Business Item 2023-220

MWWTP Water Systems Renewal & Improvements Phase 1 – Distribution System Renewal, Contract 22P076A



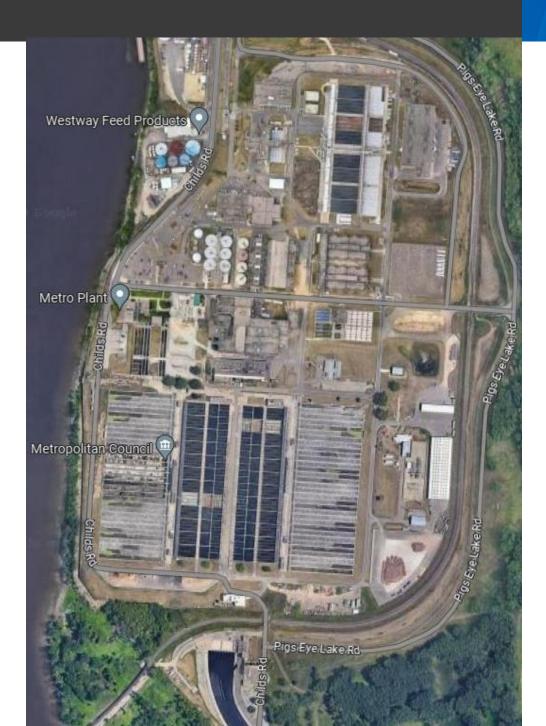
Environment Committee: September 26, 2023

Timothy Amstutz



Project Area

All work located at Metropolitan Wastewater Treatment Plant, 2400 Childs Road, Saint Paul, MN 55106



Metropolitan Council

Project Drivers

Age and Condition of Service Water Piping system

- Piping system is near end of service life. Most piping installed in the 1960s to 1980s. Some installed in 1930s (~90 years old)
- Extensive corrosion in steel pipes has resulted in
 - Pipe leaks requiring frequent unplanned repairs
 - Corrosion particulates have clogged pump seal water pipes
- Many old valves no longer open/close so pipe repairs require shutdown of large portions of the plant.



Photo of old steel service water piping showing multiple repairs



Photo of old corroded steel service water piping and valve

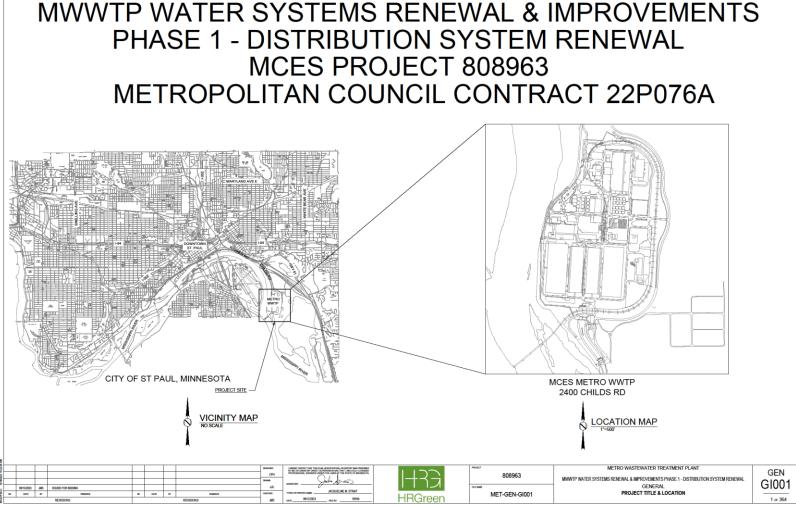
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Scope of Work

Renewal of Service Water Piping system

- Construction contract for demolition, removal, and replacement of service water piping system
 - \circ ~20,000 lineal feet of 4" to 12" ductile iron pipe
 - ~39,000 lineal feet of 1/2" to 3" piping
 - Valves, flushing hydrants, standpipes, etc.
- Construction duration approximately 36 months

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Scope of Work (continued)

Operation and Maintenance Improvements

- Project increases system pressure which eliminates the need for fixed and portable booster pumps.
- Increase total number of cleaning connections from 57 to 266
- Reduce potential for pipe corrosion
 - Use insulative coating on ductile iron pipe instead of covering steel pipe with insulation



Booster pumps P647 and P648 to be removed.



Pipe corrosion on steel service water piping that was covered in insulation.



Example of pipe coated with an insulative coating



Unused spray water standpipe to be repurposed for tank cleaning

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Bid Summary

- The Invitation for Bid (IFB) was advertised June 27, 2023
- Procurement facilitated a public bid opening on August 23, 2023.
- Two bids were received.
- Corval Constructors, Inc. bid was in the amount of \$39,877,080.
- This project is financed by a loan from the Minnesota Public Facilities Authority and has a disadvantaged business participation goal of 10%.
- The Office of Equal Opportunity reviewed and passed the bid from Corval Constructors, Inc.
- Corval Constructors, Inc. is the lowest, responsive and responsible bidder.

Metropolitan Council

Proposed Action

That the Council authorize the Regional Administrator to award and execute a contract 22P076A with Corval Constructors, Inc., to provide construction services at the Metropolitan Wastewater Treatment Plant (MWWTP) in an amount not to exceed \$39,877,080.

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