

# Seattle Public Utilities

## 45th Ave SW Culvert Replacement Project Final Design Update

**Jonathan Brown | SPU Project Manager**

**Tracey Belding | FACET Project Manager (Design Consultant)**

**Deb Powers | FACET Senior Arborist**

**June 10, 2025**

Fauntleroy Community Association Meeting

Seattle Public Utilities



**City of Seattle**

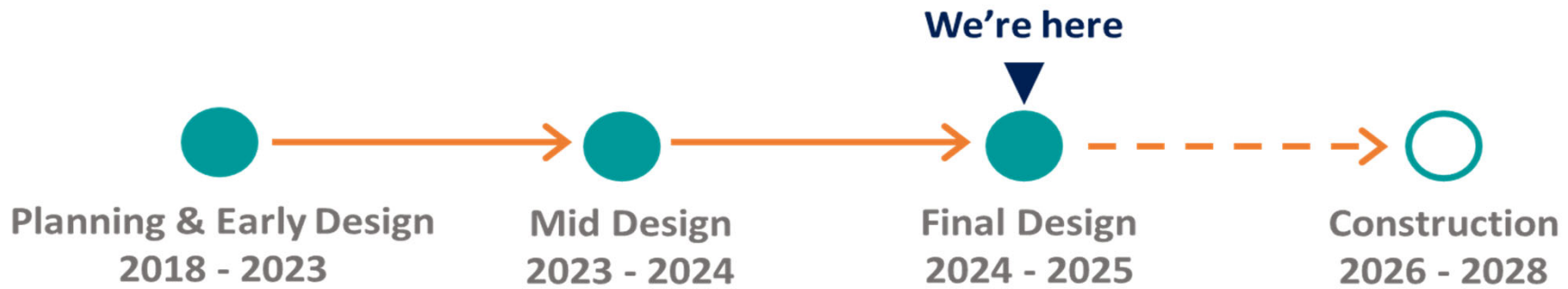


# Agenda

- Project Background
- Project Timeline
- Design Update
- Next Steps
- Q&A



# Project Timeline





# Project Background

Supporting a healthy urban  
watershed in your neighborhood





# Fauntleroy Creek Watershed

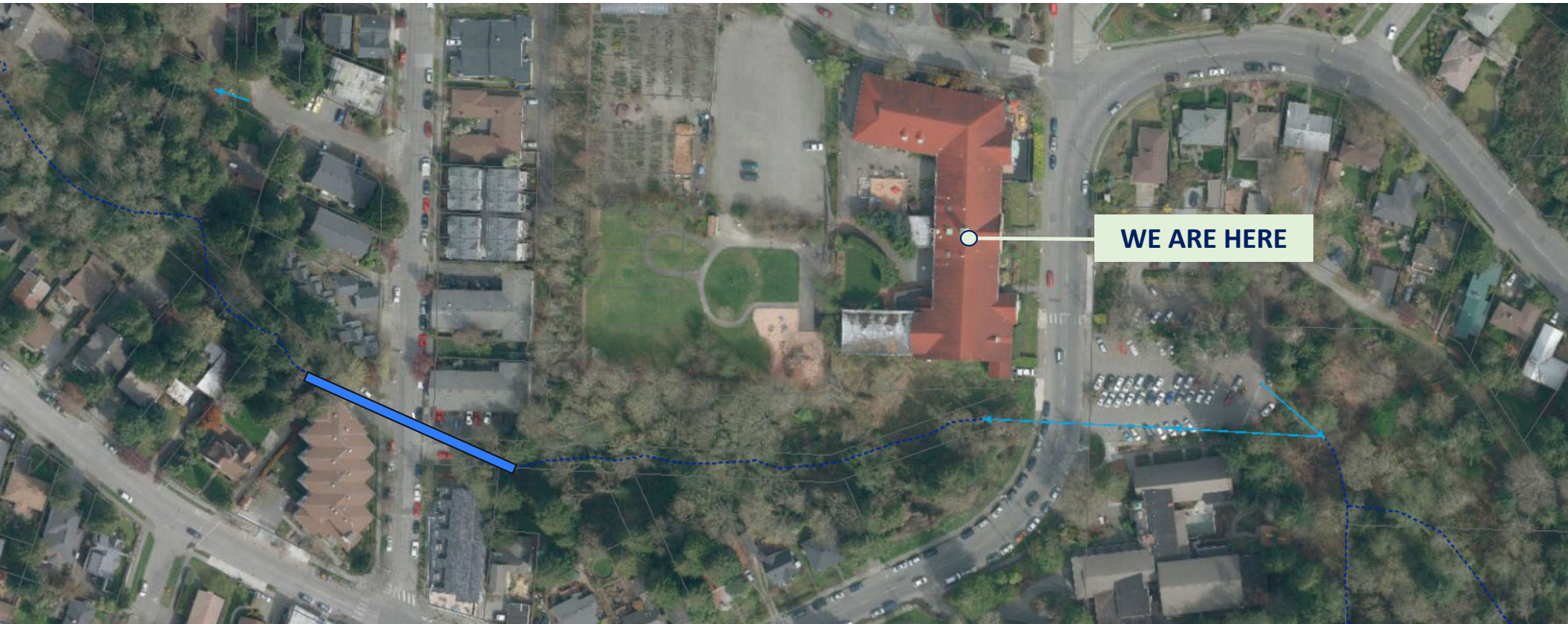


★ 45<sup>th</sup> Ave SW Culvert location



# Project Location

 45th Ave SW Culvert



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# What is the problem?

- Existing 24-inch diameter culvert in poor condition, at risk of failure. Condition and size has also led to culvert blockages
- Culvert is currently a barrier for fish passage, cutting fish off from upstream spawning habitat
- Challenging working conditions for SPU's maintenance crews



*Existing culvert inlet and maintenance stairs*



*Existing culvert outlet*



# Project Goals

- Full culvert replacement is needed, repair is not an option
- Restore fish passage and improve habitat, which supports Tribal treaty rights and SPU's commitment to racial and social justice
- Provide safer working conditions for SPU's maintenance crews



*Spawning salmon in Fauntleroy Creek  
(photo courtesy of Whitney F.)*



# Design Update

What's new with the design?



# Project Approach and Benefits

Achieve project goals by:

- Replace aging culvert with a new, structurally sound culvert
- Size culvert for fish passage and future climate impacts
- Improve stream corridor habitat
- Improve maintenance access safety for SPU crews





# Replace Aging Infrastructure

New culvert, access, etc.

*Benefit: Reduce risk of culvert failure and potential damage to roadway, parcels, stream habitat*



# Size Culvert for Fish Passage & Climate Impacts

- Increase culvert width/height: improve creek resiliency to climate change impacts
- Reduce stream flow velocity for fish swimming
- More natural stream channel
- More consistent creek grade (removes a 3' drop fish barrier)

*Benefit: a fish-passable and climate-resilient natural stream channel within a healthy ecosystem*



**Design Requirements**  
2-foot culvert replaced with 14-foot-wide culvert





# Habitat Restoration

- Remove invasive plants, replace with native vegetation
- Restore natural processes in stream channel to benefit fish, other aquatic organisms
- Add complexity with large woody material (LWM) - important features of salmon habitat

*Benefit: Improves stream habitat; vegetation provides food source for salmon; restores fish passage upstream to spawning habitat*



# Habitat Restoration

- Plantings provide habitat, shades stream channel
- Help jump-start succession process
- Source of woody material in stream channel over time, an important driver of habitat creation and channel complexity





# Tree Impacts

- Inventory
- Existing tree condition, age, etc.
- Tree codes/critical areas
- Trees' ecological functions



# Tree Impacts

- Impacts: tree retention vs. removal decisions
- Tree protection
- Natural forest succession
- Maintenance/monitoring





# Improve Maintenance Access Safety

Construct concrete access stairs, landing, and fences/gates for secure maintenance staff access that meets safety standards

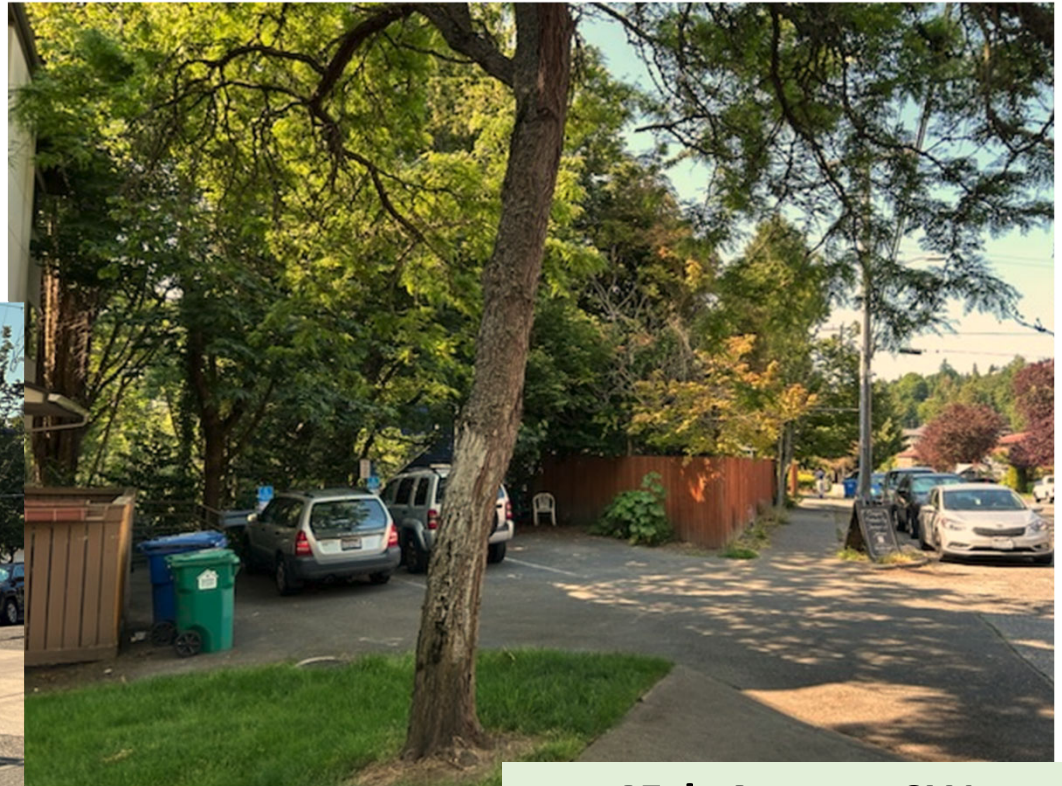
*Benefit: Safe, secure access for SPU maintenance crews*



# Fauntleroy Creek Landing Area



**45th Avenue SW  
facing west**



**45th Avenue SW  
facing north**



# Fauntleroy Creek Landing Area



**View along 45th Ave SW looking north**

Restored streetscape includes:

- Specialty pavement with stream theme
- Boulders & plantings
- Educational signage
- Streetlight
- Perforated metal ornamental fence
- Secure ravine maintenance access
- Replacement of 3 parking stalls

# Anticipated Construction Impacts

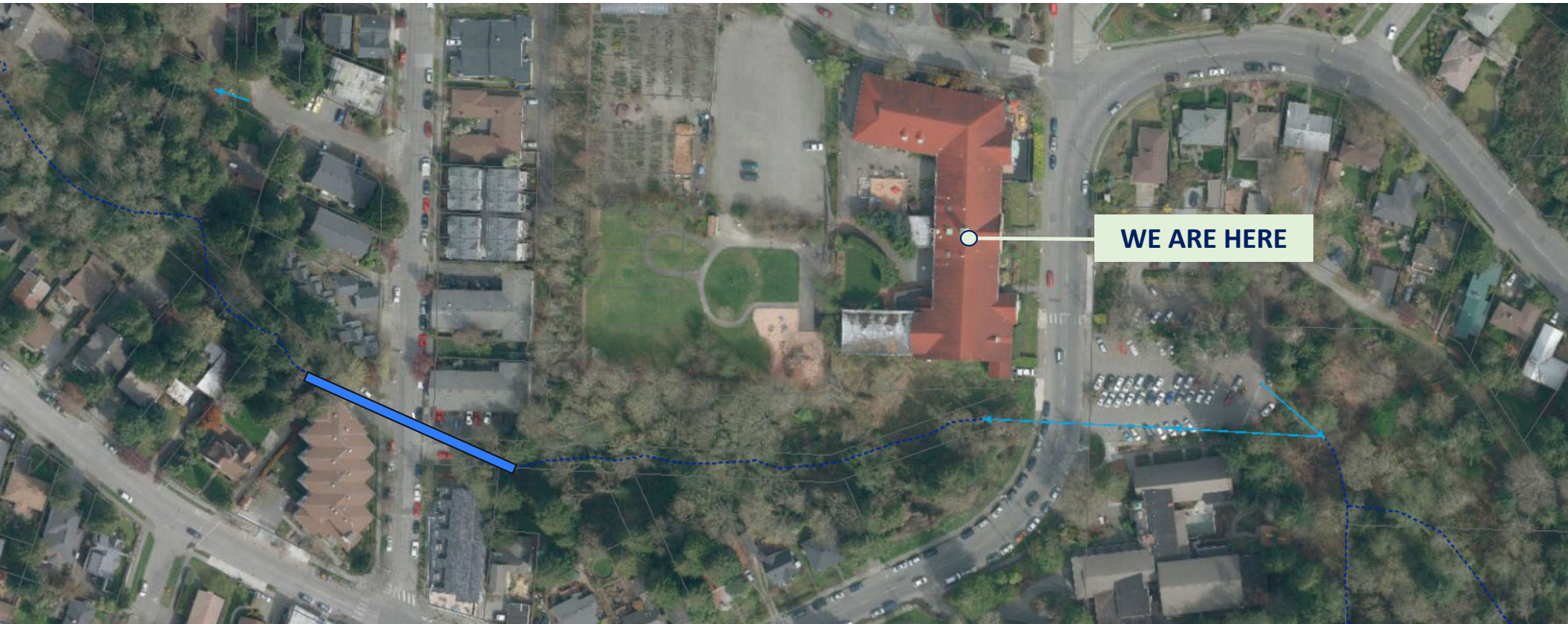
How could construction impact you?





# Project Location

 45th Ave SW Culvert



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# Site Conditions

- Space-constrained site
- Overhead power
- Adjacent buildings
- Roadway and parking
- Soil conditions require top-down construction





# Anticipated Construction Sequencing

- Relocate utilities
- Install environmental protection measures: tree protection fencing and erosion/sediment control
- Creek bypass
- Construct shoring system and excavate for culvert
- Construct culvert
- Construct stream channel then re-introduce creek flows
- Backfill the excavation, restore surfaces
- Install Landing features
- Restoration plantings



Culvert construction expected to start in 2026 and may last approximately two years

# Anticipated Construction Impacts

SPU has been working with SDOT to mitigate traffic impacts to the surrounding community

Traffic and Pedestrian impacts during construction:

- 45<sup>th</sup> closure at project site
  - Maintain local access to homes & businesses
  - Maintain pedestrian access when safe. Detours will be required at times.
- Revisions to SW Director St for two-way traffic
  - 4-way stop control at intersection with California Ave SW
- No impacts to bus routes





# Anticipated Construction Impacts

In addition to traffic impacts:

- Power line relocation work on 45th Avenue SW - as early as late 2025
- Short outages for some utility customers - will be coordinated in advance
- During construction, neighbors will experience increased noise, light, dust, vibrations, and traffic impacts
- Culvert construction expected to start in 2026 and may last approximately two years

SPU has been working mitigate impacts to the surrounding community and will continue to communicate those efforts as we get closer to construction

# Next Steps



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# Moving Forward

The Project Team will:

- Finalize project design
- Continue coordination with permit agencies
- Finalize construction and traffic impacts coordination with Seattle Department of Transportation
- Coordinate with surrounding community, adjacent property owners, and community partners
- SPU crews will continue to monitor site



# Questions?

**Do you have questions, comments, or ideas? Please contact:**

Jonathan Brown, Project Manager  
Email: [Jonathan.Brown@seattle.gov](mailto:Jonathan.Brown@seattle.gov)  
Phone: (206) 561-2581

**Learn more about the 45th Ave SW Culvert Replacement Project  
sign up for email updates**  
[www.seattle.gov/utilities/FauntleroyCreekCulverts](http://www.seattle.gov/utilities/FauntleroyCreekCulverts)





# Seattle Public Utilities

## California Ave SW Culvert Replacement Project Update

**Stephen Anderson | SPU Project Manager**

**June 10, 2025**

Fauntleroy Community Association Meeting

Seattle Public Utilities



**City of Seattle**



# Agenda

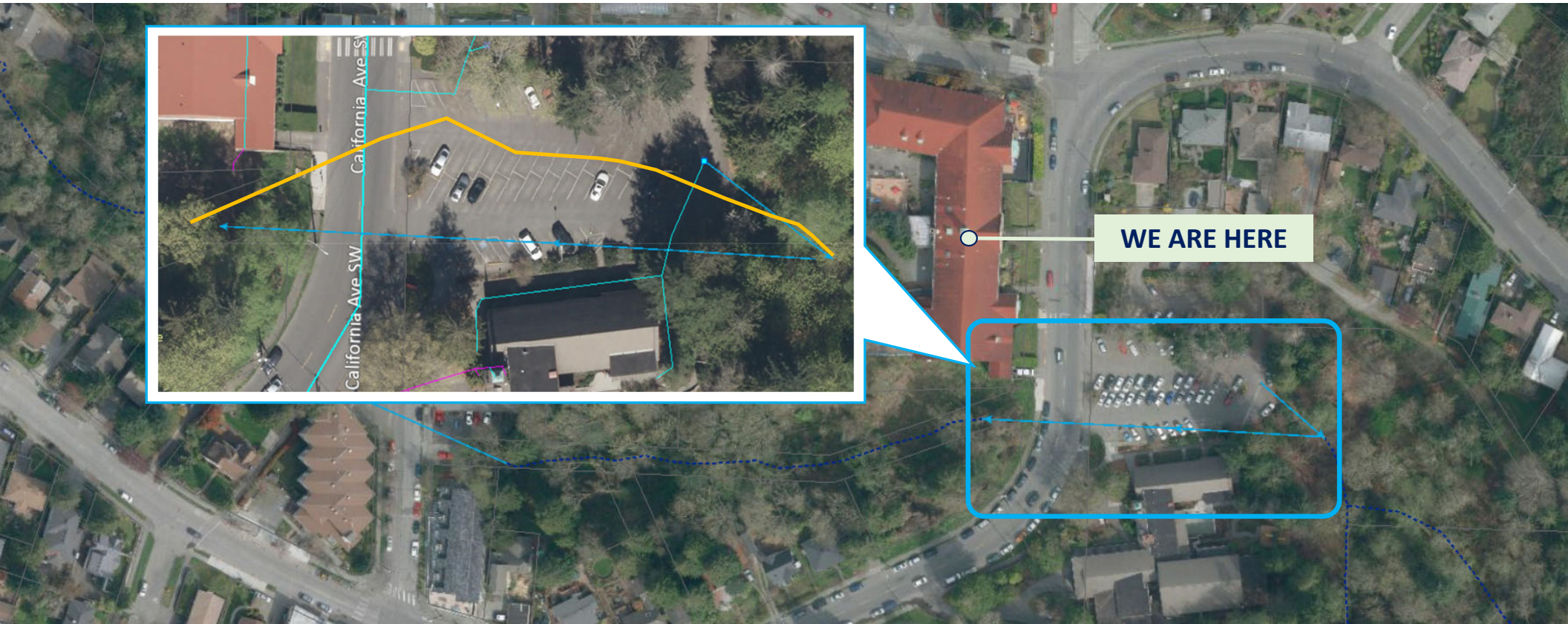
- Project Background
- Project Update
- Next Steps
- Schedule
- Emergency Repair





# Project Location

— California Ave SW Culvert





# Project Background

- Existing culvert is in poor condition and failing.
- Culvert is a full fish passage barrier and cannot be repaired/replaced in-kind.
- Reviewed design alignment options as part of early project phase.
- SPU is moving forward with formal design and pursuing a parallel emergency repair.





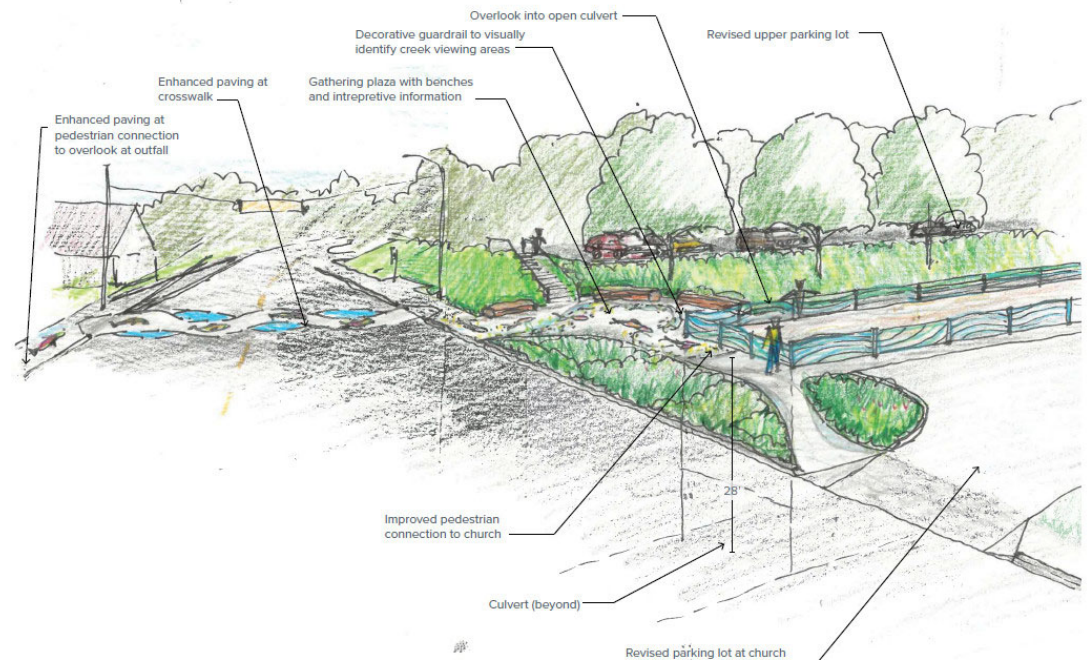
# Project Update

- Agreement reached to replace and maintain the new culvert.
- Consultant design team selected; contracting underway.
- Call for artists and artist selection (1% for Art).



# Project Next Steps

- Finalize contracting and kick-off formal design phase.
- Develop community engagement plan to support design phase.
- Restart coordination with local and federal agencies for permitting and construction impacts.
- Progress development of early design concepts (construction plans).



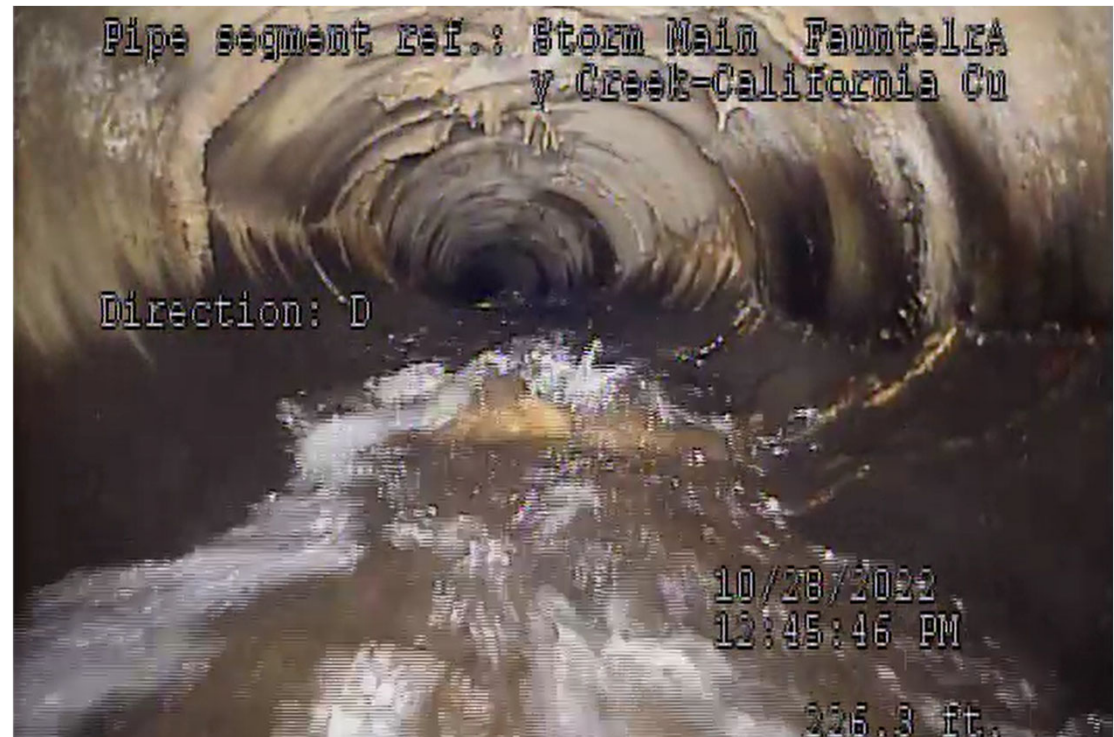


# Project Timeline



# Emergency Repair

- Developing primary and secondary alternatives for repair:
  - Primary option planned to start late Summer/early Fall 2025.
  - Secondary option would start late Spring/Summer 2026.
- Decision based on condition, risks, and community impacts.





# Thank you!

**Do you have questions, comments, or ideas? Please contact:**

Stephen Anderson, Project Manager  
Email: [Stephen.Anderson@seattle.gov](mailto:Stephen.Anderson@seattle.gov)  
Phone: (425) 473-2928

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