CITY OF NOVI CITY COUNCIL JULY 26, 2021



SUBJECT: Consideration of Approval of Change Order No. 6 to Florence Cement Company for the Cranbrooke Road Reconstruction, 9 Mile Road to Village Wood Road, asbestos-cement water main replacement in the amount of \$167,343, and amend the budget.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

EXPENDITURE REQUIRED	\$ 167,343
AMOUNT BUDGETED	\$0
APPROPRIATION REQUIRED	\$ 223,695
LINE ITEM NUMBER	592-592.00-976.117

BACKGROUND INFORMATION:

The City's 2021 Water System Master Plan recommends replacing approximately 30 miles of asbestos-cement (AC) water main that exists throughout the city. AC water main was installed up until the early 1980s and is now reaching the end of its lifecycle. Although the use of AC water main is not considered to be a health concern, it's considered good practice to eliminate AC pipe from water main networks when practical. AC pipe was commonly used starting in the 1940s due to its corrosion resistance and lightweight construction, but the material is brittle and not sized to standard outside dimensions. This makes AC pipe difficult to repair and connect to contemporary pipe materials, in both water system expansion projects and emergency repairs.

It was noted during the development of an asset management plan for replacement of AC main in the City that three sections of AC water main cross Cranbrooke Road where road reconstruction is planned this summer, between 9 Mile Road and Village Wood Road. Therefore, staff recommends the AC water main within the influence of the road be replaced with ductile iron pipe as part of the road reconstruction project.

City consultant AECOM provided a design for the AC water main replacement and obtained unit prices from the contractor, Florence Cement Company, for a change order to their original contract for the water main. Reconstruction of Cranbrooke Road between 9 Mile Road and Village Wood Road began on July 6. Replacement of the water main will begin upon approval of the change order by City Council.

The contract administration and geotechnical engineering services related to this project change order will be granted 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							
Cranbrooke Road Sidewalk	Contract5.5% of the construction contractAdministration(\$167,343 x 5.5%)		\$ 9,203.87				
KOUU SIUEWUK	Crew Days	s \$700 daily inspection fee x 15 days					
Testing Engineers & Consultants, Inc. (TEC)							
Cranbrooke Material testing Road Sidewalk services		1.9% of the construction contract (\$128,075 x 1.9%)	\$ 3,179.52				

RECOMMENDED ACTION: Approval of Change Order No. 6 to Florence Cement Company for the Cranbrooke Road Reconstruction, 9 Mile Road to Village Wood Road, asbestos-cement water main replacement in the amount of \$167,343, and amend the budget.

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following Budget Amendment for change order No. 6 to Florence Cement Company for construction associated with the asbestos-cement water main replacement along Cranbrooke Road from 9 Mile Road to Village Wood Road is authorized:

INCREASE

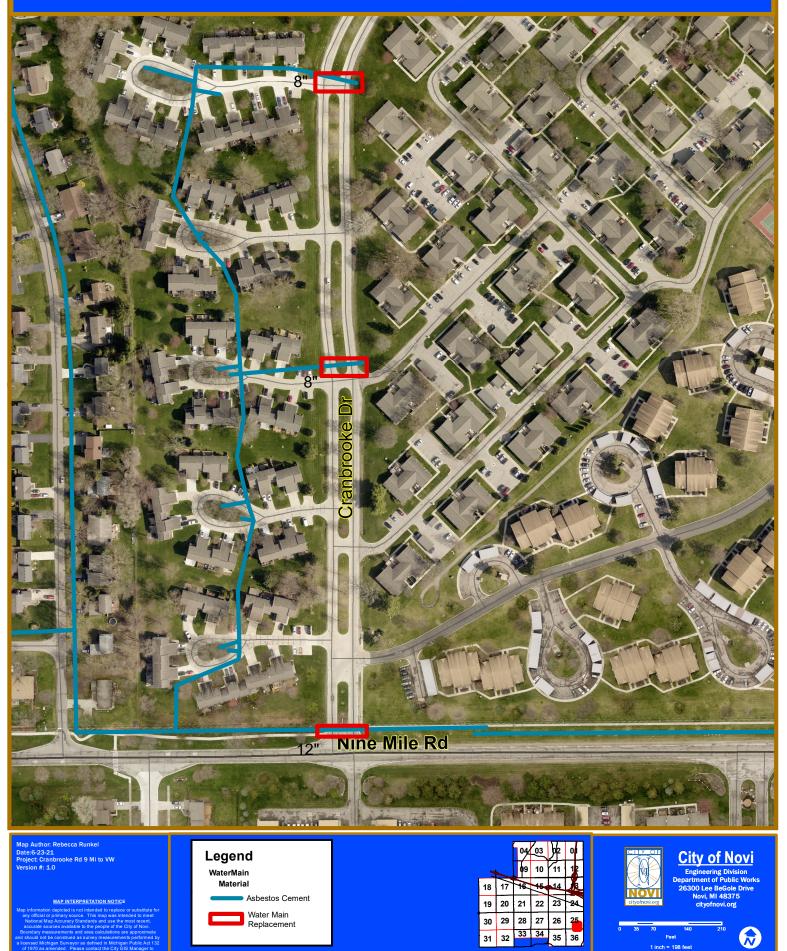
(DECREASE)

WATER & SEWER FUND					
APPROPRIATIONS					
Capital Outlay		223,695			
TOTAL APPROPRIATIONS	\$	223,695			
Net Increase (Decrease) to Fund Balance	\$	(223,695)			

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi at a regular meeting held on July 26, 2021.

Cortney Hanson City Clerk

Cranbrooke Drive AC Water Main Replacement Location Map





WORK CHANGE DIRECTIVE & CHANGE ORDER No. 6

cityofnovi.org		PURCHASE ORDER NO. 96256	1		NOVI NO.: CIP NO.:			
Project:								
Owner:	City of Novi 26300 Lee BeGole Dr. Novi, Michigan 48375 (248) 735-5632	Engineer:	Engineer:AECOM-Great Lakes27777 Franklin Road, Suite 2000Southfield, Michigan 48034(248) 204-5900					
Contractor:	Florence Cement Company 51515 Corridor Shelby Twp., Michigan 48315 (586) 997-2666	This document hereby renders changes in the Work, changes in the Contract Time and changes in the Contract Price by adding, deducting and/or balancing individual Contract line items through a signed authorization of the Prime Contractor, Owner, and Engineer.						
Drafted Date:	June 11, 2021							
Reasoning: Addition of 3 Water Main crossing abandomnents and replacements.								
		EXISTING CONTRAC			Contrac			
<u>Item No.</u> 0 0 0 0 0	Division Item Descriptio 1 "Crew Days" - Roads 2 "Crew Days" - Drains "Crew Days" - "Crew Days" - "Crew Days" - "Crew Days" -	n Unit CD CD CD CD CD CD	Unit Price \$700.00 \$700.00 \$700.00 \$700.00 \$700.00	<u>Quantity</u>				
L	1 1	Page 1 of 2		Subtotals Total	\$0.00	\$0.00 \$0.00		

NEW CONTRACT ITEMS								
						Contrac		
Item No.	Division	Item Description	Unit	Unit Price	Quantity	<u>Add</u>	Deduct	
<u>101</u> 102	-	Flowable Fille, Non-Structural Water Main, DI, 8 inch, Tr Det G	CY Ft	\$1,391.00 \$425.00	7 171	\$9,737.00 \$72,675.00		
102		Gate Well, 60 inch dia	Ea	\$6,033.00	1	\$6,033.00		
103		Gate Valve, 12 inch	Ea	\$4,129.00	1	\$4,129.00		
105		Water Main, DI, 12 inch, Tr Deg G	Ft	\$549.00	116	\$63,684.00		
106		Asbestos Cement Water Main, Rem and Disp	LS	\$11,085.00	1	\$11,085.00		
-								
-								
	<u> </u>							
	<u> </u>							
	<u> </u>		1			1		
	1							
	-							
-								
-								
-								
					Subtotals	\$167,343.00	\$0.00	
				ľ	Total		\$167,343.00	
				-				
Increase/Decre							\$167,343.00	
Original Contra							\$2,243,882.95	
		ed Change Orders					\$1,777,880.97	
Revised Contra	act Amou	nt					\$4,189,106.92	
THE	CHANGES	ADDRESSED BY THIS CHANGE ORDER HERE	BY ADJUSTS TH	E CONTRACT TIM	F BY·			
Ac	cepted By:							
			Flore	nce Cement Company				
Pre	Prepared By:AECOM-Great Lakes							
Rev	Reviewed By:							
	Aaron J. Staup, Construction Engineer							
•								
Ap	Approved By:							
	Tracey marzone, rurchasing Manager							
	Page 2 of 2							