

**STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION**

**ADDENDUM NO. 1**

**FOR**

**INTERSTATE ROUTE H-1 CONCRETE PAVEMENT  
PRESERVATION DOWEL RETROFIT  
M.P. 2.40 TO M.P. 3.46 AND M.P. 24.90 TO M.P. 26.40  
FEDERAL-AID PROJECT NO. ARR-H1-1(262)  
DISTRICTS OF HONOLULU AND EWA  
ISLAND OF OAHU**

**FY 2009**

Amend the bid documents as follows:

**A. SPECIAL PROVISIONS**

1. Replace Section 416 – DOWEL BAR RETROFIT, pages 416-1a thru 416-9a, dated 8/28/09, with the attached pages 416-1a thru 416-9a, dated 9/23/09.
2. Replace the Federal Wage Rates dated 09/04/2009 with the attached Federal Wage Rates dated 09/11/2009.

**B. PLANS**

1. Replace Plan Sheet Nos. 3, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, and 22 with the attached Plan Sheet Nos. ADD. 3, ADD. 11, ADD. 12, ADD. 13, ADD. 15, ADD. 16, ADD. 17, ADD. 18, ADD. 19, ADD. 20, ADD. 21 and ADD. 22.
2. On Detour Plan Sheet Nos. 38 to 43, General Note No. 6, plan sheet reference number should read as 24, instead of 22.

**C. PRE-BID MEETING**

Attached are the minutes and attendance sheet for the September 21, 2009 Pre-bid meeting.

**ARR-H1-1(262)**

**9/24/09**

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.



BRENNON T. MORIOKA, Ph.D. P.E.  
Director of Transportation

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## “SECTION 416 - DOWEL BAR RETROFIT

**416.01 Description.** This section includes retrofitting with epoxy-coated steel dowel bars at transverse weakened plane joints or cracks and grinding the existing Portland cement concrete pavement (PCCP) according to the Contract Documents.

**416.02 Materials.**

**(A) Epoxy-coated dowel bars.** The dowel bars shall be plain, round bars fabricated from steel meeting AASHTO M 31, M 42, or M 53. Dowels shall be cut to the required length and cleaned to remove all cutting burrs, loose mill scale, rust grease, and oil. The bars may be sheared providing the deformation of the bars from true round shape does not exceed 0.04 inch in diameter or thickness, and shall not extend more than 0.04 inch from the sheared end.

The dowel bars shall be epoxy coated 100 percent on all surfaces. The epoxy coating shall be in accordance with AASHTO M 284. The dowel bars shall also be shop coated with a bond breaking release agent. The bond breaking release agent shall be a wax based liquid membrane-forming curing compound that conforms to the requirements of AASHTO M 148 Type 1-D or 2, Class A.

Submit material's Manufacturer's material certification for approval

The dowel bars shall have tight fitting expansion end caps made of nonmetallic, non-organic materials that allow for 1/4 - inch movement of the bar at each end. The Contractor shall submit dowel bar assembly with chair and expansion end cap sample to the Engineer prior to use. End caps shall fit on dowels without excessive force that may cause damage, and shall not become dislodged during handling and when filling slots with concrete. Submit data sheet and sample for approval.

**(B) Caulk.** The caulk for sealing the existing transverse joint crack at the bottom and sides of the slot shall be commercial grade silicone caulk containing a minimum of 50 percent silicone and designed as a concrete sealant that is compatible with the patch material being used.

**(C) Core Board.** The foam core board shall be constructed of closed cell foam and be faced with poster board material or laminate on each side. The foam core board shall be 1/4 to 3/8 inch thick. Use additional foam boards as needed for joints with wide gaps. Submit data sheet and sample for approval.

**(D) Chairs.** The chair devices for supporting and holding the dowel bars in place shall be completely epoxy-coated or made of nonmetallic, non-organic material accepted by the Engineer prior to installation. Submit data sheet and sample for approval.

**(E) Patching Material.** The concrete patching materials used to backfill the slots shall be a trial tested or pre-packaged fast-setting patching grout or mortar extended with aggregates. The amount of aggregate for extension shall conform to the manufacturer's recommendation. The fast setting grout shall be mixed in accordance with the manufacturer's instruction. Submit the material's Manufacturer's material certification and test data for approval.

Patching materials (mortar) and extended patching materials (concrete) shall be cementitious materials and meet the following requirements:

Characteristics	Test Method	Requirements
<b>Patching Mortar and Grout</b>		
Compressive Strength at 3 Hours at 24 Hours	ASTM C-109 ASTM C-109	Minimum 3,000 psi Minimum 5,000 psi
Length Change at 24 Hours	ASTM C 157	0.13 percent maximum
Bond Strength at 24 Hours	ASTM C 882 (As modified by ASTM C 928, Section 8.4)	Minimum 1,000 psi
Total Chloride Ion Content	ASTM C 1218	1 lb/yd <sup>3</sup> maximum
<b>Extended Aggregate Concrete from Mortar or Grout</b>		
Compressive Strength at 3 Hours at 24 Hours	ASTM C 39 ASTM C 39	Minimum 3,000 psi Minimum 5,000 psi
Length Change at 28 Days	ASTM C 157	0.15 percent maximum
Bond Strength at 24 Hours	ASTM C 882 (As modified by ASTM C 928, Section 8.4)	Minimum 1,000 psi

Aggregate for extension material shall be AASHTO Grading No. 7 and meet section 703.01 Fine Aggregate. The moisture content of the extension material shall not exceed 0.5 percent.

#### **416.03 Construction Requirements.**

**(A) Retrofit Work Plans, Trial Batch and Demonstration.** Work shall not start until the retrofit work plans, trial batch and demonstration are reviewed, observed and accepted by the Engineer.

- (1)** Submit dowel bar retrofit working plans at least two (2) weeks prior to demonstration. Plans shall include details of work methods and work sequencing.
- (2)** Perform a trial batch of the patching material using the mixer to be used for this work. Demonstrate the ability to achieve the required compressive strengths. Test a minimum of 4 sets of cylinders (4 x 8 inch cylinders, 3 each per set) at test ages of 1, 3, 6 and 24 hours. Contractor to obtain services from a certified test lab to perform these tests. Submit test results to the State.
- (3)** Demonstrate the production techniques of work to install dowels including but not limited to slot sawcut, preparation, joint sealing, dowel placements, patch placement, finishing, curing, patch transverse joint forming and/or scoring, grinding and core drilling in accordance with section 416.03(F) on a demonstration slab on site or a site accepted by the Engineer. Schedule work of the demonstration slab during the same time period specified in the Contract Documents. The Engineer may require additional demonstration work until demonstration work conforms to the Contract Documents.
- (4)** Submit equipment specifications for gang saw, pavement grinding machine, mobile or portable mixer and any other special equipment.

**(B) Dowel Bar Installation.** Install the dowel bars in the existing concrete pavement as shown in the plans and according to the following requirements.

- (1)** Sawcut slots at each transverse and skewed joint or transverse uncontrolled shrinkage crack, generally occurring at mid slab so that the longitudinal centerline of each dowel bar is placed within the following tolerances:

- (a)** Place at a depth within 1.0 inch of the center of the existing depth of pavement or mid-slab.

111  
112 (b) Centered over the transverse joint a minimum  
113 embedment of 8 inches on each side of the joint.  
114

115 (c) Parallel to centerline direction of traffic and within the  
116 plane of the roadway surface.  
117

118 (d) Horizontal position  $\pm 1/4$  inch, vertical position  $\pm 1/4$   
119 inch, skew from parallel (per 18 inch)  $\pm 1/4$  inch.  
120

121 Cut slots into the PCCP with a gang saw capable of  
122 simultaneously cutting all the slots using diamond saw blades at  
123 one location (one wheel path). Make slots large enough to  
124 provide the minimum clearances shown in the contract documents.  
125 Cut to the required depth to place the center of the dowel at mid-  
126 depth in the concrete slab. If necessary, make multiple parallel  
127 saw cuts to aid, and to prevent damages in the removal of the  
128 existing concrete from the slot. When the transverse joint is  
129 skewed, adjust the saw cuts to ensure enough slot is on each side  
130 of the transverse joint.  
131

132 Align slots to miss existing longitudinal cracks. Slots from  
133 gang saws may be sawn but not retrofitted to miss any longitudinal  
134 crack. Clean non-retrofitted saw cuts and seal with an epoxy  
135 resin. The epoxy resin shall be in accordance with ASTM C881.  
136 Immediately pickup and remove concrete debris, water residue, or  
137 paste from saw cutting operation. Use pickup and removal  
138 equipment to include a high power, mobile, vacuum cleaning  
139 machine capable of removing all displaced material with minimum  
140 of dust.  
141

142 Schedule concrete removal operations so that the concrete  
143 removed during a work shift to shape the dowel bar slots, shall be  
144 replaced, in the same work shift, with dowel bars and fast setting  
145 grout, prior to the time the lane is to be opened to public traffic.  
146

147 Remove the concrete remaining between the saw cuts  
148 without damage to the pavement to remain. If jackhammers are  
149 used to break the concrete loose, do not use jackhammers larger  
150 than the nominal 30-pound class. If the jackhammer damages the  
151 pavement, the Engineer will require the Contractor to use a lighter  
152 hammer. Use 15-pound class jackhammer to level the bottom of  
153 the slot. Do not use jackhammers in a plane vertical to the PCCP  
154 surface. Repair or replace any damage to concrete to remain at no  
155 cost to the State.  
156

157 Sand blast and clean all exposed surfaces and cracks in the  
158 slot to bare concrete to remove saw slurry, parting compound, or  
159 other foreign material prior to bar installation. Where sand  
160 blasting operations are being performed within 9 feet of a lane  
161 occupied by public traffic, immediately remove the residue including  
162 dust after contact between the sand and the surface being treated.  
163 Remove the residue by a vacuum attachment operating  
164 concurrently with the sand blasting operation. A high-pressure  
165 water blast may be used in cleaning the slots. Use oil free  
166 compressed air to remove concrete chunks, dirt, debris, water, and  
167 slurry residue remains on the sides of the slots and all surface  
168 areas up to 3 to 4 feet from the slots perimeter. Remove all free  
169 water. Remove all broken concrete and debris from the project.  
170

171 Fill the existing transverse joint crack at the bottom and  
172 sides of the slot with a silicone caulk once the slots are cleaned.  
173 Caulk the transverse joint crack to provide a tight fit for the foam  
174 core board at the transverse joint and to prevent any of the  
175 patching material from entering the crack at the bottom and sides of  
176 the slot. Do not extend the silicone caulk beyond 3/8 inch of each  
177 side of the existing transverse joint crack.  
178

179 Place dowel bars in a chair that will provide a clearance of 1/2  
180 to 5/8 inch between the bottom of the dowel and the bottom of the  
181 slot. Place the dowel bar to the depth as shown in the plans,  
182 parallel to the centerline, parallel to pavement surface of the lower  
183 panel for roadway grades at different elevations at the transverse  
184 joint, and within the specified tolerances. The chair design shall  
185 hold the dowel bar securely in place during the placement of the  
186 patch mix.  
187

188 Place the dowel through the foam core board and position  
189 the core board at the proper location to maintain the transverse  
190 contraction joint. Place the dowel so a minimum of 8.0 inches is  
191 placed on either side of the transverse joint. Cut or remove the  
192 any joint sealant as necessary to accommodate the foam core  
193 board. The top of the foam core board should be inserted  
194 approximately 1-1/2 inches from the top surface of the pavement.  
195 Ensure that the board fit tightly around the dowel bar and to the  
196 bottom and edges of the slot. The Engineer will reject the work if  
197 for any reasons the foam core board shifts during the placement of  
198 the patching material.  
199

200 Moisten all surfaces thoroughly of the sawed slot  
201 immediately prior to filling with patch material unless the patching

material manufacturer recommends the slot surface to be dry.  
Remove any excess water with oil-free compressed air.

Fill the slot with the patching material and vibrate with a small hand held 1.0-inch or less diameter vibrator to ensure that the patching material completely surrounds the dowel and dowel bar support chairs. Avoid dumping the patching material into the slot by placing the mixture on the surface adjacent to the slot and shoving it towards the slot. Trowel or finish the mixture  $\frac{1}{8}$  to  $\frac{1}{4}$  inch above the pavement surface and cure the patch areas by applying a curing compound within 30 seconds after a set of three dowel bar patches have been finished or as directed by the patching material manufacturer.

Form or score the patching material in-line with the transverse joint above the foam board at 1-1/2 inch deep to a minimum width of  $\frac{1}{4}$  inch. Sawcutting will not be allowed during the hours restricted by the noise variance.

Allow the patching material to cure for a minimum of three (3) hours and a minimum compressive strength of 3000 psi unless otherwise directed by the Engineer, before placing any vehicle loads on the repair.

In the event the concrete is removed to place the dowel bars and the placement of the dowels and fast setting grout and curing the grout can not be done by the time the lane is to be opened to public traffic, fill the slot with a temporary backfill accepted by the Engineer.

**(C) Grinding.** Grind the entire area of the existing Portland cement concrete pavement (PCCP) retrofitted lanes, the length of the roadway from one end of the project limit to the other end, and the width of the pavement lane from longitudinal joint to longitudinal joint.

Remove all fast setting grout above the existing surface by grinding after a minimum cure time of 12 hours and not more than 7 working days of all grouts backfilled into the dowel slots.

Provide a power driven self-propelled machine that is specifically designed to grind Portland cement pavement with diamond-impregnated grinding blades. Provide and maintain in working condition all necessary equipment to insure performance of the work in the allotted time. Use equipment of the size, shape, and dimensions that does not restrict the movement of traffic in areas outside the designated limits of

247 construction. Use equipment that is capable of grinding specified  
248 surfaces without causing spalls at cracks, joints or other locations.  
249

250 Provide a line type texture that contains parallel longitudinal  
251 corrugations that present a narrow ridge with corduroy type appearance.  
252 Provide a surface finish with peaks of the ridges approximately 1/16 inch  
253 higher than the bottoms of the grooves and with approximately 60 evenly  
254 spaced grooves per foot.  
255

256 Remove existing raised pavement markers within the grinding path  
257 without causing spalls to the existing PCCP under the markers.  
258

259 Grind the patch areas and misaligned planes of surfaces on the  
260 adjacent sides of the joint or crack which are in excess of 1/16 inch to  
261 substantially eliminate vertical displacements of one side of the joint  
262 faulting with respect to the other and to restore proper drainage, ride  
263 characteristics, and skid resistance to the pavement surface. Perform  
264 grinding so that the pavement lane surface on both sides of all dowel bar  
265 retrofitted transverse joints and cracks are essentially the same depth of  
266 texture and does not vary from a true plane enough to permit a 1/16 inch  
267 thick shim 3 inches wide to pass under a one-yard straightedge adjacent  
268 to either side of the joint or crack when the straightedge is laid on the  
269 pavement parallel to centerline with its midpoint at the joint or crack.  
270

271 At the option of the Engineer, a profilograph test in accordance with  
272 HDOT TM 6 may be performed in place of the one-yard straightedge test  
273 to determine vertical displacement across the joints or cracks. Joints or  
274 cracks that indicate vertical displacement exceeding the above  
275 requirements will be verified using the one-yard straightedge test which  
276 will take precedence over the profilograph test.  
277

278 Grind in a longitudinal direction. Schedule and proceed with the  
279 construction operation in a manner that produces a uniform surface.  
280 Begin and end grinding at lines normal to the pavement centerline in any  
281 ground section. Accomplish grinding in a manner that eliminates joint or  
282 crack faults while providing positive lateral drainage by maintaining a  
283 constant cross-slope between grinding extremities in each lane.  
284 Contractor shall ensure that minor depressions are not excessive. Grind to  
285 avoid having excessive minor depressions.  
286

287 Exclude PCCP grinding over structures (i.e. bridge decks, bridge  
288 approach slabs and bridge overlay insets.) The accumulated total of the  
289 excluded areas shall not exceed 5 percent of the total area to be ground.  
290 Feather the ground pavement to match the elevation of the above feature.  
291 For pavement surfaces not providing a smooth transition between

adjacent lanes or slabs, provide corrective work and retesting to ensure conformity approved by the Engineer.

Remove solid residue from pavement surfaces before traffic action or wind blows such residue. Do not allow residue to flow across lanes or shoulders used by public traffic or into gutters or other drainage facilities. Remove and dispose residue in accordance with the contract documents

**(D) Surface Test. Delete Surface Test in its entirety.**

**(E) (D) Restoring Pavement Markings.**

**(1) Work Area (1)** – Install new pavement markings for the entire work area as shown on Plan Sheet Nos. 26 to 28. This work shall not be paid for separately, but shall be considered incidental to dowel retrofit contract items.

**(2) Work Area (2)** – Install new pavement markings for the entire work area as shown on Plan Sheet Nos. 29 to 37. This work shall not be paid for separately, but shall be considered incidental to dowel retrofit contract items.

**(F)(E) Core Drilling for Dowel Alignment Assurance and Consolidation Testing.** The Contractor shall perform core drilling for dowel alignment assurance and consolidation tests or checks by the Engineer. Perform coring by methods that will not shatter or damage the concrete adjacent to the holes. The Engineer will require within 4 days of retrofitting one test at the initial start of retrofit work, and for one test for every 500 dowels placed thereafter. A test shall consist of drilling 2 four-inch diameter cores, one on each end of a dowel to expose both ends and allow measurement for proper alignment at locations to be randomly determined by the Engineer. If the dowel bars are located incorrectly or air voids exists surrounding the dowels, additional cores will be required to determine the severity. Two additional cores shall be provided, at the Contractor's expense, for every one core that is misaligned or poorly consolidated. Dowel alignment shall meet the specified tolerances. If at any time dowels are found improperly installed, the dowel retrofit operations will be suspended and operations shall not begin until the Contractor has demonstrated to the Engineer that the problem has been corrected. All dowels identified as not in alignment or damaged shall be removed and replaced at the Contractor's expense. Cored holes shall be filled using the same patching material specified in this section and match the level of the existing pavement surface. Core sampling and patching is considered incidental to the dowel bar retrofit.

**416.04 Method of Measurement.** Pre-construction work items (crack mapping, work plans, trial batch and demonstration), Dowel bar retrofit and PCCP grinding work will be paid on a lump sum basis. Measurement for payment will not apply.

**416.05 Basis of Payment.** The Engineer will pay for the accepted crack mapping, work plans, trial batch, demonstration, dowel bar retrofit and PCCP grinding on the contract lump sum basis. Payment will be full compensation for the work prescribed in this section and the contract documents and to include but not limited to the removal and disposal of debris, slurry and grinding residue, submittal of retrofit work plans, trial batch, demonstrations, core drilling, temporary backfill and re-preparation, all additional retrofit work required at skewed joints, inspecting, locating, measuring and mapping out all uncontrolled mid slab shrinkage and other cracks, and furnishing materials, labors, tools, equipment and incidentals necessary to complete the work.

The Engineer will pay for each of the following pay items when included in the proposal schedule:

<b>Pay Item</b>	<b>Pay Unit</b>
Crack Mapping _____	Lump Sum
Work Plans, Trial Batch and Demonstration _____	Lump Sum
Dowel Bar Retrofit _____	Lump Sum
PCCP Grinding _____	Lump Sum"

**END OF SECTION 416**

GENERAL DECISION: HI20080001 09/11/2009 HI1

Date: September 11, 2009

General Decision Number: HI20080001 09/11/2009

Superseded General Decision Number: HI20070001

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	02/08/2008
1	02/15/2008
2	02/22/2008
3	02/29/2008
4	03/07/2008
5	04/18/2008
6	05/30/2008
7	06/20/2008
8	07/04/2008
9	07/11/2008
10	07/18/2008
11	07/25/2008
12	08/01/2008
13	09/05/2008
14	09/12/2008
15	09/19/2008
16	10/03/2008
17	10/31/2008
18	01/09/2009
19	02/06/2009
20	02/13/2009
21	02/27/2009
22	03/06/2009
23	04/24/2009
24	07/03/2009
25	07/10/2009
26	08/21/2009
27	09/04/2009
28	09/11/2009

ASBE0132-001 08/30/2009

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.....\$ 35.60 21.69

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BOIL0627-005 10/01/2008

	Rates	Fringes
BOILERMAKERS.....	\$ 31.00	22.10

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BRHI0001-001 09/01/2008

	Rates	Fringes
BRICKLAYER		
Bricklayers and Stonemasons.	\$ 34.70	16.47
Pointers, Caulkers and		
Weatherproofers.....	\$ 34.95	16.47

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BRHI0001-002 09/01/2008

	Rates	Fringes
Tile, Marble & Terrazzo Worker		
Terrazzo Base Grinders.....	\$ 33.14	16.47
Terrazzo Floor Grinders		
and Tenders.....	\$ 31.59	16.47
Tile, Marble and Terrazzo		
Workers.....	\$ 34.95	16.47

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CARP0745-001 08/31/2009

	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.....	\$ 36.20	19.22
Millwrights and Machine		
Erectors.....	\$ 36.45	19.22
Power Saw Operators (2		
h.p. and over).....	\$ 36.35	19.22

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CARP0745-002 08/31/2009

	Rates	Fringes
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Drywall and Acoustical  
Workers and Lathers.....\$ 36.45 19.22

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ELEC1186-001 03/01/2009

	Rates	Fringes
Electricians:		
Cable Splicers.....	\$ 42.68	30.6%+11.65
Electricians.....	\$ 38.80	30.6%+11.65
Technicians.....	\$ 39.96	30.6%+11.65

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ELEC1186-002 03/01/2009

	Rates	Fringes
Line Construction:		
Cable Splicers.....	\$ 42.68	30.6%+11.65
Groundmen/Truck Drivers.....	\$ 29.10	30.6%+11.65
Heavy Equipment Operators...	\$ 34.92	30.6%+11.65
Linemen.....	\$ 38.80	30.6%+11.65
Technicians.....	\$ 39.96	30.6%+11.65

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ELEV0126-001 01/01/2009

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 47.00	18.285+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.

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ENGI0003-002 09/01/2008

	Rates	Fringes
Diver (Aqua Lung) (Scuba)		
Diver (Aqua Lung) (Scuba)		
(over a depth of 30 feet)...	\$ 55.80	22.83
Diver (Aqua Lung) (Scuba)		
(up to a depth of 30 feet)...	\$ 46.43	22.83
Stand-by Diver (Aqua Lung)		
(Scuba).....	\$ 37.05	22.83
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung).....	\$ 55.80	22.83
Diver Tender (Other than Aqua Lung).....	\$ 34.02	22.83
Stand-by Diver (Other than Aqua Lung).....	\$ 37.05	22.83
Helicopter Work		

Airborne Hoist Operator		
for Helicopter.....	\$ 35.60	22.83
Co-Pilot of Helicopter.....	\$ 35.74	22.83
Pilot of Helicopter.....	\$ 35.91	22.83
Power equipment operator -		
tunnel work		
GROUP 1.....	\$ 32.04	22.83
GROUP 2.....	\$ 32.15	22.83
GROUP 3.....	\$ 32.32	22.83
GROUP 4.....	\$ 32.59	22.83
GROUP 5.....	\$ 32.90	22.83
GROUP 6.....	\$ 33.55	22.83
GROUP 7.....	\$ 33.87	22.83
GROUP 8.....	\$ 33.98	22.83
GROUP 9.....	\$ 34.09	22.83
GROUP 9A.....	\$ 34.32	22.83
GROUP 10.....	\$ 34.38	22.83
GROUP 10A.....	\$ 34.53	22.83
GROUP 11.....	\$ 34.68	22.83
GROUP 12.....	\$ 35.04	22.83
GROUP 12A.....	\$ 35.40	22.83
Power equipment operators:		
GROUP 1.....	\$ 31.74	22.83
GROUP 2.....	\$ 31.85	22.83
GROUP 3.....	\$ 32.02	22.83
GROUP 4.....	\$ 32.29	22.83
GROUP 5.....	\$ 32.60	22.83
GROUP 6.....	\$ 33.25	22.83
GROUP 7.....	\$ 33.57	22.83
GROUP 8.....	\$ 33.68	22.83
GROUP 9.....	\$ 33.79	22.83
GROUP 9A.....	\$ 34.02	22.83
GROUP 10.....	\$ 34.08	22.83
GROUP 10A.....	\$ 34.23	22.83
GROUP 11.....	\$ 34.38	22.83
GROUP 12.....	\$ 34.74	22.83
GROUP 12A.....	\$ 35.10	22.83
GROUP 13.....	\$ 32.02	22.83
GROUP 13A.....	\$ 32.29	22.83
GROUP 13B.....	\$ 32.60	22.83
GROUP 13C.....	\$ 33.25	22.83
GROUP 13D.....	\$ 33.57	22.83
GROUP 13E.....	\$ 33.68	22.83

#### 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

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ENGI0003-004 09/01/2008

	Rates	Fringes
Dredging: (Boat Operators)		
Boat Deckhand.....	\$ 32.02	22.83
Boat Operator.....	\$ 34.23	22.83
Master Boat Operator.....	\$ 34.38	22.83
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1.....	\$ 34.74	22.83
GROUP 2.....	\$ 34.08	22.83
GROUP 3.....	\$ 33.68	22.83
GROUP 4.....	\$ 32.02	22.83
Dredging: (Derricks)		
GROUP 1.....	\$ 34.74	22.83
GROUP 2.....	\$ 34.08	22.83
GROUP 3.....	\$ 33.68	22.83
GROUP 4.....	\$ 32.02	22.83
Dredging: (Hydraulic Suction Dredges)		
GROUP 1.....	\$ 34.38	22.83
GROUP 2.....	\$ 34.23	22.83
GROUP 3.....	\$ 34.08	22.83
GROUP 4.....	\$ 34.02	22.83
GROUP 5.....	\$ 33.68	22.83
GROUP 6.....	\$ 33.57	22.83
GROUP 7.....	\$ 32.02	22.83

#### CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

GROUP 1: Clamshell or Dipper Operator.

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

#### HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

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

#### DERRICK CLASSIFICATIONS

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

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 ENGI0003-044 09/01/2008

	Rates	Fringes
Power Equipment Operators (PAVING)		
Asphalt Concrete Material Transfer.....	\$ 34.17	21.93
Asphalt Plant Operator.....	\$ 34.60	21.93
Asphalt Raker.....	\$ 33.21	21.93
Asphalt Spreader Operator...	\$ 34.69	21.93
Cold Planer.....	\$ 35.00	21.93
Combination Loader/Backhoe (over 3/4 cu.yd.).....	\$ 33.21	21.93
Combination Loader/Backhoe (up to 3/4 cu.yd.).....	\$ 32.23	21.93
Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals).....	\$ 34.17	21.93
Grader.....	\$ 35.00	21.93
Laborer, Hand Roller.....	\$ 30.44	21.93
Loader (2 1/2 cu. yds. and under).....	\$ 34.17	21.93
Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.).....	\$ 34.49	21.93
Roller Operator (five tons and under).....	\$ 32.94	21.93
Roller Operator (over five tons).....	\$ 34.37	21.93
Screed Person.....	\$ 34.17	21.93
Soil Stabilizer.....	\$ 35.00	21.93

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\* IRON0625-001 09/01/2009

	Rates	Fringes
Ironworkers:.....	\$ 32.50	26.01
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.		

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LABO0368-001 09/01/2008

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 27.25	14.65
GROUP 2.....	\$ 24.65	14.65
GROUP 3.....	\$ 28.25	14.65
GROUP 4.....	\$ 27.75	14.65
GROUP 5.....	\$ 26.75	14.65
GROUP 6.....	\$ 18.65	10.40

#### LABORERS CLASSIFICATIONS

GROUP 1: 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; 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 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 operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, 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.

GROUP 2: 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: 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; 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 stockpile 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; Sheet 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 and false work.

GROUP 3: Licensed Powdermen; Driller (Track, Diamond Core, and Wagon) (Ingersoll-Rand ECM-350/ECM-635/ECM-635/ECM660, Sandvik Pantera HL 1500, Atlas-Copco ROC 7F); Driller (Joydrill Model TWM-2A, Gardner Denver Dri-143 and similar type drills) (in accordance with the Memorandum of Understanding between the Laborers and Operating Engineers dated at Miami, Florida, February 3, 1954); Driller (Mechanical) (Not covered elsewhere) (including multiple unit) (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 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, Pantera 900, 1100 and 1500, Ranger 700, Super Tiger 700), (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.

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/Final Clean-Up.

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LABO0368-002 08/31/2009

	Rates	Fringes
Landscape & Irrigation		
Laborers		
GROUP 1.....	\$ 20.96	8.37
GROUP 2.....	\$ 21.46	8.37
GROUP 3.....	\$ 17.46	8.37

#### LABORERS CLASSIFICATIONS

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

Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons)..:

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

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

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

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LABO0368-003 08/31/2009

	Rates	Fringes
Underground Laborer		
GROUP 1.....	\$ 28.90	15.20
GROUP 2.....	\$ 30.40	15.20
GROUP 3.....	\$ 30.90	15.20
GROUP 4.....	\$ 31.90	15.20
GROUP 5.....	\$ 32.25	15.20
GROUP 6.....	\$ 32.50	15.20
GROUP 7.....	\$ 32.95	15.20

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)

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PAIN1791-001 07/01/2009

	Rates	Fringes
Painters:		
Brush.....	\$ 31.80	22.75
Sandblaster; Spray.....	\$ 31.80	22.75

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PAIN1889-001 07/01/2009

	Rates	Fringes
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Glaziers.....	\$ 30.05	23.12
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PAIN1926-001 03/01/2009		
	Rates	Fringes
Soft Floor Layers.....	\$ 26.85	20.00
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PAIN1944-001 01/01/2009		
	Rates	Fringes
Taper.....	\$ 37.50	16.40
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PLAS0630-001 09/03/2007		
	Rates	Fringes
PLASTERER.....	\$ 33.94	16.17
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PLAS0630-002 09/03/2007		
	Rates	Fringes
Cement Masons:		
Cement Masons.....	\$ 33.10	16.17
Trowel Machine Operators....	\$ 33.25	16.17
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PLUM0675-001 07/05/2009		
	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter...	\$ 35.10	21.18
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ROOF0221-001 09/28/2008		
	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply).....	\$ 32.35	14.43
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SHEE0293-001 03/01/2009		
	Rates	Fringes
Sheet metal worker.....	\$ 37.37	18.22
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SUHI1997-002 09/15/1997		
	Rates	Fringes
Drapery Installer.....	\$ 13.60	1.20
FENCE ERECTOR (Chain Link Fence).....	\$ 9.33	1.65

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RIGGERS; WELDERS - Receive rate prescribed for craft performing operation to which rigging or 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 (29 CFR 5.5 (a) (1) (ii)).  
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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.  
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#### WAGE DETERMINATION APPEALS PROCESS

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

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour 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

**PRE-BID MEETING**

**FOR**

**INTERSTATE ROUTE H-1 CONCRETE PAVEMENT  
PRESERVATION DOWEL RETROFIT  
M.P. 2.40 TO M. P. 3.46 AND M.P. 24.90 TO M.P. 26.40  
FEDERAL-AID PROJECT NO. ARR-H1-1(262)  
DISTRICTS OF HONOLULU AND EWA  
ISLAND OF OAHU**

**SEPTEMBER 21, 2009**

**HIGHWAYS DIVISION  
KAPOLEI CONFERENCE ROOM # 609**

**ATTENDEES** - See attached Attendance Sheet.

**MEETING MINUTES**

The following voluntary meeting was called to order at 8:35 a.m. to brief the prospective bidders for the subject project.

**A. Introduction**

Mariano Ante (DOT Project Design Engineer) and Duane Taniguchi (sit in for Linah Okita – Proj. Manager) opened the meeting by describing the project's history, location, scope, limits and status as a Federal Stimulus funded pilot project in Hawaii.

**B. General Questions from Various Attendees:**

**1. Concrete Grinding and Saw Cutting.**

Response: Slurry must be disposed off in accordance with DOH NPDES and BMP policy requirements and guidelines. For additional information, the contact person from Solid Hazardous Waste, DOH is GARY SIU at 586-4226. Slurry quantities not specified, and Contractors should bid accordingly.

**2. Third Lane Grinding at Palailai Area (work area 1).**

Response: No grinding at the fairly new third lane (close to median), but only on the outside two lanes to be retrofitted.

3. Additional Testing for Smoothness after Grinding and Crack Filling.

Response: There will be no additional testing, but only as specified in the Special Provisions.

4. Profilograph Test.

Response: There is no profilograph test required in this project, as then in 2006 project due to cost. For this project, see page 416-7a, line 271 to line 276 of the revised Section 416 – DOWEL BAR RETROFIT, dated 9/23/09.

5. Lane rentals in 2006.

Response: There was none.

6. Skew Joints.

Response: Random spacing.

7. Need of five Police Officers.

Response: In the Kaimuki area (work area 2), depending on the site specific traffic control plan to be submitted by the Contractor, the Contractor is responsible for up to five police officers utilized in the traffic control plans, but may be less than five in other areas. Additional police officers will be paid for under Additional Police Officers and Traffic Control Devices.

8. Working Days.

Response: Christmas breaks, school jam and special events are not considered as working days.

9. Award Date.

Response: Being a Federal Stimulus funded project, date of award is shortened to 30 days after bid opening and NTP is shortened to 45 days after award date.

10. Extension time on Lane Closures.

Response: There is no time extension on lane closure restrictions. In Kaimuki area (work area 2), lane closure is extended on weekends.

11. Slab Replacement.

Response: Pavement slabs with considerable cracks shall be replaced as approved by the Engineer.

12. Sequence of Construction Work Schedule.

Response: All construction work in Palailai area (work area 1) should be finished first before moving to Kaimuki area (work area 2).

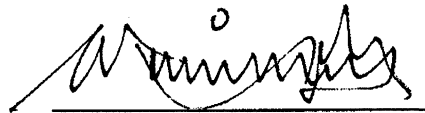
13. Early Saw Cutting.

Response: Yes, pavement early saw cutting will be allowed, within the constraints of the Noise Variance Permit.

14. Crack Mapping.

Response: Refer to plan sheet no. 3, note no. 15.

C. Meeting was adjourned at about 9:18 a.m.

A handwritten signature in black ink, appearing to read 'Mariano Ante', written over a horizontal line.

Mariano Ante  
Recorder

**HIGHWAYS DIVISION  
PRE-BID MEETING ATTENDANCE**

**SUBJECT:** INTERSTATE ROUTE H-1 CONCRETE PAVEMENT PRESERVATION  
DOWEL RETROFIT, M.P. 2.40 TO M.P. 3.46 AND M.P. 24.90 TO M.P. 26.40

**FEDERAL-AID PROJ. NO.:** ARR-H1-1(262)

**DATE, TIME & PLACE:** SEPTEMBER 21, 2009.; 8:30 A.M.: HWY-DD Conference Room

NAME	OFFICE	TELEPHONE	
		BUSINESS	FAX
Phil O'Connell	Diamond Surface	763 420-5009	763 420-5929
Leonard Leong	Royal Contr.	8399006	8397571
Earl Iwamoto	Hawaiian Dredging	735-3264	735-3232
Cassy Holloway	PENHALL COMPANY	951- 750-5782	951- 369-0694
TIN LUNG CHAO	SDOT	483-2570	
Jeremy Welch	Good fellow Bros.	484-1786	676-2902
Brent Maeda	SDOT	483-2562	
John B. Neff	Conc. Corral Co/Penhall	4888222	4876679
Steven Yohl	Triton Marine Const.	488-0854	488-0946
BRETT GORDON	Triton Marine Const	488-0854	954-5030
Bobby Yung	Goodfellow Bros	294-0761	676-2902
Rudy Morishita	Hawaiian Dredging	735.3211	735-3232
MAY LIU	Kaifor construction	690-5391	
Brian Ikebana	Hwy-LS, State	483-2584	483-2555
ALFRED CHENG	Goodfellow Bros., Inc.	676-1523	676-2902
PETER CHAN	HWY - TD	692-7680	692-7690
MARIBRO ANTE	HWY - DD	692-7593	692-7590
Duane Tanguich	Hwy-DD	692-7592	692-7590