

DATE May 20, 2019

PUBLIC HEARING, APPROVING PLANS, SPECIFICATIONS, FORM OF CONTRACT DOCUMENTS, AND ENGINEER'S ESTIMATE ON MAQUOKETA DRIVE STORM SEWER BOX REPLACEMENT; RECEIVE AND FILE BIDS; AND DESIGNATION OF LOWEST RESPONSIVE, RESPONSIBLE BIDDER AS S. M. HENTGES & SONS INC., STEVEN M. HENTGES, PRESIDENT, \$6,639,796.65

WHEREAS, on April 8, 2019, under Roll Call No. 19-0534, plans, specifications, form of contract documents, and Engineer's estimate of construction cost were filed with the City Clerk, for the construction of the following improvement:

Maquoketa Drive Storm Sewer Box Replacement, 08-2017-009

The improvement includes constructing new Reinforced Concrete Box (RCB) storm sewer sizes 4 feet x 4 feet and 12 feet x 4 feet, Reinforced Concrete Pipe (RCP) storm sewer sizes 15-inches to 84-inches, precast manholes, cast-in-place manholes and intakes, Ductile Iron (DI) sanitary sewer sizes 8-inches to 12-inches, Poly Vinyl Chloride (PVC) sanitary sewer, High Density Polyethylene (HDPE) storm sewer, DI water main, 4-inch and 6-inch Portland Cement Concrete (PCC) pavement, Hot-Mix Asphalt (HMA) paving, PCC curb and gutter, traffic signalization, earthwork and grading, erosion control, restoration, and other associated and incidental items; all in accordance with contract documents, including Plan File Nos. 609-159/257, located on College Avenue, 41st Street, Germania Drive, and Maquoketa Drive, between 41st Place and Beaver Avenue, Des Moines, Iowa.

WHEREAS, notice of the hearing on the plans, specifications, form of contract documents, and Engineer's estimate of construction cost was published as required by law.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA: That the hearing on the plans, specifications, form of contract documents, and Engineer's estimate of construction cost for said improvement be closed; and that said plans, specifications, form of contract documents, and Engineer's estimate of construction cost are hereby approved as the plans, specifications, form of contract documents, and Engineer's estimate of construction cost for said improvement.

BE IT FURTHER RESOLVED: That sealed bids for said improvement were submitted by the following bidders:

S. M. Hentges & Sons Inc.	Jordan, MN
Progressive Structures, LLC	Elkader, IA
Raccoon Valley Contractors, LLC.	Waukee, IA - Bid not read – Entire Proposal not returned

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DATE May 20, 2019

which were received and opened at a public meeting presided over by the Engineer in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa at 11:00 a.m. on April 23, 2019. Said bids and the attached tabulation of bids for said improvement be and are hereby received and filed.

BE IT FURTHER RESOLVED: That the Des Moines City Engineer, as the Engineer, has determined that the lowest responsive, responsible bid for the construction of said improvement was submitted by S. M. Hentges & Sons Inc., Steven M. Hentges, President, 650 Quaker Avenue, Suite 200, Jordan, MN, 55352 in the amount of \$6,639,796.65, and said bid be and the same is hereby accepted.

BE IT FURTHER RESOLVED: That the bid security of the unsuccessful bidders be and is hereby authorized and directed to be returned in accordance with the Instructions to Bidders.

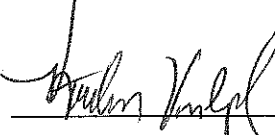
BE IT FURTHER RESOLVED: That the Engineer is hereby directed to secure execution by the lowest responsible, responsive Bidder and its surety of the contract documents in the form heretofore approved by this Council; that the Engineer is directed to thereafter present said contract documents to this Council for approval and authorization to the Mayor to sign; and that no contract shall be deemed to exist between the City of Des Moines and said Bidder until said contract has been executed by the Bidder, and shall have been approved by this Council and executed by the Mayor and attested to by the City Clerk.

BE IT FURTHER RESOLVED: That the City Council hereby authorizes the necessary road closures for the Project.

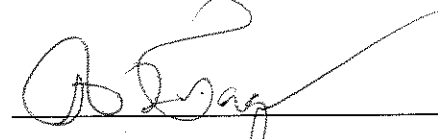
(City Council Communication Number 19-225 attached.)

Moved by \_\_\_\_\_ to adopt.

FORM APPROVED:

  
\_\_\_\_\_  
Kathleen Vanderpool  
Deputy City Attorney

FUNDS AVAILABLE

  
\_\_\_\_\_  
Robert L. Fagen  
Des Moines Finance Director

SLN Funding Source: 2019-2020 CIP, Page Storm – 5, Closes Creek Watershed Improvements, SM068, Being: \$4,026,700 of Stormwater Utility Bonds Issued; \$2,184,481.65 Stormwater Utility Bonds to be issued; \$83,000 in G.O. bonds transferred from TR091; and the remaining \$345,615 from Des Moines Water Works

★ **Roll Call Number**

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**Agenda Item Number**

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DATE May 20, 2019

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
BOESEN				
COLEMAN				
GATTO				
GRAY				
MANDELBAUM				
WESTERGAARD				
TOTAL				

MOTION CARRIED

APPROVED

\_\_\_\_\_  
Mayor

I, Diane Rauh, City Clerk of said City Council, hereby certify that at a meeting of the City Council, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

\_\_\_\_\_  
City Clerk

TABULATED BY: M. Radermacher APPROVED BY: \_\_\_\_\_  
CHECKED BY: Christopher Kull

**CONTRACTOR'S BID TABULATION**  
PROJECT: MAQUOKETA DRIVE STORM SEWER BOX REPLACEMENT

ESTIMATE

S.M. Hentges & Sons, Inc.  
Jordan, MN

Progressive Structures LLC  
Elkader, IA

Raccoon Valley Contractors  
Waukee, IA

BID SECURITY  
10% Bid Bond

BID SECURITY  
10% Bid Bond

BID SECURITY  
10% Bid Bond

BID PRICE

BID PRICE

BID PRICE

ITEM	DESCRIPTION	QUANTITY	UNIT		UNIT		UNIT		UNIT	
			PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1	Temporary Traffic Control	1 LS	\$25,000.00	\$25,000.00	\$31,000.00	\$31,000.00	\$36,000.00	\$36,000.00	Bid not read - Entire proposal not returned	
2	Clearing & Grubbing	1 LS	\$70,000.00	\$70,000.00	\$190,000.00	\$190,000.00	\$78,000.00	\$78,000.00		
3	Topsoil	2400 CY	\$25.00	\$60,000.00	\$22.00	\$52,800.00	\$75.00	\$180,000.00		
4	Excavation, Class 10	5000 CY	\$25.00	\$125,000.00	\$46.50	\$232,500.00	\$70.00	\$350,000.00		
5	Subgrade Treatment, Geogrid, Type 2	6600 SY	\$5.00	\$33,000.00	\$2.15	\$14,190.00	\$3.50	\$23,100.00		
6	Subbase, Modified Subbase, 6"	6600 SY	\$15.00	\$99,000.00	\$12.25	\$80,850.00	\$63.00	\$415,800.00		
7	Sand	1200 TONS	\$30.00	\$36,000.00	\$23.75	\$28,500.00	\$38.00	\$45,600.00		
8	Trench Foundation	500 TONS	\$35.00	\$17,500.00	\$46.25	\$23,125.00	\$42.00	\$21,000.00		
9	Sanitary Sewer Service, Schedule 80 PVC, 4"	90 LF	\$250.00	\$22,500.00	\$118.00	\$10,620.00	\$92.00	\$8,280.00		
10	Sanitary Sewer Service, Schedule 80 PVC, 6"	150 LF	\$250.00	\$37,500.00	\$125.00	\$18,750.00	\$100.00	\$15,000.00		
11	Ductile Iron (D.I.) Sanitary Sewer, 8"	40 LF	\$300.00	\$12,000.00	\$270.00	\$10,800.00	\$400.00	\$16,000.00		
12	Ductile Iron (D.I.) Sanitary Sewer, 10"	20 LF	\$300.00	\$6,000.00	\$360.00	\$7,200.00	\$510.00	\$10,200.00		
13	Ductile Iron (D.I.) Sanitary Sewer, 12"	10 LF	\$500.00	\$5,000.00	\$465.00	\$4,650.00	\$650.00	\$6,500.00		
14	Sanitary Sewer Service Relocation	12 EA	\$1,500.00	\$18,000.00	\$4,670.00	\$56,040.00	\$5,000.00	\$60,000.00		
15	Storm Sewer, HDPE, 6"	5 LF	\$400.00	\$2,000.00	\$117.00	\$585.00	\$170.00	\$850.00		
16	Storm Sewer, HDPE, 12"	89 LF	\$125.00	\$11,125.00	\$62.50	\$5,562.50	\$1,700.00	\$151,300.00		
17	Storm Sewer, HDPE, 30"	290 LF	\$200.00	\$58,000.00	\$90.50	\$26,245.00	\$195.00	\$56,550.00		
18	Reinforced Concrete Pipe (RCP), 15"	14 LF	\$250.00	\$3,500.00	\$64.50	\$903.00	\$170.00	\$2,380.00		
19	Reinforced Concrete Pipe (RCP), 18"	590 LF	\$200.00	\$118,000.00	\$61.50	\$36,285.00	\$170.00	\$100,300.00		
20	Reinforced Concrete Pipe (RCP), 24"	74 LF	\$250.00	\$18,500.00	\$105.00	\$7,770.00	\$180.00	\$13,320.00		
21	Reinforced Concrete Pipe (RCP), 36"	52 LF	\$300.00	\$15,600.00	\$117.00	\$6,084.00	\$250.00	\$13,000.00		
22	Reinforced Concrete Pipe (RCP), 48"	93 LF	\$300.00	\$27,900.00	\$205.00	\$19,065.00	\$290.00	\$26,970.00		
23	Reinforced Concrete Pipe (RCP), 84" Trenched	82 LF	\$1,000.00	\$82,000.00	\$587.00	\$48,134.00	\$925.00	\$75,850.00		
24	Reinforced Concrete Pipe (RCP), 84" Trenchless	428 LF	\$3,250.00	\$1,391,000.00	\$2,840.00	\$1,215,520.00	\$2,800.00	\$1,198,400.00		
25	Reinforced Concrete Box (RCB) Culvert, 4'x4'	28 LF	\$750.00	\$21,000.00	\$470.00	\$13,160.00	\$490.00	\$13,720.00		
26	Reinforced Concrete Box (RCB) Culvert, 12'x4'	1273 LF	\$1,250.00	\$1,591,250.00	\$1,050.00	\$1,336,650.00	\$1,500.00	\$1,909,500.00		
27	Reinforced Concrete Box (RCB) Connection Collar	3 EA	\$35,000.00	\$105,000.00	\$21,100.00	\$63,300.00	\$45,000.00	\$135,000.00		
28	Removal of Sewer, 8" to 12"	118 LF	\$15.00	\$1,770.00	\$15.65	\$1,846.70	\$25.00	\$2,950.00		
29	Removal of Sewer, 15"	369 LF	\$15.00	\$5,535.00	\$16.00	\$5,904.00	\$25.00	\$9,225.00		
30	Removal of Sewer, 18"	70 LF	\$25.00	\$1,750.00	\$13.00	\$910.00	\$25.00	\$1,750.00		
31	Removal of Sewer, 24"	120 LF	\$25.00	\$3,000.00	\$12.50	\$1,500.00	\$25.00	\$3,000.00		
32	Removal of Sewer, 30"	25 LF	\$25.00	\$625.00	\$12.50	\$312.50	\$25.00	\$625.00		
33	Removal of Sewer, 36"	212 LF	\$30.00	\$6,360.00	\$12.50	\$2,650.00	\$30.00	\$6,360.00		
34	Removal of Sewer, 65"x52" Arch Pipe	30 LF	\$40.00	\$1,200.00	\$37.50	\$1,125.00	\$30.00	\$900.00		
35	Removal of Sewer, Wood Box Culvert	842 LF	\$50.00	\$42,100.00	\$58.00	\$48,836.00	\$75.00	\$63,150.00		
36	Removal of Sewer, Reinforced Concrete Box Culvert	245 LF	\$200.00	\$49,000.00	\$128.00	\$31,360.00	\$220.00	\$53,900.00		
37	Removal of CMP Apron, 65"x52"	1 EA	\$1,000.00	\$1,000.00	\$612.00	\$612.00	\$750.00	\$750.00		
38	Culvert / Sewer Abandonment, Plug and Fill	550 CY	\$300.00	\$165,000.00	\$295.00	\$162,250.00	\$260.00	\$143,000.00		
39	Pipe Apron, 36" RCP	1 EA	\$5,000.00	\$5,000.00	\$2,830.00	\$2,830.00	\$1,800.00	\$1,800.00		
40	Pipe Apron, 84" RCP	1 EA	\$15,000.00	\$15,000.00	\$8,800.00	\$8,800.00	\$4,800.00	\$4,800.00		
41	Footing for Concrete Pipe Apron, 36" RCP	1 EA	\$2,500.00	\$2,500.00	\$1,600.00	\$1,600.00	\$1,500.00	\$1,500.00		
42	Footing for Concrete Pipe Apron, 84" RCP	1 EA	\$2,500.00	\$2,500.00	\$3,000.00	\$3,000.00	\$3,400.00	\$3,400.00		
43	Pipe Apron Guard, 36" RCP	1 EA	\$1,000.00	\$1,000.00	\$1,400.00	\$1,400.00	\$1,350.00	\$1,350.00		

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ITEM	DESCRIPTION	QUANTITY	UNIT		UNIT		UNIT		UNIT	
			PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
44	Pipe Apron Guard, 84" RCP	1 EA	\$2,500.00	\$2,500.00	\$5,200.00	\$5,200.00	\$3,500.00	\$3,500.00		
45	End Section, 4'x4' RCB	1 EA	\$10,000.00	\$10,000.00	\$5,600.00	\$5,600.00	\$3,500.00	\$3,500.00		
46	End Section, 12'x4' RCB	1 EA	\$20,000.00	\$20,000.00	\$11,200.00	\$11,200.00	\$10,000.00	\$10,000.00		
47	Subdrain, Type 1, 6"	140 LF	\$30.00	\$4,200.00	\$30.00	\$4,200.00	\$32.00	\$4,480.00		
48	Subdrain Cleanout, Type A-1, 6"	4 EA	\$500.00	\$2,000.00	\$522.00	\$2,088.00	\$850.00	\$2,600.00		
49	Subdrain Connection	4 EA	\$500.00	\$2,000.00	\$700.00	\$2,800.00	\$480.00	\$1,920.00		
50	Manhole, SW-301, 48" ID	4 EA	\$7,500.00	\$30,000.00	\$5,600.00	\$22,400.00	\$8,800.00	\$35,200.00		
51	Manhole, SW-301, 72" ID	1 EA	\$10,000.00	\$10,000.00	\$10,200.00	\$10,200.00	\$11,000.00	\$11,000.00		
52	Manhole, SW-401, 48" ID	1 EA	\$4,000.00	\$4,000.00	\$3,100.00	\$3,100.00	\$4,200.00	\$4,200.00		
53	Manhole, SW-401, 60" ID	4 EA	\$6,000.00	\$24,000.00	\$5,500.00	\$22,000.00	\$7,500.00	\$30,000.00		
54	Manhole, SW-401, 72" ID	1 EA	\$10,000.00	\$10,000.00	\$8,000.00	\$8,000.00	\$10,000.00	\$10,000.00		
55	Manhole, SW-401, 84" ID	1 EA	\$20,000.00	\$20,000.00	\$8,800.00	\$8,800.00	\$12,000.00	\$12,000.00		
56	Manhole, SW-401, 96" ID	1 EA	\$25,000.00	\$25,000.00	\$9,500.00	\$9,500.00	\$16,000.00	\$16,000.00		
57	Manhole, SW-403, 8'x4'	1 EA	\$15,000.00	\$15,000.00	\$22,900.00	\$22,900.00	\$18,000.00	\$18,000.00		
58	Manhole, SW-405 Mod.	5 EA	\$5,000.00	\$25,000.00	\$3,200.00	\$16,000.00	\$22,000.00	\$110,000.00		
59	Manhole, SW-404 Mod., 16'x4'	1 EA	\$75,000.00	\$75,000.00	\$67,200.00	\$67,200.00	\$75,000.00	\$75,000.00		
60	Manhole, SW-404 Mod., 12'x12'	1 EA	\$85,000.00	\$85,000.00	\$91,000.00	\$91,000.00	\$83,000.00	\$83,000.00		
61	SW-501	1 EA	\$5,000.00	\$5,000.00	\$3,100.00	\$3,100.00	\$7,500.00	\$7,500.00		
62	SW-505	15 EA	\$7,500.00	\$112,500.00	\$8,800.00	\$132,000.00	\$10,000.00	\$150,000.00		
63	SW-505, MOD.	2 EA	\$5,000.00	\$10,000.00	\$1,950.00	\$3,900.00	\$11,000.00	\$22,000.00		
64	SW-509	5 EA	\$10,000.00	\$50,000.00	\$16,900.00	\$84,500.00	\$11,500.00	\$57,500.00		
65	SW-510	3 EA	\$15,000.00	\$45,000.00	\$19,300.00	\$57,900.00	\$14,000.00	\$42,000.00		
66	Nyoplast Drain Basin, 12"	2 EA	\$2,500.00	\$5,000.00	\$1,400.00	\$2,800.00	\$2,800.00	\$5,600.00		
67	Nyoplast Drain Basin, 30"	1 EA	\$4,500.00	\$4,500.00	\$3,200.00	\$3,200.00	\$4,800.00	\$4,800.00		
68	Drop Connection	1 EA	\$2,500.00	\$2,500.00	\$6,950.00	\$6,950.00	\$8,800.00	\$8,800.00		
69	Manhole Adjustment Minor, with PCC Boxout	5 EA	\$3,000.00	\$15,000.00	\$2,500.00	\$12,500.00	\$5,055.00	\$25,275.00		
70	Remove Manhole or Intake	24 EA	\$1,000.00	\$24,000.00	\$950.00	\$22,800.00	\$725.00	\$17,400.00		
71	Pavement, Jointed Reinforced PCC, 6"	3540 SY	\$70.00	\$247,800.00	\$69.30	\$245,322.00	\$85.00	\$300,900.00		
72	Curb and Gutter, 2.5' Width, 6" Thickness	1760 LF	\$50.00	\$88,000.00	\$41.00	\$72,160.00	\$50.00	\$88,000.00		
73	HMA Standard Traffic (ST) Base, 3/4", PG 58-28S	600 TON	\$130.00	\$78,000.00	\$124.00	\$74,400.00	\$145.00	\$87,000.00		
74	HMA Standard Traffic (ST) Surface, 1/2", PG 58-28H	300 TON	\$130.00	\$39,000.00	\$152.00	\$45,600.00	\$175.00	\$52,500.00		
75	Composite Pavement	450 SY	\$175.00	\$78,750.00	\$152.00	\$68,400.00	\$90.00	\$40,500.00		
76	Removal of Paver Driveway	60 SY	\$30.00	\$1,800.00	\$17.00	\$1,020.00	\$100.00	\$6,000.00		
77	PCC Sidewalk, 4"	250 SY	\$60.00	\$15,000.00	\$52.50	\$13,125.00	\$100.00	\$25,000.00		
78	PCC Sidewalk, 6"	65 SY	\$70.00	\$4,550.00	\$63.00	\$4,095.00	\$105.00	\$6,825.00		
79	Detectable Warnings	85 SF	\$50.00	\$4,250.00	\$44.10	\$3,748.50	\$55.00	\$4,675.00		
80	PCC Driveway, 6"	960 SY	\$70.00	\$67,200.00	\$63.00	\$60,480.00	\$78.00	\$74,880.00		
81	Granular Surfacing, Class A Crushed Stone	1000 TON	\$35.00	\$35,000.00	\$29.00	\$29,000.00	\$45.00	\$45,000.00		
82	Subbase Over-excavation, Modified Subbase	1000 TON	\$35.00	\$35,000.00	\$42.60	\$42,600.00	\$50.00	\$50,000.00		
83	Pavement Removal	7028 SY	\$15.00	\$105,420.00	\$10.40	\$73,091.20	\$46.00	\$323,288.00		
84	Paver Driveway	60 SY	\$100.00	\$6,000.00	\$105.00	\$6,300.00	\$110.00	\$6,600.00		
85	Temporary Pavement, HMA	1000 TON	\$200.00	\$200,000.00	\$120.00	\$120,000.00	\$140.00	\$140,000.00		
86	Temporary Pavement, Asphalt Millings	1000 TON	\$40.00	\$40,000.00	\$13.15	\$13,150.00	\$45.00	\$45,000.00		
87	Traffic Signalization	1 LS	\$90,000.00	\$90,000.00	\$83,000.00	\$83,000.00	\$95,000.00	\$95,000.00		
88	Seeding, Fertilizing, Mulching for Hydraulic Seeding (Type 1)	1.5 ACRE	\$7,500.00	\$11,250.00	\$4,000.00	\$6,000.00	\$4,500.00	\$6,750.00		
89	Seeding, Fertilizing, Mulching for Hydraulic Seeding (Type 4)	1.5 ACRE	\$7,500.00	\$11,250.00	\$1,850.00	\$2,775.00	\$2,100.00	\$3,150.00		
90	Seeding, Fertilizing, Mulching for Hydraulic Seeding (Native Grass an	1.75 ACRE	\$7,500.00	\$13,125.00	\$3,875.00	\$6,431.25	\$4,200.00	\$7,350.00		
91	Sod	700 SQ	\$150.00	\$105,000.00	\$65.00	\$45,500.00	\$75.00	\$52,500.00		
92	Stormwater Pollution Prevention	1 LS	\$1,000.00	\$1,000.00	\$6,800.00	\$6,800.00	\$7,800.00	\$7,800.00		
93	Filter Socks	2000 LF	\$4.00	\$8,000.00	\$1.85	\$3,700.00	\$2.50	\$5,000.00		
94	Removal of Filter Socks	2000 LF	\$1.00	\$2,000.00	\$0.30	\$600.00	\$0.30	\$600.00		
95	Temporary Rolled Erosion Control Products (RECP), Type 4	300 SY	\$5.00	\$1,500.00	\$2.85	\$855.00	\$3.50	\$1,050.00		
96	Rip Rap, Class A	250 TON	\$75.00	\$18,750.00	\$80.00	\$20,000.00	\$130.00	\$32,500.00		

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ITEM	DESCRIPTION	QUANTITY	UNIT		UNIT		UNIT		UNIT	
			PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
97	Rip Rap, Class D	300 TON	\$65.00	\$19,500.00	\$61.00	\$18,300.00	\$90.00	\$27,000.00		
98	Stabilized Construction Entrance	500 TON	\$40.00	\$20,000.00	\$32.50	\$16,250.00	\$48.00	\$24,000.00		
99	Erosion Control Mulching, Bonded Fiber Matrix	2 ACRE	\$5,000.00	\$10,000.00	\$2,785.00	\$5,570.00	\$3,200.00	\$6,400.00		
100	Chain Link Fence, 48"	65 LF	\$40.00	\$2,600.00	\$47.00	\$3,055.00	\$50.00	\$3,250.00		
101	Removal of Fence	65 LF	\$20.00	\$1,300.00	\$21.00	\$1,365.00	\$12.00	\$780.00		
102	Modular Block Retaining Wall	118 SF	\$45.00	\$5,310.00	\$49.00	\$5,782.00	\$50.00	\$5,900.00		
103	Limestone Retaining Wall	186 SF	\$60.00	\$11,160.00	\$49.00	\$9,114.00	\$66.00	\$12,276.00		
104	Steel Sheet Pile Wall	585 SF	\$55.00	\$32,175.00	\$58.00	\$33,930.00	\$150.00	\$87,750.00		
105	Removal of Retaining Wall	324 LF	\$20.00	\$6,480.00	\$25.00	\$8,100.00	\$40.00	\$12,960.00		
106	Tree Protection Fence	1500 LF	\$5.00	\$7,500.00	\$4.00	\$6,000.00	\$4.50	\$6,750.00		
107	Subsurface Utility Pothole	5 EA	\$2,500.00	\$12,500.00	\$800.00	\$4,000.00	\$11,000.00	\$55,000.00		
108	Vibration Monitoring	1 LS	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$100,000.00	\$100,000.00		
109	Mobilization	1 LS	\$678,615.00	\$678,615.00	\$625,000.00	\$625,000.00	\$500,000.00	\$500,000.00		
110	Maintenance of Postal Service	1 LS	\$5,000.00	\$5,000.00	\$5,100.00	\$5,100.00	\$11,000.00	\$11,000.00		
111	Maintenance of Solid Waste Collection	1 LS	\$5,000.00	\$5,000.00	\$7,400.00	\$7,400.00	\$18,000.00	\$18,000.00		
112	8" CL 52 DIP	695 LF	\$90.00	\$62,550.00	\$79.00	\$54,905.00	\$190.00	\$132,050.00		
113	8" C900 DR18 PVC Pipe	815 LF	\$80.00	\$65,200.00	\$93.00	\$75,795.00	\$170.00	\$138,550.00		
114	16" PVC Casing Pipe	65 LF	\$150.00	\$9,750.00	\$184.00	\$11,960.00	\$300.00	\$19,500.00		
115	8" Bend	5 EA	\$1,000.00	\$5,000.00	\$588.00	\$2,940.00	\$870.00	\$4,350.00		
116	8" Solid Sleeve	2 EA	\$500.00	\$1,000.00	\$1,200.00	\$2,400.00	\$880.00	\$1,760.00		
117	8" x 8" Tee	3 EA	\$1,600.00	\$4,800.00	\$725.00	\$2,175.00	\$1,350.00	\$4,050.00		
118	8" Cap/Plug	2 EA	\$1,000.00	\$2,000.00	\$205.00	\$410.00	\$2,500.00	\$5,000.00		
119	8" Valve	4 EA	\$2,500.00	\$10,000.00	\$1,715.00	\$6,860.00	\$2,200.00	\$8,800.00		
120	Hydrant Assembly	6 EA	\$6,000.00	\$36,000.00	\$6,085.00	\$36,510.00	\$10,000.00	\$60,000.00		
121	Prepare Excavation for Tapping Sleeve & Valve	1 EA	\$4,000.00	\$4,000.00	\$6,275.00	\$6,275.00	\$5,000.00	\$5,000.00		
122	New 1" Water Service (Opposite Side)	24 EA	\$5,000.00	\$120,000.00	\$3,365.00	\$80,760.00	\$5,000.00	\$120,000.00		
123	New 1" Water Service (Same Side)	5 EA	\$5,000.00	\$25,000.00	\$3,360.00	\$16,800.00	\$3,000.00	\$15,000.00		
124	Remove Tee/Tapping Sleeve	1 EA	\$5,000.00	\$5,000.00	\$8,525.00	\$8,525.00	\$4,000.00	\$4,000.00		
125	8" Type 1 Water Main Alteration	1 EA	\$15,000.00	\$15,000.00	\$17,140.00	\$17,140.00	\$14,000.00	\$14,000.00		
126	8" Water Main - Remove & Replace	1 EA	\$10,000.00	\$10,000.00	\$12,100.00	\$12,100.00	\$12,000.00	\$12,000.00		
127	Magnesium Anode, 32-Pound	9 EA	\$500.00	\$4,500.00	\$540.00	\$4,860.00	\$3,000.00	\$27,000.00		
128	Foundation Rock	50 TON	\$35.00	\$1,750.00	\$38.00	\$1,900.00	\$50.00	\$2,500.00		
129	Manufactured Sand	50 TON	\$35.00	\$1,750.00	\$66.00	\$3,300.00	\$4.00	\$200.00		
TOTAL CONSTRUCTION COST				\$7,500,000.00		\$6,639,796.65		\$8,985,049.00		
PERCENT OF ENGINEER'S ESTIMATE						-11.47%		+19.80%		
						Low				