CITY OF NOVI CITY COUNCIL **JUNE 26, 2023**



SUBJECT: Consideration of approval of Change Order No. 1 to LGC Global Inc. for

the Novi Road/13 Mile Road PCCP Water Main Repair project in the amount

of \$123,919.21.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

EXPENDITURE REQUIRED	\$ 123,919.21
AMOUNT BUDGETED	\$ 1,475,380.00
APPROPRIATION REQUIRED	\$0
LINE ITEM NUMBER	592-536.00-976.112

BACKGROUND INFORMATION:

In 2019, staff inspected a portion of the City's 36-inch prestressed concrete cylinder pipe (PCCP) water transmission main using the Pipe Diver inspection tool. The Pipe Diver (a robotic data collection device inserted into the water main) identified and ranked structural deficiencies in four pipe segments. The PCCP pipe material fails catastrophically like the 2017 Great Lakes Water Authority (GLWA) pipe failure on 14 Mile Road and would significantly affect the water supply to most of the City.

It was determined that the Carbon Fiber Reinforced Polymer (CFRP) lining would be the best option for the repair, which was awarded by City Council on March 6, 2023, to LGC Global. Following that award, staff saw the opportunity for an additional improvement involving the installation of approximately 100 feet of water main across 13 Mile, just east of Novi Road. This connection would provide additional redundancy in this area of the water system and would avoid the need to shut off the water service to residents in the area for this repair, as well as for future repairs. LGC Global has agreed to complete this water main segment per the enclosed proposal.

This work is expected to be completed this fall since this project involves the 36-inch transmission main, which is the primary source of water for a large portion of the City and cannot be shut down during the high-demand irrigation summer season.

RECOMMENDED ACTION: Approval of Change Order No. 1 to LGC Global Inc. for the Novi Road/13 Mile Road PCCP Water Main Repair project in the amount of \$123,919.21.



Monday, May 15, 2023

Ben Croy City Engineer City of Novi 26300 Lee BeGole Drive Novi, MI 48375

Subject: Water Main at 13 Mile Rd and Novi Rd

LGC Global is pleased to offer the following budgetary proposal to the City of Novi to perform the installation of an 8-inch Water Main through directional boring, connecting with existing water main and Permanent Restoration at Novi Rd and 13 Mile Road.

The proposed scope of services for water main installation includes:

- Documentation Review and Value Engineering (as mentioned below in Table 1).
- Investigation and Coordination with the Vendor and Sub-Contractors.
- Submittals and furnishing materials.
- Maintenance of Traffic
- Dust Control and SESC measures
- Mobilization
- Exploratory digging, Shutdown permits, Dewatering.
- Installation of Water Main, Tie-ins, and Testing.
- Disinfection and Chlorination
- Site Restoration and Landscaping
- Demobilization
- Quality Control, As-builts and Closeout documentation



❖ Value Engineering

No.	Function	Cost	Service Analysis	Value Analysis
		Analysis		
1	Installation of 8-	\$ 123,919.21	Minimum traffic	Highly Preferred
	inch WM		disruption	
	(Directional Bore)			
2	Installation of 8-	\$ 114,527.28	Major traffic	Moderately/Less
	inch WM (Open		disruption due to Rd	Preferred
	Cut)		closure	

Table 1

> Proposed Budgetary Pricing

Item	em Item Description		Total	Total	
No.			Qty		
1	Mobilization 10% Max.	LS	1	\$11,844.82	
2	Pre-Construction Audio-Visual	LS	1	\$6,169.18	
3	Water Main HDPE 8" Directional Bore	FT	100	\$ 42,718.00	
4	Water Main DI 8", Tr Det G	FT	5	\$ 3,906.79	
5	Water Main DI 8", Tr Det F	FT	5	\$ 3,906.79	
6	Tapping Sleeve & Valve with Well 8"x8"	EA	1	\$ 10,750.26	
7	Tapping Sleeve & Valve with Well 8"x16"	EA	1	\$ 21,659.97	
8	Sidewalk, Rem	SYD	9	\$ 474.29	
9	Aggregate Base, 4" CL II Granular	SYD	10	\$ 1,208.85	



10	Sidewalk Concrete, 4"	SFT	75	\$	2,547.56
11	Erosion Control, Silt Fence	FT	100	\$	595.34
12	Surface Restoration	LS	1	\$	9,377.15
13	Maintenance of Traffic	LS	1	\$	8,760.23
Total Amount			\$ 1	23,919.21	

We look forward to the opportunity to perform our service and deliver high-quality results.

If you have any questions or comments, please do not hesitate to contact me.

Best regards,

LGC Global, Inc.

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