



CITY OF NOVI CITY COUNCIL
JULY 10, 2023

SUBJECT: Approval to award condition assessment services to Pure Technologies for inspection of PCCP water main, in the amount of \$61,700.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

EXPENDITURE REQUIRED	\$ 61,700.00
AMOUNT BUDGETED	\$ 61,700.00
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBER	592-536.00-816.088

BACKGROUND INFORMATION:

During construction operations related to the ongoing I-96 Flex Lane construction, MDOT notified staff of a leak on the city's 30-inch prestressed concrete cylinder pipe (PCCP) water main, on south side of I-96 just east of Novi Road. The cause of the leak not yet determined. MDOT was aware of this main's location and appear to have taken all reasonable precautions throughout their work. Although only a minor amount of water is leaking, it is not clear if there is potential for significant failure, potentially impacting I-96 traffic and flex lane construction. Given the location of the leak is under I-96, inspection of the main is a high priority and staff has begun the process to investigate further. American Leak Detection attempted to locate the leak using acoustic technology. However, the results were inconclusive due to interference caused by the grouted pipe casing and ambient noise from traffic.

Staff has since consulted with Pure Technologies for inspection of the water main using the Smart Ball, which is their proprietary device capable of detecting the location and severity of leaks. The Smart Ball was previously used to inspect a portion of the water main on Ten Mile with good results. The proposed inspection is approximately 2.4 miles of water main, including areas north and south of the leak, taking advantage of mobilization. Pure Technologies has provided the attached proposal, which has been reviewed by staff and is recommended for approval.

The inspection will take place a few weeks following award and Xylem will provide a report summarizing the inspection and analysis. If required, staff will recommend project solutions based on the report.

RECOMMENDED ACTION: Approval to award condition assessment services to Pure Technologies for inspection of PCCP water main, in the amount of \$61,700.