CITY COUNCIL COMMUNICATION:

02-045

AGENDA:

JANUARY 28, 2002

SUBJECT:

MARTIN LUTHER KING, JR. PARKWAY PAVING - S.W. 2nd STREET TO S.W. 7th STREET - CHANGE ORDER NO. 16

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

JEB E. BREWER, P.E.
ACTING CITY ENGINEER

ITEM ____

OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA

SYNOPSIS -

A change order in the amount of $19,421.45 with M. Peterson Company (Merlin Peterson, President, 4000 Delaware Avenue, Des Moines, Iowa, 50313) for additional work on Martin Luther King, Jr. Parkway (MLK) Paving-S.W. 2nd Street to S.W. 7th Street. This change order covers all costs associated with eliminating the proposed hybrid composite fiber optic cable and replacing it with a two fiber optic cable system to operate the traffic signals on MLK between S.W. 2nd Street and S.W. 7th Street.

FISCAL IMPACT -

Funding for this project in the amount of $19,421.45 is in the 2001-2002 Capital Improvements Budget - MLK - East/West Segment.

RECOMMENDATION -

Approval.

BACKGROUND -

Bids were taken by the Iowa Department of Transportation (IDOT) for the construction of the MLK project from S.W. 2nd Street to S.W. 7th Street. The low bidder was M. Peterson Construction Company.

The City's Engineering Department, Traffic and Transportation Division, has elected to follow the trend within the industry by eliminating the proposed hybrid composite fiber optic cable as bid, and replacing it with a two fiber optic cable system to operate the traffic signals on MLK between S.W. 2nd Street and S.W. 7th Street. The first cable will have 36 single mode fibers in three tubes with 12 fibers each. The second cable will have 12 multi-mode fibers in one tube. With these two separate single and multi-mode fiber optic cables, there no longer is a need to splice cables at every signal

controller cabinet. The single mode cable will run uninterrupted throughout the projects with additional cable being added to provide the specified amount of slack left coiled in each handhole. The multi-mode cable will run between adjacent signal control cabinets and be terminated in them. Additional cable shall be added to provide the specified amount of slack to be left coiled in each handhole at both ends of each cable run. This slack cable left coiled in the handholes at both ends of the cable runs is for future splicing.

The Traffic and Transportation Division has also elected to exchange the proposed fiber splice enclosure and pigtails originally designated for placement into the handhole to be relocated to 24 and 48 port distribution units enclosed in slide-out drawers located in the traffic controller cabinets. These distribution unit enclosures shall be dust and moisture repellant and shall not exceed 3.5" Height x 18.5" Width x 11.25" Depth.

This change order includes two 48 port, rack mounted, fiber boxes, with all required ST connectors and all required ST jumpers mounted in the controllers at 7th and Cherry and S.W. 7th and MLK.

This change order also includes seven 24 port, rack mounted, fiber boxes, and all required ST connectors, and all required ST jumpers mounted in the controllers at 7th and Mulberry, 5th and Cherry, 6th and Cherry, S.W. 7th and Tuttle, S.W. 2nd and MLK, S.W. 3rd and MLK, and S.W. 5th and MLK.

This switch in fiber optic cable and connection hardware is necessary to ensure that the current MLK project will be compatible with all future MLK projects.