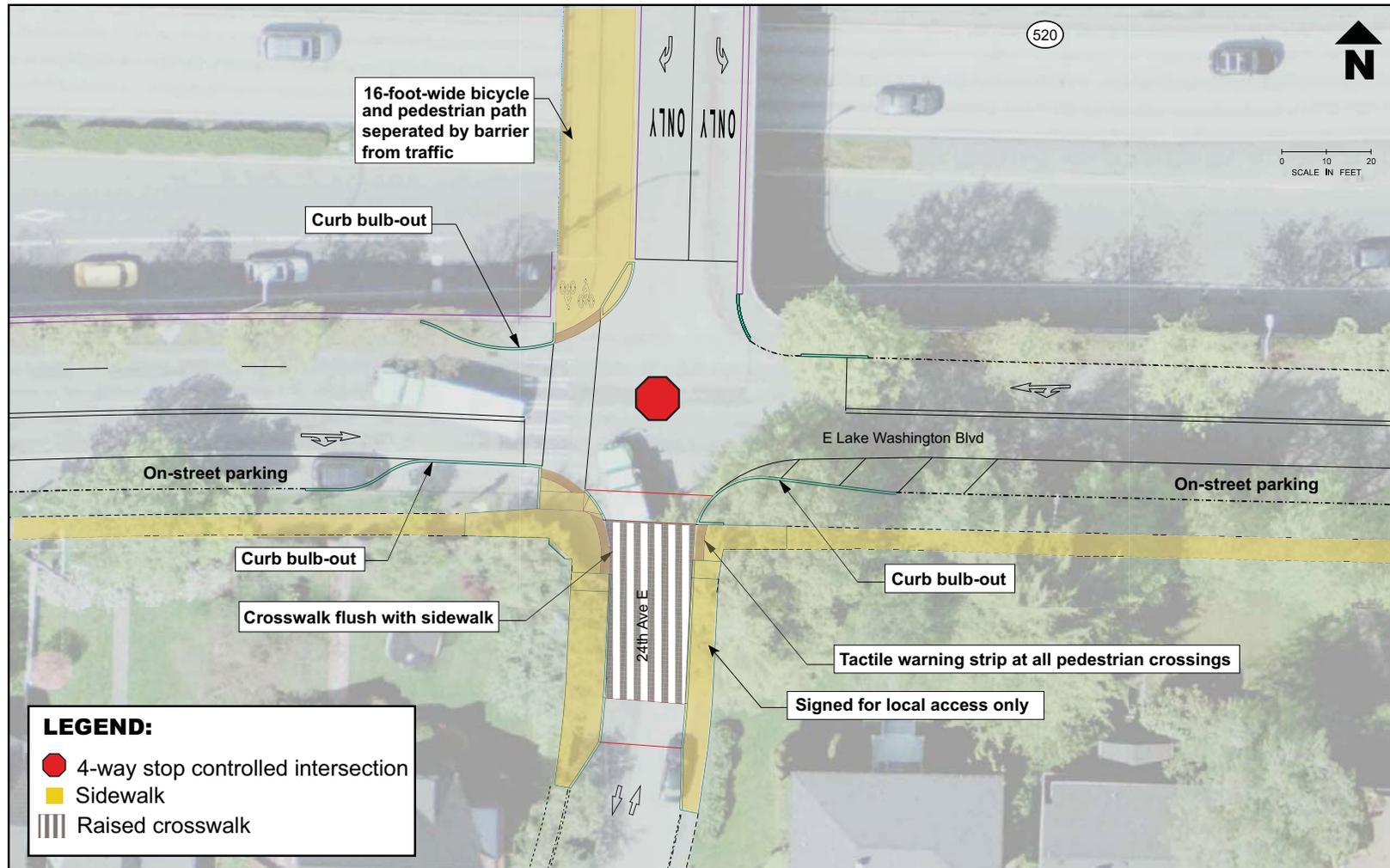
Montlake Boulevard key features



Vicinity map

Note: Curb ramps and pedestrian refuge islands updated to meet ADA standards.

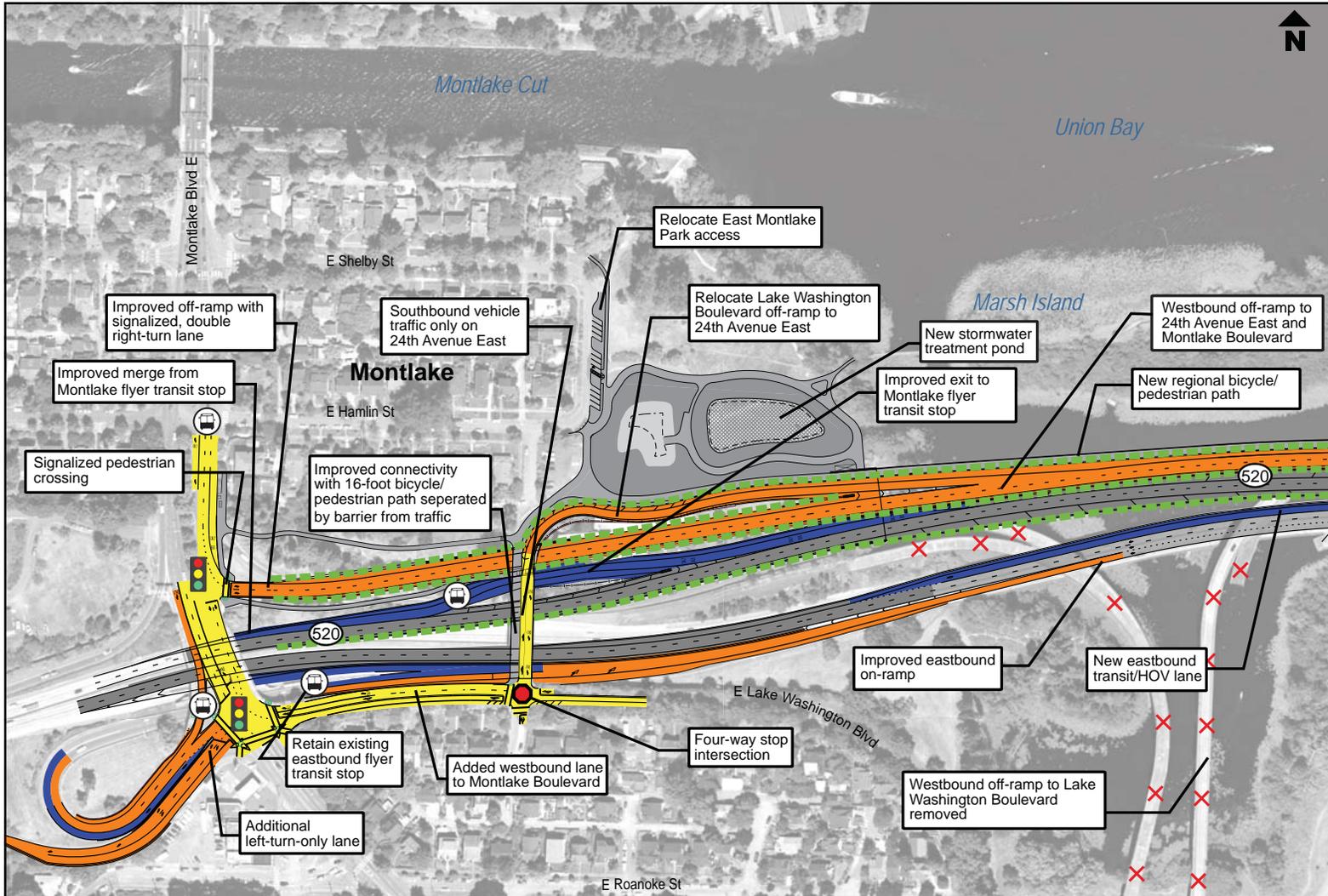
24th Avenue East and Lake Washington Blvd. intersection key features



Vicinity map

Note: Curb ramps and pedestrian refuge islands updated to meet ADA standards.

Key features of the West Approach Bridge North Project



Noise reduction strategies

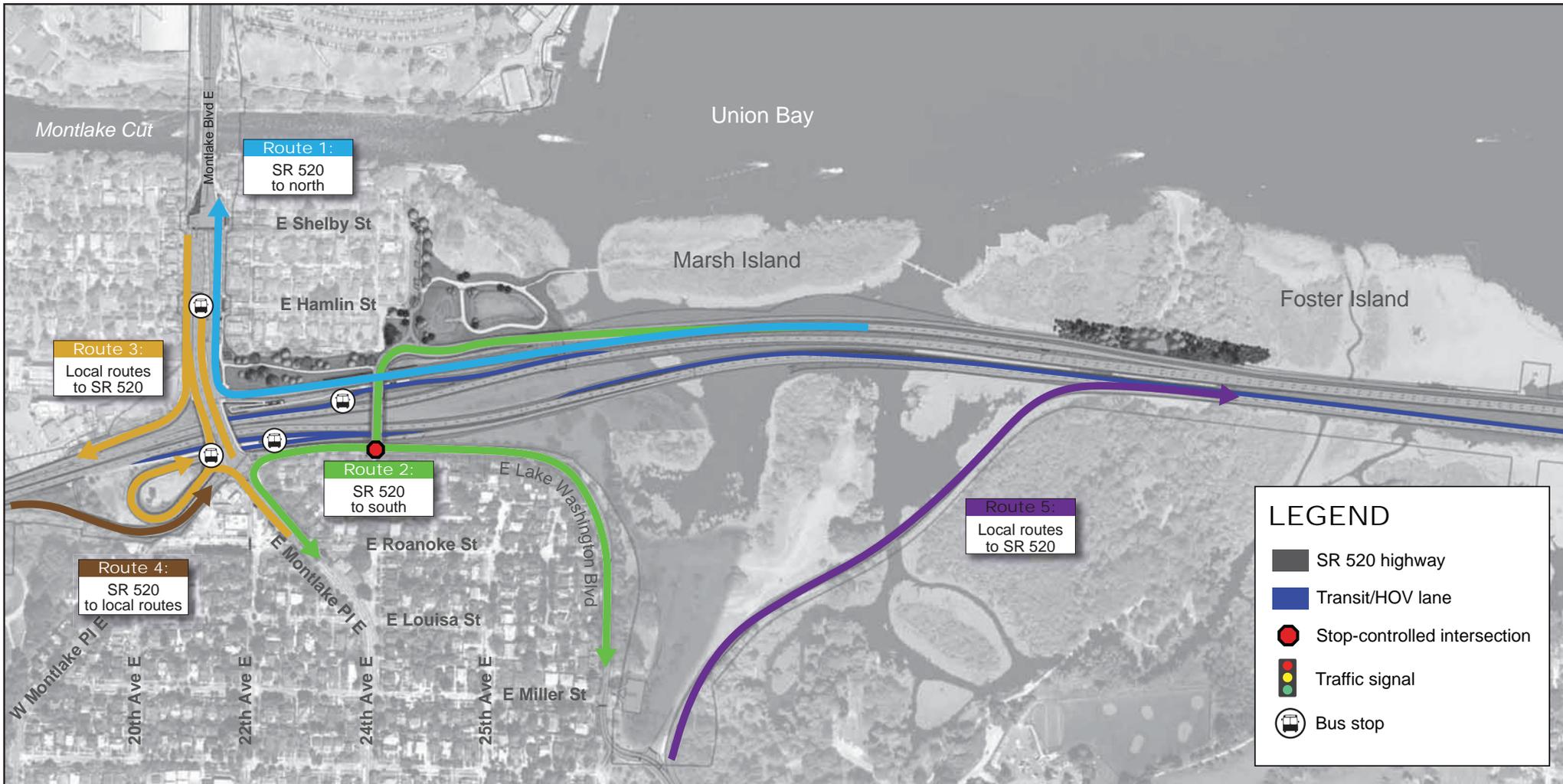
West Approach Bridge North noise-reduction strategies include the following:

- 4-foot concrete traffic barriers (taller than standard barrier)
- Encapsulated bridge joints
- Quieter concrete pavement on the new bridge

LEGEND

- SR 520 highway
- On- and off-ramps
- Local arterials
- Transit/HOV ramps
- ✕ Removal of on- and off-ramps
- Stop-controlled intersection
- Traffic signal
- Bus stop
- 4-foot concrete traffic barriers

Traffic routes after completion of the West Approach Bridge North Project



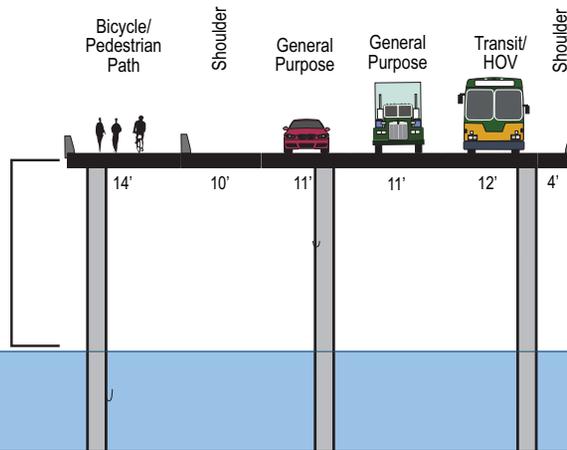
Cross section of new WABN structure and existing SR 520 west approach near Madison Park

New West Approach Bridge North (westbound)

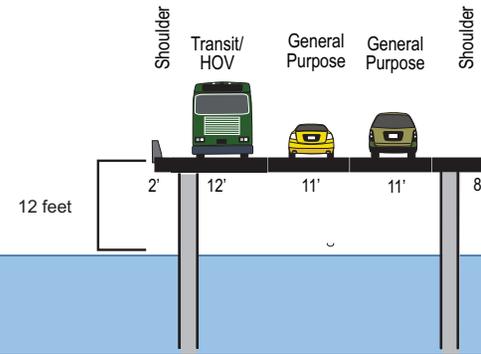
Existing west approach bridge, restriped (eastbound)



Vicinity map



Varies: 30-55 ft feet from Montlake shoreline to near Madison Park

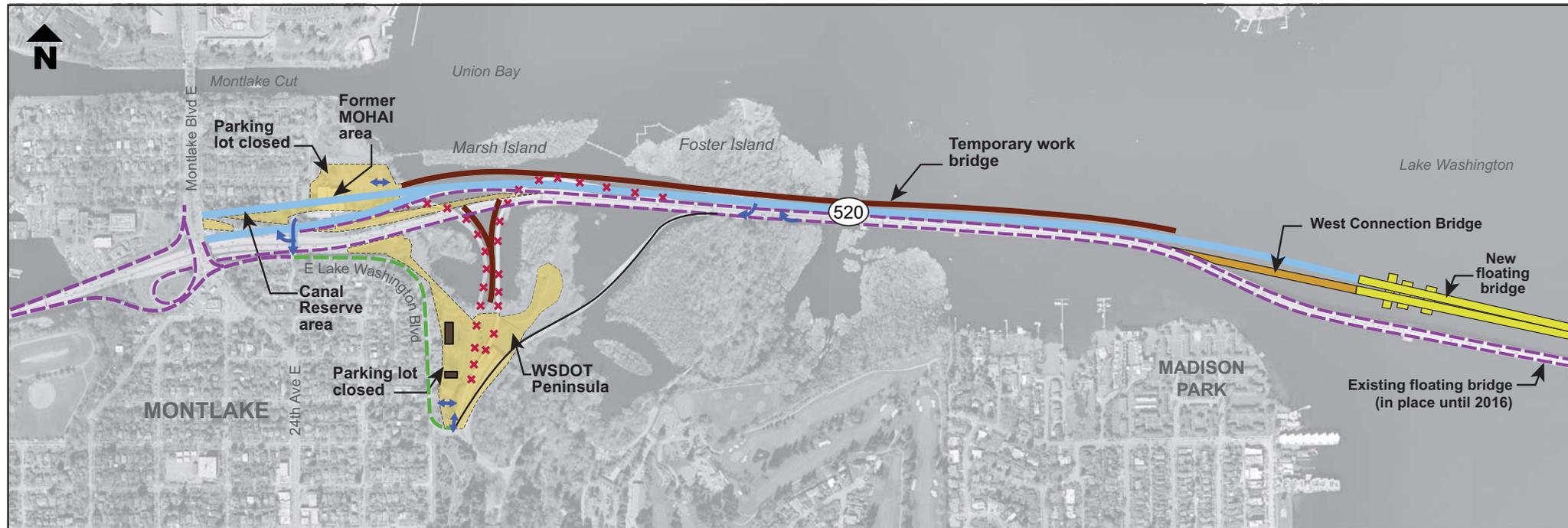


Two general-purpose lanes and one transit/HOV lane (westbound) and a bicycle/pedestrian path on the north side of the bridge.

To be restriped to carry two general-purpose lanes and one transit/HOV lane (eastbound).

Note: These cross section views are illustrative only and are not to scale. They are intended to show approximate lane width and height, and do not represent the actual design of the bridge.

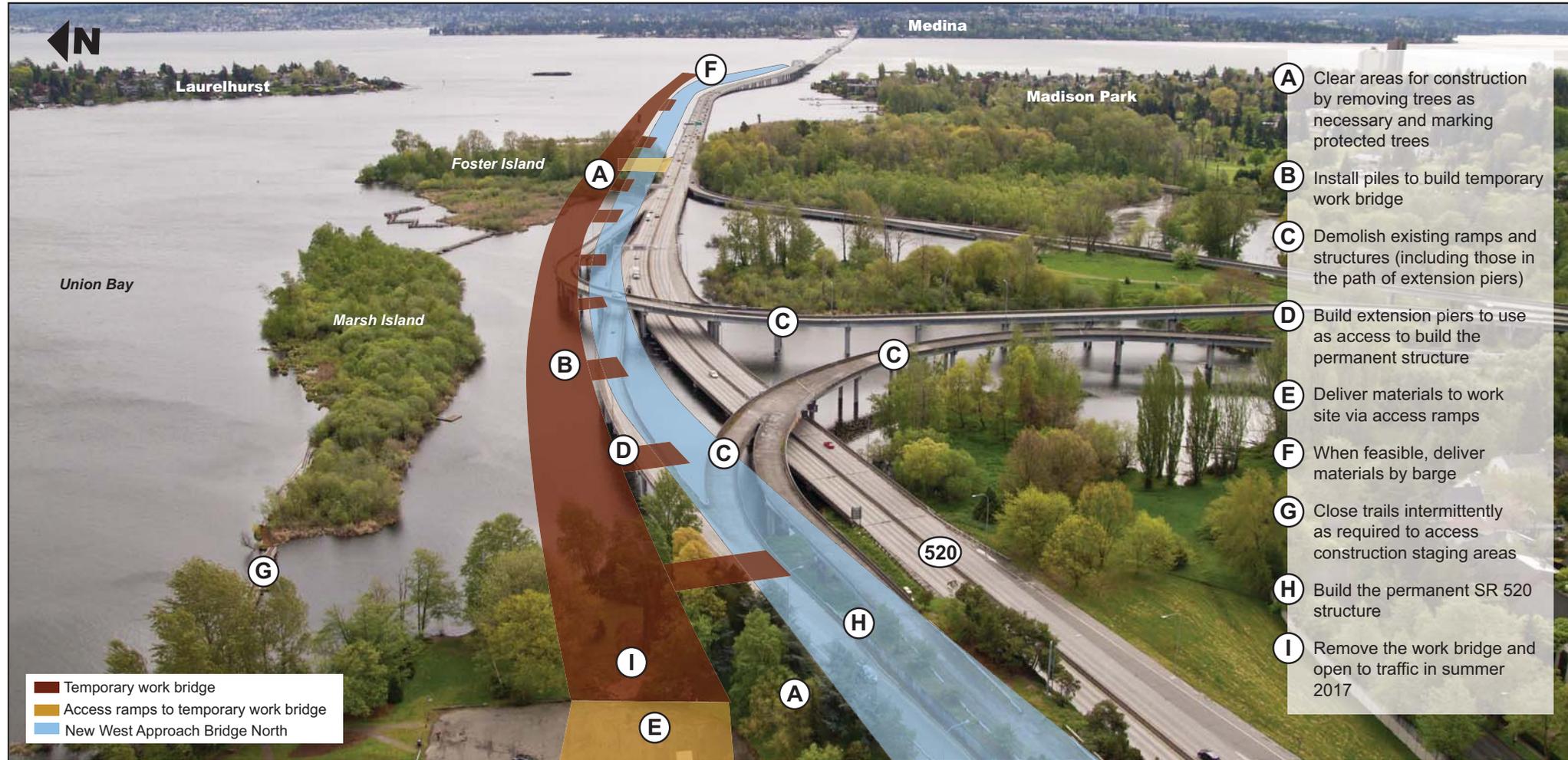
West Approach Bridge North Project construction overview



LEGEND:

- Staging areas (includes tree and vegetation removal)
- Primary haul route
- Secondary haul route
- Project field office
- Temporary work bridge
- New floating bridge
- New WABN
- West Connection Bridge
- Contractor access point
- Ramp removal

Steps for building new West Approach Bridge North



Note: For illustration purposes, not to scale

Work bridges are necessary to build the new west approach

What is a work bridge?

To build the new structure over shallow water the contractor will install a temporary work bridge. The work bridge provides the platform to store materials and equipment and build the new permanent bridge. It will be removed when the project is complete.

How will the contractor access the work bridge?

The contractor will deliver materials and equipment from the staging area at the former MOHAI site and from the SR 520 highway at Foster Island. This will require intermittent westbound nighttime single-lane closures.

How will piles be installed?

Piles will be vibrated and/or impact driven into the lakebed. Pile installation methods will be determined by the contractor.

Pile installation is allowed to occur during the following seasons and times:

- To help protect fish migration, pile installation will occur between the fall and the spring.
- Typical hours of installation will occur between 8 a.m. and 5 p.m. on weekdays and 9 a.m. to 5 p.m. on weekends.

Pile installation activities create noise and vibrations. Nearby residents and park users may hear and feel construction activities. WSDOT conducted pre-construction inspections of front-line homes to enable timely resolution if an issue occurs during construction. Nearby residents and users will also receive notifications prior to noisy work.



Pile installation on the West Connection Bridge.



Example of a work bridge. The design of the WABN work bridges are dependent on the contractor and may look different than above.

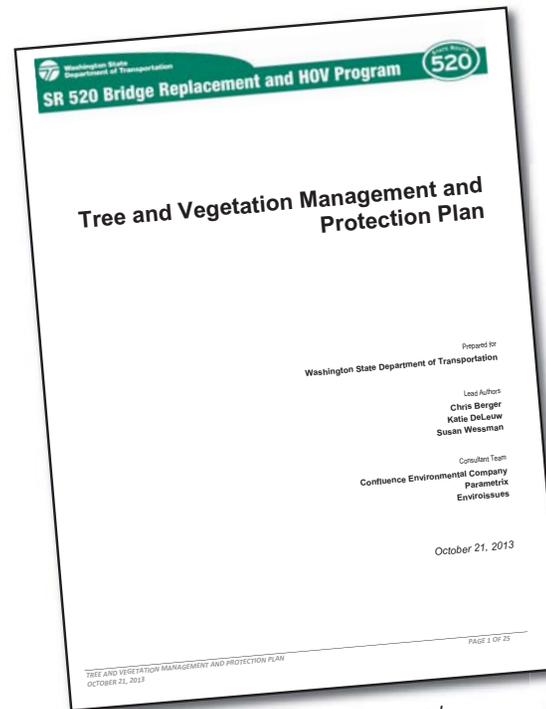
Tree and vegetation protection and removal

WSDOT worked closely with the city of Seattle during the project design to minimize tree removal and ensure protection of the remaining vegetation. Starting this month, crews will begin to remove trees and vegetation only within the project's limits as necessary to allow room to build the project.

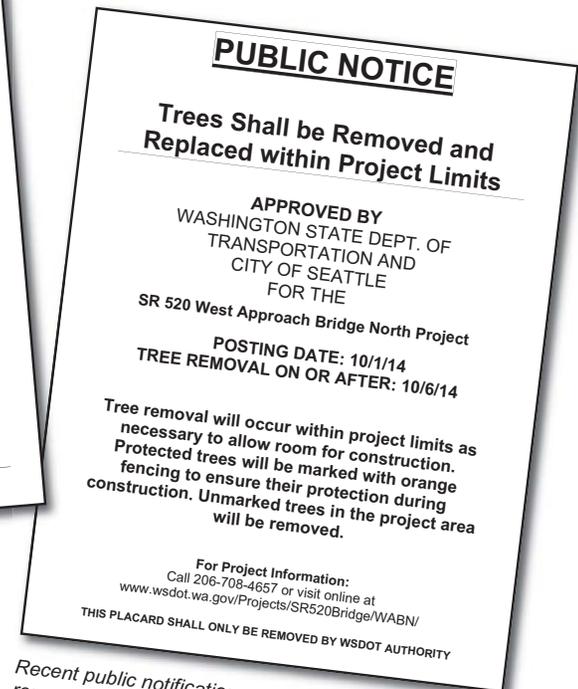
Removal will include the following locations:

- In the Montlake area including the former MOHAI area, Old Canal Reserve area, and along the north side of East Lake Washington Boulevard between 24th Avenue East and Montlake Blvd East
- WSDOT Peninsula
- A portion of Foster Island north of the existing SR 520 highway

All work will adhere to WSDOT, federal, state and local regulatory requirements. After construction is complete, areas will be replanted to create a well-balanced and integrated landscape.

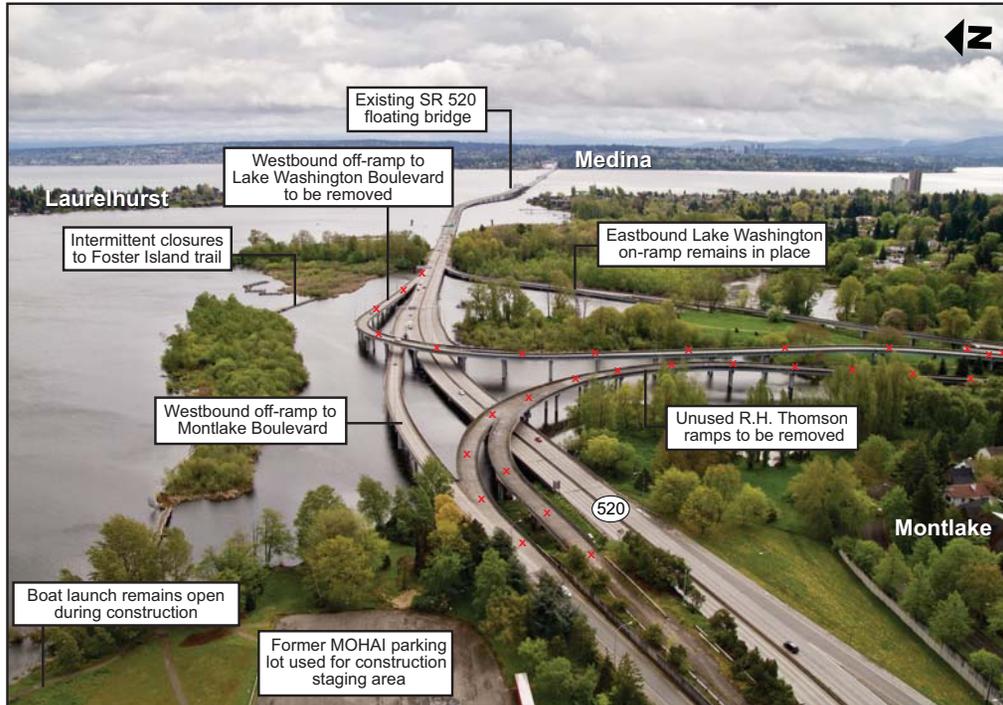


Cover page of the 2013 SR 520 Tree and Vegetation Management and Protection Plan.



Recent public notification explaining upcoming tree removal plans in the project construction area.

Views of SR 520 ramps in the Arboretum area before removal

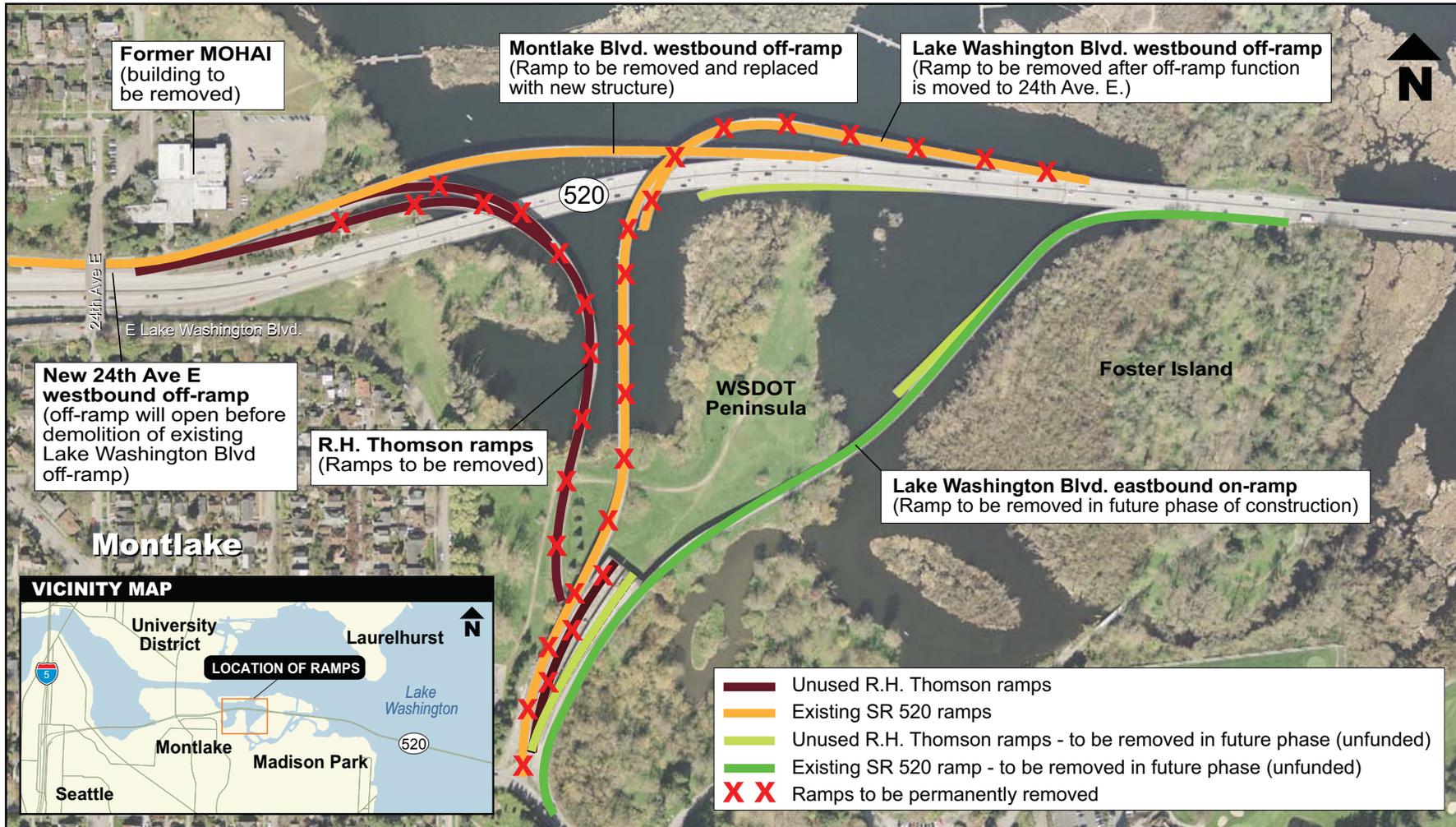


View of SR 520, looking east



View of SR 520, looking northeast

Ramp removal during West Approach Bridge North Project



Construction best management practices

All work will adhere to WSDOT, federal, state and local regulatory requirements. WSDOT's contractor will employ best management practices throughout construction to minimize impacts on the community and the environment from the following construction effects:

- Noise
- Vibration
- Traffic and transportation
- Water/soil contamination
- Trees/vegetation removal
- Air quality/dust
- Lighting / glare / aesthetics

Types of best management practices include:

- Providing advance notice of noisy work and comply with city of Seattle noise permits
- Using noise shields on generators, compressors, jackhammers, and other loud equipment
- Conducting pre-construction inspections of front-line properties
- Marking protected trees with high-visibility fencing
- Installing tire washes to prevent tracking of dirt and gravel on local streets
- Keeping spill-response kits and containment booms on all barges and marine vessels
- Using directional lights and light shielding
- Applying water to dust-generating work areas and activities
- Following no idling policy for construction vehicles



How to stay informed throughout West Approach Bridge North Project construction

Stay up-to-date on the latest WABN construction information by using the following tools:

Online

Visit the SR 520 Orange Page website:

www.wsdot.wa.gov/Projects/SR520Bridge/520orangepage/

Email project staff:

SR520Bridge@wsdot.wa.gov

Follow us on Twitter:

[@WSDOT_520](https://twitter.com/WSDOT_520)

Visit the WABN Project website:

www.wsdot.wa.gov/Projects/SR520Bridge/WABN



Phone

Call the SR 520 24-hour construction hotline:

206-708-4657



Public meetings

Attend monthly meetings with the contractor

Where: Graham Visitors Center

2300 Arboretum Drive E
Seattle, WA 98112

When: The first Wednesday of every month, 5:30 - 6:30 p.m.

- December 3 *
- January 7
- February 4
- March 4
- April 1



* The December monthly meeting will be held at Montlake Community Center

Email updates

Sign up:

public.govdelivery.com/accounts/WADOT/subscriber/new

