

## **Roll Call Number**

Agenda Item Number

DATE January 10, 2022

ORDERING CONSTRUCTION OF
DES MOINES LEVEE ALTERATIONS - PHASE C
AND FIXING A DATE FOR RECEIVING OF BIDS ON FEBRUARY 8, 2022
AND PUBLIC HEARING ON MARCH 7, 2022
ENGINEER'S ESTIMATE IS \$14,200,000.00

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:

Des Moines Levee Alterations - Phase C, 082020006

The improvement includes earthen levee raise and widening, earthwork, excavation, clearing, revetment, steel sheet piling, gatewell raise, storm sewer pipe and repair, seepage relief pipe, swing gates, articulated concrete block, utility abandonment, rain garden, Portland Cement Concrete (PCC) pavement, Hot Mix Asphalt (HMA) pavement, light pole relocation, erosion control, seeding, other incidental items and miscellaneous associated work including cleanup; all in accordance with the contract documents, including Plan File No. 638-222/388, with improvements located along the Des Moines River from the confluence of the Raccoon River to S.E. 14th Street, in Des Moines, Iowa

be and the same are hereby approved and accepted. The estimated construction cost for said improvement is \$14,200,000.00. 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 March 7, 2022, 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 February 8, 2022, 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 February 8, 2022, 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**

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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	$\frac{22-012}{}$ attached.)
Moved by	to adopt.
FORM APPROVED	FUNDS AVAILABLE
s/Kathleen Vanderpool	s/Nickolas J. Schaul
Kathleen Vanderpool Deputy City Attorney	Nickolas J. Schaul Director of Finance

Funding Source: 2021-2022 CIP, Page 101, Flood Mitigation Improvements, SM087, Being: \$14,200,000 in Storm Water Utility Funds and Flood Mitigation Sales Tax

SLNPW

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT	I
COWNIE					9
SHEUMAKER					[
WESTERGAARD					ľ
BOESEN				,	]
VOSS					1
MANDELBAUM		11			]1
GATTO					
TOTAL	9				
MOTION CARRIED	•		·	APPROVED	١

I, P. Kay Cmelik, 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.

Mayor

City Clerk

## **CONSTRUCTION ESTIMATE**

DEPARTMENT OF ENGINEERING CITY OF DES MOINES, IOWA

Activity ID 08-2020-006

Date: 12/17/2021

## PROJECT: DES MOINES LEVEE ALTERATIONS - PHASE C

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NC	DECODIDATION		ESTIMATE		AMOUNT
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
	CLEARING & GRUBBING	LS	1	\$50,000.00	\$50,000.00
2 *	TOPSOIL, ON-SITE	CY	8600	\$18.00	\$154,800.00
	TOPSOIL, OFF-SITE (IMPORT)  EXCAVATION, CLASS 10 (IMPERVIOUS LEVEE FILL FROM OFFSITE, IMPORT	CY	2300	\$25.00	\$57,500.00
4 *	CONTRACTOR FURNISHED BORROW)	CY	56600	\$21.00	\$1,188,600.00
5 *	EXCAVATION, CLASS 10 (PERVIOUS LEVEE FILL INSTALLED FROM EXISTING SUITABLE BORROW ONSITE)	CY	35000	\$16.00	\$560,000.00
6 *	EXCAVATION, CLASS 10 (EXPLORATION TRENCH, EXPORT MATERIAL W/OUT DEBRIS OR CONTAMINATION OFF SITE)	CY	9700	\$16.00	\$155,200.00
7 *	EXCAVATION, CLASS 10 (COMPENSATORY STORAGE AREA, EXPORT SUITABLE MATERIAL W/OUT DEBRIS OR CONTAMINATION OFF-SITE)	CY	6630	\$20.00	\$132,600.00
8 *	EXPORT (UNACCEPTABLE DEBRIS, UNSUITABLE MATERIAL TO LANDFILL)	TON	23000	\$21.00	\$483,000.00
9 *	EXPORT (CONTAMINATED LEAD, PETRO, ETC. UNSUITABLE MATERIAL TO LANDFILL)	TON	4000	\$25.00	\$100,000.00
10 *	EXPLORATORY EXCAVATION (UTILITY POTHOLING)	HOURS	88	\$350.00	\$30,800.00
11 *	SUBGRADE PREPARATION	SY	1730	\$8.00	\$13,840.00
12 *	MODIFIED SUBBASE, 4" DEPTH	SY	810	\$15.00	\$12,150.00
13 *	MODIFIED SUBBASE, 6" DEPTH	SY	1920	\$15.00	\$28,800.00
14 *	TRENCH FOUNDATION	TON	40	\$30.00	\$1,200.00
15 *	ENGINEERED BACKFILL	CY	20	\$30.00	\$600.00
16 *	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL, CLASS II MATERIALS (AT UTILITY TRENCHES)	CY	60	\$30.00	\$1,800.00
17 *	SANITARY SEWER ABANDONMENT, FILL AND PLUG (STA 186+25, 12")	LF	100	\$300.00	\$30,000.00
18 *	SANITARY SIPHON SEWER ABANDONMENT, FILL AND PLUG 60 LF ON NORTH BANK (STA 196+45, 36")	LS	1	\$100,000.00	\$100,000.00
19 *	SANITARY SIPHON SEWER ABANDONMENT, FILL AND PLUG 60LF ON SOUTH BANK (STA 534+00, 36")	LS	1	\$20,000.00	\$20,000.00
20 *	SANITARY SEWER ABANDONMENT, FILL AND PLUG (STA 175+60, 5'x5' box culvert)	LF	75	\$3,000.00	\$225,000.00
21 *	GAS ABANDONMENT, FILL AND PLUG (STA 176+00, 10")	LF	110	\$175.00	\$19,250.00
22 *	GAS ABANDONMENT, FILL AND PLUG (STA 533+50, 8")	LF	135	\$175.00	\$23,625.00
23 *	GAS ABANDONMENT, FILL AND PLUG (STA 533+50, 10")	LF	135	\$175.00	\$23,625.00
24 *	WATER ABANDONMENT, FILL AND PLUG (STA 533+00, 175+50, 12")	LF	250	\$200.00	\$50,000.00
25 *	WATER ABANDONMENT, FILL AND PLUG (STA 533+50, 12")	LF	135	\$200.00	\$27,000.00
26 *	STORM SEWER ABANDONMENT, FILL AND PLUG (STA 201+75, 24")	LF	175	\$500.00	\$87,500.00
27 *	STORM SEWER ABANDONMENT, FILL AND PLUG (STA 533+50, 18")	LF	30	\$250.00	\$7,500.00
28 *	STORM SEWER GROUT LEAKING JOINT, 72" X 72" RCB BOX, STA 577+00	EACH	1	\$2,000.00	\$2,000.00
29 *	STORM SEWER GATEWELL ABANDONMENT, FILL AND PLUG (GATEWELL #409)	EACH	1	\$3,000.00	\$3,000.00
30 *	PIPE ABANDONMENT, FILL AND PLUG (VARIOUS TYPES_SIZES_)	CY	20	\$150.00	\$3,000.00
31	STORM SEWER, TRENCHED (RCP CLASS 5, STA 518+25 AT CLAY AVENUE, 12")	LF	622	\$160.00	\$99,520.00
32 *	STORM SEWER POINT REPAIR, RCP CLASS 3, 15"; STA. 518+25	LS	1	\$10,000.00	\$10,000.00
33 *	STORM SEWER POINT REPAIR, RCP CLASS 3, 18"; STA. 518+25	LS	1	\$10,000.00	\$10,000.00
34	PIPE CULVERT, TRENCHED, RCP, 12"	LF	70	\$400.00	\$28,000.00

		ESTIMATED UNITS			AMOUNT
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
35	PIPE APRON, TYPE 2 CIRCULAR CONCRETE, 12"	EACH	4	\$600.00	\$2,400.00
36 *	SPIN CAST PIPE REHABILITATION, LRCP SANITARY, 48" DIA STA. 533+00	LF	220	\$400.00	\$88,000.00
37 *	RELOCATE HYDRANT ASSEMBLY; STA 175+75	LS	1	\$15,000.00	\$15,000.00
38 *	RELOCATE YARD HYDRANT ASSEMBLIES; STA. 188+00 AT EAGLE VIEW APARTMENTS	LS	1	\$6,000.00	\$6,000.00
39	MANHOLE, STORM SEWER (LEVEE SEEPAGE RELIEF), SUDAS SW-401, 48"	EACH	5	\$7,300.00	\$36,500.00
40	MANHOLE, STORM SEWER (LEVEE SEEPAGE RELIEF), SUDAS SW-401, 60"	EACH	2	\$9,000.00	\$18,000.00
41	MANHOLE, STORM SEWER, SUDAS SW-512 CATCH BASIN INLET	EACH	1	\$2,500.00	\$2,500.00
42	MANHOLE, STORM SEWER, 96" DIA. SUDAS SW-401	EACH	1	\$10,000.00	\$10,000.00
43 *	CONCRETE COLLARS AT MANHOLE-SEWER CONNECTION	EACH	2	\$2,000.00	\$4,000.00
44 *	MANHOLE ADJUSTMENT, MINOR W/ REINFORCED CONCRETE DIAMOND PAVING PATCH	EACH	2	\$3,000.00	\$6,000.00
45 *	CONNECT TO MANHOLE	EACH	12	\$2,500.00	\$30,000.00
46	CURB AND GUTTER, 2' WIDE 6" STANDARD CURB	LF	17	\$120.00	\$2,040.00
47	BEAM CURB, PCC, 6" HEIGHT	LF	157	\$110.00	\$17,270.00
48	HMA PAVEMENT (CLAY AVENUE)	TON	225	\$125.00	\$28,125.00
49 *	REMOVAL OF SIDEWALK	SY	720	\$12.00	\$8,640.00
50 *	REMOVAL OF SHARED USE PATH (TRAIL)	SY	10830	\$12.00	\$129,960.00
51 *	REMOVAL OF PAVEMENT, HMA BITUMINOUS SURFACING (CLAY AVENUE)	SY	1000	\$12.00	\$12,000.00
52 *	REMOVAL OF DRIVEWAY, GRANULAR SURFACING	SY	2190	\$7.00	\$15,330.00
53 *	REMOVAL OF DRIVEWAY, PCC	SY	1680	\$12.00	\$20,160.00
54	SHARED USE PATH, HMA, 6 IN., STANDARD TRAFFIC SURFACE, 3/8", PG 58- 128S	SY	12000	\$55.00	\$660,000.00
55 *	TEMPORARY SHARED USE TRAIL	SY	1000	\$45.00	\$45,000.00
56	SIDEWALK, PCC, 5"	SY	810	\$60.00	\$48,600.00
57	DETECTABLE WARNING	SF	185	\$50.00	\$9,250.00
58	DRIVEWAY, PCC, 6"	SY	861	\$75.00	\$64,575.00
59	DRIVEWAY, PCC, 8"	SY	16	\$110.00	\$1,760.00
60 *	DRIVEWAY, GRANULAR SURFACING, 6" (LEVEE ACCESS RAMPS)	SY	400	\$20.00	\$8,000.00
61 *	DRIVEWAY, GRANULAR SURFACING, 12"	SY	62	\$40.00	\$2,480.00
62 *	CURB & GUTTER REMOVAL	LF	510	\$13.00	\$6,630.00
63 *	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE	LF	300	\$10.00	\$3,000.00
64 *	PAINTED SYMBOLS AND LEGENDS	EACH	32	\$200.00	\$6,400.00
65 *	GROOVES CUT FOR SYMBOLS AND LEGENDS	EACH	32	\$125.00	\$4,000.00
66 *	TEMPORARY TRAFFIC CONTROL	LS	1	\$100,000.00	\$100,000.00
67 *	SPECIAL SIGNAGE	EACH	23	\$500.00	\$11,500.00
68 *	FILTER SOCK, INSTALLATION, MAINTENANCE, AND REMOVAL	LF	3000	\$4.00	\$12,000.00
69 *	TEMPORARY ROLLED EROSION CONTROL PRODUCT (RECP, TYPE 2 OR TYPE 3, 100% BIODEGRADABLE)	SY	6000	\$4.00	\$24,000.00
70 *	TEMPORARY EARTH DIVERSION STRUCTURE, ALL TYPES, 18" HEIGHT	LF	400	\$35.00	\$14,000.00
71 *	RIP RAP, CLASS B	TON	9000	\$70.00	\$630,000.00

		ESTIMATED UNITS			AMOUNT
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
72 *	RIP RAP, CLASS E	TON	24200	\$70.00	\$1,694,000.00
73 *	RIP RAP REMOVE	TON	5500	\$40.00	\$220,000.00
74 *	SILT FENCE, INSTALLATION, MAINTENANCE, AND REMOVAL	LF	13000	\$3.00	\$39,000.00
75 *	STABILIZED CONSTRUCTION ENTRANCE	SY	1360	\$40.00	\$54,400.00
76 *	DUST CONTROL, WATER	MGAL	150	\$100.00	\$15,000.00
77 *	INLET PROTECTION DEVICE, DROP-IN INTAKE PROTECTION	EACH	1	\$500.00	\$500.00
78 *	INLET PROTECTION DEVICE, SURFACE-APPLIED INTAKE PROTECTION	EACH	4	\$500.00	\$2,000.00
79 *	INLET PROTECTION DEVICE, MAINTENANCE	EACH	5	\$200.00	\$1,000.00
80 *	TEMPORARY CHAIN LINK FENCE, 5'	LF	1200	\$35.00	\$42,000.00
81 *	REMOVAL & REINSTALLATION OF EXISTING FENCE, CHAIN LINK, 6' HEIGHT	LF	530	\$50.00	\$26,500.00
82 *	REMOVAL OF EXISTING FENCE, CHAIN LINK, 4' HEIGHT	LF	810	\$8.00	\$6,480.00
83 *	TEMPORARY FENCE, CONSTRUCTION, ORANGE WARNING 3'-5'	LF	4000	\$5.00	\$20,000.00
84 *	DEMOLITION WORK, REMOVAL OF RAILROAD BRIDGE ABUTMENT NEAR EAGLEVIEW LOFTS	LS	1	\$25,000.00	\$25,000.00
85 *	REMOVE AND RELOCATE EXISTING SIGN	EACH	5	\$500.00	\$2,500.00
86 *	REMOVE SALVAGE AND STOCKPILE GARDEN PLANTERS, HYDRANTS & IRRIGATION	LS	1	\$15,000.00	\$15,000.00
87 *	REMOVE GUARD RAIL AND SIGN	LF	20	\$100.00	\$2,000.00
88 *	REMOVE AND RELOCATE CONCRETE PAD	EACH	3	\$500.00	\$1,500.00
89 *	REMOVE AND DISPOSE DEBRIS (FROM PIPES AND GATEWELLS)	TON	110	\$80.00	\$8,800.00
90 *	REMOVE AND DISPOSE DEBRIS (CONTAMINATED FROM PIPES AND GATEWELLS)	TON	55	\$90.00	\$4,950.00
91 *	REMOVE AND DISPOSE MISC DEBRIS	TON	80	\$80.00	\$6,400.00
92 *	CONSTRUCTION SURVEY AND AS-BUILT SURVEY	LS	1	\$75,000.00	\$75,000.00
93 *	MOBILIZATION	LS	1	\$1,015,835.00	\$1,015,835.00
94 *	CONCRETE WASHOUT	LS	1	\$2,500.00	\$2,500.00
95 *	TREE PROTECTION FENCE	LF	1410	\$5.00	\$7,050.00
96 *	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1	\$35,000.00	\$35,000.00
97	LEVEE SEEPAGE RELIEF PIPE, DIRECTIONALLY DRILLED, PE, DR18, 10" (INCLUDES TRENCH AND FILL, COMPLETE)	LF	224	\$250.00	\$56,000.00
98	LEVEE SEEPAGE RELIEF PIPE, TRENCHED, CPEP, 15" (INCLUDES TRENCH AND FILL, COMPLETE)	LF	6	\$300.00	\$1,800.00
99	LEVEE SEEPAGE RELIEF PIPE, TRENCHED, CPEP, 12" (INCLUDES TRENCH AND FILL, COMPLETE)	LF	1283	\$235.00	\$301,505.00
100	LEVEE SEEPAGE RELIEF PIPE, TRENCHED, CPEP SLOTTED, 10" (INCLUDES TRENCH AND FILL, COMPLETE)	LF	5891	\$215.00	\$1,266,565.00
101	LEVEE SEEPAGE RELIEF PIPE, TRENCHED, DIP, 10" (INCLUDES TRENCH AND FILL, COMPLETE)	LF	6	\$300.00	\$1,800.00
102	FLOATING BALL CHECK VALVE	EACH	10	\$8,000.00	\$80,000.00
103	MANHOLE, LEVEE SEEPAGE RELIEF, PVC, 24" DIAMETER	EACH	31	\$3,300.00	\$102,300.00
104 *	FLOOD CONTINGENCY PLAN	LS	1	\$150,000.00	\$150,000.00
105 *	COFFER AND DEWATER, DEWATERING, CONTROL OF WATER	LS	1	\$200,000.00	\$200,000.00
106 *	STEEL SHEET PILING	SF	40900	\$35.00	\$1,431,500.00
107	GATEWELL #286 RAISE	LS	1	\$15,000.00	\$15,000.00
108	GATEWELL #290 RAISE	LS	1	\$30,000.00	\$30,000.00

			ESTIMATE	AMOUNT	
NO.	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL
109	GATEWELL #305 RAISE	LS	1	\$20,000.00	\$20,000.00
110	GATEWELL #340, #340A & #340B RAISE	LS	1	\$200,000.00	\$200,000.00
111	GATEWELL #410A & #410B RAISE	LS	1	\$30,000.00	\$30,000.00
112	GATEWELL #415 RAISE	LS	1	\$30,000.00	\$30,000.00
113 *	ROAD SIGNAGE	EACH	40	\$500.00	\$20,000.00
114 *	SWING GATE	EACH	5	\$3,500.00	\$17,500.00
115 *	BENCH (RECREATIONAL)	EACH	5	\$1,000.00	\$5,000.00
116 *	GRANULAR FILTER BLANKET	TON	5000	\$45.00	\$225,000.00
117 *	REMOVAL GRANULAR FILTER BLANKET	TON	2000	\$30.00	\$60,000.00
118 *	PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) WATERMAIN PROTECTION MEASURES	LS	1	\$20,000.00	\$20,000.00
119 *	PROJECT SIGN	EACH	6	\$500.00	\$3,000.00
120 *	PROJECT SIGN (LEVEE RIGHT-OF-WAY SIGNS)	EACH	20	\$500.00	\$10,000.00
121 *	FINE FILTER AGGREGATE (TOE FILTER AT 48" PCCP)	CY	150	\$110.00	\$16,500.00
122 *	FINE FILTER AGGREGATE (BUTTRESS ATOP SRT)	CY	2000	\$110.00	\$220,000.00
123 *	ARTICULATED CONCRETE BLOCK (LEVEE RAMP #9, #10)	SF	5530	\$17.00	\$94,010.00
124 *	GRANULAR CLEAN SAND (RAIN GARDEN MANUFACTURED SAND INFILTRATION TRENCH)	CY	300	\$30.00	\$9,000.00
125 *	PLANTING SOIL (RAIN GARDEN MANUFACTURED MEDIA, 75% SAND, 25% COMPOST)	CY	425	\$25.00	\$10,625.00
126 *	SEEDING (RAIN GARDEN SEED MIX)	ACRE	0.2	\$5,000.00	\$1,000.00
127 *	PLUG PLANTING (RAIN GARDEN)	EA	500	\$50.00	\$25,000.00
128 *	SEEDING, FERTILIZING, AND MULCHING, TYPE 1	ACRE	6.1	\$5,500.00	\$33,550.00
129 *	HYDROSEEDING (LEVEE TURF SEED MIX)	ACRE	21.9	\$6,000.00	\$131,400.00
130 *	HYDROSEEDING (WETLAND SEED MIX)	ACRE	1	\$6,000.00	\$6,000.00
131 *	HYDROSEEDING (HIGH PERFORMANCE TURF SEED MIX)	ACRE	5.2	\$3,500.00	\$18,200.00
132 *	SEEDING (NATIVE UPLAND SEED MIX)	ACRE	0.4	\$3,500.00	\$1,400.00
133 *	HYDROMULCHING (TEMPORARY)	ACRE	30	\$1,500.00	\$45,000.00
134 *	MAINTENANCE AND ESTABLISHMENT OF SEED AND VEGETATION	LS	1	\$20,000.00	\$20,000.00
135 *	GROUT AND PATCH REPAIR 72-INCH X 48" BLIND TIE STORM SEWER PIPE (STA 206+00)	LS	1	\$20,000.00	\$20,000.00
136	CAST-IN-PLACE CONCRETE SEAT WALL (STA. 532+50L)	LF	50	\$300.00	\$15,000.00
137 *	PVC ELECTRICAL CONDUIT (2" SCH40 PVC, STA. 536+20L)	LF	60	\$15.00	\$900.00
138 *	RELOCATE LIGHT POLE AND RECONSTRUCT BASE	EACH	9	\$10,000.00	\$90,000.00
	ed By: Craig Bouska d By:	тота	L CONSTF	RUCTION COST	\$14,200,000.00

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

\* Estimate Total= \$11,021,490.00