CONTRACT CHANGE ORDER N. GRANDVIEW BLVD TRAFFIC SIGNAL COMMUNICTIONS PROJECT

DATE: February 8, 2018

Contract Number: 4032

Branch: Engineering Department

Change Order Number: 1

Contractor: MP Systems, Inc.

Amount of original contract\$51,220.90

Amount of Contract prior this Change Order.....\$51,220.90

Description of change:

Additional Work to Remove Existing Failing Fiber and Install New Fiber Optic Cable on St. Paul Ave. from N. Prairie Ave. to S. Washington Ave.:

This project involves the installation of new fiber optic cable on N. Grandview Blvd. and a section of fiber replacement on St. Paul Avenue from Wisconsin Ave. to N. Prairie Ave. After the project had commenced, while conducting field reviews of the traffic signal equipment that will be modified, staff noticed that another section of signal communication fiber on St. Paul Avenue was about to fail in section between N. Prairie Ave. and S. Washington Ave. Since the contract unit price bid for new 6CT fiber optic was a very reasonable price, it was decided that this additional nearly failed section should also be replaced at the same time and with this contractor.

The following quantity is proposed to be added to the project to complete replacement of a nearly failed fiber optic line on St. Paul Avenue from N. Prairie Ave. to S. Washington Ave.:

1. Bid Item #1 - Remove Existing Fiber Optic Cable, 750 LF @ \$0.54 / LF	\$405.00
2. Bid Item #3 - Furnish and Install 6-CT Fiber Optic Cable, 750 LF @ \$1.40 / LF	\$1,050.00
3. Bid Item #6 - Install Fiber Optic Communications in Signal Cabinet,	
2 EA @ \$3,250.77 / EA	<u>\$6,501.54</u>

Total for Extra Work\$7,956.54

Contract Completion Date Time Extension:

The original contract completion date for this project is December 22, 2017.

The contractor has experienced significant time delays with this project due to the following reasons:

The City adding additional quantity to replace a nearly failed fiber optic cable on St. Paul Ave. from N. Prairie Ave. to S. Washington Ave. This additional work consisted of 750 FT of existing cable removal and 750 FT of new fiber installation and additional signal communications installation work. Additional contract work days to complete this item is 4 Days.

While investigating various methods to remove the existing fiber cable from the additional work area on St. Paul Ave., the contractor encountered a very deteriorated conduit under the sidewalk between Prairie and Washington. A large section of 2-inch conduit was not able to be reused and had to be replaced by our City garage. The extra time to fix the conduit was 14 Days.

While working on removal and installation of existing copper communication cable on N. Grandview Blvd., the contractor encountered a constricted conduit between Sunkist Ave. & Northview Road. The constriction in the conduit could not permit any more fiber optic installation. City crews dug up the constricted area and the City IT Department determined that a fiber optic vault needed to be installed to provide means of installing the cable in this constricted area. The conduit fix and vault installation took 14 Days to complete.

After the initial delays from broken and constricted conduit, the winter weather set in with a 2-week period of very cold conditions which froze water inside the conduits in several places. After several attempts to thaw and break up the frozen water in the conduits, the contractor informed the City that they were not able to continue and will need to suspend work until Spring 2018 when the ground and conduit is thawed.

The estimated Spring restart date is March 19 th . Therefore, the contract time is recommended to be extended 32 days to May 1, 2018.		
Total Amount of this Change Order	\$7,956.	\$7,956.54
Net Contract Amount after this Change Order	\$59,177.4	14
City of Waukesha Director of Public Works	Date	
Contractor	Date	

MP Systems, Inc.