

Public Works
STAFF REPORT



SUBJECT: 2021 TxCDBG – Harbin Drive Improvements
MEETING: Public Works Committee Meeting - 19 Jan 2021
DEPARTMENT: Public Works
STAFF CONTACT: Nick Williams

RECOMMENDATION:

The purpose of the meeting item is to provide an update.

BACKGROUND:

A professional services agreement for design on December 3, 2019. The design work has progressed on schedule and the 100% plans are due in February.

PROJECT:

The Harbin Drive Improvements will replace inadequate and undersized water and sewer lines as well as address and provide stormwater infrastructure.

The project will increase the pavement from two lanes to four lanes from Washington Street to the Northwest Loop within the existing right-of-way.

A shared use path, ten feet wide, is proposed from on the east side of Harbin from Washington to Northwest Loop. A matching five-foot wide sidewalk is proposed on the west side of Harbin.

A median, 14-feet in width, is shown dividing the traffic. The median is continuous with openings at West Sloan, the stadium, Frey Street, Mimosa Street, Overhill Street, the First Presbyterian Church, and Lacy Funeral Home.

FISCAL IMPACT SUMMARY:

The latest opinion of probable construction cost is approximately \$7.6 million with asphalt pavement and approximately \$9.2 million with concrete pavement as an alternate. Alternate bid items will be used to ensure the best bid is received.

TIMELINE:

The project work schedule will reflect any events that occur at the Tarleton stadium. The total construction is anticipated to take 12-18 months to complete.

ATTACHMENTS:

[Harbin Drive Improvements - OPCC](#)

SECTION 00 42 43
 PROPOSAL FORM

UNIT PRICE BID

Engineer's Estimate

Project Item Information					Bidder's Proposal	
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
SECTION A - GENERAL						
1	Mobilization and Demobilization		LS	1	\$310,026.30	\$310,026.30
2	Traffic Control		LS	1	\$25,000.00	\$25,000.00
3	Prepare SWPPP		LS	1	\$3,500.00	\$3,500.00
4	Erosion Control		LS	1	\$10,000.00	\$10,000.00
5	Temporary Project Sign		EA	2	\$500.00	\$1,000.00
6	Traffic Signal Modifications		EA	2	\$50,000.00	\$100,000.00
7	Unclassified Excavation		CY	45420	\$8.00	\$363,360.00
8	Embankment		CY	730	\$20.00	\$14,600.00
9	Sodding and 4" Topsoil		SY	19192	\$5.00	\$95,960.00
10	Trench Safety Plan		LS	1	\$3,000.00	\$3,000.00
11	Irrigation Adjustments		LS	1	\$1,000.00	\$1,000.00
12	Remove an Replace Mailbox		EA	32	\$600.00	\$19,200.00
13	Relocate Sign		EA	50	\$500.00	\$25,000.00
					SUBTOTAL	\$971,646.30
SECTION B - DEMOLITION						
1	Tree Removal (6"-12")		EA	9	\$600.00	\$5,400.00
2	Tree Removal (13"-18")		EA	2	\$750.00	\$1,500.00
3	Tree Removal (19"-24")		EA	8	\$1,250.00	\$10,000.00
4	Remove Existing RCP (18"-30")		LF	129	\$25.00	\$3,225.00
5	Remove Existing Box Culvert (3'x2')		LF	42	\$35.00	\$1,470.00
6	14"-16" Removing Stabilize Base & Asphalt Pavement		SY	38891	\$5.00	\$194,455.00
7	Removing Concrete (Curb & Gutter)		LF	4004	\$9.00	\$36,036.00
8	Removing Concrete (Driveways)		SY	5878	\$15.00	\$88,170.00
9	Removing Concrete (Sidewalks)		SY	1283	\$15.00	\$19,245.00
					SUBTOTAL	\$359,501.00
SECTION C - DRAINAGE IMPROVEMENTS						
1	7'x3' RCB		LF	98	\$450.00	\$44,100.00
2	48" RCP		LF	27	\$180.00	\$4,860.00
3	42" RCP		LF	171	\$150.00	\$25,650.00
4	36" RCP		LF	535	\$125.00	\$66,875.00
5	30" RCP		LF	1280	\$110.00	\$140,800.00
6	24" RCP		LF	1485	\$75.00	\$111,375.00
7	18" RCP		LF	2471	\$60.00	\$148,260.00
8	7'x3' Parallel Headwall		EA	1	\$6,150.00	\$6,150.00
9	7'x3' Headwall		EA	1	\$4,500.00	\$4,500.00
10	36" Headwall		EA	1	\$5,860.00	\$5,860.00
11	48" Safety End Treatment		EA	1	\$5,500.00	\$5,500.00
12	42" Safety End Treatment		EA	6	\$4,100.00	\$24,600.00
13	18" Safety End Treatment		EA	3	\$1,040.00	\$3,120.00
14	20' Inlet		EA	15	\$12,500.00	\$187,500.00
15	15' Inlet		EA	14	\$10,000.00	\$140,000.00
16	10' Inlet		EA	6	\$7,500.00	\$45,000.00
17	6" Concrete Riprap		CY	150	\$500.00	\$75,000.00
18	Outlet Structure		LS	1	\$25,000.00	\$25,000.00
19	4'x4' Storm Drain Manhole		EA	17	\$4,100.00	\$69,700.00
20	5'x5' Storm Drain Manhole		EA	3	\$4,900.00	\$14,700.00
21	6'x6' Storm Drain Manhole		EA	2	\$5,700.00	\$11,400.00
22	Trench Safety		LF	6067	\$2.00	\$12,134.00
					SUBTOTAL	\$1,172,084.00
SECTION C-1 - TARLETON DRAINAGE IMPROVEMENTS						
1	6'x5' RCB		LF	332	\$480.00	\$159,360.00
2	6'x4' RCB		LF	354	\$340.00	\$120,360.00
3	5'x4' RCB		LF	240	\$330.00	\$79,200.00
4	42" RCP		LF	755	\$150.00	\$113,250.00
5	6'x5' Headwall		EA	1	\$25,000.00	\$25,000.00
6	5'x5' Storm Drain Manhole		EA	1	\$5,500.00	\$5,500.00
7	7'x7' Junction Box		EA	1	\$8,500.00	\$8,500.00
8	8'x8' Junction Box		EA	2	\$10,000.00	\$20,000.00
9	Trench Safety		LF	1681	\$2.00	\$3,362.00
10	3.5" HMAC (Ty-D) (PG 64-22)		TON	380	\$85.00	\$32,300.00
11	Cut and Restore Pavement (Flex Base)		SY	1868	\$60.00	\$112,066.67
					SUBTOTAL	\$678,898.67
SECTION D - PAVEMENT IMPROVEMENTS						

SECTION 00 42 43
PROPOSAL FORM

UNIT PRICE BID

Engineer's Estimate

Project Item Information					Bidder's Proposal	
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
1	3.5" HMAC (Ty-D) (PG 64-22)		TON	8160	\$85.00	\$693,600.00
2	12" Flexible Base (Ty-A) (Gr-4)		SY	49367	\$12.00	\$592,404.00
3	10" Lime Treatment (Subgrade)		SY	51109	\$5.00	\$255,545.00
4	Hydrated Lime (41 LBS/SY)		TON	1048	\$170.00	\$178,160.00
5	Concrete Curb & Gutter (Ty-II)		LF	21553	\$25.00	\$538,825.00
6	Driveways (Concrete)		SY	5962	\$75.00	\$447,150.00
7	Curb Ramps		EA	40	\$2,000.00	\$80,000.00
8	Concrete Sidewalks (4")		SY	2775	\$50.00	\$138,750.00
9	Concrete Sidewalks (5")		SY	5308	\$52.00	\$276,016.00
					SUBTOTAL	\$3,200,450.00

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Engineer's Estimate

Project Item Information					Bidder's Proposal	
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
SECTION E - WATER IMPROVEMENTS						
1	16-Inch Waterline (AWWA C900, Class 3, DR-18)		LF	385	\$120.00	\$46,200.00
2	12-Inch Waterline (AWWA C900, Class 3, DR-18)		LF	1215	\$120.00	\$145,800.00
3	6-Inch Waterline (AWWA C900, Class 3, DR-18)		LF	1099	\$72.00	\$79,128.00
4	12-Inch Gate Valve		EA	7	\$3,000.00	\$21,000.00
5	6-Inch Gate Valve		EA	7	\$1,500.00	\$10,500.00
6	6-Inch Pressure Release Valve		EA	1	\$1,500.00	\$1,500.00
7	16"x16" TEE		EA	2	\$3,500.00	\$7,000.00
8	12"x12" TEE		EA	1	\$3,000.00	\$3,000.00
9	12"x6" TEE		EA	4	\$2,500.00	\$10,000.00
10	6"x6" TEE		EA	5	\$1,500.00	\$7,500.00
11	12"x6" Reducer		EA	6	\$2,000.00	\$12,000.00
12	12"x16" Reducer		EA	2	\$2,500.00	\$5,000.00
13	Ductile Iron Fittings		TON	2	\$5,000.00	\$10,000.00
14	Connection to Proposed 12-Inch Waterline		EA	5	\$3,000.00	\$15,000.00
15	Connection to Existing 12-Inch Waterline		EA	6	\$3,000.00	\$18,000.00
16	Connection to Existing 6-Inch Waterline		EA	4	\$2,500.00	\$10,000.00
17	1" Water Service Re-Connection		EA	15	\$1,400.00	\$21,000.00
18	Fire Hydrant		EA	4	\$5,000.00	\$20,000.00
19	Temporary Water System		LS	1	\$20,000.00	\$20,000.00
					SUBTOTAL	\$462,628.00
SECTION F - SEWER IMPROVEMENTS						
1	8-Inch PVC Sanitary Sewer (SDR-26) by Open Cut		LF	868	\$95.00	\$82,460.00
2	6-Inch PVC Sanitary Sewer (SDR-26) by Open Cut		LF	971	\$95.00	\$92,245.00
3	6-Inch PVC Sanitary Sewer (DR-25) (150 Min PSI Pressure) by Open Cut		LF	250	\$125.00	\$31,250.00
4	12-Inch Steel Casing		LF	52	\$160.00	\$8,320.00
5	16-Inch Steel Casing		LF	20	\$180.00	\$3,600.00
6	Remove Existing Manhole		EA	3	\$1,500.00	\$4,500.00
7	4' Diameter Drop Watertight Manhole (All Depths)		EA	11	\$10,000.00	\$110,000.00
8	4" Sewer Service Re-Connection		EA	11	\$2,000.00	\$22,000.00
9	CCTV on Existing Sewer		LF	2089	\$5.00	\$10,445.00
10	Post-Construction CCTV		LF	2089	\$4.00	\$8,356.00
11	Bypass Pumping		LS	1	\$10,000.00	\$10,000.00
12	Trench Safety		LF	2089	\$3.00	\$6,267.00
					SUBTOTAL	\$389,443.00
SECTION G - CONCRETE PAVEMENT (ADD ALTERNATE)						
1	8" Reinforced Portland Cement Concrete		SY	40510	\$70.00	\$2,835,700.00
2	3.5" HMAc (Ty-D) (PG 64-22)		TON	(8160)	\$85.00	(\$693,600.00)
3	12" Flexible Base (Ty-A) (Gr-4)		SY	(49367)	\$12.00	(\$592,404.00)
					SUBTOTAL	\$1,549,696.00

BID SUMMARY	
SECTION A - GENERAL	\$971,646.30
SECTION B - DEMOLITION	\$359,501.00
SECTION C - DRAINAGE IMPROVEMENTS	\$1,850,982.67
SECTION D - PAVEMENT IMPROVEMENTS	\$3,200,450.00
SECTION E - WATER IMPROVEMENTS	\$462,628.00
SECTION F - SEWER IMPROVEMENTS	\$389,443.00
SECTION G - CONCRETE PAVEMENT (ADD ALTERNATE)	\$1,549,696.00
Subtotal	\$7,234,650.97
Subtotal (Add Alternate)	\$1,549,696.00
5% Contingency	\$361,732.55
5% Contingency (Add Alternate)	\$77,484.80
TOTAL (Base)	\$7,596,383.52
TOTAL (Add Alternate)	\$1,627,180.80
TOTAL (Base + Alternate)	\$9,223,564.32

END OF SECTION