

FACT SHEET: NORTHUP WAY, PHASE 1

Project Summary: The project widens Northup Way from just east of 33rd Place to NE 24th Street and includes a two-way left turn lane, bike lanes, sidewalks and landscaping. Total project length of project is 0.86 miles.

Meets Projects Objectives:

- ✓ Bike Lane Continuity
- ✓ Sidewalk Continuity
- ✓ Environmental Stewardship
- ✓ Two-way left turn travel lane
- ✓ Aesthetics/Landscaping
- ✓ Improves Site Access
- ✓ Compatible Design with SR 520 Project
- ✓ Natural Drainage Practices Design Elements
- ✓ Illumination Enhancements
- ✓ Consistent with Public Outreach
- ✓ Improved Traffic Operations
- ✓ Cost Effective

Project Benefits:

Creates continuous bike lanes, pedestrian pathway and center left turn lane along the 0.86 mile roadway. The corridor is illuminated and landscaping is provided within a 4 foot planter strip and at locations within the median. Natural drainage practices are incorporated into the design and include a biofiltration swale, Filtterra™ tree box filters, porous sidewalks with permeable structural soil fill resulting in reduced detention vault size requirements. Economical and aesthetically pleasing walls are included to reduce wetland and right-of-way impacts. Site access and vehicular/pedestrian safety are improved with improved visibility of driveways, illumination, center two-way left turn lane and continuous pathway for cyclists and pedestrians. Based on the results of the first Public Open House,

the project was generally given positive reviews by the attendees.

Design Considerations:

This project is Phase 1 of a two phase project. Phase 2 is timed to coincide with the SR 520 design process. Opportunities to coordinate with this project require that this 2nd phase be delayed. Phase 1 constructs this roadway to the ultimate roadway cross-section as determined in the Alternatives Analysis.

Specific project elements that are of a unique nature to this project include the incorporation of Natural Drainage Practices, structural walls, enhanced landscape and lighting opportunities.

Water quality is enhanced through the use of the Filtterra™ tree box filters. Overall, the amount of impervious areas is minimized through the use of porous concrete sidewalks and planted medians. Further, storm water detention requirements are reduced through the use of porous structural fill beneath sidewalks and planting areas. Detention vaults where situated in permeable soil layers will be designed to allow infiltration. A bioswale is provided at the eastern limits of the project to reduce detention requirements, enhance water quality and provide opportunities for natural landscaping. Structural wall design adjacent to a sensitive wetland and ravine will minimize impacts to the wetlands, while providing the most cost effective design. Non-structural wall will be designed using economic and aesthetically pleasing modular block systems for cut sections of less than 4 feet.

Landscaping including street trees and ground cover will be incorporated into the 4' planter strip as well as in landscaped median areas.

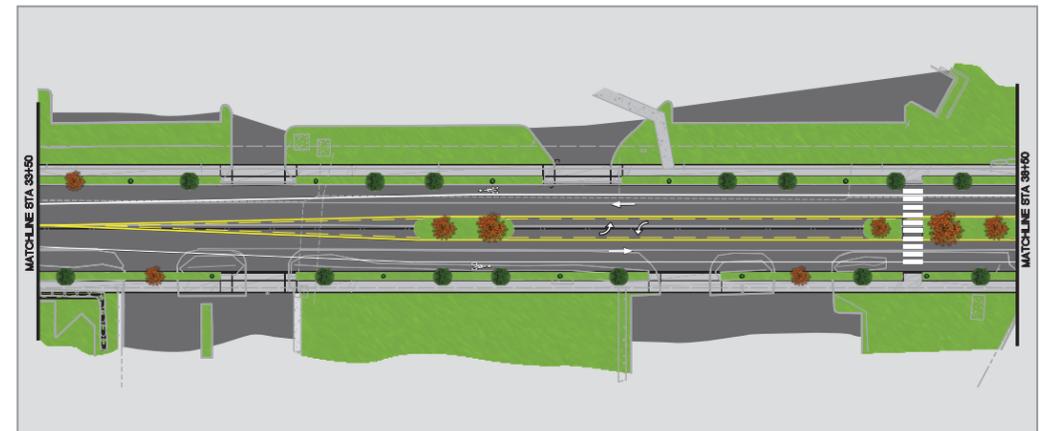
Design Challenges:

Due to the phased implementation, sidewalk and bike lane transitions are required. A temporary pedestrian shared use path is proposed southeast of 33rd Place along the north shoulder, and a 2' paved shoulder is provided for eastbound traffic creating a 13' travel lane shared with bicycles and auto traffic. Many of the landscaped medians will require support from adjacent property owners as they may require driveway consolidation or turn restrictions.

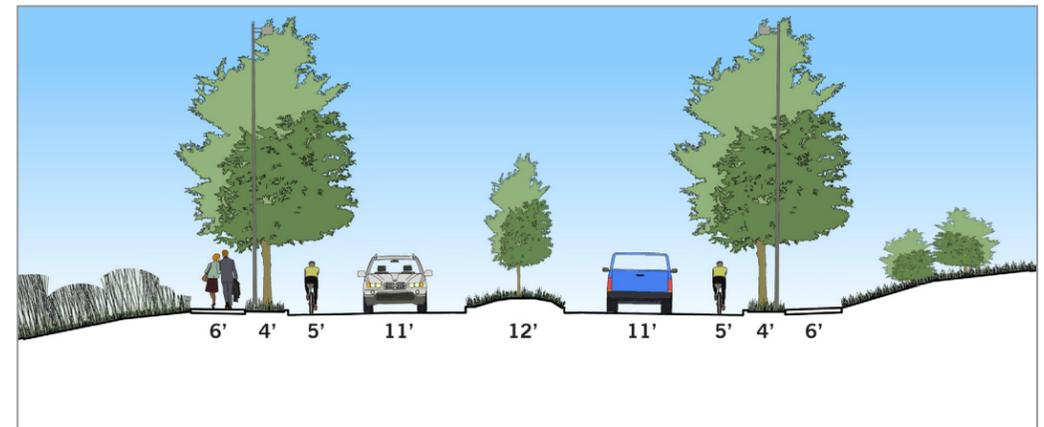
Coordination With Other Projects:

This project is compelling as it is supportive of the long term policy and planning objectives of Bellevue's Bicycle and Pedestrian Plan (Walk & Roll), and dovetails into the bicycle and pedestrian improvements associated with the SR 520 and BNSF pedestrian/bike trail. As a transit corridor, these improvements will provide pedestrian crossing opportunities and safe access to bus stops. Overall, the Northup Way Project is supportive of the SR 520 project and close coordination through both phase 1 and 2 will be necessary.

Cost: \$8.43 Million



Plan view



Cross section view

FACT SHEET: NORTHUP WAY, PHASE 1A

Project Summary: The project widens the northeast side of Northup Way, constructing half of the roadway. The project would create continuous sidewalks and bike lanes along the northeast side of the road, and would improve bicycle safety through a 2 to 5 feet wide shoulder. A 2-way left turn lane would not be installed under this project. This project can be from just east of 33rd Place to NE 24th Street. Total project length of project is 0.86 miles.

Meets Projects Objectives:

- Bike Lane Continuity
- Sidewalk Continuity
- Environmental Stewardship
- Two-way left turn travel lane
- Aesthetics/Landscaping
- Improves Site Access
- Compatible Design with SR 520 Project
- Natural Drainage Practices Design Elements
- Illumination Enhancements
- Consistent with Public Outreach
- Improved Traffic Operations
- Cost Effective

Project Benefits:

Creates continuous bike lanes, pedestrian pathway and center left turn lane along the 0.86 mile roadway. The corridor is illuminated and landscaping is provided within a 4 foot planter strip along the northeast side. Natural drainage practices are incorporated into the design and include Filterra™ tree box filters, porous sidewalks with permeable structural soil fill and reduced detention vault size requirements. Economical and aesthetically pleasing walls to reduce wetland and right-of-way impacts are included in the design. Site access and vehicular/pedestrian safety are improved along the northeast roadside with improved visibility of driveways and illumination. Bicycle access is accommodated with a northwest bound bike lane

and an improved southeast bound shoulder. Pedestrians are accommodated along the northeast roadside, and provided crossing opportunities near existing bus zones. The reduced cross-section, width has less impact on the properties along the southwest side of the road, and is less costly than the full width design. This narrower roadway section also reduces the impervious area and subsequently, the storm water quality and detention requirements.

Design Considerations:

This project essentially constructs the northeast roadside as described in Phase 1. This design offers at a reduced cost many of the design elements associated with the full build of the ultimate cross-section. If there is a desire to build this roadway to its ultimate Phase 1 configuration, the design of the southeast roadside must be fully considered. As an example, the sizing and location of the drainage system should be designed considering its ultimate configuration. There is a risk that drainage regulatory requirements may change, and design decisions made would have been incorrect. Design decisions regarding driveway consolidation and access issues for the properties along the northeast roadside would need to be made during Stage 1 even though the installation of landscaped medians would not occur until Stage 2.

Specific project elements that are of a unique nature to this project include the incorporation of Natural Drainage Practices, structural walls, and enhanced landscape and lighting opportunities. Water quality is enhanced through the use of the Filterra™ tree box filters. Overall, the amount of impervious areas is minimized through the use of porous concrete sidewalks. Further, water detention requirements are reduced through the use of porous structural fill beneath sidewalks and planting areas. Detention vaults where situated in permeable soil layers will be designed to allow

infiltration.

Structural wall design adjacent to a sensitive wetland and ravine will minimize impacts to the wetlands, while providing the most cost effective design. Non-structural walls will be designed using economic and aesthetically pleasing modular block systems for cut sections of less than 4 feet. Landscaping including street trees and ground cover will be incorporated into the 4' planter strip. Natural landscaping will be untouched along the southwest roadside.

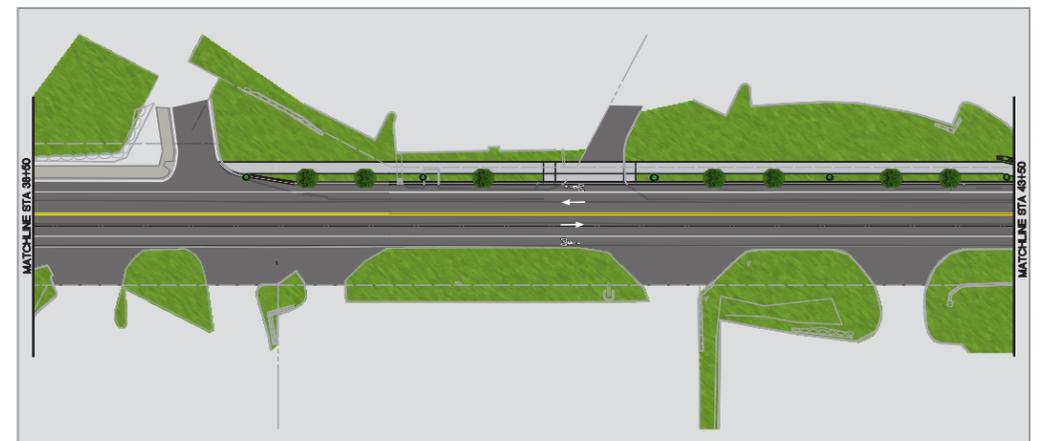
Design challenges:

Due to the phased implementation, sidewalk and bike lane transitions are required. A temporary pedestrian shared use path is proposed southeast of 33rd Place along the north shoulder, and a 2' paved shoulder is provided for eastbound traffic creating a 13' travel lane shared with bicycles and auto traffic. The southeast bound cyclists will be accommodated using a discontinuous system of shoulder, full width bike lane, and transition to an existing 6 feet wide pathway under I-405. As a transit corridor, the accessibility of southeast bound transit patrons could be enhanced through spot improvements such as illuminated and accessible bus stops, but access and safety would be limited without continuous southwest roadside sidewalks and median protected crosswalks.

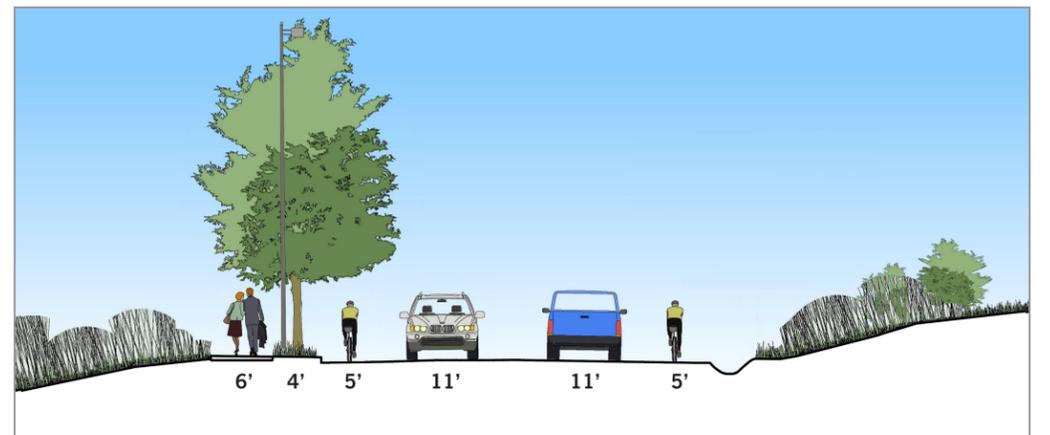
Coordination with other Projects

This project is partially supportive of the long term policy and planning objectives of Bellevue's Bicycle and Pedestrian Plan (Walk & Roll) and enhances the connectivity to the bicycle and pedestrian improvements associated with the SR 520 and BNSF pedestrian/bike trail. Overall, the Northup Way Project is supportive of the SR 520 project and close coordination through both phase 1 and 2 will be necessary.

Cost: \$4.54 Million



Plan view



Cross section view

FACT SHEET: NORTHUP WAY, PHASE 2

Project Summary: The project improves Northup Way from Bellevue Way/Lake Washington Boulevard to east of 33rd Place. The project creates continuous sidewalks and bike lanes within the project limits. No sidewalk is proposed along Northup Way near the Bellevue Way intersection due to its proximity to the SR 520 limited access SR 520 limited access right-of-way. This project is designed to be consistent with current City planning objectives but does not include additional westbound left turn lanes at NE 108th Avenue and Bellevue Way as proposed under the SR 520 preliminary design concepts. Total project length of project is 0.63 miles.

Meets Projects Objectives:

- ✓ Bike Lane Continuity
- ✓ Sidewalk Continuity
- ✓ Environmental Stewardship
- ✓ Two-way left turn travel lane
- ✓ Aesthetics/Landscaping
- ✓ Improves Site Access
- ✓ Compatible Design with SR 520 Project
- ✓ Natural Drainage Practices Design Elements
- ✓ Illumination Enhancements
- ✓ Consistent with Public Outreach
- ✓ Improved Traffic Operations
- ✓ Cost Effective

Creates continuous bike lanes, pedestrian pathway and center left turn lane along the 0.63 mile roadway. The corridor is illuminated and landscaping is provided within the 4 foot landscape areas east of NE 108th Avenue and in areas of the restored Yarrow Creek planter strip and at locations within the median. Natural drainage practices are incorporated into the design and include an ecology embankment shoulder near Bellevue Way and porous sidewalks with permeable structural soil fill that reduced detention requirements. Economical

and aesthetically pleasing walls to reduce wetland and right-of-way impacts are included in the design. Site access and vehicular/pedestrian safety are improved with improved visibility of driveways, illumination, center two-way left turn lane and continuous pathway for cyclists and pedestrians. Traffic operations are improved with the addition of an eastbound right turn lane at NE 108th Avenue. Improvements to Yarrow Creek will improve natural habitat by daylighting an additional 250 feet of creek and providing three fish passable culverts. Based on the results of the first Public Open House, the project was generally given positive reviews by the attendees.

Design Considerations:

This project is Phase 2 of a two phase project. Phase 1, southeast of these project limits is assumed to be build first. This Phase 2 would be closely coordinated with the SR 520 design process. The SR 520 improvements would supersede this design assuming the SR 520 project moves forward as expected. Basic elements of this design would however be incorporated into the SR 520 design including continuous pedestrian and bicycle facilities, lighting, landscaping, and the full roadway cross section east of 33rd Place. The SR 520 project would include improving Yarrow Creek through creation of fish passable culverts and stream daylighting. The northeast curb line as depicted is assumed to be the basis of the any future proposed SR 520 improvements. Improvements associated with the SR 520 would be expected to occur within the properties adjacent to the SR 520 right-of-way, including WSDOT's maintenance facility located east of NE 108th Avenue. Overall, the amount of impervious areas is minimized through the use of porous concrete sidewalks. Further, storm water detention require-

ments are reduced through the use of porous structural fill beneath sidewalks and planting areas. Detention vaults are not required under this Phase of the project. An ecology embankment is provided at the western limits of the project to improve water quality before entering into the Yarrow Creek basin. Opportunities for natural landscaping adjacent to the existing and newly daylighted Yarrow Creek are proposed to enhance the natural environment. Structural wall design adjacent to a sensitive wetland and ravine will minimize impacts to the wetlands, while providing the most cost effective design. Non-structural walls will be designed using economic and aesthetically pleasing modular block systems for cut sections of less than 4 feet. Landscaping including street trees and ground cover will be incorporated into the 4' planter strip.

Design challenges:

Close coordination is required with the SR 520 project. Utility coordination, temporary traffic control and permitting will be significant as it relates to the major excavation associated with Yarrow Creek culvert crossing. Right-of-way needs will affect several properties including the WSDOT Maintenance Facility and the Yarrowood Condos.

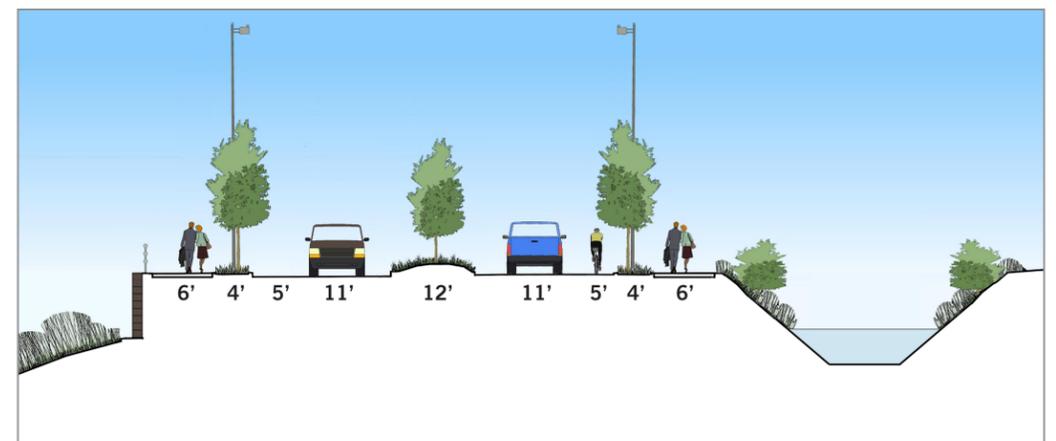
Coordination with other Projects

This project needs to be developed in close coordination with the SR 520 project. The project is supportive of policy and planning objectives of Bellevue's Bicycle and Pedestrian Plan (Walk & Roll) and dovetails into the bicycle and pedestrian improvements associated with the SR 520 and BNSF pedestrian/bike trail. Improvements to Yarrow Creek are consistent with Department of Ecology objectives.

Cost: \$5.62 Million



Plan view



Cross section view