

**STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS**

**ADDENDUM NO. 6**

**FOR**

**TRAFFIC SIGNAL CONTROLLER INSTALLATION AND ADAPTIVE TRAFFIC  
SIGNAL CONTROL TECHNOLOGY AT VARIOUS LOCATIONS, OAHU  
FEDERAL-AID PROJECT NO. STP-0300(189)**

**JULY 17, 2023**

This Addendum shall make the following amendments to the Request for Proposals Documents:

**A. REQUEST FOR BEST AND FINAL OFFER**

1. The State of Hawaii, Department of Transportation (HDOT) requests prospective Offerors for Traffic Signal Controller Installation and Adaptive Traffic Signal Control Technology at Various Locations, Oahu, to submit a Best and Final Offer (BAFO) in response to this Addendum.
2. Prospective Offerors are hereby notified that the receiving of BAFO is scheduled for 2:00 PM, Hawaii Standard Time (HST), on July 31, 2023, via HlePRO. Hard copies will not be accepted.
3. Each Offeror, to which this request for BAFO is submitted, may change any provision of its original proposal in its BAFO. However, the primary purpose of this BAFO is to allow Offerors an opportunity to address questions and comments that arose during the demonstrations and discussions held from May 24-26, 2023. Please note that all discussions, whether verbal or in writing, were informal and are not considered part of an Offeror's proposal. Any changes, including those based on discussions with Offerors must be included in the Offeror's BAFO. Only those sections of the original submitted proposal that are changed must be re-submitted, with changes in revision text highlighted.
4. If the HDOT does not receive a BAFO by 2:00 PM, Hawaii Standard Time (HST), on July 31, 2023, the Offeror's previous proposal will be considered to be their BAFO.



5. If an Offeror would like to withdraw their proposal, a written request must be submitted to the RFP Point of Contact, prior to 2:00 PM, Hawaii Standard Time (HST), on July 31, 2023.


## **B. SPECIFICATIONS**

1. Subsection 1.5 (Procurement Timetable) – Delete page 11 and replace with the attached page 11 dated r7/17/23.
2. Subsection 1.17 (Contract; Contract and Performance Period) – Delete page 16 and replace with the attached page 16 dated r7/17/23.
3. Subsection 2.1 (Project Overview) – Delete page 20 and replace with the attached page 20 dated r7/17/23.
4. Subsection 3.1 (System/Equipment Procurement and Installation) – Delete page 22 and replace with the attached page 22 dated r7/17/23.
5. Subsection 3.1 (System/Equipment Procurement and Installation) – Delete page 24 and replace with the attached page 24 dated r7/17/23.
6. Subsection 3.4 (System Documentation) – Delete page 27 and replace with the attached page 27 dated r7/17/23.
7. Subsection 3.7 (Detection and Modem Maintenance) – Delete page 33 and replace with the attached page 33 dated r7/17/23.
8. Subsection 4.11 (Section 5: Proposed Technical Solution) – Delete page 43 and replace with the attached page 43 dated r7/17/23.
9. Delete Appendix B: Offer Form, OF-2, in its entirety and replace with attached Appendix B: Offer Form, OF-2, dated r7/17/23.
10. Delete Appendix H: Federal Aid Construction Requirements, page H-1, and replace with attached Appendix H: Federal Aid Construction Requirements, page H-1, dated r7/17/23.
11. Delete Appendix H: Federal Aid Construction Requirements, Federal Wage Rates, and replace with attached Appendix H: Federal Aid Construction Requirements, Federal Wage Rates, dated 3/17/23.



12. Delete Appendix I: Requirements Matrices, pages I-3, I-7, and I-16, and replace with attached Appendix I: Requirements Matrices, pages I-3, I-7, and I-16, dated r7/17/23.
13. Delete Appendix J: Special Provisions, Section 623 (Traffic Signal System), in its entirety and replace with attached Appendix J: Special Provisions, Section 623 (Traffic Signal System), dated r7/17/23.

Please acknowledge receipt of this Addendum No. 6 in your Best and Final Offer.



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ROBIN K. SHISHIDO  
Highways Deputy Director



HST	= Hawaii Standard Time
IP	= Internet Protocol
JTMC	= Joint Traffic Management Center
Offeror	= Any individual, partnership, firm, corporation, joint venture, limited liability company, or other legal entity
Procurement Officer	= The Director of the State of Hawaii, Department of Transportation as the contracting officer
RFP	= Request for Proposals
State	= State of Hawaii, including each department and political subdivisions
USPS	= United States Post Service

## 1.5. PROCUREMENT TIMETABLE

The schedule represents the HDOT's best estimate of the schedule that will be followed. All times indicated are Hawaii Standard Time (HST). If a component of this schedule, such as "Proposal Due date/time" is delayed, the rest of the schedule of dates and deadlines thereafter shall be shifted by the same number of calendar days; provided that if any date that is shifted falls on a weekend (Saturday or Sunday) or holiday, the date shall be the first working day following the weekend or holiday. The approximate schedule is presented in *Table 1*.

*Table 1: Significant Dates (subject to change)*

Release of Request for Proposals (RFP)	August 31, 2022
Pre-proposal Tele-Conference (non-mandatory)	September 12, 2022 10:00 AM (HST)
Deadline for submission of written questions	September 22, 2022 2:00 PM (HST)
HDOT's response to written questions	November 4, 2022
Proposal Due date/time (via HlePRO)	April 7, 2023 2:00 PM (HST)
Evaluation of Proposals	April 10, 2023- April 27, 2023
Determination of Priority-Listed Offerors	April 27, 2023
Demonstrations and Discussion with Priority-Listed Offerors	May 24, 2023- May 26, 2023
Best and Final Offer Due date/time (via HlePRO)	July 31, 2023 2:00 PM (HST)
Offeror Selection and Notice of Award	September 22, 2023
Contract Notice to Proceed 1	December 13, 2023
Contract Notice to Proceed 2	June 14, 2024
Contract Notice to Proceed 3	September 11, 2024





- f) Traffic signal system warranty (issued after acceptance of system implementation testing and burn-in of each intersection).
- g) Detection and Modem Maintenance (issued after acceptance of system implementation testing and burn-in of each intersection).
- h) Litigation support
- i) Develop and implement recommended optimization measures
- j) Offeror-furnished controller and conflict monitor implementation
- k) IP communication implementation
- l) EOC communication implementation

- 3) NTP3 (360 calendar days) – Issued for subsequent phases of the field implementation activities following Offeror's proposed and Engineer-accepted deployment phasing. NTP3 will not be issued until Phase 1 System implementation testing and burn-in period is successfully completed. Work under NTP3 includes but is not limited to:
  - a) State-furnished controller, conflict monitor unit and cellular modem implementation
  - b) Automated Traffic Signal Performance Measures (ATSPM) module implementation
  - c) Supplemental detection implementation (per Appendix K, HDOT Oahu Traffic Signal Inventory)
  - d) ATCS implementation (per Appendix K, HDOT Oahu Traffic Signal Inventory)
  - e) System implementation testing and burn-in period
  - f) Traffic signal system warranty (issued after acceptance of system implementation testing and burn-in of each intersection).
  - g) Detection and Modem Maintenance (issued after acceptance of system implementation testing and burn-in of each intersection).
  - h) Litigation support
  - i) Develop and implement recommended optimization measures



- 4) Traffic Signal System Warranty Period (1095 calendar days) – At the conclusion of NTP3, the Offeror shall continue to provide warranty, optimization, and litigation support for a period of 36 months. Work under the Traffic Signal System Warranty Period includes but is not limited to:
  - a) Traffic signal system warranty (issued after acceptance of system implementation testing and burn-in of each intersection).
  - b) Detection and Modem Maintenance (issued after acceptance of system implementation testing and burn-in of each intersection).
  - c) Litigation support
  - d) Develop and implement recommended optimization measures



Unless terminated, the Offeror and the State may extend the term for 169 calendar days without the necessity of resoliciting.

#### 1.17.3. Coordination Between the Contractors

Other work by the other contractors may be in progress within or near the project limits. The Contractor shall conduct work so as not to hinder the progress of the work by other contractors within or near the project limits. The Contractor shall be responsible for any damage it causes to work of another contractor. Contractors shall cooperate with each other, including but not limited to:

- 1) Coordinating their work schedules and traffic control plans.
- 2) Placing and disposing the materials used.
- 3) Operating and storage of equipment.

The Contractor shall coordinate its work with adjacent projects, including but not limited to:



## 2. RFP PURPOSE AND OVERVIEW

### 2.1. PROJECT OVERVIEW

This project seeks to acquire:

- Traffic signal central system, including head-end software and server hardware.
- Configuration and installation of approximately 255 State-furnished traffic signal controllers on Oahu. The State-furnished traffic signal controllers will be the Q-Free Intelight 2070LX controller.
- Local controller firmware, including configuration.
- Conflict monitor units, which are compatible with the State-furnished and Offeror-furnished controllers.
- Cellular modems and required accessories with FirstNet cellular service
- ATCS and ATSPM modules at 118 Oahu intersections
- Supplemental traffic detection at 118 Oahu intersections
- Implementation and integration of State-furnished controllers, firmware, conflict monitor units, cellular modems, ATCS, ATSPM modules, and the central traffic management system.
- Training of State and County personnel on vendor firmware, central management system, and controller hardware.
- Litigation support.
- Traffic signal system warranty period.
- **Detection and Modem Maintenance**
- Software assurance support.
- Configuration and installation of two (2) Offeror-furnished traffic signal controllers on Oahu.
- IP and Ethernet over Copper (EOC) communication equipment.
- Implementation and integration of two (2) Offeror-furnished controllers, firmware, conflict monitor units, IP/EOC communication, and the central traffic management system.

See *Appendix K HDOT Oahu Traffic Signal Inventory* for a list of HDOT signalized intersections on Oahu

See *Appendix K1 DTS Oahu Traffic Signal Inventory* for a list of DTS signalized intersections on Oahu. The Offeror-furnished controllers will be installed at intersection numbers C138 and C139.





- One workstation and monitor, including all accessories such as keyboard and mouse. Workstation shall comply with the following minimum requirements:
  - WIN 11 Pro Edition or latest commercial version (approved by Engineer)
  - Dual network interface card capability
  - 32GB Memory
  - 1TB solid state hard drive
  - Intel Core i9-12900
  - Mini-Tower form
  - 2-24" monitors
  - 5 Year support with Next Business Day Onsite Service
- Four (4) network interface cards for existing client workstations (1Gbps min capacity). Existing workstations are located on the second floor, on the Operations Floor.

Jumper cables between rack equipment will be responsibility of Offeror. Traffic signal central system procurement will not be paid for separately but will be considered incidental to Traffic Signal Central System Implementation.

#### 3.1.2. **Traffic Signal Central System Licenses**

Procure and integrate all traffic signal central system licenses necessary for the 255 State intersections and 2 City intersections. All periodic costs (e.g., annual) shall be covered for the duration of the Contract.

The Engineer will pay for the accepted Traffic Signal Central System License at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

#### 3.1.3. **Local Controller Firmware**

Procure, configure, and install local controller firmware on State-furnished controller hardware, which will be Q-Free Intelight 2070LX controllers with the Linux 2015.05.152 kernel or as updated, and Offeror-furnished 2070LX controller. The new local controller firmware shall be compatible with the new head-end software, the State-furnished controller hardware, and Offeror-furnished controller hardware.

The Engineer will pay for the accepted Local Controller Firmware at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

#### 3.1.4. **Conflict Monitor Units**

Procure **and configure** new Model 2010 conflict monitor units, compatible with the State-furnished controllers and the Offeror-furnished controllers.





3.1.7. **Adaptive Traffic Control System (ATCS)**

Procure, configure, and integrate ATCS as an available feature in the traffic signal system. The ATCS shall integrate seamlessly with the new head-end software and the local controller firmware. The functional and technical requirements for the ATCS are defined in *Appendix I*. All periodic costs (e.g., annual) shall be covered for the duration of the Contract.

The Engineer will pay for the accepted ATCS at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

3.1.8. **Automated Traffic Signal Performance Measures (ATSPM) Modules**

Procure, configure, and integrate the traffic signal central system's ATSPM module and intersection modules to provide ATSPM for locations identified for ATCS in Appendix K, HDOT Oahu Traffic Signal Inventory. All ATSPM modules shall be compatible with the new head-end software and the local controller firmware. All periodic costs (e.g., annual) shall be covered for the duration of the Contract.

The Engineer will pay for the accepted ATSPM modules at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

3.1.9. **Supplemental Intersection Detection**

Procure, configure, and install intersection detection and mid-block magnetometer detection at select intersections, as shown in Appendix K, HDOT Oahu Traffic Signal Inventory.

The Engineer will pay for the accepted intersection and mid-block magnetometer detection at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

3.1.10. **Service Agreement Extension**

Provide an extension to all service agreements, licenses, and software assurance provided as part of this Contract. See Section 3.9 for more details.

The Engineer will pay for the accepted extension at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

3.1.11. **Offeror-Furnished Traffic Signal Controller**

Procure **and configure** new 2070LX controllers. The functional and technical requirements for the 2070LX controllers to be procured are defined in Appendix I.

The Engineer will pay for the accepted Offeror-furnished controller at the contract price per pay unit, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

3.1.12. **Ethernet over Copper (EOC) Extender**





The Engineer will pay for the accepted refresh training on a contract lump sum basis. Payment will be full compensation for work prescribed in this section and the contract documents.

### 3.4. SYSTEM DOCUMENTATION

#### 3.4.1. Site Evaluation of Existing Conditions (HDOT Intersections Only)

Offeror shall conduct a site evaluation of all HDOT intersections included in this project within 90 calendar days of NTP1. This shall include but not be limited to:

1. Physical inventory of all traffic signal controller cabinets and existing detection included in this project. All existing traffic signal controller equipment should comply with the Hawaii Standard Specification Subsection 770.05 – Controller Equipment. Identify any incompatibility issues which might prevent the implementation of this scope. Present all such issues to the Engineer for evaluation.
2. Confirm adequate cabinet space and power sources for all contractor furnished items, including cellular modem(s). Identify any cabinet space issues which may prevent implementation of this scope. Present all such issues to the Engineer for evaluation.
3. Assess the existing operating conditions. As part of the site evaluation, the Offeror shall also determine if there are any non-functioning traffic signal equipment that would affect the traffic signal optimization work described in *Section 3.10*.
4. Retrieve existing signal timing plans from the traffic signal controllers and existing traffic signal system, as needed. Furnish retrieved timing plans to the Engineer for confirmation prior to implementation.
5. Survey cellular signal strengths at every intersection included in this project. Identify any signal strength issues which may prevent the implementation of this scope. Present all such issues to the Engineer for evaluation.
6. Identify and document in plan format locations for intersection detection sensors, midblock magnetometer detectors and support equipment, and auxiliary magnetometer detectors and support equipment. Identify any mounting issues which may prevent the implementation of this scope. Present all such issues to the Engineer for evaluation.
7. Document intersection detection to support completion of central system graphical user interfaces as described in Requirement C-104 of Appendix I including but not limited to vehicles, pedestrians, bicycle, emergency vehicle preemption, railroad preemption, and transit priority detection calls.

#### 3.4.2. Documentation of Proposed System

The Offeror shall fulfill the following documentation requirements:

1. Provide detailed system documentation in both hard copy (minimum 5 bound, full sets printed in color) and soft copy (PDF format).
2. This documentation shall include the system component design, configuration, training, as-built drawings, operation, maintenance, and user manuals.
  - a. Off-the-shelf user manuals provided by the proposed manufacturers of the equipment will be acceptable.
3. All documentation shall be in English and shall utilize U.S. measurements.

The system documentation shall:

1. Be complete, accurate, up-to-date, and contain only information that pertains to the system components installed.
2. Contain a complete subject index.
3. Contain the title, version number, and issue date on each page.



The Engineer will pay for the accepted Traffic Signal Timing Optimization Approach on a contract lump sum basis. Payment will be full compensation for work prescribed in this section and the contract documents.

3.6.2. **Develop and Implement Recommended Optimization Measures**

When directed by the Engineer, the Offeror shall:

1. Develop the optimized signal timing plans based upon their approved methodology from *Section 3.6.1*.
2. Implement the approved signal timing plans and fine tune, as necessary.
3. Fine tune configuration of the ATCS based on accumulated traffic performance measures.

Develop and Implement Recommended Optimization Measures will be paid on a force account basis in accordance with HDOT Standard Specifications currently Subsection-109.06 – Force Account Provisions and Compensation and as ordered by the Engineer.

3.7. **DETECTION AND MODEM MAINTENANCE**

After the acceptance of each intersection and during the Warranty period, the Offeror shall provide maintenance services for the following items:

- Intersection Detection
- Mid-Block Magnetometer Detection
- Cellular Modems

For these items, the Offeror shall:

1. Conduct routine maintenance and checks to ensure normal working order for the above items. Tasks include (but are not limited to) the following:
  - a. Annual maintenance and check of Intersection Detection System, including adjustment of vehicle detection zones to optimize performance for current field conditions.
    - i. All video detector lenses shall be cleaned once per year (or more frequently) as needed to ensure optimum performance.
  - b. Annual maintenance and check of Mid-Block Magnetometer Detection System, including check of battery levels for all Magnetometers and Repeaters.
2. In conjunction with warranty requirements in Section 3.9, provide labor and materials to adjust, repair, or replace any malfunctioning equipment within 24 hours from time of notification. Temporarily replace malfunctioning equipment requiring offsite repair. Install repaired or new equipment no later than 30 days from time of notification.
  - a. Adjustment, repair, and replacement work for malfunctioning equipment due to damage resulting from unforeseen adverse events (such as motor vehicle accident, vandalism, or tropical force winds) or due to unforeseen field conditions (such as new construction from other projects affecting signal operations) may be identified to the Engineer and considered for payment on a Force Account basis as Additional Signal Work and Equipment. See Appendix J Special Provision 623 for more information.
3. Procure the use of traffic control devices and/or Special Duty Police Officers at his own cost to conduct maintenance operations.

The Engineer will pay for the accepted Detection and Modem Maintenance at the contract price per intersection, per month, as shown in OF-2, Offer Form. Payment will be full compensation for work prescribed in this section and the contract documents.

Any required traffic signal system maintenance of Contractor-provided material and equipment prior to acceptance of an intersection will not be paid separately but will be considered incidental to the various items.

3.8. **TRAFFIC SIGNAL OPERATION AND LITIGATION SUPPORT**

As directed by the Engineer, the Offeror shall provide support to the HDOT throughout the Traffic Signal System Warranty period, including:

1. Litigation Support
  - a. Provide documentation as requested by the State.
  - b. Provide deposition on the operation of the Contractor-provided traffic signal system.
  - c. Provide testimony on the operation of the Contractor-provided traffic signal system, as needed.
2. Complaint Response and Resolution
  - a. Provide written responses, on behalf of HDOT, to the Engineer for its review and further action of any traffic signal complaints, inquiries, or comments related to the Contractor-provided traffic signal system.
  - b. Investigate to qualify complaint and determine needed work for a resolution.
  - c. Modify traffic signal operation, as needed.
  - d. Coordinate with City and County of Honolulu, Department of Transportation Services on any needed assistance.

Engineer will coordinate JTMC site access for the successful Offeror, as needed.

Litigation Support will be paid on a force account basis in accordance with HDOT 2005 Standard Specifications for Road and Bridge Construction, as amended (HDOT Standard Specifications) currently Subsection 109.06 – Force Account Provisions and Compensation and as ordered by the Engineer. Any required traffic signal operation of Contractor-





Complies with Exception, Complies with New Development, or Non-Compliance. Following is how each is defined:

- **Comply.** If the Offeror believes its proposed system meets the desired functionality, complies with the requirements listed, and is currently developed and available for shipment and installation, it must be so noted as “comply” on the Requirements Matrices. Offeror shall include a concise explanation of the solution and how the requirement will be met.
- **Complies with Exception.** If the Offeror believes the desired functionality is partially met or present in another form other than as stated, it must be so noted as “complies with exception” on the Requirements Matrices. Offeror shall include a concise explanation of the alternative or partial solution.
- **Complies with New Development.** If the Offeror believes its proposed system does not meet the desired functionality but is proposing to meet the requirements with new development (hardware or software), it must be so noted as “complies with new development” on the Requirements Matrices. Offeror shall include a concise explanation of how the requirement will be met including details on the new development that will be required.
- **Non-Compliance.** If the Offeror believes its proposed system does not currently and will not comply with a listed requirement, it must be so noted as “non-compliance” on the Requirements Matrices. Offeror shall include a detailed explanatory statement and necessary documentation for a “non-compliance” response.

The Offeror shall describe the products included in the Offeror’s Proposal, how they work together (including a physical architecture diagram), and how they will allow the Offeror to meet the RFP requirements. The Offeror shall discuss the outlook for these products and their manufacturers to describe their anticipated long-term viability and place in their markets. **If available, the Offeror shall also provide Mean Time Between Failure (MTBF) information for the proposed products including the Offeror-furnished controller, intersection detection, mid-block magnetometer detection, cellular modem, and EOC extender.**



**The Offeror will list and detail all items of the proposed technical solution that will require additional subscriptions, licenses, and fees at the end of the warranty period or the software assurance period. This includes (but is not limited to) any subscriptions and or fees for the following items:**

- **Central System**
- **Individual Controllers**
- **ATSPM functionality**
- **ATCS functionality**
- **Video analytics**

In addition to addressing the requirements matrix, the Offeror shall address in their response the following future programs that will require some integration with HDOT’s selected Traffic Signal System.

- As part of HDOT’s traffic signal modernization program, implementation of an asset management system is being evaluated. Please elaborate on your proposed solution and how it might be used as, or integrate with, an asset management system for HDOT’s traffic signal system.

#### **4.12. SECTION 6: SOFTWARE ASSURANCE**

The Offeror shall describe the software assurance support services included and any conditions associated with the software assurance support.



**APPENDIX B: OFFER FORM, OF-2**

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.0100	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	\$250,000.00
623.1100	Intersection Detection (4-Way)	77	EACH	\$ _____	\$ _____
623.1200	Intersection Detection (3-Way)	35	EACH	\$ _____	\$ _____
623.1300	Intersection Detection (2-Way)	6	EACH	\$ _____	\$ _____
623.2100	Mid-Block Magnetometer Detection, per Intersection	100	EACH	\$ _____	\$ _____
623.4100	Additional Signal Work and Equipment	F.A.	F.A.	F.A.	<b>\$2,500,000.00</b>
636.0100	Additional E-Construction Programs, Additional Licenses, or Additional Equipment	F.A.	F.A.	F.A.	\$150,000.00
645.0200	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$250,000.00
696.0100	Maintenance of Trailers	F.A.	F.A.	F.A.	\$100,000.00
697.3012	Traffic Signal Central System Licenses	257	EACH	\$ _____	\$ _____
697.3013	Local Controller Firmware	257	EACH	\$ _____	\$ _____
697.3016	Cellular Data Service	15,912	MONTHS	\$ _____	\$ _____



ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
697.3017	ATCS, per Intersection	118	EACH	\$ _____	\$ _____
697.3018	ATSPM Module, per Intersection	118	EACH	\$ _____	\$ _____
697.3019	Software Assurance Agreement Two Year Extension	L.S.	L.S.	L.S.	\$ _____
697.3030	Training	L.S.	L.S.	L.S.	\$ _____
697.3031	Refresh Training	L.S.	L.S.	L.S.	\$ _____
697.3040	System Documentation	L.S.	L.S.	L.S.	\$ _____
697.3041	As-Builts	L.S.	L.S.	L.S.	\$ _____
697.3052	Traffic Signal Central System Implementation	L.S.	L.S.	L.S.	\$ _____
697.3053	State-furnished Controller, Conflict Monitor Unit, and Cellular Modem Implementation, per Intersection	255	EACH	\$ _____	\$ _____
697.3101	Traffic Signal Timing Optimization Approach	L.S.	L.S.	L.S.	\$ _____
697.3102	Develop and Implement Recommended Optimization Measures	F.A.	F.A.	F.A.	\$1,750,000.00
697.3201	Detection and Modem Maintenance, per Intersection	10,836	MONTHS	\$ _____	\$ _____



ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
697.3202	Litigation Support	F.A.	F.A.	F.A.	\$500,000.00
697.3301	Conflict Monitor Unit	257	EACH	\$ _____	\$ _____
697.3302	Cellular Modem	373	EACH	\$ _____	\$ _____
697.3303	Offeror-furnished Traffic Signal Controller	2	EACH	\$ _____	\$ _____
697.3304	Offeror-furnished Controller and Conflict Monitor Unit Implementation, per Intersection	2	EACH	\$ _____	\$ _____
697.3305	IP Communication Implementation, per Intersection	1	EACH	\$ _____	\$ _____
697.3306	EOC Communication Implementation, per Intersection	1	EACH	\$ _____	\$ _____
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.	\$ _____

Total contract cost for accomplishing the development and delivery of the above services.

\$ \_\_\_\_\_

**Note: Pricing shall include labor, materials, supplies, all applicable taxes, and any other costs incurred to provide the specified services.**



I certify that, to the best of my knowledge and belief, the pricing data and cost included in OF-2 is accurate, complete, and current as of \_\_\_\_\_, 2023 and will be honored for up to a maximum of 90 days or as provided in section 1.16, or until the contract is executed, whichever is sooner.

Authorized (Original) Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Offeror: \_\_\_\_\_

Name of Company



## APPENDIX H: FEDERAL AID CONSTRUCTION REQUIREMENTS

The U.S. Department of Transportation Regulations entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Programs", Title 49, Code of Federal Regulations, Part 26 is applicable to this project. Offerors are hereby notified that the Department of Transportation will strictly enforce full compliance with all of the requirements of the Disadvantaged Business Enterprise (DBE) program with respect to this project.

Offerors are directed to read and be familiar with EXHIBIT B Requirements for Participation By Disadvantaged Business Enterprises (DBEs), which establishes the program requirements pursuant to Title 49 Code of Federal Regulations Part 26 and, particularly, the requirements of certification, method of award, and evidence of good faith. The DBE forms included in Appendix H shall be submitted by the cost proposal deadline. **Bidders wishing to provide updated DBE forms by email may submit to the Engineer at [tara.yi.lucas@hawaii.gov](mailto:tara.yi.lucas@hawaii.gov)** the Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction, Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Trucking Company and Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement –Subcontractor, Manufacturer, or Supplier by **July 31**, 2023 at 2:00 PM HST. Failure to provide these documents shall be cause for bid/proposal rejection.



"General Decision Number: HI20230001 03/17/2023

Superseded General Decision Number: HI20220001

State: Hawaii

Construction Types: Building, Heavy (Heavy and Dredging), Highway and Residential

Counties: Hawaii Statewide.

BUILDING CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories); HEAVY AND HIGHWAY CONSTRUCTION PROJECTS AND DREDGING

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.



Modification Number	Publication Date
0	01/06/2023
1	01/13/2023
2	01/27/2023
3	02/17/2023
4	02/24/2023
5	03/10/2023
6	03/17/2023

ASBE0132-001 06/05/2022

Rates	Fringes
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## Asbestos Workers/Insulator

Includes application of  
all insulating materials,  
protective coverings,  
coatings and finishes to  
all types of mechanical  
systems. Also the  
application of  
firestopping material for  
wall openings and  
penetrations in walls,  
floors, ceilings and  
curtain walls.....

\$ 42.80	25.85
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BOIL0627-005 01/01/2021

Rates	Fringes
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BOILERMAKER.....\$ 37.25	31.25
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BRHI0001-001 09/05/2022

Rates	Fringes
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## BRICKLAYER

Bricklayers and Stonemasons.\$ 47.24	31.33
Pointers, Caulkers and Weatherproofers.....\$ 47.49	31.33

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BRHI0001-002 09/05/2022

Rates	Fringes
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## Tile, Marble &amp; Terrazzo Worker

Terrazzo Base Grinders.....\$ 43.79	33.10
Terrazzo Floor Grinders and Tenders.....\$ 42.24	33.10
Tile, Marble and Terrazzo Workers.....\$ 45.60	33.10

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CARP0745-001 10/01/2021

Rates	Fringes
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## Carpenters:

Carpenters; Hardwood Floor  
Layers; Patent Scaffold  
Erectors (14 ft. and  
over); Piledrivers;  
Pneumatic Nailers; Wood  
Shinglers and Transit



and/or Layout Man.....	\$ 51.25	24.84
Millwrights and Machine Erectors.....	\$ 51.50	24.84
Power Saw Operators (2 h.p. and over).....	\$ 51.40	24.84

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CARP0745-002 10/01/2021

	Rates	Fringes
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Drywall and Acoustical Workers and Lathers.....	\$ 51.50	24.84
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ELEC1186-001 08/22/2022

	Rates	Fringes
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## Electricians:

Cable Splicers.....	\$ 60.51	30.90
Electricians.....	\$ 53.55	30.69
Telecommunication worker....	\$ 34.94	13.69

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ELEC1186-002 08/22/2022

	Rates	Fringes
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## Line Construction:

Cable Splicers.....	\$ 60.51	30.90
Groundmen/Truck Drivers.....	\$ 40.16	25.34
Heavy Equipment Operators...	\$ 48.20	28.43
Linemen.....	\$ 53.55	30.69
Telecommunication worker....	\$ 34.94	13.69

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ELEV0126-001 01/01/2023

	Rates	Fringes
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ELEVATOR MECHANIC.....	\$ 68.08	37.335+a+b
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a. VACATION: Employer contributes 8% of basic hourly rate for 5 years service and 6% of basic hourly rate for 6 months to 5 years service as vacation pay credit.

b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

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ENGI0003-002 09/03/2018

	Rates	Fringes
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## Diver (Aqua Lung) (Scuba))

Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)...	\$ 66.00	31.26
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)...	\$ 56.63	31.26
Stand-by Diver (Aqua Lung) (Scuba).....	\$ 47.25	31.26

## Diver (Other than Aqua Lung)

Diver (Other than Aqua Lung).....	\$ 66.00	31.26
Diver Tender (Other than Aqua Lung).....	\$ 44.22	31.26
Stand-by Diver (Other than		



Aqua Lung).....	\$ 47.25	31.26
Helicopter Work		
Airborne Hoist Operator		
for Helicopter.....	\$ 45.80	31.26
Co-Pilot of Helicopter.....	\$ 45.98	31.26
Pilot of Helicopter.....	\$ 46.11	31.26
Power equipment operator -		
tunnel work		
GROUP 1.....	\$ 42.24	31.26
GROUP 2.....	\$ 42.35	31.26
GROUP 3.....	\$ 42.52	31.26
GROUP 4.....	\$ 42.79	31.26
GROUP 5.....	\$ 43.10	31.26
GROUP 6.....	\$ 43.75	31.26
GROUP 7.....	\$ 44.07	31.26
GROUP 8.....	\$ 44.18	31.26
GROUP 9.....	\$ 44.29	31.26
GROUP 9A.....	\$ 44.52	31.26
GROUP 10.....	\$ 44.58	31.26
GROUP 10A.....	\$ 44.73	31.26
GROUP 11.....	\$ 44.88	31.26
GROUP 12.....	\$ 45.24	31.26
GROUP 12A.....	\$ 45.60	31.26
Power equipment operators:		
GROUP 1.....	\$ 41.94	31.26
GROUP 2.....	\$ 42.05	31.26
GROUP 3.....	\$ 42.22	31.26
GROUP 4.....	\$ 42.49	31.26
GROUP 5.....	\$ 42.80	31.26
GROUP 6.....	\$ 43.45	31.26
GROUP 7.....	\$ 43.77	31.26
GROUP 8.....	\$ 43.88	31.26
GROUP 9.....	\$ 43.99	31.26
GROUP 9A.....	\$ 44.22	31.26
GROUP 10.....	\$ 44.28	31.26
GROUP 10A.....	\$ 44.43	31.26
GROUP 11.....	\$ 44.58	31.26
GROUP 12.....	\$ 44.94	31.26
GROUP 12A.....	\$ 45.30	31.26
GROUP 13.....	\$ 42.22	31.26
GROUP 13A.....	\$ 42.49	31.26
GROUP 13B.....	\$ 42.80	31.26
GROUP 13C.....	\$ 43.45	31.26
GROUP 13D.....	\$ 43.77	31.26
GROUP 13E.....	\$ 43.88	31.26

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

GROUP 3: Brakeman; Deckhand; Fireman; Oiler; Oiler/Gradechecker; Signalman; Switchman; Highline Cableway Signalman; Bargeman; Bunkerman; Concrete Curing Machine (self-propelled, automatically applied unit on streets, highways, airports and canals); Leveeman; Roller (5 tons and under); Tugger Hoist.

GROUP 4: Boom Truck or dual purpose ""A"" Frame Truck (5 tons or less); Concrete Placing Boom (Building Construction); Dinky Operator; Elevator Operator; Hoist and/or Winch (one drum); Straddle Truck (Ross Carrier, Hyster and similar).



GROUP 5: Asphalt Plant Fireman; Compressors, Pumps, Generators and Welding Machines ("Bank" of 9 or more, individually or collectively); Concrete Pumps or Pumpcrete Guns; Lubrication and Service Engineer (Grease Rack); Screedman.

GROUP 6: Boom Truck or Dual Purpose "A" Frame Truck (over 5 tons); Combination Loader/Backhoe (up to and including 3/4 cu. yd.); Concrete Batch Plants (wet or dry); Concrete Cutter, Groover and/or Grinder (self-propelled unit on streets, highways, airports, and canals); Conveyor or Concrete Pump (Truck or Equipment Mounted); Drilling Machinery (not to apply to waterliners, wagon drills or jack hammers); Fork Lift (over 10 tons); Loader (up to and including 3 and 1/2 cu. yds); Lull High Lift (under 40 feet); Lubrication and Service Engineer (Mobile); Maginnis Internal Full Slab Vibrator (on airports, highways, canals and warehouses); Man or Material Hoist; Mechanical Concrete Finisher (Large Clary, Johnson Bidwell, Bridge Deck and similar); Mobile Truck Crane Driver; Portable Shotblast Concrete Cleaning Machine; Portable Boring Machine (under streets, highways, etc.); Portable Crusher; Power Jumbo Operator (setting slip forms, etc., in tunnels); Rollers (over 5 tons); Self-propelled Compactor (single engine); Self-propelled Pavement Breaker; Skidsteer Loader with attachments; Slip Form Pumps (Power driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms); Small Rubber Tired Tractors; Trencher (up to and including 6 feet); Underbridge Personnel Aerial Platform (50 feet of platform or less).

GROUP 7: Crusher Plant Engineer, Dozer (D-4, Case 450, John Deere 450, and similar); Dual Drum Mixer, Extend Lift; Hoist and/or Winch (2 drums); Loader (over 3 and 1/2 cu. yds. up to and including 6 yards.); Mechanical Finisher or Spreader Machine (asphalt), (Barber Greene and similar) (Screedman required); Mine or Shaft Hoist; Mobile Concrete Mixer (over 5 tons); Pipe Bending Machine (pipelines only); Pipe Cleaning Machine (tractor propelled and supported); Pipe Wrapping Machine (tractor propelled and supported); Roller Operator (Asphalt); Self-Propelled Elevating Grade Plane; Slusher Operator; Tractor (with boom) (D-6, or similar); Trencher (over 6 feet and less than 200 h.p.); Water Tanker (pulled by Euclids, T-Pulls, DW-10, 20 or 21, or similar); Winchman (Stern Winch on Dredge).

GROUP 8: Asphalt Plant Operator; Barge Mate (Seagoing); Cast-in-Place Pipe Laying Machine; Concrete Batch Plant (multiple units); Conveyor Operator (tunnel); Deckmate; Dozer (D-6 and similar); Finishing Machine Operator (airports and highways); Gradesetter; Kolman Loader (and similar); Mucking Machine (Crawler-type); Mucking Machine (Conveyor-type); No-Joint Pipe Laying Machine; Portable Crushing and Screening Plant; Power Blade Operator (under 12); Saurman Type Dragline (up to and including 5 yds.); Stationary Pipe Wrapping, Cleaning and Bending Machine; Surface Heater and Planer Operator, Tractor (D-6 and similar); Tri-Batch Paver; Tunnel Badger; Tunnel Mole and/or Boring Machine Operator Underbridge Personnel Aerial Platform (over 50 feet of platform).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loader and Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).



GROUP 9A: Dozer (D-8 and similar); Gradesetter (when required by the Contractor to work from drawings, plans or specifications without the direct supervision of a foreman or superintendent); Push Cat; Scrapers (up to and including 20 cu. yds); Self-propelled Compactor with Dozer; Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds) (621 Band and similar); Sheep's Foot; Tractor (D-8 and similar); Tractors with boom (larger than D-6, and similar).

GROUP 10: Chicago Boom; Cold Planers; Heavy Duty Repairman or Welder; Hoist and/or Winch (3 drums); Hydraulic Skooter (Koehring and similar); Loader (over 6 cu. yds. up to and including 12 cu. yds.); Saurman type Dragline (over 5 cu. yds.); Self-propelled, rubber-tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar); Soil Stabilizer (P & H or equal); Sub-Grader (Gurries or other automatic type); Tractors (D-9 or equivalent, all attachments); Tractor (Tandem Scraper); Watch Engineer.

GROUP 10A: Boat Operator; Cable-operated Crawler Crane (up to and including 25 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (up to and including 1 cu. yd.); Dozer D9-L; Dozer (D-10, HD41 and similar) (all attachments); Gradall (up to and including 1 cu. yd.); Hydraulic Backhoe (over 3/4 cu. yds. up to and including 2 cu. yds.); Mobile Truck Crane Operator (up to and including 25 tons) (Mobile Truck Crane Driver Required); Self-propelled Boom Type Lifting Device (Center Mount) (up to and including 25 tons) (Grove, Drott, P&H, Pettibone and similar); Trencher (over 6 feet and 750 h.p. or more); Watch Engineer (steam or electric).

GROUP 11: Automatic Slip Form Paver (concrete or asphalt); Band Wagon (in conjunction with Wheel Excavator); Cable-operated Crawler Cranes (over 25 tons but less than 50 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (over 1 cu. yd. up to 7 cu. yds.); Gradall (over 1 cu. yds. up to 7 cu. yds.); DW-10, 20, etc. (Tandem); Earthmoving Machines (multiple propulsion power units and 2 or more Scrapers) (up to and including 35 cu. yds., "struck" m.r.c.); Highline Cableway; Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.); Leverman; Lift Slab Machine; Loader (over 12 cu. yds); Master Boat Operator; Mobile Truck Crane Operator (over 25 tons but less than 50 tons); (Mobile Truck Crane Driver required); Pre-stress Wire Wrapping Machine; Self-propelled Boom-type Lifting Device (Center Mount) (over 25 tons m.r.c); Self-propelled Compactor (with multiple-propulsion power units); Single Engine Rubber Tired Earthmoving Machine (with Tandem Scraper); Tandem Cats; Trencher (pulling attached shield).

GROUP 12: Clamshell or Dipper Operator; Derricks; Drill Rigs; Multi-Propulsion Earthmoving Machines (2 or more Scrapers) (over 35 cu. yds "struck" m.r.c.); Operators (Derricks, Piledrivers and Cranes); Power Shovels and Draglines (7 cu. yds. m.r.c. and over); Self-propelled rubber-tired Earthmoving equipment (over 31 cu. yds.) (657B and similar); Wheel Excavator (up to and including 750 cu. yds. per hour); Wheel Excavator (over 750 cu. yds. per hour).

GROUP 12A: Dozer (D-11 or similar or larger); Hydraulic



Excavators (over 4 cu. yds.); Lifting cranes (50 tons and over); Pioneering Dozer/Backhoe (initial clearing and excavation for the purpose of providing access for other equipment where the terrain worked involves 1-to-1 slopes that are 50 feet in height or depth, the scope of this work does not include normal clearing and grubbing on usual hilly terrain nor the excavation work once the access is provided); Power Blade Operator (Cat 12 or equivalent or over); Straddle Lifts (over 50 tons); Tower Crane, Mobile; Traveling Truss Cranes; Universal, Liebherr, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level); Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump Truck, over 8 cu. yds. (water level).

GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump or Roll-Offs).

GROUP 13D: Truck Driver (Slip-In or Pup).

GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar or similar); Tractor Trailer (Hauling Equipment); Tandem Trucks hooked up to Trailer (Hauling Equipment)

BOOMS AND/OR LEADS (HOURLY PREMIUMS):

The Operator of a crane (under 50 tons) with a boom of 80 feet or more (including jib), or of a crane (under 50 tons) with leads of 100 feet or more, shall receive a per hour premium for each hour worked on said crane (under 50 tons) in accordance with the following schedule:

Booms of 80 feet up to but not including 130 feet or Leads of 100 feet up to but not including 130 feet	0.50
Booms and/or Leads of 130 feet up to but not including 180 feet	0.75
Booms and/or Leads of 180 feet up to and including 250 feet	1.15
Booms and/or Leads over 250 feet	1.50

The Operator of a crane (50 tons and over) with a boom of 180 feet or more (including jib) shall receive a per hour premium for each hour worked on said crane (50 tons and over) in accordance with the following schedule:

Booms of 180 feet up to and including 250 feet	1.25
Booms over 250 feet	1.75

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 ENGI0003-004 09/04/2017

Rates

Fringes



Dredging: (Boat Operators)		
Boat Deckhand.....	\$ 41.22	30.93
Boat Operator.....	\$ 43.43	30.93
Master Boat Operator.....	\$ 43.58	30.93
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1.....	\$ 43.94	30.93
GROUP 2.....	\$ 43.28	30.93
GROUP 3.....	\$ 42.88	30.93
GROUP 4.....	\$ 41.22	30.93
Dredging: (Derricks)		
GROUP 1.....	\$ 43.94	30.93
GROUP 2.....	\$ 43.28	30.93
GROUP 3.....	\$ 42.88	30.93
GROUP 4.....	\$ 41.22	30.93
Dredging: (Hydraulic Suction Dredges)		
GROUP 1.....	\$ 43.58	30.93
GROUP 2.....	\$ 43.43	30.93
GROUP 3.....	\$ 43.28	30.93
GROUP 4.....	\$ 43.22	30.93
GROUP 5.....	\$ 37.88	26.76
Group 5.....	\$ 42.88	30.93
GROUP 6.....	\$ 37.77	26.76
Group 6.....	\$ 42.77	30.93
GROUP 7.....	\$ 36.22	26.76
Group 7.....	\$ 41.22	30.93

## CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

GROUP 1: Clamshell or Dipper Operator.  
 GROUP 2: Mechanic or Welder; Watch Engineer.  
 GROUP 3: Barge Mate; Deckmate.  
 GROUP 4: Bargeman; Deckhand; Fireman; Oiler.

## HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

GROUP 1: Leverman.  
 GROUP 2: Watch Engineer (steam or electric).  
 GROUP 3: Mechanic or Welder.  
 GROUP 4: Dozer Operator.  
 GROUP 5: Deckmate.  
 GROUP 6: Winchman (Stern Winch on Dredge)  
 GROUP 7: Deckhand (can operate anchor scow under direction of Deckmate); Fireman; Leveeman; Oiler.

## DERRICK CLASSIFICATIONS

GROUP 1: Operators (Derricks, Piledrivers and Cranes).  
 GROUP 2: Saurman Type Dragline (over 5 cubic yards).  
 GROUP 3: Deckmate; Saurman Type Dragline (up to and including 5 yards).  
 GROUP 4: Deckhand, Fireman, Oiler.

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 ENGI0003-044 09/03/2018

	Rates	Fringes
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Power Equipment Operators  
(PAVING)

Asphalt Concrete Material		
Transfer.....	\$ 42.92	32.08
Asphalt Plant Operator.....	\$ 43.35	32.08
Asphalt Raker.....	\$ 41.96	32.08



Asphalt Spreader Operator...	\$ 43.44	32.08
Cold Planer.....	\$ 43.75	32.08
Combination Loader/Backhoe (over 3/4 cu.yd.).....	\$ 41.96	32.08
Combination Loader/Backhoe (up to 3/4 cu.yd.).....	\$ 40.98	32.08
Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals).....	\$ 42.92	32.08
Grader.....	\$ 43.75	32.08
Laborer, Hand Roller.....	\$ 41.46	32.08
Loader (2 1/2 cu. yds. and under).....	\$ 42.92	32.08
Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.).....	\$ 43.24	32.08
Roller Operator (five tons and under).....	\$ 41.69	32.08
Roller Operator (over five tons).....	\$ 43.12	32.08
Screed Person.....	\$ 42.92	32.08
Soil Stabilizer.....	\$ 43.75	32.08

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IRON0625-001 09/01/2022

Rates	Fringes
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Ironworkers:.....	\$ 45.00	39.00
a. Employees will be paid \$.50 per hour more while working in tunnels and coffer dams; \$1.00 per hour more when required to work under or are covered with water (submerged) and when they are required to work on the summit of Mauna Kea, Mauna Loa or Haleakala.		

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LAB00368-001 09/05/2022

Rates	Fringes
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Laborers:		
Driller.....	\$ 41.00	24.25
Final Clean Up.....	\$ 30.45	19.57
Gunite/Shotcrete Operator and High Scaler.....	\$ 40.50	24.25
Laborer I.....	\$ 40.00	24.25
Laborer II.....	\$ 37.40	24.25
Mason Tender/Hod Carrier....	\$ 40.50	24.25
Powderman.....	\$ 41.00	24.25
Window Washer (bosun chair).\$	39.50	24.25

#### LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter



(Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for treme work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character, whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator);Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any



substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers' work; Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant



Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools, breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, establishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than "Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unloading in storage area); Ground and Soil Treatment Work (Pest Control); Guniting/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam "Target Man" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for waterpools, artificial lakes and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and material for use in reinforcing concrete construction (except when a derrick or outrigger operated by other than hand power is used); Loading, unloading, sorting, stockpiling, handling and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs, walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially



designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheet piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Stripper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms and false work.

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LAB00368-002 09/05/2022

	Rates	Fringes
Landscape & Irrigation Laborers		
GROUP 1.....	\$ 27.25	15.80
GROUP 2.....	\$ 28.25	15.80
GROUP 3.....	\$ 22.15	15.80

#### LABORERS CLASSIFICATIONS

GROUP 1: Installation of non-potable permanent or temporary irrigation water systems performed for the purposes of Landscaping and Irrigation architectural horticultural work; the installation of drinking fountains and permanent or temporary irrigation systems using potable water for Landscaping and Irrigation architectural horticultural purposes only. This work includes (a) the installation of all heads, risers, valves, valve boxes, vacuum breakers (pressure and non-pressure), low voltage electrical lines and, provided such work involves electrical wiring that will carry 24 volts or less, the installation of sensors, master control panels, display boards, junction boxes, conductors, including all other components for controllers, (b) and metallic (copper, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe including all work incidental thereto, i.e., unloading, handling and distribution of all pipes fittings, tools, materials and equipment, (c) all soldering work in connection with the above whether done by torch, soldering iron, or other means; (d) tie-in to main lines, thrust blocks (both precast and poured in place), pipe hangers and supports incidental to installation of the entire irrigation system, (e) making of pressure tests, start-up testing, flushing, purging, water balancing, placing into operation all irrigation equipment, fixtures and appurtenances installed under this agreement, and (f) the fabrication, replacement, repair and servicing of landscaping and irrigation systems.



Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons).:

GROUP 2. Layout of irrigation and other non-potable irrigation water systems and the layout of drinking fountains and other potable irrigation water systems in connection with such Landscaping and Irrigation work. This includes the layout of all heads, risers, valves, valve boxes, vacuum breakers, low voltage electrical lines, hydraulic and electrical controllers, and metallic (coppers, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe. This work also includes the reading and interpretation of plans and specifications in connection with the layout of Landscaping, Rockscape, Waterscape, and Irrigation work; Operation of Hydro-Mulching machines (sprayman and driver), Drillers, Trenchers (riding type, Davis T-66, and similar) and fork lifts used in connection with the performance of such Landscaping and Irrigation work; Tree climbers and chain saw tree trimmers, Sporadic operation (when used in connection with Landscaping, Rockscape, Waterscape, and Irrigation work) of Skid-Steer Loaders (Bobcat and similar), Cranes (Bantam, Grove, and similar), Hoptos, Backhoes, Loaders, Rollers, and Dozers (Case, John Deere, and similar), Water Trucks, Trucks requiring a State of Hawaii Public Utilities Commission Type 5 and/or type 7 license, sit-down type and "gang" mowers, and other self-propelled, sit-down operated machines not listed under Landscape & Irrigation Maintenance Laborer; Chemical spraying using self-propelled power spraying equipment (200 gallon capacity or more).

GROUP 3: Maintenance of trees, shrubs, ground covers, lawns and other planted areas, including the replanting of trees, shrubs, ground covers, and other plantings that did not "take" or which are damaged; provided, however, that re-planting that requires the use of equipment, machinery, or power tools shall be paid for at the rate of pay specified under Landscape and Irrigation Laborer, Group 1; Raking, mowing, trimming, and runing, including the use of "weed eaters", hedge trimmers, vacuums, blowers, and other hand-held gas, air, electric, or self-powered tools, and the operation of lawn mowers (Note: The operation of sit-down type and "gang" mowers shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer, Group 2); Guywiring, staking, propping, and supporting trees; Fertilizing, Chemical spraying using spray equipment with less than 200 gallon capacity, Maintaining irrigation and sprinkler systems, including the staking, clamping, and adjustment of risers, and the adjustment and/or replacement



of sprinkler heads, (Note: the cleaning and gluing of pipe and fittings shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer(Group 1); Watering by hand or sprinkler system and the performance of other types of gardening, yardman, and horticultural-related work.

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LAB00368-003 09/05/2022

	Rates	Fringes
Underground Laborer		
GROUP 1.....	\$ 40.60	24.25
GROUP 2.....	\$ 42.10	24.25
GROUP 3.....	\$ 42.60	24.25
GROUP 4.....	\$ 43.60	24.25
GROUP 5.....	\$ 43.95	24.25
GROUP 6.....	\$ 44.20	24.25
GROUP 7.....	\$ 44.65	24.25

GROUP 1: Watchmen; Change House Attendant.

GROUP 2: Swamper; Brakeman; Bull Gang-Muckers, Trackmen; Dumpmen (any method); Concrete Crew (includes rodding and spreading); Grout Crew; Reboundmen

GROUP 3: Chucktenders and Cabletenders; Powderman (Prime House); Vibratorman, Pavement Breakers

GROUP 4: Miners - Tunnel (including top and bottom man on shaft and raise work); Timberman, Retimberman (wood or steel or substitute materials thereof); Blasters, Drillers, Powderman (in heading); Microtunnel Laborer; Headman; Cherry Picker (where car is lifted); Nipper; Grout Gunmen; Grout Pumpman & Potman; Gunite, Shotcrete Gunmen & Potmen; Concrete Finisher (in tunnel); Concrete Screed Man; Bit Grinder; Steel Form Raisers & Setters; High Pressure Nozzleman; Nozzleman (on slick line); Sandblaster-Potman (combination work assignment interchangeable); Tugger

GROUP 5: Shaft Work & Raise (below actual or excavated ground level); Diamond Driller; Gunite or Shotcrete Nozzleman; Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

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PAIN1791-001 01/01/2023

	Rates	Fringes
Painters:		
Brush.....	\$ 40.50	30.84
Sandblaster; Spray.....	\$ 40.50	30.84

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PAIN1889-001 07/01/2022

	Rates	Fringes
Glaziers.....	\$ 41.50	38.37

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\* PAIN1926-001 03/05/2023



	Rates	Fringes
Soft Floor Layers.....	\$ 39.77	33.80

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PAIN1944-001 01/01/2023

	Rates	Fringes
Taper.....	\$ 44.60	33.65

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PLAS0630-001 09/05/2022

	Rates	Fringes
PLASTERER.....	\$ 45.00	33.58

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PLAS0630-002 08/31/2020

	Rates	Fringes
Cement Masons:		
Cement Masons.....	\$ 42.65	32.29
Trowel Machine Operators....	\$ 42.80	32.29

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PLUM0675-001 01/01/2023

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter...	\$ 50.98	29.30

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ROOF0221-001 11/06/2022

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply).....	\$ 43.15	21.21

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SHEE0293-001 03/05/2023

	Rates	Fringes
Sheet metal worker.....	\$ 47.37	31.71

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\* SUHI1997-002 09/15/1997

	Rates	Fringes
Drapery Installer.....	\$ 13.60 **	1.20

	Rates	Fringes
FENCE ERECTOR (Chain Link Fence).....	\$ 9.33 **	1.65

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.=====

\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave



for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates



the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:



Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"



Requirement Number	Requirement	Offeror Response (Comply, Complies with Exception, Complies with New Development, Non-Compliance)	Proposer Explanation and Comment
A-6.1	<p>If a browser-based approach is used to access the configuration parameters and settings within the controller, the firmware shall also provide a means to access all supported data elements and parameters using the NTCIP-compliant communications.</p> <ul style="list-style-type: none"> <li>- As part of the RFP response, describe how your browser-based approach allows to access another vendor's non-standard data elements supported by that vendor's firmware.</li> </ul>		
A-7	<p>The firmware shall be capable of interfacing with a central signal system.</p> <ul style="list-style-type: none"> <li>- As part of the RFP response, describe the Central Signal Systems with which your firmware has already been interfaced and the abilities and limitations of these interfaces.</li> </ul>		
A-7.1	<p>As part of the RFP response, describe the controller models with which your firmware has already been interfaced and the abilities and limitations of these interfaces.</p>		
A-8	<p>The Offeror shall make any proprietary data elements (scalar, tabular, and block objects) defined in the supported MIB for the firmware available for use by the Central System Software.</p>		
A-8.1	<p>If the Offeror is proposing to use a browser-based method to access the controller firmware, the firmware shall be provided with an API or other defined and industry-accepted means for integration of that browser-based software into the Central System Software.</p>		
A-9	<p>The firmware shall be compliant with the latest available versions of NTCIP 1201, 1202, 1209, and 1211. Compliant means that all functions supported by the firmware / controller must be readable and/or commanded using NTCIP-defined data elements. Only those functions and features supported by the firmware / controller for which there are not any standardized NTCIP objects, vendor-specific data elements are allowed to be used.</p> <ul style="list-style-type: none"> <li>- As part of the RFP response, provide an explanation of any deviations from compliance with the listed NTCIP standards.</li> <li>- As part of the RFP response, describe whether data elements from NTCIP 1202 or NTCIP 1209 are used to provide the detector data.</li> </ul>		
A-10	<p>If the firmware uses a different mechanism for Transit Signal Priority (TSP) than those defined in NTCIP 1211, provide a detailed description of the TSP mechanism and explicitly reference the vendor-specific, NTCIP-compatible data elements supporting TSP as defined in the to-be-provided Management Information Base (MIB) used by the Firmware.</p>		
A-11	<p>The firmware shall meet or exceed current ATC API (software/firmware) standard 5401, as jointly developed and published by AASHTO, ITE, and NEMA.</p> <ul style="list-style-type: none"> <li>- As part of the RFP response, provide an explanation of any deviations from compliance with the ATC API 5401 standards.</li> </ul>		



Requirement Number	Requirement	Offeror Response (Comply, Complies with Exception, Complies with New Development, Non-Compliance)	Proposer Explanation and Comment
A-37	Firmware shall allow for the ability to remotely write the current controller configuration to the controller datakey and USB. - As part of the RFP response, describe what information is saved on the datakey and the process for updating the datakey. - As part of the RFP response, describe the process for saving the controller configurations via USB.		
A-37.1	The firmware shall be provided with the current configuration parameters for the installed firmware version number.		
A-37.1a	The firmware version shall be displayable on the controller's display.		
A-37.1b	The firmware version shall be retrievable from the Central System Software using the NTCIP-defined data elements included in the modules table.		
A-37.1c	The firmware version shall update the parameter value of the version number in the modules table every time a firmware update is performed, i.e., only the currently installed version number shall be contained.		
A-37.1d	If the firmware contains several version numbers to describe different components within the firmware, the firmware shall use several rows in the modules table to enter the version numbers (one for each version number contained).		
A-38	The firmware shall be able to monitor field devices at the intersection. - As part of the RFP response, describe types of and how many field devices the firmware can monitor.		
A-39	The firmware shall be able to accommodate multiple communication forms including but not limited to: Ethernet, broadband, fiber, wireless, and copper communications. - As part of the RFP response, describe the forms of communication the firmware can reliably accommodate/use to communicate.		
A-40	The firmware shall allow calls to be <u>placed</u> remotely on detectors and phases through a Central Signal System.		
A-41	The firmware shall allow calls to be <u>removed</u> remotely on detectors and phases through a central signal system.		
A-42	The firmware shall provide a minimum of 8 auxiliary function outputs.		
A-43	The firmware shall be able support peer-to-peer functionality to send data collected by the firmware (including but not limited to detector actuations, counts, and controller status) to other IP addressable controllers as defined by the user. - As part of the RFP response, describe the peer-to-peer data sharing functionalities of your firmware.		



Requirement Number	Requirement	Offeror Response (Comply, Complies with Exception, Complies with New Development, Non-Compliance)	Proposer Explanation and Comment
C-33	The Solution shall be supplied with an interface (and detailed documentation) to provide traffic signal status information to external systems or a data portal on a per second basis. - As part of the RFP response, provide your API documentation to send the information to the external data portal.		
C-34	If a web-based Solution is provided, the solution shall operate on several, common browser solutions including Edge and Chrome. - As part of the RFP response, identify all web browsers including versions the Solution is currently integrated with.		
C-34.1	If a web-browser-based approach is proposed by the Central System Software and if a web-browser-based approach is also used to access the controller firmware configuration parameters and settings within the controller, the Solution shall provide a means to integrate the web-browser-based firmware into the web-based Solution. - As part of the RFP response, describe how your browser-based Solution will integrate the firmware web-browser and what support from the controller firmware provider is expected.		
C-35	The solution shall allow for automatic pushing of supported browser upgrades and patches, which shall not affect the proposed solution.		
C-36	The Solution/application/product shall provide effective, interactive control and use with nonvisual means and provide 508 Compliance in accordance with the relevant federal standards regarding IT Accessibility and 508 Compliance.		
C-37	The Solution shall be provided with both Intrusion Detection System (IDS) and Intrusion Prevention System (IPS) capabilities. - As part of the RFP response, provide a detailed description of the IDS and IPS components, its vendor(s), update, recording and reporting capabilities.		
C-38	The Solution shall provide, as a minimum, physical warm standby server(s) installed at the JTMC, providing redundancy to allow for continuous operation during hardware and software maintenance activities. As part of the RFP response: - Provide a detailed description of how this requirement will be satisfied. - Describe similar deployments where these redundancy measures were implemented and describe their observed effectiveness.		



## SECTION 623 – TRAFFIC SIGNAL SYSTEM

Make the following amendment to said Section:

(I) Amend **Section 623.02 – Materials** by adding the following after line 131:

“Intersection Detection 770.12

Mid-Block Magnetometer Detection 770.13”

(II) Amend **Section 623.03 – Construction** by adding the following after line 451:

**“(15) Intersection Detection.** Mount intersection detection sensors on existing traffic signal standard in accordance with Engineer approved Contractor provided installation plans. Limit drilling of new holes in traffic signal standards, existing holes shall be used for detection sensors to the furthest extent possible. Intersection detection will be provided for all intersection approaches identified in the contract documents. Provide fully operational intersection detection system, including accessory cabinet components and any required cabling. The intersection detection system shall provide for both presence (stopbar) detection at the intersection as well as have ability to provide detection for upstream locations (within 600’ of intersection).

**(16) Mid-Block Magnetometer Detection.** Core roadway pavement, install detectors, epoxy flush with the roadway surface, and install overhead support equipment and cabling as needed in accordance with Engineer approved Contractor provided installation plans. Limit drilling of new holes in traffic signal standards, existing holes shall be used for access points, repeaters, and radio units to the furthest extend possible. Mid-block magnetometer detection will be provided for intersection approaches and travel lanes identified in the contract documents. Provide fully operational mid-block detection system, including access points, repeaters, radio units, cabinet equipment, and any required cabling.”

(III) Amend **Section 623.03 – Construction** by replacing lines 491 to 576 with the following:

**“(G) Additional Signal Work and Equipment.** Provide additional services and equipment as needed for the following:

**(1)** Resolve unforeseen field conditions (discovered during the site evaluation) and complete installation and operation of new controller, intersection detection, and midblock detection. This includes (but is not limited to) clearing existing obstructed conduits, installing additional cables, signal cabinet replacement, and furnishing auxiliary equipment such as battery backup systems.



(2) At the request of HDOT or DTS, adjust, repair, or replace malfunctioning field equipment damaged from unforeseen adverse events or field conditions. Examples of unforeseen adverse events include motor vehicle accidents, vandalism, or tropical force winds. Example of unforeseen field conditions includes construction from other projects that affect the traffic signal operations at an intersection. Field equipment identified for repair, replacement, and reinstallation includes (but is not limited to) Intersection Detection sensors; Mid-block Magnetometer Detection units, repeaters, and access points; and Cellular Modems.”

(IV) Amend **Section 623.03 – Construction** by replacing lines 491 to 576 with the following:

“(I) **Warranty.** Provide new material and equipment for permanent construction.

Furnish copies of manufacturer’s warranty or warranties guaranteeing equipment free from defects in materials, design, and manufacturing, during the project and for not less than the warranty period specified by the contract documents.

During the project and throughout the warranty period, adjust or repair material and equipment under warranty within 24 hours from time of notification.

During the project and throughout the warranty period, temporarily replace under-warranty material and equipment requiring factory corrections, within 24 hours from time of notification. Install factory-corrected or new material and equipment no later than 30 days from time of notification.”

(V) Amend **Section 623.04 - Measurement** by replacing lines 578 to 579 to read:

**“623.04 Measurement.**

(A) The Engineer will measure intersection detection per each intersection in accordance with the contract documents.

(B) The Engineer will measure mid-block magnetometer detection per each intersection in accordance with the contract documents.

(C) The Engineer will measure additional signal work and equipment, if ordered by the Engineer, on a force account basis, in accordance with Subsection 109.6 – Force Account Provisions and Compensation.”

(VI) Amend **Section 623.05 – Payment** by replacing lines 581 to 594 to read:



95 **"623.05 Payment.**

96  
97 The Engineer will pay for the intersection detection at the contract unit  
98 price per each intersection complete in place. The price includes full  
99 compensation for submitting the equipment list, installation plans and as-built  
100 drawings; furnishing and installing the intersection detection system; mounting  
101 detection sensors; traffic control; wiring; bonding and grounding; testing;  
102 providing turn-on service; submitting warranty; and furnishing equipment, tools,  
103 labor, materials; and other incidentals necessary to complete the work.

104  
105 The Engineer will pay for the mid-block magnetometer detection at the  
106 contract unit price per each intersection complete in place. The price includes  
107 full compensation for submitting the equipment list the equipment list, installation  
108 plans and as-built drawings; furnishing and installing the magnetometer detection  
109 system; mounting access points, repeaters, and radio units; traffic control;  
110 pavement coring and epoxy; wiring; bonding and grounding; testing; providing  
111 turn-on service; submitting warranty; and furnishing equipment, tools, labor,  
112 materials; and other incidentals necessary to complete the work.

113  
114 The Engineer will consider full compensation for additional materials and  
115 labor not shown in the contract that are necessary to complete the installation of  
116 the various systems incidental to the various contract items. The Engineer will  
117 not allow additional compensation.

118  
119 The Engineer will pay for additional signal work and equipment according  
120 to Subsection 109.06 – Force Account Provisions and Compensation. An  
121 estimate amount for the force account is allocated in the proposal schedule  
122 under additional signal work and equipment. The actual amount to be paid will  
123 be the sum shown on the accepted force account records whether this sum be  
124 more or less than the estimated amount allocated in the proposal schedule.

125  
126 The Engineer will pay for the following pay items when included in the  
127 proposal schedule:

128

129 Pay Item	Pay Unit
130	
131 Intersection Detection (4-Way)	Each
132	
133 Intersection Detection (3-Way)	Each
134	
135 Intersection Detection (2-Way)	Each
136	
137 Mid-Block Magnetometer Detection	Each
138	
139 Additional Signal Work and Equipment	Force Account"

140  
141



