



AGENDA ITEM SUMMARY FORM

MEETING DATE: February 13, 2024
PREPARED BY: Chris Whittaker
AGENDA CONTENT: SH 288B Utilities

AGENDA ITEM SECTION: Regular Agenda

BUDGETED AMOUNT: _____ **FUNDS REQUESTED:** _____
FUND: _____

EXECUTIVE SUMMARY:

The City has been selected for the TxDOT TA Grant that will improve sidewalks to the downtown area along SH 288B from Cedar Street to Orange Street. The existing utilities in this area are old consisting of a 4" Cast Iron (CI) water line with lead joints located under the north bound lane and multiple concrete sanitary sewer crossing located mid blocks.

The city has coordinated with TxDOT on the replacement on the utilities prior to the construction of the new downtown sidewalks. TxDOT will not allow the water line to replace in the same location due to it being located under their paving and has requested that if improvements are made, to relocate the water line from under their paving.

Does the City want to replace these utilities (water and sanitary sewer) prior to the TxDOT TA Downtown Sidewalk Improvement commences or does the City want to leave the system as is and address any future issue at that time?

In preparation for this meeting, HDR and City staff has worked on a plan to abandon the existing 4" CI water line and adjust the water distribution system to create loops in the area that will provide better water quality, improve pressure, and increase fire flow protection. Several service lines to customers will have to be rerouted to the new water lines in order to keep service to the existing structure.

The sanitary sewer is old concrete pipe that has a life expectancy of approximately 50-70 years and these lines have reached their life expectance. Currently we are soliciting quotes to televise these lines to verify:

1. There are reports of TxDOT utilizing casing on the existing sanitary sewer that cross though their improved drainage system that was installed in the late 1990's. We need to verify if the sewer line was replaced and if it was, was it from ROW to ROW or just at the location of the casing. If it was replaced ROW to ROW there is no action needed. If not, there will need to be some form of rehabilitation if the selects to move forward with rehabilitation of the sanitary sewer.
2. Does the pipe still have continuous alignment through the joints (no offsets) and still form a circular shape. If the pipe has does have these and requires rehabilitation, we can us Cured in Place Pipe to

expedite the repair and eliminate the need to trench across SH 288B. If not the repair would need to be performed by open cut and require point repairs to SH 288B

The sanitary sewer in this area is all 6" and approximately 2,350 LF long. It is estimated that the cost to perform the televising of the sanitary sewer is \$13,000. We expect to have quotes in hand by the time of the council meeting.

We have put together an exhibit showing the improvements and the associated estimated construction cost (Assuming removing and replacing the sanitary sewer with point repairs to 288B). Please see attached exhibit and OPCC.

TxDOT has stated that the TA funds must be spent by a certain time and they can only extend the project by 12 months to allow for the utilities to be replaced. This means that the City will have to expedite the replacement of the utilities in the area if they elect to proceed forward with the rehabilitation.

RECOMMENDATION: Council to provide direction on how they would like to proceed.

Sanitary Sewer

- FITTINGS
- ▲ CLEANOUTS
- GRAVITY MAINS
- PRESURIZED MAINS
- LATERAL LINES
- MANHOLES
- VALVES
- LIFT STATIONS
- WATER MAINS
- LATERAL LINES
- STORAGE TANKS
- PLANT BUILDINGS
- ★ GROUNDWATER WELLS

Water Distribution System

- FIRE HYDRANTS
- LEFT
- RIGHT (BACKWARDS)
- METERS
- WELL TRANSFER LINES
- WATER MAINS
- LATERAL LINES
- STORAGE TANKS
- PLANT BUILDINGS
- ★ GROUNDWATER WELLS

CITY LIMITS



OPINION OF PROBABLE CONSTRUCTION COST

Water/Sewer Rehabilitation Project

CITY OF ANGLETON, TX

JANUARY 2023

Water Line

ITEM NO.	ITEM DESCRIPTION	UNIT	QUAN.	UNIT PRICE	TOTAL AMOUNT
A) GENERAL ITEMS					
1	Traffic Control, including Flagmen, Signs, Barrels, Barricades, Arrow Boards, Maintaining All Weather Access to Traffic, Temporary Transitions from Proposed Pavement to Existing Pavement, Relocating Existing Mailboxes and Traffic Signs, and Temporary Mailboxes, complete in place, the sum of:	L.S.	1	75,000	75,000
2	Temporary Sediment Control including Inlet protection barriers, Stage I and II inlets and existing inlets, including filter fabric fence, gravel bags, repair and replacement, maintenance and removal of sediments and DTPES requirements, complete in place, the sum of:	L.S.	1	25,000	25,000
WATER ITEMS					
3	Furnish and install 8-inch PVC C-900 DR18 CL 235 water line, all fittings, by augured construction as shown on plans, complete in place, the sum of:	LF	2595	\$ 85.00	\$ 220,575.00
4	1" wet connection, complete in place, the sum of:	EA	1	\$ 200.00	\$ 200.00
5	2" wet connection, complete in place, the sum of:	EA	3	\$ 300.00	\$ 900.00
6	4" wet connection, complete in place, the sum of:	EA	3	\$ 400.00	\$ 1,200.00
7	6" wet connection, complete in place, the sum of:	EA	1	\$ 1,100.00	\$ 1,100.00
8	8" wet connection, complete in place, the sum of:	EA	7	\$ 1,200.00	\$ 8,400.00
9	8"x8" TS&V, complete in place, the sum of:	EA	5	\$ 5,000.00	\$ 25,000.00
10	Cut, plug, and abandon existing 2"-8" water line, complete in place, the sum of:	EA	7	\$ 140.00	\$ 980.00
11	Short side water service connection replacement, complete in place, the sum of:	EA	9	\$ 1,000.00	\$ 9,000.00
12	Long side water service connection replacement, complete in place, the sum of:	EA	13	\$ 1,300.00	\$ 16,900.00
13	Remove and salvage existing fire hydrant, including gate valve and box, complete in place, the sum of:	EA	3	\$ 60.00	\$ 180.00
14	Furnish and install fire hydrant assembly, including 6-inch gate valve and box and hydrant lead, complete in place, the sum of:	EA	3	\$ 7,000.00	\$ 21,000.00
15	Furnish and Install 6" Gate Valve & Box, complete in place, the sum of:	EA	2	\$ 2,200.00	\$ 4,400.00
16	Furnish and Install 8" Gate Valve & Box, complete in place, the sum of:	EA	14	\$ 3,000.00	\$ 42,000.00
17	14" steel casing on 8" PVC SDR 26 water line with restrained joints throughout casing, complete in place, the sum of:	LF	180	\$ 105.00	\$ 18,900.00
18	Abandon valve	EA	3	\$ 200.00	\$ 600.00
19	Plug existing 2"-8" water line, complete in place, the sum of:	EA	4	\$ 800.00	\$ 3,200.00
B) PAVING ITEMS					
20	Concrete point repair including removal and disposal of existing concrete pavement and subgrade, and proposed reinforcing, joints, dowels, paving under cut, and replacement of 7" thick concrete and 12" thick cement stabilized sand subgrade, complete in place, the sum of:	SY	277.8	\$ 180.00	\$ 50,000.00
21	Remove existing sidewalk and replace with 4"-thick sidewalk, complete in place, the sum of:	SF	1265	\$ 8.00	\$ 10,120.00
22	Remove and replace existing concrete curb ramp, complete in place, the sum of:	EA	8	\$ 2,600.00	\$ 20,800.00
C) SANITARY SEWER ITEMS					
23	8" PVC SDR 26 sanitary sewer (by auger), including bedding and backfill, complete in place, the sum of:	LF	350	\$ 155.00	\$ 54,250.00
24	4' diameter sanitary sewer manhole, including bedding and backfill, complete in place, the sum of:	EA	4	\$ 4,500.00	\$ 18,000.00
25	Sanitary sewer service reconnection (by excavation), including fittings, all depths, complete in place, the sum of:	EA	3	\$ 1,200.00	\$ 3,600.00
26	Tie existing sanitary sewer into proposed manhole, complete in place, the sum of:	EA	3	\$ 2,500.00	\$ 7,500.00
27	14" steel casing on 8" PVC sanitary sewer, complete in place, the sum of:	LF	195	\$ 325.00	\$ 63,375.00
28	Plug existing 2"-8" sanitary line, complete in place, the sum of:	EA	1	\$ 500.00	\$ 500.00
GENERAL ITEMS TOTAL:					\$ 100,000.00
WATER ITEMS TOTAL:					\$ 374,535.00
PAVING ITEMS TOTAL:					\$ 80,920.00
SANITARY SEWER ITEMS TOTAL:					\$ 147,225.00
MISCELLANEOUS ITEM (30%)					\$ 182,740.00
TOTAL AMOUNT					\$ 885,420.00