

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ADDENDUM NO. 1

FOR

FURNISHING AND DELIVERING HARDWARE, CABLES,
CONTROLLER EQUIPMENT, SIGNAL HEADS, PEDESTRIAN SIGNAL
AND SIGNAL STANDARDS FOR TRAFFIC SIGNAL SYSTEM
ISLANDS OF MAUI, KAUAI, AND HAWAII
PROJECT NO. HWY-C-06-21

NOVEMBER 26, 2021

This Addendum shall make the following amendment to the Bid Documents:

- A. TABLE OF CONTENTS – Add and make a part of the specifications the attached TABLE OF CONTENTS.
- B. NOTICE TO BIDDERS - Prospective bidders are hereby notified that the deadline date and time to submit bids is 2:00 p.m., December 15, 2021. The attached NOTICE TO BIDDERS dated r11/26/2021 will be incorporated and made a part of the original NOTICE TO BIDDERS.
- C. SECTION 11 – Replace Section 11, dated 10/15/2021, with attached revised Section 11, dated r11/26/2021.
- C. PROPOSAL SCHEDULE – Replace Proposal Schedule pages PF-6 through PF-34, dated 10/15/21 with attached revised Proposal Schedule pages PF-6 through PF-34, dated r11/26/21

The following is provided for information:

- D. QUESTIONS & ANSWERS – Attached are answers to questions submitted via HiePRO.

Please acknowledge receipt of this Addendum No. 1 by recording the date of its receipt in the space provided on Page P-4 of the Proposal.



JADE T. BUTAY
Director of Transportation

NOTICE TO BIDDERS
(Chapter 103D, HRS)

The receiving of SEALED BIDS for FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT, SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS FOR TRAFFIC SIGNAL SYSTEM, ISLANDS OF MAUI, KAUAI, AND HAWAII, PROJECT NO. HWY-C-06-21, scheduled for 2:00 P.M., Tuesday, November 30, 2021, via HiePRO, is HEREBY POSTPONED until 2:00 P.M., Wednesday, December 15, 2021.



JADE T. BUTAY
Director of Transportation

TABLE OF CONTENTS

Page No.

Notice to Bidders

Special Provisions.....SP-1 - SP-4

Specifications (Mtls)

Section 1 Definition and Terms..... 1-1 - 1-4

Section 2 Proposal Requirements and Conditions..... 2-1 - 2-3

Section 3 Award and Execution of Contract..... 3-1 - 3-3

Section 4 Scope of Work.....4-1 - 4-3

Section 5 Control of Work..... 5-1 - 5-2

Section 6 Control of Material and Equipment.....6-1 - 6-3

Section 7 Legal Relations and Responsibility.....7-1 - 7-4

Section 8 Prosecution and Progress..... 8-1 - 8-7

Section 9 Payment.....9-1 - 9-2

Section 10 Furnishing and Delivering Hardware, Cables,
Controller Equipment, Signal Heads, Pedestrian Signal
and Signal Standards for Traffic Signal System..... 10-1 - 10-9

Section 11 Furnishing and Delivering Hardware, Cables,
Controller Equipment, Signal Heads, Pedestrian Signal
and Signal Standards for Traffic Signal System..... 11-1 - 11-9

Appendices

Appendix A – Standard Plan TE-32, Type I & II Traffic Signal
System Miscellaneous Details.....TE-32

Appendix B – Sample Invoice.....B-1

Appendix C – Sample – Satisfactory Evidence by Affidavit for
Final Payment.....C-1

ProposalPF-1 - PF-5

Proposal Schedule..... PF-6 – PF-34

Forms

Contract..... KF-1 - KF-3

SECTION 11 – FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT, SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS FOR TRAFFIC SIGNAL SYSTEM

11.1 GENERAL

(A) Material

Materials shall conform to the Standard Specifications and the Standard Plans and/or manufacturer’s specifications, as applicable. Refer to Section 1.40, Standard Specifications and Section 1.41, Standard Plans of the Special Provisions for the definition of Standard Specifications and Standard Plans.

Material	Standard Specification Section
Brackets, Fittings and Hardware	623.02
Conductors and Cables for Traffic Signal System	770.06
Controller Equipment	770.05 and/or manufacturer’s specifications, as applicable
Traffic Signal Heads	770.02
Pedestrian Signal	770.04
Light Emitting Diode (LED) Traffic Signal Heads	770.02
LED Programmable Visibility Signals (refer for more information for Group F below)	770.02
Traffic Signal Standards	770.01

Supplement to the above Specifications:

1. Pedestrian Signal Push Button with Integral Sign:
 The pedestrian push button unit shall be secured to traffic poles with stainless steel screws, lock washer, and be tamper resistant, weatherproof, and constructed so that electrical shocks are impossible to receive. The assembly shall consist of a raised walking person, a raised arrow indication, and a push button.
 - a. The push button assembly housing shall be constructed of cast and/or machined aluminum. The housing shall be painted black and the raised walking person and arrow shall be painted white. The housing shall be capable of being mounted on the side or top of a pole with a minimum 2 inch diameter in an “up-button” or “down-button” configuration on the side or top of a pole with a

minimum 2-inch diameter, and shall be designed to reduce vandalism.

- b. The push button assembly shall be shockproof and rainproof. The pedestrian push button switch shall be a piezo electric type. The actuator button shall be 2-inches in diameter. The push button shall have an operating force in compliance with Americans with Disabilities Act (ADA) standards. A LED and audible tone are momentarily activated with the pedestrian call.
- c. A directional sign (conforming to ADA requirements) shall be installed with stainless steel fasteners to the housing. The raised walking person and arrows shall be directional. The sign shall be capable of being mounted in an “up button” or “down button” configuration and painted white.

2. Countdown Light Emitting Diode (LED) Pedestrian Signal Module.

The LED pedestrian traffic signal modules shall be designed as a retrofit replacement of the existing pedestrian traffic signal housing. The message-bearing surface of the module shall be supplied with an overlapping, full “UPRAISED HAND” and “WALKING PERSON” symbol that complies with Pedestrian Traffic Control Signal Indications (PTCSI) standard and the numbers 00 to 99 on the numerical countdown display. The numerical countdown display shall have 2 rows of LEDs and a minimum height of 7 inches. The modules shall use LEDs and conform with these specifications, and outlined shapes shall not be accepted. The LED pedestrian countdown signal modules shall not require special tools for installation, shall be weather tight, shall fit securely in the existing pedestrian housing, shall connect directly to existing electrical wiring, shall be operationally compatible with the currently used controller assemblies, and shall have a warranty of five years. Catastrophic failure of one LED light source shall not result in the loss of more than the light from that one LED. The LED pedestrian and countdown module shall be operationally compatible with conflict monitors. Each module shall include all necessary components to complete conversion, including gaskets. To ensure quality and performance, the pedestrian module shall be listed on the California Department of Transportation’s (CALTRANS) Qualified Products List (QPL) and meet the Institute of Transportation Engineering (ITE) standards.

- 3. LED Programmed Visibility Lamp (Red, Yellow, Green) module shall be a direct replacement for the incandescent lamps used in Programmable Visibility Traffic signal heads, the lamps shall be CALTRANS QPL certified, failure of single LED results in loss of light from that LED only,

120V operating voltage, 5-year manufacturer warranty, and power factor greater than 0.9.

(B) Product List

Bid Item	Description	Standard Spec Section
<u>1. Signal Intersection Control and Cabinet Systems</u>		
1	332 Standard Cabinet, 8-Phase, 4-Ped operation, Opticom compatible	770.05
2	332L Enhanced/Stretch Cabinet, 8-Phase, 4-Ped Operation, Opticom compatible, pre-wired for Battery Backup System and extra AC outlets	770.05
2a	Pole Mount NEMA 3R Cabinet Enclosure w/Police Panel	770.05
3	Video Detector System, 8-Phase, 4-Ped operation, Autoscope or equal	770.14
4	Radar Detector System, 8-Phase, 4-Ped operation, Wavetronix or equal	770.15
5	Infrared Detector System, 8-phase, 4-Ped operation, TrafiSense2 or equal	770.16
6	Hybrid Video Radar System, 8-phase, 4-Ped operation, Iteris or equal	770.17
7	Traffic Signal Performance Measures (SPM) Report System, Transparency SPM or equal	770.05
8	Conflict Monitor, 16 channel with Ethernet Port, 2010 ECLip or equal	770.05
9	Traffic Signal Controller, McCain Flex or equal, including Management Information Bases (MiB)	770.05
10	Traffic Signal Controller, Econolite Cobalt Controller or equal, including Management Information Bases (MiB)	770.05
11	Signal Preemption Module, Model 762 Opticom or equal	770.05
12	Signal Preemption Detector, Model 711 Opticom or equal	770.05
13	Isolator Card, Model 242 DC Isolator EDI or equal	770.05
14	Two-Channel Loop Detector Electronics Unit, Model 222 Vehicle Detector or equal	770.05
15	Detector Loop Amplifier, Model 262C or equal	770.05
16	Load Switch, Model 200 or equal	770.05
17	Flasher, Model 204 or equal	770.05
18	Power Supply Unit, Model 206 or equal	770.05
19	Flash Transfer Relays (FTR) Series 21- with rectifier diode	770.05

20	<p>332 Cabinet Locks Replacement w/door alarm system:</p> <ul style="list-style-type: none"> - Must fit standard 332 cabinets - No wiring required – all power must be provided by the key - Indoor/Outdoor use – stainless steel shell construction - Audit events, attack and tamper proof - Unauthorized key list 	770.05
21	<p>332 Cabinet Lock Programming Station, Key Charger and Accessories:</p> <ul style="list-style-type: none"> - Small, robust electronic key with stainless steel housing - Intelligent key holds all access and schedule data - Rechargeable battery, up to 1,800 openings per charge - Stand-alone, network, WEB, mobile and Bluetooth programming 	770.05
22	332 Cabinet Door Stopper Rod Latch	770.05
23	332 Cabinet Light Assembly	770.05
24	332 Cabinet Light Front Switch	770.05
25	332 Cabinet Light Rear Switch	770.05
26	332 Cabinet Fan Assembly	770.05
27	332 Cabinet Thermostat	770.05
28	332 Cabinet Door Air Filter	770.05
29	<p>332 Cabinet Louvre Stainless Steel Filter Screen (Estimated Quantity in Square Feet):</p> <ul style="list-style-type: none"> - 1.5 mm x 1.5 mm - Insect protection - Must allow air flow - Durable fiberglass 	770.05
30	332 Cabinet Front Door Anodized	770.05
31	332 Cabinet Rear Door w/ Hooks Anodized	770.05
32	Rugged Cellular Router w/ VPN, Digi TX64 5G or equal	770.05
33	Antenna - Cellular, 5G, compatible with DigiTX64 5G router or equal	770.05
33a	Cellular External Mount Antenna, First Net Capable	770.05
34	Rugged and High Capacity (256 GB or more) USB drive, Samsung MUF256BE3/AM or equal	770.05
35	Wireless Modem, [Non-QPL], Sierra Wireless, First Net Capable or equal	770.05
36	Video Transcoder, Hydra 265 or equal	770.13
37	Rack Mount Ethernet Switch, Moxa IKS 6726A or equal	770.05
<u>2. Power Backup</u>		
38	Nickel Zinc Battery Panel, 500W, ZincFive or equal	770.12
39	U.P.S. Inverter, 1000W, ZincFive or equal	770.12

40	U.P.S. Inverter, 1500W, ZincFive or equal	770.12
41	Power Interface Module (PIM), ZincFive or equal	770.12
42	Power Block 8 awg 3 pole 50 amp	770.12
43	Spacer Block, ZincFive or equal	770.12
44	Speedy Sleeve, ZincFive or equal	770.12
<u>3. Detector, Sensor and Camera Systems</u>		
(Each sensor and cabinet interface must include all mounting, power and communication accessories and software)		
45	Video Detection Camera, Autoscope or equal	770.14
46	Video Cabinet Interface, Autoscope Communications Manager or equal	770.14
47	Radar Advance/Extended Range Sensor, Wavetronix or equal	770.15
48	Radar Stop Bar Sensor, Wavetronix Matrix or equal	770.15
49	Radar Cabinet Interface, Wavetronix 656 or equal	770.16
50	Infrared Detection Camera, TrafiSense2 Thermal Sensor or equal	770.17
51	Infrared Cabinet Interface, TI-BPL2 EDGE or equal	770.17
52	Microwave Vehicle Motion Detector, MS Sedco TC-CK1-SBE INTERSECTOR or equal	770.18
53	Microwave Pedestrian Motion Detector, Marlin Controls SmartWalk 1400 or equal	770.19
54	Microwave Detection Transformer Cabinet Interface, MS-SEDCO INTERSECTOR HUB or equal	770.18
55	Closed-Circuit Television (CCTV) Camera w/ analytics, Cohu HD RISE 4260 HD or equal	770.13
<u>4. Traffic Signal Heads</u>		
56	3-Section Polycarbonate Head/housing, R,Y,G LED, Stainless Steel Parts	770.02
57	4-Section Polycarbonate Head/housing, RA,YA,YA, GA, Arrows LED, Stainless Steel Parts	770.02
58	3 Section Light Bank, R,Y,GA LED	770.02
59	3-Section Program Visibillity Light Bank R,Y,G LED – 3M or McCain or equal	770.02
60	3-Section Program Visibillity Light Bank RA,YA,GA LED –3M or McCain or equal	770.02
61	12" Solid State LED Red Ball	770.02
62	12" Solid State LED Yellow Ball	770.02
63	12" Solid State LED Green Ball	770.02
64	12" Solid State LED Red Arrow	770.02
65	12" LED Solid State Yellow Arrow	770.02
66	12" LED Solid State Green Arrow	770.02
67	12" LED Solid State Yellow/Green Arrow	770.02
68	Replacement Programmable Visible LED Bulb Red	770.02

69	Replacement Programmable Visible LED Bulb Yellow	770.02
70	Replacement Programmable Visible LED Bulb Green	770.02
71	3-Section Back Plate, with single slit, McCain or equal	770.02
72	4-Section Back Plate, with single slit, McCain or equal	770.02
73	<p>3-Section Signal Head Back Plate, with single slit:</p> <ul style="list-style-type: none"> - Must be made from lightweight aluminum composite material - Must have reflective sheeting to produce a twelve-year finished product without fading, cracking and peeling failures - Must be fabricated to fit any signal head assembly, as needed <p>LightHawk ALPOLIC 350 or equal</p>	770.02
73a	<p>4-Section Signal Head Back Plate, with single slit:</p> <ul style="list-style-type: none"> - Must be made from lightweight aluminum composite material - Must have reflective sheeting to produce a twelve-year finished product without fading, cracking and peeling failures - Must be fabricated to fit any signal head assembly, as needed <p>LightHawk ALPOLIC 350 or equal</p>	770.02
74	3-Section Signal Head Back Plate, with single slit, 3M Programmable Visibility or equal	770.02
75	4-Section Signal Head Back Plate, with single slit, McCain Programmable Visibility or equal	770.02
76	Aluminum Standard Signal Visor, dark green 12"	770.02
76a	Poly Standard Signal Visor, dark green 12"	770.02
<u>5. Pedestrian Signal</u>		
77	Pedestrian Countdown Signal Filled Hand/man w/Poly Housing, LED and Countdown Timer, All Stainless Steel parts	770.04
78	Pedestrian Signal Filled Hand/Man w/Countdown LED (w/o Housing)	770.04
79	Pedestrian Pushbutton Housing Only, Stainless Steel (Black)	770.04
80	ADA Pushbutton Raised Sign (Dual Arrow)	770.04
81	ADA Pushbutton Raised Sign (Left Arrow)	770.04
82	ADA Pushbutton Raised Sign (Right Arrow)	770.04
83	Pedestrian Push Button Extension assembly. 12"	770.04
84	Pedestrian Push Button Extension assembly. 18"	770.04
85	Pedestrian Push Button Extension assembly. 24"	770.04
86	Accessible Pedestrian System (APS), Touchless (Guardian Wave)	770.04
87	Pedestrian Pushbutton Electronic Piezo w/LED and Beep (black)	770.04

<u>6. Solar Powered Roadside Flashing Assemblies</u>		
88	RRFB Pedestrian Crosswalk System - Tapco 2180-RRFB18 or Equivalent MUTCD 50 MPH	770.21
89	Radar Speed Feedback Sign - Traffic Logic Safespace Evolution 12 or Equivalent MUTCD 50 MPH	770.21
90	Flashing Beacon - Tapco LED Blinker 24/7 or Equivalent MUTCD 50 MPH: <ul style="list-style-type: none"> - Combined flashing perimeter LEDs and reflective sheeting solar powered with battery package - Able to measure the available light and adjusts the LED flash brightness accordingly - Can be programmed to flash 24/7 - high-intensity LEDs visible at a distance of a mile away - Tapco SKU 2180-BBSAB or equal 	770.21
<u>7. Brackets, Fittings and Hardware</u>		
91	Slip Fitter Collar 4-way, brass or bronze, SE-3176 or equal	623.02
92	Nipple 1-1/2" x 6", brass or bronze, SE 0469-6 or equal	623.02
93	Nipple 1-1/2" x 7", brass or bronze, SE 0469-7 or equal	623.02
94	Nipple 1-1/2" x 8", brass or bronze, SE 0469-8 or equal	623.02
95	Nipple 1-1/2" x 11", brass or bronze, SE 0469-11 or equal	623.02
96	Nipple 1-1/2" x 12", brass or bronze, SE 0469-12 or equal	623.02
97	Cast Nipple, brass or bronze, SE 0435 or equal	623.02
98	Serrated Elbow, brass or bronze, SE 4091 or equal	623.02
99	1-Way Cable Mount, 3-Section, Astro-Brac Galaxy AG-0125 or equal	623.02
100	1-Way Cable Mount, 4-Section, Astro-Brac Galaxy AG-0125 or equal	623.02
101	1-Way Cable Mount for OPS Signals, Astro-Brac Galaxy, 1-1/2" NPS AG-0151 or equal	623.02
102	Tubes, stainless steel, Astro Brac AB-2003-46-PNC or equal	623.02
103	Tubes, stainless steel, Astro Brac AB-2003-58-PNC or equal	623.02
104	Clamp Kit, Astro Brac AS-3009-96-SS-PNC or equal	623.02
105	1-Way Cable Mount, Astro-Brac Stellar Assy AS-0125-4-62-SS-PNC or equal	623.02
106	V-Bolt Kit, Astro Brac AB 0256-55 or equal	623.02
107	Band Mount, aluminum, 3/4" -14 NPT, Astro Mini-Brac AB-0155 or equal	623.02
108	Neoprene Gasket, SE 0345 or equal	623.02
109	Lockring, Serrated, Brass, SE-0360 or equal	623.02
110	Lockring, Serrated, Aluminum, SE-4360-PNC or equal	623.02
111	Support Tube, 1-1/2" x 48", brass or bronze, SE-0491-48 or equal	623.02
112	Support Tube, 1-1/2" x 60", brass or bronze, SE-0491-60 or equal	623.02

113	Brass Pipe Fitting, Center Support 4-Way, 1-1/2" NPS, SE-0496 or equal	623.02
114	Brass Pipe Fitting, Center Support 4-Way, 1-1/2" NPS Thread, SE-0305-SOE-P or equal	623.02
115	Brass Hub Plate, Large Pole, SE-0357 or equal	623.02
116	Brass Hub Plate, SE-4124 or equal	623.02
117	Hub Plate w/o Cable Guide, brass or bronze, 1-1/2", SE-4426 or equal	623.02
118	Roger Wrench with 10" Handle, SM-0173-10 or equal	623.02
119	Vertical Slip Tee, brass or bronze, SE-4022 or equal	623.02
120	Slip Fitter, brass or bronze, SE 3175 or equal	623.02
121	Serrated Elbow, brass or bronze, SE-4091 or equal	623.02
122	Horizontal Slip Tee, brass or bronze, SE-0474 or equal	623.02
123	Tube Cap, AB-0260 or equal	623.02
124	Tee, brass or bronze, SE-0471 or equal	623.02
125	Brass Pipe, 20' length, 1-1/2"	623.02
125a	Type 3/3R Junction Box, Eaton B-Line 18128 RTSC NK SS4 or equal	770.22
125b	Junction Box, Eaton B-Line U214 MTB SS Meter Main or equal	770.22
<u>8. Cables</u>		
126	Stranded #14, Four(4) Conductor Cable, IMSA 20-1 (1,000 Foot Spool)	770.06
127	Stranded #14, Two (2) Conductor Cable, Type 2 (1,000 Foot Spool)	770.06
128	Stranded #14, Twenty-six (26) Conductor Cable, Type 2 IMSA 20-1 (1,000 Foot Spool)	770.06
129	Stranded #12, one(1) Conductor Cable For Detector Loops, IMSA 51-5 (1,000 Foot Spool)	770.06
130	8 awg Wire Stranded Colors, Green, White, Black and Red, THHN, 1000' Spool	770.06
131	Cat 6 Data Cable, UTP Outdoor Rated 500' Boxed or Spool	770.06
132	6 awg Bare Copper, 500' Spool	770.06
133	8 awg Bare Copper, 500' Spool	770.06
134	Detector Cable, Opticom 138 IR (1,000 Foot Spool) or equal	770.06
<u>9. Traffic Signal Poles</u>		
135	Type I, 8 foot Standard Traffic Pole	770.01
136	Type I, 10 Feet, Standard Traffic Pole	770.01
137	Type I, 12 foot Standard Traffic Pole	770.01
138	Type I, 14 foot Standard Traffic Pole	770.01
139	Type I, 18 Feet, Standard Traffic Pole	770.01
<u>10. Tools</u>		

140	Load Switch Analyzer	770.20
141	Work Station Soldering Set, PACE MBT250A or equal	770.20
142	Field Soldering Irons	770.20
143	Cabinet Display Panel with Overlaps	770.20
144	Ethernet Cable Tester	770.20
145	Modular Plug Crimping Tool	770.20
146	Ethernet Modular Plugs (Male/Female)	770.20
147	Conflict Monitor Tester: <ul style="list-style-type: none"> - Provides a testing procedure for traffic signal conflict monitor - formal verification of proper working condition of traffic signal - Allows testing MMUs in 12 and 16 channel modes within one test run - Integrated Port1/SDLC testing and flashing yellow arrow testing capabilities - ASTI PCMT-80000 Conflict Monitor Tester or equal 	770.20
148	Heavy Duty Banding Tool, BAND-IT C00369 or equal	770.20
148a	Heavy Duty Band-It Tool, cordless/battery , UL4000-D or equal	770.20
148b	Band-It 304 STAINLESS STEEL band, Pelco US-8122-06 or equal, 100 foot	770.20
148c	Band-It 201 SS Buckle, US-8122-56 or equal, QTY 100/box	770.20
149	Rugged Laptop: <ul style="list-style-type: none"> - Processor: Intel Core i5 (8350U) Quad Core, 6M Cache, 1.7 GHz or equal - Operating System: Windows 11 Pro English - Screen: Anti-Glare, Outdoor-Readable - Keyboard: Sealed, rubberized - RAM: 16 GB - Storage: 512GB SATA Solid State Drive (SSD) - Network: Bluetooth 4.2, Gigabit Ethernet, Wireless Broadband - USB Ports – 3 USB 3.0, 1 USB 2.0 - HDMI – One (1) - VGA Port – One (1) Dell Latitude 7424 Extreme or equal	770.20
150	Loop Finder, Model LF-22 or equal	770.20
151	GTT OPTICOM compatible Emitter, Tomar T792HLB-20V or equal	770.20
152	170/2070 Controller Tester, compatible with McCain Flex or equal	770.20
153	Cabinet Test Display, McCain or equal	770.20

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

1. SIGNAL INTERSECTION CONTROL AND CABINET SYSTEMS (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
1	332 Standard Cabinet, 8-Phase, 4-Ped operation	1	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	1	\$ _____	\$ _____
2	332L Enhanced/Stretch Cabinet, 8-Phase, 4-Ped Operation, pre-wired for BBS and extra AC outlets	4	\$ _____	\$ _____	4	\$ _____	\$ _____	4	\$ _____	\$ _____
2a	Pole Mount NEMA 3R Cabinet Enclosure w/Police Panel	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00
3	Video Detector System, 8-Phase, 4-Ped operation, Autoscope or equal	5	\$ _____	\$ _____	4	\$ _____	\$ _____	5	\$ _____	\$ _____
4	Radar Detector System, 8-Phase, 4-Ped operation, Wavetronix or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
5	Infrared Detector System, 8-phase, 4-Ped operation, TraffiSense2 or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
6	Hybrid Video Radar System, 8-phase, 4-Ped operation, Iteris or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

1. SIGNAL INTERSECTION CONTROL AND CABINET SYSTEMS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
7	Traffic Signal Performance Measures (SPM) Report System, Transparency or equal	1	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	1	\$ _____	\$ _____
8	Conflict Monitor, 16 channel with Ethernet Port, 2010ECLip or equal	90	\$ _____	\$ _____	20	\$ _____	\$ _____	90	\$ _____	\$ _____
9	Traffic Signal Controller, McCain Flex or equal	8	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	8	\$ _____	\$ _____
10	Traffic Signal Controller, Econolite Cobalt Controller or equal	1	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
11	Signal Preemption Module, Model 762 Opticom or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____
12	Signal Preemption Detector, Model 711 Opticom or equal	50	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	50	\$ _____	\$ _____
13	Isolator Card, Model 242 DC Isolator EDI or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

1. SIGNAL INTERSECTION CONTROL AND CABINET SYSTEMS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
14	Two-Channel Loop Detector Electronics Unit, Model 222 Vehicle Detector or equal	8	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	8	\$ _____	\$ _____
15	Detector Loop Amplifier, Model 262C or equal	6	\$ _____	\$ _____	10	\$ _____	\$ _____	6	\$ _____	\$ _____
16	Load Switch, Model 200 or equal	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
17	Flasher, Model 204 or equal	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
18	Power Supply Unit, Model 206 or equal	6	\$ _____	\$ _____	10	\$ _____	\$ _____	6	\$ _____	\$ _____
19	Flash Transfer Relays, (FTR) Series 21- with rectifier diode	12	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	12	\$ _____	\$ _____
20	332 Cabinet Locks Replacement w/door alarm system	180	\$ _____	\$ _____	40	\$ _____	\$ _____	180	\$ _____	\$ _____
21	332 Cabinet Lock Programming Station, Key Charger and Accessories	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
22	332 Cabinet Door Stopper Rod Latch	50	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	50	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

1. SIGNAL INTERSECTION CONTROL AND CABINET SYSTEMS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
23	332 Cabinet Light Assembly	50	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	50	\$ _____	\$ _____
24	332 Cabinet Light Front Switch	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
25	332 Cabinet Light Rear Switch	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
26	332 Cabinet Fan Assembly	50	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	50	\$ _____	\$ _____
27	332 Cabinet Thermostat	50	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	50	\$ _____	\$ _____
28	332 Cabinet Door Air Filter	200	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	200	\$ _____	\$ _____
29	332 Cabinet Louvre Stainless Steel Filter Screen (estimated quantity in sq ft)	125	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	125	\$ _____	\$ _____
30	332 Cabinet Front Door Anodized	6	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	6	\$ _____	\$ _____
31	332 Cabinet Rear Door w/ Hooks Anodized	6	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	6	\$ _____	\$ _____
32	Rugged Cellular Router w/ VPN, Digi TX64 5G or equal	90	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

1. SIGNAL INTERSECTION CONTROL AND CABINET SYSTEMS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
33	Antenna - Cellular, 5G, compatible with DigiTX64 5G router or equal	90	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	20	\$ _____	\$ _____
33a	Cellular External Mount Antenna, First Net Capable	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00
34	Rugged and High Capacity (256 GB or more) USB thumb drive, Samsung MUF256BE3/AM or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____
35	Wireless Modem, [Non-QPL], First Net capable	0	\$ 00.00	\$ 00.00	20	\$ _____	\$ _____	1	\$ _____	\$ _____
36	Video Transcoder, Hydra 265 or equal	40	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	40	\$ _____	\$ _____
37	Rack Mount Ethernet Switch, Moxa IKS 6726A or equal	90	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
SUBTOTAL 1 (SUM OF BID ITEMS NOS. 1 THRU 37 FOR EACH RESPECTIVE DISTRICT)				\$ _____			\$ _____			\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

2. POWER BACKUP (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
38	Nickel Zinc Battery Panel, 500W, ZincFive or equal	90	\$_____	\$_____	50	\$_____	\$_____	50	\$_____	\$_____
39	U.P.S. Inverter, 1000W, ZincFive or equal	1	\$_____	\$_____	2	\$_____	\$_____	1	\$_____	\$_____
40	U.P.S. Inverter, 1500W, ZincFive or equal	1	\$_____	\$_____	0	\$ 00.00	\$ 00.00	1	\$_____	\$_____
41	Power Interface Module (PIM), ZincFive or eqia;	1	\$_____	\$_____	2	\$_____	\$_____	1	\$_____	\$_____
42	Power Block 8 awg 3 pole 50 amp	50	\$_____	\$_____	10	\$_____	\$_____	50	\$_____	\$_____
43	Spacer Block, ZincFive or equal	50	\$_____	\$_____	10	\$_____	\$_____	50	\$_____	\$_____
44	Speedy Sleeve, ZincFive or equal	2	\$_____	\$_____	1	\$_____	\$_____	2	\$_____	\$_____
SUBTOTAL 2 (SUM OF BID ITEMS NOS. 38 THRU 44 FOR EACH RESPECTIVE DISTRICT)				\$_____			\$_____			\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

3. DETECTOR, SENSOR AND CAMERA SYSTEMS (See Section 11.1 (B) for More Bid Item Information)

(Each sensor and cabinet interface must include all mounting, power and communication accessories and software)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
45	Video Detection Camera, Autoscope or equal	5	\$ _____	\$ _____	5	\$ _____	\$ _____	5	\$ _____	\$ _____
46	Video Cabinet Interface, Autoscope Comm Manager or equal	5	\$ _____	\$ _____	5	\$ _____	\$ _____	5	\$ _____	\$ _____
47	Radar Advance/Extended Range Sensor, Wavetronix or equal	5	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____
48	Radar Stop Bar Sensor, Wavetronix Matrix or equal	5	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____
49	Radar Cabinet Interface, Wavetronix 656 or equal	5	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____
50	Infrared Detection Camera, TrafiSens2 or equal	1	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	1	\$ _____	\$ _____
51	Infrared Cabinet Interface, TI-BPL2 EDGE or equal	1	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	1	\$ _____	\$ _____
52	Microwave Vehicle Motion Detector, MS Sedco TC-CK1-SBE INTERSECTOR or equal	4	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	4	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

3. DETECTOR, SENSOR AND CAMERA SYSTEMS (cont'd) (See Section 11.1 (B) for More Bid Item Information)
(Each sensor and cabinet interface must include all mounting, power and communication accessories and software)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
53	Microwave Pedestrian Motion Detector, Marlin Controls SmartWalk 1400 or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
54	Microwave Detection Transformer Cabinet Interface, MS-SEDCO INTERSECTOR HUB or equal	6	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00
55	Closed-Circuit Television (CCTV) Camera w/ analytics, CohuHD or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00
SUBTOTAL 3 (SUM OF BID ITEMS NOS. 45 THRU 55 FOR EACH RESPECTIVE DISTRICT)				\$ _____			\$ _____			\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

4. TRAFFIC SIGNAL HEADS (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
56	3-Section Polycarbonate Head/housing, R,Y,G LED, SS Parts	80	\$ _____	\$ _____	20	\$ _____	\$ _____	80	\$ _____	\$ _____
57	4-Section Polycarbonate Head/housing, RA,YA,YA, GA, Arrows LED, SS Parts	30	\$ _____	\$ _____	20	\$ _____	\$ _____	30	\$ _____	\$ _____
58	3-Section Light Bank, R,Y,GA LED	30	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	30	\$ _____	\$ _____
59	3-Section Program Visibility Light Bank R,Y,G LED - 3M/McCain or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
60	3-Section Program Visibility Light Bank RA,YA,GA LED - 3M/McCain or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____
61	12" Solid State LED Red Ball	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
62	12" Solid State LED Yellow Ball	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
63	12" Solid State LED Green Ball	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

4. TRAFFIC SIGNAL HEADS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
64	12" Solid State LED Red Arrow	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
65	12" LED Solid State Yellow Arrow	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
66	12" LED Solid State Green Arrow	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
67	12" LED Solid State Yellow/Green Arrow	20	\$ _____	\$ _____	20	\$ _____	\$ _____	20	\$ _____	\$ _____
68	Replacement Programmable Visible LED Blub Red	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
69	Replacement Programmable Visible LED Blub Yellow	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
70	Replacement Programmable Visible LED Blub Green	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
71	3-Section Back Plate, McCain or equal, w/ single slit	100	\$ _____	\$ _____	10	\$ _____	\$ _____	100	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

4. TRAFFIC SIGNAL HEADS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
72	4-Section Back Plate, McCain or equal, w/ single slit	20	\$_____	\$_____	10	\$_____	\$_____	20	\$_____	\$_____
73	3-Section Signal Head Back Plate, LightHawk ALPOLIC 350 or equal w/ single slit	200	\$_____	\$_____	0	\$ 00.00	\$ 00.00	20	\$_____	\$_____
73a	4-Section Signal Head Back Plate, LightHawk ALPOLIC 350 or equal w/ single slit	100	\$_____	\$_____	0	\$ 00.00	\$ 00.00	20	\$_____	\$_____
74	3-Signal Head Back Plate, 3M Programmable Visibility or equal, w/ single slit	10	\$_____	\$_____	0	\$ 00.00	\$ 00.00	20	\$_____	\$_____
75	4-Signal Head Back Plate, McCain Programmable Visibility or equal, w/ single slit	20	\$_____	\$_____	0	\$ 00.00	\$ 00.00	20	\$_____	\$_____

PROPOSAL SCHEDULE
 FOR
 FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
 SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
 FOR TRAFFIC SIGNAL SYSTEM
 PROJECT NO. HWY-C-06-21
 ISLANDS OF MAUI, KAUAI AND HAWAII

4. TRAFFIC SIGNAL HEADS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
76	Aluminum Standard Signal Visor dark green 12"	150	\$_____	\$_____	0	\$ 00.00	\$ 00.00	150	\$_____	\$_____
76a	Poly Standard Signal Visor dark green 12"	100	\$_____	\$_____	20	\$_____	\$_____	10	\$_____	\$_____
SUBTOTAL 4 (SUM OF BID ITEMS NOS. 56 THRU 76a FOR EACH RESPECTIVE DISTRICT)				\$_____			\$_____			\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

5. PEDESTRIAN SIGNAL (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
77	Pedestrian Countdown Signal Filled Hand/man w/Poly Housing, LED and Countdown Timer, All SS parts	70	\$_____	\$_____	10	\$_____	\$_____	70	\$_____	\$_____
78	Pedestrian Signal Filled Hand/Man w/Countdown LED (w/o Housing)	10	\$_____	\$_____	10	\$_____	\$_____	10	\$_____	\$_____
79	Pedestrian Pushbutton Housing Only, Stainless Steel (Black)	50	\$_____	\$_____	10	\$_____	\$_____	50	\$_____	\$_____
80	ADA Pushbutton Raised Sign (Dual Arrow)	10	\$_____	\$_____	0	\$ 00.00	\$ 00.00	10	\$_____	\$_____
81	ADA Pushbutton Raised Sign (Left Arrow)	25	\$_____	\$_____	10	\$_____	\$_____	25	\$_____	\$_____
82	ADA Pushbutton Raised Sign (Right Arrow)	25	\$_____	\$_____	10	\$_____	\$_____	25	\$_____	\$_____
83	Pedestrian Push Button Extension assembly. 12"	2	\$_____	\$_____	0	\$_____	\$_____	1	\$_____	\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

5. PEDESTRIAN SIGNAL (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
84	Pedestrian Push Button Extension assembly. 18"	2	\$_____	\$_____	0	\$ 00.00	\$ 00.00	2	\$_____	\$_____
85	Pedestrian Push Button Extension assembly. 24"	2	\$_____	\$_____	0	\$ 00.00	\$ 00.00	2	\$_____	\$_____
86	Accessible Pedestrian System (APS), Touchless (Guardian Wave)	10	\$_____	\$_____	10	\$_____	\$_____	10	\$_____	\$_____
87	Pedestrian Pushbutton Electronic Piezo w/LED and Beep (black)	70	\$_____	\$_____	10	\$_____	\$_____	70	\$_____	\$_____
SUBTOTAL 5 (SUM OF BID ITEMS NOS. 77 THRU 87 FOR EACH RESPECTIVE DISTRICT)				\$_____			\$_____			\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

6. SOLAR POWERED ROADSIDE FLASHING ASSEMBLIES (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
88	RRFB Pedestrian Crosswalk System - Tapco 2180-RRFB18 or Equivalent MUTCD 50 MPH	20	\$ _____	\$ _____	20	\$ _____	\$ _____	10	\$ _____	\$ _____
89	Radar Speed Feedback Sign, Traffic Logic Safespace Evolution 12 or Equivalent MUTCD 50 MPH	20	\$ _____	\$ _____	20	\$ _____	\$ _____	10	\$ _____	\$ _____
90	Flashing Beacon - Tapco LED Blinker 24/7 or Equivalent MUTCD	20	\$ _____	\$ _____	20	\$ _____	\$ _____	10	\$ _____	\$ _____
SUBTOTAL 6 (SUM OF BID ITEMS NOS. 88 THRU 90 FOR EACH RESPECTIVE DISTRICT)				\$ _____			\$ _____			\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21

ISLANDS OF MAUI, KAUAI AND HAWAII

7. BRACKETS, FITTINGS AND HARDWARE (See Section 11.1 (B) for More Bid Item Information)

**FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT**

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
91	Slip Fitter Collar 4-way, brass or bronze, SE-3176 or equal	25	\$ _____	\$ _____	10	\$ _____	\$ _____	25	\$ _____	\$ _____
92	Nipple 1-1/2" x 6", brass or bronze, SE 0469-6 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
93	Nipple 1-1/2" x 7", brass or bronze, SE 0469-7 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
94	Nipple 1-1/2" x 8", brass or bronze, SE 0469-8 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
95	Nipple 1-1/2" x 11", brass or bronze, SE 0469-11 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
96	Nipple 1-1/2" x 12", brass or bronze, SE 0469-12 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
97	Cast Nipple, brass or bronze, SE 0435 or equal	75	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	75	\$ _____	\$ _____
98	Serrated Elbow, brass or bronze, SE 4091 or equal	125	\$ _____	\$ _____	10	\$ _____	\$ _____	5	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

7. **BRACKETS, FITTINGS AND HARDWARE (cont'd)** (See Section 11.1 (B) for More Bid Item Information)

**FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT**

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
99	1-Way Cable Mount, 3- Section, Astro-Brac Galaxy AG-0125 or equal	20	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	20	\$ _____	\$ _____
100	1-Way Cable Mount, 4- Section, Astro-Brac Galaxy AG-0125 or equal	5	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____
101	1-Way Cable Mount for OPS Signals, Astro-Brac Galaxy, 1-1/2" NPS AG- 0151 or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____
102	Tubes, stainless steel, Astro Brac AB-2003-46- PNC or equal	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00
103	Tubes, stainless steel, Astro Brac AB-2003-58- PNC or equal	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00
104	Clamp Kit, Astro Brac AS-3009-96-SS-PNC or equal	6	\$ _____	\$ _____	10	\$ _____	\$ _____	6	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

7. BRACKETS, FITTINGS AND HARDWARE (cont'd) (See Section 11.1 (B) for More Bid Item Information)
**FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT**

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
105	1-Way Cable Mount, Astro-Brac Stellar Assy AS-0125-4-62-SS-PNC or equal	6	\$ _____	\$ _____	10	\$ _____	\$ _____	6	\$ _____	\$ _____
106	V-Bolt Kit, Astro Brac AB 0256-55 or equal	25	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	25	\$ _____	\$ _____
107	Band Mount, aluminum, 3/4" -14 NPT, Astro Mini-Brac AB-0155 or equal	8	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	8	\$ _____	\$ _____
108	Neoprene Gasket, SE 0345 or equal	100	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	100	\$ _____	\$ _____
109	Lockring, Serrated, Brass, SE-0360 or equal	25	\$ _____	\$ _____	20	\$ _____	\$ _____	25	\$ _____	\$ _____
110	Lockring, Serrated, Aluminum, SE-4360- PNC or equal	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00	5	\$ _____	\$ _____
111	Support Tube, 1-1/2" x 48", brass or bronze, SE- 0491-48 or equal	30	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	30	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

7. BRACKETS, FITTINGS AND HARDWARE (cont'd) (See Section 11.1 (B) for More Bid Item Information)
**FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT**

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
112	Support Tube, 1-1/2" x 60", brass or bronze, SE-0491-60 or equal	30	\$ _____	\$ _____	10	\$ _____	\$ _____	30	\$ _____	\$ _____
113	Brass Pipe Fitting, Center Support 4-Way, 1-1/2" NPS, SE-0496 or equal	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00
114	Brass Pipe Fitting, Center Support 4-Way, 1-1/2" NPS Thread, SE-0305-SOE-P or equal	25	\$ _____	\$ _____	10	\$ _____	\$ _____	25	\$ _____	\$ _____
115	Brass Hub Plate, Large Pole, SE-0357 or equal	10	\$ _____	\$ _____	10	\$ _____	\$ _____	10	\$ _____	\$ _____
116	Brass Hub Plate, SE-4124 or equal	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____	1	\$ _____	\$ _____
117	Hub Plate w/o Cable Guide, brass or bronze, 1-1/2", SE-4426 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
118	Roger Wrench with 10" Handle, SM-0173-10 or equal	2	\$ _____	\$ _____	10	\$ _____	\$ _____	2	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

7. BRACKETS, FITTINGS AND HARDWARE (cont'd) (See Section 11.1 (B) for More Bid Item Information)
**FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT**

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
119	Vertical Slip Tee, brass or bronze, SE-4022 or equal	50	\$ _____	\$ _____	10	\$ _____	\$ _____	50	\$ _____	\$ _____
120	Slip Fitter, brass or bronze, SE-3175 or equal	0	\$ 00.00	\$ 00.00	10	\$ _____	\$ _____	5	\$ _____	\$ _____
121	Serrated Elbow, brass or bronze, SE-4091 or equal	25	\$ _____	\$ _____	10	\$ _____	\$ _____	25	\$ _____	\$ _____
122	Horizontal Slip Tee, brass or bronze, SE-0474 or equal	25	\$ _____	\$ _____	10	\$ _____	\$ _____	25	\$ _____	\$ _____
123	Tube Cap, AB-0260 or equal	10	\$ _____	\$ _____	10	\$ _____	\$ _____	1	\$ _____	\$ _____
124	Tee, brass or bronze, SE-0471 or equal	25	\$ _____	\$ _____	10	\$ _____	\$ _____	25	\$ _____	\$ _____
125	Brass Pipe, 20' length, 1-1/2"	2	\$ _____	\$ _____	60	\$ _____	\$ _____	2	\$ _____	\$ _____
125a	Type 3/3R Junction Box, Eaton B-Line 18128 RTSC NK SS4 or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00

PROPOSAL SCHEDULE
 FOR
 FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
 SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
 FOR TRAFFIC SIGNAL SYSTEM
 PROJECT NO. HWY-C-06-21
 ISLANDS OF MAUI, KAUAI AND HAWAII

7. **BRACKETS, FITTINGS AND HARDWARE (cont'd) (See Section 11.1 (B) for More Bid Item Information)**
FOR MAUI AND HAWAII DISTRICTS – ALL THREADS AND FITTINGS SHALL BE NPS WITH STAINLESS STEEL LOCK BOLTS
FOR KAUAI DISTRICT – ALL THREADS AND FITTINGS SHALL BE NPT

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
125b	Junction Box, Eaton B-Line U214 MTB SS Meter Main or equal	10	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	0	\$ 00.00	\$ 00.00
SUBTOTAL 7 (SUM OF BID ITEMS NOS. 91 THRU 125b FOR EACH RESPECTIVE DISTRICT)				\$ _____			\$ _____			\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

8. TRAFFIC SIGNAL CABLE (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
126	Stranded #14, Four(4) Conductor Cable, IMSA 20-1 (1,000 Foot Spool)	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
127	Stranded #14, Two (2) Conductor Cable, Type 2 (1,000 Foot Spool)	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
128	Stranded #14, Twenty-six (26) Conductor Cable, Type 2 IMSA 20-1 (1,000 Foot Spool)	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
129	Stranded #12, one(1) Conductor Cable For Detector Loops, IMSA 51-5 (1,000 Foot Spool)	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
130	8 awg Wire Stranded Colors, Green, White, Black and Red, THHN, 1000' Spool	4	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
131	Cat 6 Data Cable, UTP Outdoor Rated 500' Boxed or Spool	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
132	6 awg Bare Copper, 500' Spool	2	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

8. TRAFFIC SIGNAL CABLE (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
133	8 awg Bare Copper, 500' Spool	2	\$_____	\$_____	4	\$_____	\$_____	1	\$_____	\$_____
134	Detector Cable, Opticom 138 IR or equal(1,000 Foot Spool)	2	\$_____	\$_____	4	\$_____	\$_____	1	\$_____	\$_____
SUBTOTAL 8 (SUM OF BID ITEMS NOS. 126 THRU 134 FOR EACH RESPECTIVE DISTRICT)				\$_____			\$_____			\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

9. TRAFFIC SIGNAL POLES (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
135	Type I, 8 foot Standard Traffic Pole	10	\$ _____	\$ _____	5	\$ _____	\$ _____	10	\$ _____	\$ _____
136	Type I, 10 Feet, Standard Traffic Pole	30	\$ _____	\$ _____	5	\$ _____	\$ _____	10	\$ _____	\$ _____
137	Type I, 12 foot Standard Traffic Pole	2	\$ _____	\$ _____	5	\$ _____	\$ _____	2	\$ _____	\$ _____
138	Type I, 14 foot Standard Traffic Pole	2	\$ _____	\$ _____	5	\$ _____	\$ _____	2	\$ _____	\$ _____
139	Type I, 18 Feet, Standard Traffic Pole	10	\$ _____	\$ _____	5	\$ _____	\$ _____	2	\$ _____	\$ _____
SUBTOTAL 9 (SUM OF BID ITEMS NOS. 135 THRU 139 FOR EACH RESPECTIVE DISTRICT)				\$ _____			\$ _____			\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

10. TOOLS (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
140	Load Switch Analyzer	1	\$ _____	\$ _____	1	\$ _____	\$ _____	1	\$ _____	\$ _____
141	Work Station Soldering Set, PACE MBT250A or equal	1	\$ _____	\$ _____	1	\$ _____	\$ _____	1	\$ _____	\$ _____
142	Field Soldering Irons	1	\$ _____	\$ _____	4	\$ _____	\$ _____	1	\$ _____	\$ _____
143	Cabinet Display Panel with Overlaps	1	\$ _____	\$ _____	2	\$ _____	\$ _____	1	\$ _____	\$ _____
144	Ethernet Cable Tester	2	\$ _____	\$ _____	2	\$ _____	\$ _____	2	\$ _____	\$ _____
145	Modular Plug Crimping Tool	2	\$ _____	\$ _____	2	\$ _____	\$ _____	2	\$ _____	\$ _____
146	Ethernet Modular Plugs (Male/Female)	200	\$ _____	\$ _____	100	\$ _____	\$ _____	100	\$ _____	\$ _____
147	Conflict Monitor Tester	2	\$ _____	\$ _____	1	\$ _____	\$ _____	2	\$ _____	\$ _____
148	Heavy Duty Band-It Tool, BAND-IT C00369 or equal	2	\$ _____	\$ _____	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

10. TOOLS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
148a	Heavy Duty Band-It Tool, cordless/battery , UL4000-D or equal	0	\$ 00.00	\$ 00.00	2	\$ _____	\$ _____	1	\$ _____	\$ _____
148b	Band-It 304 STAINLESS STEEL band Pelco US-8122-06 or equal, 100 foot	20	\$ _____	\$ _____	10	\$ _____	\$ _____	1	\$ _____	\$ _____
148c	Band-It 201 SS Buckle US-8122-56 or equal, QTY 100/box	10	\$ _____	\$ _____	5	\$ _____	\$ _____	1	\$ _____	\$ _____
149	Rugged Laptop, Dell Latitude 7424 Extreme or equal	3	\$ _____	\$ _____	2	\$ _____	\$ _____	1	\$ _____	\$ _____
150	Loop Finder Model LF-22 or equal	3	\$ _____	\$ _____	1	\$ _____	\$ _____	1	\$ _____	\$ _____
151	GTT OPTICOM compatible Emitter, Tomar T792HLB-20V or equal	3	\$ _____	\$ _____	3	\$ _____	\$ _____	1	\$ _____	\$ _____
152	170/2070 Controller Tester, compatible with McCain Flex or equal	3	\$ _____	\$ _____	1	\$ _____	\$ _____	1	\$ _____	\$ _____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

10. TOOLS (cont'd) (See Section 11.1 (B) for More Bid Item Information)

BID ITEM NO.	ITEM	MAUI DISTRICT			KAUAI DISTRICT			HAWAII DISTRICT		
		EST. YRLY QTY (A)	UNIT PRICE (B)	AMOUNT (A X B)	EST. YRLY QTY (C)	UNIT PRICE (D)	AMOUNT (C X D)	EST. YRLY QTY (E)	UNIT PRICE (F)	AMOUNT (E X F)
153	Cabinet Test Display, McCain or equal	3	\$_____	\$_____	1	\$_____	\$_____	1	\$_____	\$_____
SUBTOTAL 10 (SUM OF BID ITEMS NOS. 140 THRU 153 FOR EACH RESPECTIVE DISTRICT)				\$_____			\$_____			\$_____

PROPOSAL SCHEDULE
 FOR
 FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
 SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
 FOR TRAFFIC SIGNAL SYSTEM
 PROJECT NO. HWY-C-06-21
 ISLANDS OF MAUI, KAUAI AND HAWAII

BID SUMMARY

	MAUI DISTRICT	KAUAI DISTRICT	HAWAII DISTRICT
SUBTOTAL 1	\$_____	\$_____	\$_____
SUBTOTAL 2	\$_____	\$_____	\$_____
SUBTOTAL 3	\$_____	\$_____	\$_____
SUBTOTAL 4	\$_____	\$_____	\$_____
SUBTOTAL 5	\$_____	\$_____	\$_____
SUBTOTAL 6	\$_____	\$_____	\$_____
SUBTOTAL 7	\$_____	\$_____	\$_____
SUBTOTAL 8	\$_____	\$_____	\$_____
SUBTOTAL 9	\$_____	\$_____	\$_____
SUBTOTAL 10	\$_____	\$_____	\$_____
TOTAL of each District (Sum of Subtotals 1 thru 10)	\$_____	\$_____	\$_____
TOTAL AMOUNT FOR COMPARISON OF BIDS (Sum of Total of Maui + Kauai + Hawaii Districts)			\$_____

PROPOSAL SCHEDULE
FOR
FURNISHING AND DELIVERING HARDWARE, CABLES, CONTROLLER EQUIPMENT,
SIGNAL HEADS, PEDESTRIAN SIGNAL AND SIGNAL STANDARDS
FOR TRAFFIC SIGNAL SYSTEM
PROJECT NO. HWY-C-06-21
ISLANDS OF MAUI, KAUAI AND HAWAII

NOTES:

“Out-of-State Bidder’s attention is directed to the business registration requirement in Section 2.8 Out-of-State Bidders, of the Special Provisions and determination of the lowest price bid in Section 2.8 Out-of-State Bidders, of the Specifications. An out-of-state bidder is required to answer the following statement:

State of Hawaii General Excise and Use Taxes are included in all bid prices.

Write “Yes” or “No”

If the above statement is left unanswered, it will be considered a “No” answer by the State.”

1. Bids shall include all Federal, State, County and all other applicable taxes
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS will be used to determine the lowest responsible bidder.
3. Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.
4. In case of a discrepancy between unit price and the total in said bid, the unit price shall prevail.
5. Bidder shall make no changes to the items in the Proposal Schedule. Do not add or remove anything on the Proposal Schedule. Only provide bid prices and totals where space is provided. Pursuant to the Hawaii Administrative Rule 3-122-97(b)(2)(B), bids submitted with changes to the item(s) are considered rejectable bids.
6. The Contract shall be an indefinite quantity/”as needed” contract. Refer to Section 4.6 of the Special Provisions.
7. The number of annual estimated quantities in this Proposal Schedule is for bidding purposes only. Payments to the Contractor will be made based on actual number of deliveries and the unit bid price.
8. Prior to commencing with the work, the successful Bidder is required to submit a Certificate of Insurance. Refer to Section 7.8, Insurance, of the Specifications for more information.
9. By submitting a proposal, the Bidder acknowledges he has read and understands all the provisions of the Special Provisions and the Specifications and is fully aware of all the conditions to be encountered in performing the work.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

FURNISHING AND DELIVERING HARDWARE, CABLES,
CONTROLLER EQUIPMENT, SIGNAL HEADS, PEDESTRIAN SIGNAL
AND SIGNAL STANDARDS FOR TRAFFIC SIGNAL SYSTEM
ISLANDS OF MAUI, KAUAI, AND HAWAII
PROJECT NO. HWY-C-06-21

ANSWERS TO QUESTIONS SUBMITTED VIA HIEPRO

1. Is it possible to extend closing date to December 17th?

Response: An addendum will be issued to address the questions and will extend the closing date to allow adequate review time.

2. I have a question with respect to bid items 4, 47, 48, and 49. Regarding number 4, What are the required components for the 'System'?

Response: The required components of the system include all elements needed to fully operate traffic signal detection at a 4-legged intersection. This includes: stop bar sensor, advanced sensor, cabinet interface, all mounts, brackets for sensors, cabinet shelf, tools, cables, and junction boxes.

3. Regarding 47, 48, and 49, do you require and SDLC connection in the cabinet or do you prefer the Click 112-contact closures cards.

Response: We do not require SDLC connection in the cabinet. Either SDLC connection or Click 112 contact closures cards are acceptable.

4. We request to extend the bid due date to at least 2 weeks.

Response: An addendum will be issued to address these questions and will extend the bid due date to allow adequate review time.

5. Will contract extension allow inflationary price adjustments?

Response: Please see Section 10.9 Escalation Clause of the specifications

6. Bid item #1 – Does it include controller?

Response: No, it does not include the controller

7. Bid Item #2 – Please provide specifications for this item. Does it include controller and pre-wired Power Interface Module (PIM) for BBS? How many AC outlets?

Response: This is a standard 332-Stretch cabinet. No, it does not include the controller. No, it does not include pre-wired Power Interface Module (PIM) for BBS. Any number of additional AC outlets will satisfy.

8. Request to remove the bid item #7. If not, please provide the timeframe and number of intersections.

Response: Bid item #7 will be removed.

9. Bid items #9 & #10 – Request to remove Management Information Bases (MiB) requirement as it is proprietary and the controller manufacturers will not be able to share this information. Hence, the bidder will not bid this item as specified.

Response: Management Information Bases (MiB) will be removed from Bid Items #9 and #10

10. Please provide specifications for bid items #20 & #21.

Response: Information has been added to Section 11.1 (B) Product List for Bid Items #20 and #21

11. Bid Item #29 - Please provide specs and/or any additional information

Response: Information has been added to Section 11.1 (B) Product List for Bid Item #29

12. Bid items #73 & 73a – Please provide drawings and the signal head brand as back plate size varies for different signal head manufacturers

Response: Drawings and detail specs can be provided by the vendor. Information has been added to Section 11.1 (B) Product List for Bid Items # 73 & 73a.

13. Bid Item #90 – Please provide specifications and/or Tapco Model number

Response: Information has been added to Section 11.1 (B) Product List for Bid Item #90

14. Bid item #147 – Please provide model/part number

Response: Information has been added to Section 11.1 (B) Product List for Bid Item #147

15. Bid Item #149 – Please provide specifications

Response: Information has been added to Section 11.1 (B) Product List for Bid Item #149