

Traffic Signal Update Project CIP No. 17058 HSIPL 5242 (034)				Engineers Estimate \$3,585,000		ST FRANCIS ELECTRIC, LLC		BEAR ELECTRICAL SOLUTIONS, INC		TENNYSON ELECTRIC LLC	
August 12, 2024						SAN LEANDRO, CA		ALVISO, CA		LIVERMORE, CA	
ITEM NO.	ITEM DESCRIPTION	BID QTY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL		
1	Mobilization	1	LS	\$ 122,685.00	\$ 122,685.00	\$ 170,000.00	\$ 170,000.00	\$ 475,000.00	\$ 475,000.00		
2	Traffic Control System	1	LS	\$ 120,000.00	\$ 120,000.00	\$ 220,000.00	\$ 220,000.00	\$ 157,650.00	\$ 157,650.00		
3	Lead Compliance Plan	1	LS	\$ 1,700.00	\$ 1,700.00	\$ 3,000.00	\$ 3,000.00	\$ 5,000.00	\$ 5,000.00		
4	Prepare Water Pollution Control Program	1	LS	\$ 2,500.00	\$ 2,500.00	\$ 24,000.00	\$ 24,000.00	\$ 5,000.00	\$ 5,000.00		
5	Prepare Storm Water Pollution Prevention Plan	1	LS	\$ 5,083.00	\$ 5,083.00	\$ 1,500.00	\$ 1,500.00	\$ 5,000.00	\$ 5,000.00		
6	Monument Preservation	1	LS	\$ 15,000.00	\$ 15,000.00	\$ 5,000.00	\$ 5,000.00	\$ 1,500.00	\$ 1,500.00		
7	Existing Utility Verification	1	LS	\$ 6,500.00	\$ 6,500.00	\$ 17,500.00	\$ 17,500.00	\$ 45,000.00	\$ 45,000.00		
8	Central Management System	1	LS	\$ 240,000.00	\$ 240,000.00	\$ 360,000.00	\$ 360,000.00	\$ 195,000.00	\$ 195,000.00		
9	Fiber Optic System Testing	1	LS	\$ 23,000.00	\$ 23,000.00	\$ 20,000.00	\$ 20,000.00	\$ 125,000.00	\$ 125,000.00		
10	Wireless System Testing	1	LS	\$ 21,000.00	\$ 21,000.00	\$ 50,000.00	\$ 50,000.00	\$ 30,000.00	\$ 30,000.00		
11	Remove Existing Sign Mounted on Mast Arm	7	EA	\$ 350.00	\$ 2,450.00	\$ 45.00	\$ 315.00	\$ 350.00	\$ 2,450.00		
12	Remove Existing Signal Cabinet	30	EA	\$ 1,000.00	\$ 30,000.00	\$ 400.00	\$ 12,000.00	\$ 2,250.00	\$ 67,500.00		
13	Remove Existing Battery Backup Unit	2	EA	\$ 800.00	\$ 1,600.00	\$ 350.00	\$ 700.00	\$ 2,100.00	\$ 4,200.00		
14	Remove Existing Controller	40	EA	\$ 750.00	\$ 30,000.00	\$ 150.00	\$ 6,000.00	\$ 1,500.00	\$ 60,000.00		
15	Remove Signal Head	59	EA	\$ 450.00	\$ 26,550.00	\$ 100.00	\$ 5,900.00	\$ 350.00	\$ 20,650.00		
16	Remove Signal Head Mount	29	EA	\$ 150.00	\$ 4,350.00	\$ 50.00	\$ 1,450.00	\$ 350.00	\$ 10,150.00		
17	Remove Emergency Vehicle Pre-Emption Device	2	EA	\$ 500.00	\$ 1,000.00	\$ 150.00	\$ 300.00	\$ 450.00	\$ 900.00		
18	Furnish and Install 332LS Cabinet	30	EA	\$ 25,000.00	\$ 750,000.00	\$ 22,000.00	\$ 660,000.00	\$ 36,500.00	\$ 1,095,000.00		
19	Furnish and Install Battery Backup System and Enclosure and Foundation	4	EA	\$ 9,100.00	\$ 36,400.00	\$ 11,000.00	\$ 44,000.00	\$ 16,500.00	\$ 66,000.00		
20	Furnish and Install 2070LX Controller	40	EA	\$ 8,500.00	\$ 340,000.00	\$ 7,000.00	\$ 280,000.00	\$ 8,500.00	\$ 340,000.00		
21	Furnish and Install Sign on Signal Standard	7	EA	\$ 700.00	\$ 4,900.00	\$ 550.00	\$ 3,850.00	\$ 650.00	\$ 4,550.00		
22	Furnish and Install 12x3 Signal Head with Yellowretroreflective Border	59	EA	\$ 990.00	\$ 58,410.00	\$ 1,000.00	\$ 59,000.00	\$ 1,150.00	\$ 67,850.00		
23	Furnish and Install Signal Head Mount	29	EA	\$ 910.00	\$ 26,390.00	\$ 800.00	\$ 23,200.00	\$ 950.00	\$ 27,550.00		
24	Furnish and Install Yellowretroreflective Border Tape on Existing Signal Backplate	126	EA	\$ 450.00	\$ 56,700.00	\$ 80.00	\$ 10,080.00	\$ 475.00	\$ 59,850.00		
25	Furnish and Install Emergency Vehicle Detection System	2	EA	\$ 16,000.00	\$ 32,000.00	\$ 19,700.00	\$ 39,400.00	\$ 19,500.00	\$ 39,000.00		
26	Furnish and Install Integrated Radio and Mounting	12	EA	\$ 5,500.00	\$ 66,000.00	\$ 9,000.00	\$ 108,000.00	\$ 6,850.00	\$ 82,200.00		
27	Furnish and Install Integrated Radio, Omni-Directional Antennas, and Mounting	31	EA	\$ 7,500.00	\$ 232,500.00	\$ 9,500.00	\$ 294,500.00	\$ 8,500.00	\$ 263,500.00		
28	Furnish and Install Power Over Ethernet Cable	6920	LF	\$ 1.25	\$ 8,650.00	\$ 1.40	\$ 9,688.00	\$ 8.00	\$ 55,360.00		
29	Furnish and Install 2" Conduit	135	LF	\$ 70.00	\$ 9,450.00	\$ 10.00	\$ 1,350.00	\$ 110.00	\$ 14,850.00		
30	Furnish and Install 4" Conduit with Four 1" HDPE SDR 11 Innerduct Under Train Tracks	565	LF	\$ 110.00	\$ 62,150.00	\$ 188.00	\$ 106,220.00	\$ 285.00	\$ 161,025.00		
31	Furnish and Install 4" Conduit with Four 1" HDPE SDR 11 Innerduct	8500	LF	\$ 90.00	\$ 765,000.00	\$ 94.00	\$ 799,000.00	\$ 165.00	\$ 1,402,500.00		
32	Furnish and Install 12-Strand SMFO Cable	1350	LF	\$ 1.50	\$ 2,025.00	\$ 3.00	\$ 4,050.00	\$ 15.00	\$ 20,250.00		
33	Furnish and Install 96-Strand SMFO Cable	1750	LF	\$ 7.50	\$ 13,125.00	\$ 6.00	\$ 10,500.00	\$ 15.00	\$ 26,250.00		
34	Furnish and Install 144-Strand SMFO Cable	12158	LF	\$ 8.50	\$ 103,343.00	\$ 6.50	\$ 79,027.00	\$ 10.00	\$ 121,580.00		
35	Furnish and Install Pull Tape	39080	LF	\$ 0.80	\$ 31,264.00	\$ 0.90	\$ 35,172.00	\$ 1.50	\$ 58,620.00		
36	Furnish and Install 1-18 AWG Tracer Wire	10250	LF	\$ 1.50	\$ 15,375.00	\$ 1.00	\$ 10,250.00	\$ 4.00	\$ 41,000.00		
37	Furnish and Install Fabric Innerduct	900	LF	\$ 8.50	\$ 7,650.00	\$ 7.00	\$ 6,300.00	\$ 20.00	\$ 18,000.00		
38	Furnish and Install #8 Cable	250	LF	\$ 5.00	\$ 1,250.00	\$ 1.50	\$ 375.00	\$ 3.00	\$ 750.00		
39	Furnish and Install No. 5 Pull Box	2	EA	\$ 1,950.00	\$ 3,900.00	\$ 4,300.00	\$ 8,600.00	\$ 2,650.00	\$ 5,300.00		
40	Furnish and Install No. 6E Pull Box	14	EA	\$ 2,750.00	\$ 38,500.00	\$ 5,000.00	\$ 70,000.00	\$ 3,250.00	\$ 45,500.00		
41	Furnish and Install Splice Vault	9	EA	\$ 8,700.00	\$ 78,300.00	\$ 9,000.00	\$ 81,000.00	\$ 6,250.00	\$ 56,250.00		
42	Furnish and Install Splice Closure	4	EA	\$ 1,950.00	\$ 7,800.00	\$ 1,675.00	\$ 6,700.00	\$ 6,250.00	\$ 25,000.00		
43	Furnish and Install 332LS Hub Cabinet and Foundation	2	EA	\$ 11,000.00	\$ 22,000.00	\$ 16,000.00	\$ 32,000.00	\$ 21,500.00	\$ 43,000.00		
44	Furnish and Install Surge Protector Power Strip	43	EA	\$ 1,000.00	\$ 43,000.00	\$ 1,000.00	\$ 43,000.00	\$ 1,250.00	\$ 53,750.00		
45	Furnish and Install 12-Strand Fiber Distribution Unit	8	EA	\$ 2,000.00	\$ 16,000.00	\$ 1,800.00	\$ 14,400.00	\$ 2,500.00	\$ 20,000.00		
46	Furnish and Install Ethernet Switch (Traffic Signal Cabinet)	45	EA	\$ 4,500.00	\$ 202,500.00	\$ 3,900.00	\$ 175,500.00	\$ 5,850.00	\$ 263,250.00		
47	Furnish and Install 20A Circuit Breaker	2	EA	\$ 300.00	\$ 600.00	\$ 2,500.00	\$ 5,000.00	\$ 2,650.00	\$ 5,300.00		
48	Furnish and Install Fiber Patch Cords	66	EA	\$ 55.00	\$ 3,630.00	\$ 50.00	\$ 3,300.00	\$ 350.00	\$ 23,100.00		
49	Furnish and Install Type 2 Surge Protection	2	EA	\$ 1,120.00	\$ 2,240.00	\$ 1,000.00	\$ 2,000.00	\$ 1,350.00	\$ 2,700.00		
50	Furnish and Install Power Distribution Unit	4	EA	\$ 850.00	\$ 3,400.00	\$ 745.00	\$ 2,980.00	\$ 1,350.00	\$ 5,400.00		
51	Furnish and Install Uninterruptible Power Supply Assembly(Hub Cabinet)	4	EA	\$ 4,700.00	\$ 18,800.00	\$ 5,000.00	\$ 20,000.00	\$ 6,500.00	\$ 26,000.00		
52	Furnish and Install External Batteries	8	EA	\$ 2,000.00	\$ 16,000.00	\$ 2,500.00	\$ 20,000.00	\$ 2,250.00	\$ 18,000.00		
53	Furnish and Install Ethernet Switch (Hub Cabinets)	4	EA	\$ 29,100.00	\$ 116,400.00	\$ 30,000.00	\$ 120,000.00	\$ 33,650.00	\$ 134,600.00		
54	Furnish and Install Ethernet Switch (Telecom Room)	1	EA	\$ 30,500.00	\$ 30,500.00	\$ 30,000.00	\$ 30,000.00	\$ 38,500.00	\$ 38,500.00		
55	Furnish and Install 1 Gbps Fiber Transceiver	56	EA	\$ 250.00	\$ 14,000.00	\$ 375.00	\$ 21,000.00	\$ 1,500.00	\$ 84,000.00		
56	Furnish and Install 10 Gbps Fiber Transceiver	15	EA	\$ 600.00	\$ 9,000.00	\$ 850.00	\$ 12,750.00	\$ 1,200.00	\$ 18,000.00		
57	Furnish and Install Uninterruptible Power Supply Assembly(Telecom Room)	2	EA	\$ 4,300.00	\$ 8,600.00	\$ 4,000.00	\$ 8,000.00	\$ 4,350.00	\$ 8,700.00		
58	Furnish and Install 144-Strand Fiber Distribution Unit	4	EA	\$ 9,000.00	\$ 36,000.00	\$ 9,825.00	\$ 39,300.00	\$ 13,650.00	\$ 54,600.00		
59	Furnish and Install Cellular Gateway	2	EA	\$ 3,600.00	\$ 7,200.00	\$ 3,500.00	\$ 7,000.00	\$ 4,250.00	\$ 8,500.00		
60	Furnish and Install Nema 3R Enclosure	1	EA	\$ 1,200.00	\$ 1,200.00	\$ 2,750.00	\$ 2,750.00	\$ 7,850.00	\$ 7,850.00		
61	Furnish and Install 2" Indoor Conduit	80	LF	\$ 90.00	\$ 7,200.00	\$ 170.00	\$ 13,600.00	\$ 225.00	\$ 18,000.00		
62	Furnish and Install Conduit Clamp Assembly	22	EA	\$ 40.00	\$ 880.00	\$ 80.00	\$ 1,760.00	\$ 150.00	\$ 3,300.00		
63	Furnish and Install Conduit Hanger Assembly	3	EA	\$ 175.00	\$ 525.00	\$ 340.00	\$ 1,020.00	\$ 250.00	\$ 750.00		
64	Drill Through Wall	3	EA	\$ 950.00	\$ 2,850.00	\$ 1,500.00	\$ 4,500.00	\$ 1,150.00	\$ 3,450.00		
65	Furnish and Install Corrugated Flexible Conduit	75	LF	\$ 45.00	\$ 3,375.00	\$ 8.00	\$ 600.00	\$ 95.00	\$ 7,125.00		
66	Furnish and Install Rack Cable Assembly	2	EA	\$ 1,250.00	\$ 2,500.00	\$ 3,750.00	\$ 7,500.00	\$ 6,500.00	\$ 13,000.00		
67	Railroad Relations and Insurance Requirements	1	LS	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00		
68	Trainees	6	EA	\$ 800.00	\$ 4,800.00	\$ 800.00	\$ 4,800.00	\$ 800.00	\$ 4,800.00		
<b>TOTAL BASE BID ITEMS 1 - 68:</b>				<b>\$</b>	<b>3,992,700.00</b>	<b>\$</b>	<b>4,255,687.00</b>	<b>\$</b>	<b>6,188,410.00</b>		
<b>Alternative Bid Schedule</b>											
1A	Furnish and Install 4" Conduit	8500	LF	\$ 51.75	\$ 439,875.00	\$ 39.50	\$ 335,750.00	\$ 145.00	\$ 1,232,500.00		
2A	Furnish and Install Pull Tape	9770	LF	\$ 0.80	\$ 7,816.00	\$ 0.90	\$ 8,793.00	\$ 2.00	\$ 19,540.00		
3A	Furnish and Install Splice Vault	36	EA	\$ 8,505.00	\$ 306,180.00	\$ 9,000.00	\$ 324,000.00	\$ 6,750.00	\$ 243,000.00		
<b>TOTAL ALTERNATIVE BID ITEMS 1A- 3A:</b>				<b>\$</b>	<b>753,871.00</b>	<b>\$</b>	<b>668,543.00</b>	<b>\$</b>	<b>1,495,040.00</b>		
<b>TOTAL BASE BID ITEMS 1 - 68 AND ALTERNATIVE BID ITEMS 1A- 3A:</b>				<b>\$</b>	<b>4,746,571.00</b>	<b>\$</b>	<b>4,924,230.00</b>	<b>\$</b>	<b>7,683,450.00</b>		