

Puget Way Culvert Replacement Project

Project Purpose

This project will replace an aging and undersized creek culvert under Puget Way SW and is to reduce flooding of roadways and private property.

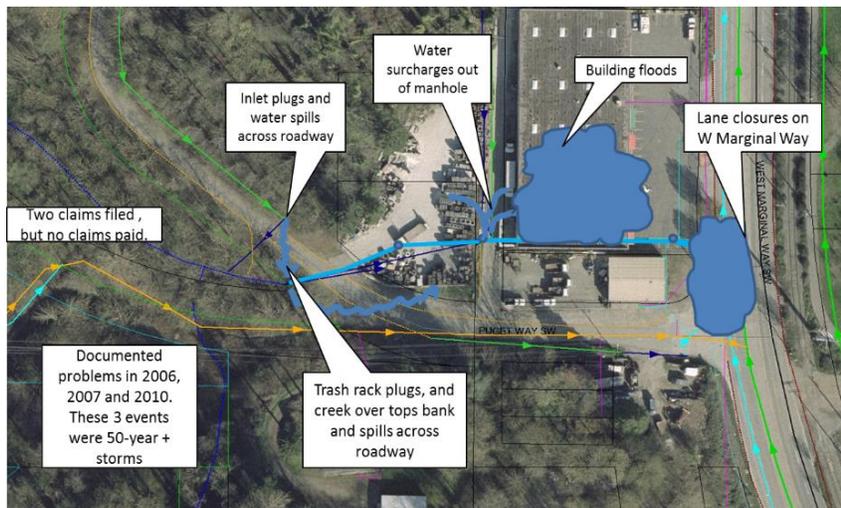
Total Project Cost: \$3.1 million

FCD Request: \$1.8 million

Schedule: Final Design 2019, Construction 2019-2021.

Flooding Problem:

In 2007, SPU began investigating flooding complaints in the West Duwamish Greenbelt (Puget Park) near the intersection of Puget Way and West Marginal Way. Puget Creek flows through these pipes from the project area to an outfall on the Duwamish Waterway at the Southwest Idaho Street street-end. The site - including 3 nearby private and commercial buildings - has flooded at least three times during periods of intense rainfall. At the most extreme events, West Marginal Way flooded and one of the warehouses had three feet of flood water inside.



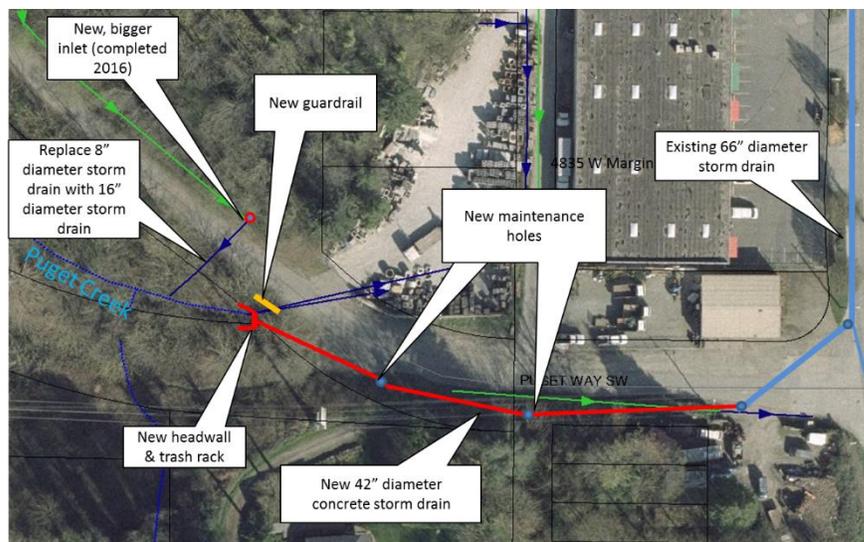
Flooding is caused by undersized culverts (both public and private) which are in poor condition.

Flooding is aggravated by: runoff from a roadside ditch; debris jams in the pipes due to limited maintenance; and undersized private pipes connecting to SPU's drainage that act as a bottleneck.

Puget Way is the only road access for 12 residences, so culvert failure would cut off access and emergency services to these homes and disrupt the adjacent commercial businesses.

Near-term Outcomes and Benefits:

1. New culvert with expected lifespan of 75-100 years
 - ⇒ will reduce the threat of culvert failure and associated flood impacts and road closure
2. Improved trash rack, headwall and new WSDOT standard traffic railing
 - ⇒ will improve maintenance and public safety associated with culvert
3. Invasive control, native vegetation plantings and installation of large woody material in stream
 - ⇒ will improve riparian habitat conditions in a city-owned Natural Area that is in a portion of the city with limited open space and parks.



Long-term Outcomes and Benefits

1. Reduced flooding impacts to Puget Way, West Marginal Way, Parks property, commercial businesses and private residences in an underserved area.
2. Reduction in operations and maintenance costs resulting from improved and safer access for maintenance crews who currently need to clean the rack after every heavy rainfall.
3. Improved control and certainty of long-term maintenance from relocating the existing pipes out from under private buildings and into an alignment where they will be routinely maintained.