



Mercer Island Capital Project Updates

Utility Board
September 14, 2021

Meter replacement project (AMI)



Replace water meters with new meters that communicate with City in real time. Project will improve billing accuracy, manage water loss, reduce sources of lead, and create standards for replacing water meters.

Project Status:

- Propagation study identified seven locations to install wireless data collectors on poles. Currently working with PSE to replace existing power poles and install equipment.
- Vendor contract under review with the city.
- Construction tentatively scheduled to start November/December 2021
- FYI – City Capital watermain replacement projects have included new meter technology/implementation.



SCADA Replacement Project - Water

Replace existing programmable logic controllers (PLC) panel at five water sites.

Project Status:

- Currently in construction
- Completion date has been delayed from fall 2021 to spring 2022 (tentative), due to supply shortages



SCADA Replacement Project - Sewer

Develop plans and specifications to replace SCADA system components (PLC units) at 17 pump stations and at the Public Works building.

Project Status:

- Currently, design is being prepared for Pump Station 16 (to be used as template)
- Planning to advertise for construction bids in late Q4 2021 or Q1 2022

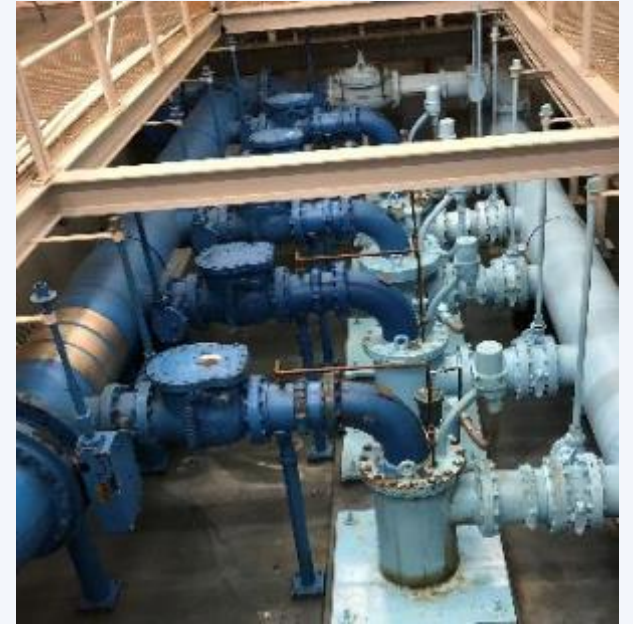


Reservoir Pump Replacement Project

Develop plans and specifications to replace the five submersible pump and motor assemblies at the reservoir booster pump station

Project Status:

- Currently in design, consultant is performing assessment of current operations
- Design is scheduled to be completed in early 2022
- Construction expected to start in 2022
 - *Project will require Council appropriation*



Booster Chlorination Project

Construct booster disinfection system to reduce the risk of future water system contamination.

Project Status:

- Construction contract has been awarded
- Staff is currently reviewing material submittals and awaiting material procurement
- Supply chain issues are creating delays in construction schedule
- Construction is expected to begin near the end of this year



2021 Water system improvements



Install new water mains on 81st Ave, SE 24th St, and 82nd Ave near MICEC

Project Status:

- Construction began in May
- Project substantially completed in late August
- Only a short project punchlist remains before full completion



Basin 42 watercourse stabilization project

Stabilize 1200 linear feet of watercourse in 6500 block of EMW, using logs and streambed cobble to reduce sediment transport.

Project Status:

- Project is currently under construction
- In-water work will be completed by end of September (per permitting regulations)
- Contractor will re-plant site in late fall



Stormwater Conveyance System Assessments

Analysis to confirm adequate capacity of stormwater conveyance system.

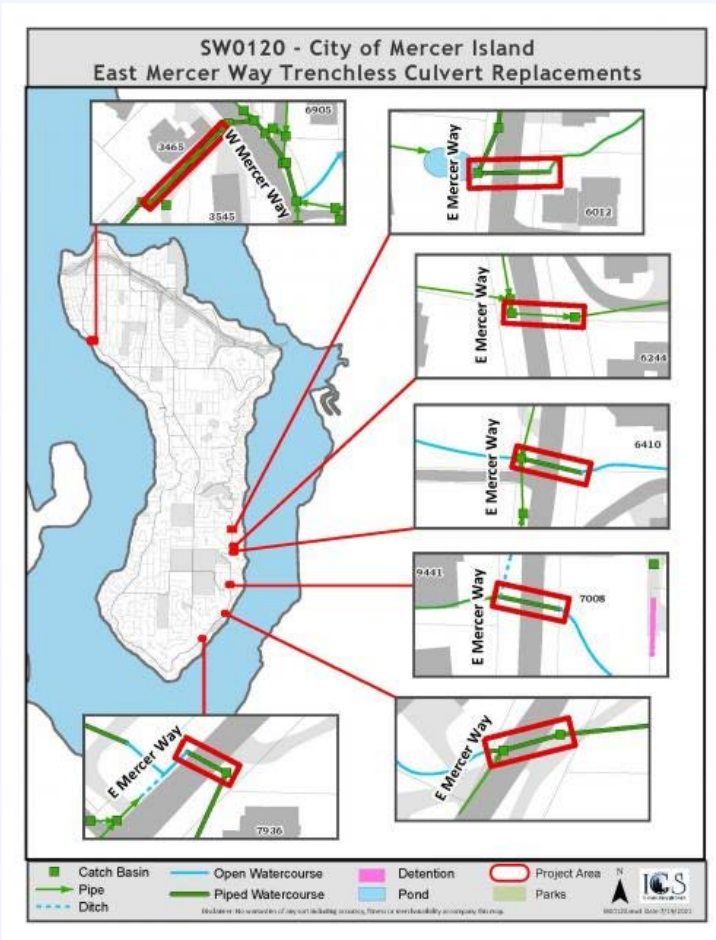
Area of focus: Sub basin 32 (includes south end shopping center), one of the largest drainage basins on the island

Project status:

- Consultant hired
- Propose improvements as needed, which will inform next Capital budget cycle (2023-2024)



EMW Trenchless Culvert Replacements



Project Status:

- Replacing culverts with defects (separated joints, cracks, root intrusion, etc..) that were identified using CCTV inspections
- Design underway for seven culverts using trenchless methods such as slip-lining or pipe bursting
- Pipe failure at these locations would pose structural risk to main arterial roadway
- Consultant hired for design; permitting expected in 2021
- Construction planned for 2022



Additional Notes & Tidbits

- Staffing changes
- Timeline challenges – supply chain delays
- October 5th City Council meeting
 - ARPA discussion regarding potential Utility Projects
- Questions?

