CITY COUNCIL COMMUNICATION:

00-320

AGENDA:

JULY 10, 2000

SUBJECT:

E. 20TH STREET TRUNK SANITARY SEWER RELINING - CHANGE ORDER NO. 1

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

FLOYD BENTZ, P. E.
CITY ENGINEER

ITEM ____

OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA

SYNOPSIS -

A change order in the amount of $109,964.30 has been negotiated with Insituform Technologies USA, Inc. (President Anthony W. Hooper, 17988 Edison Ave., Chesterfield, MO) for additional work in conjunction with the E. 20th Street Trunk Sanitary Sewer Relining Project. This change order will compensate the contractor for unforeseen conditions encountered in cleaning this trunk sewer prior to relining.

FISCAL IMPACT -

This change order will be funded from Relining Sanitary Trunk Sewers, in the Capital Improvements Budget. Sufficient funding is available in the CIP for the expense of this change order.

RECOMMENDATION -

Approval.

BACKGROUND -

On March 3, 1999, the Iowa Department of Natural Resources (DNR) issued an administrative order requiring the City of Des Moines to repair this leaking sanitary trunk sewer. The City responded to this order with a very aggressive schedule to have this sewer repaired by October 1999. Because of the short period of time given to comply with the Iowa DNR's administrative order, the contract for this project included both the cleaning of the sewer as well as the installation of the new liner.

Prior to submitting the bid, both the prime contractor, Insituform Technologies USA, Inc., and their subcontractor, Hydro-Klean Services (President Andrew W. Merical, 132 S.E. Shurfine Dr., Ankeny, IA), had personnel enter all accessible manholes on this

sewer to estimate the amount of debris to be removed. Based on their field observations, both contractors agreed that there would be approximately 50 cubic yards of waste to be removed and the bid was based on that quantity of material. The final quantity removed from this sewer was 323 cubic yards based on weight tickets of each load of debris removed. The sewer was televised prior to the bids, which is our standard procedure, but nothing unusual was noted from the video. The water level in the sewer obscured much of the debris.

The following items were encountered in the cleaning of this box sewer, which resulted in conditions that differed materially from what would normally be encountered in cleaning a sanitary trunk sewer of this type.

1. Chunks of concrete adhered to the bottom of the sewer. At some time in the past it appears that a repair had been made inside of this leaking sewer by placing a poured concrete fillet in the bottom. This fillet had partially deteriorated over the years, and what was left had to be removed with chipping hammers before the liner could be installed. No record could be found of these previous repairs.

2. Large construction debris. Formwork, including plywood and 2 x 4's from the original construction, had been left in place. This had become loose and had to be removed before the sewer could be lined.

3. Small plastic shavings and beads. These shavings were being discharged into this line from an upstream source during construction. This plastic would settle and mix with the other waste, and it was not immediately realized that this additional material was accumulating in the sewer. This resulted in additional cleaning.

4. Sticky tar-like deposits. This material was in approximately ¾ of the length of the project and was very difficult and time-consuming to remove.

5. Rubber pellets - These small, black 'rubber' pellets were in the upper reach of the sewer. It was not difficult to remove these, but they are mentioned because it is suspected that they are the source of the tar-like substance that was difficult to remove.

6. Leaking common wall. The center wall of this two-chambered sanitary/storm sewer was deteriorated allowing cross-connections throughout most of the upper one-half of the project. This made progress very difficult for the cleaning contractor and the sub-contractor placing new concrete fillets in the bottom corners of the sewer.

Both Insituform Technologies USA, Inc. and Hydro-Klean have submitted detailed itemized costs for cleaning this sewer. The Engineering Department has had numerous meetings with these contractors and feel that the additional compensation requested is a reasonable cost. Both contractors have waived all additional administrative costs in dealing with this issue and are asking only for the actual costs that they incurred in the process of cleaning this sewer. Insituform Technologies USA, Inc. is waiving approximately $5,000 of additional administrative costs and Hydro-Klean is waiving their additional administrative costs of slightly over $11,000 in an effort to resolve this issue.

Both Insituform Technologies USA, Inc. and Hydro-Klean vigorously pursued this project in an effort to complete the project on schedule, so that the City of Des Moines was able to avoid penalties of up to $5,000 per day from the Iowa DNR. Staff is recommending approval of these claims for cleaning this sewer under the unusual conditions encountered.