



**CITY OF NOVI CITY COUNCIL
NOVEMBER 12, 2024**

SUBJECT: Consideration of Approval of Change Order No. 6 to LGC Global, Inc. for the Novi Road/13 Mile Road PCCP Water Main Repair project, in the amount of \$309,717.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- Replacement of an existing 30-inch water main butterfly valve and structure
- Temporary closure of the westbound leg of 13 Mile Road at South Lake Drive
- Two-week construction time in mid-December
- Short-term leak repair performed in July 2024

FINANCIAL IMPACT

	FY 2024/25
EXPENDITURE REQUIRED	\$ 309,717.58
BUDGET	
Water & Sewer Fund 592-536.00-976.224	\$ 380,000.00
APPROPRIATION REQUIRED	\$ 0
FUND BALANCE IMPACT	\$ 0
The contract administration, crew days, and material testing services fees related to this Change Order can be found on the following page. Budget includes these costs and a contingency.	

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. All identified segments were lined with Carbon Fiber Reinforced Polymer (CFRP) in March and April of this year.

With all the water main valve turning involved with the lining, staff noticed a significant leak with the existing 30-inch butterfly valve at the intersection of 13 Mile/South Lake Drive/Old Novi Road (see attached location map). Staff and the contractor, LGC Global, Inc., quickly developed a plan of attack. First, a thorough investigation of the valve. From that investigation, we were able to ascertain a temporary fix that would lessen the leak to a manageable amount. This temporary band-aid would get the City through the highest demand months (mainly due to irrigation) without the need to completely shut down this vital water supply.

In December, dealing with lower water demands, the contractor can more safely shut this water main down and perform a full replacement of the 30-inch butterfly valve and gatewell structure. Construction is expected to take approximately two weeks and will involve the closure of the westbound leg of 13 Mile Road at South Lake Drive (see attached Closure and Detour Map).

The contract administration and geotechnical engineering services related to this change order will be awarded to the following pre-qualified firms using the fee percentages in the Agreements for Professional Engineering Services and Geotechnical Engineering Services for Public Projects.

AECOM		
Contract Administration	6.75% of the Change Order value (\$309,717.58 x 0.0675)	\$20,905.94
Crew Days	\$800 daily inspection fee X 10 days	\$8,000.00
G2 Consulting Group, Inc. (G2)		
Material testing services	2.0% of the Change Order value (\$309,717.58 X 0.02)	\$6,194.35

RECOMMENDED ACTION: Approval of Change Order No. 6 to LGC Global, Inc. for the Novi Road/13 Mile Road PCCP Water Main Repair project, in the amount of \$309,717.58



SOUTH LAKE DRIVE

30-inch butterfly valve

13 MILE ROAD

WB 13 Mile Leg Closure Area

OLD NOVI ROAD

