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

Periodical estimate for Partial Payment No. 8 and Final to Zenith Tech, Inc. No W23633 Bluemound Rd., Waukesha, WI 53187 for W. Sunset Dr. And S. Grand Ave. Intersection Improvements.

Contract No. 4016								
						Original	\$ 524,282.05	
						nended	\$ 555,843.85	(CCO #1)
						nended	\$ 651,967.00	(CCO #2)
Item	Bid	Completed Quantity	Description		AI	nended Cost	\$ 613,497.80 Per Unit	(CCO #3) Amount
No 1	Quantity 1	1,33	Lump Sum Traffic Control	(a)	\$	23,100.00	Lump Sum	\$30,723.00
2	1	1.0	Lump Sum Temporary Traffic Signal (W Sunset &	-	\$	20,550.00	Lump Sum	\$20,550.00
			S Grand)	_	\$	-	Lin, Ft.	\$37,044.00
3 4	252 20	252 20	Lin. Ft. of 18-Inch PVC Sanitary Sewer Lin. Ft. of 6-Inch PVC Sanitary Lateral	@	\$ \$	147.00 128.00	Lin, Ft. Lin, Ft.	\$2,560.00
			Rehabilitate Sanitary Manhole with Cementitious					·
5	2	2	Liner	@	\$	2,465.00	Each	\$4,930.00
6	2	2	Install Chimney Seal	@	\$	410.00	Each	
7	4	2	Chimney Replacement	@	\$	1,025.00	Each	\$2,050.00
8	8	0	Storm Sewer Inlet Repair	@	\$	410.00	Vert. Ft.	\$0.00
9	2	0	Storm Sewer Manhole Repair	@	\$	410,00	Vert. Ft.	\$0.00
10	252	252	Lin. Ft. of Sanitary Sewer Televising - Prepaving	@	\$	3.40	Lin. Ft.	\$856.80
11	2	2	Sanitary Lateral Televising - Prepaving	@	\$	452.00	Each	\$904.00
12	50	0	Cu. Yds. of Slurry Backfill	@	\$	93.00	Cu. Yd.	\$0,00
13-	20	0	Silt Fence, Delivered, Installed and Maintained	@	\$	15.50	Lin, Ft,	\$0.00
14	20	0	Straw Bales Delivered, Installed and Maintained	@	\$	10.00	Each	\$0.00
15	6	6	Filter Fabric Inlet Protection	@	\$	55,00	Each	\$330.00
16	800	512	Lin, Ft. of Sawcutting at Pavement Limits	@	\$	2,00	Lin. Ft.	\$1,024.00
17	100	20	Tons of 11/4-Inch Dense Aggregate	@	\$	20.00	Ton	\$400.00
18	12000	14,807	Sq. Ft. of Concrete Pavement Removal and Replacement	@	\$	5.65	Sq. Ft.	\$83,659.55
19	1200	2,300	Sq. Ft. of Side Walk Removal	@	\$	2.00	Sq. Ft.	\$4,600.00
20	800	1,252	Lin. Ft. of Concrete Curb and Gutter Removal and Replacement	œ	\$	42.00	Lin, Ft.	\$52,584.00
21	1200	3,847	Sq. Ft. of New 4-Inch Concrete Walk and Curb Ramps	@	\$	5,25	Sq. Ft.	\$20,196.75
22	130	96	Sq. Ft. of Detectable Warning Surface	@	\$	25,00	Sq. Ft.	\$2,400.00
23	50	36	Lin. Ft. of Concrete Curb – Pedestrian	@	\$	25.00	Lin. Ft.	\$900.00
24	200	0	Sq. Ft. of Concrete Median Sloped Nose	@	\$	7.50	Sq. Ft.	\$0.00
25	3000	2,400	Lin. Ft. of Pavement Markings, Yellow, Epoxy, 4-Inch	@	\$	0.90	Lin, Ft.	\$2,160.00
26	1400	450	Lin. Ft. of Pavement Markings, White, Epoxy, 4- Inch	@	\$	0.90	Lin. Ft.	\$405.00
27	1000	0	Lin. Ft. of Pavement Markings, White, Epoxy, 6-Inch	@	\$	7.25	Lin. Ft.	\$0.00
28	600	250	Lin. Ft. of Pavement Markings, White, Epoxy, 8- Inch	@	\$	1,65	Lin. Ft.	\$412.50
29	200	126	Lin. Ft. of Pavement Markings, White, Epoxy, 18- Inch	@	\$	8.75	Lin, Ft.	\$1,102.50
30	300	0	Lin. Ft. of Pavement Markings, Yellow, Epoxy, 12-Inch	@	\$	5.25	Lin, Ft.	\$0.00
31	600	0	Lin. Ft. of Pavement Markings, Yellow, Epoxy, 4-Inch, (30' Skip, 10' Line)	@	\$	0.95	Lin. Ft.	\$0.00
32	14	0	Pavement Markings, White, Epoxy, Arrows, Type 2	@	\$	220.00	Each	\$0.00
33	7	0	Pavement Markings, White, Epoxy, Words "ONLY"	@	\$	260.00	Each	\$0.00
34	100	458	Topsoil and Sod (Includes Stripping)	@	\$	18.50	Sq. Yd.	\$8,473.00
35	25	0	Extra Bags of Cement for High-Early-Strength Concrete	@	\$	10.85	Each	\$0.00
36	7	0	Street Light Pull Boxes 15 x 30 Inch	@	\$	720,00	Each	\$0.00
37	1	1	Temporary Street Lighting Overhead Wiring	@	\$	5,645.00	Lump Sum	\$5,645.00
38	300	0	Lin, Ft. of #10 AWG wire	@	\$	0.72	Lin. Ft.	\$0.00

	200	440	Y' TO CHEATTER !	<i>(</i> 2)	\$ 0.87	Lin. Ft.	\$382.80
39 40	300 300	440 1,760	Lin. Ft. of #6 AWG wire Lin. Ft. of #4 AWG wire	@ @	\$ 1.13	Lin. Ft.	\$1,988.80
41	500	332	Conduit Rigid Nonmetallic Schedule 40 2-Inch	@	\$ 5.65	Lin, Ft.	\$1,875.80
42	1000	920	(WisDOTPay Item 652.0225) Conduit Rigid Nonmetallic Schedule 40 3-Inch	@	\$ 6.70	Lin. Ft.	\$6,164.00
43	14	22	(WisDOTPay Item 652.0235) Pull Boxes Steel 24x42-Inch (WisDOT Pay Item	@	\$ 800.00	Each	\$17,600.00
44	9	9	653.0140) Concrete Bases Type 1 (WisDOT Pay Item 654.0101)	@	\$ 642.00	Each	\$5,778.00
45	6	4	Concrete Bases Type 2 (WisDOT Pay Item 654,0102) - W Sunset & Grand	@	\$ 820.00	Each	\$3,280.00
46	1	1	Concrete Bases Type 2 (WisDOT Pay Item 654,0102) - W Sunset & West	@	\$ 820.00	Each	\$820,00
47	1	1	Concrete Bases Type 5 (WisDOT Pay Item 654,0105)	@	\$ 667.00	Each	\$667.00
48	2	2	Concrete Bases Type 10 (WisDOT Pay Item 654,0110) - W Sunset & Grand	@	\$ 3,800.00	Each	\$7,600.00
49	1	1	Concrete Bases Type 10 (WisDOT Pay Item 654,0110) - W Sunset & West	@	\$ 3,800.00	Each	\$3,800.00
50	1	1	Concrete Control Cabinet Bases Type 9 Special (WisDOT Pay Item 654.0217)	@	\$ 1,285.00	Each	\$1,285.00
51	400	0	Cable Traffic Signal 5-14 AWG (WisDOT Pay Item 655,0230)	@	\$ 1.05	Lin, Ft,	\$0.00
52	400	1,580	Cable Traffic Signal 7-14 AWG (WisDOT Pay Item 655.0240)	@	\$ 1.10	Lin. Ft.	\$1,738.00
53	1600	2,254	Cable Traffic Signal 12-14 AWG (WisDOT Pay Item 655.0260) Cable Type UF 2-10 AWG Grounded (WisDOT	@	\$ 1.30	Lin. Ft.	\$2,930.20
54	600	733	Pay Item 655.0320) Electrical Wire Traffic Signals 10 AWG	@	\$ 1.40	Lin. Ft.	\$1,026.20
55	1200	1,190	(WisDOT Pay Item 655,0515)	@	\$ 0.75	Lin. Ft.	\$892.50
56	600	0	Electrical Wire Lighting 10 AWG (WisDOT Pay Item 655,0615)	@	\$ 0.75	Lin. Ft.	\$0.00
57	1	1	Electrical Service Meter Breaker Pedestal W Sunset & S Grand (WisDOT Pay Item 656.0200.01)	@	\$ 1,540.00	Lump Sum	\$1,540.00
58	9	9	Pedestal Bases (WisDOT Pay Item 657.0100)	@	\$ 155.00	Each	\$1,395.00
59	8	6	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle (WisDOT Pav Item 657.0255)	@	\$ 325.00	Each	\$1,950.00
60	2	2	Poles Type 2 (WisDOT Pay Item 657.0305) - W Sunset & Grand	@	\$ 1,310.00	Each	\$2,620.00
61	1	1	Poles Type 2 (WisDOT Pay Item 657.0305) - W Sunset & West	@	\$ 1,310.00	Each	\$1,310.00
62	4	4	Traffic Signal Standards Aluminum 15-Ft (WisDOT Pay Item 657.0425)	@	\$ 456.00	Each	\$1,824.00
63	4	4	Traffic Signal Standards Aluminum 10-Ft (WisDOT Pay Item 657.0430) - W Sunset & Grand	@	\$ 420.00	Each	\$1,680.00
64	1	1	Traffic Signal Standards Aluminum 10-Ft (WisDOT Pay Item 657,0430) - W Sunset & West	@	\$ 420.00	Each	\$420.00
65	2	2	Trombone Arms 20-Ft (WisDOT Pay Item 657,0590) -W Sunset & Grand	@	\$ 1,050.00	Each	\$2,100.00
66	1	1	Trombone Arms 20-Ft (WisDOT Pay Item 657.0590) - W Sunset & West	@	\$ 1,050.00	Each	\$1,050.00
67	10	10	Traffic Signal Face 3-12 Inch Vertical (WisDOT Pay Item 658.0110)	@	\$ 325.00	Each	\$3,250.00
68	2	2	Traffic Signal Face 4-12 Inch Vertical (WisDOT Pay Item 658.0115)	@	\$ 380.00	Each	\$760.00
69	10	10	Backplates Signal Face 3 Section 12-Inch (WisDOT Pay Item 658.0215)	@	\$ 62.00	Each	\$620.00
70	2	2	Backplates Signal Face 4 Section 12-Inch (WisDOT Pay Item 658.0220)	@	\$ 66.00	Each	\$132.00
71	4	4	LED Modules 12-Inch Red Ball (WisDOT Pay Item 658,0600)	@	\$ 64,00	Each	\$256.00
72	4	4	LED Modules 12-Inch Yellow Ball (WisDOT Pay Item 658,0605)	@	\$ 65.00	Each	\$260.00
73	4	4	LED Modules 12-Inch Green Ball (WisDOT Pay Item 658.0610)	@	\$ 65.00	Each	\$260.00
74	8	4	LED Modules 12-Inch Red Arrow (WisDOT Pay Item 658.0615)	@	\$ 65,00	Each	\$260.00
75	16	16	LED Modules 12-Inch Yellow Arrow (WisDOT Pay Item 658.0620)	@	\$ 65.00	Each	\$1,040.00
76	2	2	LED Modules 12-Inch Green Arrow (WisDOT Pay Item 658.0625)	@	\$ 65,00	Each	\$130.00

77	1	1	Signal Mounting Hardware W Sunset & S Grand (WisDOT Pay Item 658.5069.01)	@	\$	2,360.00	Lump Sum	\$2,360.00
78	2	2	Poles Type 9 (SPV.0060.01) - W Sunset & Grand	@	\$	3,695.00	Each	\$7,390.00
79	1	1	Poles Type 9 (SPV.0060.02) - W Sunset & West	@	\$	3,695.00	Each	\$3,695.00
80	2	2	Monotube Arms 30-Ft (SPV.0060.03) - W Sunset & Grand	@	\$	3,285.00	Each	\$6,570.00
81	1	1	Traffic Signal Controller and Cabinet 8-Phase Fully Actuated (SPV.0060.04) - W Sunset & Grand	@	\$	22,010.00	Each	\$22,010.00
82	1	1	Video Vehicle Detection System W Sunset & S Grand	@	\$	22,985.00	Each	\$22,985.00
83	1	1	Emergency Vehicle Preemption System W Sunset & S Grand	@	\$	8,930.00	Each	\$8,930.00
84	1	1	Audible Pedestrian Push Button System for W Sunset & S Grand	@	\$	10,470.00	Each	\$10,470.00
85	1	1	Remove Traffic Signals W Sunset & Grand	@	\$	2,565.00	Lump Sum	\$2,565.00
86	9	9	Remove, Store and Reinstall Existing Lighting	@	\$	72.00	Each	\$648.00
80	9	9	Luminaires Remove, Store and Reinstall Existing 16-Inch	w	Ψ	72.00		
87	8	8	Countdown Pedestrian Heads	@	\$	230.00	Each	\$1,840.00
88	8	8	Remove, Store and Reinstall Existing 3 Face Vertical Signal Heads	@	\$	230.00	Each	\$1,840.00
89	5	3	Remove, Relocate and Reinstall Existing Type 4 Pole with Lumiaire Arms	@	\$	975.00	Each	\$2,925.00
90	1	1	Remove Existing Push Button and Pedestrian Head from Existing Type 9 Pole and Reinstall on New 10-FT Standard Pole - Sunset & West	@	\$	130.00	Lump Sum	\$130.00
91	1	1	Remove Existing 30-FT Monotube Arm with Attached Sign, Signal Heads and EVP Head, Store and Reinstall on New Type 9 Post - W Sunset & West	@	\$	2,050.00	Lump Sum	\$2,050.00
92	1	1	Remove and Dispose of Existing Type 9 Monotube Pole - W Sunset & West	@	\$	1,230.00	Lump Sum	\$1,230.00
93	1	1	Manufacture a Special Plate to be Mounted on Existing Type 10 Concrete Base to Mount a Pedestal Base - W Sunset & West	@	\$	770.00	Lump Sum	\$770.00
94	1	1	Install City Furnished 3 Face Vertical Head on New 20-FT Trombone Arm - W Sunset & West	@	\$	130.00	Lump Sum	\$130.00
95	1	1	Install City Furnished Pedestrian Head to be Mounted on Existing Pole - W Sunset & West	@	\$	130.00	Lump Sum	\$130.00
Alt Bid	16000	23,304	Sq. Ft of Concrete Pavement Removal and Replacement (Sunset Sta. 26+00 to 35+00)	@	\$	5.65	Lump Sum	\$131,667.60
CCO 1	1	1	Additional Asphalt Resurfacing Work	@	\$	31,561.80	Lump Sum	\$31,561.80
Extra 1		1	Manhole Structure Installation at Sunset & Grand	@	\$	4,400.00	Each	\$4,400.00
Extra 2		1	Monotube Arms 30-Ft (SPV.0060.03) - W Sunset & S West Ave	@	\$	3,285.00	Each	\$3,285.00
LD1		43	Assessment of 43 Days of Liquidated Damages at \$500 per day deducted from payment.	@	\$	(500.00)	Day	-\$21,500.00
			Total	B				\$613,497.80
Less Retainage						\$0.00		
Total						\$613,497.80		
Less Previosuly Paid						\$591,057.87		
Total Amount Due						\$22,439.93		

This estimate has been checked by the Engineering Department and we recommend that the above amount of \$22,439.93 be allowed.

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