

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ADDENDUM NO. 1
FOR**

**TRAFFIC SIGNAL MODERNIZATION
LED SIGNAL RETROFIT, PHASE I
AT VARIOUS LOCATIONS ON OAHU**

FEDERAL-AID PROJECT NO. CMAQ-0300(101)

**DISTRICTS OF HONOLULU, EWA, WAIANAE,
WAHIAWA, AND WAIALUA
ISLAND OF OAHU
FY 2005**

Amend the bid documents as follows:

1. SPECIAL PROVISIONS

- a. Replace Pages 623-1a through 623-17a dated 5/10/05 with the attached Pages 623-1a through 623-17a dated 6/14/05.
- b. Replace Pages 712.39-1a through 712.39-3a dated 12/28/04 with the attached Pages 712.39-1a through 712.39-3a dated 6/14/05.
- c. Replace Federal Wage Rate dated 03/11/2005 with the attached Federal Wage Rate dated 05/27/2005.

2. PROPOSAL SCHEDULE

- a. Replace Pages P-8 through P-10 dated 5/10/05 with the attached Pages P-8 through P-10 dated 6/14/05.

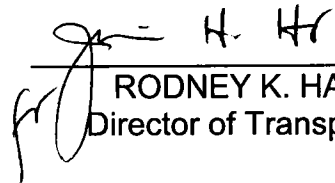
3. PLANS

- a. Replace Plan Sheet No. 2 with the attached Plan Sheet No. ADD. 2.

4. PRE-BID MEETING

Attached are responses to the June 6, 2005 pre-bid meeting questions and attendance list for your information.

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



RODNEY K. HARAGA
Director of Transportation

Amend **Section 623 - Traffic Signal System** to read as follows:

"SECTION 623 - TRAFFIC SIGNAL SYSTEM

623.01 Description. This work includes furnishing labor, materials, tools, machinery, and equipment necessary to upgrade and retrofit an operating traffic signal system complete in place according to the contract.

The traffic signal work includes:

(1) Replacing existing incandescent traffic signal optical unit assembly with LED optical unit of same signal indication, except for the yellow ball-to-arrow conversion, as scheduled and necessary for proper and consistent traffic operation.

Existing traffic signals of this project are made by various companies. Some companies may no longer exist due to business acquisitions or mergers. Traffic signal brands inventoried during design includes, but not limited to:

- Eagle
- McCain
- Siemens Eagle Durasig
- IDC (Indicator Direct Control)
- LFE/Automatic Signals
- Singer
- Marbelite
- Econolite
- U.S. Traffic Corporation
- 3M (programmable visibility type traffic signal)

Traffic signals are made to standard traffic industry conventions. However, physical variations exist amongst the different brands and models. LED optical unit may not perfectly fit and be secured in all traffic signal brands and models without minor housing modifications, e.g., adding corrosion-resistant fastening bolts and tabs. Such signal housing modifications shall best accommodate future maintenance, reflect **best** trade practice, and considered inclusive of the base contract work.

Contractor shall also bear and reflect the risk in its base bid to replace the entire traffic signal head housing with one suitable for the LED optical unit or use more than one brand of LED optical unit if such modification is later field verified to be unfeasible.

The LED optical unit retrofit work of this project excludes programmable visibility style traffic signals.

- (2) Modifying yellow ball/circular signal indication following a non-straight green arrow on the same traffic signal to yellow arrow as scheduled.

Signal indication modification for a regular style traffic signal involves replacing the existing optical unit with an LED optical unit of a different indication. Aligning arrows for proper traffic operation.

- (3) Signal indication modification for a programmable visibility style traffic signal, i.e., 3M, is included in this project and involves replacing the existing signal lens to one with a different indication.

- (4) Replacing missing or damaged traffic signal visors as scheduled. As previously mentioned, existing traffic signals are made by various companies. Replacement visor shall be wholly compatible in fastening method, physical dimensions, style, and color for the specific existing traffic signal for which it is to be installed.

Visor replacement work is intended to be State-furnished and Contractor-installed. Contractor shall timely coordinate in advance with the Engineer in researching and receiving the various types of visors from City's Manana traffic signal maintenance yard in Pearl City to accommodate its schedule. Coordination may involve Contractor's personnel locating and cannablizing visors from old traffic signals stored at the City's Manana yard.

If suitable visor cannot be obtained from the City's Manana yard or in sufficient quantity, Contractor may be directed by the Engineer under force account to purchase the visors from other sources or replace the entire signal housing.

- (5) Performing miscellaneous traffic control upgrades as scheduled in the contract documents or directed by the Engineers which may include:

(a) demolish, dispose, salvage or adjust various traffic signal system components and hardware;

(b) trenching, structural excavating, backfilling, and restoring work;

- (6) Coordinating work and arranging for inspection of work with the Engineer and other agencies as required.

- (7) Turning over to the Department complete and operating traffic signal systems.

Furnish and install the incidental parts that the contract does not show and that are necessary to complete the traffic signal system as though such parts were in the contract.

Electrical equipment shall conform to the NEMA Standards and this contract. Material and workmanship shall conform to the "National Electric Code", (the Code); General Order Nos. 6 and 10 of the Hawaii Public Utilities Commission; the standards of the ASTM; the ANSI; Local Joint Pole Agreement; local power company rules; and local ordinances that may apply.

The following definitions apply:

- (1) **Actuation** - The operation of types of detector.
- (2) **Clearance Interval** - The length of time of display of the signal indication following the right-of-way interval.
- (3) **Detector for Traffic Actuation** - A device that pedestrians or vehicles can register their presence with a traffic-actuated controller.
- (4) **Extendible Portion** - That part of the green interval that follows the initial portion.
- (5) **Extension Limit** - The maximum time that a traffic phase may retain the right-of-way after actuation on another traffic phase, after timing out the initial portion.
- (6) **Flashing Feature** - That feature incorporated to stop normal signal operation and cause the flashing of any predetermined combination of signal lights.
- (7) **Initial Portion** - That part of the green interval that is timed-out or separately controlled by a traffic-actuated controller before the extendible portion of the interval takes effect.
- (8) **Interval** - Several divisions of the time cycle during which signal indications do not change.
- (9) **Interval Sequence** - The order of appearance of the signal indications during successive intervals of a time cycle.
- (10) **Magnetic Vehicle Detector** - A detector actuated by the movement of a vehicle passing through its magnetic field.
- (11) **Major Street** - The roadway approach or approaches at an intersection normally carrying the greater volume of vehicular traffic.
- (12) **Manual Operation** - The operation of a signal controller by a hand-operated switch.

(13) **Minimum Period** - In semi-traffic-actuated controllers, the shortest time for which the right-of-way will be given to the approaches not having detectors.

(14) **Minor Movement Interval** - An auxiliary phase added to a controller phase (parent phase) and modified by an auxiliary movement controller.

(15) **Minor Street** - The roadway approach or approaches at an intersection normally carrying the smaller volume of vehicular traffic.

(16) **Non-Parent Phase** - A controller phase not modified by an auxiliary control unit.

(17) **Parent Phase** - A controller phase modified by an auxiliary control unit.

(18) **Passage Period** - The time allowed for a vehicle to travel at a selected speed from the detector to the nearest point of conflicting traffic.

(19) **Pedestrian Detector** - A detector, usually of the push-button type, installed near the roadway and operated by hand.

(20) **Pressure-Sensitive Vehicle Detector** - A detector installed in the roadway, actuated by the pressure of a vehicle passing over its surface.

(21) **Pre-Timed Controller** - An automatic control device for supervising the operation of traffic control signals according to a pre-timed cycle and divisions.

(22) **Recall Switch** - A manually operated switch in an actuated controller to provide for the automatic return of the right-of-way to a street.

(23) **Right-of-Way** - The privilege of the immediate use of the highway.

(24) **Signal Indication** - The illumination of a traffic signal lens or equivalent device, or of a combination of several lenses or equivalent devices, e.g., an LED optical unit.

(25) **Time Cycle** - The number of seconds required for one complete revolution of the timing dial or complete sequence of signal indications.

(26) **Traffic-Actuated Controller** - A digital control device for supervising the operation of traffic control signals according to the varying demands of traffic as registered with the controller by loop detectors or pedestrian push buttons.

(27) Traffic Phase - A part of the cycle allocated to traffic movements receiving the right-of-way or to combinations of traffic movements receiving the right-of-way simultaneously during one or more intervals.

(28) Unit Extension - The minimum time, during the extendible portion, for which the right-of-way must remain on traffic phases following an actuation on that phase, subject to the extension limit.

623.02 Materials. Concrete shall conform to Section 601 - Structural Concrete.

Reinforcing steel shall conform to Section 602 - Reinforcing Steel.

Steel plate covers and anchor bolts shall conform to ASTM A 36 and A 307 respectively. The Contractor shall zinc-coat the anchor bolts if exposed.

Other materials shall conform to the following:

Dark Green Enamel Paint	708.03
Paint Thinner	708.04
Pullboxes	712.06(B)
Conduits	712.27
Conductors and Cables for Traffic Signal System	712.34(B)
Controller Equipment	712.37
Traffic Signal Standards	712.38
Traffic Signals and Appurtenances	712.39
Epoxy Sealer	712.54
Hot Applied Rubberized Sealant	712.57
Conflict Monitor Tester	712.71
Load Switch Analyzer and Tester	712.72
Loop Detector Amplifier Tester	712.73

Materials will be subject to inspection after delivery to agreed storage facility and during installation. Failure of the Engineer to note faulty material or workmanship during construction will not relieve the Contractor of the responsibility for removing or replacing materials at no cost to the State.

The Engineer may make inspection or sampling of certain materials at the factory or warehouse before delivery to the work site, when required.

623.03 Construction Requirements.

(A) Equipment Labeling, Lists and Drawings. The bidder shall submit the equipment list according to Subsection 106.13 - Ordering of Certain Materials.

Prior to field installation, Contractor shall prepare and submit minimum of three (3) sets of documents required by **Section 712.39 – Traffic Signals and Appurtenances:**

- a) Manufacturer Reference and Qualification
- b) Manufacturer Quality Assurance/Testing
- c) Manufacturer warranty

and one sample of each type/signal indication LED optical unit for Engineer's review. Allow minimum of two (2) weeks for review. Sample, if approved, will be returned to the Contractor and can be used for this project.

Contractor shall maintain a Project LED Inventory and Installation Record in Microsoft Excel spreadsheet format by each unit's unique serial number. This record shall include delivery date, testing date, installation/energizing date, installation location, and name of installer. Format to be finalized by the Engineer at the start of the project. Contractor shall transmit such record to the Engineer on monthly basis or more frequently upon Engineer's request. The installation record may be used to verify work and payment. Inconsistency found in the record may result in rejection of installed work.

Upon completion of the work, submit an 'As Built' or corrected plan showing in detail the construction changes, warranty documents, and final installation records.

(B) Traffic Signal Optical Unit Pre-Installation Quality Control Testing. When so directed by the Engineer, the Contractor shall setup and perform preinstallation quality control testing of traffic signal optical units. Specific samples and sample size shall be determined by the Engineer. Such testing consists of providing the necessary facility for and energizing the sample units 48 continuous hours to visually check for normal operation.

Failed samples shall be ground for the State to reject the represented lot of the delivered traffic signal optical units.

(C) Excavation and Backfill. Excavation and backfill shall conform to Section 206 - Excavation and Backfill for Conduits and Structures.

Do the necessary excavation to modify an existing traffic signal system to prevent damage to pavements, sidewalks and other improvements. Place the material from the excavation to prevent damage and obstruction to vehicular and pedestrian traffic and interference with surface drainage.

(D) Installation.

(1) Standards. Install each traffic signal and controller standard with its shaft precisely vertical on a concrete foundation.

Locations of standards shown in the contract are approximate. The Engineer will decide the exact locations in the field.

(2) Signal Heads. Assemble the signal heads to give the signal arrangement as intended to properly function at its present configuration. Plumb or level the members, arrange the members symmetrically, and assemble the members securely. Installation shall be such that the Contractor conceals the conductors within the standards and mounting assemblies as much as possible.

Grease or apply anti-lock pipe thread compound for all new metal hardware having threading to allow for future maintenance.

Do not install signal heads at the intersections until the other signal equipments, including the controller, are in place and ready for operation at that intersection. The Contractor may mount the signal heads when covering the faces or not directing the faces toward traffic.

Provide immediate field inspection access and safeguard for the Engineer and/or Inspector to inspect the work upon request.

Before final acceptance of the traffic signal system, adjust the direction of signal heads as specified by the Engineer.

(a) LED Optical Unit Retrofit. Completely remove and dispose incandescent traffic signal lighting assembly including electrical wiring up to wiring terminal block typically located at the bottom section of the traffic signal head, Alzak light reflector, bulb socket, Krpton-gas light bulb, and all

fastening hardware and accessories no longer needed. Salvage existing yellow ball LED optical unit as applicable.

Install new LED optical unit per LED manufacturer's installation instructions. Modify traffic signal housing as necessary to secure LED against movement and possible vibration loads. Such modification shall best accommodate future maintenance and reflect best trade practices.

(b) **Programmable Visibility Traffic Signal Lens Replacement.** Remove and salvage existing lens scheduled for replacement. Install new lens of revised signal indication as scheduled and per lens manufacturer's installation instructions. Contractor shall timely coordinate in advance with City and County DTS Traffic Signal Field Operations personnel (contact: Wally Nakihira, Field Supervisor @ 564-6101) to arrange for realigning and retaping the programmed visibility heads as necessary.

(c) **Visor Replacement.** Completely remove and dispose damaged visor. Coordinate and obtain compatible types and quantities of visor from State. Install visors per traffic signal head manufacturer's installation instructions. Furnish and install new corrosion-resistant fastening hardware as necessary for complete work and in accordance with best trade practices.

(d) **Furnish-Only LED Optical Unit.** Deliver furnish-only LED optical units to a State-designated maintenance yard on Oahu. Contractor shall enter accepted LED unit serial numbers, delivery date and testing date into the Project LED Inventory and Installation Record stipulated under Section 623.03(A).

(3) **Traffic Signal Standard and Controller Foundations and Pullboxes.** Construct the foundations and boxes required carefully at the locations designated. Pour the foundations and boxes in areas that the Contractor has carefully excavated to receive the foundations and boxes. Construct each unit as detailed in the contract and connect each unit properly with the facilities of which each unit is a component part.

Mix, place, and cure the concrete according to Section 601 - Structural Concrete, and Section 503 - Concrete Structures. The Engineer will allow hand mixing.

Set the anchor bolts for the foundations to fit the bases of the standards to be installed.

Give the pullbox frames and covers two coats of asphaltic base paint after installation.

(4) Conduits. Conduits shall be direct burial shown in the contract. Conduits under paved areas subject to vehicular traffic shall be PVC Schedule 80.

Install the ducts to drain towards either one or both pullboxes, manholes, or signal standard foundation.

Make directional changes in the conduits such as bends and changes to clear obstructions with curved segments using accepted deflection couplings or with short lengths of straight ducts and couplings. The deflection angle between two adjacent lengths of ducts shall not exceed 6 degrees. The bends shall not have a radius of less than 12 times the nominal size of the conduit. The Contractor may use factory-made ells.

Cut the rigid PVC conduits with a hacksaw. Square and trim the ends after cutting to remove rough edges. The connections shall be of the solvent weld type. Make the solvent weld joints according to the conduit manufacturer's recommendations and as accepted.

Use the rigid PVC conduit for drilling or jacking.

Thread the PVC fittings for connecting PVC conduit to rigid metal conduit on the metal conduit side.

Seal the ends of the duct with plugs at the end of each day of work, whenever problems interrupt the duct installation work and whenever ducts are subject to submergence in water.

Keep the conduits clean during construction.

Use only hand shovels in compacting concrete encasements. Cure the concrete for at least 72 hours or otherwise agreed in writing by the Engineer before permitting vehicular traffic to run over the concrete.

Provide each conduit run with a No. 10 gage flexible, zinc-coated pull wire extending through its entire length. Double an additional 2 feet back into the conduit at each end of the run. Conduits and sleeves entering pullboxes shall end flush in the wall with ends ground smooth. Plug the conduits and sleeves temporarily.

Ends of conduit runs shall extend at least 24 inches past the face of curb or edge of pavement unless the ends end in the pullboxes. Locate the ends accurately by special markers, markings on curb, or as specified by the Engineer. Show these locations on the 'As Built' plans required under Subsection 623.03(A) - Equipment List and Drawings.

Give the exterior portions of the direct burial steel conduits not encased in concrete two coats of asphaltic base paint.

The entire length of a conduit run between pullboxes or standards shall be of one type of material.

The completed duct lines shall be subject to a field test. Pass a bullet-shaped test mandrel about 14 inches long with a diameter 0.5 inch less than the inside diameter of the ducts through the entire length of each duct run. The Engineer will consider scouring found on the mandrel deeper than 1/32 inch an indication of burrs and/or obstructions in the duct run. Normal abrasion between the duct line and bottom of mandrel is not an indication of burrs and/or obstructions in the duct run. Remove such burrs and/or obstructions. Pass the test mandrel through again. Repeat the process until the Contractor gets a satisfactory result.

Use steel or Schedule 80 PVC conduits for all exposed construction except risers for communications cables. Use only Schedule 80 PVC conduits for risers for communication cables.

(5) Wiring. Wiring shall conform to the appropriate articles of the Code. Arrange the wiring within cabinets, signal heads, standards and pullboxes neatly. Encase the wiring installed underground in conduits. Before installing the wires and cables in conduits, pull a wire brush, swab and mandrel through each conduit for the removal of extraneous matter and verification of the absence of obstructions and debris from the conduit system.

Pull the cables directly from their cores or reels into the conduits. Do not pull off and lay the cables on the ground before installation. Make the pulls in one direction only. Lubricants used shall be as recommended by the cable manufacturer or accepted by the Engineer. Leave the wires or cables under tension nor tight against bushings or fittings.

Remove the damaged ends resulting from the use of pulling grips soon after pulling the cable. Maintain the cable end seals. Do not pull the open ended cables through the conduits. Cables shall be continuous from pulling point to pulling point. The

Engineer will not permit splices. Make the splices, taps and terminations with pressure-indented connectors or lugs as appropriate or as specified herein. Tape or seal the ends of the spare conductors as accepted.

Run the signal light conductors continuously from the terminal block located in a cabinet or signal head to a similarly located terminal block without splices. The Contractor may splice the branch signal light neutrals at pullboxes. Leave at least 5 feet of slack in each conductor at each standard and at least 2 feet of slack at each pullbox.

Join the conductors by a 'western union' type splice. Use the connectors for splicing conductors No. 8 AWG, or larger. Solder the splices by the pouring or dipping method.

Pencil the conductor insulation well, trim the conductor insulation to conical shape, and roughen the conductor insulation before applying splice insulation.

Splice insulation includes layers of thermoplastic electrical insulating tape not over 0.007-inch thick applied to a thickness equal to and well lapped over the original insulation. The splice insulation shall conform to Federal Specifications MIL-I-7798. On high voltage and multiple lighting conductor splices, apply two layers of synthetic oil resistant rubber tape conforming to ASTM D 119 over each conductor before placing the thermoplastic tape. Then cover the splice well with at least two layers of asphaltic impregnated open mesh fabric tape and a coating of high grade insulating paint or similar material. Leave at least 2 feet of slack for each conductor at each splice.

Furnish the cables on reels and handle the cables with great care to avoid damage to the conductors or the jacket.

Install the communications cable, connect the communication cable to terminals, and wire the communication cable to the proper equipment to produce a closed loop network suitable for operating within the traffic signal control system. Cable runs shall be continuous between controller cabinets without splices.

Tape the cable ends to exclude moisture and shall remain so until the Contractor attaches the terminal equipment. For cable connections in terminal cabinets, use Bell Telephone System or equivalent connectors accepted for outside use.

Pull the cable in the conduit with a cable grip designed to provide a firm hold on the exterior covering of the cable. Pull the cable with a minimum dragging on the ground or pavement. Use powdered soapstone, talc, or other accepted lubricants to ease the pulling of the cable.

Preemption Detector (Opticom) Cables will be continuous without splices from the detector to the cabinet.

(6) Bonding and Grounding. Make the metallic cable sheaths, conduits and standards mechanically and electrically secure to form a continuous system. Ground the system effectively. Bonding and grounding jumpers shall be No. 8 AWG copper wire or equivalent copper strap of the same cross-sectional area.

Bond the standards by a bonding strap attached to an anchor bolt or a 3/16 inch or larger, brass or bronze bolt installed in the lower portion of the shaft.

Ground the conduits and the neutral wires at the service points as required under the Code except that grounding conductors shall be No. 6 AWG or equal.

Install a copper-clad steel or pure copper ground rod 5/8 inch diameter by 8 feet long alongside each traffic signal standard and controller concrete base.

The Contractor shall connect them with No. 6 AWG wire to the No. 8 AWG ground wire loop and power system neutral.

On wood poles, ground all equipment mounted less than 8 feet above ground surface.

(7) Continuity of Service. During relocation, reconstruction or other improvements of existing traffic signal systems, keep the existing system operational until the reconstructed or new traffic signal system can be started and put into service. Arrange the work accordingly and shall provide temporary relocations and wiring as necessary.

(8) Salvaging Electrical Equipment. Remove and salvage the existing traffic signal bulbs and reusable traffic signal parts. Clean, sort, label, and bundle/palletize salvaged equipment neatly and deliver salvaged materials to locations on Oahu to be designated by the Engineer. Contractor shall refer to Construction Notes of the Plans for electrical equipment and accessory salvaging work.

The Engineer will consider salvaging of existing electrical equipment as incidental to the various items of work.

(E) Painting. Supply the steel traffic signal standards including mast arms with a natural, zinc-coated finish. The standards require no painting.

Paint the signal head mountings with two coats of weatherproof dark enamel. The enamel shall conform to Subsection 708.03 - Dark Green Enamel Paint.

(F) Electric Service. Electric power shall be 120 volts, single phase, 60 Hz. Install the service underground in a steel conduit of the size shown in the contract from the local power company's pole to the controller.

(G) Field Test. Before the acceptance of the work, do the following tests on traffic signals and circuits, in the presence of the Engineer:

- (1) Test for continuity of each circuit.
- (2) Test for grounds in each circuit.
- (3) A Megger test on each circuit between the circuit ground. The insulation resistance shall not be less than the values specified in Table 622-I - Insulation Resistance when measured with an instrument having a voltage rating of 500 volts.
- (4) A functional test to show that the system functions as specified or as intended herein.

Replace or repair the fault in material or the installation revealed by these tests according to the contract. Repeat the same tests until no fault appears.

The Engineer may waive the above tests with visual inspection of whether the LED optical unit is lit or not.

(H) Services Provided By The Counties On Their Respective Projects.

Department of Transportation Services (DTS), City and County of Honolulu will be responsible for the following:

- (1) making all splices and connections in the pullboxes and cabinet locations pertaining to signal heads, pedestrian buttons, vehicle detectors, preemption detectors, and intertie circuits.

(2) installing and programming the Controller Timings and Conflict Monitor Cards.

(3) aligning and taping the Programmed Visibility Heads.

(4) reserving the right to inspect the traffic signal construction in addition to the State construction management personnel and representatives.

(I) **Restoring Pavements and Other Improvements.** Restore the existing pavements and other improvements such as driveways, sidewalks, curbs and gutters disturbed by excavation to their original condition according to the contract. Materials used for restoration work shall be equal to or better in quality than the materials the Contractor will replace, and matching in thickness, texture, and color whenever applicable. The grades of the restored surfaces shall conform to the existing grades.

(J) **Warranty.** Materials and equipment installed for permanent construction shall be new and operational. The contract intends the use of first-class material and equipment throughout the performance of the contract.

(1) All Work Except for LED Optical unit

Secure from the manufacturer(s), a warranty or warranties guaranteeing equipments from defects in materials, design and workmanship for not less than 12 months from the date of acceptance.

When requiring adjustments or repairs during the warranty period, adjust or repair the existing unit within 24 hours from the time of notification.

When requiring repairs that need factory corrections during the warranty period, replace the existing unit with an accepted temporary operational replacement unit within 24 hours from the time of notification until the Contractor can install the new unit. Install the new, identical non-defective unit within 30 days from the time of notification.

(2) LED Optical unit

Secure from the original equipment manufacturer(s), a five-year warranty or warranties guaranteeing equipment from defects in materials, design and workmanship for terms and periods further specified in *Special Provision Section*

712.39 - Traffic Signals and Appurtenances. Such warranty or warranties shall be additionally endorsed with notarized original signatures of legally authorized representatives from all intermediary supplier(s), subcontractor(s), and prime contractor furnishing the LED optical unit.

When requiring adjustments or repairs during the standard one-year guarantee period per Special Provision Section 108.18, the Contractor shall adjust, repair or replace the LED unit within 24 hours from the time of notification. Replace the defective LED optical unit with a new State-furnished replacement unit. Contractor shall enter replacement unit serial number, delivery date, testing date, installation date, installation location, and name of installer into the Project LED Inventory and Installation record.

As noted in the General Notes of the Plans, the State, at its own sole judgment of best interest to the public, may proceed to perform the repairs with its own forces and recover the incurred costs from the Contractor.

During the one-year guarantee period, the Contractor is responsible for handling all LED manufacturer warranty claims on defective LED units. This includes all costs to store, package, and transport the defective units to the manufacturer or its authorized representative. Upon receiving the replacement units from the manufacturer, the Contractor shall enter the replacement unit serial numbers, delivery date and testing date into the Project LED Inventory and Installation Record, and promptly deliver the units to a State-designated maintenance yard on Oahu.

After the one-year guarantee period, all new LED warranty claims would be handled by the State or its authorized representative.

623.05 Method of Measurement. The Engineer will measure the LED optical unit, visor, traffic signal lens, controller assembly, traffic signal standard, foundation for traffic signal standard, pedestrian or traffic signal assembly, pedestrian pushbutton, pullbox, loop detector sensing unit, riser, opticom receiver, microwave vehicle detector, conflict monitor tester, systems monitor tester, load switch analyzer and tester, and loop detector amplifier tester per each complete in place.

The Engineer will not measure traffic signal ductline, cable, meter socket, and software for controller for payment.

623.06 Basis of Payment. The Engineer will pay for the accepted LED optical unit at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; field verification and reporting of site differing conditions; testing and inspection; furnishing and mounting the LED; furnishing, assembling, wiring, and housing the LED; disposing incandescent optical unit and accessories; salvaging and deliver existing yellow LED; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

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

The Engineer will pay for the accepted traffic signal visor at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; field verification and reporting of traffic signal type; coordinating, obtaining and transporting State-furnished visors; mounting the visors; cleaning and painting to match signal housing; disposing damaged visors; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted 3M-compatible traffic signal lens at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the lenses; salvaging and deliver old lenses; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted miscellaneous traffic signal upgrades as noted in the schedules at the contract lump sum price. If applicable, partial payment(s) will be prorated as mutually agreeable percentage(s) of the total lump sum price to reflect completed portion(s) of work. The price includes full compensation for coordinating and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for furnish-only traffic signal optical unit to be turnover to the State for future maintenance per the contract unit price.

The Engineer will pay for traffic signal optical unit pre-installation testing per force account.

The Engineer will consider cost for additional materials and labor not specifically shown or called for that are necessary to complete the work incidental to the various contract items in the proposal.

The Engineer will make payment under:

Pay Item	Pay Unit
Retrofit Traffic Signal Light, _____	Each
Replace 8-Inch Traffic Signal With 12-Inch Traffic Signal One vertical section, yellow flasher application	Each
Replace Missing or Damaged Traffic Signal Visor	Each
Modify Programmable Visibility Traffic Signal Indication Lens	Each
Scheduled Miscellaneous Traffic Signal Upgrades And Modifications Noted in the Drawings (Notes _ thru _) Not Covered By Other Pay Items	Lump Sum
Furnish Only Traffic Signal Light, _____	Each
Traffic Signal Optical Unit Pre-Installation Testing	Force Account"

END OF SECTION

SECTION 712 - MISCELLANEOUS

Make the following amendments to said Section:

(I) Amend 712.39 (A)(1) - **Optical Units** as follows:

(1) **Optical Units.** The terms of "optical units", "signal modules", "modules", "light", and "lighting units" in reference to traffic signal are considered to be the same and interchangeable throughout this contract.

(a) **Manufacturer Reference and Qualification.** Manufacturer of LED optical units shall be reputable in U.S. traffic signal market and in stable financial condition. It shall minimally have the following sales and production volume for the past three years:

Annual sales in U.S. and production of at least 60,000 LED optical units of same or equivalent models proposed for this project.

AND

Three (3) municipality agencies each having purchased and satisfactorily using more than 5,000 LED optical units of same or equivalent models proposed for this project.

Before ordering of LED optical units, Contractor/Manufacturer shall submit contact information and/or letter(s)-of-recommendation evidencing this requirement for Engineer's verification. Equivalent model is clarified to be predecessor models used in same application of this project and meeting current or previous version purchase specifications of ITE, Caltrans, or other approved LED traffic signal industry authority.

(b) **General.** The LED optical unit shall comply with Caltrans Purchase Specification Light Emitting Diode (LED) Signal Modules.

Complete specifications can be viewed at the following web links:

<http://www.dot.ca.gov/hq/esc/ttsb/electrical/Traffic%20Signal.pdf>

The Caltrans purchase specifications are additionally qualified and amended for this project as follows:

(i) **Signal Lens Tinting.** Signal module lens shall be clear or with color integrally tinted into the plastic. No use of color transparent film over clear plastic lens.

- (ii) **Nighttime Dimming.** No nighttime dimming feature.
- (iii) **Type I Traffic Signal Module only.**
- (iv) **Incandescent Optical Unit Appearance.** Signal module is not required to be visually comparable to the incandescent optical unit as long as light uniformity and distribution requirements are still met.
- (v) **Number of LED Rows for Arrow Signal Indication.** Except for bimodal arrow or having signal module lens that diffuses the light, arrow signal indication shall have at least three (3) rows of LED.
- (vi) **Span-Wire Traffic Signal Mounting Application.** Only four (4) signal modules (two red balls and two yellow balls) signal modules of this project shall be required to be "wide angle" or "expanded view" visible for permanent span-wire signal mounting application as scheduled.
- (vii) **Manufacturer Quality Assurance.** Contractor shall locally maintain a copy of all specified design and production testing results for all LED optical units delivered to this project.

Failure to timely submit a set of complete and up-to-date records upon the Engineer's request at any time during the project shall be grounds to reject the delivered or installed LED optical unit(s).

- (viii) **Warranty.** The warranty provision is superceded by the following terms.

(c) **Warranty.** In addition to the standard one-year guarantee per **Special Provision Section 108.18 – Guarantee of Work**, Contractor shall submit a five-year LED optical unit warranty for the end user. Warranty shall originate from the LED optical unit manufacturer and additionally endorsed with notarized original signatures of legally authorized representatives from all factory of origin (if not of the same business entity as the manufacturer), intermediary supplier(s), subcontractor(s), and prime contractor. The warranty shall include this project's installation record and make it as a part of the warranty.

The warranty shall guarantee that the LED optical units will perform and maintain the specified performance under normal and expected application for five (5) years.

The five-year warranty period begins at the first field energizing date for each LED unit and not the manufacturing, delivery, purchase, or project completion date. Contractor shall enter the field energizing date information into the Project LED Inventory and Installation Record in accordance with Special Provision Section 623.03(A).

The one-year guarantee period and the five-year warranty shall begin concurrently at the first field energizing date for each LED unit.

Terms of warranty shall not limit the State or its authorized representative from seeking remedies directly with any party legally bounded in supplying the LED optical units for this project, e.g., the original equipment manufacturer.

The manufacturer and all intermediary parties participating in the warranty are entitled to inspect and test the failed LED optical units. In the event that the manufacturer chooses to not send a representative to Oahu to examine the failed units and handle the warranty claims, all costs incurred by the State to store, box, and transport the defective units to its factory or testing agency shall be borne by the manufacturer.

(II) Supplement 712.39 (C)(3) – Programmable Visibility Traffic Signal Heads as follows:

(2) **Optical System.** Lens furnished and installed for this project shall be physically and functionally compatible with the existing 3M programmable visibility traffic signal heads as scheduled. Lens shall be engineered and manufactured to meet or exceed luminous intensity, uniformity/distribution, and chromaticity requirements set forth by *Equipment and Materials Standards of the Institute of Transportation Engineer "Vehicle Traffic Control Signal Heads"*.

END OF SECTION

GENERAL DECISION: HI20030001 05/27/2005 HI1

Date: May 27, 2005

General Decision Number: HI20030001 05/27/2005

Superseded General Decision Number: HI020001

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

Modification Number	Publication Date
0	06/13/2003
1	01/02/2004
2	01/23/2004
3	03/05/2004
4	03/12/2004
5	03/26/2004
6	07/16/2004
7	09/03/2004
8	09/10/2004
9	10/08/2004
10	10/15/2004
11	01/21/2005
12	02/18/2005
13	02/25/2005
14	03/11/2005
15	05/06/2005
16	05/27/2005

* ASBE0132-001 02/27/2005

	Rates	Fringes
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.....	\$ 31.35	18.04

BOIL0204-001 10/01/1998

	Rates	Fringes
Boilermaker.....	\$ 26.25	13.76

BRHI0001-001 08/30/2004

	Rates	Fringes
Bricklayer		
Bricklayers and Stonemasons	\$ 27.30	18.22
Bricklayers and Stonemasons	\$ 27.30	18.22
Pointers, Caulkers and		
Weatherproofers.....	\$ 27.55	18.22

BRHI0001-002 08/30/2004

	Rates	Fringes
Terrazzo Worker		
Terrazzo Base Grinders.....	\$ 25.74	18.22
Terrazzo Floor Grinders		
and Tenders.....	\$ 24.19	18.22
Tile, Marble and Terrazzo		
Workers.....	\$ 27.55	18.22

CARP0745-001 08/30/2004

	Rates	Fringes
Carpenters:		
Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinlers and Transit and/or Layout Man.....	\$ 31.95	17.05
Millwrights and Machine Erectors.....	\$ 32.20	17.05
Power Saw Operators (2 H.P. and over).....	\$ 32.10	17.05

CARP0745-002 08/30/2004

	Rates	Fringes
Drywall and Acoustical Workers and Lathers.....	\$ 32.20	17.00

ELEC1186-001 02/13/2005

	Rates	Fringes
Electricians:		
Cable Splicers.....	\$ 37.24	7.57+30.6%
Electricians.....	\$ 33.85	7.57+30.6%
Technicians.....	\$ 34.87	7.57+30.6%

ELEC1186-002 02/13/2005

	Rates	Fringes
Line Construction:		
Cable Splicers.....	\$ 37.24	7.57+30.6%
Groundmen; Truck Drivers....	\$ 25.39	7.57+30.6%
Heavy Equipment Operators...	\$ 30.47	7.57+30.6%
Linemen.....	\$ 33.85	7.57+30.6%
Technicians.....	\$ 34.87	7.57+30.6%

ELEV0126-001 01/01/2005

	Rates	Fringes
Elevator Mechanic.....	\$ 40.95	12.015+a+b

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, Thanksgiving Day, Day after Thanksgiving Day and Christmas Day.

	Rates	Fringes
Diver (Aqua Lung) (Scuba)		
Diver (Aqua Lung) (Scuba)		
(over a depth of 30 feet)...\$ 53.30		18.28
Diver (Aqua Lung) (Scuba)		
(up to a depth of 30 feet)..\$ 43.93		18.28
Stand-by Diver (Aqua Lung)		
(Scuba).....\$ 34.55		18.28
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung)\$ 53.30		18.28
Diver Tender (Other than		
Aqua Lung).....\$ 31.52		18.28
Stand-by Diver (Other than		
Aqua Lung).....\$ 34.55		18.28
Helicopter Work		
Airborne Hoist Operator		
for Helicopter.....\$ 33.10		18.28
Co-Pilot of Helicopter.....\$ 33.24		18.28
Pilot of Helicopter.....\$ 33.41		18.28
Power equipment operators:		
(Includes All Types of Paving)		
GROUP 1.....\$ 29.24		18.28
GROUP 2.....\$ 29.35		18.28
GROUP 3.....\$ 29.52		18.28
GROUP 4.....\$ 29.79		18.28
GROUP 5.....\$ 30.10		18.28
GROUP 6.....\$ 30.75		18.28
GROUP 7.....\$ 31.07		18.28
GROUP 8.....\$ 31.18		18.28
GROUP 9.....\$ 31.29		18.28
GROUP 9A.....\$ 31.52		18.28
GROUP 10.....\$ 31.58		18.28
GROUP 10A.....\$ 31.73		18.28
GROUP 11.....\$ 31.88		18.28
GROUP 12.....\$ 32.24		18.28
GROUP 12A.....\$ 32.60		18.28
GROUP 13.....\$ 29.52		18.28
GROUP 13A.....\$ 29.79		18.28
GROUP 13B.....\$ 30.10		18.28
GROUP 13C.....\$ 30.75		18.28
GROUP 13D.....\$ 31.07		18.28
GROUP 13E.....\$ 31.18		18.28
Wage Rates for Tunnel Work:		
GROUP 1.....\$ 29.54		18.28
GROUP 2.....\$ 29.65		18.28
GROUP 3.....\$ 29.82		18.28
GROUP 4.....\$ 30.09		18.28
GROUP 5.....\$ 30.40		18.28
GROUP 6.....\$ 31.05		18.28
GROUP 7.....\$ 31.37		18.28
GROUP 8.....\$ 31.48		18.28
GROUP 9.....\$ 31.59		18.28
GROUP 9A.....\$ 31.82		18.28

GROUP 10.....	\$ 31.88	18.28
GROUP 10A.....	\$ 32.03	18.28
GROUP 11.....	\$ 32.18	18.28
GROUP 12.....	\$ 32.54	18.28
GROUP 12A.....	\$ 32.90	18.28

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 Skooper (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

	Rates	Fringes
Dredging: (Boat Operators)		
Boat Deckhand.....	\$ 29.52	18.28
Boat Operator.....	\$ 31.73	18.28
Master Boat Operator.....	\$ 31.88	18.28
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1.....	\$ 32.24	18.28
GROUP 2.....	\$ 31.58	18.28
GROUP 3.....	\$ 31.18	18.28
GROUP 4.....	\$ 29.52	18.28
Dredging: (Derricks)		
GROUP 1.....	\$ 32.24	18.28
GROUP 2.....	\$ 31.58	18.28
GROUP 3.....	\$ 31.18	18.28
GROUP 4.....	\$ 29.52	18.28
Dredging: (Hydraulic Suction Dredges)		
GROUP 1.....	\$ 31.88	18.28
GROUP 2.....	\$ 31.73	18.28
GROUP 3.....	\$ 31.58	18.28
GROUP 4.....	\$ 31.52	18.28
GROUP 5.....	\$ 31.18	18.28
GROUP 6.....	\$ 31.07	18.28
GROUP 7.....	\$ 29.52	18.28

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.

IRON0625-001 09/01/2003

	Rates	Fringes
Ironworker.....	\$ 28.00	21.36
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.		

	Rates	Fringes
Laborer		
GROUP 1.....	\$ 24.15	12.70
GROUP 2.....	\$ 21.95	12.70
GROUP 3.....	\$ 25.15	12.70
GROUP 4.....	\$ 24.65	12.70
GROUP 5.....	\$ 23.65	12.70
GROUP 6.....	\$ 15.95	8.55

LABORERS CLASSIFICATIONS

GROUP 1: Asbestos Removal Worker (EPA certified workers); Asphalt 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, Welding, Signalling, Choke Setting, and Rigging in connection with Laborers' work (except demolition); Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson 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 Curer (impervious membrane and form oiler); 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 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; Curbing, Concreting, and Asphalt; Curing of Concrete, 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; Driller (Track, Diamond Core, and Wagon); Driller (Joydrill Model TWM-2A, Gardner Denver DH-143 and similar type drills); Driller

(Mechanical) (not covered elsewhere) (including multiple unit); (Ingersoll-Rand DM45E/DM50E/LM-100/LM-600C, Gardner-Denver SCH2500/SCH3500BV, Furukawa HCR-C300, Tamrock Drilltech CHA800/DHH 850 Tamrock Commando) (similar and replacement equipment thereof); Drilling for blasting; Operation of all rock and concrete drills and Jack Hammers, including handling, carrying, laying out of hose; (Ingersoll-Rand DM45E/DM50E/LM-100/LM-600C), Gardner-Denver SCH2500/SCH3500 BV, Furukawa HCR-C300, Tamrock Drilltech CHA 800/DHH 850/Tamrock Commando) (similar and replacement equipment thereof); Drilling (Mechanical) on the site or along the right-of-way as well as access roads, reservoirs, including areas adjacent or pertinent to construction sites); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Fence and/or Guardrail Erector; Forklift (9 ft. and under); 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, or heat welding for sewer 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); Installation of Gilsulate 500XR; 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); Mason Tender, Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting); 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, 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 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); 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; 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; Sandblaster (Nozzleman) handling, placing and operation of nozzle; Scaffold Erector; 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.

GROUP 2: Air Blasting; Appliance Handling (job site) (after delivery and unloading in storage area); Asphalt Laborer; Asphalt Plant Laborer; Backfill work connected with the installation of Gilsulate 500XR; Backfilling, Grading and all other labor connected therewith; Boring Machine; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Cemetary Laborers; Chainman, Rodmen, and Grade Markers; Cleaning and Clearing of all debris; 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; Cleanup of Grounds and Buildings (other than "Light Clean-Up") (Janitorial Laborer); Clean-up of right-of-way; Clearing and slashing of brush or trees by hand or mechanical cutting; 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); Cribbers, Shorer, Lagging, Sheeting, and
 Trench Jacking and Bracing, Hand-Guided Lagging Hammer
 Whaling Bracing; 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, burning or cutting, breaking away, cleaning
 and removal of all masonry, wood or metal fixtures for
 salvage or scrap, 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, Chuck Tender, Outside Nipper;
 Dry-packing of concrete (plugging and filling of she-bolt
 holes); Excavation, Preparation of street ways and bridges;
 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; Garbage and Debris
 Handlers and Cleaners; Gas, Pneumatic, and Electric Tools,
 not listed Group 1 (except Rototiller); General Clean-up:
 sweeping, cleaning, washdown, wiping of construction
 facility, and equipment (other than "Light Clean-up"
 [Janitorial] Laborer); General Excavation and Grading (all
 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; General
 Laborer; Guniting Operator; Junk Yard Laborers (same as
 Salvage Yard); Landscape Nursery Laborers; 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 signalling
 from truck, conveyance or stockpile; Material Yard
 Laborers; Parks and Sports arenas and all recreational
 center employees; Pipelayer Tender; Pipewrapper, Caulker,
 Bander, Kettlemen, and men applying asphalt, Laykold,
 Creosote, and similar-type materials (pipe under 6 inches);
 Plasterer Laborer (including Hod Carrier); 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; Removal of surplus material; 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; 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; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright; 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); Tagging and Signaling of all building materials into high-rise units; 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.

GROUP 3: Licensed Powdermen.

GROUP 4: Gunnite Operator; High Scaler (working suspended), Pipelaying.

GROUP 5: Window Washer (Outside) (Working from bosun's chair and/or cable-suspended scaffold or work platform).

GROUP 6: Light Clean-Up.

	Rates	Fringes
Landscape & Irrigation Laborers		
Group 1.....	\$ 18.36	5.82
Group 2.....	\$ 18.86	5.82
Group 3.....	\$ 15.11	5.82

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 peformance of other types of gardening, yardman, and horticultural-related work.

	Rates	Fringes
Underground Laborer		
GROUP 1.....	\$ 24.75	12.70
GROUP 2.....	\$ 26.25	12.70
GROUP 3.....	\$ 26.75	12.70
GROUP 4.....	\$ 27.75	12.70
GROUP 5.....	\$ 28.10	12.70
GROUP 6.....	\$ 28.35	12.70
GROUP 7.....	\$ 28.80	12.70

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 Cabetenders; 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); Headman; Cherry Pickerman (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

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

* PAIN1791-001 01/01/2005

	Rates	Fringes
Painters:		
Brush.....	\$ 26.55	22.10
Sandblaster; Spray.....	\$ 27.05	22.10

PAIN1889-001 07/01/2004

	Rates	Fringes
Glazier.....	\$ 25.23	19.80

PAIN1926-001 02/27/2005

	Rates	Fringes
Soft Floor Layer.....	\$ 24.15	17.70

PAIN1944-001 01/01/2005

	Rates	Fringes
Taper.....	\$ 35.00	13.55

PLAS0630-002 08/30/2004

	Rates	Fringes
Cement Masons:		
Cement Masons.....	\$ 27.25	18.22
Trowel Machine Operators....	\$ 27.40	18.22

PLUM0675-001 01/02/2005

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter.	\$ 31.35	17.75

ROOF0221-001 04/28/2002

	Rates	Fringes
Roofer (including Built Up, Composition and Single Ply)....	\$ 28.10	12.83

SHEE0293-001 09/01/2002

	Rates	Fringes
Sheet metal worker.....	\$ 33.47	14.12

SUHI1997-001 09/15/1997

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

SUHI1997-002 09/15/1997

	Rates	Fringes
Fence Erector-Chain Link Fence.	\$ 9.33	1.65

RIGGERS; WELDERS - Receive rate prescribed for craft performing operation to which rigging or welding is incidental.

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 (29 CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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 Regional Office for the area in which the survey was conducted because those Regional Offices have 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 DECISION

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
623.1001	Retrofit Traffic Signal Light - Red Ball to Same	892	EACH	\$ _____	\$ _____
623.1002	Retrofit Traffic Signal Light - Red Ball, Expanded View Model, to Same	2	EACH	\$ _____	\$ _____
623.1004	Retrofit Traffic Signal Light - Yellow Ball to Same	1,012	EACH	\$ _____	\$ _____
623.1005	Retrofit Traffic Signal Light - Yellow Ball, Expanded View Model, to Same	2	EACH	\$ _____	\$ _____
623.1006	Retrofit Traffic Signal Light - Yellow Ball to Yellow Arrow	213	EACH	\$ _____	\$ _____
623.1007	Retrofit Traffic Signal Light - Green Ball to Same	706	EACH	\$ _____	\$ _____
623.1008	Retrofit Traffic Signal Light - Green Ball to Green Arrow	363	EACH	\$ _____	\$ _____
623.1018	Retrofit Traffic Signal Light - Green Arrow to Green	2	EACH	\$ _____	\$ _____
623.1009	Retrofit Traffic Signal Light - Yellow-Green Bimodal	64	EACH	\$ _____	\$ _____
623.3000	Replace Missing or Damaged Traffic Signal Visor	28	EACH	\$ _____	\$ _____
623.4000	Modify 3M Programmable Visibility Traffic Signal Lens 53 - Yellow Straight Arrow 1 - Yellow Diagonal Arrow 1 - Green Diagonal Arrow 1 - Red Diagonal Arrow	56	EACH	\$ _____	\$ _____

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
623.5000	Scheduled Miscellaneous Traffic Signal Upgrades & Modifications Noted in the Drawings (Notes A thru R, excluding B) Not Cover By Other Pay Items	L.S.	L.S.	L.S.	\$ _____
623.6010	Furnish Only Traffic Signal Light - Green Ball	70	EACH	\$ _____	\$ _____
623.6011	Furnish Only Traffic Signal Light - Green Arrow	40	EACH	\$ _____	\$ _____
623.6020	Furnish Only Traffic Signal Light - Yellow Ball	100	EACH	\$ _____	\$ _____
623.6021	Furnish Only Traffic Signal Light - Yellow Arrow	20	EACH	\$ _____	\$ _____
623.6030	Furnish Only Traffic Signal Light - Red Ball	90	EACH	\$ _____	\$ _____
623.6040	Furnish Only Traffic Signal Light - Yellow-Green Arrow Bimodal	7	EACH	\$ _____	\$ _____
623.7000	Traffic Signal Optical Unit Pre-Installation Testing	F.A.	F.A.	F.A.	\$ 8,000.00
645.2000	Additional Police Officers And/Or Additional Traffic Control Devices	F.A.	F.A.	F.A.	\$ 50,000.00
699.1000	Mobilization (Not to Exceed 10% of the Sum of All Items Excluding the Bid Price of This Item and Force Account Items.)	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
<p>a. SUM OF ALL ITEMS \$ _____</p> <p>b. Either Furnish Foreign Steel Not to Exceed Minimal Amount (Fill in '0') Furnish Foreign Steel in Excess of Minimal Amount (Fill in 25% X a) * \$ _____</p> <p>c. Amount for Comparison of Bids (a+b) * \$ _____</p> <p>* All bidders must fill in b and complete c.</p> <p>NOTE: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.</p>					