## TO THE BOARD OF PUBLIC WORKS CITY OF WAUKESHA, WISCONSIN

46

47

48

0

1,204.6

68.8

Pre-Paving Lateral Sewer Televising

Lin, Ft. of 12-Inch Storm Sewer (RCSP)

Lin. Ft. of 12-Inch Storm Sewer (PVC)

Periodical estimate for Partial Payment No. 5 to State Contractors, Inc., 16575 W. Dakota St., New Berlin, WI 53151 for Summit Avenue & Delafield Street - Phase 2 Utility and Street Improvements - Concrete.

\$ 5,215,619.03 Contract No. 3930 1/5/2016 Description Cost Per Unit Amount No Quantity 0 Lin. Ft. of Furnish and Install 16-Inch Water Main and Fittings (0) \$165.00 Lin. Ft. \$0.00 1 2 2,898 Lin. Ft. of Furnish and Install 12-Inch Water Main and Fittings 0 \$86.00 Lin. Ft. \$249,228.00 3 Lin. Ft. of Furnish and Install 8-Inch Water Main and Fittings \$149.00 Lin. Ft. \$47,084.00 316 0 Lin. Ft. of Furnish and Install 24-Inch Steel Casing \$1,150.00 \$0.00 4 0 (0) Lin, Ft. Furnish and Install 16-Inch Butterfly Valve \$0.00 5 0 (0) \$2,760.00 Each Furnish and Install 12-Inch Gate Valve 5 (0) \$2,715.00 Each \$13,575.00 6 7 5 Furnish and Install 8-Inch Gate Valve (1) \$1,580.00 Each \$7,900.00 8 5 Furnish and Install Hydrant Assembly \$5,700.00 Each \$28,500.00 (0) 9 9 Connect New Service Lateral (SL1) \$2,550.00 Each \$22,950.00 (0) 3 \$2,750.00 Each 10 Connect New Service Lateral (SL2) (0) \$8,250.00 9 Each 11 Connect New Service Lateral (SL3) (0) \$2,575.00 \$23,175.00 12 22 Connect 1" Copper Service Lateral (SL4) (0) \$825.00 Each \$18,150.00 13 22 Connect 1" Copper Service Lateral (SL5) @ \$1,375.00 Each \$30,250.00 3 Connect 1-1/4" Copper Service Lateral (SL6) (0) \$1,040.00 Each \$3,120.00 14 2 Connect 6" Service Lateral (SL7) \$8,400.00 Each \$16,800.00 15 (0) Insulation 2" Thick Polystyrene Board \$1.00 Sq. Ft. \$240.00 240 (0) 16 \$550.00 17 33 Furnish and Install Curb Boxes & Rods Where Needed (a) Each \$18,150.00 \$18,000.00 18 25 Furnish and Install Curb Stop Where Needed (1) \$720.00 Each 3 \$620.00 Each \$1,860.00 19 Abandon Existing Hydrant @ 20 0 @ \$7,300.00 Lump Sum \$0.00 Abandon Valve Boxes & Manholes 21 0 (0) \$150.00 Each \$0.00 Valve Box Adjustments @ \$242,798.40 22 1,556.4 Lin. Ft. of 15-Inch PVC Sanitary Sewer \$156.00 Lin. Ft. 23 40 Lin. Ft. of 10-Inch PVC Sanitary Sewer (0) \$342.00 Lin. Ft. \$13,680.00 \$210.00 \$18,438.00 24 87.8 Lin. Ft. of 8-Inch PVC Sanitary Sewer (0) Lin. Ft. 25 0 Lin. Ft. of 24-Inch CIPP Sewer Lining (0) \$105.00 Lin. Ft. \$0.00 0 Lin, Ft. of 15-Inch CIPP Sewer Lining (0) \$52.00 Lin. Ft. \$0.00 26 \$32.00 27 0 Lin. Ft. of 12-Inch CIPP Sewer Lining (0) Lin Ft \$0.00 28 3.286 Lin, Ft. of 8-Inch CIPP Sewer Lining (0) \$24,50 Lin, Ft. \$80,507.00 74.7 \$214.00 Vert. Ft. \$15,985.80 29 Vert. Ft. of 8 - 48-Inch Diameter Sanitary Sewer Manhole @ \$395.00 30 21.4 Vert. Ft. of 1 - 48-Inch Diameter Sanitary Sewer Manhole with (0) Vert. Ft. \$8,453.00 Outside Drop \$6,011.60 31 11.3 Vert. Ft. of 1 - 60-Inch Diameter Sanitary Sewer Manhole (0) \$532.00 Vert. Ft. 32 0 Vert. Ft. of Rehabilitate Sanitary Manhole with Cementitious Liner (0) \$113.00 Vert. Ft. \$0.00 33 1 \$1,060.00 Each \$1,060.00 Bench/Invert/Trough Minor Work (1) 1.8 \$1,101.60 34 Vert. Ft. of Chimney Replacement, Sanitary (0) \$612.00 Vert. Ft. 35 0 Vert. Ft. of Chimney Replacement, Storm (0) \$612.00 Vert. Ft. \$0.00 36 0 Chimney Seals (0) \$379.00 Each \$0.00 37 650.6 Lin. Ft. of 6-Inch Sanitary Lateral Extension @ \$130.00 Lin. Ft. \$84,578.00 38 42 Sanitary Lateral Cleanout @ \$1,285.00 Each \$53,970.00 25 39 Sanitary Lateral Cleaning and Pre-lining Video Inspection (0) \$260.00 Each \$6,500.00 40 0 Sanitary Lateral Spot Repair (Up to 5 Feet of Repair at Each Spot) (0) \$2,900.00 Each \$0.00 41 0 CIPP Lateral Lining Within 10 Feet of Sewer Main @ \$2,575.00 Each \$0.00 0 Lin. Ft. of CIPP Lateral Lining Additional Length Over 10 Feet from @ \$52.50 Lin. Ft. \$0.00 42 Sewer Main 43 0 Lateral Connection Test and Seal (0) \$340.00 Each \$0.00 44 0 Lin, Ft. of Pre-Paving Main Line Sewer Televising, Sanitary (0) \$1.75 Lin, Ft. \$0.00 0 Lin. Ft. of Pre-Paving Main Line Sewer Televising, Storm @ \$2.75 Lin. Ft. \$0.00 45

@

@

@

\$240.00

\$119.00

\$79.00

Each

Lin. Ft.

Lin. Ft.

\$0.00

\$143,347.40

\$5,435.20

4O	(2)	Lin Pt. of #4 Inch Stown Server (DCSD)	(A)	\$2.62 AA	T in T24	622 444 00
49 50	62 339.1	Lin. Ft. of 54-Inch Storm Sewer (RCSP)  Vert. Ft. of 65 Standard Storm Inlets	@	\$362.00 \$295.00	Lin. Ft. Vert. Ft.	\$22,444.00 \$100,034.50
50 51	0	Vert. Ft. of Rehabilitate Storm Manhole with Cementitious Liner	@	\$293.00 \$113.00	Vert. Ft.	\$0.00
52	31.1	Vert, Ft. of S Standard Storm Manholes	@			\$6,748.70
53	0	Vert, Ft, of 1 - 60-Inch Diameter Storm Manhole	@	\$217.00 \$727.00	Vert. Ft. Vert. Ft.	\$0.00
54	7.4	Vert, Ft, of 1 - 108-Inch Diameter Storm Manhole  Vert, Ft, of 1 - 108-Inch Diameter Storm Manhole	@	\$1,250.00	Vent. Ft. Vert. Ft.	\$9,250.00
55	1.4	Junction Chamber	@	\$1,230.00	Lump Sum	\$16,750.00
56	0	Cu, Yds, of Slurry Backfill	@	\$60.00	Cu, Yd,	\$10,730.00
57	0	•	@	\$3.00	Lin, Ft.	\$0.00 \$0.00
58		Lin. Ft. of Sawcutting at Pavement Limits Traffic Control	@	\$80,228.00	Lump Sum	\$0.00 \$26,475.24
59	0.33 0.33		@	\$20,000.00	-	
60	0.33	Construction Staging and Temporary Traffic Signals for Delafield Street, Madison Street and North Street Intersection Summit Avenue and Delafield Street Detour	@	\$10,845.00	Lump Sum Lump Sum	\$6,600.00 \$3,578.85
61	6,665	Lin, Ft. of Concrete Curb and Gutter Removal	@	\$3,00	Lin, Ft,	\$19,995.00
62	14,852	Sq. Yds. of Pavement Removal	@	\$4.00	Sq. Yd.	\$59,408.00
63	8,191.24	Tons of 1¼-Inch Dense Aggregate	@	\$14.00	Ton	\$114,677.36
64	0	Tons of 1/4-Inch Crushed Stone Backfill (Includes Undercut)	@	\$11.00	Ton	\$0.00
65	64.93	Tons of 3-Inch Crushed Stone Backfill (Includes Undercut)	@	\$11.00	Ton	\$714.23
66	0	Sq. Yds. of Geotextile Fabric, Type SAS	@	\$2.00	Sq. Yd.	\$0.00
67	o	Lin. Ft. of Shaping and Grading Roadway Base	@	\$10.00	Lin. Ft.	\$0.00
68	1,927.1	Lin. Ft. of 30-Inch Combination Concrete Curb and Gutter	@	\$14.00	Lin. Ft.	\$26,979.40
69	0	Lin, Ft, of Concrete Barrier Curb	@	\$50.00	Lin, Ft,	\$0.00
70	0	Lin, Ft. of Concrete Curb and Gutter Removal and Replacement	@	\$70.00	Lin, Ft.	\$0.00
70 71	0	Sq. Ft. of Concrete Pavement Removal and Replacement		\$6.50		\$0.00
		•	@		Sq. Ft.	
72 72	0	Sq. Ft. of 9-Inch Concrete Pavement, Doweled	@	\$35.00	Sq. Ft.	\$0.00
73	0	Sq. Ft. of 4-Inch HMA Pavement	@	\$8.50	Sq. Ft.	\$0.00
74	0	Sq. Ft. of 5-Inch HMA Transition Pavement	@	\$8.75	Sq. Ft.	\$0.00
75	0	Sq. Ft. of 7-Inch HMA Transition Pavement	@	\$10,00	Sq. Ft.	\$0.00
76	6,044	Sq. Ft. of Walk and Drive Approach Removal	@	\$2.00	Sq. Ft.	\$12,088.00
77	6,920.4	Sq. Ft. of New 4-Inch Concrete Walk and Curb Ramps	@	\$4.40	Sq. Ft.	\$30,449.76
78	0	Lin. Ft. of Concrete Curb - Pedestrian	@	\$50.00	Lin. Ft.	\$0.00
79	1,653.7	Sq. Ft. of New 6-Inch Concrete Walk and Drive Approach	@	\$4.70	Sq. Ft.	\$7,772.39
80	0	Sq. Ft. of New 7-Inch Concrete Walk and Drive Approach	@	\$4.90	Sq. Ft.	\$0.00
18	0	Sq. Ft. of Concrete Slope Nose	@	\$10.00	Sq. Ft.	\$0.00
82	0	Sq. Ft. of Detectable Warning Field	@	\$45.00	Sq. Ft.	\$0.00
83	0	Extra Bags of Cement for High-Early-Strength Concrete	@	\$10.00	Each	\$0.00
84	0	Lin. Ft. of Grooved in Place Pavement Markings, Yellow, Preformed Plastic, 4-Inch	~	\$3.70	Lin. Ft.	\$0.00
85	0	Lin. Ft. of Pavement Markings, White, 4-Inch, Epoxy	@	\$1.05	Lin. Ft.	\$0.00
86	0	Lin. Ft. of Grooved in Place Pavement Markings, White 10-Ft Dash, 30-Ft Skip. Preformed Plastic, 4-Inch	(A)	\$3.70	Lin, Ft,	\$0.00
87	0	Lin. Ft. of Grooved in Place Pavement Markings, White, Preformed Plastic. 8-Inch	@	\$6.00	Lin. Ft.	\$0.00
88	0	Lin. Ft. of Grooved in Place Pavement Markings, White 3-Ft Dash, 9-Ft Skip. Preformed Plastic, 8-Inch	@	\$6.00	Lin. Ft.	\$0.00
89	0	Lin. Ft. of Grooved in Place Pavement Markings, White, Preformed Thermoplastic. 6-Inch	@	\$16.50	Lin. Ft.	\$0.00
90 91	0	Lin. Ft. of Grooved in Place Pavement Markings, White, Preformed Thermoplastic. 18-Inch Thermoplastic Grooved in Place Pavement Markings, Arrows, Type	@ @	\$27.50 \$615.00	Lin. Ft. Each	\$0.00 \$0.00
92	0	2. White. Preformed Grooved in Place Pavement Markings, Words, Only, White,	<u>@</u>	\$775.00	Each	\$0.00
93	0	Preformed Thermoplastic Grooved in Place Pavement Markings, Arrows, Type 3, White,	@	\$850.00	Each	\$0.00
04	0	Preformed Thermoplastic		de oo	I : D4	<b>#0.00</b>
94	0	Lin. Ft. of Pavement Markings, Curb Head, Yellow, Epoxy	@	\$8.00	Lin. Ft.	\$0.00
95 96	0	Lin. Ft. of Grooved in Place Pavement Markings, Yellow, Preformed Plastic. 12-Inch Lin. Ft. of Grooved in Place Pavement Markings, White, Preformed	@	\$17.50 \$17.50	Lin, Ft, Lin, Ft,	\$0.00 \$0.00
90	0	Plastic. 12-Inch Lin. Ft. of Grooved in Place Pavement Markings, Arrows, Type 6,	œ @	\$17.50	Lin. Ft.	\$0.00
	-	White. Preformed Thermoplastic		. ,		<del>-</del>
98	0	Clearing and Grubbing	@	\$70.00	Inch Dia.	\$0.00
99	0	Sq. Yds. of Topsoil and Sod (Includes Stripping)	@	\$7.25	Sq. Yd.	\$0.00
100	0	Lin. Ft. of Silt Fence, Delivered, Installed and Maintained	@	\$2.00	Lin. Ft.	\$0.00

101	0	Strom Pales Policered Installed and Mainteined	<i>(</i> 2)	\$10.00	East	\$0.00
101 102	0	Straw Bales Delivered, Installed and Maintained Lin. Ft. of Erosion Log Sediment Barrier Delivered, Installed and	@ @	\$6.00	Each Lin, Ft,	\$0.00
102	v	Maintained	·	Ψ0,00	Lini, i t,	Ψ0.00
103	0	Filter Fabric Inlet Protection	@	\$50.00	Each	\$0.00
104	0.5	Temporary Street Lighting	@	\$56,766.34	Lump Sum	\$28,383.17
105	2,363.4	Lin. Ft. of Non Metallic Conduit, Street Light, Polyethylene Duct, Black, 2-Inch	@	\$6.38	Lin. Ft.	\$15,078.49
106	2,260.4	Lin. Ft. of Non Metallic Conduit, Communications, Polyethylene Duct, Orange, 3-Inch	@	\$7.84	Lin. Ft.	\$17,721.54
107	0	Street Light Pull Boxes, 15-Inch x 30-Inch	@	\$694.86	Each	\$0.00
108	0	Communications Pull Boxes, 24-Inch x 36-Inch	@	\$746.79	Each	\$0.00
109	0	Concrete Bases, Type 5	@	\$719.61	Each	\$0.00
110	0	Street Light Controller	@	\$6,653.33	Each	\$0.00
111	0.5	Relocate existing overhead sign structure (Delafield St)	@	\$451.90	Each	\$225.95
112	0.5	Relocate existing overhead sign structure with luminaire (North St.)	a	\$451.90	Each	\$225.95
113	0	Type 2 Concrete Base for Overhead Sign Structure (Delafield St and North St.)	@	\$830.53	Each	\$0.00
114	0	Lin. Ft. of Furnish and install 6-CT Fiber Optic Cable	@	\$1.40	Lin. Ft.	\$0.00
115	0	Modify Existing Signal Cabinet at Summit & Moreland for Fiber	@	\$5,244.75	Lump Sum	\$0.00
116	0	Optic Connection Install Fiber Optic Communication at Summit & Delaffeld Signal	@	\$3,589.79	Lump Sum	\$0.00
117	0	Cabinet Install Fiber Optic Communications at Delafield & Madison / North	@	\$3,979.19	Lump Sum	\$0.00
118	0.5	St Signal Cabinet Remove Salvage and Reinstall Fiber Optic Cable at Delafield &	@	\$4,943.83	Lump Sum	\$2,471.92
119	0	Madison Traffic Signal Lin. Ft. of Remove Existing Copper Communication Cable (North	@	\$0.68	Lin. Ft.	\$0.00
120	0	St.) Modify Existing Signal Cabinet at St Paul & North St. / Wisconsin	@	\$5,390.77	Lump Sum	\$0.00
121	0	for Fiber Optic Connection Lin. Ft. of 652.0225 Conduit Rigid Nonmetallic Schedule 40 2- Inch	@	\$4.78	Lin. Ft.	\$0.00
122	0	Lin, Ft. of 652,0235 Conduit Rigid Nonmetallic Schedule 40 3-	@	\$5.95	Lin. Ft.	\$0.00
123	0	Lin. Ft. of 652,0615 Conduit Special 3-Inch	@	\$16.70	Lin. Ft.	\$0.00
124	0	653.0140 Pull Boxes Steel 24X42-Inch	@	\$756.33	Each	\$0.00
125	0	654.0101 Concrete Bases Type 1	@	\$544.95	Each	\$0.00
126	0	654.0102 Concrete Bases Type 2	@	\$830.53	Each	\$0.00
127	0	654.0217 Concrete Control Cabinet Bases Type 9 Special	@	\$1,692.09	Each	\$0.00
128	0	Lin. Ft. of 655.0230 Cable Traffic Signal 5-14 AWG	@	\$1.06	Lin, Ft.	\$0.00
129	0	Lin. Ft. of 655.0240 Cable Traffic Signal 7-14 AWG	@	\$1,22	Lin. Ft.	\$0.00
130	0	Lin. Ft. of 655.0260 Cable Traffic Signal 12-14 AWG	@	\$1.77	Lin, Ft,	\$0.00
131	0	Lin. Ft. of 655,0320 Cable Type UF 2-10 AWG Grounded	@	\$0.85	Lin, Ft.	\$0.00
132	0	Lin, Ft, of 655.0515 Electrical Wire Traffic Signals 10 AWG	@	\$0.76	Lin. Ft.	\$0.00
133	0	Lin, Ft. of 655,0615 Electrical Wire Lighting 10 AWG	@	\$0.76	Lin. Ft.	\$0.00
134	0	656.0200.01 Electrical Service Meter Breaker Pedestal - Delafield & Summit	@	\$1,159.16	Lump Sum	\$0.00
135	0	657.0100 Pedestal Bases	@	\$269.11	Each	\$0.00
136	0	657,0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	@	\$402.97	Each	\$0.00
137	0	657.0305 Poles Type 2	@	\$1,157.85	Each	\$0.00
138	0	657.0310 Poles Type 3	@	\$2,551.17	Each	\$0.00
139	0	657.0420 Traffic Signal Standards Aluminum 13-Ft.	@	\$634.18	Each	\$0.00
140	. 0	657.0425 Traffic Signal Standards Aluminum 15-Ft.	@	\$670.68	Each	\$0.00
141	0	657.0430 Traffic Signal Standards Aluminum 10-Ft.	@	\$394.85	Each	\$0.00
142	0	657.0585 Trombone Arms 15-Ft.	@	\$1,434.74	Each	\$0.00
143	0	657.0590 Trombone Arms 20-Ft.	@	\$1,438.14	Each	\$0.00
144	0	657.0595 Trombone Arms 25-Ft.	@	\$1,669.35	Each	\$0.00
145	0	657.0615 Luminaire Arms Single Member 4 1/2-Inch Clamp 8-Ft.	@	\$295.87	Each Each	\$0.00
146 147	0	658.0110 Traffic Signal Face 3-12 Inch Vertical	@ @	\$420.71 \$619.15	Each Each	\$0.00 \$0.00
148	0	658.0120 Traffic Signal Face 5-12 Inch Vertical	@	\$89.32	Each	\$0.00 \$0.00
149	0	658.0215 Backplates Signal Face 3 Section 12-Inch	@	\$100.60	Each	\$0.00 \$0.00
150	0	658.0225 Backplates Signal Face 5 Section 12-Inch 658.0416 Pedestrian Signal Face 16-Inch	@	\$267.62	Each	\$0.00
151	0	658,0600 LED Modules 12-Inch Red Ball	@	\$51.11	Each	\$0.00
152	0	658.0605 LED Modules 12-Inch Yellow Ball	@	\$52.33	Each	\$0.00
	-	OF COUNTY THE PRODUCT IN HOU I MICH DOIL	~			

153	0	658,0610 LED Modules 12-Inch Green Ball	@	\$53.54	Each	\$0.00	
154	0	658.0615 LED Modules 12-Inch Red Arrow	a	\$51.11	Each	\$0.00	
155	0	658,0620 LED Modules 12-Inch Yellow Arrow	a	\$52.33	Each	\$0.00	
156	0	658.0625 LED Modules 12-Inch Green Arrow	@	\$53.54	Each	\$0.00	
157	0	658.0635 LED Modules Pedestrian Countdown Timer 16-Inch	@	\$268.13	Each	\$0.00	
158	0	658.5069.01 Signal Mounting Hardware - Delafield, North & Madison	@	\$2,935.96	Lump Sum	\$0.00	
159	0	658.5069.01 Signal Mounting Hardware - Delafield & Summit	@	\$3,027.22	Lump Sum	\$0.00	
160	0.9	661.0200.01 Temporary Traffic Signals For Intersections - Delafield, North & Madison	@	\$28,967.58	Lump Sum	\$26,070.82	
161	0	SPV.0060.01 LED Luminaires	@	\$882,65	Each	\$0.00	
162	0	SPV.0060.02 Traffic Signal Controller and Cabinet 8-Phase Fully Actuated	@	\$16,209.30	Each	\$0.00	
163	0.5	SPV.0105.01 Removing and Reinstalling Video Vehicle Detection System - Delafield, North & Madison	@	\$5,301.69	Each	\$2,650.85	
164	0	SPV.0105.02 Video Vehicle Detection System - Delafield & Summit	@	\$23,980.77	Each	\$0.00	
165	0	SPV.0105.03 Emergency Vehicle Preemption System - Delafield, North & Madison	@	\$9,856.47	Lump Sum	\$0.00	
166	0	SPV.0105.04 Emergency Vehicle Preemption System - Delafield & Summit	_	\$9,856.47	Lump Sum	\$0.00	
167	1	SPV.0105.05 Remove Traffic Signals and Street Lighting - Delafield, North & Madison	@	\$3,115.45	Lump Sum	\$3,115.45	
168	0	SPV.0105.06 Audible Pedestrian Push Button System - Delafield, North & Madison	@	\$7,849.94	Lump Sum	\$0.00	
169	0	SPV.0105.07 Audible Pedestrian Push Button System - Delafield & Summit	_	\$6,633.06	Lump Sum	\$0.00	
170	0.9	SPV.0105.08 Temporary Non-Intrusive Vehicle Detection System for Intersections - Delaffeld, North & Madison	@	\$12,430.95	Lump Sum	\$11,187.86	
171	0	SPV.0105.09 Modify Traffic Signals - Delafield, North & Madison	@	\$1,460.25	Lump Sum	\$0.00	
172	1	SPV.0105.10 Remove Traffic Signals and Street Lighting - Delafield & Summit	@	\$4,153.93	Lump Sum	\$4,153.93	
Extra No. 1	1	Temporary Lighting Feed to Lower City Hall Lot	@	\$1,108.27	Lump Sum	\$1,108.27	
		Subtotal					
		Less Retainage					
		Total					
Less Amout Previously Paid						\$1,299,719.47	
		Total Amount Du	e			\$377,465.28	

This estimate has been checked by the Engineering Department and we recommend that the above amount of \$377,465.28 be allowed.

Respectfully Submitted,

August 1997

Fred V. Abadi, PhD., P.E. Director of Public Works

Robin/Excel/Partials/State-3930