STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ADDENDUM NO. 1

for

CASTLE HILLS ACCESS ROAD
DRAINAGE IMPROVEMENTS, PHASE 2
FEDERAL-AID PROJECT NO. STP-0300(125)
DISTRICT OF KOOLAUPOKO
ISLAND OF OAHU
FY 2011

The following amendments shall be made to the Bid Documents:

A. SPECIAL PROVISIONS

1. Replace **SECTION 512 – MICROPILES**, Pages 512-1a through 512-10a, dated r12/05/11, with the attached Pages 512-1a through 512-10a, dated r01/23/12.

2. Replace **Federal Wage Rates**, dated 12/16/2011, with the attached **Federal Wage Rates**, dated 01/27/2012.

B. PLANS

1. Replace Plan Sheet No. 17 with the attached Plan Sheet No. ADD. 17, dated 1/19/12.
2. Replace Plan Sheet No. 35 with the attached Plan Sheet No. ADD. 35, dated 1/19/12.
3. Replace Plan Sheet No. 37 with the attached Plan Sheet No. ADD. 37, dated 1/19/12.
4. Replace Plan Sheet No. 38 with the attached Plan Sheet No. ADD 38, dated 1/19/12.
5. Replace Plan Sheet No. 39 with the attached Plan Sheet No. ADD. 39, dated 1/19/12.
6. Replace Plan Sheet No. 40 with the attached Plan Sheet No. ADD. 40, dated 1/19/12.
7. Replace Plan Sheet No. 42 with the attached Plan Sheet No. ADD. 42, dated 1/19/12.
8. Replace Plan Sheet No. 43 with the attached Plan Sheet No. ADD. 43, dated 1/19/12.

9. Replace Plan Sheet No. 44 with the attached Plan Sheet No. ADD. 44, dated 1/19/12.
10. Replace Plan Sheet No. 46 with the attached Plan Sheet No. ADD. 46, dated 1/19/12.

C. PRE-BID CONFERENCE MINUTES

The attached pre-bid conference minutes, including the list of attendees, shall be incorporated and made a part of the Bid Documents.

D. RESPONSE TO QUESTIONS FROM PRE-BID CONFERENCE

The following responses are provided to unanswered questions from the pre-bid conference.

1. Question: Who will be responsible to renew and/or obtain the permits?

   Answer: HDOT will be responsible to renew and/or obtain permits that will expire.

2. Question: Are the construction plans for Phase 1 available?

   Response: Scanned images of the construction plans for Castle Hills Access Road, Drainage Improvements, Phase 1, Federal-Aid Project No. STP-0300(122) are included on the compact disk for Addendum No. 1.

3. Question: Can the Contractor access Po'okela Street from the cul-de-sac of Pilina Way through State property (Lot "B" and T.M.K.: 4-5-023: 016)?

   Response: No.

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.

GLENN M. OKIMOTO, Ph.D.
Director of Transportation

Make the following Section a part of the Standard Specifications:

"SECTION 512 – MICROPILES

512.01 General.

(A) Description. This section shall covers constructing micropiles to the required locations, capacity and dimensions, in place complete, as indicated on the Plans and as specified herein.

(B) Definitions. Micropiles shall be defined as small diameter, high capacity drilled and grouted piles. Each pile shall consist of permanent steel casing (unbonded zone), cement grout-to-ground contact area (bonded zone), inner steel reinforcement (central reinforcing bar), centralizers, and cement grout that is tremied into the drill holes as the steel casing are withdrawn and/or injected during post grouting. The micropiles shall be of Type B classification as defined in FHWA-SA-97-070 (June 2000), which requires placing neat cement grout into the hole under pressure as the temporary steel drill casing is withdrawn.

512.02 Design Requirements.

(A) General. Micropiles shall have a minimum length of 80 feet below the bottom of the outlet structure concrete slab including a minimum bonded length of 40 feet and unbonded length of 40 feet with allowable compressive and tensile capacities of 60 and 15 kips, respectively.

Permanent steel casings shall be installed through the unbonded zone. The bonded section of the micropile shall extend a minimum of 40 feet below the bottom of the steel casing.

The micropile Contractor shall select the drilling, installation, and grouting methods needed to satisfy or exceed the minimum length and capacity of the micropile.

512.02 Qualifications of Micropile Contractor. The Micropile Contractor shall conform to Subsection 102.01 – Prequalification of Bidders and below. The Micropile Subcontractor shall be pre-qualified prior to the bidding.

(A) Micropile Experience. Because of the expertise required to successfully complete the micropile according to contract, a qualified Micropile Subcontractor shall install the micropiles. The Micropile Subcontractor shall have installed cased permanent micropiles for at least three (3) years and has successfully completed at least five (5) projects (each project shall have at least 20 micropiles per project) in the last five (5) years.

For a project to count as experience, the casing shall have been advanced simultaneously with the drilling operation to the bottom of the micropile, and removed upwards as the grout was placed. In addition, the grouting process shall only have proceeded after completion of the drilling process.

512.03 Preconstruction Requirements.

(A) Protection of Existing Structures. Verify locations of existing underground utilities and structures prior to micropile work. If obstructions are encountered in the drilling work, the Contractor shall stop operations in such areas and immediately notify the Engineer.

(B) Experience Information. The Micropile Contractor shall submit the following to the Engineer within 30 days before submitting the bid:

(1) List containing at least ten (10) projects on which they have installed permanent micropiles. A description of each project including a reference shall be included in the list. The references shall include the individual's name, current phone number, and company name.

(2) List identifying the drill operators and on-site supervisors who will be assigned to this project. The list shall contain a summary of each individual's experience in sufficient detail that the Engineer could determine if the individual has satisfied at least one year of experience in installing permanent micropiles and direct experience on at least two (2) piling projects similar to the scope of work as this project.

(3) Each accepted individual shall not be changed without permission of the Engineer and shall be full-time on this project.

The use of consultants and/or manufacturer's representatives does not satisfy the above qualification requirements.

The Engineer may suspend the micropile construction if the micropile Contractor substitutes unqualified personnel for approved personnel during construction. If work is suspended due to substitution of unqualified personnel, the Contractor shall be fully liable for additional costs resulting from the suspension of work and no adjustment in contract time resulting for the suspension of work will be allowed.

(C) Prior to the start of the micropile construction, the Contractor shall submit the following to the Engineer for review:

(1) Shop Drawings. Indicate installation methods including drilling, placement of grout, placement of reinforcement and centralizers.

(2) Grout Mix Design. Submit a grout mix design, not less than forty-five days prior to grout placement. Submit certified test reports for grout strength in accordance with ASTM C109.

(3) Manufacturer's Instructions. Submit installation instructions for placement of micropiles, including detailed narrative describing the drilling equipment, drilling procedures, placement of reinforcement and grout including centralizers, and methods to be used and all aspects of the work.

(4) Certificates. Submit certification identifying cement, brand name, type, mill location, and quantity to be used. Mill test reports of the piling steel components (reinforcement, casing and bearing plates, etc).

(5) Pollution Control Plan. Submit Pollution Control Plan to the Engineer for acceptance.

(D) Submit a signed statement that the Micropile Contractor has inspected both the project site and the subsurface information including soil or rock samples made available in the contract documents.

(E) A trial micropile shall be installed in batter to show the adequacy of its methods and equipment. Position this trial micropile away from production micropiles at the location shown in the Plans or as modified by the Engineer. Construct the trial micropile to the same diameter as production micropiles or as directed by the Engineer. Install a temporary steel casing and drill the trial micropile to the maximum depth shown on the Plans.

Failure to show the Engineer the adequacy of methods and equipment shall be reason for the Engineer to require alterations in equipment and/or methods by the Contractor. Additional trial micropile required demonstrating the adequacy of altered methods of construction or equipment shall be at no additional cost to the State. Once the Engineer has given acceptance to construct production micropiles, the Engineer will not permit changes in the methods or equipment used to construct the satisfactory trial micropile without consent of the Engineer.

512.04 Materials. Materials shall conform to the following:

(A) Portland cement shall conform to ASTM C150, Type 1.

(B) Grout shall conform to ASTM C476. Grout shall be neat cement (Portland cement and water) or a sand-cement grout with a fluid consistency, water cement ratio of 0.45 or less, and a minimum unconfined compressive strength (from cubes) of 4000 psi at 28 days in accordance with ASTM C109. The grout shall contain suitable admixtures to control bleeding, shrinkage, improve flowability, and reduce the potential for washout. The admixtures shall be non-corrosive and designed for anchoring applications.

(C) Water shall be clean, fresh, potable, and free from injurious amounts of mineral and organic substances.

(D) Central reinforcing steel shall be high strength all-thread rebar conforming to ASTM A615, Grade 75, and shall be epoxy coated in accordance with ASTM A934 or ASTM A775.

(E) Centralizers shall be fabricated from plastic or material that is non-detrimental to the reinforcing steel. Wood shall not be used. The centralizer shall be able to support the epoxy coated bar reinforcing so a minimum of 2.25 inches of grout cover is provided and shall permit grout to freely flow up the drill hole.

(F) Permanent steel casing shall be hot-dip galvanized and conform to the physical properties of ASTM A252, Grade 3, with a minimum yield strength of 50 ksi, and Subsection 512.05(D).

(G) Coal tar epoxy shall be abrasion resistant and durable and shall conform to Corps of Engineers C-200, C-200a and AWWA C-210. The thickness shall be between 8 and 24 mils. The coal tar epoxy shall be applied to clean and dry bar surfaces.

512.05 Construction Requirements.

(A) Protection of Existing Structures. Verify locations of existing underground utilities and structures prior to micropile work. If obstructions are encountered in the drilling work, stop operations in such area and immediately notify the Engineer.

The Contractor shall control his operations to prevent damage to existing structures and utilities. Preventive measures shall include, but are not limited to, selecting construction methods and procedures that will

reduce the amount of cave-ins, over-cuts, and excessive grout losses, and monitoring and controlling the vibrations from construction activities such as drilling or the driving of casing.

(B) Construction Requirement.

(1) General. The Contractor shall perform the micropile installations through whatever materials are encountered, to the locations and dimensions as shown in the plans or otherwise required by the Engineer. The Contractor's methods and equipment shall be suitable for the intended purpose and material encountered.

The Contractor shall account for anticipated subsurface conditions including, but not limited to, those shown on the plans by selecting suitable drilling and grouting methods that will produce micropiles that satisfy or exceed the design load requirements, while reducing the potential for difficult drilling and excessive grout losses or grout takes.

Provide drill holes with minimum diameter of 7 inches at the locations and depths shown in the Contract Documents or as directed by the Engineer. Install the reinforcements and grout the same day the holes are drilled to minimize sloughing and caving. Contractor shall install temporary steel casings to bottom of drilled hole at the Contractor's expense.

During micropile installations, the Engineer will maintain the following information during micropile installation:

(a) Detailed drilling records and logs of the date of drilling, equipment used, driller's name, actual hole sizes and depths, subsurface materials encountered, drilling rates and any unusual conditions.

(b) Grouting records indicating the grouting dates, cement type, quantity injected, and grout pressures at the point of injection, including any post grouting performed.

The Contractor shall submit as-built drawings showing the micropile locations, elevations of top and bottom of steel casing and reinforcing steel, total pile length and bond length, and casing size to the Engineer for review and record.

The Contractor shall immediately report to the Engineer any unusual conditions encountered during the micropile construction.

(2) **Drilling Equipment.** The drilling equipment for the micropiles may consist of a combination of rotary drilling, core drilling, percussion drilling, or driven casing and shall be capable of drilling through loose/soft silt and sand, stiff silt and clay, hard cobbles and boulders and other subsurface conditions anticipated. It shall have suitable drilling bit and other appropriate equipment to drill into the various subsurface materials anticipated at this site. The use of bentonite or drilling mud will not be allowed.

(3) **Grouting Equipment.** Grout shall be produced with high-speed, high shear mixers. The grouting equipment shall be equipped with a pressure gauge to monitor grout pressures. An additional in-line pressure gauge shall be installed at the point of injection. Both pressure gauges shall be capable of measuring pressures of at least twice the actual grout pressures anticipated by the Contractor. The grouting equipment shall be capable of thoroughly mixing and producing a grout free of lumps and undispersed cement, and shall be able to pump the grout in a continuous operation.

(C) Soil Cuttings and Fluids. Suitable equipment and approved methods shall be used to contain and treat the soil cuttings and fluids from the drilling and grouting in accordance with City, State and Federal environmental pollution regulations and requirements to prevent environmental impacts to existing structures. The soil cuttings and fluids from the drilling shall be disposed of by the Contractor in accordance with City, State and Federal environmental pollution regulations and requirements.

(D) Permanent Steel Casings. Casing shall have a minimum outside diameter of 7 inches, minimum wall thickness of 0.498 inch, and machined flush jointed threads.

(E) Central Reinforcing Steel Placement. The central reinforcing steel consists of a single No. 11 epoxy coated longitudinal bar within each micropile as indicated. Non-corrosive centralizers shall be used with the reinforcing bars. The centralizer shall be placed at vertical spacings not exceeding 10 feet and the lower centralizer shall be located not more than one foot above the bottom of the reinforcing bar.

Reinforcing steel shall only be spliced with mechanical couplers specifically manufactured for splicing epoxy coated bars and capable of achieving the full ultimate strength of the bar. The coupler shall also be corrosion resistant. Contractor to submit mechanical coupler data to the Engineer for approval.

(F) Grouting. The grout in each micropile shall be placed by starting from the deepest point in the drill hole and working upward. It shall be pumped through grout tubes, pipes, or drill rods. The grout pressures and grout takes shall be controlled to reduce the amount of ground heave and excessive grout takes. Additional post grouting may be performed as determined by the Contractor, to obtain the required load capacity. After completing the grouting, the grout tube or pipe may remain in the hole, but it shall be filled with grout of equal or greater strength than the grout used in the installations.

(G) Grout Quality Control. One set of grout specimens shall be taken daily. Each set shall consist of 6 cubes. Cubes shall be made from brass molds (not plastic molds). Grout specimens shall be cured under laboratory conditions. Cubes shall be tested in accordance with ASTM C109. Strength tests shall be made for 3 cubes at 7 days and for 3 cubes at 28 days. If the strength tests of one or more cubes of a set from a pile are at 10 percent or more below the required compressive strength required at 28 days, the pile shall be abandoned and replaced by a pile placed adjacent to the abandoned pile as directed by the Engineer at the Contractor's expense. All tests shall be made by an independent testing laboratory approved by the Engineer and paid for by the Contractor.

(H) Pre-Production Sacrificial Micropiles. A sacrificial pre-production trial micropile shall be installed in a batter position to show the adequacy of its methods and equipment. Position this trial micropile away from production micropiles at the location shown on the Plans or as modified by the Engineer. Construct the trial micropile to the same diameter as production micropiles or as directed by the Engineer. Install a temporary steel casing and drill the trial micropile to the maximum depth shown on the Plans.

Failure to show the Engineer the adequacy of methods and equipment shall be reason for the Engineer to require alterations in equipment and/or methods by the Contractor. Additional trial micropiles required demonstrating the adequacy of altered construction methods or equipment shall be at no additional cost to the State. Once the Engineer has given acceptance to construct production micropiles, the Engineer will not permit changes in the methods or equipment used to construct the satisfactory trial micropile without consent of the Engineer.

A sacrificial pre-production load test micropile shall be installed using the equipment and methods proposed by the Contractor and tested prior to production micropile installation.

The sacrificial load test micropile shall be installed vertically at location shown on the plans. The Contractor shall notify the Engineer of the load testing schedule a minimum of five calendar days prior to the commencement of load testing. The Engineer will observe the testing and take records of the instruments and gauges during the testing.

The Contractor shall test the pre-production micropile in tension to at least one and half (1.5) times of its allowable design load in accordance with ASTM D3689, "Quick Load Test Method for Individual Piles" and as modified herein. The Contractor shall provide all necessary load test equipment, hydraulic jack, pump, load cell, and instrumentation in accordance with ASTM D3689 and as specified herein. Perform the pre-production testing by incrementally loading the micropile to be tested in accordance with the following loading schedule:

Proof Test Schedule

0.05P
0.25P
0.50P
0.75P
1.00P
1.25P
1.50P

Where P = allowable micropile capacity of 60 kips.

Except at the maximum testing load, increase the loads from one increment to the next immediately after recording the micropile movement. Measure and record the micropile movement at the top of the pile for each load increment to the nearest 0.001 inches with respect to a constant elevation benchmark located sufficiently far away from the pile being tested so as not to be affected by the test. Monitor the load with a load cell. At load increments other than the maximum test load, hold the load just long enough to measure the micro-pile movement, but not more than one minute. Hold the maximum test load for ten (10) minutes. Periodically pump the jack as necessary to maintain a constant load. Start the load-holding period as soon as the maximum load has been applied and record the micro-pile movements at 1, 2, 3, 4, 5, 6, and 10 minutes.

If the micropile movements between the one minute and ten (10) minute readings exceeds 0.04 inches, hold the maximum test load for an additional 50 minutes and record micropile movements at 15, 20, 25, 30, 45, and 60 minutes.

Pre-production micropile testing with ten (10) minute load-holding periods is acceptable if the total movement measured between one minute and ten (10) minutes is less than 0.04 inches, and the total movement at

the maximum test load exceeds 80 percent of the theoretical elongation of the unbonded length of the pile being tested.

Pre-production micropile testing with sixty (60) minutes load-holding periods is acceptable if the creep rate does not exceed 0.08 inches per log cycle of time and the total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the unbonded length of the pile being tested.

If a micropile fails the verification testing, the Contractor shall modify his design and /or installation procedures to provide micropiles with acceptable results. Additional pre-production micropile shall be installed and tested at no additional cost to the State. Any modifications to the micropile design and construction will be at the Contractor's expense.

(l) Construction Tolerance. The following construction tolerances apply to micropiles:

(1) The micropile shall be within two (2) inches of plan position in the horizontal plane at the plan elevation for the top of the pile.

(2) The batter micropiles shall be installed to not more than plus or minus 2 percent from specified batter alignment of the micropile.

(3) After grouting, the top of the central reinforcing steel shall be no more than six (6) inches above and no more than three (3) inches below plan position.

(4) The top elevation of the micropile shall have a tolerance of ± one-half (½) inch from the plan top of pile elevation.

(5) The dimensions of the casings are subject to American Pipe Institute tolerances applicable to regular steel pipe.

(6) Micropiles not constructed within the required tolerances are unacceptable. Submit correction plan of replacement micropiles to the Engineer. Corrections may be made to an unacceptable micropile by any approved combination of the following methods:

The approval of correction procedures is dependent on analysis of the effect of the degree of misalignment, improper positioning, and/or mis-location of the unacceptable micropile. Correction methods may be approved if substantiated by acceptable design analysis. Redesign drawings and computations shall be signed by a Structural Engineer licensed in the State of Hawaii. Materials and work necessary, including engineering

analysis and redesign and construction, to effect corrections for unacceptable micropiles shall be furnished at no cost to the State.

(J) Clean Up. Upon completion of work, remove all materials, tools, scaffolding, refuse and debris generated by the work from premises, leaving premises in clean and satisfactory condition.

Clean up shall be conducted by the Contractor to remove rubbish and debris from the site daily, unless otherwise directed. Store materials which cannot be disposed of daily properly.

512.06 Method of Measurement. The Engineer will pay for one sacrificial pre-production trial micropile and one sacrificial pre-production load test micropile in a lump sum basis.

Production micropiles will be paid on a contract unit price basis. Micropile length will be measured from cut-off to tip elevations shown on the plans.

512.07 Payment. The Engineer will pay for the accepted sacrificial pre-production trial and load test micropiles at the contract price complete in place. The price includes full compensation for drilling, placing permanent steel casing and neat cement grout, furnishing and installing reinforcing steel, furnishing and installing reaction piles, stable testing assembly, equipment, load cell and reference systems, performing load testing, keeping records and furnishing labor, materials, equipment, tools and incidentals necessary to complete the pre-production sacrificial micropiles.

The Engineer will pay for the accepted production micropiles on a contract unit price basis. Payment will be per linear foot of production micropile including full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item:

Pay Item	**Pay Unit**
Sacrificial Pre-production Trial Micropile	Lump Sum
Sacrificial Pre-production Load Test Micropile	Lump Sum
Production Micropiles	Linear Foot"

END OF SECTION 512

General Decision Number: HI120001 01/27/2012 HI1

Superseded General Decision Number: HI20100001

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	01/06/2012
1	01/13/2012
2	01/20/2012
3	01/27/2012

ASBE0132-001 08/29/2010

	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	$ 36.65	22.24

BOIL0627-005 04/01/2010

	Rates	Fringes
BOILERMAKER	$ 31.92	21.42

BRHI0001-001 08/29/2011

	Rates	Fringes
BRICKLAYER		
Bricklayers and Stonemasons	$ 33.90	22.62
Pointers, Caulkers and Weatherproofers	$ 34.15	22.62

BRHI0001-002 08/29/2011

	Rates	Fringes

Tile, Marble & Terrazzo Worker		
Terrazzo Base Grinders	$ 32.34	22.62
Terrazzo Floor Grinders and Tenders	$ 30.79	22.62
Tile, Marble and Terrazzo Workers	$ 34.15	22.62

CARP0745-001 08/29/2011

	Rates	Fringes
Carpenters:		
Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinglers and Transit and/or Layout Man	$ 38.00	19.62
Millwrights and Machine Erectors	$ 38.25	19.62
Power Saw Operators (2 h.p. and over)	$ 38.15	19.62

CARP0745-002 08/29/2011

	Rates	Fringes
Drywall and Acoustical Workers and Lathers	$ 38.25	19.62

ELEC1186-001 02/20/2011

	Rates	Fringes
Electricians:		
Cable Splicers	$ 44.33	26.41
Electricians	$ 40.30	25.18
Telecommunication worker	$ 23.20	17%+6.35

ELEC1186-002 02/20/2011

	Rates	Fringes
Line Construction:		
Cable Splicers	$ 44.33	24.67
Groundmen/Truck Drivers	$ 30.22	20.89
Heavy Equipment Operators	$ 36.27	22.50
Linemen	$ 40.30	23.57
Telecommunication worker	$ 23.20	17%+$6.35

ELEV0126-001 01/01/2012

	Rates	Fringes
ELEVATOR MECHANIC	$ 50.63	23.535+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, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

ENGI0003-002 08/29/2011

	Rates	Fringes
Diver (Aqua Lung) (Scuba)		
Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)	$ 58.75	23.94
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)	$ 49.38	23.94
Stand-by Diver (Aqua Lung) (Scuba)	$ 40.00	23.94
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung)	$ 58.75	23.94
Diver Tender (Other than Aqua Lung)	$ 36.97	23.94
Stand-by Diver (Other than Aqua Lung)	$ 40.00	23.94
Helicopter Work		
Airborne Hoist Operator for Helicopter	$ 38.55	23.94
Co-Pilot of Helicopter	$ 38.69	23.94
Pilot of Helicopter	$ 38.86	23.94
Power equipment operator - tunnel work		
GROUP 1	$ 34.99	23.94
GROUP 2	$ 35.10	23.94
GROUP 3	$ 35.27	23.94
GROUP 4	$ 35.54	23.94
GROUP 5	$ 35.85	23.94
GROUP 6	$ 36.50	23.94
GROUP 7	$ 36.82	23.94
GROUP 8	$ 36.93	23.94
GROUP 9	$ 37.04	23.94
GROUP 9A	$ 37.27	23.94
GROUP 10	$ 37.33	23.94
GROUP 10A	$ 37.48	23.94
GROUP 11	$ 37.63	23.94
GROUP 12	$ 37.99	23.94
GROUP 12A	$ 38.35	23.94
Power equipment operators:		
GROUP 1	$ 34.69	23.94
GROUP 2	$ 34.80	23.94
GROUP 3	$ 34.97	23.94
GROUP 4	$ 35.24	23.94
GROUP 5	$ 35.55	23.94
GROUP 6	$ 36.20	23.94
GROUP 7	$ 36.52	23.94
GROUP 8	$ 36.63	23.94
GROUP 9	$ 36.74	23.94
GROUP 9A	$ 36.97	23.94
GROUP 10	$ 37.03	23.94
GROUP 10A	$ 37.18	23.94
GROUP 11	$ 37.33	23.94

GROUP 12	$ 37.69	23.94
GROUP 12A	$ 38.05	23.94
GROUP 13	$ 34.97	23.94
GROUP 13A	$ 35.24	23.94
GROUP 13B	$ 35.55	23.94
GROUP 13C	$ 36.20	23.94
GROUP 13D	$ 36.52	23.94
GROUP 13E	$ 36.63	23.94

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 Loaderand 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, Liebher, 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

ENGI0003-004 08/29/2011

	Rates	Fringes
Dredging: (Boat Operators)		
Boat Deckhand	$ 34.97	23.94
Boat Operator	$ 37.18	23.94
Master Boat Operator	$ 37.33	23.94
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1	$ 37.69	23.94
GROUP 2	$ 37.03	23.94
GROUP 3	$ 36.63	23.94
GROUP 4	$ 34.97	23.94
Dredging: (Derricks)		
GROUP 1	$ 37.69	23.94
GROUP 2	$ 37.03	23.94
GROUP 3	$ 36.63	23.94
GROUP 4	$ 34.97	23.94
Dredging: (Hydraulic Suction Dredges)		
GROUP 1	$ 37.33	23.94

GROUP 2	$ 37.18	23.94
GROUP 3	$ 37.03	23.94
GROUP 4	$ 36.97	23.94
Group 5	$ 36.63	23.94
Group 6	$ 36.52	23.94
Group 7	$ 34.97	23.94

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 08/29/2011

	Rates	Fringes
Power Equipment Operators (PAVING)		
(10) Cold Planer	$ 37.40	25.33
(10)Loader (2 1/2 cu. yds. and under)	$ 36.57	25.33
(10)Soil Stabilizer	$ 37.40	25.33
(11)Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.)	$ 36.89	25.33
(3)Roller Operator (five tons and under)	$ 35.34	25.33
(5)Screed Person	$ 36.57	25.33
(6)Combination Loader/Backhoe (up to 3/4 cu.yd.)	$ 34.63	25.33
(6)Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals)	$ 36.57	25.33
(6)Roller Operator (over five tons)	$ 36.77	25.33
(7)Combination Loader/Backhoe (over 3/4		

cu.yd.)	$ 35.61	25.33
(8) Asphalt Plant Operator	$ 37.00	25.33
Asphalt Concrete Material Transfer	$ 36.57	25.33
Asphalt Raker	$ 35.61	25.33
Asphalt Spreader Operator	$ 37.09	25.33
Grader	$ 37.40	25.33
Laborer, Hand Roller	$ 32.84	25.33

IRON0625-001 09/01/2011

	Rates	Fringes
Ironworkers:	$ 33.75	28.01

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.

LABO0368-001 08/29/2011

	Rates	Fringes
Laborers:		
Driller	$ 31.30	15.91
Final Clean Up	$ 21.70	11.47
Gunite Operator & High Scaler	$ 30.80	15.91
Laborer I	$ 30.30	15.91
Laborer II	$ 27.70	15.91
Powderman	$ 31.30	15.91
Window Washer (bosun chair)	$ 29.80	15.91

LABORERS CLASSIFICATIONS

Laborer I: Asbestos Removal Worker (EPA certified workers); 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, Welding, Signalling, Choke Setting, and Rigging in connection with Laborers' work (except demolition); 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; 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; Falling, bucking, yarding, loading or burning of all trees or timber on construction site; 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 lightweight backfill; Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Lead base paint abatement laborers (EPA certified workers); 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): handling, placing and opertion 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, 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; 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: Air Blasting; Appliance Handling (job site) (after delivery and unloading in storage area); Asphalt Plant Laborer; Backfilling, Grading and all other labor connected therewith; Boring Machine; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); 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; 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, stablishing 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: sweeeping, 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; Ground and Soil Treatment Work (Pest Control); 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 waterponds, 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 stockkpile to point of installation; hooking and signalling 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 (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; Sandblasting (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; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; 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; Striper (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 an false work.

LABO0368-002 08/29/2011

	Rates	Fringes
Landscape & Irrigation		
Laborers		
GROUP 1	$ 21.70	8.52
GROUP 2	$ 22.20	8.52
GROUP 3	$ 18.20	8.52

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 oflandscaping 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.

LABO0368-003 08/29/2011

	Rates	Fringes
Underground Laborer		
GROUP 1	$ 30.90	15.91
GROUP 2	$ 32.40	15.91
GROUP 3	$ 32.90	15.91
GROUP 4	$ 33.90	15.91
GROUP 5	$ 34.15	15.91
GROUP 6	$ 34.25	15.91
GROUP 7	$ 34.50	15.91

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 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; Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

PAIN1791-001 01/01/2012

	Rates	Fringes
Painters:		
Brush	$ 33.60	24.30
Sandblaster; Spray	$ 33.60	24.30

PAIN1889-001 07/01/2011

	Rates	Fringes
Glaziers	$ 32.05	24.22

PAIN1926-001 07/01/2011

	Rates	Fringes
Soft Floor Layers	$ 28.12	20.98

PAIN1944-001 01/01/2012

	Rates	Fringes
Taper	$ 40.00	16.90

PLAS0630-001 08/29/2011

	Rates	Fringes
PLASTERER	$ 34.69	22.62

PLAS0630-002 08/29/2011

	Rates	Fringes
Cement Masons:		
Cement Masons	$ 33.85	22.62
Trowel Machine Operators	$ 34.00	22.62

PLUM0675-001 07/03/2011

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter	$ 36.10	22.26

ROOF0221-001 09/25/2011

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply)	$ 36.10	16.13

SHEE0293-001 08/28/2011

	Rates	Fringes
Sheet metal worker	$ 34.65	21.71

SUHI1997-002 09/15/1997

	Rates	Fringes
Drapery Installer	$ 13.60	1.20
FENCE ERECTOR (Chain Link Fence)	$ 9.33	1.65

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

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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)).

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 union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows 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. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived

from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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

DEPARTMENT OF TRANSPORATION
HIGHWAYS DIVISION
DESIGN BRANCH
TECHNICAL DESIGN SECTION
601 KAMOKILA BOULEVARD, ROOM 688
KAPOLEI, HAWAII 96707

PRE-BID CONFERENCE MINUTES

601 KAMOLIKA BOULEVARD, CONFERENCE ROOM 541
KAPOLEI, HAWAII 96707
JANUARY 10, 2012; 9:30 A.M.

PROJECT TITLE: CASTLE HILLS ACCESS ROAD
DRAINAGE IMPROVEMENTS, PHASE 2
DISTRICT OF KOOLAUPOKO
ISLAND OF OAHU

PROJECT NUMBER: STP-0300(125)

The pre-bid conference commenced at 9:32 A.M.

The pre-bid conference was opened with an introduction from the Hawaii Department of Transportation (HDOT) staff and a brief description of the project.

The following items were discussed.

1. Notice to Proceed:

   a. HDOT has not issued the Notice to Proceed (NTP) for the Castle Hills Access Road, Drainage Improvements, Phase 1, Federal-Aid Project No. STP-0300(122), herein after referred to as the Phase 1 project.

   b. The bid documents include provisions for delay of the NTP for the Phase 2 project of up to 365 calendar days.

2. Access Restrictions for Private Roadways:

   a. The Contractor will be traveling over a private road (portion of Po'okela Street) to access the project site adjacent to Kupohu Street within the Castle Hills subdivision.

   b. The Fathers of the Sacred Hearts own a portion of Po'okela Street and all other roads within the Castle Hills subdivision.

   c. The Fathers of the Sacred Hearts has given the HDOT permission to use a portion of Po'okela Street to gain access to the project site for the duration of construction.

d. Access over Kupohu Street will not be permitted.

3. Construction Surveys:

   a. The State has installed surface settlement points and inclinometers shown on Sheet 11 of the construction plans. The Contractor shall take caution and protect the surface settlement points and inclinometers from damage.

4. Permits:

   a. The bid CD contains scanned images of various permit applications, permits, permit conditions and other documents.

   b. The Contractor shall be responsible to prepare and submit a written site-specific BMP plan and erosion control plan to the Engineer for review and acceptance.

5. Temporary Cofferdam:

   a. The temporary cofferdam shown on the plan is only schematic. The Contractor shall be fully responsible to design, determine the location and extents of the temporary cofferdam, providing safe excavation conditions, and prevent ground settlement and lateral earth movement.

   b. A portion of the existing gabion wall to be constructed with the Phase 1 project may need to be removed to install the temporary cofferdam for construction of the drop structure. Bidders should include the cost for this work in their bids.

   c. Any surcharge behind the temporary cofferdam from construction activity and/or equipment should be avoided, unless providing sufficient shoring and lateral bracing with calculation justification.

   c. The temporary cut slope inclination for the gabion wall construction shall be determined by the Contractor.

   d. The Contractor shall submit the installation procedures for the gabion walls and gabion apron following the manufacturer's recommendations. The procedures should also include the planned construction access for the engineer's review and acceptance.

The following questions were asked at the pre-bid conference.

1. Question: Is the Contractor required to hold their price if the (Phase 2) project is delayed?

   Answer: Yes, the Contractor must hold their bid price for at least 365 calendar days after the effective date of the contract.

2. Question: Will there be more access for the Phase 2 project?

   Answer: The Phase 1 project will demolish and remove seven (7) homes along Kupohu Street and three (3) homes along Pilina Way. There should be more access for the Phase 2 project.

3. Question: Who will be responsible to renew and/or obtain the permits?

   Answer: Certain permits will expire during the Phase 1 project. HDOT will renew and/or obtain these permits. HDOT will review other permits that may expire during the Phase 2 project then decide who will be responsible for the renewal and/or obtain the required permits. A response will be provided at a later date.

4. Question: Are the construction plans for Phase 1 available?

   Answer: The construction plans for the Phase 1 project should be available. HDOT will review this request and provide a response at a later date.

5. Question: Can the Contractor access Po'okela Street from the cul-de-sac of Pilina Way, through State property (Lot "B" and T.M.K.: 4-5-023: 016)?

   Answer: HDOT staff recalls an existing embankment between Lot "B" and Po'okela Street. The terrain may be difficult to traverse. HDOT will review this inquiry and provide a response at a later date.

6. Question: Does the Phase 1 project have any in-stream work along the north stream bank?

   Answer: No.

7. Question: When is the last day for issuance of addendums?

   Answer: January 30, 2012.

The pre-bid conference concluded at approximately 9:50 A.M.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PRE-BID CONFERENCE
SIGN-UP SHEET

Project: **Castle Hills Access Road**
Drainage Improvements, Phase 2
Federal-Aid Project No. STP-0300(125)
District of Koolaupoko
Island of Oahu
FY2011

Date: **Tuesday, January 10, 2012**
Time: **9:30 A.M.**
Place: **601 Kamokila Boulevard, Room 541**
Kapolei, Hawaii 96707

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