

Project overview

Seattle Public Utilities (SPU) is replacing two culverts at 45th Ave SW and California Ave SW. These culverts are in extremely degraded condition and need to be replaced to reduce the risk of structural failure and to remove fish passage barriers.

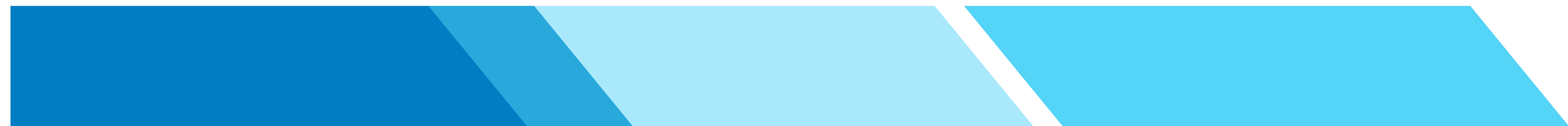
What's happening now?

- Options analysis kicked off in 2018 and will continue through early 2020
- SPU is assessing the feasibility of design for recommended options and further refining cost estimates
- SPU is working in close partnership with Fauntleroy Church to discuss options for the California Ave SW culvert (joint public/private ownership)
- SPU is actively exploring grant opportunities to supplement project funding



Project timeline

Tentative schedule as of October 2019. Schedule is subject to change.



Options Analysis
2019 - Early 2020

Design
Early 2020 - Spring 2021

Construction
2021 - 2024*

* For completion of both culverts. Construction will likely be staggered.

Project need and background



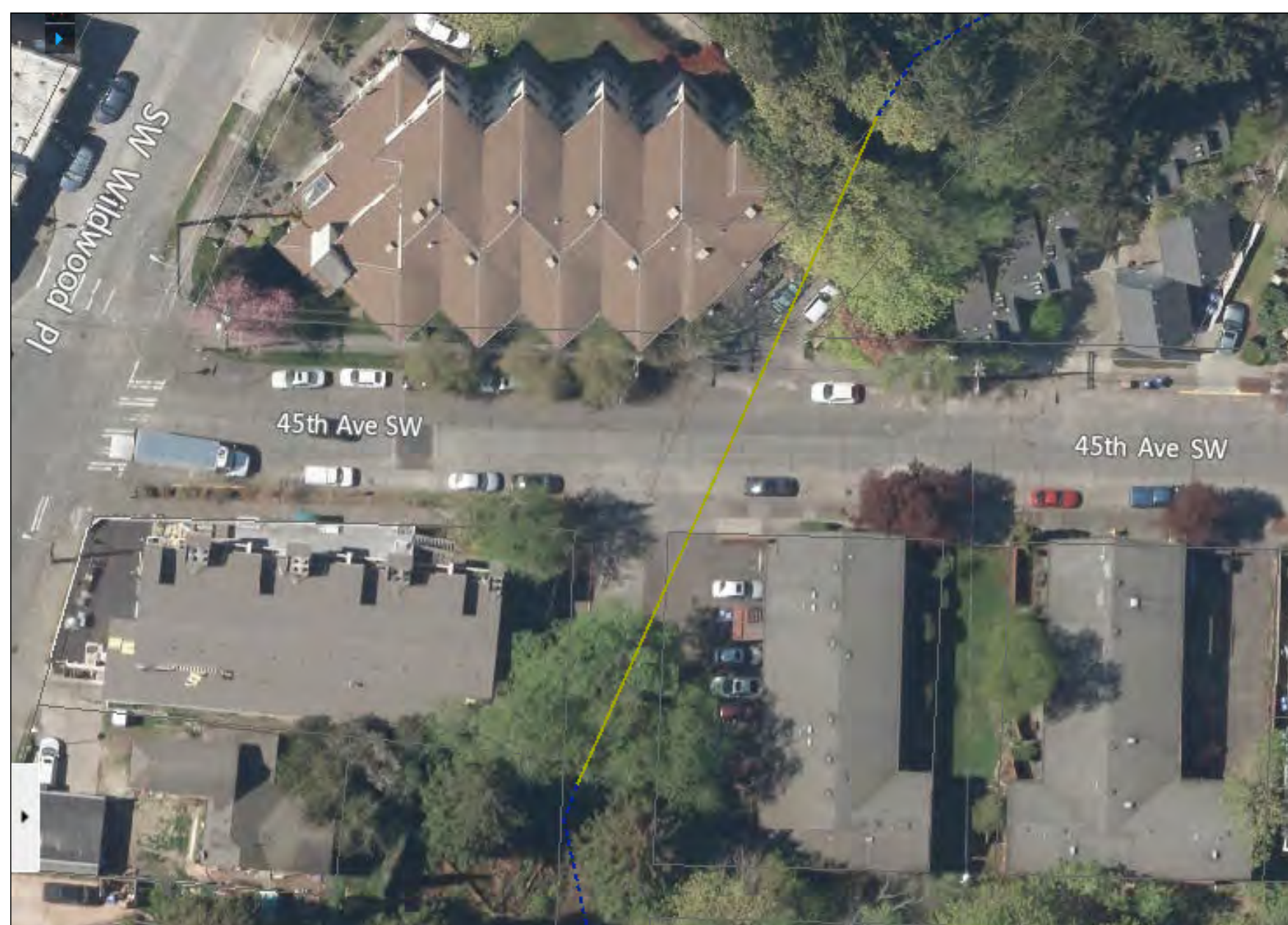
Poor structural condition

Both culverts are approximately 100 years old, in poor structural condition, and need replacement to reduce the risk of culvert failure.



Fish passage barriers

Current culverts do not meet state laws and are barriers for fish to pass into the middle and upper channel of Fautleroy Creek, which are viable fish habitat.



Fully developed area with nearby buildings, culverts in public and private ownership

Culverts are close to residences and community buildings. California Ave SW culvert includes both publicly and privately owned segments on Fautleroy Church property that requires coordinated design.

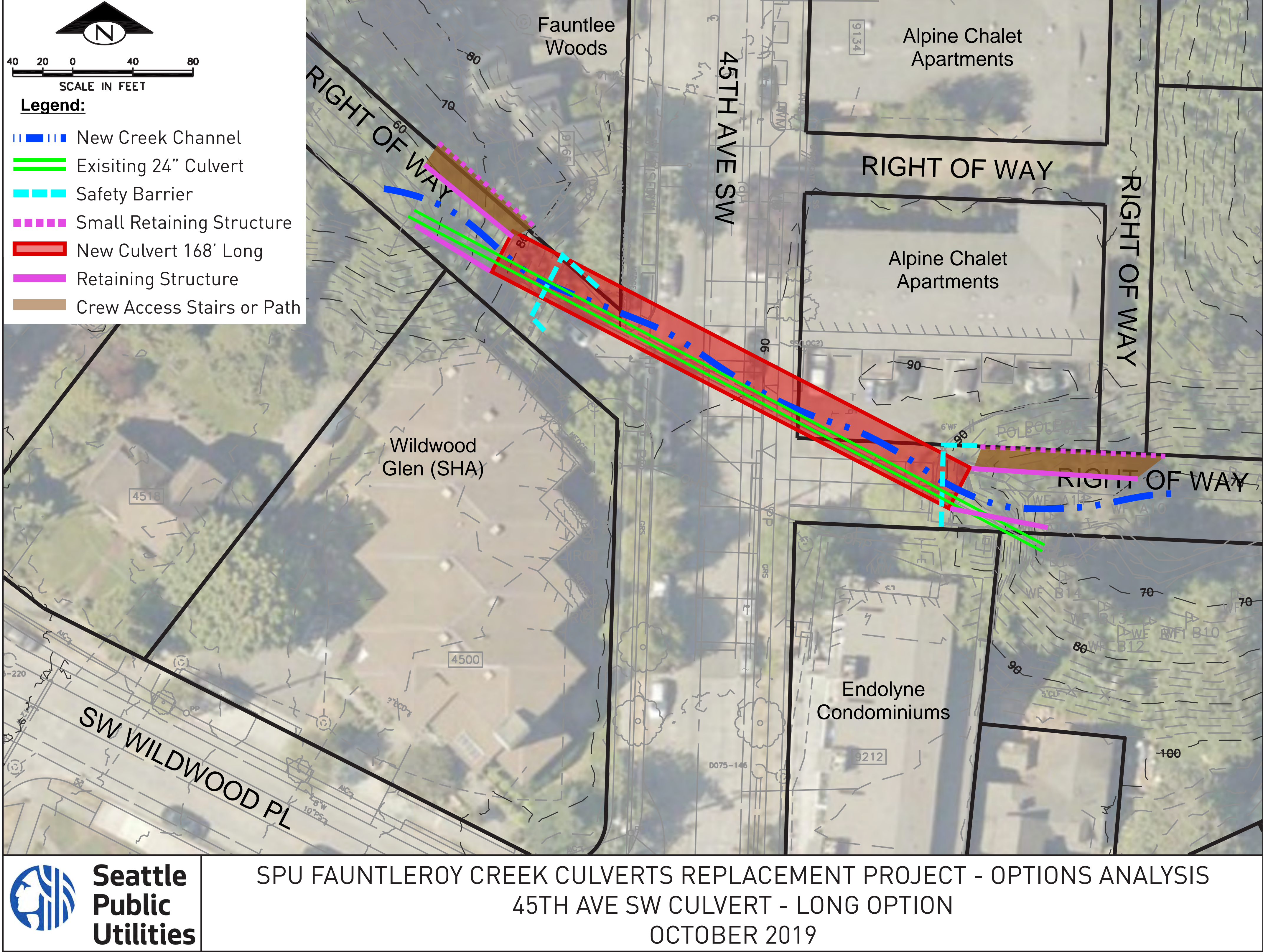
Project opportunities

- Reducing the risk of culvert failure
- Improving drainage capacity and creek resiliency to higher flows from anticipated climate change
- Restoring fish passage, which supports tribal treaty rights and SPU's commitment to racial and social justice
- Considering community safety in culvert design
- Enhancing the community's connection to the Fautleroy watershed
- Providing safer working conditions for maintenance crews

45th Ave SW Culvert Replacement

Recommended option

Long option



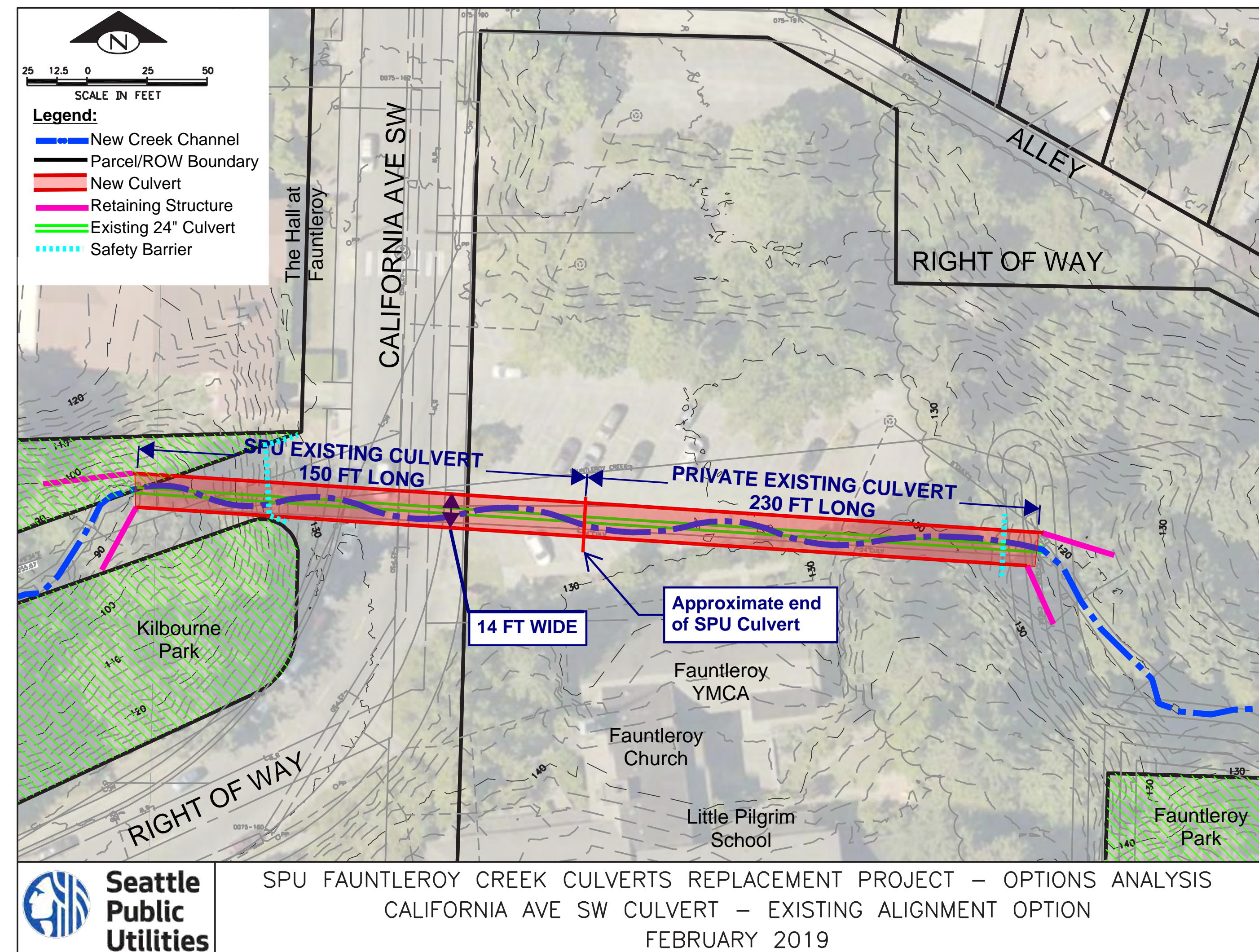
- Longer, 14-foot wide culvert on similar alignment as existing culvert, with retaining walls on each end
- Additional fish habitat created due to shorter design than existing culvert
- No significant long-term impacts to site conditions; site use and access stays the way it is now
- Improvement to stream's natural function
- Requires moderate maintenance
- Depth of the replacement culvert is 20 to 23 feet below the street surface (to the top of the culvert)

All options are conceptual and details are subject to change.



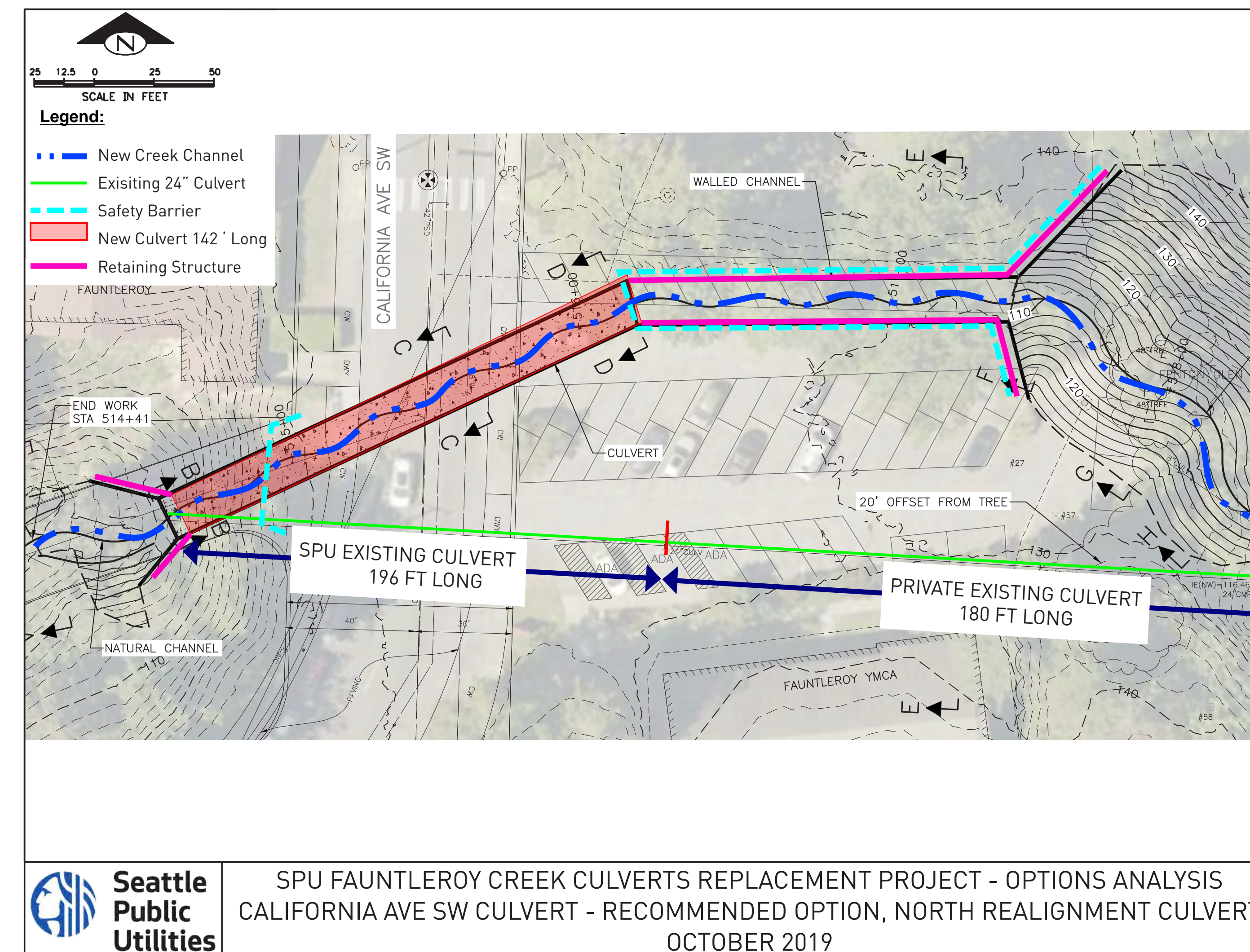
California Ave SW Culvert Replacement Options

Existing alignment option



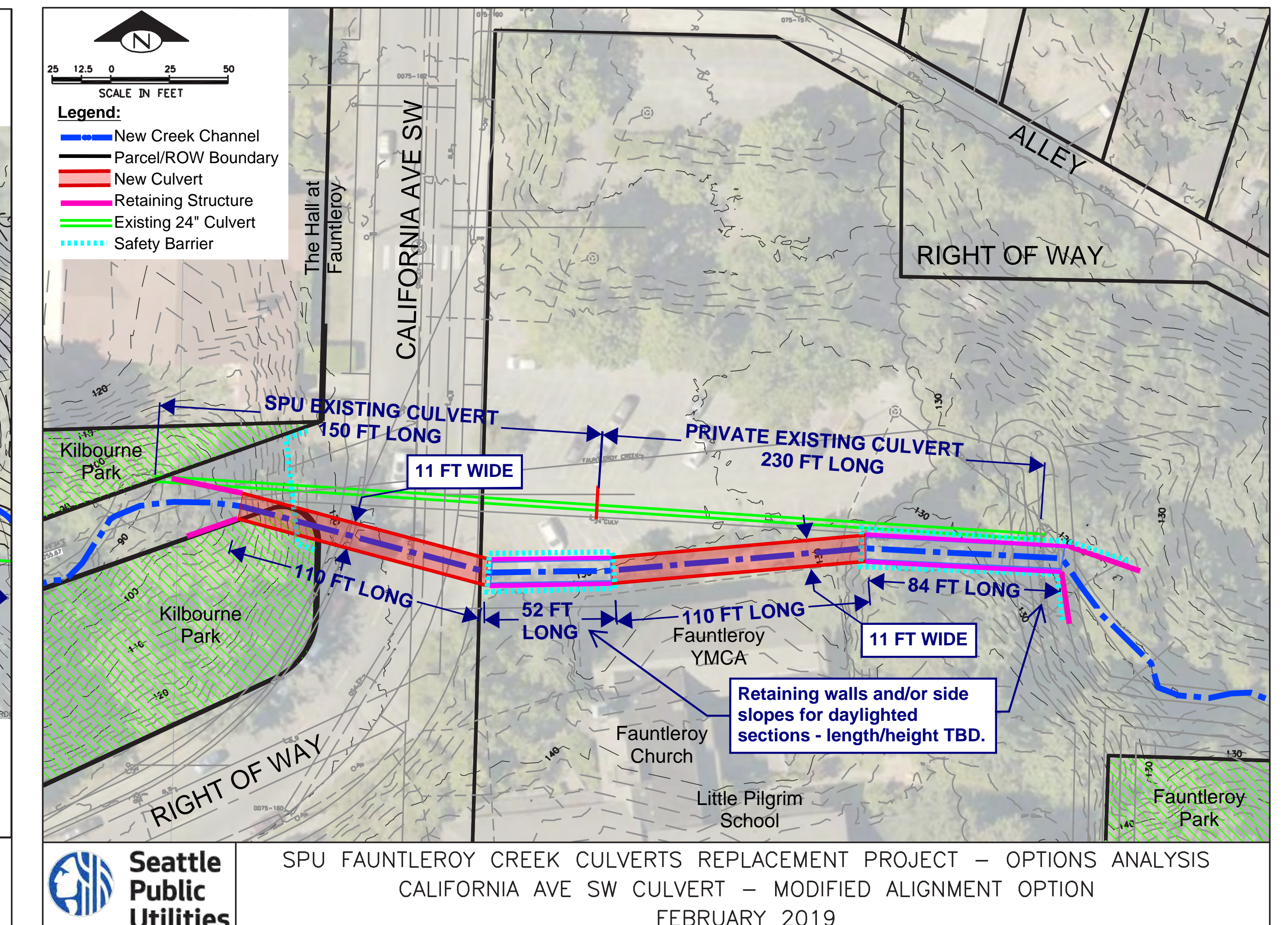
- 14-foot wide SPU culvert and 14-foot wide private culvert on similar alignment with retaining walls on both ends
- Limited fish habitat created due to long culvert design
- Some improvement to stream's natural function
- Moderate maintenance required

North realignment option (revised)



- New alignment of a 14-foot wide culvert with a significant daylighted creek channel section and retaining walls and lengthening the natural channel upstream
- Greatest benefit to fish habitat and stream function
- Least maintenance required
- Allows for use of existing culvert for bypass creek during construction, removing schedule restrictions; potential to reduce costs

Modified alignment option



- Multi-segment 11-foot wide culvert, on nearby alignment, including significant daylighted creek channel sections and retaining walls
- Moderately increased fish habitat due to daylighted sections
- Moderate improvement to stream's natural function
- Less maintenance required
- Allows for use of existing culvert for bypass creek during construction, removing schedule restrictions; potential to reduce costs

All options are conceptual and details are subject to change.