STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS

ADDENDUM NO. 2 FOR TRAFFIC SIGNAL MODERNIZATION, OAHU, PHASE 2A DISTRICT OF HONOLULU ISLAND OF OAHU FEDERAL-AID PROJECT NO. STP-0300(214)

NOVEMBER 8, 2024

This Addendum shall make the following amendment(s) to the Solicitation:

A. <u>TABLE OF CONTENTS</u>

1. Delete **TABLE OF CONTENTS**, dated 12/21/22, in its entirety and replace with the attached **TABLE OF CONTENTS**, dated r11/8/2024.

B. <u>SPECIFICATIONS</u>

- 1. Delete SECTION 623 TRAFFIC SIGNAL SYSTEM, dated 7/1/18, in its entirety and replace with the attached SECTION 623 TRAFFIC SIGNAL SYSTEM, dated r11/8/2024.
- 2. Add and make a part of the specifications the attached SECTION 770 TRAFFIC SIGNAL MATERIALS, dated r11/8/2024.

C. <u>PROPOSAL SCHEDULE</u>

1. Delete **PROPOSAL SCHEDULE** Pages P-8 through P-21, dated 8/27/24, and replace them with the attached **PROPOSAL SCHEDULE** pages P-8 through P-21, dated r11/8/2024.

D. <u>PLANS</u>

1. Delete PLAN SHEET NO. 18 EROSION & SEDIMENT CONTROL PLAN (ESCP) and replace them with attached PLAN SHEET NO. ADD. 18 EROSION & SEDIMENT CONTROL PLAN (ESCP).

- Delete PLAN SHEET NO. 97 PLAN DUCT LINE 5 / PROFILE DUCT LINE 5 / ELEVATION – POLE C and replace them with attached PLAN SHEET NO. ADD. 97 PLAN – DUCT LINE 5 / PROFILE – DUCT LINE 5 / ELEVATION – POLE C.
- 3. Delete PLAN SHEET NO. 100 PLAN DUCT LINE 9 & 29 / PROFILE DUCT LINE 9 / ELEVATION – POLE F and replace them with attached PLAN SHEET NO. ADD. 100 PLAN – DUCT LINE 9 & 29 / PROFILE – DUCT LINE 9 / ELEVATION – POLE F.
- 4. Delete PLAN SHEET NO. 102 PLAN DUCT LINE 11 & 31 & 32 / PROFILE – DUCT LINE 11 / ELEVATION – POLE H / ELEVATION – POLE G and replace them with attached PLAN SHEET NO. ADD. 102 PLAN – DUCT LINE 11 & 31 & 32 / PROFILE – DUCT LINE 11 / ELEVATION – POLE H / ELEVATION – POLE G.
- Delete PLAN SHEET NO. 106 PLAN DUCT LINE 15 & 36 / PROFILE DUCT LINE 15 / ELEVATION – POLE J and replace them with attached PLAN SHEET NO. ADD. 106 PLAN – DUCT LINE 15 & 36 / PROFILE – DUCT LINE 15 / ELEVATION – POLE J.

The following is provided for information:

E. <u>PRE-BID MEETING MINUTES</u>

1. The attached **PRE-BID MEETING MINUTES** are provided for information and includes a list of attendees.

F. <u>RESPONSES TO REQUEST FOR INFORMATION (RFI's/QUESTIONS)</u>

1. The attached **RESPONSES TO REQUEST FOR INFORMATION** is provided for your information.

Please acknowledge receipt of this **ADDENDUM NO. 2** by recording the date of its receipt in the space provided on the **PAGE P-4** of the Proposal.

Sugar). / comers

BRYAN J. KIMURA Traffic Branch Head

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1	SECTION 623 – TRAFFIC SIGNAL SYSTEM
2 3	Make the following amendment to said Section:
4 5	(I) Amend Section 623.04 - Measurement by replacing lines 578 to 579 to read:
6 7 8	"623.04 Measurement. The Engineer will not measure software for controller and interconnect risers for payment.
9 10 11 12 13	(A) The Engineer will measure work to Verify Location of Existing Underground Utilities and Hawaiian Electric Company service connection fees on a force account basis according to Subsection 109.06 – Force Account Provisions and Compensation.
15 16 17 18 19	(B) The Engineer will measure the controller assembly with software, foundation for traffic signal controller, traffic signal standard, traffic signal or pedestrian signal assembly, pedestrian pushbutton, pull box, loop detector sensing unit, and emergency vehicle preemption optical receiver per each in accordance with the contract documents.
20 21 22 23	(C) The Engineer will measure traffic signal duct line and cables per linear foot in accordance with the contract documents.
23 24 25 26	(D) The Engineer will measure Traffic Signal Hardware Modification as requested by Engineer on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation."
27 28 29	(II) Amend Section 623.05 – Payment by replacing lines 581 to 594 to read:
30 31 32 33 34 35 36 37 38 39	"623.05 Payment. The Engineer will pay for investigation work to Verify Location of Existing Underground Utilities; and Hawaiian Electric Company service connection fees on a force account basis according to Subsection 109.06 – Force Account Provisions and Compensation. An estimate amount for the force account is allocated in the proposal schedule under Verify Location of Existing Underground Utilities and Hawaiian Electric Company Service Connection Fees. The actual amount to be paid will be the sum shown on the accepted force account records whether this sum be more or less than the estimated amount allocated in the proposal schedule.
40 41 42 43 44 45	The Engineer will pay for the controller assembly with software at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and mounting the controller cabinet; furnishing, assembling, wiring, software, and housing the controller and auxiliary equipment; painting the controller cabinet; testing; providing turn-on service; submitting warranty; and furnishing equipment,

- 46 tools, labor, materials and other incidentals necessary to complete the work.
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The Engineer will pay for the traffic signal standard at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the traffic signal standard; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipment, tools, labor, materials; and other incidentals necessary to complete the work.

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55 The Engineer will pay for the foundation for controller cabinet at the contract 56 unit price per each complete in place. The price includes full compensation for 57 excavating and backfilling; forming; furnishing and placing the reinforcing steel; 58 mixing, placing, and curing the concrete; furnishing and setting the anchor bolts; 59 restoring the pavement; and furnishing equipment, tools, materials and other 60 incidentals necessary to complete the work.

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The Engineer will pay for traffic signal and pedestrian signal assembly at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; assembling the signal heads; wiring; bonding and grounding; painting the signal head mounting; testing; providing turn-on service; submitting warranty; and furnishing equipment, tools, labor, materials and other incidentals necessary to complete the work.

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The Engineer will pay for the pedestrian pushbutton with instruction sign at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the pedestrian pushbutton with the instruction sign; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipment, tools, labor, materials; and other incidentals necessary to complete the work.

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The Engineer will pay for the pull box at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the pull box at the designated locations; saw cutting; excavating and backfilling; restoration of concrete sidewalks, asphalt concrete pavement and landscaping; coating the frames and covers; and furnishing equipment, tools, labor, materials and other incidentals necessary to complete the work.

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The Engineer will pay for the loop detector sensing unit at the contract unit price per each complete in place. The price includes full compensation for saw cutting; cleaning and blowing the saw cut areas; furnishing and inserting the loop cable; splicing in the pull box; filling the saw cut groove with epoxy sealer or hot applied rubberized sealant; and furnishing equipment, tools, labor, materials and other incidentals necessary to complete the work.

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The Engineer will pay for the emergency vehicle preemption (EVP) optical receiver at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the EVP; wiring; bonding and grounding; testing; providing turn-on
 service; submitting warranty; and furnishing equipment, tools, labor, materials; and
 other incidentals necessary to complete the work.

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99 The Engineer will pay for the traffic signal duct lines at the contract unit price 100 per linear foot complete in place. The price includes full compensation for saw 101 cutting; trenching; excavating and backfilling, including asphalt concrete 102 pavement, hot mix asphalt base course, aggregate base course and aggregate 103 subbase course for trench repair; concrete curb and/or gutter and concrete 104 sidewalk repair; furnishing and placing the reinforcing steel for concrete 105 encasement; mixing, placing, and curing the concrete for encasement; furnishing, 106 installing, bonding, and grounding the conduits and interconnect subducts; and 107 furnishing equipment, tools, labor, materials and other incidentals necessary to 108 complete the work.

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110 The Engineer will pay for the traffic signal cables at the contract unit price 111 per linear foot complete in place. The price includes full compensation for 112 furnishing, installing, splicing, and taping the cable; furnishing and installing 113 interconnect fabric subducts; making the connections; providing turn-on service; 114 and furnishing equipment, tools, labor, materials and other incidentals necessary 115 to complete the work.

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117 The Engineer will not pay for the inter-connect risers. The work includes 118 furnishing and installing the riser; and furnishing equipment, tools, labor, materials, 119 and other incidentals necessary to complete the work. The Engineer will consider 120 the cost for risers as included in the contract price for the various contract items.

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122 The Engineer will consider full compensation for additional materials and 123 labor not shown in the contract that are necessary to complete the installation of 124 the various systems incidental to the various contract items. The Engineer will not 125 allow additional compensation.

127 The Engineer will pay for the following pay items when included in the 128 proposal schedule: 129

130 131	Pay Item	Pay Unit
131	Verify Location of Existing Underground Utilities	Force Account
133 134	Hawaiian Electric Company service connection fees	Force Account
135 136	Controller Assembly with Software	Each
137 138	Type Traffic Signal Standard	Fach
139	Foundation for	Each
140 141	Foundation for	Each

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142	Signal Assembly	Each
143 144 145	Pedestrian Pushbutton with Instruction Sign	Each
145	Type Pullbox	Each
147 148 149	Loop Detector Sensing Unit (6 Ft. x 6 Ft.) Loops	Each
150	EVP Optical Receiver with	Each
151 152 153	Traffic Signal Ductline	Lin. Ft.
155	EVP Cable	Lin. Ft.
155 156 157	No, Cable	Lin. Ft.
157	Traffic Signal Hardware Modification	Force Account
159 160 161 162 163 164 165 166	An estimated amount for the force account is allocate schedule under Traffic Signal Hardware Modification, which inc relocation, and/or reinstallation of new or existing traffic signal the controller, modules, sensor, etc. The actual amount to be p shown on accepted force account records, whether this sum is the estimated amount allocated in the proposal schedule."	ed in the proposal cludes the removal, hardware, such as paid will be the sum s more or less than

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END OF SECTION 623

1	SECTION 770 – TRAFFIC SIGNAL MATERIALS		
2 3	Make the following amendments to said Section:		
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5 6	(I) revisir	Amend Subsection 770.02(A) – Standard Traffic Signal Heads by ng the first paragraph from line 211 to 216 to read:	
8 9 10 11		" (b) To ensure quality and performance, LED head shall have prior history of testing and use by CALTRANS and shall exceed ITE standards. Failure on one LED shall not affect other LED's. LED head shall have fully-encapsulated	
12		electronic circuitry and configuration for 12-inch ball."	
13 14	(II)	Amend Subsection 770.02(A)(4) - Back Plates from line 285 to 290 to	
15	read:		
16 17 18 19 20 21 22 23 24		"(4) Back Plates. Louvered back plates shall be furnished and installed on mast arm mounted signal heads. Back plates shall be constructed of aluminum alloy 3003-H14 sheet having minimum thickness of 0.058 inch and minimum dimensions equal to signal head size plus five-inch border, with a one-inch retro-reflective border around the outside edge of the front surface. Back plates shall be dull black in color."	
25 26	(III) read:	Amend Subsection 770.04 – Pedestrian Signal from line 444 to 600 to	
27 28 29 30 31 32 33 34 35 36 37 38 39		"(A) Purpose. The purpose of this specification is to provide the minimum requirements for the LED "walking person" and "hand" icon pedestrian signal modules with countdown. This specification is only for the nominal overall message-bearing surface of 16 x 18 in. This specification is not intended to impose restrictions upon specific designs and materials that conform to the purpose and the intent of this specification. This specification refers to definitions and practices described in "Pedestrian Traffic Control Signal Indications" published in the <i>Equipment and Materials Standards of the Institute of Transportation Engineers</i> , (referred to in this document as "PTCSI") and in the Applicable Sections of Manual on Uniform Traffic Control Devices (MUTCD) 2009 Section 4E.	
40 41 42 43 44 45		(B) Physical and Mechanical Requirements. The modules shall fit into existing pedestrian signal housings built for the PTCSI sizes stated in Section 1 of the "walking person" and "hand" icon pedestrian signal indication Standard without modification to the housing and shall not require special tools for installation.	
46 47		Installation of a retrofit replacement module into existing pedestrian signal housing shall only require the removal of the existing optical unit	

components, shall be weather tight and fit securely in the housing; and shall
 connect directly to existing electrical wiring. The LED module shall have a
 visual appearance similar to that of an incandescent lamp (ie: Smooth and
 non-pixilated). Screwed on lenses are not allowed. Only modules with
 internal mask shall be utilized. No external silk-screen shall be permitted.

When not illuminated, the WALKING PERSON, UPRAISED HAND, and COUNTDOWN DIGITS shall not be readily visible. The countdown digits of the pedestrian signal module shall be located to the right of the associated UPRAISED HAND. The display of the number of remaining seconds shall begin only at the beginning of the pedestrian change interval. After the countdown displays zero, the display shall remain dark until the beginning of the next countdown. The walking person, hand icons and countdown digits shall be incandescent looking.

The units shall not have any external attachments, dip switches, toggle switches or options that will allow the mode to be changed from counting the clearance cycle, to the full walk/don't walk cycle or any other modification to the icons or digits.

For each nominal module, use the corresponding minimum H (height) and W (width) measurements:

Module Size	lcon Height	lcon Width	Countdown Height	Countdown Width	Countdown Segment Width
16x18 in	11 in	7 in	9 in	7 in	0.7 in

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All exposed components of a module shall be suitable for prolonged exposure to the environment. As a minimum, the module shall be rated for use in the ambient operating temperature range, measured at the exposed rear of the module, of -40°C to +74°C (-40°F to +165°F).

The module shall be a single, self-contained device, not requiring onsite assembly for installation into an existing pedestrian signal housing. The power supply shall be located inside the pedestrian signal module. The assembly and manufacturing process for the module shall be designed to assure all internal LED and electronic components are adequately supported to withstand mechanical shock and vibration from high winds and other sources.

The front window shall be a transparent polycarbonate material with internal masking to prevent the icons and digits from being visible when not in operation. External masking or silk-screen technology shall not be permitted. 90 Each module shall be identified on the backside with the manufacturer's name, model, serial number and operating characteristics. 92 The operating characteristics shall include the nominal operating voltage and stabilized power consumption, in watts and/or Volt-Amperes.

95 **Photometric Requirements.** For a minimum period of 60 months, (C) 96 the maintained minimum luminance values for the modules under 97 operating conditions, when measured normal to the plane of the icon 98 surface, shall not be less than: 99

- Walking person: 2,200 cd/m²;
 - Hand: 1,400 cd/m².

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Countdown digits: 1,400 cd/m²;

104 The luminance of the emitting surface, measured at angles from the 105 normal of the surface, may decrease linearly to a value of 50% of the values 106 listed above at an angle of 15 degrees. The LED module shall have a visual 107 appearance similar to that of an incandescent lamp (i.e.: Smooth and non-108 pixilated). 109

Maximum permissible luminance: When operated within the temperature range, the actual luminance for a module shall not exceed three times the required peak value of the minimum maintained luminance. Luminance uniformity: The uniformity of the signal output across the emitting section of the module lens (i.e. the hand, person or countdown icon) shall not exceed a ratio of 5 to 1 between the maximum and minimum luminance values (cd/m²).

The standard colors for the LED Pedestrian Signal Module shall be White for the walking person and Portland Orange for the hand icon and the countdown digits.

(D) **Electrical Requirements.** All wiring and terminal blocks shall meet the requirements of Section 13.02 of the VTCSH Standard. Maximum of three secured, color coded, 1 meter (39 in) long 600 V, 16 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105°C, are to be provided for electrical connection. The conductors shall be color coded with orange for the hand, blue for the walking person and white as the common lead.

130 LED modules shall operate from a 60 + 3 Hertz ac line power over a voltage range from 80 to 135 VAC RMS. Nominal operating voltage for all 131 132 measurements shall be 120 + 3 VAC RMS. Fluctuations in line voltage over the range of 80 to 135 VAC RMS shall not affect luminous intensity by 133

134 more than + 10 %. To prevent the appearance of flicker, the module circuitry 135 shall drive the LEDs at frequencies greater than 100 Hz when modulated, or at DC, over the voltage range specified. 136 137 Low Voltage Turn Off: There should be no illumination of the module 138 139 when the applied voltage is less than 35 VAC RMS. To test for this condition, 140 each icon must first be fully illuminated at the nominal operating voltage. The 141 applied voltage shall then be reduced to the point where there is no illumination. This point must be greater than 35 VAC RMS. 142 143 Turn-ON and Turn-OFF Time: A module shall reach 90% of full 144 illumination (turn-ON) within 75 msec of the application of the nominal 145 operating voltage. The signal shall cease emitting visible illumination (turn-146 OFF) within 75 msec of the removal of the nominal operating voltage. 147 148 149 Default Condition: For abnormal conditions when nominal voltage is 150 applied to the unit across the two-phase wires (rather than being applied to the phase wire and the neutral wire) the pedestrian signal unit shall default 151 to the hand symbol. The on-board circuitry of a module shall include voltage 152 153 surge protection: 154 155 To withstand high-repetition noise transients and low-repetition high-energy transients as specified in NEMA Standard TS-2 2003; 156 157 Section 2.1.8 158 Section 8.2 IEC 1000-4-5 & Section 6.1.2 ANSI/IEEE C62.41.2-159 2002. 3kV. 2 ohm Section 8.0 IEC 1000-4-12 & Section 6.1.1 ANSI/IEEE C62.41.2-160 161 2002, 6kV, 30 ohm 162 163 The LED signal and associated on-board circuitry shall meet the requirements of the Federal Communications Commission (FCC) Title 47, 164 165 Subpart B, Section 15 regulations concerning the emission of electronic noise by Class A digital devices. The modules shall provide a power factor of 0.90 166 or greater when operated at nominal operating voltage, and 25°C (77°F). 167 168 Total harmonic distortion induced into an AC power line by the module, operated at nominal operating voltage, and at 25°C (77°F) shall not exceed 169 20%. 170 171 The current draw shall be sufficient to ensure compatibility and proper 172 173 triggering and operation of load current switches and conflict monitors in 174 signal controller units. Off State Voltage Decay: When the module is 175 switched from the On state to the Off state the terminal voltage shall decay to a value less than 10 VAC RMS in less than 100 milliseconds when driven 176 177 by a maximum allowed load switch leakage current of 10 milliamps peak (7.1 milliamps AC). 178

180 (E) Module Functions. The module shall operate in one mode: Clearance Cycle Countdown Mode Only. The module shall start counting 181 182 when the flashing don't walk turns on and will countdown to "0" and turn off when the steady "Don't Walk" signal turns on. The module shall not have 183 user accessible switches or controls for the purpose of modifying the cycle, 184 *icons or digits.* At power on, the module enters a single automatic learning 185 cycle. During the automatic learning cycle, the countdown display shall 186 remain dark. The unit shall re-program itself if it detects any increase or 187 188 decrease of Pedestrian Timing. The digits shall go blank once a change is detected and then take one complete pedestrian cycle (with no counter 189 190 during this cycle) to adjust its buffer timer.

192 The module shall allow for consecutive cycles without displaying the steady Hand icon ("Don't Walk"). The module shall recognize preemption 193 194 events and temporarily modify the crossing cycle accordingly. If the 195 controller preempts during the walking man, the countdown shall follow the controller's directions and shall adjust from walking man to flashing hand. 196 197 It shall start to count down during the flashing hand. If the controller 198 preempts during the flashing hand, the countdown shall continue to count down without interruption. The next cycle, following the preemption event, 199 shall use the correct, initially programmed values. This specification is 200 201 worded such that the flashing don't walk time is not modified.

203 If the controller output displays Don't Walk steady condition or if both 204 the hand/person go dark and the unit has not arrived to zero, the unit 205 suspends any timing and the digits shall go dark.

(F) Warranty. Manufacturers will provide the following warranty
 provisions. Replacement or repair of an LED signal module that fails to
 function as intended due to workmanship or material defects within the first
 5 years (60 months) from the date of project acceptance."

- 210 211 (IV) 212 to read
 - (IV) Amend Subsection 770.05(A)- Controller Assembly from line 617 to 625 to read:
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221 222 **"(1)** The traffic signal controller shall be a 2070 LX on CALTRANS QPL. Each controller shall be furnished with the latest firm ware. Each controller shall be able to communicate with HDOT's traffic signal central server.

- (2) Each controller assembly listed in Table 770.05-1 Controller Assembly Requirements contains sufficient equipment for full 8-vehicle, 4-pedestrian, and 4-preemption phase intersection, even though the contract documents may not require it.
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TABLE 770.05-1 – CONTROLLER ASSEMBLY				
REQUIREMENTS				
Item	<u>Quantity</u>			
Model 2070 LX Controller	1			
332A Aluminum Cabinet (Non-QPL)	1			
Model 200 Load Switches	12			
Model 204 Flasher	All			
Model 242L Isolators	2			
Model FS/ST Isolator	All			
Flash Transfer Relays (Non-QPL)	All			
Firmware	1			
Model 2010ECL Conflict Monitor (Crimp and Poke Type, such as Molex Dualcon TM Straight/on Edge Dual Position Connectors, or approved equal)	1			
Model 662T Time Delay Detector Amplifiers (Non-QPL)	8			
Model M762 Preempt. Car (Non-QPL) with M768 Auxiliary Input Panel	2			

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(V) Amend Subsection 770.05(B)- Model 170E Controller by deleting lines
 627 to 643.

229 (VI) Amend Subsection 770.05(C)(5)- Cabinet by deleting lines 660 to 665.

(VII) Amend Subsection 770.05(D)- Auxiliary Equipment from line 697 to 741
 to read:

233 234 "(1) Model M762 Optical Preemption Module with M768 235 Auxiliary Input Panel. M762 shall be card-type and shall interface 236 with Model 170 cabinet preemption slots of input file. Each M762 Module shall have two channels of preemption. M762 shall include 237 238 firmware to discriminate between two valid priority signals, to 239 prioritize valid same priority signals on a first come, first served basis, 240 and to override low priority signal if high priority is received. M762 241 Module shall receive input signals (9.639 and 14.035 Hz) to permit priority preemption operation within 170 local intersection program. 242 243 M762 shall optically isolate output signals and shall trigger active low signal to controller for high priority and pulsed active low signal for 244 low priority. M768 Auxiliary Input Panel shall be used to interconnect 245

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246M762 with the terminals inside the traffic cabinet. The State's247preemption systems employ the 3M/Global Traffic Technologies248Opticom System. New preemption equipment shall be 3M/Global249Traffic Technologies Opticom or accepted equal that is fully250compatible with 3M/Global Traffic Technologies Opticom.251

(2) Security Tumbler for Signal Cabinet. The signal control cabinet door locks (2 locks for each cabinet) are keyed to take Best Lock Series tumblers. The contractor shall furnish and install 2 lock cylinders that will fit in the current locks on the signal cabinet. The lock cylinders keys shall be one of a kind, licensed to DTS, and each cylinder shall have 2 sets of keys with "do not duplicate" stamped on each key."

260 (VIII) Amend Subsection 770.06(G) – Type 7 Preemption Detector

261 (Opticom) Cables from line 788 to 798 to read:

"(G) Type 7 - Preemption Detector (Opticom) Cables. Preemption detector (Opticom) cables are specific cables that run continuously from optical detectors mounted on traffic signal standards to terminal blocks for M762 phase module located in controller cabinet. Each detector shall be furnished with its own cable running back to controller cabinet. 3M/Global Traffic Technologies' M138 Optical Detector Cable shall be furnished for detector cable because it is compatible and consistent with requirements for Opticom Preemption System. M138 cable shall be furnished that is BerkTek Type B, shield jacket, three - insulated conductor cable, 20 AWG, one - 20 AWG bare stranded ground, 600 Volts, orange-blue-yellow color coded and 5/16-inch diameter."

(IX) Amend Subsection 770.11 – Preemption Detectors from line 997 to 1009 to read:

"(A) **Description.** Preemption Detectors shall be located on traffic signal standards to convert optical signals emitted from an emergency vehicle to electrical pulses for emergency preemption of traffic signals. Electrical signals from optical detector shall be transmitted by 4-conductor cable to preemption module M762 located in input slot of controller cabinet. M762 preemption module shall direct and hold controller in preemption mode until signal disappears. Preprogrammed selection of phases and signal displays shall be controlled by Local Intersection Program. The State's preemption system employ 3M/Global Traffic Technologies Opticom System. New preemption equipment shall be by 3M/Global Traffic Technologies Opticom or equal accepted by the Engineer, that is fully compatible with 3M/Global Traffic Technologies Opticom. Astro-mini brackets or similar device for attaching preemption detector to poles shall be included."

292 (X) Amend Subsection 770.11 – Preemption Detectors from line 1012 to

293 1021 to read:294

295 "(1) **Type 7 Cable.** Type 7 preemption detector (Opticom) cables shall be specific cables that run continuously from optical detectors 296 297 mounted on traffic signal standards to terminal blocks for M762 phase module in controller cabinet. Type 7 preemption detector 298 cable shall be compatible with 3M/Global Traffic Technologies' M138 299 Optical Detector cable and shall be consistent with requirements for 300 301 Opticom Preemption System. M138 cable shall be BerkTek Type B, shield jacket, 3-insulated conductor, 20AWG stranded copper, 1-302 303 20AWG bare stranded ground, 600 volts, orange-blue-yellow color 304 coded, and 5/16-inch diameter."

306 (XI) Add Subsection 770.12 – Pedestrian Signal Push Button With Integral 307 Sign to read:

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"(A) Description. The pedestrian push button unit shall consist of an assembly that can be secured to traffic poles with standard screws, be tamper proof, weatherproof, and constructed so that electrical shocks are impossible to receive.

(B) Materials.

(1) The housing for the push button assembly shall be of cast and/or machined aluminum. The push button assembly shall be weatherproof with a water diverting groove set in the outside diameter of the actuator button receptor. The housing shall be designed to reduce vandalism and shall mount on the side or top of a pole with a minimum 2-inch diameter button. The push button housing shall be capable of mounting in an 'up button' or 'down button' configuration. All wire connections shall be accessible from the back of the assembly.

(2) An ADA acceptable raised directional sign shall be installed with stainless steel fasteners to the housing. The sign shall consist of a raised walking person and a raised arrow indication. Paint the unit black and paint the raised walking person and arrow white. The sign shall be capable of mounting in an 'up button' or 'down button' configuration. The raised walking person and arrows shall be directional and match the indication as shown in the plans.

334(3) The pushbutton shall extend from the sign faceplate335approximately three inches. The pushbutton actuator shall be336convex in design having a flat area on the face for uses of a stylus,337ADA acceptable, two inches in diameter, and have a tension of less

338	than five pounds when pressed. The button shall be manufactured
339	in a way that it cannot be stuck in a closed (constant call) position.
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341	The pedestrian push button shall be a piezo electric type and
342	be UL listed. The button shall have a stainless steel actuator and
343	shall be mounted within the housing with stainless steel, non-
344	corrosive, tamper proof fasteners. The unit shall operate between
345	12-24V DC or AC, 3 inch round mounts with 4 mounting bolts. The
346	pedestrian button shall give an audio and visual signal each time the
347	pedestrian button is activated."
348	
349	END OF SECTION 770

PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT	
201.0100	Clearing and Grubbing	200	S.Y.	\$	\$	
201.0200	ISA Certified Arborist	F.A.	F.A.	F.A.	\$10,000.00	
202.0101	Removal of Sign and Post	5	Each	\$	\$	
202.1002	Removal of Sign	3	Each	\$	\$	
202.2010	Removal of Asphalt Concrete Pavement	1,070	S.Y.	\$	\$	
202.2020	Removal of P.C.C. Pavement	45	S.Y.	\$	\$	
202.5030	Removal of Concrete Curb	275	S.Y.	\$	\$	
202.5040	Removal of Concrete Curb and Gutter	320	L.F.	\$	\$	
202.5050	Removal of Concrete Sidewalk and Curb Ramps	230	S.Y.	\$	\$	
202.6060	Removal of Guardrail	380	L.F.	\$	\$	
202.6070	Removal of Terminal Impact Attenuators	2	Each	\$	\$	
202.6000	Removal of Traffic Signal System	L.S.	L.S.	L.S.	\$	
203.0100	Roadway Excavation	45	C.Y.	\$	\$	

	PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
209.0100	Installation, Maintenance, Monitoring, & Removal of BMP	L.S.	L.S.	L.S.	\$		
209.0200	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	\$ <u>5,000.00</u>		
219.0100	Determination and Characterization of Fill Material	L.S.	L.S.	L.S.	\$		
219.0200	Testing for Lead Based Paint	F.A.	F.A.	F.A.	\$ <u>4,000.00</u>		
301.0100	Hot Mix Asphalt Base Course	30	Ton	\$	\$		
304.0100	Aggregate Base Course	65	C.Y.	\$	\$		
314.0100	Controlled Low-Strength Material	10	C.Y.	\$	\$		
401.0100	PMA Pavement, Mix No. IV (with PG 64E-22)	125	Ton	\$	\$		
411.0100	14-inch Concrete Pavement	45	S.Y.	\$	\$		
507.0100	Stainless Steel Pipe Railing	L.S.	L.S.	L.S.	\$		
509.0100	Repair Concrete Delaminations and Spalls	7	S.F.	\$	\$		
509.0200	Reinforcing Splices	14	Pound	\$	\$		
511.0100	Furnishing Drilled Shaft Equipment	L.S.	L.S.	L.S.	\$		

PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT	
511.0200	Obstruction	40	Hour	\$	\$	
511.1024	Drilled Shaft (24-inch Diameter Shaft)	50	L.F.	\$	\$	
511.1042	Drilled Shaft (42-inch Diameter Shaft)	44	L.F.	\$	\$	
511.2024	Unclassified Shaft Excavation (24-inch Diameter)	50	L.F.	\$	\$	
511.2042	Unclassified Shaft Excavation (42-inch Diameter)	44	L.F.	\$	\$	
511.5000	Coring for Integrity Testing for Acceptable Drilled Shaft	40	L.F.	\$	\$	
604.0100	Reconstruct Catch Basin No. 1	1	Each	\$	\$	
604.0200	Reconstruct Catch Basin No. 2	1	Each	\$	\$	
606.0100	Guardrail Type 3 – Beam Type Guardrail MASH Compliant	300	L.F.	\$	\$	
606.0200	Hawaii MASH Transition Section	4	Each	\$	\$	
606.0300	Median Barrier	50	L.F.	\$	\$	
607.0100	4 - feet, Chain Link Fence	35	L.F.	\$	\$	
617.0100	Imported Planting Soil	15	C.Y.	\$	\$	

	PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
623.0100	Verify Location of Existing Underground Utilities	F.A.	F.A.	F.A.	\$50,000.00		
623.0200	Hawaiian Electric Company Service Connection Fees	F.A.	F.A.	F.A.	\$10,000.00		
623.0100	Controller Assembly with Software	1	Each	\$	\$		
623.0200	Type I Traffic Signal Standard, H = 10 Feet	5	Each	\$	\$		
623.0301	Type II Traffic Signal Standard with 27-Foot Mast Arm mounted above Median Barrier	1	Each	\$	\$		
623.0302	Type II Traffic Signal Standard with 28-Foot Mast Arm	1	Each	\$	\$		
623.0303	Type II Traffic Signal Standard with 36-Foot Mast Arm mounted above Median Barrier	2	Each	\$	\$		
623.0304	Type II Traffic Signal Standard with 37-Foot Mast Arm	1	Each	\$	\$		
623.0400	Foundation for Controller Cabinet	1	Each	\$	\$		
623.0501	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Type VI Mounting with Retroreflective Backplate)	10	Each	\$	\$		

	PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT	
623.0502	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Programmable Visibility, Type VI Mounting with Retroreflective Backplate)	2	Each	\$	\$	
623.0503	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Type IV Mounting)	3	Each	\$	\$	
623.0504	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Programmable Visibility, Type IV Mounting)	1	Each	\$	\$	
623.0505	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Type III Mounting)	2	Each	\$	\$	
623.0506	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Programmable Visibility, Type III Mounting)	1	Each	\$	\$	
623.0507	Traffic Signal Assembly (1-Way, 12-inch, 1-3 Section Vertical, Type I Mounting)	3	Each	\$	\$	
623.0508	Pedestrian Signal Assembly (1-Way, 12-inch, One Vertical with Type IV Mounting)	8	Each	\$	\$	
623.0601	Pedestrian Push Button with Instruction Sign	8	Each	\$	\$	
623.0701	Type A Pull Box	11	Each	\$	\$	

	PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
623.0702	Type B Pull Box	4	Each	\$	\$		
623.0703	Special Type C Pull Box	8	Each	\$	\$		
623.0801	Loop Detector Sensing Unit (6 FT x 6 FT) One Loop	6	Each	\$	\$		
623.0802	Loop Detector Sensing Unit (6 FT x 6 FT) Two Loops	12	Each	\$	\$		
623.0803	Loop Detector Sensing Unit (6 FT x 6 FT) Four Loops	6	Each	\$	\$		
623.0804	Loop Detector Sensing Unit (6 FT x 6 FT) Six Loops	4	Each	\$	\$		
623.0901	EVP Optical Receiver with Mast Arm Mounting	4	Each	\$	\$		
623.1001	Traffic Signal Duct Line, One 2-inch Conduit, Schedule 40 PVC, Concrete Encased	160	L.F.	\$	\$		
623.1002	Traffic Signal Duct Line, Two 2-inch Conduit, Schedule 40 PVC, Concrete Encased	110	L.F.	\$	\$		
623.1003	Traffic Signal Duct Line, Two 2-inch Conduits, Schedule 40 PVC, Reinforced Concrete Encased	75	L.F.	\$	\$		

	PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
623.1004	Traffic Signal Duct Line, Four 2-inch Conduits, Schedule 40 PVC, Concrete Encased	630	L.F.	\$	\$		
623.1005	Traffic Signal Duct Line, Four 2-inch Conduits, Schedule 40 PVC, Reinforced Concrete Encased	125	L.F.	\$	\$		
623.1006	Traffic Signal Ductline, Five 2-inch Conduits, Schedule 40 PVC, Concrete Encased	20	L.F.	\$	\$		
623.1007	Traffic Signal Ductline, Seven 2-inch Conduits, Schedule 40 PVC, Concrete Encased	10	L.F.	\$	\$		
623.1101	EVP Cable	1,400	L.F.	\$	\$		
623.1102	No. 14, 2-Conductor Loop Detector Lead-in Cable	3,900	L.F.	\$	\$		
623.1103	No. 14, 4-Conductor Signal Drop Cable	1,400	L.F.	\$	\$		
623.1104	No. 14, 26-Conductor Traffic Control Cable	1,100	L.F.	\$	\$		
623.1105	No. 6, 3-Conductor Power Cable	30	L.F.	\$	\$		

PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT	
623.9010	Traffic Signal Hardware Modification	F.A.	F.A.	F.A.	\$ <u>75,000.00</u>	
624.0100	Water Meter Relocation	L.S.	L.S.	L.S.	\$	
625.0100	Concrete Jacket	11	L.F.	\$	\$	
626.0100	Adjusting Sewer Manhole Frame and Cover	1	Each	\$	\$	
629.0101	Removal of Pavement Markings for Detour Lanes	4,700	L.F.	\$	\$	
629.0102	Removal of Pavement Markers for Detour Lanes	200	Each	\$	\$	
629.0103	Removal of HOV Lane Marking for Detour Lanes	2	Each	\$	\$	
629.0104	Removal of Pavement Word for Detour Lanes	2	Each	\$	\$	
629.0105	Removal of Pavement Arrow for Detour Lanes	5	Each	\$	\$	
629.0201	4-Inch Profiled Pavement Striping for Detour Lanes (Thermoplastic Extrusion), White	2,000	L.F.	\$	\$	
629.0202	4-Inch Pavement Striping for Detour Lanes (Tape, Type I or Thermoplastic Extrusion), White	450	L.F.	\$	\$	

	PROPOSAL SCHE	DULE			
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.0203	4-Inch Pavement Striping for Detour Lanes (Tape, Type I or Thermoplastic Extrusion), Yellow	1,450	L.F.	\$	\$
629.0204	4-Inch Pavement Striping for Detour Lanes (Tape, Type I or Thermoplastic Extrusion), Double Yellow	700	L.F.	\$	\$
629.0205	8-Inch Pavement Striping for Detour Lanes (Tape, Type I or Thermoplastic Extrusion) White	600	L.F.	\$	\$
629.0206	HOV Lane Marking for Detour Lanes (Tape, Type III or Thermoplastic Extrusion)	2	Each	\$	\$
629.0207	Pavement Words for Detour Lanes (Thermoplastic Extrusion)	2	Each	\$	\$
629.0208	Pavement Arrows for Detour Lanes (Tape, Type III or Thermoplastic Extrusion)		Each	\$	\$
629.0209	Type C Pavement Marker for Detour Lanes	110	Each	\$	\$
629.0210	Type D Pavement Marker for Detour Lanes	40	Each	\$	\$
629.0220	Type H Pavement Marker for Detour Lanes	40	Each	\$	\$

	PROPOSAL SCHE	DULE			
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.0301	4-Inch Profiled Pavement Striping (Thermoplastic Extrusion), White	2,200	L.F.	\$	\$
629.0302	4-Inch Pavement Striping (Tape, Type I or Thermoplastic Extrusion), White	1,000	L.F.	\$	\$
629.0303	4-Inch Pavement Striping (Tape, Type I or Thermoplastic Extrusion), Yellow	1,700	L.F.	\$	\$
629.0304	4-Inch Pavement Striping (Thermoplastic Extrusion), Double Yellow	800	L.F.	\$	\$
629.0305	8-Inch Pavement Striping (Tape, Type I or Thermoplastic Extrusion) White	760	L.F.	\$	\$
629.0306	12-Inch Pavement Striping (Tape, Type III or Thermoplastic Extrusion) White or Yellow	170	L.F.	\$	\$
629.0307	Crosswalk Marking (Thermoplastic Extrusion)	13	Lane	\$	\$
629.0308	29.0308 HOV Lane Marking (Tape, Type III or Thermoplastic Extrusion)		Each	\$	\$
629.0309	Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)	12	Each	\$	\$

	PROPOSAL SCHE	DULE			
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.0310	Pavement Word (Thermoplastic Extrusion)	4	Each	\$	\$
629.0401	Type C Pavement Marker	110	Each	\$	\$
629.0402	Type D Pavement Marker	50	Each	\$	\$
629.0403	Type H Pavement Marker	50	Each	\$	\$
629.0404	Type F Pavement Marker	3	Each	\$	\$
630.0100	Street Name Sign	2	Each	\$	\$
630.0200	Street Name Sign on Traffic Signal Mast Arm	4	Each	\$	\$
631.0100	Regulatory Sign (10 Square Feet or Less)	6	Each	\$	\$
631.0200	Warning Sign (10 Square Feet or Less)	3	Each	\$	\$
632.0100	Type II Object Marker	10	Each	\$	\$
634.0100	Portland Cement Concrete Sidewalk	250	S.Y.	\$	\$
638.0100	Curb, Type 2A	260	L.F.	\$	\$

	PROPOSAL SCHE	DULE			
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
638.0200	Curb, Type 2D	15	L.F.	\$	\$
638.0300	Curb and Gutter, Type 2DG	310	L.F.	\$	\$
641.0100	Hydro-Mulch Seeding (150 S.Y.)	L.S.	L.S.	L.S.	\$
644.0100	Repair of Existing Sprinkler Systems	F.A.	F.A.	F.A.	\$ <u>25,000.00</u>
645.0100	Traffic Control	L.S.	L.S.	L.S.	\$
645.2000	Additional Police Officers and/or Additional Control Device and Advertisement	F.A.	F.A.	F.A.	\$ <u>50,000.00</u>
648.0100	Field-Posted Drawings	L.S.	L.S.	L.S.	\$
650.0100	Curb Ramp, Type A	6	Each	\$	\$
650.0200	Curb Ramp, Type C	1	Each	\$	\$
650.0300	Detectable Warning Mat	8	Each	\$	\$
671.0100	Protection of Endangered Species	F.A.	F.A.	F.A.	\$ <u>10,000.00</u>

	PROPOSAL SCHE	DULE			
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
680.0100	Coordinate with HECO to Extend the Overhead Service to Underground to the New Meter Location, Complete	1	Each	\$	\$
680.0200	Provide New HECO 2-feet x 4-feet Handhole, Complete	1	Each	\$	\$
680.0300	Provide New 10"W x 12"H x 6"D Splice Can, Complete	1	Each	\$	\$
680.0400	Provide New Combination Meter/Main Meter Socket, Complete	1	Each	\$	\$
680.0500	Provide New Meter Pedestal, Complete	1	Each	\$	\$
680.0600	Provide Conduit, Conductors, Trench Excavation, Trench Backfill, and Concrete Encasement, Complete	100	L.F.	\$	\$
693.0100	HDOT Approved Terminal Impact Attenuator – MASH Compliant, TL-3	2	Each	\$	\$
696.0100	Maintenance of Trailers	F.A.	F.A.	F.A.	\$30,000.00
699.0100	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item)	L.S.	L.S.	L.S.	\$

		PROPOSAL SCHE	DULE						
ITEM N	10.	ITEM	APPROX. UNIT UNIT PRICE						
NOTES:	S	Sum of All Items				\$			
1.	Bids	shall include all Federal, State, County and other applicable	taxes and fees.						
2.	The bidde	TOTAL AMOUNT FOR COMPARISON OF BIDS shall be use er.	ed to determine	the lowest	responsible				
3.	Bidd	ers shall complete all unit prices and amounts. Failure to do s	so shall be grou	nds for reje	ction of bid.				
4.	lf a c	liscrepancy occurs between unit bid price and the bid price, th	ne unit bid price	shall gover	'n.				
5.	Bidd and supp sepa the p Origi be b FAIL REJI If the shall	lers shall submit and <u>upload the complete proposal to Hi</u> time. Proposals received after said due date and time short documents explicitly designated as <u>confidential and/</u> <u>arate file</u> to HIePRO. Bidders shall not include confidential proposal. The record of each bidder and respective bid s inal (wet ink, hard copy) proposal documents are not required ased on evaluation of proposals submitted and uploaded <u>URE TO UPLOAD THE COMPLETE PROPOSAL TO HIEPF</u> <u>ECTION OF THE BID.</u> ere is a conflict between the specification document and the H govern and control, unless otherwise specified.	ePRO prior to to all not be cons for proprietary al and/or propr hall be open to to be submitted to HIePRO. RO SHALL BE HEPRO solicitati	the bid ope sidered. A shall be up ietary doc public ins d. Contrac <u>GROUNDS</u> ion, the spe	ening date ny additional bloaded as a uments with spection. t award shall <u>FOR</u> ecifications				







	<u>GRAPHIC</u>	SCALES		FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
SCALE 1''=5'	5' 0	5'	10'	HAWAII	HAWAII	STP-0300(214)	2024	ADD. 97	149



<u>G</u>	RAPHIC	<u>SCALES</u>		FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5' 5'	0	5′	10'			$STP_0200(21A)$	2024	<u>مم 1</u>	1/0

	<u>GRAPHIC</u>	SCALES		FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTA SHEET
ALE 1''=5'	5′ 0	5′ 	10'	HAWAII	HAWAII	STP-0300(214)	2024	ADD. 102	149
	Notes:								
7)	3 The 606.0	following w 0300 - Medi	vork s ian Ba	hall be ir arrier:	nciden	tal to Propos	sal Ite	em No.	
	a	. Furnish Median	ing ar Barrie	nd install. er #2.	ing tr	affic signal	condu	its witl	hin
	b	. Construc Barrier Concrete dimensic	cting #2 in e Cove ons, se	Pull Boxe cluding f ers per S ee sheet	es #10 Turnist tandai 96.	and #11 with ning and inst rd Plan TE-3	nin Mee talling 37. Fo	dian Polyme or pull	er box
	8 Relo Relo exis This Wate	cated water cation plan ting irrigati work shall er Meter Re	- later on sh ion sy l be p locatio	al/irriga beet 52. stem, as aid for u	tion n The C neede Inder	nain, see Wat contractor sh d, to facilita Proposal Ite	er Mei all rel te con m No.	ter ocate structio 634.010	on. 10 -
							× COMS	S. HIGA LICENSED PROFESSION ENGINEER No. 6763-	St JOINA
			·,/				License THIS WC UNDER MY OF THIS OBSERVATIO CHAPTER	Expiration Date RK WAS PREPARI SUPERVISION ANI PROJECT WILL E DN AS DEFINED II 115, RULES OF	ED BY ME (D CONSTRUC BE UNDER N N HAR TITLE THE BOARD
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• 				APPROVED I	BY:		inger and Object E	er BWS	Dat-
				Chief, Traffic Review (for work within City F	Branch, DPP (OW)	Mar (for Date Ch	work affecting BWS facil work affecting BWS facil ef, Traffic Signal &	ties in City/State R/W and	Date BWS easements only DTS Date
					DEF	STATE OF H, PARTMENT OF TRA	AWAII NSPORTA	TION	
								VCTC	

TRAFFIC SIGNAL MODERNIZATION Oahu - Phase 2A

Federal Aid Project No. STP-0300(214) Date: August 2024 Scale: As noted

ADD. 102

SHEET NO. 25 OF 37 SHEETS

REVISION

<u>GRAPHIC SCALES</u>	FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
SCALE 1"=5'	HAWAII	HAWAII	STP-0300(214)	2024	ADD.106	149

TRAFFIC SIGNAL MODERNIZATION, OAHU, PHASE 2A FAP NO. STP-0300(214) SOLICITATION NO. B25000780

PRE-BID CONFERENCE MINUTES

The following notes are from the Hawaii Department of Transportation (HDOT) pre-bid conference with prospective bidders for the subject project.

The meeting was conducted virtually via Microsoft Teams at on October 25, 2024 at 9:00 AM Hawaii Standard Time (HST).

The following was discussed:

- A. General:
 - Pre-bid conference is non-mandatory and is intended for clarification prior to bidding.
 - Announcement: Anything said at this meeting is for clarification only, the bid documents shall govern over anything said today and discrepancies shall be clarified by addendum.
 - All Question shall be received in writing via HIePRO by November 1, 2024 at 2:00 PM HST. Questions received after the deadline will not be addressed. Verbal requests for information will not receive a response.
 - The minutes to this meeting will be distributed by an addendum prior to bid opening.
 - Bid Offer Due Date and Time is November 15, 2024, 2:00PM HST through HIePRO. Bids received after said due date and time shall not be considered.
 - Geotechnical Engineering Exploration Documents for this project is included in the solicitation on HIePRO.
- B. Disadvantaged Business Enterprises (DBE)

Jesus Navarro of Office of Civil Rights spoke about the project DBE and DBE requirements. See attached DBE handout.

- C. Open to discussion with prospective bidders. No bidders attended.
- D. Attendees: See attached attendance list.

Steven Yoshida- HDOT, Highways, Traffic Design Patrick Tuter – HDOT, Highways, Traffic Design Jesus Navarro – HDOT, Office of Civil Rights Daniel Williams – HDOT, Office of Civil Rights Wesley Leong – HDOT, Highway, Oahu District Conrad Higashiona – Engineering Concepts, Inc.

Conference adjourned at 9:15 AM.

<u>State of Hawaii, Dept. of Transportation – Administration Division (HDOT OCR)</u> <u>Disadvantaged Business Enterprises (DBE) Program</u> Pre – Bid Meeting – 10/25/24

STP-0300(214) Traffic Signal Modernization, Oahu, Phase 2A

<u>Policy of the State of Hawaii, Department of Transportation's (HDOT) DBE Program</u>: To ensure equal opportunity and non-discrimination in the award and administration of United States DOT-assisted contracts. Contractors shall take all necessary and reasonable steps in accordance with the regulations (49 CFR, Part 26) to ensure that DBE's have an equal opportunity to compete for and perform on contracts.

DBE Goal for this project: 5.9%

- Be sure to document discussions, phone calls, faxes or memos relating to your efforts in meeting the DBE goal.
- DBEs must be certified by the bid opening date.
- DBE subcontractors, manufacturers, suppliers, trucking companies and any second tier subcontractors shall be listed on the respective DBE forms in order to receive credit.

The following forms are due to the Department's Project Manager or designee by the close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) calendar days after bid opening. These forms are confidential documents and should not be included with the submitted proposals.

- A best practice would be to email the required DBE documents to the Department's Project Manager or designee so they can be received prior to the 4:30 P.M. HST deadline.
- 1. <u>DBE Confirmation and Commitment Agreement</u>. This form must be signed by the bidder/offeror and each DBE subcontractor, manufacturer, supplier, or trucking company. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information, DBE name and contact information and subcontractor name and contact information if the DBE is a second tier subcontractor.

To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract.

2. DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for

<u>Construction</u>. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form. The bidder/offeror must submit documentation demonstrating how the DBE goal was met or how the bidder/offeror attempted to meet the goal if the goal

was not met. Responses must be sufficient to properly evaluate the bidder's/offeror's good faith efforts. Copies of correspondence return receipts, telephone logs, or other documentation will be required to support GFE. This documentation shall include quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project.

Documentation of good faith efforts is required irrespective of whether the bidder/offeror met the DBE project goal.

The above forms must be complete and provide the necessary information to properly evaluate bids/proposals. Failure to provide any of the above shall be cause for bid/proposal rejection. It is in best interest of the bidder to ensure that that dollar amount listed for DBEs on the DBE Confirmation and Commitment Agreement and the DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction are consistent and in alignment with each other.

In determining calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday.

• Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project.

DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors, truckers/haulers, and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).

The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

- In the bid documents be sure to refer to the DBE Requirements section and pay special attention to:
 - Section VIII. Demonstration of Good Faith Efforts for Contract Award, which summarizes the kinds of efforts that will be considered demonstrative of good faith efforts, and
 - Section IX. Administrative Reconsideration, which describes the process the apparent low bidder may take if they failed to meet the provisions of 49 CFR Sections 26.53(a)

- All federally funded projects awarded after October 1, 2017 are required to use the Certification and Contract Compliance Management System program, an online payment tracking system. This project will be required to use the Certification and Contract Compliance Management System program. HDOT OCR will work with the Project Engineer and selected bidder to get the contract information to create a contract record for the project. Subcontractors, suppliers, manufacturers, trucking companies, etc. that are selected to work on this project are expected to log in (on a regular basis) and indicate if payment was prompt and provide all required information.
- BIDDER REGISTRATION FORM. All firms bidding or quoting on DOT projects, including vendors, subcontractors, manufacturers, truckers, etc., must register as a bidder. Certified DBEs are automatically registered as a bidder with the HDOT.
 Bidder Registration Form can be found at: <u>https://hidot.hawaii.gov/administration/files/2019/03/Bidder-Registration-Fillable-Form.pdf</u>
- Be sure to check the DBE Directory online at: <u>https://hdot.dbesystem.com/</u> to ensure the DBEs listed are certified.
- Accessing HDOT DBE Directory.pdf

Surveys for Small Business information: <u>https://forms.office.com/g/iFuWtNKzN6</u> - General Contractors/Primes

TRAFFIC SIGNAL MODERNIZATION, OAHU, PHASE 2A FAP NO. STP-0300(214) SOLICITATION NO. B25000780

Response to Request for Information (RFI's/Questions)

11/01/2024

1. Please show on the plans where the clearing and grubbing work is required so we can compare with the bid item quantity.

HDOT response: The area to be cleared and grubbed is shown on the INSETs on sheet ADD. 18, Erosion and Sediment Control Plan (ESCP). It is called out as "Approximate Limits of Grading and Disturbed Area".

2. Plans show Reinforced Concrete Jacket for existing sewer line. Please make a bid item for this and any other RC jackets that are required for civil utilities.

HDOT response: The bid item for Reinforced Concrete Jacket for existing sewer line is Item No. 625.0100 – Concrete Jacket.

3. In the project summary it has "guardrails, and crash attenuators" but there are no pay items for Guardrail and Crash Attenuators - please confirm there are no guardrails, and crash attenuators on the project.

HDOT response: There are guardrails and crash attenuators for this project.

The pay item for guardrail is Item No. 606.0100 – Guardrail Type 3 – Beam Type Guardrail MASH Compliant.

The pay item for the transition between Median Barrier to Guardrail is 606.0200 – Hawaii MASH Transition Section.

The pay item for crash attenuators is Item No. 693.0100 – HDOT Approved Terminal Impact Attenuator – MASH Compliant, TL-3.

4. What plan is the detour striping shown on? Or please show what is considered detour striping on the plans.

HDOT response: The detour striping is shown on Detour Plan – A on sheet 148.