

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.

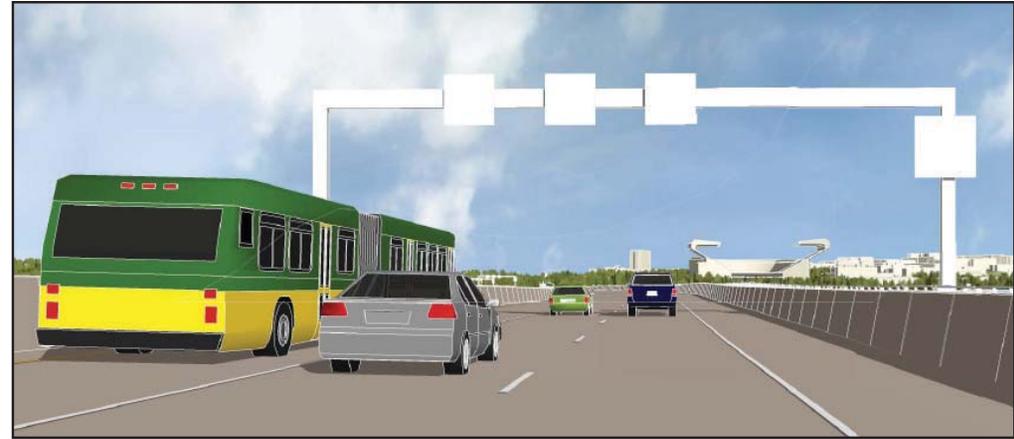
Community and Environmental Benefits

- 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.

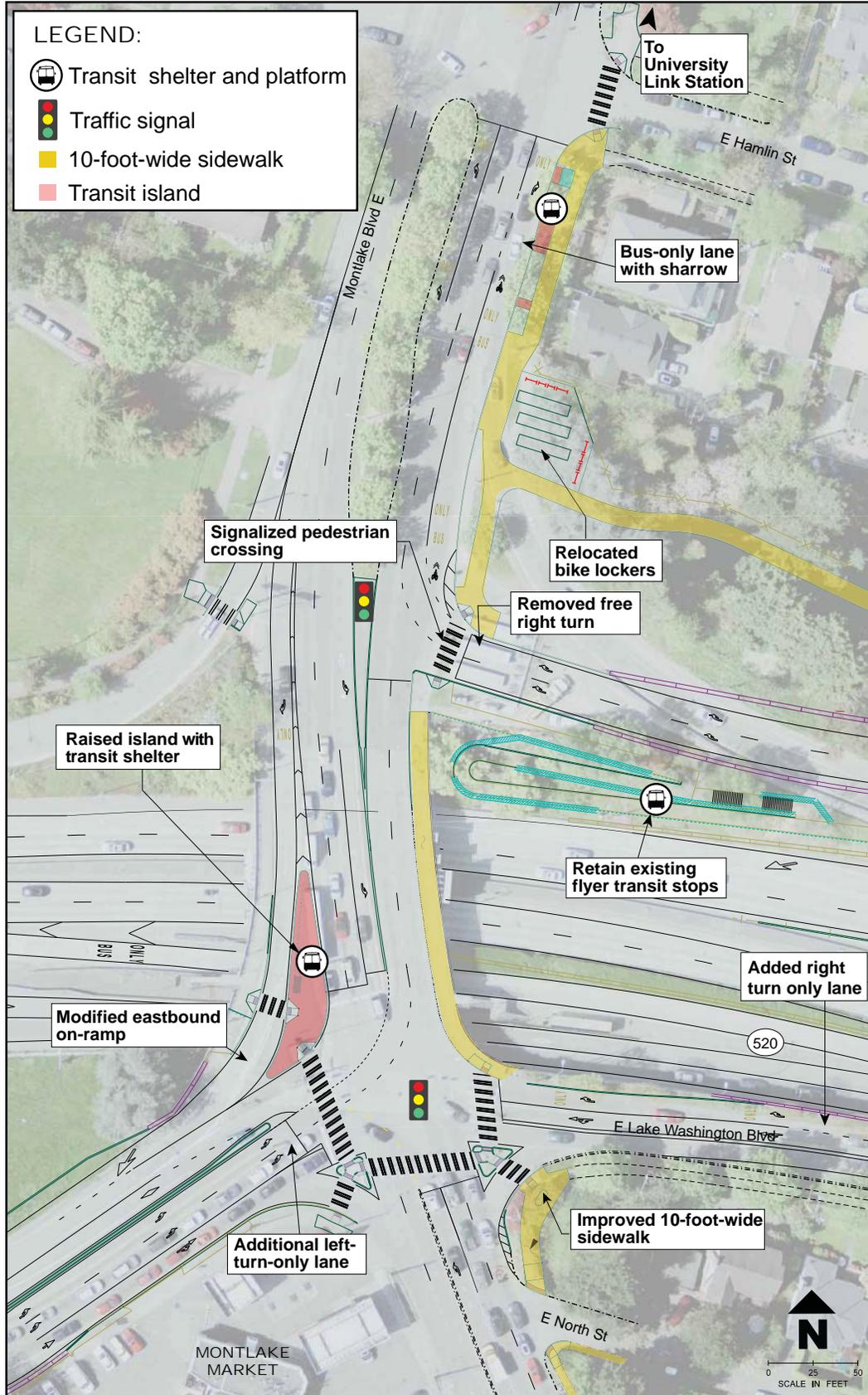


WABN will extend transit/HOV lanes from the Eastside across Lake Washington to Montlake.



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

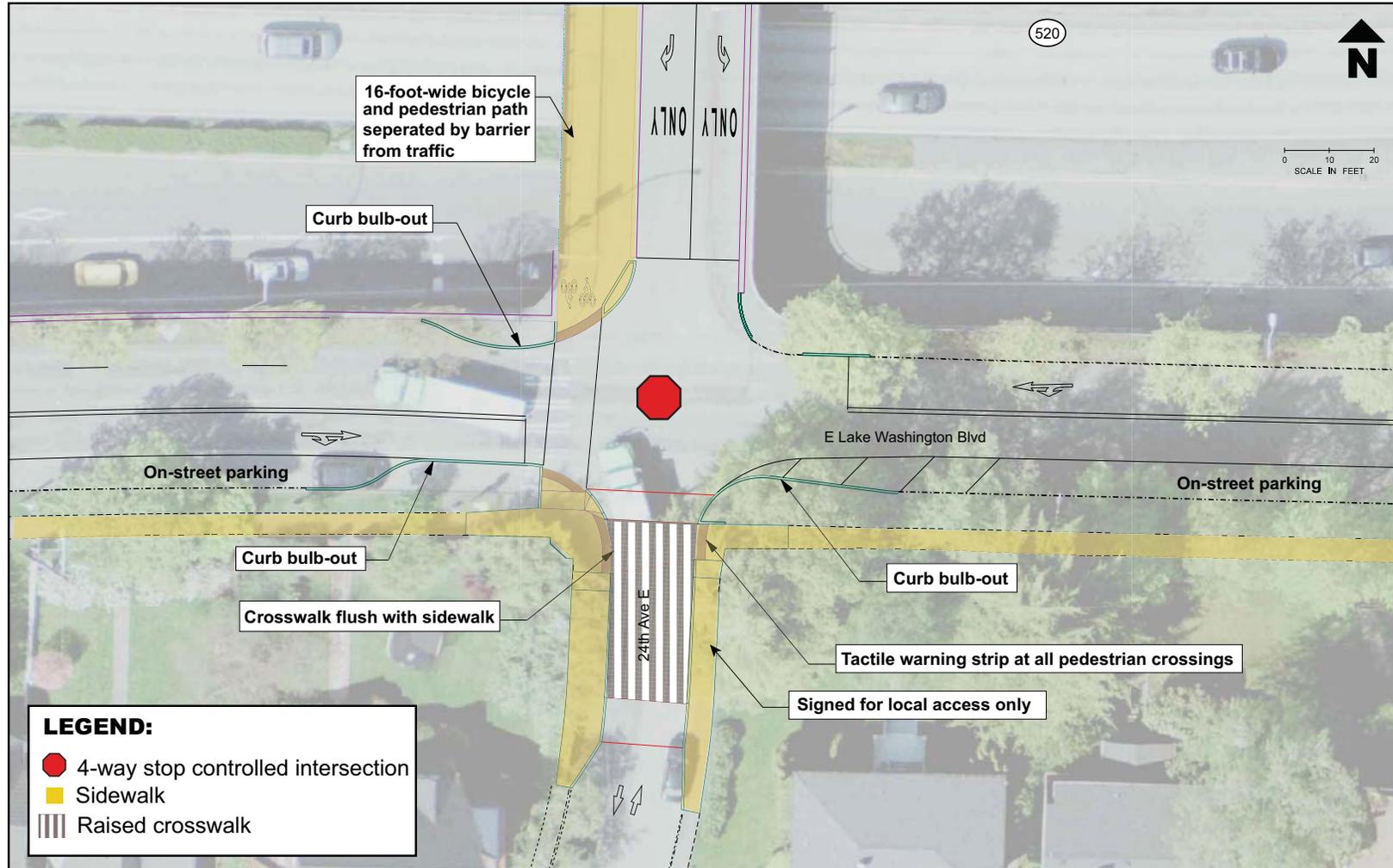
Montlake Boulevard key features



Vicinity map

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

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



LEGEND:

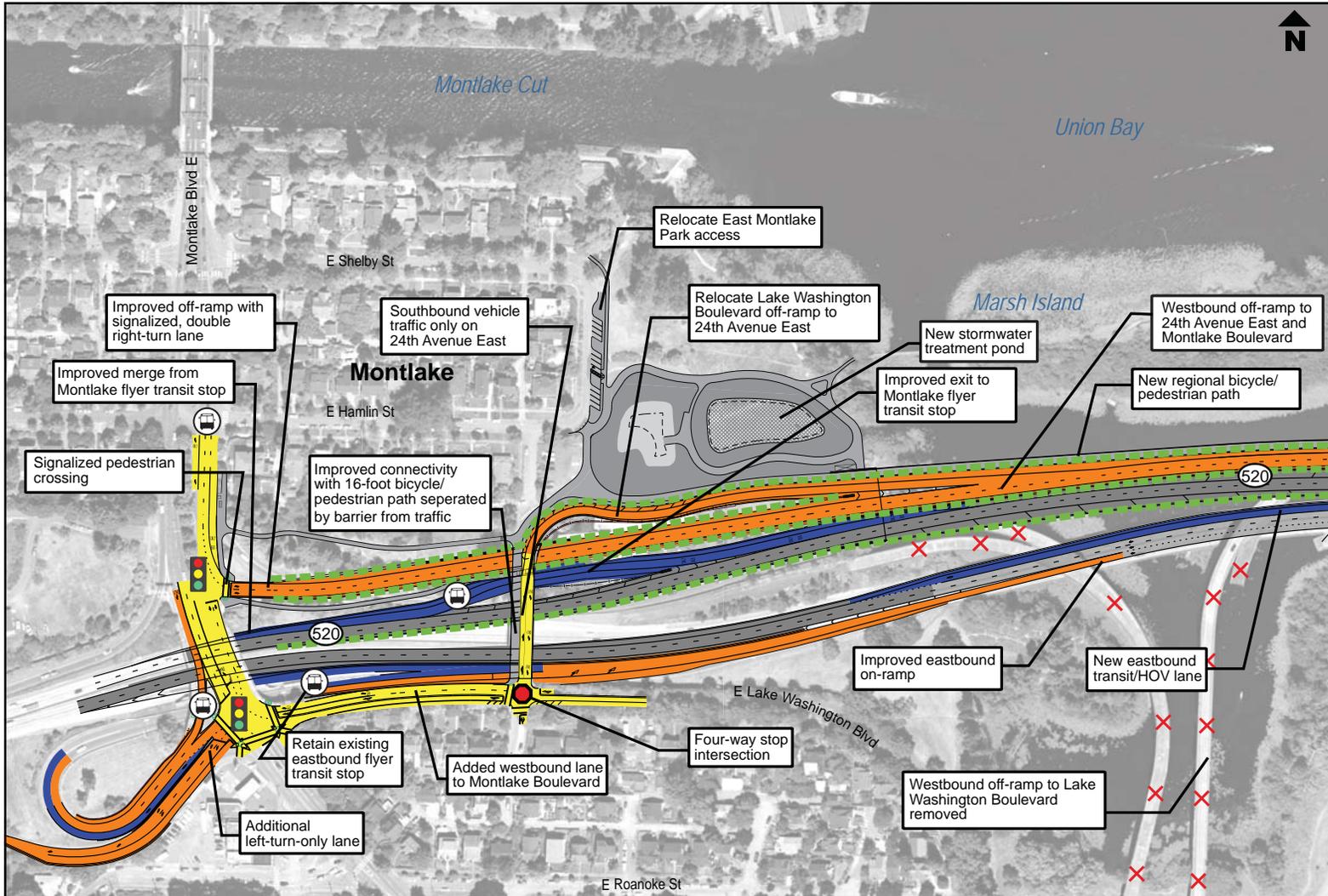
-  4-way stop controlled intersection
-  Sidewalk
-  Raised crosswalk



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

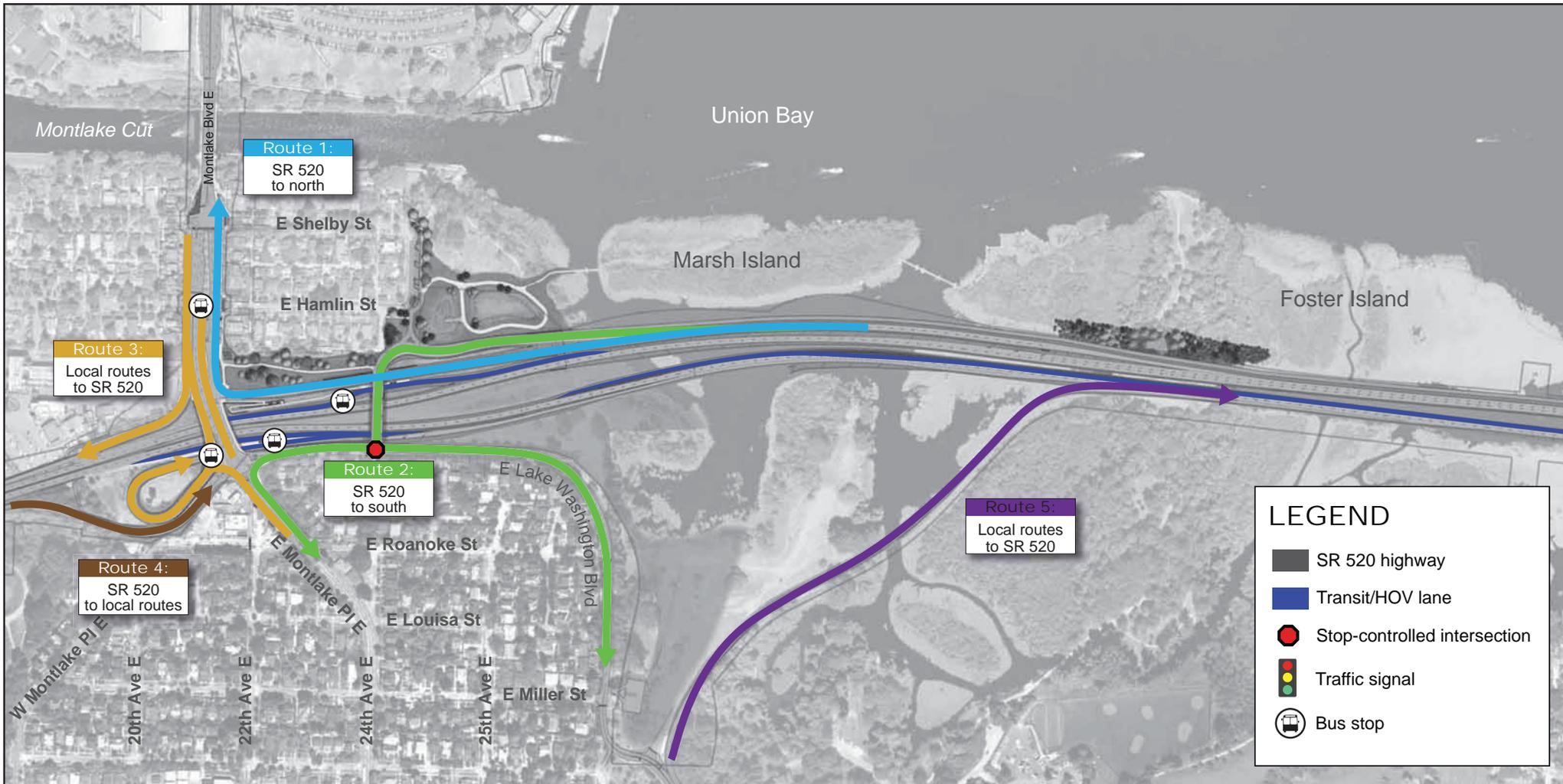
West Approach Bridge North noise-reduction strategies include the following:

- 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



Traffic volume changes with the West Approach Bridge North Project

The West Approach Bridge North Project is not expected to result in significant overall changes in traffic volumes in the Montlake area.



- Westbound off-ramp to Lake Washington Boulevard relocated to 24th Avenue East.
- Eastbound on-ramp from Lake Washington Boulevard remains open.
- 120 cars per hour represents **two cars per minute**.
- 460 cars per hour represents **eight cars per minute**.

LEGEND

- Reduced traffic per hour
- Additional traffic per hour
- No change in traffic per hour
- Removal of on- and off-ramps
- Stop-controlled intersection
- Traffic signal
- Bus stop

Note: Traffic volumes listed represent changes in average vehicles per hour during the afternoon peak period. These numbers were based on an anticipated 2016 completion date. WABN is currently scheduled to open in summer 2017.

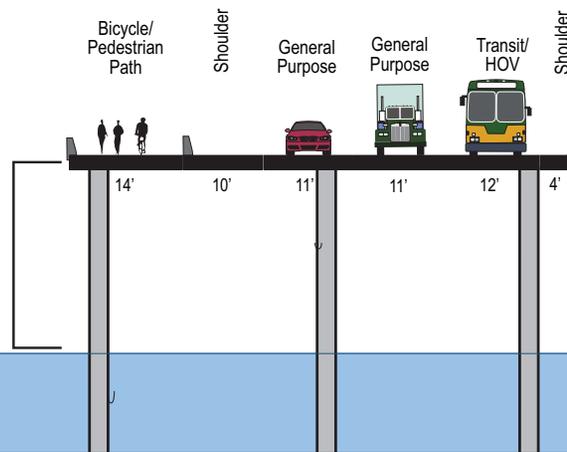
Cross section of new WABN structure and existing SR 520 west approach near Madison Park

New West Approach Bridge North (westbound)

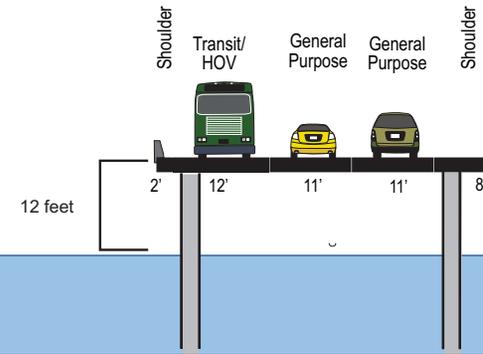
Existing west approach bridge, restriped (eastbound)



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.