

DATE April 8, 2019

ORDERING CONSTRUCTION OF  
MAQUOKETA DRIVE STORM SEWER BOX REPLACEMENT  
AND FIXING A DATE FOR RECEIVING OF BIDS ON APRIL 23, 2019  
AND PUBLIC HEARING ON MAY 20, 2019  
ENGINEER'S ESTIMATE IS \$7,500,000.00

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA: That the attached communication recommending construction of the following improvement and the method of financing; and also including the recommendation of the Des Moines City Engineer, as the Engineer, submitting plans, specifications, form of contract documents, and Engineer's estimate of cost 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

be and the same are hereby approved and accepted. The estimated construction cost for said improvement is \$7,500,000.00. The proposed plans, specifications, and form of contract documents are available for public inspection in the Des Moines City Engineer's Office.

BE IT FURTHER RESOLVED: That this Council hereby determines that it is necessary and advisable to construct said improvement in the manner set forth in the plans, specifications, and form of contract documents submitted by the Engineer; and that payment for the cost of said improvement shall be paid from the funding source identified below.

BE IT FURTHER RESOLVED: That a public hearing on said plans, specifications, form of contract documents, and Engineer's estimate of construction cost for said improvement be held in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, at 5:00 p.m. on May 20, 2019, at which time this Council will consider any objections offered thereto or to the making of said improvement.

BE IT FURTHER RESOLVED: That proposals will be received by the City of Des Moines, at the office of the Des Moines City Clerk until 11:00 a.m. on April 23, 2019, for the construction of said improvement, and the taking of bids in the manner required by law. Proposals received will be 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, after which the bids together with a bid tabulation and recommendation of the Engineer will be presented to the City Council at its next meeting for action thereon.



**Roll Call Number**

**Agenda Item Number**

6C

DATE April 8, 2019

BE IT FURTHER RESOLVED: That an appropriate Notice to Bidders for said improvement be posted, and Notice of Public Hearing for said improvement be published in the Des Moines Register, all as provided and directed by Chapter 26 and/or 314, Code of Iowa.

(City Council Communication Number 19-157 attached.)

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

FORM APPROVED:

FUNDS AVAILABLE

Kathleen Vanderpool  
Deputy City Attorney

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; \$3,000,000 Stormwater Utility Bonds to be issued; \$90,000 in G.O. bonds transferred from TR091; and the remaining \$383,300 from Des Moines Water Works

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

60

## CONSTRUCTION ESTIMATE

DEPARTMENT OF ENGINEERING  
CITY OF DES MOINES, IOWA

Activity ID 08-2017-009

Date: 3/20/2019

### PROJECT: MAQUOKETA DRIVE STORM SEWER BOX REPLACEMENT

NO.	DESCRIPTION	ESTIMATED UNITS			AMOUNT
		UNIT	TOTAL	UNIT PRICE	TOTAL
1	* Temporary Traffic Control	LS	1	\$25,000.00	\$25,000.00
2	* Clearing & Grubbing	LS	1	\$70,000.00	\$70,000.00
3	* Topsoil	CY	2400	\$25.00	\$60,000.00
4	* Excavation, Class 10	CY	5000	\$25.00	\$125,000.00
5	* Subgrade Treatment, Geogrid, Type 2	SY	6600	\$5.00	\$33,000.00
6	* Subbase, Modified Subbase, 6"	SY	6600	\$15.00	\$99,000.00
7	* Sand	TONS	1200	\$30.00	\$36,000.00
8	* Trench Foundation	TONS	500	\$35.00	\$17,500.00
9	Sanitary Sewer Service, Schedule 80 PVC, 4"	LF	90	\$250.00	\$22,500.00
10	Sanitary Sewer Service, Schedule 80 PVC, 6"	LF	150	\$250.00	\$37,500.00
11	Ductile Iron (D.I.) Sanitary Sewer, 8"	LF	40	\$300.00	\$12,000.00
12	Ductile Iron (D.I.) Sanitary Sewer, 10"	LF	20	\$300.00	\$6,000.00
13	Ductile Iron (D.I.) Sanitary Sewer, 12"	LF	10	\$500.00	\$5,000.00
14	Sanitary Sewer Service Relocation	EA	12	\$1,500.00	\$18,000.00
15	Storm Sewer, HDPE, 6"	LF	5	\$400.00	\$2,000.00
16	Storm Sewer, HDPE, 12"	LF	89	\$125.00	\$11,125.00
17	Storm Sewer, HDPE, 30"	LF	290	\$200.00	\$58,000.00
18	Reinforced Concrete Pipe (RCP), 15"	LF	14	\$250.00	\$3,500.00
19	Reinforced Concrete Pipe (RCP), 18"	LF	590	\$200.00	\$118,000.00
20	Reinforced Concrete Pipe (RCP), 24"	LF	74	\$250.00	\$18,500.00
21	Reinforced Concrete Pipe (RCP), 36"	LF	52	\$300.00	\$15,600.00
22	Reinforced Concrete Pipe (RCP), 48"	LF	93	\$300.00	\$27,900.00
23	Reinforced Concrete Pipe (RCP), 84" Trenched	LF	82	\$1,000.00	\$82,000.00
24	Reinforced Concrete Pipe (RCP), 84" Trenchless	LF	428	\$3,250.00	\$1,391,000.00
25	Reinforced Concrete Box (RCB) Culvert, 4'x4'	LF	28	\$750.00	\$21,000.00
26	Reinforced Concrete Box (RCB) Culvert, 12'x4'	LF	1273	\$1,250.00	\$1,591,250.00
27	Reinforced Concrete Box (RCB) Connection Collar	EA	3	\$35,000.00	\$105,000.00
28	* Removal of Sewer, 8" to 12"	LF	118	\$15.00	\$1,770.00
29	* Removal of Sewer, 15"	LF	369	\$15.00	\$5,535.00
30	* Removal of Sewer, 18"	LF	70	\$25.00	\$1,750.00
31	* Removal of Sewer, 24"	LF	120	\$25.00	\$3,000.00
32	* Removal of Sewer, 30"	LF	25	\$25.00	\$625.00

6C

NO.	DESCRIPTION	ESTIMATED UNITS			AMOUNT
		UNIT	TOTAL	UNIT PRICE	TOTAL
33	* Removal of Sewer, 36"	LF	212	\$30.00	\$6,360.00
34	* Removal of Sewer, 65"x52" Arch Pipe	LF	30	\$40.00	\$1,200.00
35	* Removal of Sewer, Wood Box Culvert	LF	842	\$50.00	\$42,100.00
36	* Removal of Sewer, Reinforced Concrete Box Culvert	LF	245	\$200.00	\$49,000.00
37	* Removal of CMP Apron, 65"x52"	EA	1	\$1,000.00	\$1,000.00
38	* Culvert / Sewer Abandonment, Plug and Fill	CY	550	\$300.00	\$165,000.00
39	Pipe Apron, 36" RCP	EA	1	\$5,000.00	\$5,000.00
40	Pipe Apron, 84" RCP	EA	1	\$15,000.00	\$15,000.00
41	Footing for Concrete Pipe Apron, 36" RCP	EA	1	\$2,500.00	\$2,500.00
42	Footing for Concrete Pipe Apron, 84" RCP	EA	1	\$2,500.00	\$2,500.00
43	Pipe Apron Guard, 36" RCP	EA	1	\$1,000.00	\$1,000.00
44	Pipe Apron Guard, 84" RCP	EA	1	\$2,500.00	\$2,500.00
45	End Section, 4'x4' RCB	EA	1	\$10,000.00	\$10,000.00
46	End Section, 12'x4' RCB	EA	1	\$20,000.00	\$20,000.00
47	Subdrain, Type 1, 6"	LF	140	\$30.00	\$4,200.00
48	Subdrain Cleanout, Type A-1, 6"	EA	4	\$500.00	\$2,000.00
49	Subdrain Connection	EA	4	\$500.00	\$2,000.00
50	Manhole, SW-301, 48" ID	EA	4	\$7,500.00	\$30,000.00
51	Manhole, SW-301, 72" ID	EA	1	\$10,000.00	\$10,000.00
52	Manhole, SW-401, 48" ID	EA	1	\$4,000.00	\$4,000.00
53	Manhole, SW-401, 60" ID	EA	4	\$6,000.00	\$24,000.00
54	Manhole, SW-401, 72" ID	EA	1	\$10,000.00	\$10,000.00
55	Manhole, SW-401, 84" ID	EA	1	\$20,000.00	\$20,000.00
56	Manhole, SW-401, 96" ID	EA	1	\$25,000.00	\$25,000.00
57	Manhole, SW-403, 8'x4'	EA	1	\$15,000.00	\$15,000.00
58	Manhole, SW-405 Mod.	EA	5	\$5,000.00	\$25,000.00
59	Manhole, SW-404 Mod., 16'x4'	EA	1	\$75,000.00	\$75,000.00
60	Manhole, SW-404 Mod., 12'x12'	EA	1	\$85,000.00	\$85,000.00
61	SW-501	EA	1	\$5,000.00	\$5,000.00
62	SW-505	EA	15	\$7,500.00	\$112,500.00
63	SW-505, MOD.	EA	2	\$5,000.00	\$10,000.00
64	SW-509	EA	5	\$10,000.00	\$50,000.00
65	SW-510	EA	3	\$15,000.00	\$45,000.00
66	Nyoplast Drain Basin, 12"	EA	2	\$2,500.00	\$5,000.00
67	Nyoplast Drain Basin, 30"	EA	1	\$4,500.00	\$4,500.00

6C

NO.	DESCRIPTION	ESTIMATED UNITS			AMOUNT
		UNIT	TOTAL	UNIT PRICE	TOTAL
68	Drop Connection	EA	1	\$2,500.00	\$2,500.00
69	Manhole Adjustment Minor, with PCC Boxout	EA	5	\$3,000.00	\$15,000.00
70	* Remove Manhole or Intake	EA	24	\$1,000.00	\$24,000.00
71	Pavement, Jointed Reinforced PCC, 6"	SY	3540	\$70.00	\$247,800.00
72	Curb and Gutter, 2.5' Width, 6" Thickness	LF	1760	\$50.00	\$88,000.00
73	HMA Standard Traffic (ST) Base, 3/4", PG 58-28S	TON	600	\$130.00	\$78,000.00
74	HMA Standard Traffic (ST) Surface, 1/2", PG 58-28H	TON	300	\$130.00	\$39,000.00
75	Composite Pavement	SY	450	\$175.00	\$78,750.00
76	* Removal of Paver Driveway	SY	60	\$30.00	\$1,800.00
77	PCC Sidewalk, 4"	SY	250	\$60.00	\$15,000.00
78	PCC Sidewalk, 6"	SY	65	\$70.00	\$4,550.00
79	Detectable Warnings	SF	85	\$50.00	\$4,250.00
80	PCC Driveway, 6"	SY	960	\$70.00	\$67,200.00
81	* Granular Surfacing, Class A Crushed Stone	TON	1000	\$35.00	\$35,000.00
82	* Subbase Over-excavation, Modified Subbase	TON	1000	\$35.00	\$35,000.00
83	* Pavement Removal	SY	7028	\$15.00	\$105,420.00
84	Paver Driveway	SY	60	\$100.00	\$6,000.00
85	* Temporary Pavement, HMA	TON	1000	\$200.00	\$200,000.00
86	* Temporary Pavement, Asphalt Millings	TON	1000	\$40.00	\$40,000.00
87	Traffic Signalization	LS	1	\$90,000.00	\$90,000.00
88	* Seeding, Fertilizing, Mulching for Hydraulic Seeding (Type 1)	ACRE	1.5	\$7,500.00	\$11,250.00
89	* Seeding, Fertilizing, Mulching for Hydraulic Seeding (Type 4)	ACRE	1.5	\$7,500.00	\$11,250.00
90	* Seeding, Fertilizing, Mulching for Hydraulic Seeding (Native Grass and Forbs)	ACRE	1.75	\$7,500.00	\$13,125.00
91	* Sod	SQ	700	\$150.00	\$105,000.00
92	* Stormwater Pollution Prevention	LS	1	\$1,000.00	\$1,000.00
93	* Filter Socks	LF	2000	\$4.00	\$8,000.00
94	* Removal of Filter Socks	LF	2000	\$1.00	\$2,000.00
95	* Temporary Rolled Erosion Control Products (RECP), Type 4	SY	300	\$5.00	\$1,500.00
96	* Rip Rap, Class A	TON	250	\$75.00	\$18,750.00
97	* Rip Rap, Class D	TON	300	\$65.00	\$19,500.00
98	* Stabilized Construction Entrance	TON	500	\$40.00	\$20,000.00
99	* Erosion Control Mulching, Bonded Fiber Matrix	ACRE	2	\$5,000.00	\$10,000.00
100	* Chain Link Fence, 48"	LF	65	\$40.00	\$2,600.00
101	* Removal of Fence	LF	65	\$20.00	\$1,300.00
102	Modular Block Retaining Wall	SF	118	\$45.00	\$5,310.00

6C

NO.	DESCRIPTION	ESTIMATED UNITS			AMOUNT
		UNIT	TOTAL	UNIT PRICE	TOTAL
103	Limestone Retaining Wall	SF	186	\$60.00	\$11,160.00
104	Steel Sheet Pile Wall	SF	585	\$55.00	\$32,175.00
105 *	Removal of Retaining Wall	LF	324	\$20.00	\$6,480.00
106 *	Tree Protection Fence	LF	1500	\$5.00	\$7,500.00
107 *	Subsurface Utility Pothole	EA	5	\$2,500.00	\$12,500.00
108 *	Vibration Monitoring	LS	1	\$40,000.00	\$40,000.00
109 *	Mobilization	LS	1	\$678,615.00	\$678,615.00
110 *	Maintenance of Postal Service	LS	1	\$5,000.00	\$5,000.00
111 *	Maintenance of Solid Waste Collection	LS	1	\$5,000.00	\$5,000.00
112 *	8" CL 52 DIP	LF	695	\$90.00	\$62,550.00
113 *	8" C900 DR18 PVC Pipe	LF	815	\$80.00	\$65,200.00
114 *	16" PVC Casing Pipe	LF	65	\$150.00	\$9,750.00
115 *	8" Bend	EA	5	\$1,000.00	\$5,000.00
116 *	8" Solid Sleeve	EA	2	\$500.00	\$1,000.00
117 *	8" x 8" Tee	EA	3	\$1,600.00	\$4,800.00
118 *	8" Cap/Plug	EA	2	\$1,000.00	\$2,000.00
119 *	8" Valve	EA	4	\$2,500.00	\$10,000.00
120 *	Hydrant Assembly	EA	6	\$6,000.00	\$36,000.00
121 *	Prepare Excavation for Tapping Sleeve & Valve	EA	1	\$4,000.00	\$4,000.00
122 *	New 1" Water Service (Opposite Side)	EA	24	\$5,000.00	\$120,000.00
123 *	New 1" Water Service (Same Side)	EA	5	\$5,000.00	\$25,000.00
124 *	Remove Tee/Tapping Sleeve	EA	1	\$5,000.00	\$5,000.00
125 *	8" Type 1 Water Main Alteration	EA	1	\$15,000.00	\$15,000.00
126 *	8" Water Main - Remove & Replace	EA	1	\$10,000.00	\$10,000.00
127 *	Magnesium Anode, 32-Pound	EA	9	\$500.00	\$4,500.00
128 *	Foundation Rock	TON	50	\$35.00	\$1,750.00
129 *	Manufactured Sand	TON	50	\$35.00	\$1,750.00

Prepared By: Matt Radermacher

Checked By: *Shirley Kohl*

**TOTAL CONSTRUCTION COST** \$7,500,000.00

\* Item does not have to be included in 4-year maintenance bond, but shall be covered by a 1-year maintenance bond.

\* Estimate Total= \$2,547,730.00