

North Mercer Island Interceptor and Enatai Interceptor Upgrade Project



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

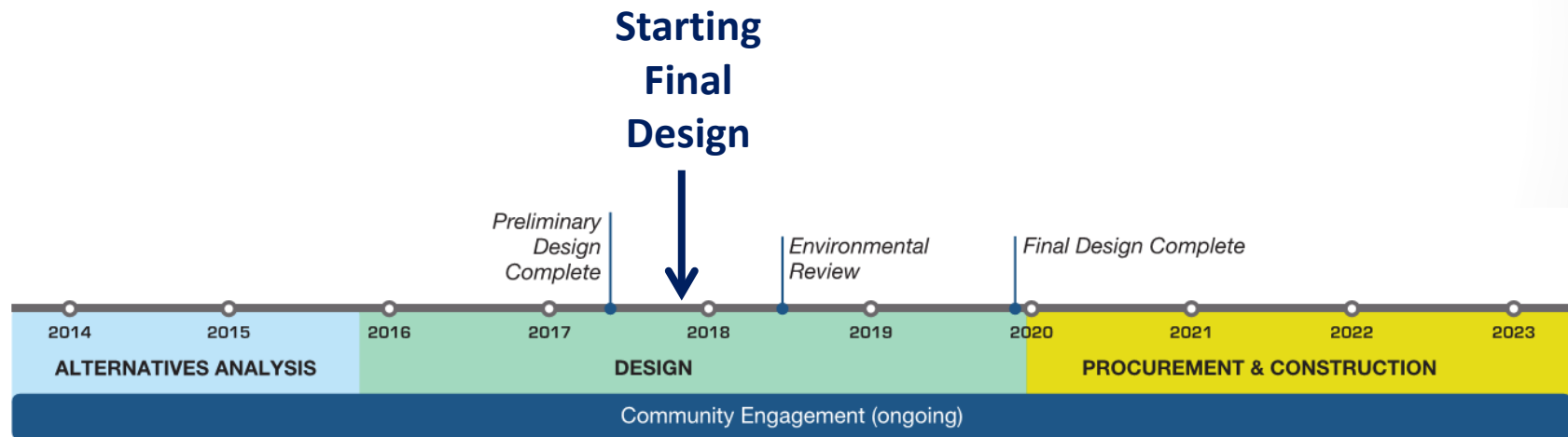
Enatai Neighborhood Community Meeting

November 9, 2017



Project Objective & Schedule

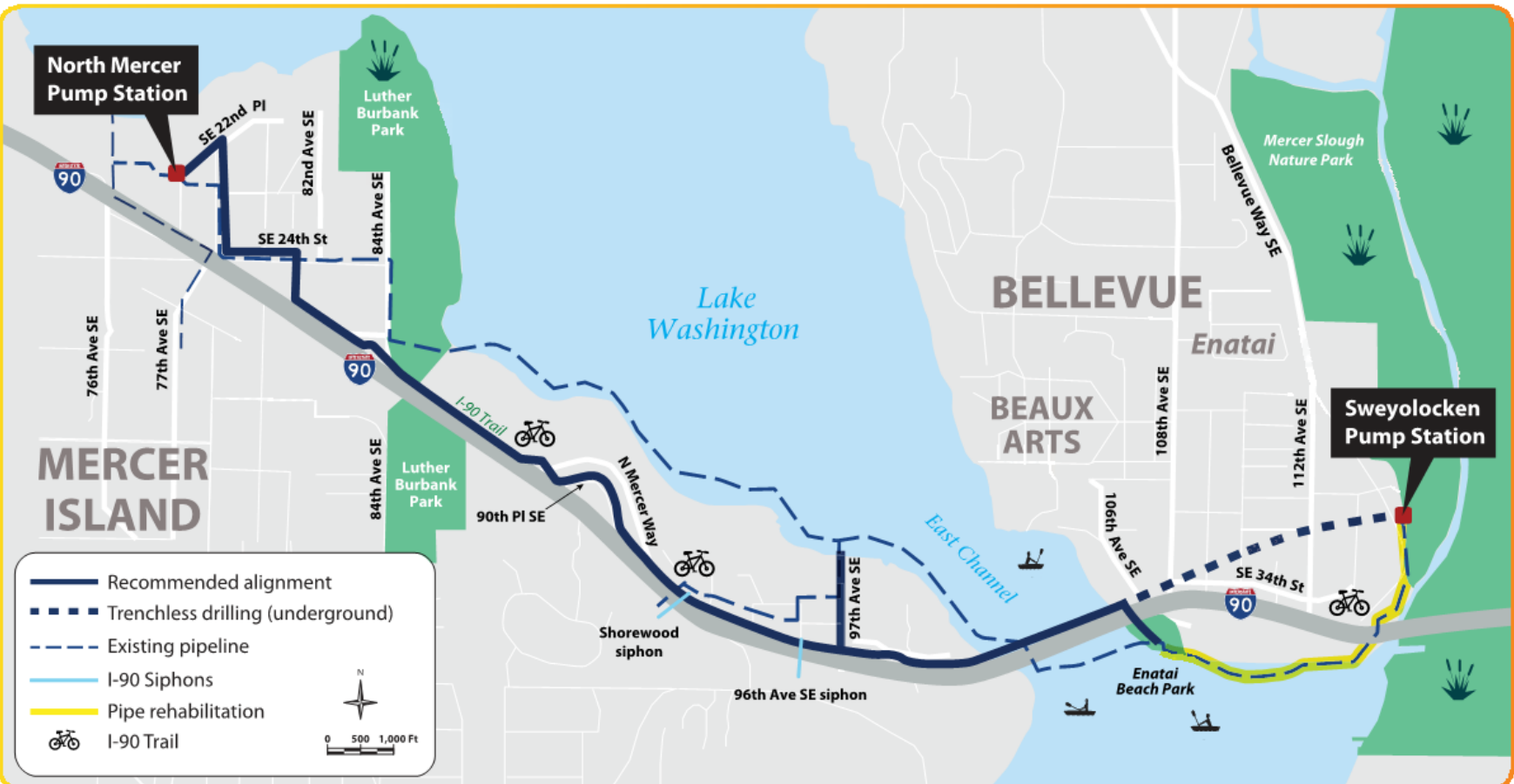
To increase system reliability, performance and efficiency, King County proposes to rehabilitate and/or replace its North Mercer Island and Enatai sewer pipes to accommodate 20-year peak wastewater flows projected through the year 2060.



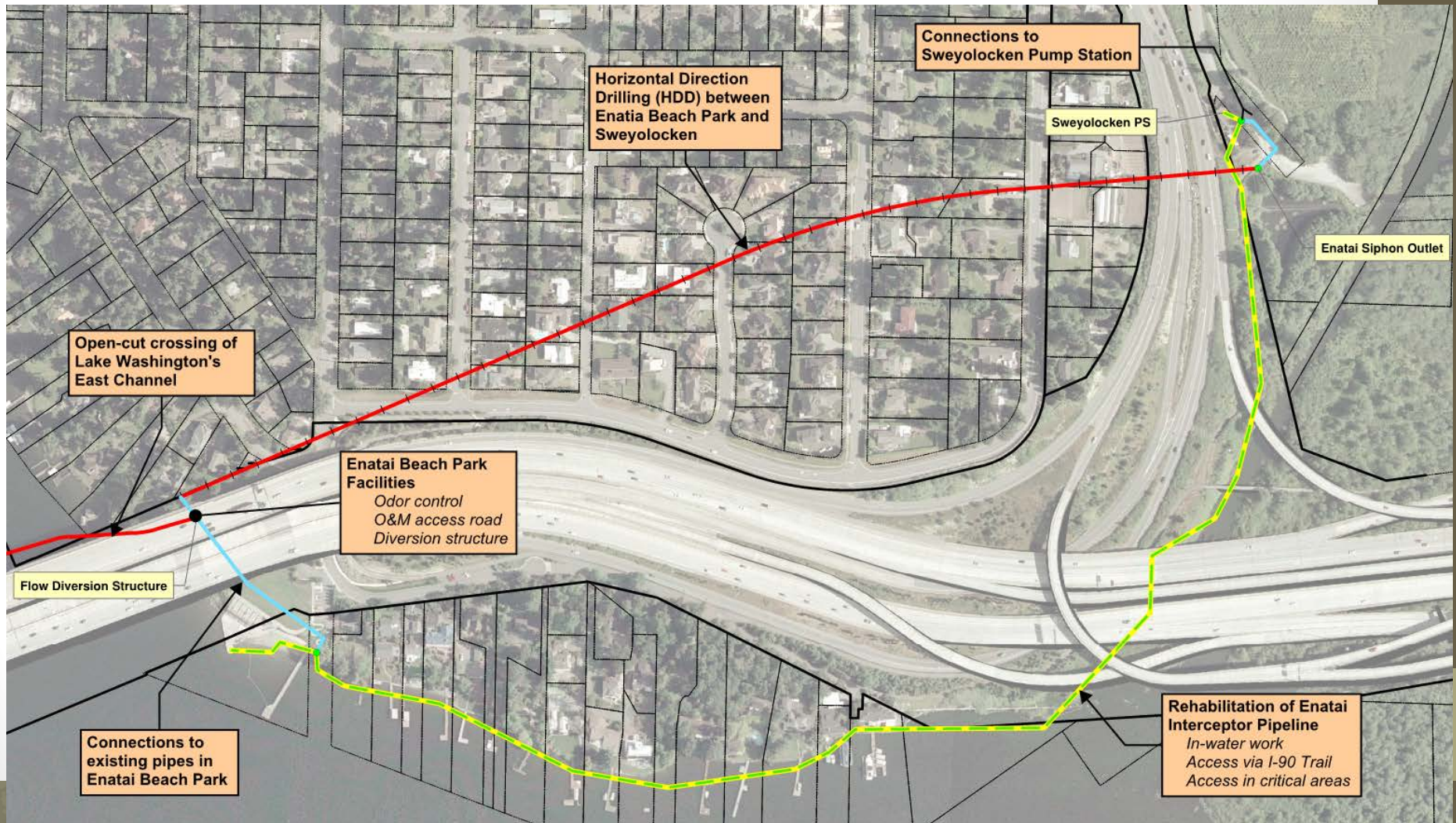
Existing King County Wastewater System



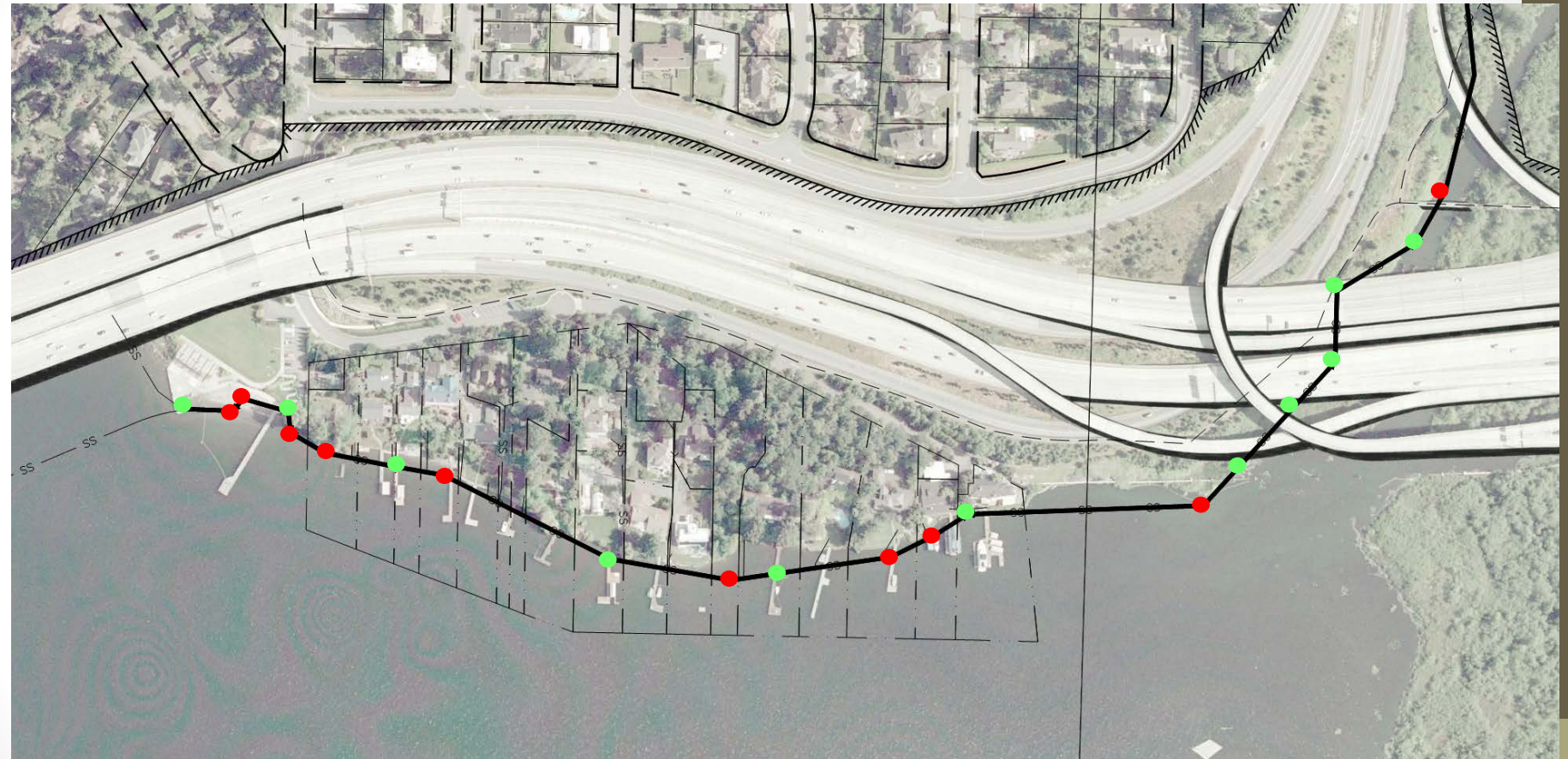
Project Alignment



Project Elements in Bellevue

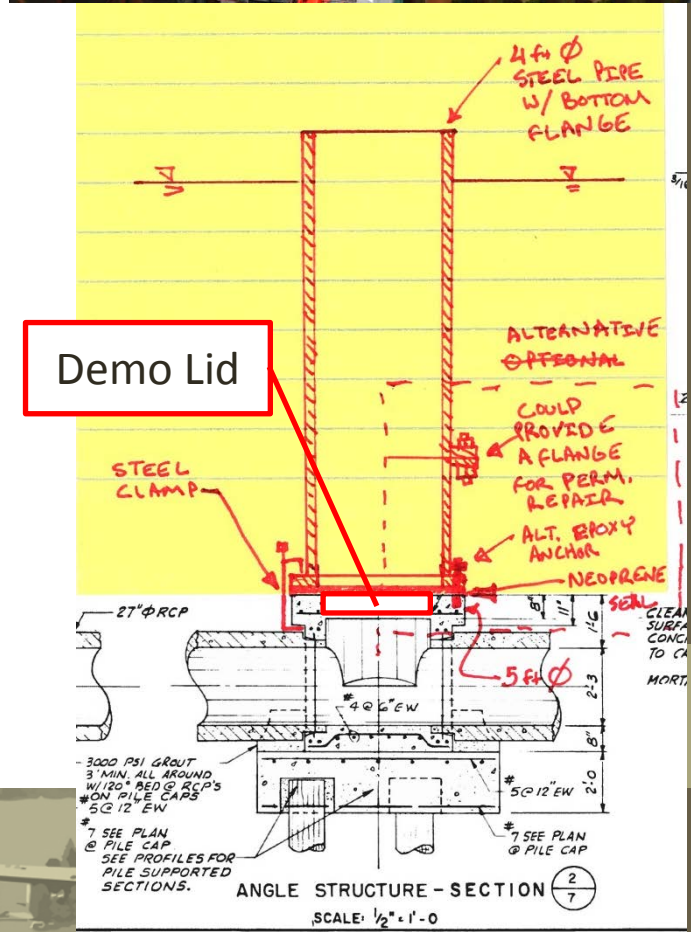


Enatai Interceptor Rehab – Cured-in-Place Pipe (CIPP)

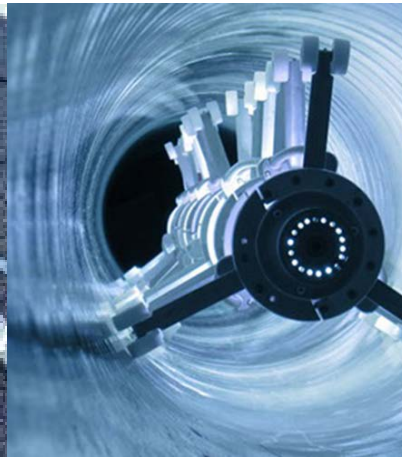
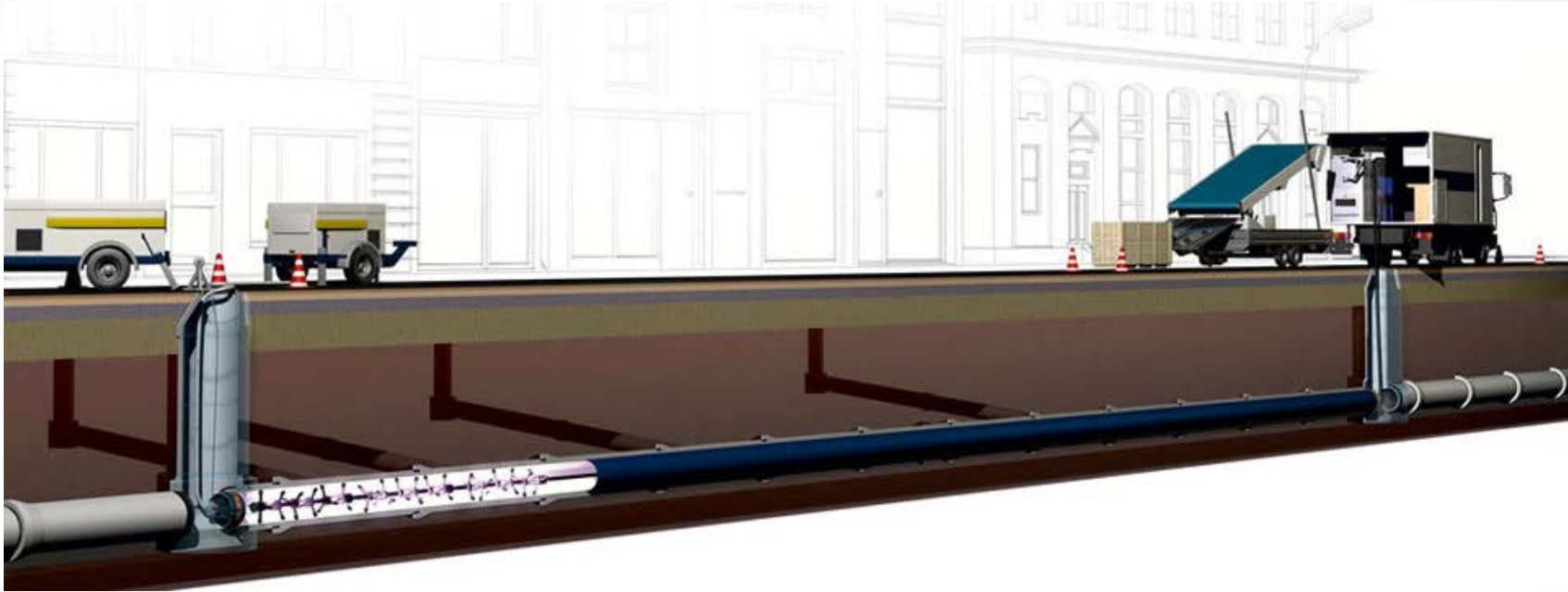


CIPP: Pipe Access in Lake at Angle Structures

- Access at pipe angles to improve pipeline
- Containment to work in dry conditions
 - Cofferdam and Silt Curtains/Wall
 - Protect Water Quality
- Restored Lakebed



CIPP: Equipment and Staging-UV Cure



- Video Truck
- Vac-Truck
- Air Compressor
- Winch
- Trailer

CIPP: Process Overview

- Set up construction staging areas, sewer bypass, grinder pumps
- Install access at angle structures
- Remove existing liner and new liner
- Remove grinder pumps, sewer bypass, and final restoration

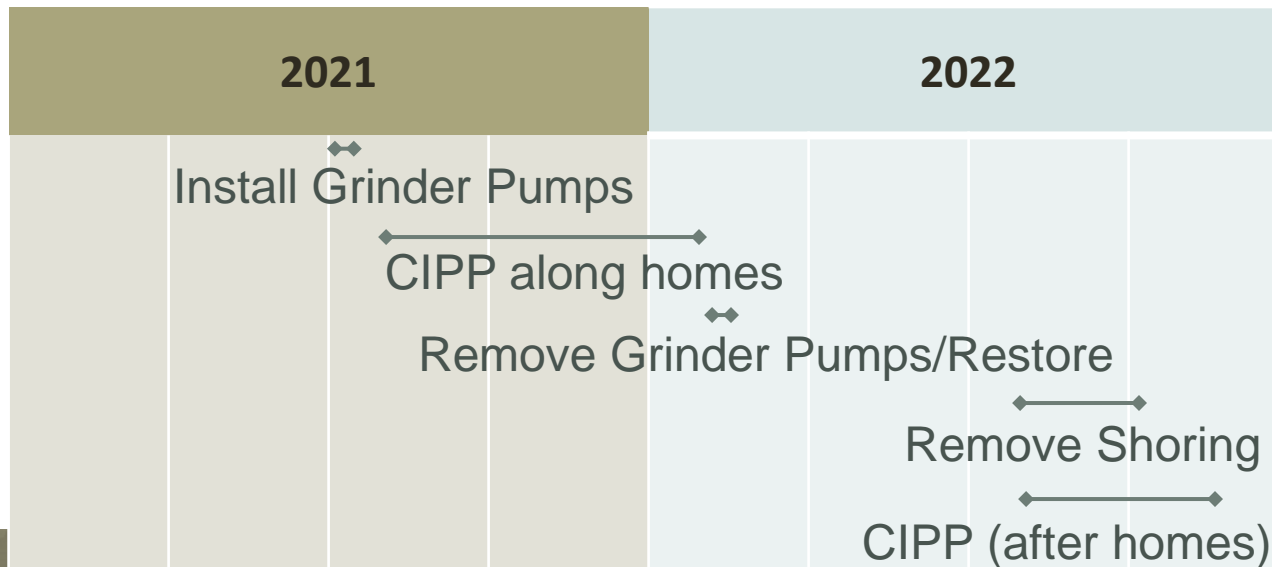


Construction Constraints



CIPP: Schedule

- Installation Temporary Grinder Pumps
- CIPP Process – Install Shoring & Work along Enatai homes
- Removal of Temporary Grinder Pumps & Property Restoration
- Removal of Shoring along Enatai homes
- CIPP Process – Work along rest of sewer alignment (after homes)

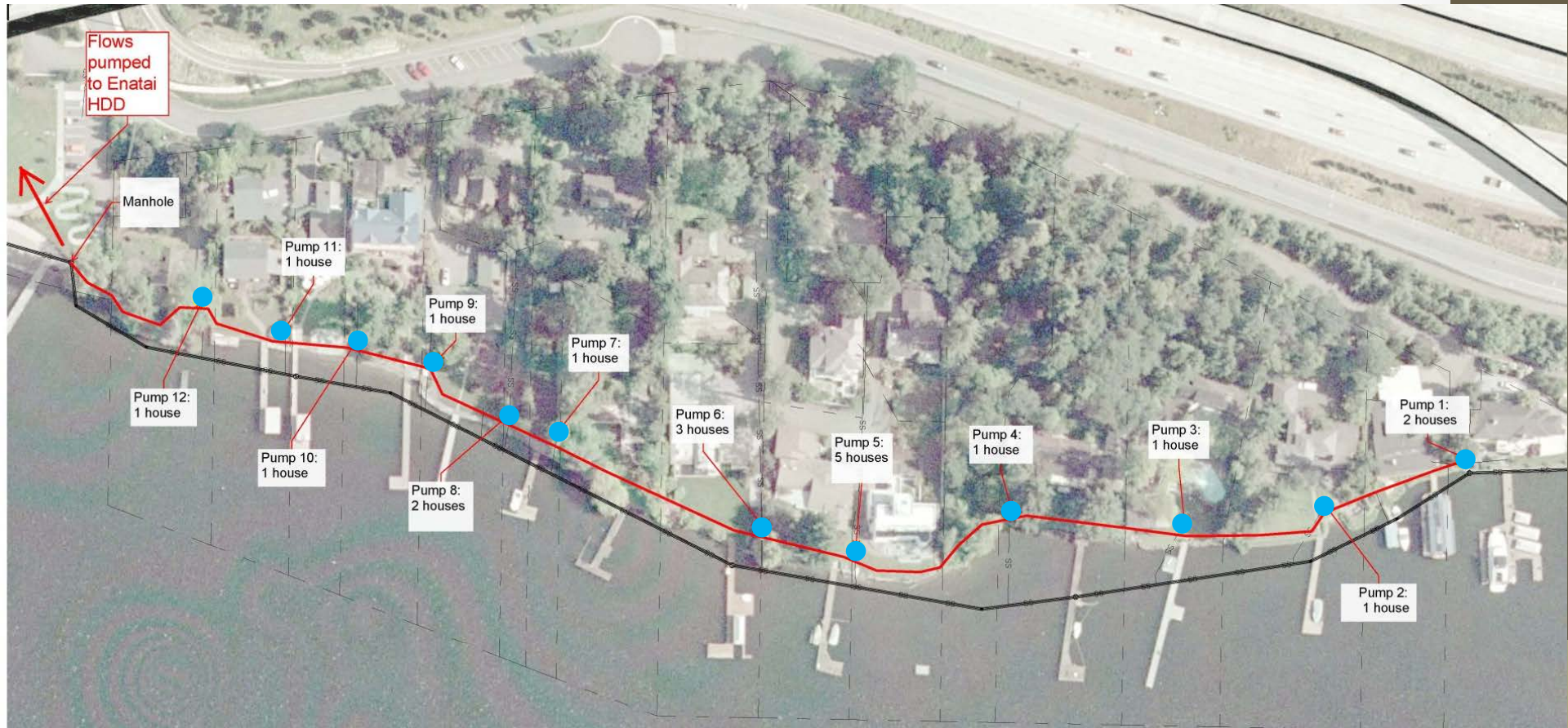


Temporary sewer service

- Initial Concept – temporary relocation/hotels
- New Plan – Grinder pump bypass system
 - 12 grinder stations for 25 homes
 - Prefabricated units (~3 ft diameter, ~6-8 ft deep)
 - PSE Power supply by King County
 - Standby Generator and Bypass at Enatai Beach Park
 - Above grade conduits
 - ~2-inch dia. temporary force main
 - Plastic weatherproof electrical conduit.



Temporary Sewer Service: Preliminary Layout



Temporary Sewer Service: Grinder Pump Installation



Temporary Sewer Service: Grinder Pump Care

Care of the grinder pump station

All property owners and residents should be aware of best practices to follow with pressure sewer systems to ensure safe, reliable service with minimal maintenance. Dispose of these items either in the trash, or for chemicals and fuel products, at an appropriate disposal site.

<i>Trash</i>	<i>Disposal site</i>
<ul style="list-style-type: none">• Glass• Metal• Gravel and sand (including aquarium rocks)• Coffee grinds• Kitty litter• Seafood shells• Sanitary napkins, tampons, tampon applicators, and wipes• Disposable diapers• Socks, rags, or cloths• Plastics	<ul style="list-style-type: none">• Explosive or flammable materials• Lubricating oil, grease, cooking oil, and paint• Strong chemicals• Gasoline or diesel



Upcoming Coordination

- Rights of entry Request
 - Ground survey along shoreline areas, docks
 - Habitat survey
- Temporary Construction Easements before grinder pump installation
- Access hatch for 3 docks



- Ongoing City of Bellevue coordination
- Pipeline internal inspection
- In-water angle structure dive survey - Summer 2018
- Construction 2020 and beyond



Our commitment to you

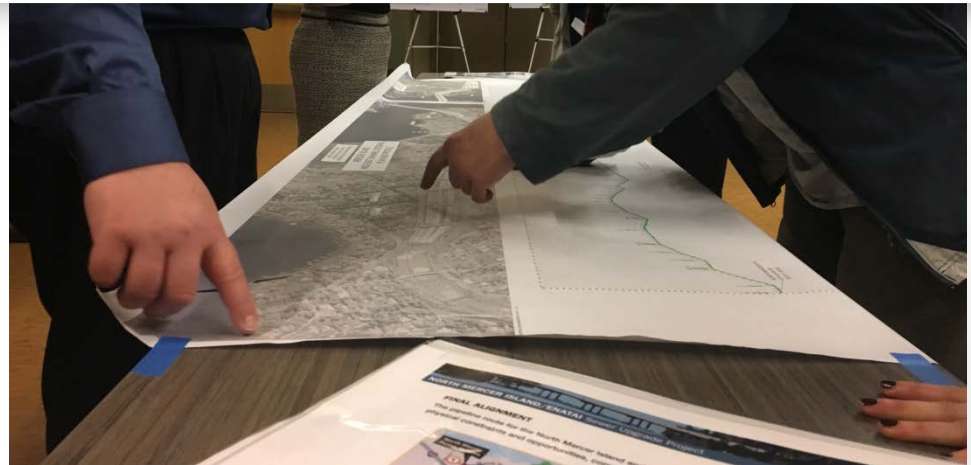
- Outreach and coordination with renters and property owners
- Advance notification of activities
- Responsiveness
- Gather input where we can



King County project team identifies route for sewer pipeline in Mercer Island and Bellevue

Finalizing the route comes after nearly two years of studies and conversations with the community, local government, and partner agencies to identify the best location for the pipeline route. The existing sewer line runs along the Bellevue and Mercer Island shoreline in the East Channel and Lake Washington. The new pipeline will stay out of the water as much as possible to limit the impact to sensitive environmental areas.

More information about the pipeline route inside!



Questions?
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Thank You

