



COMMISSION FILE NO: 24-139-11 **DATE INTRODUCED:** November 4, 2024

INTRODUCED BY: Executive Director (Signature on File in the Office of the Commission)

REFERRED BY COMMISSION CHAIRPERSON TO: Operations Committee

RELATING TO: Award of Contract C98066E02, Condition Assessment of Priority Sites

SUMMARY:

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract C98066E02, Condition Assessment of Priority Sites, with Taplin Group, LLC, (Taplin) in the amount of \$1,209,935. Taplin was the lowest responsible, responsive bidder among four bids received.

Hydrogen sulfide gas is known to cause corrosion in sewer systems, which can deteriorate sewers and manholes and reduce the useful life of the infrastructure. In 2019, the District performed a study to identify areas within the Metropolitan Interceptor Sewer (MIS) system that have high levels of sulfide generation that can lead to generation of hydrogen sulfide gas. The study recommended that the District perform condition assessments on infrastructure in areas with an increased potential of high levels of hydrogen sulfide generation. Staff recommends performing a condition assessment to understand the remaining useful life and to identify rehabilitation or replacement needs.

The District has identified four MIS segments that have high levels of hydrogen sulfide gas and exhibit signs of corrosion. These segments consist of approximately 12 miles of concrete pipe of varying diameters and 85 manholes. Staff recommends performing an advanced condition assessment on these segments.

ATTACHMENTS: **BACKGROUND** **KEY ISSUES** **RESOLUTION**
FISCAL NOTE **S/W/MBE** **OTHER** _____

*OP_Award_C98066E02_Condition_Assessment_Priority_Sites_Legislative_file.docx
10-25-24*

COMMITTEE ACTION: _____ **DATE:** _____

COMMISSION ACTION: _____ **DATE:** _____

SUMMARY (Cont'd)

Award of Contract C98066E02, Condition Assessment of Priority Sites

In addition, at the Jones Island Water Reclamation Facility (JIWRF), there are two large diameter concrete pipes that convey raw wastewater from the high and low level siphon structures to the preliminary treatment facility. These pipes total 311 feet in length, range in size from 72 inches to 96 inches, and are critical pieces of infrastructure. If these pipes failed, the ability to convey flows through to the treatment process would be significantly compromised. In 2015, ground settlement occurred in the area surrounding the high and low level structures and these pipes. While the District stabilized these structures, due to extremely challenging technical issues, staff determined that the best course of action at the time was to monitor the two pipes for settlement. Staff has since monitored these pipes and has noted some slight settlement over time. Given this situation, staff recommends performing a condition assessment of these pipes. Depending upon the results of this assessment, staff will develop and recommend any necessary mitigative actions.

Below is a summary of the pipes for which condition will be assessed under this proposed contract.

Segment	Location	Length (feet)	Size	No. of Manholes / Structures
1	West College Avenue in City of Franklin and Village of Hales Corners	5,500	36-inch and 84-inch circular	9
2	Northwest Side of Sewer Service Area from West County Line Road in the City of Milwaukee and through the Menomonee River Parkway in the City of Wauwatosa	56,700	48-inch, 60-inch and 96-inch circular; 57-inch by 42-inch and 72-inch by 54-inch special section	72
3	East Scott Street in the City of Milwaukee	14	96-inch circular	1
4	West Scott Street in the City of Milwaukee	1,300	60-inch circular	3
5	Jones Island Water Reclamation Facility	311	72-inch, 90-inch, and 96-inch circular	2

SUMMARY (Cont'd)

Award of Contract C98066E02, Condition Assessment of Priority Sites

Multiple sensor inspection (MSI) is a type of advanced condition assessment that involves deploying a remotely operated platform that is equipped with various sensors to assess the interior condition of pipes. The sensors work in conjunction to provide an image of the pipe interior while highlighting areas of corrosion, and the location of cracks and debris below the water level.

Under Contract C98066E02, the contractor will:

- Conduct a condition assessment using MSI equipment for 64,000 linear feet of pipe.
- Conduct a condition assessment for 87 manhole structures.
- Collect and test compressive strength on concrete core samples in nine manholes.
- Submit a report detailing condition assessment scores for each pipe and manhole.
- Deploy traffic control and flow control to complete the work.
- Conduct site restoration.

The contract duration is 250 days.

RESOLUTION

Award of Contract C98066E02, Condition Assessment of Priority Sites

RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that Contract C98066E02, Condition Assessment of Priority Sites, is awarded to Taplin Group, LLC, in the amount of \$1,209,935, and that the Executive Director is directed to execute a contract on behalf of the District.