Factoria Boulevard Storm Conveyance Improvements Project

CITY OF BELLEVUE UTILITIES

OCTOBER 7, 2020

Presentation Outline

- Project Background and Flooding Problem
- Alternatives and Proposed Solution/Approach
- Project Scope and Improvements
- Implementation Schedule
- What to Expect During Construction
- How to Stay in Touch

Flooding in Factoria Blvd/Richards Creek Drainage Basin

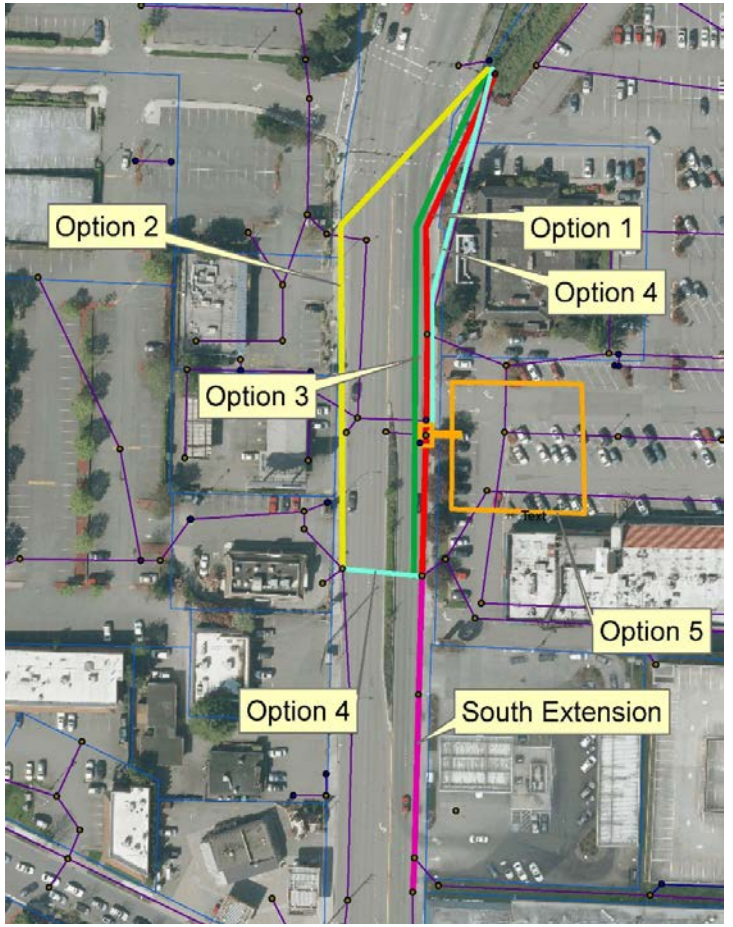
- Recurring street flooding along Factoria Boulevard, south of I-90
- Existing system built in 1950s by King County
- Factors contributing to Flooding:
  - Limited/under-capacity storm pipe and inlets
  - Flooding exacerbated by unmaintained channel downstream at the outfall of the storm conveyance
  - Climate change – more high intensity short duration storms

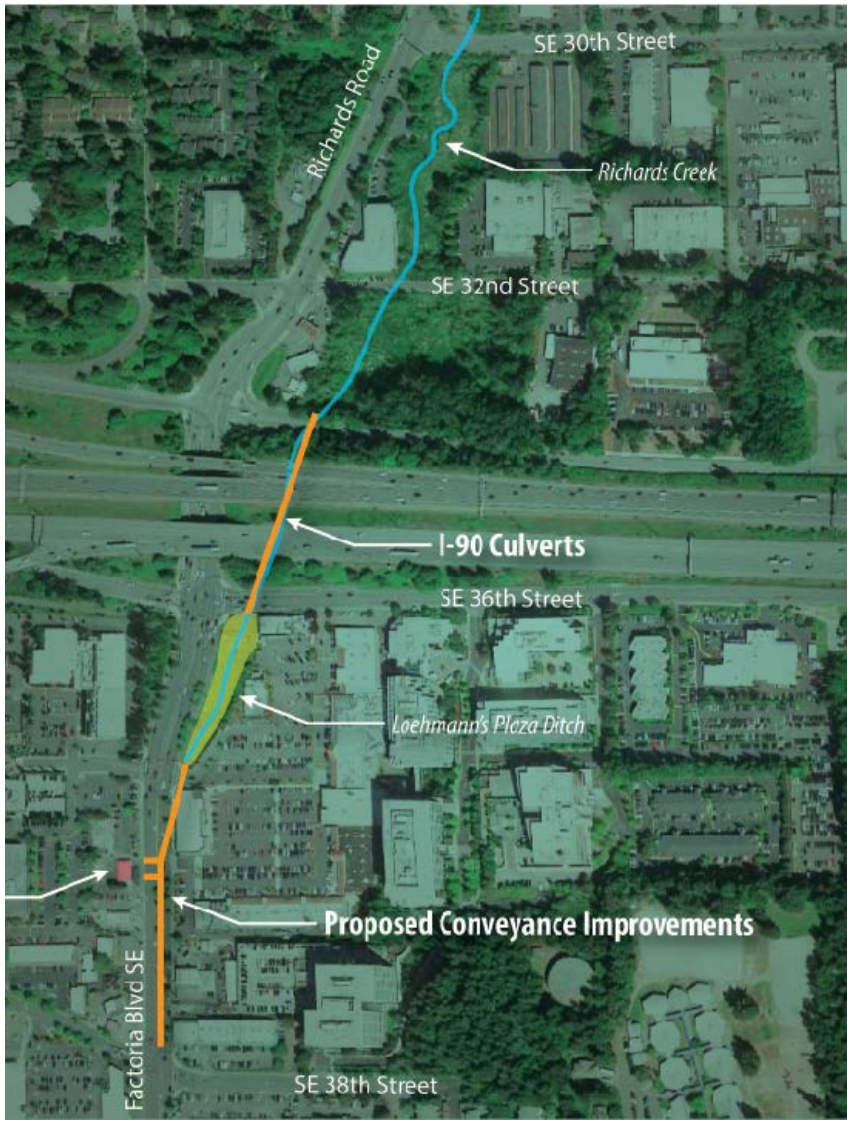
Flooding on Aug 13-14, 2014 at Factoria Blvd (picture at Formula-1 Fast Lube)

- Objective: Construct storm system improvements to reduce the risk of street flooding along Factoria Boulevard during high intensity storm events.

Alternatives Considered

- Do Nothing
- Improvement Alternatives
  - Option 1: Replace existing Storm Drain with Larger capacity Conveyance
  - Option 2: New Storm Drain parallel on west side along Factoria Blvd
  - Option 3: New conveyance parallel to existing storm drain along east side
  - Option 4: High-capacity inlets and new pipe drain across Factoria Blvd, and parallel to existing pipe along east side
  - Option 5: Detention Vault beneath parking lot

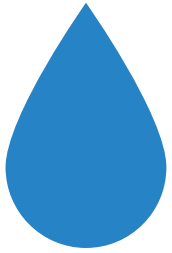




Proposed Solution & Approach

- If nothing is done, during high-intensity storm events, local street flooding will likely to occur and impact people who live, work, shop, and travel in the Factoria neighborhood and potentially cause economic disruption to the businesses.
- To provide a long-term fix to the flooding problem in this important commercial area, a combination of Option 1 and Option 4 is being proposed. It would provide protection against large 100-year storm event.
- Obtain input from stakeholders on proposed solution, and perform preliminary design to better understand cost, schedule, risks, potential impacts and mitigation measures.

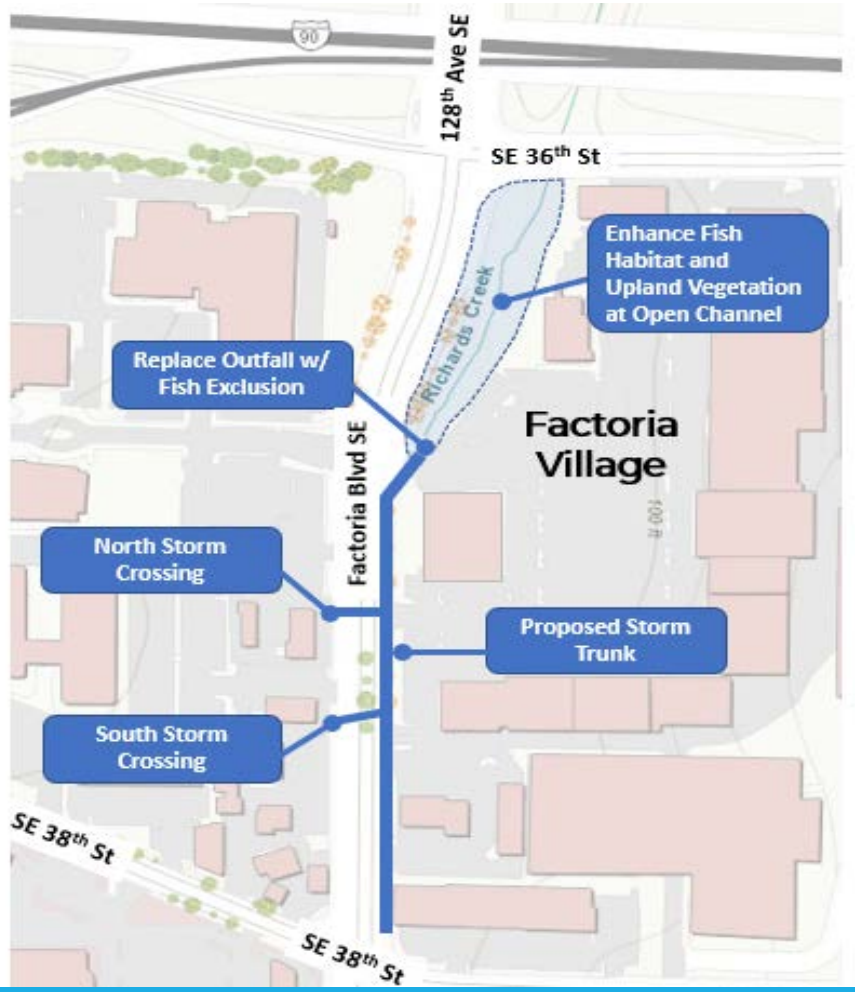
Poll #2: Level of Concern



At what level do you agree flooding in the Factoria Boulevard area is an important problem the City needs to take action on?

Project Scope and Components

- **Conveyance Improvements**
  - Replace an existing 5.3 feet x 3.3 feet storm drain pipe with a larger capacity (9-foot-wide by 4-foot-high) storm conveyance system
  - Two new 24-inch-diameter concrete pipes crossing Factoria Boulevard from west to east
  - 19 new inlets to reduce gutter flow
  - Replacement of Stormwater Outfall
- **Utilities Relocation -** City's water line, PSE's gas and power line, other telecommunication lines
- **Downstream Open Channel Improvements -** Enhance Fish Habitat and Upland Vegetation (Mitigation)



Implementation Schedule

Development and analysis of potential project designs (alternatives analysis, and preliminary design)

Develop detailed design, permit acquisition, and agency coordination

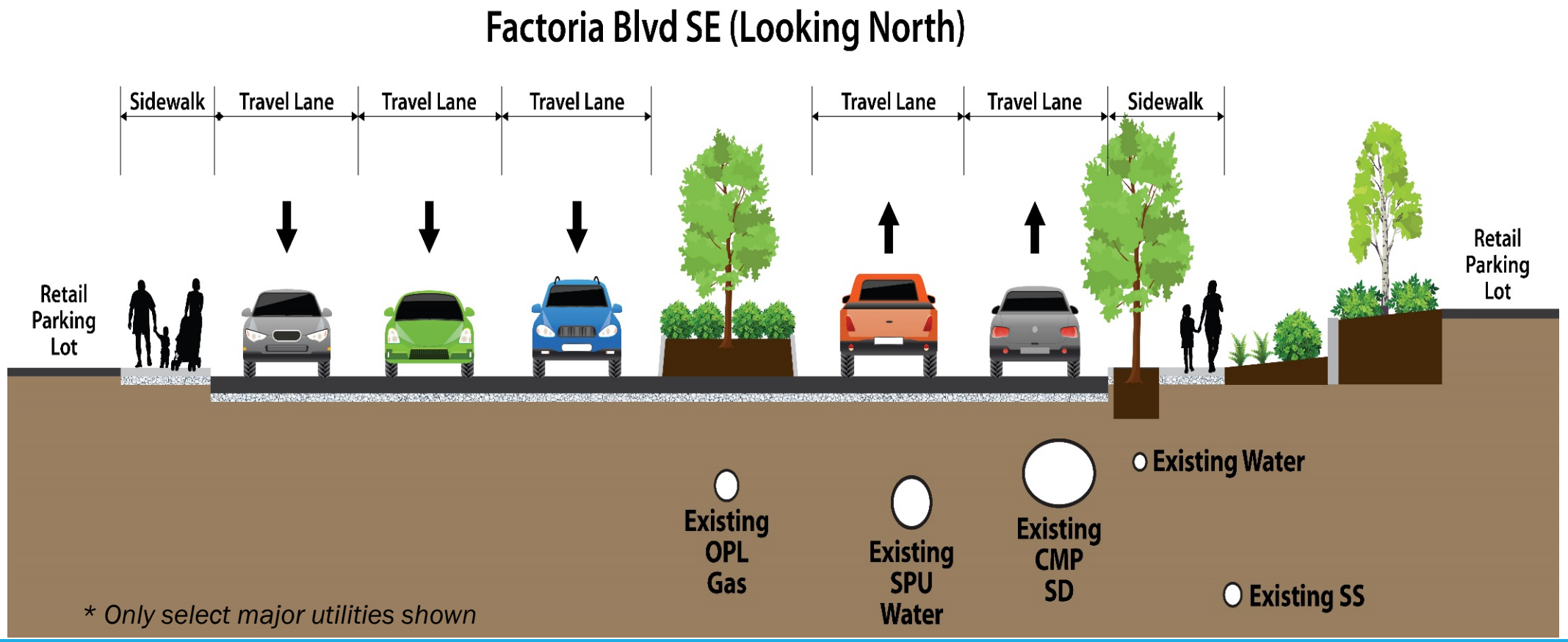
Franchise utility relocation

Solicit construction contractor and plan construction logistics

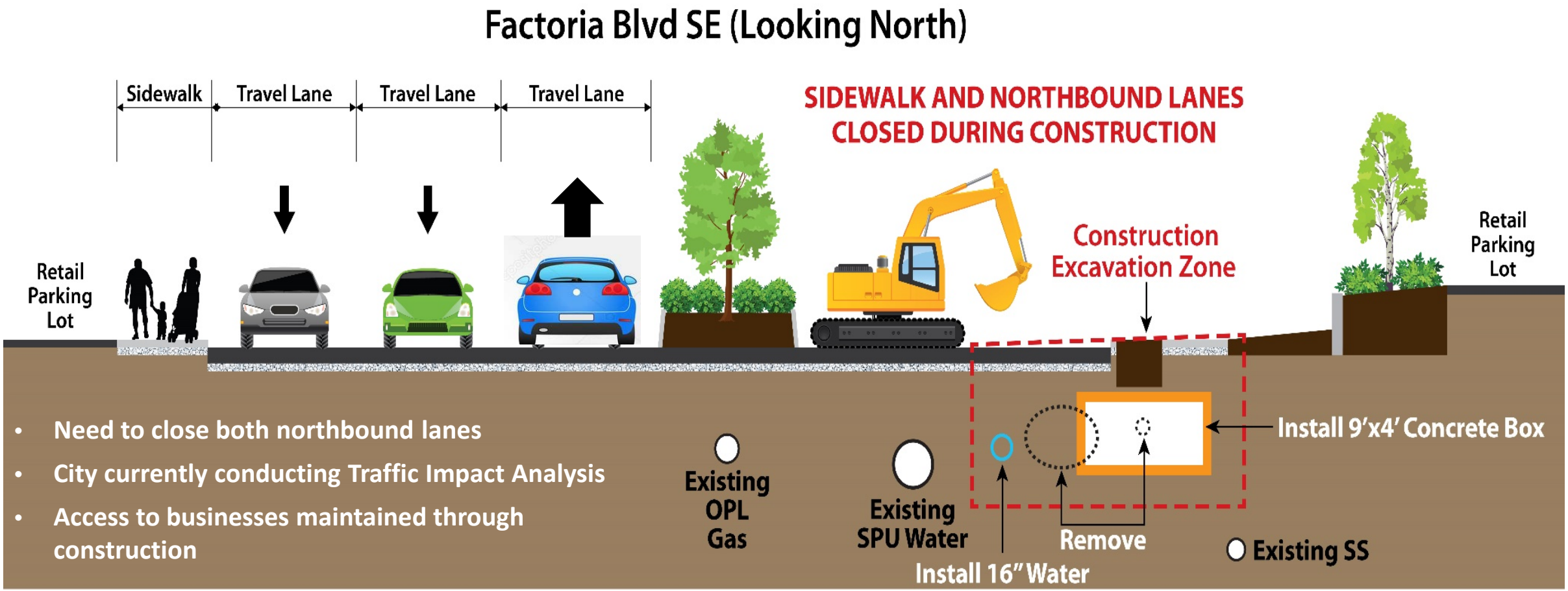
Construction activities

Complete restoration

Factoria Boulevard – Existing Condition



During Construction



- Need to close both northbound lanes
- City currently conducting Traffic Impact Analysis
- Access to businesses maintained through construction

Construction Impacts: Traffic

Traffic impacts:

- Both northbound Factoria Boulevard lanes will be closed, and one of the current southbound lanes will become a northbound lane for approx. 3 months of heavy construction.
- There will be changes to traffic patterns and times, directed by flaggers and uniform police officers.
- Access maintained throughout construction area.
- Partial/single lane closure during utilities relocation, restoration etc.

Construction Impacts: Residents and Businesses

- **Business access:** Access to the businesses on both sides of Factoria Boulevard will be maintained throughout project construction. The city will provide clear signage to highlight business access locations.
- **Pedestrian and bicycle access:** The sidewalk on the east side of the road will be closed, but the sidewalk on the west side will remain open, along with safe and accessible detours.
- **Bus routes:** The two King County Metro bus stops in the project area will be temporarily relocated.

Poll #3: Concerns About Construction Impacts

What concerns, if any, do you have about potential construction impacts from the project?

How to Stay in Touch

- Project website: Factoria Boulevard Stormwater Conveyance, City of Bellevue
- Subscribe to alerts on webpage
- City of Bellevue Project Manger and Public Information Officer listed on website
- City of Bellevue Traffic Advisories webpage

Home / City Government / Departments / Utilities / Utilities Projects, Plans and Standards / Utilities Capital Projects / Factoria Boulevard Stormwater Conveyance

Utilities Capital Projects

- 136th Avenue NE Inlet Station
- Cherry Crest Pump Station Replacement
- Enatai Inlet Station
- Factoria Boulevard Stormwater Conveyance
- Lower Coal Creek Flood Hazard Reduction
- Meydenbauer Flood Control
- Pikes Peak Reservoir Replacement
- Sewer Capital Investment Projects
- Stormwater Capital Investment Projects
- Water Capital Investment Projects
- West Lake Sammamish Water Pressure

Factoria Boulevard Stormwater Conveyance

The Factoria Boulevard Stormwater Conveyance Improvements project will improve stormwater infrastructure to reduce the risks of flooding during heavy storms in the Factoria-Richards Creek drainage basin.

The city will replace a segment of stormwater pipe with a larger one along the northbound lanes of Factoria Boulevard Southeast, next to the Factoria Village commercial area. The city will also install a concrete box to hold stormwater, which will drain into a modified Richards Creek Inlet channel.

Why is this construction needed?

Flooding is a recurrent event in the Factoria-Richards Creek drainage basin during major storms. In 2014, a heavy storm on Aug. 12-13 inundated Factoria Boulevard with nearly 4 feet of water. Businesses were flooded, streets were inaccessible and the community was significantly disrupted.

These kinds of storms have increased in frequency in the last decade, and may continue to increase as a result of climate change. If stormwater infrastructure improvements are not made, the current storm drainage system's limited capacity to convey stormwater during intense storms may result in flooding of Factoria Boulevard, which would significantly disrupt the flow of traffic in the region, causing economic disruption to the many

Alerts

Receive email or text alerts about progress on this project.

Subscribe

Contact

For more information about the project, please contact:

Birol Shaha, Senior Utilities Engineer
425-452-4477
Bshaha@bellevuewa.gov

To meet with city staff regarding this project, please contact:

Jessica Guthrie, Utilities Public Information Officer
425-452-5215
jguthrie@bellevuewa.gov

Questions? Comments?

Are there any specific actions you would like the City to consider taking to support resident's needs during the project?

Wrap Up and Next Steps

Staff will stay on the line to answer any further questions.

Poll #4: Satisfaction

How satisfied are you with today’s online open house?