

**7. REFERENCE  
INFORMATION FOR  
BIDDING AND  
CONSTRUCTION**

## **Requirements of Chapter 104, HRS Wages and Hours of Employees on Public Works Law**

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Chapter 104, HRS, applies to every public works construction project over \$2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

### **Rate of Wages for Laborers and Mechanics**

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]
- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

### **Overtime**

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS]

### **Weekly Pay**

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

### **Posting of Wage Rate Schedules**

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

### **Withholding of Accrued Payments**

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

### **Certified Weekly Payrolls and Payroll Records**

- A certified copy of all payrolls shall be submitted weekly to the contracting agency.
- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [HAR §12-22-10]
  - the name and home address of each employee
  - the employee's correct classification
  - rate of pay (basic hourly rate + fringe benefits)
  - itemized list of fringe benefits paid
  - daily and weekly hours worked
  - weekly straight time and overtime earnings
  - amount and type of deductions
  - actual wages paid
  - date of payment
- Records shall be made available for inspection by the contracting agency, the Department of Labor and Industrial Relations, and any of its authorized representatives, who may also interview employees during working hours on the job. [§104-3(b), HRS]

## Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

## Apprentices and Trainees

- In order to be paid apprentice or trainee rates, apprentices and trainees must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the Department of Labor and Industrial Relations, Workforce Development Division, (808) 586-8877. [§12-22-6(1), HAR]
- The number of apprentices or trainees on any public work in relation to the number of journeymen in the same craft classification as the apprentices or trainees employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship or trainee standards registered with or recognized by the Department of Labor and Industrial Relations. A registered or recognized apprentice receiving the journeyworker rate will not be considered a journeyworker for the purpose of meeting the ratio requirement. [§12-22-6(2), HAR]

## Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are:
    - First Violation Equal to 25% of back wages found due or \$250 per offense up to \$2,500, whichever is greater.
    - Second Violation Equal to amount of back wages found due or \$500 for each offense up to \$5,000, whichever is greater.
    - Third Violation Equal to two times the amount of back wages found due or \$1,000 for each offense up to \$10,000, whichever is greater; and  
**Suspension** from doing any new work on any public work of a governmental contracting agency for three years.
  - A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of the **second notification of violation**.
  - **Suspension:** For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25]
- **Suspension:** Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c)]
  - If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of \$10,000 per project, and \$1,000 per day thereafter, for interference or delay. [§104-22(b)]
  - Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f)]

For additional information, visit the department's website at <http://labor.hawaii.gov/wsd> or contact any of the following DLIR offices:



Oahu (Wage Standards Division).....	(808) 586-8777
Hawaii Island .....	(808) 322-4808
Kauai .....	(808) 274-3351
Maui .....	(808) 243-5322

State of Hawai'i  
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS  
Princess Ruth Ke'elikolani Building  
830 Punchbowl Street  
Honolulu, Hawai'i 96813



February 19, 2018

WAGE RATE SCHEDULE BULLETIN NO. 491

This schedule of wage rates contained herein is recognized by the Director of Labor and Industrial Relations to be prevailing on public construction work for the purposes of Chapter 104, Hawai'i Revised Statutes. The schedule of wage rates determines the applicable wage determination for each classification and does not impose any staffing requirements for any classification. The schedule of wage rates is applicable only to those laborers and mechanics employed at the site of work.

As required by law, future wage rates for laborers and mechanics are incorporated into this bulletin based on available information and are subject to change. Whenever the Director determines that the prevailing wage has increased as shown in the wage rate schedule, the contractor must increase the wages accordingly during the performance of the contract. For addenda or additional wage rate schedules, please consult the Internet at <http://labor.hawaii.gov/rs>.

The Apprentice Schedule is available on the Internet or upon request from the Research and Statistics Office. Pursuant to Section 12-22-6 (1), Hawai'i Administrative Rules, the Apprentice Schedule is applicable only to apprentices who are parties to apprenticeship agreements registered with or recognized by the Department of Labor and Industrial Relations.

Questions on the schedule should be referred to the Research and Statistics Office at (808) 586-9005.

The next regular schedule will be issued on or about September 15, 2018.

LEONARD HOSHIO  
Director

STATE OF HAWAII  
DAVID Y. IGE, Governor

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS  
LEONARD HOSHIO, Director

RESEARCH AND STATISTICS OFFICE  
PHYLLIS DAYAO, Research & Statistics Officer

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In cooperation with:  
WAGE STANDARDS DIVISION  
PAMELA MARTIN, Administrator

WAGE RATE SCHEDULE BULLETIN NO. 491

Classification	Current				2018				2019				2020				Remarks See Pg 6-8
	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		
<b>ASPHALT PAVING GROUP:</b>																	
Asphalt Concrete Material Transfer	9/18/17 \$73.54	\$41.92	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Asphalt Raker	\$72.58	\$40.96	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Asphalt Spreader Operator	\$74.06	\$42.44	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Laborer, Hand Roller	\$69.81	\$38.19	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Roller Operator (5 tons and under)	\$72.31	\$40.69	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Roller Operator (over 5 tons)	\$73.74	\$42.12	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Screed Person	\$73.54	\$41.92	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
<b>EQUIPMENT OPERATOR:</b>																	
Combination Loader/Backhoe (over 3/4 cu. yd.)	\$72.58	\$40.96	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Combination Loader/Backhoe (up to 3/4 cu. yd.)	\$71.60	\$39.98	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Concrete saws and/or Grinder (self-propelled unit on streets, highways, airports and canals)	\$73.54	\$41.92	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Grader, Soil Stabilizer, Cold Planer	\$74.37	\$42.75	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Loader (2-1/2 cu. yds. and under)	\$73.54	\$41.92	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Loader (over 2-1/2 cu. yds. to and including 5 cu. yds.)	\$73.86	\$42.24	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
<b>TRUCK DRIVER:</b>																	
Assistant to Engineer	\$72.31	\$40.69	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Oil Tanker (double), Hot Liquid Asphalt Tanker	\$73.86	\$42.24	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Semi-Trailer, Semi-Dump, Asphalt Distributor	\$73.54	\$41.92	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Slip-in or Pup	\$73.86	\$42.24	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Single or Rock Cans Tandem Dump Truck (8 cu. yds. & under, water level)	\$72.58	\$40.96	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Single or Rock Cans Tandem Dump Truck (over 8 cu. yds., water level)	\$72.89	\$41.27	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Tractor Trailer (hauling equipment)	\$73.97	\$42.35	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Utility, Flatbed	\$72.31	\$40.69	\$31.62	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
<b>*BOILERMAKER</b>																	
	2/19/18 \$65.88	\$36.43	\$29.45	-	-	-	-	-	-	-	-	-	-	-	-	-	13
<b>CARPENTER:</b>																	
Carpenter, Patent Scaffold Erector (14 feet and over); Piledriver; Pneumatic Nailer	9/18/17 \$69.11	\$47.45	\$21.66	\$71.36	\$49.45	\$21.91	-	-	-	-	-	-	-	-	-	-	1,12,13
Millwright	\$69.36	\$47.70	\$21.66	\$71.61	\$49.70	\$21.91	-	-	-	-	-	-	-	-	-	-	1,12,13
Power Saw Operator (2 h.p. & above)	\$69.26	\$47.60	\$21.66	\$71.51	\$49.60	\$21.91	-	-	-	-	-	-	-	-	-	-	1,12,13
<b>CEMENT FINISHER:</b>																	
Cement Finisher; Curb Setter; Precast Panel Setter; Manhole Builder	9/18/17 \$67.58	\$39.10	\$28.48	\$69.13	\$39.80	\$29.33	-	-	-	-	-	-	-	-	-	-	2,12,13
Trowel Machine Operator	\$67.73	\$39.25	\$28.48	\$69.28	\$39.95	\$29.33	-	-	-	-	-	-	-	-	-	-	2,12,13
<b>CHAIN-LINK FENCE ERECTOR</b>																	
	10/2/17 \$36.55	\$22.60	\$13.95	\$38.75	\$24.00	\$14.75	-	-	-	-	-	-	-	-	-	-	10,13
<b>CHLORINATOR</b>																	
	9/18/17 \$31.59	\$28.42	\$3.17	-	-	-	-	-	-	-	-	-	-	-	-	-	

WAGE RATE SCHEDULE BULLETIN NO. 491

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	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		
<b>DIVER:</b>																	
Diver (Aqua Lung) (Scuba) - Up to a depth of 30 feet	9/18/17 \$86.69	\$55.63	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Diver (Aqua Lung) (Scuba) - Over a depth of 30 feet	\$96.00	\$65.00	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Stand-By Diver (Aqua Lung) (Scuba)	\$77.31	\$46.25	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
Diver (Other than Aqua Lung)	\$97.31	\$66.25	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	3,12,13
Stand-By Diver (Other than Aqua Lung)	\$78.56	\$47.50	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	3,12,13
Tender (Other than Aqua Lung)	\$75.53	\$44.47	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	12,13
<b>DRAPERY INSTALLER</b>																	
	9/18/17 \$20.21	\$18.00	\$2.21	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>DRYWALL INSTALLER</b>																	
	9/18/17 \$69.36	\$47.70	\$21.66	9/3/18 \$71.61	\$49.70	\$21.91	-	-	-	-	-	-	-	-	-	-	12,13
<b>* DRYWALL TAPERS/FINISHERS</b>																	
	2/19/18 \$68.25	\$42.10	\$26.15	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>* ELECTRICIAN (Note: 2 increases for 2018 and 2019)</b>																	
Cable Splicer (inside/outside)	2/18/18 \$82.47	\$53.68	\$28.79	8/26/18 \$83.98	\$54.78	\$29.20	2/17/19 \$84.67	\$55.33	\$29.34	\$29.34	\$29.74	2/23/20 \$86.17	\$56.43	\$29.74	\$29.74	\$29.74	4,13
Ground Worker (outside)	\$60.77	\$36.60	\$24.17	\$61.83	\$37.35	\$24.48	\$62.30	\$37.73	\$24.57	\$24.57	\$24.88	\$63.36	\$38.48	\$24.88	\$24.88	\$24.88	4,13
Heavy Equipment Operator (outside)	\$70.08	\$43.92	\$26.16	\$71.31	\$44.82	\$26.49	\$71.90	\$45.27	\$26.63	\$26.63	\$26.96	\$73.13	\$46.17	\$26.96	\$26.96	\$26.96	4,13
Line Installer (outside); Wire Installer (inside)	\$76.27	\$48.80	\$27.47	\$77.65	\$49.80	\$27.85	\$78.28	\$50.30	\$27.98	\$27.98	\$28.36	\$79.66	\$51.30	\$28.36	\$28.36	\$28.36	4,13
Cable Splicer (inside/outside)	-	-	-	-	-	-	8/25/19 \$85.48	\$55.88	\$29.60	\$29.60	\$29.60	-	-	-	-	-	4,13
Ground Worker (outside)	-	-	-	-	-	-	\$62.87	\$38.10	\$24.77	\$24.77	\$24.77	-	-	-	-	-	4,13
Heavy Equipment Operator (outside)	-	-	-	-	-	-	\$72.56	\$45.72	\$26.84	\$26.84	\$26.84	-	-	-	-	-	4,13
Line Installer (outside); Wire Installer (inside)	-	-	-	-	-	-	\$79.01	\$50.80	\$28.21	\$28.21	\$28.21	-	-	-	-	-	4,13
Telecommunication Worker																	
Licensed Technician	9/3/17 \$42.13	\$29.94	\$12.19	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Technician I / Splicer	\$40.38	\$28.44	\$11.94	-	-	-	-	-	-	-	-	-	-	-	-	-	13
<b>* ELEVATOR CONSTRUCTOR MECHANIC</b>																	
	2/19/18 \$90.005	\$57.36	\$32.645	-	-	-	-	-	-	-	-	-	-	-	-	-	13
<b>EQUIPMENT OPERATOR:</b>																	
Group 1	9/18/17 \$72.00	\$40.94	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 2	\$72.11	\$41.05	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 3	\$72.28	\$41.22	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 4	\$72.55	\$41.49	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 5	\$72.86	\$41.80	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 6	\$73.51	\$42.45	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 7	\$73.83	\$42.77	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 8	\$73.94	\$42.88	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 9	\$74.05	\$42.99	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 9A	\$74.28	\$43.22	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 10	\$74.34	\$43.28	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 10A	\$74.49	\$43.43	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 11	\$74.64	\$43.58	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 12	\$75.00	\$43.94	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13
Group 12A	\$75.36	\$44.30	\$31.06	-	-	-	-	-	-	-	-	-	-	-	-	-	5,12,13

WAGE RATE SCHEDULE BULLETIN NO. 491

Classification	Current				2018				2019				2020				Remarks See Pg 6-8
	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		
<b>FENCE ERECTOR (CHAIN-LINK TYPE)</b> See Chain-Link Fence Erector	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>FLOOR LAYER (CARPET, LINOLEUM &amp; SOFT TILE)</b>	2/26/17 \$60.73	\$33.00	\$27.73		3/4/18 \$63.47	\$34.15	\$29.32									13	
<b>GLAZIER</b>	9/18/17 \$67.32	\$36.78	\$30.54													6,13	
<b>HELICOPTER WORK:</b>																	
Airborne Hoist Operator	\$75.86	\$44.80	\$31.06													12,13	
Co-Pilot	\$76.00	\$44.94	\$31.06													12,13	
Pilot	\$76.17	\$45.11	\$31.06													12,13	
<b>*INSULATOR</b>																	
	9/18/17 \$64.40	\$39.90	\$24.50		9/2/18 \$65.10	\$40.40	\$24.70		9/1/19 \$65.90	\$40.90	\$25.00		8/30/20 \$67.30	\$41.90	\$25.40	7,12,13	
<b>IRONWORKER:</b>																	
Reinforcing, Structural	9/18/17 \$71.15	\$39.00	\$32.15		9/1/18 \$73.54	\$40.25	\$33.29		9/1/19 \$76.02	\$41.50	\$34.52					8,12,13	
<b>LABORER:</b>																	
Driller	9/4/17 \$56.66	\$37.40	\$19.26		9/3/18 \$58.66	\$38.40	\$20.26									1,13	
Gunite Operator or Shotcrete Operator	\$56.16	\$36.90	\$19.26		\$58.16	\$37.90	\$20.26		-	-	-		-	-	-	1,13	
High Scaler (Working Suspended)	\$56.16	\$36.90	\$19.26		\$58.16	\$37.90	\$20.26		-	-	-		-	-	-	13	
Laborer I	\$55.66	\$36.40	\$19.26		\$57.66	\$37.40	\$20.26		-	-	-		-	-	-	1,13	
Laborer II	\$53.06	\$33.80	\$19.26		\$55.06	\$34.80	\$20.26		-	-	-		-	-	-	1,13	
Light/Final Clean-up (Janitorial) Laborer	\$42.94	\$27.80	\$15.14		\$44.92	\$28.80	\$16.12		-	-	-		-	-	-	1,13	
Mason Tender/Hod Carrier	\$56.16	\$36.90	\$19.26		\$58.16	\$37.90	\$20.26		-	-	-		-	-	-	1,13	
Powder Blaster	\$56.66	\$37.40	\$19.26		\$58.66	\$38.40	\$20.26		-	-	-		-	-	-	1,13	
Window Washer (Outside) (On bosun's chair, cable-suspended scaffold or work platform)	\$55.16	\$35.90	\$19.26		\$57.16	\$36.90	\$20.26		-	-	-		-	-	-	13	
<b>LANDSCAPER:</b>																	
Landscape & Irrigation Laborer A	9/4/17 \$36.82	\$24.85	\$11.97		9/3/18 \$38.18	\$25.50	\$12.68		9/2/19 \$39.60	\$26.15	\$13.45						
Landscape & Irrigation Laborer B	\$37.62	\$25.65	\$11.97		\$39.08	\$26.40	\$12.68		\$40.60	\$27.15	\$13.45		-	-	-		
Landscape & Irrigation Maintenance Laborer	\$32.62	\$20.65	\$11.97		\$33.78	\$21.10	\$12.68		\$35.00	\$21.55	\$13.45		-	-	-		
<b>LATHER</b>																	
	9/18/17 \$69.36	\$47.70	\$21.66		9/3/18 \$71.61	\$49.70	\$21.91									12,13	
<b>MASON; Bricklayer:</b>																	
Cement Blocklayer; Stone Mason; Precast Sill Setter	9/18/17 \$68.23	\$39.76	\$28.47													2,13	
Pointer-Caulker-Weatherproof	\$68.48	\$40.01	\$28.47													2,13	
<b>PAINTER:</b>																	
Painter; Spray Painter; Sandblaster or Waterblaster; Thermoplastic Striper; Paper Hanger	1/1/18 \$66.21	\$37.35	\$28.86		7/1/18 \$67.04	\$37.85	\$29.19		1/1/19 \$67.74	\$38.35	\$29.39						
Painter; Spray Painter; Sandblaster or Waterblaster Thermoplastic Striper; Paper Hanger	-	-	-						7/1/19 \$68.44	\$38.80	\$29.64						

WAGE RATE SCHEDULE BULLETIN NO. 491

Classification	Current				2018				2019				2020				Remarks See Pg 6-8
	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate		
<b>PLASTERER:</b>																	
	9/18/17	\$69.02	\$40.54	\$28.48	9/3/18	\$70.67	\$41.34	\$29.33									2, 12, 13
<b>*PLUMBER: (Note: 2 increases for each year.)</b>																	
Plumber; Pipefitter; Refrigeration Fitter; Heating & Air Conditioning Fitter; Sprinkler Fitter; Steamfitter	1/7/18	\$68.12	\$42.35	\$25.77	7/1/18	\$68.87	\$42.85	\$26.02	1/6/19	\$69.59	\$43.35	\$26.24	1/5/20	\$71.06	\$44.35	\$26.71	9, 13
Plumber; Pipefitter; Refrigeration Fitter; Heating & Air Conditioning Fitter; Sprinkler Fitter; Steamfitter									7/7/19	\$70.34	\$43.85	\$26.49	7/5/20	\$71.81	\$44.85	\$26.96	9, 13
<b>*ROOFER:</b>																	
Shingle, Tile, Built-up Roofing Coal Tar Pitch	2/19/18	\$57.48 \$97.33	\$39.85 \$79.70	\$17.63 \$17.63	9/2/18	\$58.60 \$99.10	\$40.50 \$81.00	\$18.10 \$18.10	9/1/19	\$59.35 \$100.50	\$41.15 \$82.30	\$18.20 \$18.20	9/7/20	\$60.10 \$101.90	\$41.80 \$83.60	\$18.30 \$18.30	
<b>SANDBLASTER OR WATERBLASTER:</b>																	
Use wages of craft to which sand or water blasting is incidental.																	
<b>SHEETMETAL WORKER:</b>																	
(Note: 2 increases in 2018 & 2019)	9/3/17	\$68.33	\$41.80	\$26.53	3/4/18	\$69.23	\$42.20	\$27.03	3/3/19	\$70.66	\$42.85	\$27.81					13
									9/2/18	\$69.99	\$42.55	\$27.44					13
<b>TERMITE TREATER</b>																	
	9/18/17	\$16.84	\$13.13	\$3.71													
<b>TERRAZZO:</b>																	
Terrazzo Setter	9/4/17	\$68.92	\$40.95	\$27.97	9/3/18	\$70.52	\$41.70	\$28.82									2, 13
Terrazzo Base Grinder		\$67.11	\$39.14	\$27.97		\$68.71	\$39.89	\$28.82									2, 13
Certified Terrazzo Floor Grinder and Tender		\$65.56	\$37.59	\$27.97		\$67.16	\$38.34	\$28.82									2, 13
Terrazzo Floor Grinder		\$62.56	\$34.59	\$27.97		\$64.16	\$35.34	\$28.82									2, 13
<b>TILE SETTER:</b>																	
Ceramic Hard Tile; Marble Setter	9/4/17	\$68.92	\$40.95	\$27.97	9/3/18	\$70.52	\$41.70	\$28.82									2, 13
Certified Ceramic Tile & Marble Helper		\$65.56	\$37.59	\$27.97		\$67.16	\$38.34	\$28.82									2, 13
<b>TRUCK DRIVER:</b>																	
Concrete Mixer	9/18/17	\$37.96	\$31.73	\$6.23													
Concrete Mixer/Booster		\$44.97	\$34.03	\$10.94													
Dump Truck, 8 cu. yds. & under (water level); Water Truck (up to & including 2,000 gallons) Flatbed, Utility, etc.		\$72.55	\$41.49	\$31.06													12, 13
End Dump, Unlicensed (Euclid, Mack, Caterpillar, or similar); Tractor Trailer (hauling equipment)		\$72.28	\$41.22	\$31.06													12, 13
Semi-Trailer, Rock Cans, or Semi-Dump Slip-in or Pup		\$73.94	\$42.88	\$31.06													12, 13
Tandem Dump Truck, over 8 cu. yds. (water level); Water Truck (over 2,000 gallons)		\$73.51 \$73.83	\$42.45 \$42.77	\$31.06 \$31.06													12, 13
		\$72.86	\$41.80	\$31.06													12, 13



WAGE RATE SCHEDULE BULLETIN NO. 491

Classification	Current				2018				2019				2020				Remarks See Pg 6-8			
	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate	9/4/17	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate	9/3/18	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate	2019	Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate	2020		Prevailing Wage Total	Basic Hourly Rate	Fringe Hourly Rate
<b>UNDERGROUND LABORER:</b> Worker in a raise, shaft, or tunnel.																				
Group 1	\$56.26	\$37.00	\$19.26	9/4/17	\$58.26	\$38.00	\$20.26	9/3/18	-	-	-	-	-	-	-	-	-	-	-	13
Group 2	\$57.76	\$38.50	\$19.26		\$59.76	\$39.50	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 3	\$58.26	\$39.00	\$19.26		\$60.26	\$40.00	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 4	\$59.26	\$40.00	\$19.26		\$61.26	\$41.00	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 5	\$59.51	\$40.25	\$19.26		\$61.51	\$41.25	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 6	\$59.61	\$40.35	\$19.26		\$61.61	\$41.35	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 7	\$59.86	\$40.60	\$19.26		\$61.86	\$41.60	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
Group 8	\$60.31	\$41.05	\$19.26		\$62.31	\$42.05	\$20.26		-	-	-	-	-	-	-	-	-	-	-	13
<b>WATER FRONT CONSTRUCTION (DREDGING):</b>				9/18/17																
<b>CLAMSHELL OR DIPPER DREDGES:</b>																				
Clamshell or Dipper Operator	\$75.00	\$43.94	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	11,12,13
Mechanic; Welder; Watch Engineer	\$74.34	\$43.28	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Deckmate; Bargemate	\$73.94	\$42.88	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Fire Person; Oiler; Deckhand; Barge Worker	\$72.28	\$41.22	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
<b>HYDRAULIC SUCTION DREDGES:</b>																				
Lever Operator	\$74.64	\$43.58	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Mechanic; Welder	\$74.34	\$43.28	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Watch Engineer (steam or electric)	\$74.49	\$43.43	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Dozer Operator	\$74.28	\$43.22	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Deckmate	\$73.94	\$42.88	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Winch Operator (stern winch on dredge)	\$73.83	\$42.77	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Fire Person; Oiler; Deckhand (can operate anchor scow under direction of deckmate); Levee Operator	\$72.28	\$41.22	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
<b>DERRICKS:</b>																				
Operator; Derrick, Piledriver, Crane	\$75.00	\$43.94	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Deckmate; Saorman Type Dragline (up to & including 5 yds.)	\$74.34	\$43.28	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Saorman Type Dragline (over 5 cu. yds.)	\$73.94	\$42.88	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Fire Person; Oiler; Deckhand	\$72.28	\$41.22	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
<b>BOAT OPERATORS:</b>																				
Master Boat Operator	\$74.64	\$43.58	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Boat Operator	\$74.49	\$43.43	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
Boat Deckhand	\$72.28	\$41.22	\$31.06		-	-	-		-	-	-	-	-	-	-	-	-	-	-	12,13
<b>WATER WELL DRILLER:</b>				9/18/17																
Water Well Driller	\$40.97	\$31.00	\$9.97		\$40.97	\$31.00	\$9.97		-	-	-	-	-	-	-	-	-	-	-	
Water Well Driller Helper	\$26.87	\$18.00	\$8.87		\$26.87	\$18.00	\$8.87		-	-	-	-	-	-	-	-	-	-	-	
<b>WELDER:</b>																				
Use wages of craft to which welding is incidental, except for Chain-Link Fence Erector. See remark.																				10

Comments: Overtime must be paid at one and one-half times the basic hourly rate plus the hourly cost of required fringe benefits.  
\* Indicates a wage, fringe benefit, remark, or title change from the previous bulletin.

REMARKS:

1. Carpenter, Laborer (excluding High Scaler, Window Washer): \$.50 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.
2. Cement Finisher, Mason, Plasterer, Terrazzo, Tile Setter: \$1.00 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.

3. Diver (Other than Aqua Lung), Stand-By Diver (Other than Aqua Lung):

- A. On any dive exceeding 50 feet, the diver shall, in addition, be paid the following amount of "depth money":
  - \$1.50 per foot in excess of 50 feet
  - \$100.00 plus \$2.00 per foot in excess of 100 feet
  - \$200.00 plus \$3.00 per foot in excess of 150 feet

- B. When it is necessary for a Diver to enter any pipe, tunnel or other enclosure, the said Diver shall, in addition to the hourly rate, receive a premium in accordance with the following schedule for distance traveled from the entrance of the pipe, tunnel or other enclosure:

- 1) When able to stand erect, but in which there is no vertical ascent:
  - 5 feet to 50 feet \$5.00 per day
  - 50 feet to 100 feet \$7.50 per day
  - 100 feet to 150 feet \$12.50 per day

The premium shall be increased an additional \$7.50 for each succeeding 50 feet.
- 2) When unable to stand erect and in which there is no vertical ascent:
  - 5 feet to 50 feet \$5.00 per day
  - 50 feet to 100 feet \$7.50 per day
  - 100 feet to 150 feet \$12.50 per day
  - 150 feet to 200 feet \$36.75 per day
  - 200 feet to 300 feet \$1.00 per foot
  - 300 feet to 450 feet \$1.50 per foot
  - 450 feet to 600 feet \$2.50 per foot

4. Electrician:

- A. One and one-half times the straight-time rate while working in a tunnel under construction; under water with aqualung equipment; in a completed tunnel which has only one entrance or exit providing access to safety and where no other personnel are working; or in an underground structure having no access to safety or where no other personnel are working.
- B. Double the straight-time rate shall be paid for the following types of hazardous work regardless if fall prevention devices are used:
  - 1) While working from poles, trusses, stacks, towers, tanks, bosun's chairs, swinging or rolling scaffolds, supporting structures, and open platforms, over 70 feet from the ground where the employee is subject to a free fall; provided, however, that when work is performed on stacks, towers or permanent platforms where the employees are on a firm footing within an enclosure, a hazardous condition does not exist regardless of height;
  - 2) While working outside of a railing or enclosure, or temporary platforms extending outside of a building, or from scaffolding or ladder within an enclosure where an employee's footing is within one foot of the top of such railing, and the employee is subject to a free fall of over 70 feet;
  - 3) Working on buildings while leaning over the railing or edge of the building, and is subject to a free fall of 70 feet; or
  - 4) Two hours minimum hazardous pay per day shall be paid while climbing to a stack, tower or permanent platform which exceeds 70 feet from the ground but where the employee is on a firm footing within an enclosure.
- C. Five percent per hour shall be added to the hourly wage for height pay while working above 9,000 feet elevation.

REMARKS:

5. Equipment Operator:

- A. Operators and Assistants to Engineer (climbing a boom) of cranes (under 50 tons) with booms of eighty feet or more (including jib) or of cranes (under 50 tons) with leads of one hundred feet or more, shall receive additional premium according to the following schedule:
 

Booms of 80 feet up to, or leads of 100 feet up to, but not including 130 feet	Per Hour
Booms and/or leads of 130 feet up to, but not including 180 feet	\$0.50
Booms and/or leads of 180 feet up to and including 250 feet	\$0.75
Booms and/or leads over 250 feet	\$1.15
	\$1.50

Operators and Assistants to Engineer (climbing a boom) of cranes (50 tons and over) with booms of 180 feet or more (including jib) shall receive additional premium according to the following schedule:

Booms of 180 feet up to and including 250 feet	Per Hour
Booms over 250 feet	\$1.25
	\$1.75

Note: The boom shall be measured from the center of the heel pin to the center of the boom or jib point sheave.

- B. \$1.25 per hour shall be added to the hourly wage while operating a rig suspended by ropes or cables or to perform work on a Yo-Yo Cat.
- C. In a raise or shaft, a premium of \$.40 per hour will be paid in addition to the regular straight time wage.
  - A raise is defined to be an underground excavation (lined or unlined) whose length exceeds its width and the inclination of the grade from the excavation is greater than 20 degrees from the horizontal.
  - A shaft is defined to be an excavation (lined or unlined) made from the surface of the earth, generally vertical in nature, but may decline up to 75 degrees from the vertical, and whose depth is greater than 15 feet and its largest horizontal dimension. Includes an underground silo.
- D. In a tunnel, a premium of \$.30 per hour will be paid in addition to the regular straight time wages.
  - A tunnel is defined to be an underground excavation (lined or unlined) whose length exceeds its width and the inclination of the grade from the excavation is no greater than 20 degrees from the horizontal.
- 6. Glazier: \$1.00 per hour shall be added to the hourly wage for exterior glazing work performed in a walking/working surface with an unprotected side or edge 10 feet or more above a lower level which requires protection from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, position device systems, fall restraint systems, perimeter safety cables or controlled decking zones.
- 7. Insulator: Six percent per hour shall be added to the hourly wage for hazardous pay while working from a boatswain chair, staging or free standing scaffolding erected from the ground up or mezzanine floor subject to a free fall and skyclimber suspended from a permanent structure and when working above 40 feet.
- 8. Ironworker: \$.50 per hour shall be added to the hourly wage while working in tunnels or coffer dams. \$1.00 per hour shall be added to the hourly wage while working under or covered with water (submerged), or on the summits of Mauna Kea, Mauna Loa or Haleakala.
- 9. Plumber: One and one-half times the straight-time rate for height pay while working from OSHA approved trusses, stacks, towers, tanks, bosun's chair, swinging or rolling scaffolding, supporting structures or on open platforms where the employee is subject to a direct fall of 40 feet or more. Provided, however, that when said work is performed where the employee is on a firm footing within an enclosure, a hazardous condition does not exist regardless of height. \$1.00 per hour shall be added to the straight-time rate while working with flame cutting or any type of welding equipment on any galvanized material or product for at least an hour.
- 10. Chain-Link Fence Erector: \$1.00 per hour shall be added to the hourly wage while performing welding services.
- 11. Water Front Construction: Clamshell or Dipper Operator: \$.50 per hour shall be added to the straight-time rate while working with boom (including jib) over 130 feet.
- 12. Possible wage/fringe option increases:
  - Carpenter, Drywall and Lather: Effective WRS 492 - \$0.25
  - Cement Finisher, Plasterer: - Effective WRS 492 - \$0.30
  - Drywall Taper/Finishers: Effective 1/1/19 - \$2.50
  - Asphalt Paving, Diver, Equipment Operator, Helicopter Work, Truck Driver except Concrete Mixer & Concrete Mixer Booster, Water Construction (Dredging): Effective WRS 492 - \$2.75
  - Insulator: Effective: 9/1/19 - \$0.25
  - Ironworker: Effective WRS 492 - \$0.26; 9/1/19 - \$0.27
  - Roofer: Effective 9/1/19 - \$0.75; 9/7/20 - \$0.80

REMARKS:

13. Overtime/Holiday must be paid at one and one-half times the basic hourly rate, plus the hourly cost of required fringe, with the following exceptions:

A. Two times the basic hourly rate, plus the hourly cost of required fringe.

**Asphalt Paving:** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Boilermaker:** Sunday, New Year's Day, President's Day, Memorial Day, Kamehameha Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

**Diver:** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Electrician:** Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

**Elevator Constructor:** Saturday, Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Equipment Operator:** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Floor Layer:** Labor Day.

**Glazier:** Sunday.

**Helicopter Worker:** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Ironworker:** Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

**Plumber:** Sunday, New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

**Sheetmetal Worker:** Sunday, New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

**Telecommunication:** Sunday, New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

**Truck Driver, except Concrete Mixer & Concrete Mixer/Booster:** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

**Water Front Construction (Dredging):** Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

B. Three times the basic hourly wage, plus the hourly cost of required fringe on Labor Day.

- Carpenter
- Cement Finisher
- Chain Link Fence Erector
- Drywall Installer
- Insulator
- Laborer
- Lather
- Mason
- Plasterer
- Terrazzo
- Tile Setter
- Underground Laborer

## Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

**(ii) (a)** Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

**(1)** The work to be performed by the classification requested is not performed by a classification in the wage determination; and

**(2)** The classification is utilized in the area by the construction industry; and

**(3)** The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

**(b)** If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

**(c)** In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**(d)** The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

**(iii)** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

**(iv)** If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

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of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

**3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

**(ii) (a)** The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

**(b)** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

**(1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

**(iii) Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

**10. (i) Certification of Eligibility.** By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(ii)** No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(iii)** The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

**11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

**(1) Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**(2) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.



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**(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

**C. Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

**(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

**(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

**(3)** The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

General Decision Number: HI180001 01/26/2018 HI1

Superseded General Decision Number: HI20170001

State: Hawaii

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

Counties: Hawaii Statewide.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/05/2018
1	01/26/2018

ASBE0132-001 08/31/2015

	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.....	\$ 39.65	23.50

BOIL0627-005 01/01/2013

	Rates	Fringes
BOILERMAKER.....	\$ 35.20	27.35
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BRHI0001-001 09/04/2017		
	Rates	Fringes
BRICKLAYER		
Bricklayers and Stonemasons.....	\$ 44.55	23.22
Pointers, Caulkers and Weatherproofers.....	\$ 45.01	23.22
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BRHI0001-002 09/04/2017		
	Rates	Fringes
Tile, Marble & Terrazzo Worker		
Terrazzo Base Grinders.....	\$ 44.39	22.72
Terrazzo Floor Grinders and Tenders.....	\$ 42.84	22.72
Tile, Marble and Terrazzo Workers.....	\$ 46.20	22.72
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CARP0745-001 09/04/2017		
	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.....	\$ 47.45	21.66
Millwrights and Machine Erectors.....	\$ 47.70	21.66
Power Saw Operators (2 h.p. and over).....	\$ 47.60	21.66
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CARP0745-002 09/04/2017		
	Rates	Fringes
Drywall and Acoustical Workers and Lathers.....	\$ 47.70	21.66
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ELEC1186-001 08/22/2017		
	Rates	Fringes
Electricians:		
Cable Splicers.....	\$ 52.58	15.78+24.10%
Electricians.....	\$ 47.80	15.63+24.10%
Telecommunication worker....	\$ 28.44	11.94
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ELEC1186-002 08/22/2017		

	Rates	Fringes
Line Construction:		
Cable Splicers.....	\$ 52.58	15.78+24.10%
Groundmen/Truck Drivers.....	\$ 35.85	15.28+24.10%
Heavy Equipment Operators...	\$ 43.02	15.49+24.10%
Linemen.....	\$ 47.80	15.63+24.10%
Telecommunication worker....	\$ 28.44	11.94

\* ELEV0126-001 01/01/2018

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 57.36	32.65

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 09/04/2017

	Rates	Fringes
Diver (Aqua Lung) (Scuba)		
Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)...	\$ 65.00	30.93
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)..	\$ 55.63	30.93
Stand-by Diver (Aqua Lung) (Scuba).....	\$ 46.25	30.93
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung).....	\$ 65.00	30.93
Diver Tender (Other than Aqua Lung).....	\$ 43.22	30.93
Stand-by Diver (Other than Aqua Lung).....	\$ 46.25	30.93
Helicopter Work		
Airborne Hoist Operator for Helicopter.....	\$ 44.80	30.93
Co-Pilot of Helicopter.....	\$ 44.94	30.93
Pilot of Helicopter.....	\$ 45.11	30.93
Power equipment operator - tunnel work		
GROUP 1.....	\$ 41.24	30.93
GROUP 2.....	\$ 41.35	30.93
GROUP 3.....	\$ 41.52	30.93
GROUP 4.....	\$ 41.79	30.93
GROUP 5.....	\$ 42.10	30.93
GROUP 6.....	\$ 42.75	30.93
GROUP 7.....	\$ 43.07	30.93
GROUP 8.....	\$ 43.18	30.93
GROUP 9.....	\$ 43.29	30.93
GROUP 9A.....	\$ 43.52	30.93
GROUP 10.....	\$ 43.58	30.93

GROUP 10A.....	\$ 43.73	30.93
GROUP 11.....	\$ 43.88	30.93
GROUP 12.....	\$ 44.24	30.93
GROUP 12A.....	\$ 44.60	30.93
Power equipment operators:		
GROUP 1.....	\$ 40.94	30.93
GROUP 2.....	\$ 41.05	30.93
GROUP 3.....	\$ 41.22	30.93
GROUP 4.....	\$ 41.49	30.93
GROUP 5.....	\$ 41.80	30.93
GROUP 6.....	\$ 42.45	30.93
GROUP 7.....	\$ 42.77	30.93
GROUP 8.....	\$ 42.88	30.93
GROUP 9.....	\$ 42.99	30.93
GROUP 9A.....	\$ 43.22	30.93
GROUP 10.....	\$ 43.28	30.93
GROUP 10A.....	\$ 43.43	30.93
GROUP 11.....	\$ 43.58	30.93
GROUP 12.....	\$ 43.94	30.93
GROUP 12A.....	\$ 44.30	30.93
GROUP 13.....	\$ 41.22	30.93
GROUP 13A.....	\$ 41.49	30.93
GROUP 13B.....	\$ 41.80	30.93
GROUP 13C.....	\$ 42.45	30.93
GROUP 13D.....	\$ 42.77	30.93
GROUP 13E.....	\$ 42.88	30.93

## 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 09/04/2017

Rates

Fringes



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

## CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

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

## HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

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

## DERRICK CLASSIFICATIONS

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

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ENGI0003-044 09/04/2017

Rates

Fringes

Power Equipment Operators  
(PAVING)

Asphalt Concrete Material Transfer.....	\$ 41.92	30.53
Asphalt Plant Operator.....	\$ 42.35	30.53
Asphalt Raker.....	\$ 40.96	30.53
Asphalt Spreader Operator....	\$ 42.44	30.53
Cold Planer.....	\$ 42.75	30.53
Combination Loader/Backhoe (over 3/4 cu.yd.).....	\$ 40.96	30.53
Combination Loader/Backhoe (up to 3/4 cu.yd.).....	\$ 39.98	30.53
Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals).....	\$ 41.92	30.53
Grader.....	\$ 42.75	30.53
Laborer, Hand Roller.....	\$ 40.46	30.53
Loader (2 1/2 cu. yds. and under).....	\$ 41.92	30.53
Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.).....	\$ 42.24	30.53
Roller Operator (five tons and under).....	\$ 40.69	30.53
Roller Operator (over five tons).....	\$ 42.12	30.53
Screed Person.....	\$ 41.92	30.53
Soil Stabilizer.....	\$ 42.75	30.53

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IRON0625-001 09/01/2017

	Rates	Fringes
Ironworkers:.....	\$ 39.00	34.65
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 09/04/2017

	Rates	Fringes
Laborers:		
Driller.....	\$ 37.40	19.26
Final Clean Up.....	\$ 27.80	15.14
Gunite/Shotcrete Operator and High Scaler.....	\$ 36.90	19.26
Laborer I.....	\$ 36.40	19.26
Laborer II.....	\$ 33.80	19.26
Mason Tender/Hod Carrier....	\$ 36.90	19.26
Powderman.....	\$ 37.40	19.26
Window Washer (bosun chair)....	\$ 35.90	19.26

LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and

Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter (Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for treme work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character, whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry) (including mixer

operator);Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Assessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko,

Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers' work; Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools, breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, stablishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than "Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unloading in storage area); Ground and Soil Treatment Work (Pest Control); Gunitite/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam "Target Man" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for 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 signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs, walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Stripper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms an false work.

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LABO0368-002 09/04/2017

	Rates	Fringes
Landscape & Irrigation Laborers		
GROUP 1.....	\$ 24.85	11.97
GROUP 2.....	\$ 25.65	11.97

GROUP 3.....\$ 20.65 11.97

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 09/04/2017

	Rates	Fringes
Underground Laborer		
GROUP 1.....	\$ 37.00	19.26
GROUP 2.....	\$ 38.50	19.26
GROUP 3.....	\$ 39.00	19.26
GROUP 4.....	\$ 40.00	19.26
GROUP 5.....	\$ 40.35	19.26
GROUP 6.....	\$ 40.60	19.26
GROUP 7.....	\$ 41.05	19.26

GROUP 1: Watchmen; Change House Attendant.

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



spreading); Grout Crew; Reboundmen

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

GROUP 4: Miners - Tunnel (including top and bottom man on shaft and raise work); Timberman, Retimberman (wood or steel or substitute materials thereof); Blasters, Drillers, Powderman (in heading); 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 01/01/2018

	Rates	Fringes
Painters:		
Brush.....	\$ 37.35	27.85
Sandblaster; Spray.....	\$ 37.35	27.85

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 \* PAIN1889-001 07/01/2017

	Rates	Fringes
Glaziers.....	\$ 36.78	30.54

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 \* PAIN1926-001 02/26/2017

	Rates	Fringes
Soft Floor Layers.....	\$ 33.00	27.73

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 \* PAIN1944-001 01/01/2018

	Rates	Fringes
Taper.....	\$ 42.10	24.25

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 PLAS0630-001 09/04/2017

	Rates	Fringes
PLASTERER.....	\$ 40.54	28.23

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 PLAS0630-002 09/04/2017

	Rates	Fringes
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Cement Masons:

Cement Masons.....	\$ 39.70	29.38
Trowel Machine Operators....	\$ 39.85	29.38

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 \* PLUM0675-001 01/07/2018

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter....	\$ 44.89	25.77

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 \* ROOF0221-001 11/05/2017

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply).....	\$ 39.85	17.66

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 SHEE0293-001 09/03/2017

	Rates	Fringes
Sheet metal worker.....	\$ 41.80	26.53

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

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 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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

#### Union Rate Identifiers

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

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

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those

classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

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WAGE DETERMINATION APPEALS PROCESS

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

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

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

=====

END OF GENERAL DECISION

**APPRENTICE SCHEDULE BULLETIN NO. 491 February 19, 2018**  
 Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor  
 and where the journeyworker to apprentice ratio is met.

Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total
* BOILERMAKER	1000	\$25.50	\$27.32	\$29.14	\$30.96	\$32.78	\$34.60						\$29.45	10
CARPENTER	1000	\$18.98											\$12.52	1,10
Indentured Prior to 9/1/02	1000		\$21.35	\$23.73	\$28.47	\$33.22	\$37.96	\$42.71	\$45.08				\$21.66	1,10
Indentured After 9/1/02	1000	\$18.98	\$21.35	\$23.73	\$28.47	\$33.22	\$37.96	\$42.71	\$45.08				\$8.52	1,10
"	1000												\$12.96	1,10
"	1000												\$15.46	1,10
"	1000												\$17.46	1,10
"	1000												\$19.46	1,10
<b>(Effective 9/3/18)</b>														
* CARPENTER	1000	\$19.78											\$12.77	1,10
Indentured Prior to 9/1/02	1000		\$22.25	\$24.73	\$29.67	\$34.62	\$39.56	\$44.51	\$46.98				\$21.91	1,10
Indentured After 9/1/02	1000	\$19.78	\$22.25	\$24.73	\$29.67	\$34.62	\$39.56	\$44.51	\$46.98				\$8.77	1,10
"	1000												\$13.21	1,10
"	1000												\$15.71	1,10
"	1000												\$17.71	1,10
"	1000												\$19.71	1,10
CEMENT FINISHER	1000	\$19.55											\$9.37	2,10
Indentured Prior to 9/1/03	1000		\$21.51	\$23.46	\$27.37	\$29.33	\$31.28	\$33.24	\$35.19				\$28.48	2,10
Indentured On or After 9/1/03	1000	\$19.55	\$21.51	\$23.46	\$27.37	\$29.33	\$31.28	\$33.24	\$35.19				<b>\$15.08</b>	2,10
<b>(Effective 9/3/18)</b>														
* CEMENT FINISHER	1000	\$19.90											\$9.77	2,10
Indentured Prior to 9/1/03	1000		\$21.89	\$23.88	\$27.86	\$29.85	\$31.84	\$33.83	\$35.82				\$29.33	2,10
Indentured On or After 9/1/03	1000	\$19.90	\$21.89	\$23.88	\$27.86	\$29.85	\$31.84	\$33.83	\$35.82				\$15.93	2,10
CONSTRUCTION EQUIPMENT OPERATOR	1000	\$21.61											\$8.00	3,10
Indentured On or After 9/1/02	1000		\$23.77	\$25.93	\$30.25	\$34.58	\$38.90						\$18.65	3,10
"	1000												\$19.62	3,10
"	1000												\$21.56	3,10
"	1000												\$23.49	3,10
"	1000												\$25.43	3,10

APPRENTICE SCHEDULE BULLETIN NO. 491 February 19, 2018  
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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE								FRINGE BENEFIT HOURLY RATE		Remarks See Pg 10-11	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		Total
DRYWALL INSTALLER	1000	\$19.08	\$21.47	\$23.85	\$28.62	\$33.39	\$38.16	\$42.93	\$45.32			\$12.52	10
Indentured Prior to 9/1/02	1000	\$19.08	\$21.47	\$23.85	\$28.62	\$33.39	\$38.16	\$42.93	\$45.32			\$21.66	10
Indentured After 9/1/02	1000											\$8.52	10
"	1000											\$12.96	10
"	1000											\$15.46	10
"	1000											\$17.46	10
"	1000											\$19.46	10
<b>(Effective 9/3/18)</b>													
* DRYWALL INSTALLER	1000	\$19.88	\$22.37	\$24.85	\$29.82	\$34.79	\$39.76	\$44.73	\$47.22			\$12.77	10
Indentured Prior to 9/1/02	1000	\$19.88	\$22.37	\$24.85	\$29.82	\$34.79	\$39.76	\$44.73	\$47.22			\$21.91	10
Indentured After 9/1/02	1000											\$8.77	10
"	1000											\$13.21	10
"	1000											\$15.71	10
"	1000											\$17.71	10
"	1000											\$19.71	10
* DRYWALL TAPERS/FINISHERS	1000	\$16.84	\$18.94	\$21.05	\$23.15	\$25.26	\$27.36	\$31.57	\$35.78			\$9.90	
"	1000											\$10.40	
"	1000											\$13.90	
ELECTRICIAN (WIRE & LINE INSTALLER)	1000	\$17.08	\$19.52	\$21.96	\$24.40	\$26.84	\$29.28	\$31.72	\$34.16			\$9.57	10
"	1000											\$9.91	10
"	1000											\$16.36	4,10
"	1000											\$17.37	4,10
"	1000											\$18.39	4,10
"	1000											\$19.39	4,10
"	1000											\$20.39	4,10
"	1000											\$21.40	4,10
"	1000											\$23.43	4,10
"	1000									\$39.04	\$43.92	\$25.46	4,10

ELECTRICIAN: Continued on Next Page

**APPRENTICE SCHEDULE BULLETIN NO. 491 February 19, 2018**  
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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11			
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total		
<b>(Effective 8/26/18)</b>																
* ELECTRICIAN (WIRE & LINE INSTALLER)	1000	\$17.43													\$9.62	10
"	1000		\$19.92												\$9.96	10
"	1000			\$22.41											\$16.53	4,10
"	1000				\$27.39										\$17.55	4,10
"	1000					\$29.88									\$18.58	4,10
"	1000						\$32.37								\$19.62	4,10
"	1000							\$34.86							\$20.64	4,10
"	1000								\$39.84						\$21.68	4,10
"	1000									\$44.82					\$23.73	4,10
"	1000														\$25.78	4,10
<b>* ELEVATOR CONSTRUCTOR</b>																
"	850	\$28.68													-	10
"	850		\$31.55												\$32.645	10
"	1700			\$37.28	\$40.15	\$45.89									\$32.645	10
<b>FLOOR LAYER</b>																
Indentured After 2/27/94	1000	\$14.85	\$16.50												\$18.48	10
"	1000			\$18.15	\$19.80										\$23.48	10
"	1000					\$21.45	\$23.10	\$26.40	\$29.70						\$27.73	10
<b>(Effective 3/4/18)</b>																
FLOOR LAYER	1000	\$15.37	\$17.08												\$19.32	10
Indentured after 2/27/94	1000			\$18.78	\$20.49										\$24.32	10
"	1000					\$22.20	\$23.91	\$27.32	\$30.74						\$29.32	10
<b>GLAZIER</b>																
Indentured On or After 7/1/99	1000	\$16.55	\$18.39												\$27.90	5,10
"	1000			\$20.23	\$22.07										\$28.14	5,10
"	1000					\$25.75	\$27.59	\$29.42	\$31.26						\$28.38	5,10
"	1000									\$33.10					\$28.62	5,10
"	1000														\$29.10	5,10
"	1000														\$29.34	5,10
"	1000														\$29.58	5,10
"	1000														\$29.82	5,10
"	1000														\$30.06	5,10
"	1000									\$34.94					\$30.30	5,10



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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11		
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total	
HEAVY DUTY REPAIRER & WELDER	1000													\$8.00	3,10
Indentured on or after 9/1/02	1000	\$21.61	\$23.77	\$25.93	\$30.25	\$34.58	\$36.74	\$38.90	\$41.06					\$18.65	3,10
"	1000													\$19.62	3,10
"	1000													\$21.56	3,10
"	1000													\$23.49	3,10
"	1000													\$24.47	3,10
"	1000													\$25.43	3,10
"	1000													\$26.41	3,10
INSULATOR	2000	\$19.95	\$19.95	\$23.94	\$27.93	\$31.92								\$7.80	6,10
Indentured After 5/3/95	2000													\$18.01	6,10
"	2000													\$18.35	6,10
"	2000													\$18.70	6,10
"	2000													\$19.04	6,10
<b>(Effective 9/2/18)</b>															
* INSULATOR	2000	\$20.20	\$20.20	\$24.24	\$28.28	\$32.32								\$7.80	6,10
Indentured After 5/3/95	2000													\$18.21	6,10
"	2000													\$18.55	6,10
"	2000													\$18.90	6,10
"	2000													\$19.24	6,10
IRONWORKER (REINFORCING & STRUCTURAL)	1000	\$19.50	\$21.45	\$23.40	\$27.30	\$31.20	\$35.10							\$26.42	7,10
Indentured After 10/31/93	1000													\$26.99	7,10
"	1000													\$27.56	7,10
"	1000													\$28.71	7,10
"	1000													\$29.85	7,10
"	1000													\$31.01	7,10
<b>(Effective 9/1/18)</b>															
* IRONWORKER (REINFORCING & STRUCTURAL)	1000	\$20.13	\$22.14	\$24.15	\$28.18	\$32.20	\$36.23							\$27.37	7,10
Indentured After 10/31/93	1000													\$27.96	7,10
"	1000													\$28.55	7,10
"	1000													\$29.73	7,10
"	1000													\$30.92	7,10
"	1000													\$32.11	7,10

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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11			
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total		
* LABORER I <b>(Effective 9/4/17)</b>																
* CONSTRUCTION CRAFT Indentured On or After 9/3/02	1000	\$18.20	\$21.84	\$25.48	\$29.12										\$7.55	1,10
"	1000														\$14.20	1,10
* CONSTRUCTION CRAFT <b>(Effective 9/3/18)</b>																
* CONSTRUCTION CRAFT Indentured On or After 9/3/02	1000	\$18.70	\$22.44	\$26.18	\$29.92										\$8.10	1,10
"	1000														\$14.90	1,10
* HAZARDOUS WASTE MATERIAL TECHNICIAN <b>(Effective 2/19/18)</b>																
"	1000	\$18.20	\$21.84	\$25.48	\$29.12										\$6.15	1,10
"	1000														\$12.30	1,10
* HAZARDOUS WASTE MATERIAL TECHNICIAN <b>(Effective 9/3/18)</b>																
"	1000	\$18.70	\$22.44	\$26.18	\$29.92										\$6.70	1,10
"	1000														\$13.00	1,10
LANDSCAPER	1000	\$16.15	\$17.40	\$18.64	\$19.88										\$6.15	
"	1000														\$9.82	
* LANDSCAPER <b>(Effective 9/3/18)</b>																
"	1000	\$16.58	\$17.85	\$19.13	\$20.40										\$6.70	
"	1000														\$10.43	
MASON																
BRICKLAYER Indentured prior to 9/1/03	1000	\$19.88	\$21.87	\$23.86	\$27.83	\$29.82	\$31.81	\$33.80	\$35.78						\$9.12	2,10
"	1000														\$28.47	2,10
Indentured On or After 9/1/03	1000	\$19.88	\$21.87	\$23.86	\$27.83	\$29.82	\$31.81	\$33.80	\$35.78						\$15.87	2,10
STONE MASON																
Indentured On or After 9/1/03	1000	\$21.87	\$23.86	\$25.84	\$27.83	\$29.82	\$31.81	\$33.80	\$35.78						\$15.87	2,10
POINTER-CAULKER-WEATHERPROOFER																
Indentured On or After 9/1/03	1000	\$20.01	\$22.01	\$24.01	\$28.01	\$32.01	\$36.01								\$15.87	2,10

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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11		
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total	
<b>PAINTER</b>	1000	\$16.81												\$9.25	
"	1000	\$18.68	\$20.54	\$22.41	\$24.28	\$26.15	\$28.01	\$31.75						\$12.75	
"	1000													\$13.75	
"	1000													\$14.50	
<b>(Effective 7/1/18)</b>															
* PAINTER	1000	\$17.03	\$20.82	\$22.71	\$24.60	\$26.50	\$28.39	\$32.17						\$9.25	
"	1000													\$12.75	
"	1000													\$13.75	
"	1000													\$14.50	
<b>PAVING EQUIPMENT OPERATOR</b>	1000	\$23.06												\$8.00	10
"	1000		\$29.34											\$19.10	10
"	1000			\$33.54										\$22.14	10
"	1000				\$37.73									\$26.17	10
<b>PLASTERER</b>	1000	\$16.22	\$18.24	\$20.27	\$22.30	\$24.32	\$28.38	\$32.43	\$36.49					\$15.08	2,10
Indentured On or After 9/1/03															
<b>(Effective 9/3/18)</b>															
* PLASTERER	1000	\$16.54	\$18.60	\$20.67	\$22.74	\$24.80	\$28.94	\$33.07	\$37.21					\$15.93	2,10
Indentured On or After 9/1/03															
<b>PLUMBER:</b>															
PLUMBER; FIRE SPRINKLER FITTER; REFRIGERATION	1000													\$6.94	8,10
AIR CONDITIONING; STEAMFITTER-WELDER	1000	\$17.02	\$17.02	\$20.12	\$20.12	\$23.29	\$27.53	\$31.76	\$31.76					\$6.99	8,10
Indentured On or After 9/2/85														\$9.37	8,10
"	1000													\$9.37	8,10
"	1000													\$10.09	8,10
"	1000													\$10.09	8,10
"	1000													\$10.97	8,10
"	1000													\$10.97	8,10
"	1000													\$11.62	8,10
"	1000													\$11.62	8,10

PLUMBER: Continued on Next Page

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Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE		Remarks See Pg 10-11				
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Total						
<b>(Effective 7/1/18)</b>																		
* PLUMBER:																		
PLUMBER; FIRE SPRINKLER FITTER; REFRIGERATION	1000	\$17.23															\$6.94	8,10
AIR CONDITIONING; STEAMFITTER-WELDER	1000	\$17.23															\$6.99	8,10
Indentured On or After 9/2/85	1000		\$20.35														\$9.97	8,10
"	1000			\$23.57													\$9.97	8,10
"	1000				\$23.57												\$10.70	8,10
"	1000					\$23.57											\$10.70	8,10
"	1000						\$27.85										\$11.61	8,10
"	1000							\$27.85									\$11.61	8,10
"	1000								\$27.85								\$12.27	8,10
"	1000									\$32.14							\$12.27	8,10
* ROOFER																		
Indentured Prior to 11/1/98	1000	\$17.93	\$19.93	\$23.91	\$27.90	\$31.88	\$35.87	\$37.86									\$13.38	9
"	1000								\$31.88								\$17.63	9
Indentured On or After 11/1/98 and Prior to 11/4/12	1000	\$17.93	\$19.93	\$23.91	\$27.90	\$31.88	\$33.87	\$35.87	\$37.86								\$13.38	9
"	1000									\$31.88							\$17.63	9
Indentured On or After 11/4/12	2000	\$17.93	\$23.91	\$31.88	\$35.87												\$13.38	9
"	2000																\$17.63	9
<b>(Effective 9/2/18)</b>																		
* ROOFER																		
Indentured Prior to 11/1/98	1000	\$18.23	\$20.25	\$24.30	\$28.35	\$32.40	\$36.45	\$38.48									\$13.85	9
"	1000																\$18.10	9
Indentured On or After 11/1/98 and Prior to 11/4/12	1000	\$18.23	\$20.25	\$24.30	\$28.35	\$32.40	\$34.43	\$36.45	\$38.48								\$13.85	9
"	1000																\$18.10	9
Indentured On or After 11/4/12	2000	\$18.23	\$24.30	\$32.40	\$36.45	\$38.48											\$13.85	9
"	2000																\$18.10	9

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		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			Total		
SHEETMETAL WORKER	1000	\$16.72													\$11.93	10
"	1000		\$18.81												\$12.12	10
"	1000			\$20.90											\$21.32	10
"	1000				\$22.99										\$21.83	10
"	1000					\$25.08									\$22.35	10
"	1000						\$27.17								\$22.88	10
"	1000							\$29.26							\$23.40	10
"	1000								\$31.35						\$23.93	10
"	1000									\$33.44					\$24.44	10
"	1000										\$35.53				\$24.96	10
<b>(Effective 3/4/18)</b>																
SHEETMETAL WORKER	1000	\$16.88													\$12.07	10
"	1000		\$18.99												\$12.27	10
"	1000			\$21.10											\$21.74	10
"	1000				\$23.21										\$22.27	10
"	1000					\$25.32									\$22.80	10
"	1000						\$27.43								\$23.33	10
"	1000							\$29.54							\$23.86	10
"	1000								\$31.65						\$24.39	10
"	1000									\$33.76					\$24.92	10
"	1000										\$35.87				\$25.44	10
<b>(Effective 9/2/18)</b>																
* SHEETMETAL WORKER	1000	\$17.02													\$12.20	10
"	1000		\$19.15												\$12.40	10
"	1000			\$21.28											\$22.09	10
"	1000				\$23.40										\$22.63	10
"	1000					\$25.53									\$23.15	10
"	1000						\$27.66								\$23.69	10
"	1000							\$29.79							\$24.23	10
"	1000								\$31.91						\$24.77	10
"	1000									\$34.04					\$25.30	10
"	1000										\$36.17				\$25.83	10

**APPRENTICE SCHEDULE BULLETIN NO. 491 February 19, 2018**

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor and where the journeyworker to apprentice ratio is met.

Apprentice Classifications	Interval Hrs	BASIC HOURLY RATE										FRINGE BENEFIT HOURLY RATE	Remarks See Pg 10-11		
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th				
TELECOMMUNICATION WORKER (TECHNICIAN I / SPLICER)	1000	\$17.06											Total	\$10.00	10
"	1000	\$18.49												\$10.24	10
"	1000		\$19.91											\$10.49	10
"	1000				\$21.33									\$10.72	10
"	1000					\$22.75								\$10.97	10
"	1000						\$25.60							\$11.44	10
TILE SETTER															
CERAMIC & HARD TILE	1000	\$20.48												\$9.17	2,10
Indentured Prior to 9/1/03	1000		\$22.52	\$24.57	\$28.67	\$30.71	\$32.76	\$34.81	\$36.86					\$27.97	2,10
"			\$22.52	\$24.57	\$28.67	\$30.71	\$32.76	\$34.81	\$36.86					\$15.42	2,10
Indentured On or After 9/1/03	1000														
<b>(Effective 9/3/18)</b>															
* TILE SETTER															
CERAMIC & HARD TILE	1000	\$20.85												\$9.57	2,10
Indentured Prior to 9/1/03	1000		\$22.94	\$25.02	\$29.19	\$31.28	\$33.36	\$35.45	\$37.53					\$28.82	2,10
"			\$22.94	\$25.02	\$29.19	\$31.28	\$33.36	\$35.45	\$37.53					\$16.27	2,10
Indentured On or After 9/1/03	1000														

\* Indicates a wage, fringe benefit, remark, or title change from the previous bulletin.



**STATE OF HAWAII  
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS**

**List of Construction Trades in Registered Apprenticeship Programs**

Apprenticeship programs for the following construction trades were approved and registered by the State Department of Labor and Industrial Relations in accordance with Chapter 372, Hawaii Revised Statutes, and Title 12, Chapter 30, Hawaii Administrative Rules. Union and non-union programs are listed separately. The minimum requirements are not exclusive as a program sponsor may add other requirements in their selection procedures.

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Boilermaker	Western States Area Joint Apprenticeship Committee (International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmith, Forgers, and Helpers and Subordinate, Lodge No. 627, AFL-CIO, and the Western States Joint Apprenticeship Committee, and Association of Boilermaker Employers)	x		03/18/1991	6,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school graduate or GED equivalent</li> </ul>	Coordinator Address: PO Box 1612 Page, Arizona 86040 Phone: (928)645-0277 Website: <a href="http://www.westernstatesjac.org/">http://www.westernstatesjac.org/</a>
Bricklayer-Mason	Joint Apprenticeship Committee for Bricklayer-Mason (Masonry Contractors Association of Hawaii and Other Signatory Employers and Local 1 of Hawaii of the Bricklayers and Allied Craftsmen International Union, AFL-CIO)	x		02/10/1964	8,000	<ul style="list-style-type: none"> <li>• At least 16 years old</li> <li>• High school graduate or GED equivalent</li> <li>• Physically able to perform duties of the trade</li> </ul>	*No training staff currently based in Hawaii Director of Training or Training Coordinator Address: Hawaii Masons & Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819 Phone: (808) 848-0565 Fax: (808) 847-7068 Website: <a href="http://www.baacweb.org">http://www.baacweb.org</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Carpenter	<p>Carpenters Joint Apprenticeship Committee aka Hawaii Carpenters Apprenticeship and Training Program</p> <p>(General Contractors Association of Hawaii and Building Industry Labor Association and Other Signatory Contractors and the United Brotherhood of Carpenters and Joiners of America, Local 745 AFL-CIO)</p>	x		04/01/1964	8,000	<ul style="list-style-type: none"> <li>At least 17 years old</li> <li>High school diploma or equivalent education, or equivalent work experience</li> <li>Pass basic math test</li> <li>Complete questionnaire</li> <li>Able to lift 75 lbs.</li> </ul>	<p>Director of Training</p> <p>Address: 1311 Houghtailing Street Room 201 Honolulu, HI 96817</p> <p>Phone: (808) 848-0794 Ext. 5 Fax: (808) 841-5961 Website: (808) 841-0300 <a href="http://www.carpenters.org/">http://www.carpenters.org/</a></p>
Carpenter	Associated Builders and Contractors Apprenticeship Committee		x	02/08/1990	8,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Full-time employee of a member company for a period of not less than six continuous weeks</li> <li>Legally able to work</li> <li>Physically able to perform duties of the trade</li> </ul>	<p>Director of Training</p> <p>Address: 1375 Dillingham Blvd. Suite 200 Honolulu, HI 96817</p> <p>Phone: (808) 845-4887 Fax: (808) 847-7876 Website: <a href="http://www.abchawaii.org/">http://www.abchawaii.org/</a></p>
Cement Finisher	<p>Joint Apprenticeship Committee for Cement Finishers</p> <p>(Operative Plasterers and Cement Finishers International Association, Local 630, AFL-CIO, and Local 1 of the International Union of Bricklayers and Allied Craftsmen, AFL-CIO)</p>	x		04/01/1961	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically able to perform duties of the trade</li> </ul>	<p>Director of Training or Training Coordinator</p> <p>Address: Hawaii Masons &amp; Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819</p> <p>Phone: (808) 848-0565 Fax: (808) 847-7068 Website: <a href="http://www.opcmia.org/">http://www.opcmia.org/</a> <a href="http://www.bacweb.org">http://www.bacweb.org</a></p>



Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Construction Craft Laborer	Hawaii Laborers' Joint Apprenticeship Committee (International Union of North America, Local 368, and Signatory Contractors Association)	x		02/11/2000	4,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED</li> <li>• Driver's license</li> <li>• Successfully complete Pre-Construction Apprentice Evaluation Course</li> </ul>	Director of Training Address: 96-138 Farrington Hwy. Pearl City, HI 96782 Phone: (808) 455-7979 Fax: (808) 456-8689 Website: <a href="http://www.liuna.org/">http://www.liuna.org/</a>
Construction Equipment Operator	Hawaii Joint Apprenticeship Committee for Operating Engineers (General Contractors Labor Association and the Building Industry Labor Association and International Union of Operating Engineers, Local Union #3, AFL-CIO)	x		11/14/1967	6,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED or C-based test</li> <li>• Physically able to perform duties of the trade</li> <li>• School transcripts</li> <li>• Driver's license</li> <li>• Current State DOT PUC physical</li> <li>• Pass industry or general knowledge test</li> <li>• Have reliable transportation</li> </ul>	State Administrator Address: P.O. Box 428 Kahuku, HI 96731-0428 Phone: (808) 232-2001 Fax: (808) 232-2217 Website: <a href="http://oe3.org/training/">http://oe3.org/training/</a>
Drywall, Acoustic and Lather Installer	Carpenters Joint Apprenticeship Committee aka Hawaii Carpenters Apprenticeship and Training Program (General Contractors Association of Hawaii and Building Industry Labor Association and Other Signatory Contractors and the United Brotherhood of Carpenters and Joiners of America, Local 745, AFL-CIO)	x		04/06/1988	8,000	<ul style="list-style-type: none"> <li>• At least 17 years old</li> <li>• High school diploma or GED</li> <li>• Complete questionnaire</li> <li>• Pass basic math test</li> <li>• Able to lift 100 lbs.</li> </ul>	Director of Training Address: 1311 Houghtailing Street Room 201 Honolulu, HI 96817 Phone: (808) 848-0794 Ext. 5 Fax: (808) 848-5961 Website: <a href="http://www.carpenters.org/">http://www.carpenters.org/</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Electrical Wireperson	PECA-HEW Joint Apprenticeship Committee (Pacific Electrical Contractors Association and the Hawaii Electrical Workers Division of Laborers International, Local 368)	x		11/20/1991	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Pass color code test</li> <li>Pass aptitude test</li> <li>Transcript of high school or post high school courses</li> <li>Pass one-year high school Algebra 1 (not pre-Algebra) or higher</li> <li>Valid driver's license</li> </ul>	Training Coordinator Address: 1617 Palama Street Honolulu, HI 96817 Phone: (808) 841-5877 Ext 234 Fax: (808) 847-7829 Website: N/A
Electrician	Associated Builders and Contractors Apprenticeship Committee		x	02/08/1990	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Full-time employee of a member company for a period of not less than six continuous weeks</li> <li>Legally able to work</li> <li>Physically able to perform duties of the trade</li> <li>Pass eye examination for color blindness</li> <li>Completed one-year high school algebra (not pre-algebra)</li> </ul>	Director of Training Address: 1375 Dillingham Blvd. Suite 200 Honolulu, HI 96817 Phone: (808) 845-4887 Fax: (808) 847-7876 Website: <a href="http://www.abchawaii.org/">http://www.abchawaii.org/</a>
(Electrician) Wireperson	Hawaii Electricians Joint Apprenticeship Committee (International Brotherhood of Electrical Workers (IBEW) Local 1186, AFL-CIO, and Signatory Employers)	x		04/08/1947	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Complete the National Joint Apprenticeship and Training Committee Math Course or one-year high school Algebra 1</li> <li>Transcript of high school or post high school</li> </ul>	Apprenticeship or Training Coordinator Address: 1935 Hau Street Room 301 Honolulu, HI 96819 Phone: (808) 847-0629 Fax: (808) 843-8818 Website: <a href="http://www.njatc.org/">http://www.njatc.org/</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Elevator Constructor	International Union of Elevator Constructors Local 126 Joint Apprenticeship Committee (International Union of Elevator Constructors, Local 126 and Signatory Employers)	x		03/27/2003	6,800	<ul style="list-style-type: none"> <li>Pass industry aptitude test to qualify for oral interview</li> <li>Application fee (non-refundable)</li> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>School transcripts</li> <li>Pass aptitude test (math, reading)</li> <li>Pass medical exam</li> <li>Physically able to perform duties of the trade</li> </ul>	Business Representative Address: 707 Alakea Street Room 314 Honolulu, HI 96813 Phone: (808) 536-8653 Fax: (808) 537-3779 Website: <a href="http://iuec.org/">http://iuec.org/</a>
Fire Sprinkler Fitter	Honolulu Joint Apprenticeship and Training Committee for the Plumbing and Pipefitting Industry aka JATC of UA Plumbers and Fitters, Local 675, AFL-CIO, and PAMCAH (Plumbing and Mechanical Contractors Association of Hawaii and United Association of Plumbers and Pipefitters Local 675, AFL-CIO)	x		10/19/1992	10,000	<ul style="list-style-type: none"> <li>At least 17 years old</li> <li>High school diploma or GED</li> <li>School transcripts</li> <li>Pass placement evaluation with minimum score of 70%</li> <li>Driver's license</li> </ul>	Training Coordinator Address: 720 Iwilei Road, Suite 222 Honolulu, HI 96817 Phone: (808) 456-0585 Fax: (808) 456-7131 Website: <a href="http://www.ua.org/">http://www.ua.org/</a>
Floor Layer	Joint Apprenticeship and Training Committee for Floor Layers (Hawaii Floor Covering Association and Carpet, Linoleum, and Soft Tile Union Local 1926, AFL-CIO)	x		02/17/1966	8,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>Driver's license</li> <li>Distinguish colors</li> <li>High school diploma or equivalent</li> <li>Physically able to perform duties</li> </ul>	Training Coordinator Address: 2240 Young Street Honolulu, HI 96826 Phone: (808) 942-3988 Fax: (808) 946-6667 Website: <a href="http://www.iupat.org/">http://www.iupat.org/</a>
Glazier	Joint Apprenticeship Committee for Glaziers, Architectural Metal and Glassworkers Industry aka Glaziers, Architectural Metal and Glassworkers JATC (Glass/Metal Contractors Association of Hawaii and	x		04/01/2001	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Driver's license</li> <li>Physically able to perform duties of the trade</li> </ul>	Training Coordinator Address: 2240 Young Street Honolulu, HI 96826 Phone: (808) 942-3988 Fax: (808) 946-6667 Website: <a href="http://www.iupat.org/">http://www.iupat.org/</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/ Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Hazardous Waste Material Technician	Other Signatory Contractors and the Glaziers, Architectural Metal and Glassworkers Union Local 1889, AFL-CIO)  Hawaii Laborers; Union Local 368	x		9/19/2017	4000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High School Diploma or GED</li> <li>• Possess a Valid Driver's License</li> <li>• Pass a Pre-Evaluation course</li> <li>• Physical abilities to perform duties of the trade</li> </ul>	96-138 Farrington Highway Pearl City, Hawaii 96782  Phone (808) 455-7979
Heat and Frost Insulator	Honolulu Joint Apprenticeship Committee for the Heat and Frost Asbestos Insulator Trade  (Heat and Frost Insulators and Asbestos Workers, Local 132, and Signatory Participating Employers)	x		07/23/1971	10,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED</li> <li>• Physically able to perform duties of the trade</li> </ul>	Training Coordinator Address: 1019 Laulia Street Bay #4 Kapolei, HI 96707  Phone: (808) 521-6405 Fax: (808) 523-9861 Website: <a href="http://www.insulators.org/">http://www.insulators.org/</a>
Heavy Duty Repairman and Welder	Hawaii Joint Apprenticeship Committee for Operating Engineers  (General Contractors Labor Association and the Building Industry Labor Association and International Union of Operating Engineers, Local Union #3, AFL-CIO)	x		11/14/1967	8,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED or C-based test</li> <li>• Physically able to perform duties of the trade</li> <li>• School transcripts</li> <li>• Driver's license</li> <li>• Current State DOT PUC physical</li> <li>• Ranked on general knowledge and hands on test</li> <li>• Have reliable transportation</li> </ul>	State Administrator  Address: P.O. Box 428 Kahuku, HI 96731-0428  Phone: (808) 232-2001 Fax: (808) 232-2217 Website: <a href="http://oe3.org/training/">http://oe3.org/training/</a>
Ironworker Shop Fabricator / Welder	Hawaii Shopmen's Local 803 Joint Apprenticeship and Training Committee  (International Association of Bridge,	x		12/31/1963	8,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED</li> <li>• Physically able to perform duties of the trade</li> </ul>	Training Coordinator Address: 94-497 Ukee Street Waipahu, HI 96797  Phone: (808) 671-4344

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
	Structural and Ornamental Ironworkers, Local 803, AFL-CIO, and Participating Employers)					<ul style="list-style-type: none"> <li>Must be sponsored by employer who is signatory to the Shopmen's Local 803 collective bargaining agreement</li> </ul>	Fax: (808) 676-1144 Website: <a href="http://www.ironworkers.org/">http://www.ironworkers.org/</a>
Ironworker (Reinforcing)	Joint Apprenticeship Committee for Ironworker (Reinforcing) aka Ironworkers Joint Apprenticeship Committee (Reinforcing) (International Association of Bridge, Structural and Ornamental Ironworkers, Local 625, AFL-CIO and Participating Employers)	x		06/26/1953	6,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically able to perform duties of the trade</li> </ul>	Training Coordinator Address: 94-497 Ukee Street Waipahu, HI 96797 Phone: (808) 671-8225 Fax: (808) 676-1144 Website: <a href="http://www.ironworkers.org/">http://www.ironworkers.org/</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Ironworker (Structural)	Joint Apprenticeship Committee for Ironworker (Structural) aka Ironworkers Joint Apprenticeship Committee (Structural) (International Association of Bridge, Structural and Ornamental Ironworkers, Local 625, AFL-CIO and Participating Employers)	x		03/01/1961	6,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically able to perform duties of the trade</li> </ul>	Training Coordinator Address: 94-497 Ukee Street Waipahu, HI 96797 Phone: (808) 671-8225 Fax: (808) 676-1144 Website: <a href="http://www.ironworkers.org/">http://www.ironworkers.org/</a>
Landscape and Irrigation Laborer	Hawaii Laborers Union Local 368	x		03/30/2016	4,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED or 10<sup>th</sup> grade education</li> <li>Valid driver's license</li> <li>Complete and pass the Pre-Landscape and Irrigation Apprenticeship Evaluation Course</li> </ul>	Director of Training Address: 96-138 Farrington Hwy. Pearl City, HI 96782 Phone: (808) 455-7979 Fax: (808) 456-8689 Website: <a href="http://www.liuna.org/">http://www.liuna.org/</a>
Painter	Joint Apprenticeship and Training Committee for Painters (Painting and Decorating Contractors of Hawaii (PDCA) and the International Union of Painters and Allied Trades (IUPAT) Local 1791, AFL-CIO)	x		09/01/1961	8,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Driver's license</li> <li>Physically able to perform the duties of the trade</li> <li>Pass color code vision test</li> <li>Pass entry level test of math and vocabulary</li> </ul>	Training Coordinator Address: 2240 Young Street Honolulu, HI 96826 Phone: (808) 947-6606 Fax: (808) 942-0195 Websites: <a href="http://www.dc50.org/">http://www.dc50.org/</a> <a href="http://www.iupat.org/">http://www.iupat.org/</a>
Painter	Associated Builders and Contractors Apprenticeship Committee		x	05/02/1990	8,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>Full-time employee of a member company for a period of not less than six continuous weeks</li> <li>Legally able to work</li> <li>Physically able to perform duties of the trade</li> <li>Pass physical examination if required by Committee</li> </ul>	Director of Training Address: 1375 Dillingham Blvd. Suite 200 Honolulu, HI 96817 Phone: (808) 845-4887 Fax: (808) 847-7876 Website: <a href="http://www.abchawaii.org/">http://www.abchawaii.org/</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Painter	Color Dynamics, Inc.		x	12/01/1989	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically fit to perform duties of the trade</li> <li>Must not be color blind</li> </ul>	President Address: 816 Gulick Avenue Honolulu, HI 96819 Phone: (808) 848-7000 Fax: (808) 842-0800 Website: <a href="http://www.colordynamics.com">http://www.colordynamics.com</a>
Painter	Kawika's Painting		x	10/01/1984	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically fit to perform duties of the trade</li> <li>Must not be color blind</li> </ul>	President Address: 2147 Eiuwene Street Honolulu, HI 96819 Phone: (808) 848-0003 Fax: (808) 842-1908 Website: <a href="http://www.kawikaspainting.com">http://www.kawikaspainting.com</a>
Paving Equipment Operator	Hawaii Joint Apprenticeship Committee for Operating Engineers (General Contractors Labor Association and the Building Industry Labor Association and International Union of Operating Engineers, Local Union #3, AFL-CIO)	x		04/29/2010	4,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED or C-based test</li> <li>Physically able to perform duties of the trade</li> <li>School transcripts</li> <li>Driver's license showing address in HI</li> <li>Current State DOT PUC physical</li> <li>Ranked on general knowledge and hands on test</li> <li>Have reliable transportation</li> </ul>	State Administrator Address: P.O. Box 428 Kahuku, HI 96731-0428 Phone: (808) 232-2001 Fax: (808) 232-2217 Website: <a href="http://oes3.org/training/">http://oes3.org/training/</a>
Plasterer	Joint Apprenticeship Committee for Plasterers  (Pacific Bureau for Lathing and Plastering and the Operative Plasterers and Cement Finishers Association of the U.S. and	x		06/30/1959	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>Physically able to perform duties of the trade</li> </ul>	Director of Training or Training Coordinator Address: Hawaii Masons & Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
	Canada, Local 630, AFL-CIO)						Phone: (808) 848-0565 Fax: (808) 847-7068 Website: <a href="http://www.opcmia.org/">http://www.opcmia.org/</a> <a href="http://www.bacweb.org">http://www.bacweb.org</a>
Plumber	Honolulu Joint Apprenticeship and Training Committee for the Plumbing and Pipefitting Industry <i>aka</i> JATC of UA Plumbers and Fitters, Local 675, AFL-CIO, and PAMCAH (Plumbing and Mechanical Contractors Association of Hawaii and United Association of Plumbers and Pipefitters Local 675, AFL-CIO)	x		11/14/1952	10,000	<ul style="list-style-type: none"> <li>At least 17 years old</li> <li>High school diploma or GED</li> <li>School transcripts</li> <li>Pass placement evaluation with a minimum score of 70%</li> <li>Driver's license</li> </ul>	Training Coordinator Address: 720 Iwilei Road, Suite 222 Honolulu, HI 96817 Phone: (808) 456-0585 Fax: (808) 456-7131 Website: <a href="http://www.ua.org/">http://www.ua.org/</a>
Plumber	Associated Builders and Contractors Apprenticeship Committee		x	02/02/1999	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>Full-time employee of a member company for a period of not less than six continuous weeks</li> <li>Legally able to work</li> <li>Physically able to perform duties of the trade</li> <li>Pass physical examination if required by Committee</li> </ul>	Director of Training Address: 1375 Dillingham Blvd. Suite 200 Honolulu, HI 96817 Phone: (808) 845-4887 Fax: (808) 847-7876 Website: <a href="http://www.abchawaii.org/">http://www.abchawaii.org/</a>
Pointer-Caulker-Weatherproofer	Joint Apprenticeship Committee for Pointer-Caulker-Weatherproofer (Pointing, Caulking and Weatherproofing Contractors and the International Union of Bricklayers and Allied Crafts, Local 1, AFL-CIO)	x		08/23/1995	6,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>High school graduate or GED equivalent</li> <li>Physically able to perform duties of the trade</li> </ul>	Director of Training or Training Coordinator Address: Hawaii Masons & Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819



Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
							Phone: (808) 848-0565 Fax: (808) 847-7068 Website: <a href="http://www.bacweb.org">http://www.bacweb.org</a>
Refrigeration Air-Conditioning	Honolulu Joint Apprenticeship and Training Committee for the Plumbing and Pipefitting Industry aka JATC of UA Plumbers and Fitters, Local 675, AFL-CIO, and PAMCAH  (Plumbing and Mechanical Contractors Association of Hawaii and United Association of Plumbers and Pipefitters Local 675, AFL-CIO)	x		09/04/1962	10,000	<ul style="list-style-type: none"> <li>• At least 17 years old</li> <li>• High school diploma or GED</li> <li>• School transcripts</li> <li>• Pass placement evaluation with a minimum score of 70%</li> <li>• Driver's license</li> </ul>	Training Coordinator  Address: 720 Iwilei Road, Suite 222 Honolulu, HI 96817  Phone: (808) 456-0585 Fax: (808) 456-7131 Website: <a href="http://www.ua.org/">http://www.ua.org/</a>
Roofers	Joint Apprenticeship and Training Committee for Roofers  (United Union of Roofers, Waterproofers and Allied Workers, AFL-CIO, Local 221, and All Participating Employers)	x		01/13/1968	8,000	<ul style="list-style-type: none"> <li>• At least 16 years old</li> <li>• High school diploma or GED</li> <li>• Driver's license</li> <li>• Physically able to perform duties of the trade</li> <li>• Able to lift 100 lbs.</li> </ul>	Training Director  Address: 2045 Kamehameha IV Rd. Room 203 Honolulu, HI 96819  Phone: (808) 847-5757 Fax: (808) 848-8707 Website: <a href="http://www.unionroofers.com">http://www.unionroofers.com</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Roofer	Associated Builders and Contractors Apprenticeship Committee		x	01/09/1996	7,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>Full-time employee of a member company for a period of not less than six continuous weeks</li> <li>Legally able to work</li> <li>Physically able to perform duties of the trade</li> <li>Pass physical examination if required by Committee</li> </ul>	<p>Director of Training Address: 1375 Dillingham Blvd. Suite 200 Honolulu, HI 96817</p> <p>Phone: (808) 845-4887 Fax: (808) 847-7876 Website: <a href="http://www.abchawaii.org/">http://www.abchawaii.org/</a></p>
Sheet Metal Worker	Hawaii Joint Apprenticeship Committee for the Sheet Metal Industry  (Sheet Metal Contractor's Association and Sheet Metal Workers' International Association, Local 293)	x		01/02/1958	10,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Complete industry test</li> <li>Driver's license</li> <li>Physically able to perform work</li> </ul>	<p>Apprenticeship Coordinator Address: 1405 North King Street Room 403 Honolulu, HI 96817</p> <p>Phone: (808) 841-6106 Fax: (808) 841-1842 Website: <a href="http://www.smwia.org/">http://www.smwia.org/</a></p>
Steamfitter/ Welder	Honolulu Joint Apprenticeship and Training Committee for the Plumbing and Pipefitting Industry aka JATC of UA Plumbers and Fitters, Local 675, AFL-CIO, and PAMCAH  (Plumbing and Mechanical Contractors Association of Hawaii and United Association of Plumbers and Pipefitters Local 675, AFL-CIO)	x		02/05/2002	10,000	<ul style="list-style-type: none"> <li>At least 17 years old</li> <li>High school diploma or GED</li> <li>School transcripts</li> <li>Pass placement evaluation with a minimum score of 70%</li> <li>Driver's license</li> </ul>	<p>Training Coordinator Address: 720 Iwilei Road, Suite 222 Honolulu, HI 96817</p> <p>Phone: (808) 456-0585 Fax: (808) 456-7131 Website: <a href="http://www.ua.org/">http://www.ua.org/</a></p>
Stone Mason	Joint Apprenticeship Committee for Stone Mason Industry  (Masonry Contractors Association of Hawaii and Local 1 of Hawaii of the Bricklayers and Allied Craftsmen International Union, AFL-CIO, and Other Signatory Employers)	x		02/10/1964	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>High school graduate or GED equivalent</li> <li>Physically able to perform duties of the trade</li> </ul>	<p>Director of Training or Training Coordinator Address: Hawaii Masons &amp; Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819</p>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Taper	Joint Apprenticeship Committee for Tapers (Gypsum Drywall Contractors Association of Hawaii and the International Brotherhood of Painters and Allied Trades Tapers Local Union 1944, AFL-CIO)	x		09/01/1967	8,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>Physically able to perform duties of the trade</li> <li>Driver's license</li> <li>High school diploma or equivalent</li> </ul>	Training Coordinator Address: 2240 Young Street Honolulu, HI 96826 Phone: (808) 941-0991 Fax: (808) 946-6623 Website: <a href="http://www.dc50.org/">http://www.dc50.org/</a>
Telecommunication / CATV Installer Technician	Hawaii Electricians Joint Apprenticeship Committee aka Joint Apprenticeship Committee for Telecommunications (International Brotherhood of Electrical Workers Local Union 1186, AFL-CIO, and Signatory Employers)	x		09/16/1998	6,000	<ul style="list-style-type: none"> <li>At least 18 years old</li> <li>High school diploma or GED</li> <li>Complete the National Joint Apprenticeship and Training Committee Math Course or one-year high school Algebra 1</li> <li>Transcript of high school or post high school courses</li> <li>Pass industry aptitude test to qualify for oral interview</li> <li>Application fee (non-refundable)</li> </ul>	Apprenticeship or Training Coordinator Address: 1935 Hau Street Room 301 Honolulu, HI 96819 Phone: (808) 847-0629 Fax: (808) 843-8818 Website: <a href="http://www.njatc.org/">http://www.njatc.org/</a>
Tile Setter	Joint Apprenticeship Committee for Tile Setters (Tile, Marble and Terrazzo Contractors Association of Hawaii and Local 1 of Hawaii of the Bricklayers, and Allied Craftsmen International Union of America, AFL-CIO)	x		06/24/1958	8,000	<ul style="list-style-type: none"> <li>At least 16 years old</li> <li>High school graduate or GED equivalent</li> <li>Physically able to perform duties of the trade</li> </ul>	Director of Training or Training Coordinator Address: Hawaii Masons & Plasterers Training 1188 Sand Island Parkway Honolulu, HI 96819 Phone: (808) 848-0565 Fax: (808) 847-7068 Website: <a href="http://www.bacweb.org">http://www.bacweb.org</a>

Trade	Sponsor	Union	Non-Union	Date of Approval/Registration	No. of Hours of On-the-Job Training	Minimum Requirements	Contact Information
Truck Operator and Driver	Hawaii Joint Apprenticeship Committee for Operating Engineers (General Contractors Labor Association and the Building Industry Labor Association and International Union of Operating Engineers, Local Union #3, AFL-CIO)	x		03/01/91	2,000	<ul style="list-style-type: none"> <li>• At least 18 years old</li> <li>• High school diploma or GED or C-based test</li> <li>• Physically able to perform duties of the trade</li> <li>• School transcripts</li> <li>• Driver's license</li> <li>• Current State DOT PUC physical</li> <li>• Ranked on general knowledge and hands on test</li> <li>• Have reliable transportation</li> </ul>	State Administrator Address: P.O. Box 428 Kahuku, HI 96731-0428 Phone: (808) 232-2001 Fax: (808) 232-2217 Website: <a href="http://oe3.org/training/">http://oe3.org/training/</a>

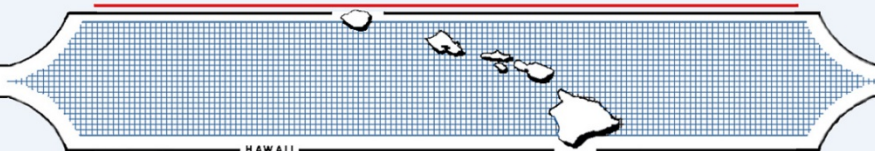
**AN ARCHAEOLOGICAL MONITORING PLAN  
FOR THE DEPARTMENT OF HAWAIIAN HOMELANDS  
ANAHOLA FARM LOTS WATER SYSTEM, PWS NO. 432 -  
PHASE I AND PHASE II IMPROVEMENTS  
ANAHOLA AHUPUA‘A, KAWAIHAU DISTRICT, ISLAND OF  
KAUA‘I, HAWAI‘I  
TMK: (4) 4-8 var.**

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March 2018  
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## INTRODUCTION

At the request of Oceanit, on behalf of the State of Hawai'i Department of Hawaiian Home lands (DHHL), Scientific Consultant Services, Inc. (SCS) has prepared this Archaeological Monitoring Plan (AMP) for the Anahola Farm Lots Water System, PWS No. 432 - Phase I and Phase II Improvements Project, located within portions of TMK: (4) 4-8 var. in Anahola Ahupua'a, Kawaihau District, Island of Kaua'i, Hawai'i (Figures 1 through 3), that is proposed for noncontiguous portions of the 350-acre DHHL subject property, including work within the 15,000-sq.ft. (0.34-acres) water system reservoir facility (Figure 4) and installation of approximately 8000-ft of new piping. The project area also encompasses individual service meters and backflow preventers throughout the subject property, PRV valves makai of Kuhio Highway, and existing interties with the County of Kauai, Department of Water system.

The proposed improvements include water distribution systems, PRV station replacement, abandonment in place of approximately 6,500 linear feet of existing Asbestos Concrete piping and installation of 8,000 feet of new piping, new well pump systems, a new booster pump, and a new disinfection system, rehabilitation of back flow preventers, demolition and replacement of 0.5MG steel tank with 0.44MG concrete tank, and with electrical and metering improvements.

Phase I improvements include replacement of all existing Asbestos Cement (A C) distribution pipes with 8-inch diameter County Standard pipes, replacement of back flow preventers, service laterals and meters as well as pressure reducing valve improvements and security improvements to the intertie with Kauai Department of Water waterlines.

Phase II improvements involves rehabilitation within the existing 15 ,000-ft<sup>2</sup> water reservoir facility, including replacement of the existing 0.5MG steel water tank with a 0.44MG concrete tank, replacement of well pumps, improvements to the water disinfection system, installation of a temporary 0.1 MG metal water tank to maintain water service, installation of diesel generator, installation of booster pumps and construction of a concrete retaining wall.

Archaeological Monitoring will ensure that any significant cultural resources identified during the current project are sampled, documented, and evaluated for their historical significance in accordance with State Historic Preservation Division (SHPD) rules and regulations. This Monitoring program will also ensure that if human skeletal remains are inadvertently identified during subsurface work, appropriate and lawful protocol concerning the Inadvertent Discovery of Human Remains (pursuant to 13-300-40a, b, c, HAR) is followed.

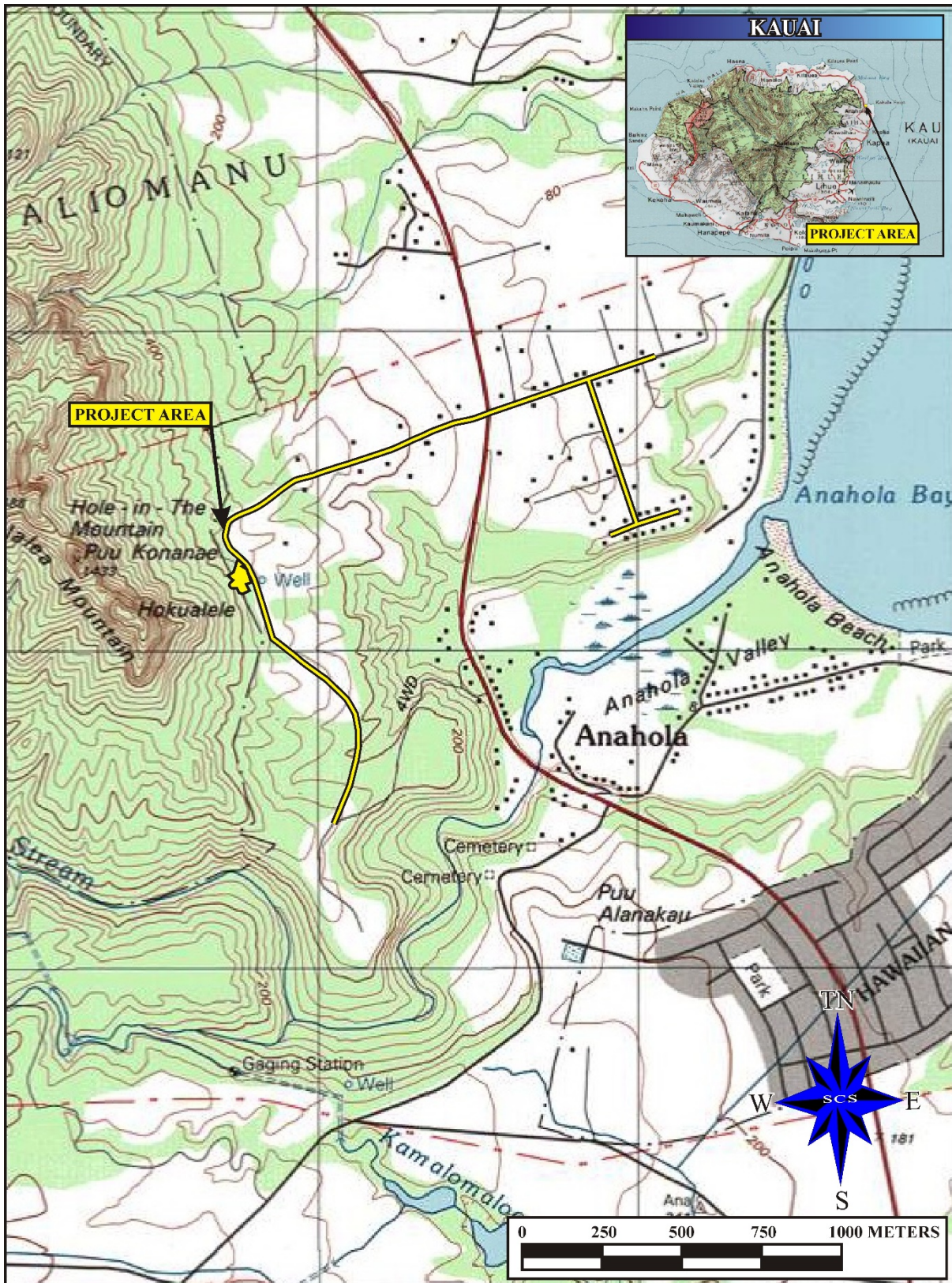


Figure 1: Portion of USGS 1998 Anahola Quadrangle Showing Project Area Location.



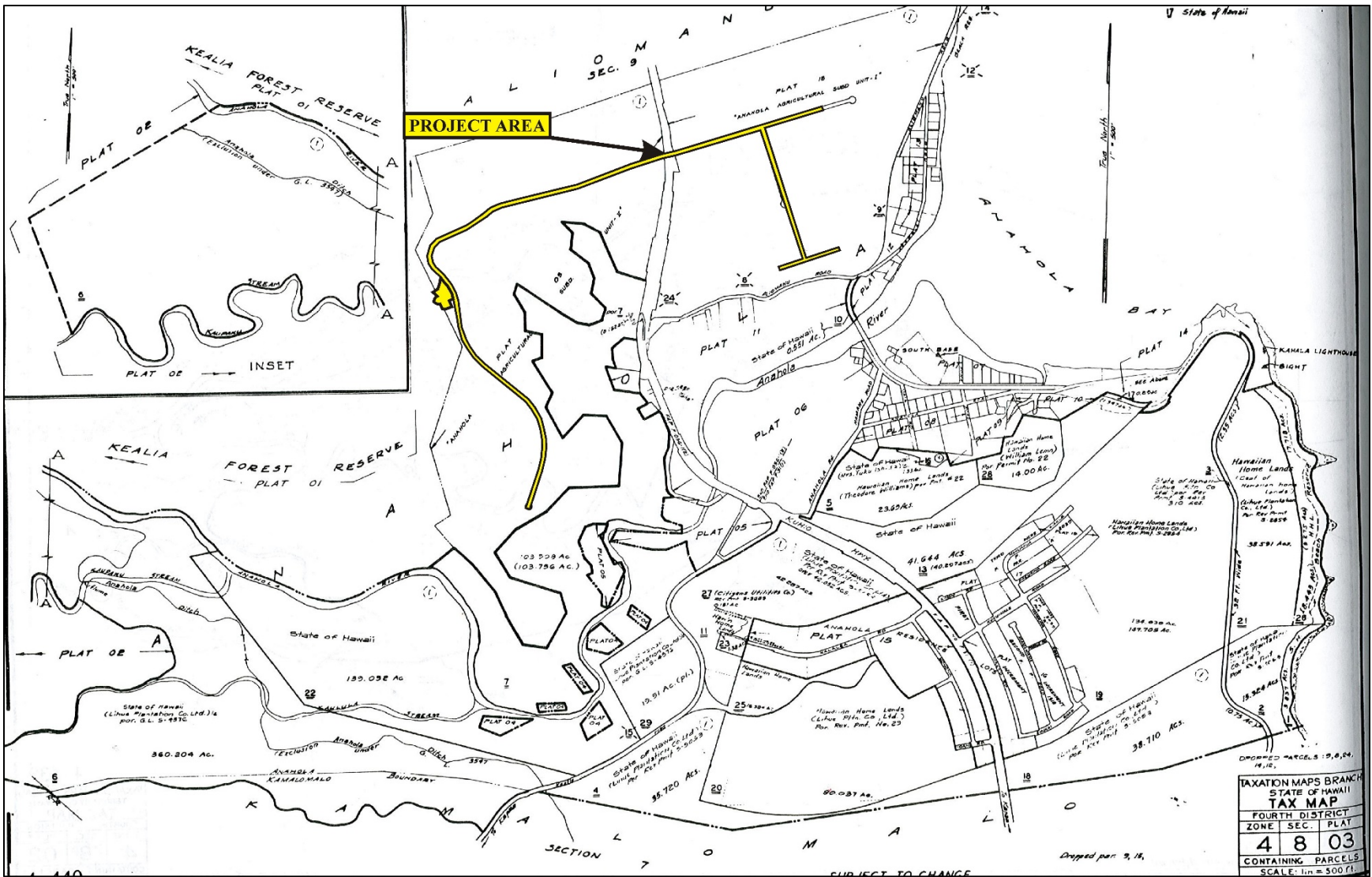


Figure 2: Tax Map Key [TMK (4) 4-8-003 Showing Project Area Location.



**Figure 3: Aerial Photograph (Source: Google Earth, accessed 8 March 2018) Showing Project Area Location.**

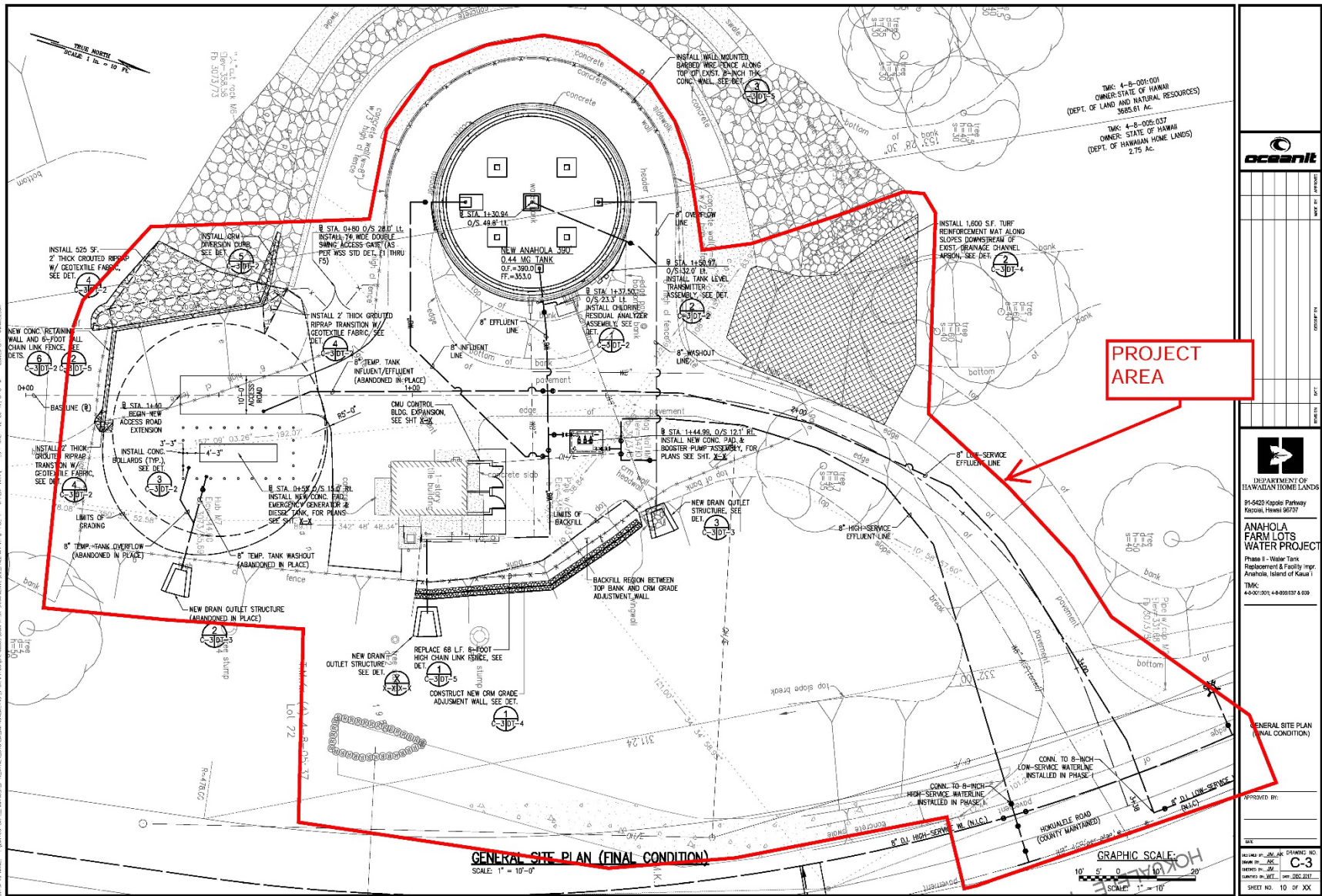


Figure 4: Client-provided Plan Showing the Project Area in the Vicinity of the Water Tank.

Pursuant to HAR §13-279-4(b), “an archaeological monitoring plan shall be reviewed and approved by the SHPD prior to the monitoring project, unless otherwise agreed to by the SHPD”. In a Chapter 6E-8 and National Historic Preservation Act (NHPA), Section 106 Review Letter for the Anahola Farm Lots Water System, PWS No. 432 - Phase I and Phase II Improvements Project, dated January 30, 2018, (Log No. 2017.02592, Doc No. 1801GC10), SHPD stipulated that an accepted archaeological monitoring plan is not required for this project, and instead stipulated that archaeological monitoring for the subject project shall be guided by a list of provisions which are included in the Monitoring Conventions and Methodology section of this archaeological monitoring plan.

### **ENVIRONMENTAL SETTING**

Kaua`i, the oldest and fourth largest of the eight main Hawaiian Islands (with land area equaling approximately 1,432 square kilometers), was formed from one great shield volcano (Macdonald et al. 1983:458-461). At one time, this vast volcano supported the largest caldera in the islands, horizontally extending 15 to 20 kilometers across. Mt. Wai`ale`ale, forming the central hub of the island, extends 1,598 meters (above mean sea level) amsl. Topographically, Kaua`i is a product of heavy erosion with broad, deep valleys and large alluvial plains. The current project area lies within the ahupua`a of Anahola, in the District of Kawaihau, on the northeast side of Kaua`i.

The Anahola Farm Lots Public Water System currently serves 45 agricultural lessees and 30 residential lots covering approximately 350 acres north of Anahola Stream on the windward side of Kaua`i. The water system's reservoir, well, pump, pump house and disinfection system are located within a 15,000-square foot fenced area at the end of a short access road connected to Hokualele Road. Approximately 90 percent of the fenced area is located on parcel 448005037 which belongs to DHHL. The remaining 10 percent is located on parcel 448001001; which belongs to the Department of Land and Natural Resources (DLNR). The water tank, located at the mauka border of the fenced area, straddles the boundary between DHHL and DLNR land; with approximately 40 percent of the tank on DHHL land and 60 percent of the tank on DLNR land. Based on the relationship and history between the two departments, it is anticipated proper access to the land will be negotiated between DHHL and DLNR quickly and easily. Ground-disturbing work required for the proposed improvements will take place both within the 350-acres of DHHL/DLNR land and along Hokualele Road and Kamalomaloo Place..

The area in which the project area lies is the semi-wet eastern region of Kauai. Rainfall indicators, according to Price (1983:62), show that the project area could receive up to 10 inches

during the winter months of December through March. Higher elevations within Anahola Ahupua`a are prone to receive more precipitation due to increased rainfall, fog drip, and lower temperature climates. The frequency of the project area receiving much upland runoff appears intermittent, given the lack of streams directly emptying onto the project area.

## **PROJECT AREA SOILS**

The soils within the project corridor are predominately Lihue silty clay loam (Lh). Other soils within the project area are Kalapa silty clay (Kd) and Mokuleia fine sandy loam (Mr) (Figure 5).

Lihue silty clay loam (Lh) soils developed in material weathered from basic igneous rock. They are gently sloping to steep. Elevations range from nearly sea level to 800 feet. The annual rainfall amounts to 40 to 60 inches. The mean annual soil temperature is 73° F. These soils are used for irrigated sugarcane, pineapple, pasture, truck crops, orchards, wildlife habitat, woodland, and homesites. The natural vegetation consists of lantana, guava, koa haole, joe, kikuyu grass, molasses grass, guinea grass, Bermuda grass, and Java plum (Foote et al. 1972:82). Lihue silty clay, 8 to 15 percent slopes [LhC]. On this soil, runoff is slow and the erosion hazard is slight. Lihue silty clay, 15 to 25 percent slopes [LhD]. On this soil, runoff is medium and the erosion hazard is moderate. Lihue silty clay, 25 to 40 percent slopes, eroded [LhE2]. This soil is similar to Lihue silty clay, 0 to 8 percent slopes, except that the surface layer is thin. Runoff is rapid, and the erosion hazard is severe (Foote et al. 1972:83).

The Kalapa Series (Kd) consists of well-drained soils at the base of slopes on the island of Kauai. These soils developed in material weathered from basic igneous rock and in colluvium. They are moderately sloping to very steep. Elevations range from 200 to 1,200 feet. The annual rainfall amounts to 60 to 100 inches. The mean annual soil temperature ranges from 69° to 74° F. The natural vegetation consists of guava, lantana, joe, sensitive plant, pilipiliula, ohia, Japanese tea, and ferns (Foote et al. 1972:55). Kalapa silty clay, 8 to 20 percent slopes (KdD). On this soil, runoff is medium and the erosion hazard is moderate. Kalapa silty clay, 20 to 40 percent slopes (KdE).-On this soil, runoff is rapid and the erosion hazard is severe (Foote et al. 1972:56).

The Mokuleia series (Mr) consists of well-drained soils along the coastal plains on the islands of Oahu and Kauai. These soils formed in recent alluvium deposited over coral sand. They are shallow and nearly level. Elevations range from nearly sea level to 100 feet. The annual rainfall amounts to 50 to 100 inches. The mean annual soil temperature is 74° F. Mokuleia fine sandy loam [Mr]. This soil occurs on the eastern and northern coastal plains of Kauai. It is nearly level. Runoff is very slow, and the erosion hazard is no more than slight. (Foote et al. 1972:95).



Figure 5: USDA NRCS Soil Map (accessed 8 March 2018) Showing Soil Types within the Project Corridor.

## **PROJECT AREA VEGETATION**

Project ground disturbance will be confined to the excavations along along Hokualele Road and Kamalomaloo Place and within the 15,000-square foot fenced area around the existing water tank, wellhead, and associated machinery. The segments along the road will take place within the roadway itself where there is no vegetation. Vegetation within the fenced area consists of grass and weeds.

## **TRADITIONAL AND HISTORIC SETTING**

Kaua`i is justifiably famous as the first landing place of Captain James Cook in January of 1778. Cook estimated a total population of the island of approximately 30,000, but this figure has been questioned by some (e.g., Bennett 1931) as probably too high. Later estimates, based on U.S. Census data, put the early 19th century population of Kaua`i at approximately 10,000. In any case, compared with the other large islands, Kaua`i has witnessed relatively modest growth and development, with a modern population (c. 50,000) not much larger than these original figures.

Until very recently, the island has survived primarily on an agricultural economy, with commercial sugarcane, rice, and other crops supplanting the traditional taro in historic times. A concomitant influx of many diverse ethnic groups (including Japanese, Filipino, Chinese, and Euro-American) has also added to the modern character of the island. Much of the knowledge of traditional land use patterns is based on what was recorded at the time of, and shortly after, western Contact, in 1778. Early records, such as journals kept by travelers and missionaries, documented Hawaiian traditions that had survived long enough to be written down. Archaeological investigations have also assisted in understanding the past, written records and the archaeological record being necessarily utilized together when studying the past of the Hawaiian Islands.

## **TRADITIONAL PERIOD**

The project area is located in the Kawaihau District, formerly known as Ko`olau District. The Kawaihau District is a roughly triangular area bordered on the northwest by the moku (district) of Halele`a and on the south and southwest by the moku of Puna. The irregular boundaries were formed by the upland mountain ranges that physically separate the Kawaihau District from the Halele`a District, and the flat plateau lands of Anahola Ahupua`a that separate the Kawaihau District from the Puna District. The coastline occurs on the northeast side of Kawaihau District.

The traditional Hawaiian economy was based on agricultural production, marine exploitation, animal husbandry, and wild plant and bird collecting. Coastal zones were utilized for marine resources, habitation, burials, and ceremonial structures often associated with fishing (Bennett 1931). Extended household groups settled in various ahupua`a, (i.e., smaller land divisions within a district), which customarily extended inland from the ocean. Ideally, this situation allowed each ahupua`a to be self-sufficient by supplying needed resources from different environmental zones (Lyons 1875:111). Typically, river valleys were defined by cultivation occurring in lower valley sections and on bends in the stream where alluvial terraces could be modified to take advantage of the stream flow (Kirch and Sahlins Vol.2 1992:59; Earle 1978:31, 155). In ahupua`a such as Kamalomalo, table lands or slopes were often cultivated in addition to the major farming areas on the broader alluvial flat lands situated in lower portions of valleys. This pattern of cultivation was seen throughout Hawai`i in similar environmental zones, such as the North Kohala coast of Hawai`i Island and the north shore of O`ahu (Earle 1978; Tomonari-Tuggle 1988:19; Kirch and Sahlins Vol.2 1992:59).

During the pre-Contact Period, impressive irrigation systems were built to transport stream water to agricultural fields (Earle 1978:67–9; Handy and Handy 1972:405). Dole (1892) described ancient agricultural resources still functioning on Kaua`i by referring to Kapa`a. Mr. Dole stated: "great engineering enterprises were undertaken, such as irrigation systems of Wahiawa, Kapa`a, and Kilauea on the island of Kaua`i." Many streams and river valleys in the various ahupua`a contained agricultural features (structures such as terraces, alignments, walls, and `auwai or ditches), which occurred in lower valley reaches near meanders in streams. The meanders consist of alluvial flood plains and terraces that could be modified to take advantage of the stream flow to bring fresh water to adjacent agricultural fields (Kirch 1985; Earle 1978:31, 155). In such a setting, the majority of farming activities (e.g., taro cultivation) presumably occurred in lower portions of the valleys (such as Papa`a Valley north of the project area) where the broad alluvial flats provided more land amenable to cultivation. Habitation most likely occurred on an alluvial, coastal plain in close proximity to both agricultural fields and marine resources. That habitation structures and agricultural fields were integrated is not unprecedented on Kaua`i (see Kirch 1985:101, 104).

Habitation was also likely to occur directly adjacent to the coastline, within sandy deposits, as has been previously documented for the Hā`ena area of Kaua`i (Griffin et al. 1977; Hammatt et al. 1978; Griffin 1984). Although coastlines were the first settled areas within the Hawaiian Islands (see Kirch 1985:71) and also the location of major habitation centers (see Davis 1984), inland areas were settled in at least a limited temporary fashion. Later in the



culture historical sequence, during the so-called Expansion Period (c. A.D. 1100–1650), people may have engaged in more intensive habitation activities within inland locales (Kirch 1985: 303–306). Dryland cultivation (e.g., taro, sweet potato) presumably occurred just inland of dune deposits (c.f. Earle 1978), and in colluvial areas further inland, near the base of valley walls and on lower valley slopes (Bennett 1931:130; see also Green 1970, 1980).

## **HISTORIC PERIOD**

Immense changes began to occur to Hawaiian traditional society with the intrusion of foreign lifestyles, first introduced on January 19, 1778 with the arrival, albeit briefly, of Captain James Cook on Kaua`i. Much of the knowledge of traditional land use patterns is based on journals recorded at the time of, and shortly after, western Contact. Early records, such as journals kept by travelers and missionaries, and surviving Hawaiian traditions, as well as archaeological investigations, have assisted in understanding the past. In 1835, the newspaper *Ke Kumu* reported 80 adults and 11 children living in the Kahili-Kilauea area. The 1847 census reported an increase in the population of northern Kaua`i with a total of 240 individuals living within the Kahili-Kilauea area (Schmitt 1969).

One of the first written descriptions of the northeastern side of the island was written in 1849 by William DeWitt Alexander while on tour of Kaua`i. He traveled by horseback from the eastern side of the island, eventually arriving in Hanalei. There, he wrote about his observations of Kilauea Stream, among other places that may relate to Anahola as well:

...But the beauty of the country was the abundance of water. Every valley, large or small had its stream. About five miles from Anahola we crossed Molowa (Moloaa) valley a most beautiful spot. There is a village here ... The country near this place has been lately burnt over, but the vegetation is springing up anew. A ride of five miles from this valley over hill, and dale, brought us to a grove of venerable *kukui* trees ... A little farther on we entered groves of *hala*, through which we continued to ride during the rest of our journey. We turned from the road to see the 4 falls of the Kahili river. Though not large they are beautiful. Here the river falls in a jet of foam over a precipice of about 40 feet into a broad clear basin below. [Kauai Historical Society 1991]

## **THE GREAT MĀHELE**

In the 1840s traditional land tenure changed drastically with the introduction of private land ownership based on Western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kamehameha III was forced to establish laws changing the traditional Hawaiian society to that of a market economy (Daws 1968:111; Kuykendall Vol. I 1938:145 footnote 47, 152, 165-6, 170; Kame`eleihiwa 1992:169-70, 176; Kelly 1983:45, 1998).

Among other things, the foreigners demanded private ownership of land to secure their island investments (Kuykendall Vol. I, 1938:138, 145, 178, 184, 202, 206, 271; Kame`eleihiwa 1992: 178). The Māhele of 1848 divided Hawaiian lands between the king, chiefs, government, and began the process of private ownership of lands. Once lands were made available and private ownership was instituted, the maka`ainana (commoners), if they had been made aware of the procedures, were able to claim the plots on which they had been cultivating and living. These claims, however, could not include any previously cultivated or presently fallow land, stream fisheries, or many other resources traditionally necessary for survival (Kelly 1983; Kame`eleihiwa 1992:295; Kirch and Sahlins 1992). This land division, called the Māhele, was primarily enacted and commenced in 1848. The subsequently awarded parcels were called Land Commission Awards (LCA). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and issued a Royal Patent after which they could then take possession of the property (Chinen 1961:16).

Land Commission Award (LCA) data shows that Anahola Ahupua`a was clearly a rich, and heavily utilized land in the historic period. While the subject land parcel on which the project area is situated has no LCAs, the ahupua`a of Anahola contains 87 Land Commission Awards (Waihona `Aina 2006). Most of the LCAs in the Anahola Ahupua`a are located below Kuhio Highway near the Anahola Stream and on the floodplains. The neighboring ahupua`a to the north (Aliomanu Ahupua`a) contains only six LCAs, while the ahupua`a to the south (Kamalomaloo) has none. This disparity may be interpreted as evidence that a large settlement (population) was established in the Anahola area. Maka`ainana (commoners) were able to claim plots on which they had been cultivating and living. However, these claims could not include ocean or stream fisheries or other resources traditionally necessary for survival, explaining the absence of LCAs in the coastal vicinity.

The general area of Anahola has primarily been utilized for sugar cane cultivation from the late nineteenth century by the Makee Sugar Co. This plantation was then bought by the Lihue Plantation in 1933. Cultivation ceased in the late 1980s. The northern portion of the Ahukini Terminal & Railway Co. passed through this area.

### **PREVIOUS ARCHAEOLOGY**

Since early spring 2016, DHHL has been in contact with Mary Jane Naone, SHPD Lead Archeologist for the island of Kaua'i about the project and various aspects of the proposed water system improvements as they relate to historic and cultural resources. Ms. Naone identified three archeological reports conducted on sites near the project area.

According to a memorandum dated August 3, 1983 from Ms. Georgiana K. Padeken, then Chairman of the Hawaiian Homeland Commission, to Mr. Roy Sue, then Administrator of the State Parks, Outdoor Recreation and Historic Sites Division of the Department of Land and Natural Resources, a rock wall was identified in a field near what is today curve number 5 of Hokualele Road. The wall was found in April 1979 by consultants for the Hokualele Road construction project. Based on the proposed design of the road project it was determined that the corner of the wall was located approximately seven feet outside of the project excavations.

In a memorandum from Mr. Susumu Ono, then Chairperson and State Historic Preservation Officer, to Ms. Georgiana K. Padeken, dated August 17, 1983, the State Parks archaeologists who visited the road project site on July 31, 1983 concurred that the wall did lie 7 feet outside of the project excavations and that the road construction had not impacted the wall foundation. Mr. Ono's memo went on to state the rock wall was believed to be part of a site identified in 1929 as a possible animal enclosure; rather than a heiau (as described by William Bennett in 1931).

In 1983, William Kikuchi conducted a cursory site survey of agricultural terraces at the reservoir site for the Anahola Farm Plots, slope 340 feet above sea level, located to the west and southwest of the Anahola Farm plots. Kikuchi identified five small stone terraces, 4 to 5 feet wide, 3 to 4 feet long, and 1 to 2 stones high, and a C-shaped structure approximately 15 feet wide and 12 feet deep. According to Kikuchi the C-shaped structure and associated terraces were most likely used for agricultural functions; the terraced areas served as tiny plots which were irrigated via subsurface moisture and the C-shaped structure would have served as temporary habitation for formers tending their upland plants for days at a time (Kikuchi 1963:4).

In 2009, Scientific consultant Services (SCS) conducted archaeological monitoring on a 2.754-acre project area which contained an existing water tank belonging to the County of Kauai (landowner) Department of Water, as part of slope control measures following heavy rains that caused erosion immediately west of the water tank (Tome and Dega 2009:ii). That portion of the slope included the agricultural terraces and C-shape surveyed by Kikuchi in 1983. During Monitoring, one previously unrecorded archaeological site was identified within the area slated for construction of slope control measures. The site, a pre-Contact Period site consisting of 15 features related to habitation and agriculture, was designated as State Site 50-30-04-5026. Cultural materials obtained from testing included three basalt artifacts, a core, one scraper, and a single waste flake (debitage). The site measured approximately 88 feet by 195 feet with its long

axis oriented southeast/northwest (160/340" magnetic) and was located approximately 44 feet west of the water tank and 32 feet west of the subsequently constructed CMU slope retaining wall. The site was interpreted as an agricultural complex with temporary habitation features.

### **EXPECTED FINDINGS WITHIN THE PROJECT AREA**

Based on historical documents and available previous archaeological research the most likely site type that would be have been present in the vicinity of the project area would be Traditional-type agricultural remnants and Traditional-type habitation features where caretakers of agricultural systems would occupy during their day. Traditional-type ceremonial structures might accompany an agricultural complex, and human burials be interred “under house floors” given that there might be habitation features (e.g., enclosures, platforms). No archaeological or cultural sites have been identified within the current project area, and previous construction associated with the construction of the existing well head, water tank and its associated structures as well as previous excavations for the construction of Hokualele Road and Kamalomaloo Place have not revealed any subsurface historical or cultural resources. Nevertheless, DHHL will ensure precautionary monitoring is conducted during all excavation and ground disturbance in order to ensure proper handling of any unanticipated discovery.

### **MONITORING CONVENTIONS AND METHODOLOGY**

In their Chapter 6E-8 and National Historic Preservation Act (NHPA), Section 106 Review Letter for the Anahola Farm Lots Water System, PWS No. 432 - Phase I and Phase II Improvements Project, dated January 30, 2018, (Log No. 2017.02592, Doc No. 1801GC10), SHPD stipulated that the archaeological monitoring for this project shall be guided by the following provisions:

- Following selection of the archaeological firm, the DHHL project manager and the archaeological principal investigator and the archaeological monitor(s) shall consult with our office regarding the monitoring provisions;
- The archaeological principal investigator shall meet Secretary of Interior (SOI) professional qualifications and Hawaii Administrative Rules (HAR) professional qualifications specified in HAR §13-281-3 and, per HAR §13-279-5, shall prepare the archaeological monitoring report;
- The archaeological monitor(s) shall have a minimum of 1 year of full-time professional field experience in Hawaii;
- The archaeological principal investigator and monitor(s) shall conduct a pre-construction coordination briefing with all project personnel (DHHL, contractors, etc.);

- The archaeological monitor(s) will conduct a 100% surface pedestrian survey prior to initiation of any project work involving ground disturbance;
- On-site archaeological monitoring shall be conducted during all ground disturbing activities;
- Photographic documentation shall be completed both pre- and post- excavations;
- In the event that non-burial historic properties are identified, SHPD shall be notified of the find and consulted regarding documentation, assessment of significance, and treatment, and that all documentation shall be in compliance with HAR §13-279 and HAR §13-280;
- Documentation of non-burial cultural deposits shall include: recordation of stratigraphy using USDA soil descriptions (and shall include profiles at least 2 m in length); recordation of feature contents through excavation, screening and/or sampling of features; a minimum of two representative scaled profile drawings (if no historic properties are identified); photo documentation of project work and individual trenches or profiles with scale and N arrow; and appropriate laboratory analysis of collected samples and artifacts. Laboratory analysis may include but not be limited to artifact analysis, wood taxa identification, radiocarbon dating, pollen analysis, and invertebrate and vertebrate identification. Charcoal samples shall be submitted for wood taxa identification prior to radiocarbon dating.
- If human remains are identified, work will cease in the vicinity, SHPD shall be notified, and compliance with procedures outlined in HRS 6E-43, HAR §13-300-40, and SHPD directives shall be followed;
- An archaeological monitoring report meeting the reporting requirements of HAR §13-279-5 shall be prepared and submitted to SHPD for review within 30 days of completion of archaeological monitoring;
- Final curation and archiving of any collections shall be determined in consultation with the SHPD and the landowner; and
- Departure from these provisions shall occur only in consultation with and written concurrence from SHPD.

This AMP has been prepared in accordance with DLNR-SHPD rules governing standards for Archaeological Monitoring (13-279). In addition to the provisions listed above, archaeological monitors will adhere to the following guidelines during monitoring:

1. If significant deposits or features are identified and additional field personnel are required, the archaeological consultants conducting the monitoring will notify the contractor/representatives and the SHPD before additional personnel are brought to the site.
2. One archaeological monitor will be assigned to each piece of machinery conducting ground altering activities within the project area at all times while in operation.
3. If non-burial cultural deposits and/or features are identified during Monitoring, the on-site archaeologist will have the authority to temporarily suspend construction activities at the find location, so the deposits or features may be identified, documented, and assessed for

significance. SHPD will be immediately consulted regarding appropriate documentation and assessment. Construction work and/or back-filling of excavation pits or trenches will occur in the location of find only after all archaeological documentation has been completed and approved by the SHPD.

4. Stratigraphy will also be recorded and photographed with north arrow and scale at selected locations to provide representative stratigraphic data across the project area. Again, the profiles will measure a minimum of 1 m across. Both vertical and horizontal scales will be recorded.
5. The archaeologist will provide all coordination with the contractor, SHPD, and any other groups involved in the project. The archaeologist will coordinate all monitoring and sampling activities with the safety officers for the contractors to ensure that proper safety regulations and protective measures meet compliance. Close coordination will also be maintained with construction representatives in order to adequately inform personnel of the possibility that open archaeological units or trenches may occur in the project area.
9. As necessary, verbal and/or written reports will be made to SHPD and any other agencies as requested. As part of the general conditions of any County permit, the SHPD maintains the right to inspect the project area at any time to ensure the provisions of this AMP are being met.

### **LABORATORY ANALYSIS**

All non-burial artifacts and samples collected during the project will undergo analysis at the SCS laboratory in Honolulu. Photographs, illustrations, and all paper and electronic documents accumulated during the project will be curated at the laboratory of the archaeological consultants conducting the monitoring. All collected artifacts and midden samples will be cleaned, sorted, counted, weighed (metric), and analyzed (both qualitative and quantitative data), with all data recorded on standard laboratory forms. Midden samples will be minimally identified to major class (e.g., bivalve, gastropod mollusk, echinoderm, fish, bird, and mammal). Digital photographs with scales will be taken of a representative sample of the diagnostic artifacts. Tables and text discussing the artifact and sample results will be provided in the report, along with appropriate digital photographs.

Samples (wood charcoal, shell, non-human bone, kukui nut) identified as potentially suitable for dating from an undisturbed context (e.g., cultural layer, pit feature) shall be considered for radiocarbon dating in consultation with SHPD and the landowner. Prior to submittal, potential wood charcoal samples shall first be submitted to International

Archaeological Research Institute, Inc. (IARII) for wood taxa identification. Only samples identified as short-lived endemic or Polynesian-introduced species will be selected for dating purposes.

All stratigraphic profiles and plan view maps of identified historic properties (e.g., sites, cultural layers, features) shall be drafted for presentation in the final report. Photographs of project work, including overviews, and of individual profiles, cultural layers, and features shall also be included in the final report.

### **CURATION**

If requested by the landowner, all collected non-burial materials will be curated in the laboratory of the archaeological consultants conducting the Monitoring until a final disposition repository location is determined in consultation with the landowner and the SHPD.

### **REPORTING**

All historic properties (non-burial and burial) identified and/or further documented during archaeological monitoring (e.g., cultural layer, pit features, buried walls) shall be assessed for site significance per HAR §13-284-6, Criteria a through e and an effect determination will be made. This information shall be included in the final report, along with an appropriate recommendation for future mitigation.

An archaeological monitoring report meeting the reporting requirements of HAR §13-279-5 shall be prepared and submitted to SHPD for review within 30 days of completion of archaeological monitoring. The final SHPD-accepted AMR shall be distributed to SHPD and the landowner. If the project continues beyond a 6 month period, the contracting archaeologist will update the SHPD with a written summary as to progress of the work and any finds identified during monitoring. This will occur at the 180 days mark of monitoring, should work continue beyond this time frame.

## REFERENCES

- Alexander, W.D.  
1882 *A Brief History of Land Titles in the Hawaiian Kingdom*. P.C. Advertiser Co. Steam Print, Honolulu.
- Bennett, W.C..  
1931 *Archaeology of Kaua`i*. B.P. Bishop Museum Bulletin No. 80. Honolulu.
- Chinen, J.  
1961 *Original Land Titles in Hawaii*. Library of Congress Catalogue Card No. 61-17314.
- Daws, G.  
1982 *Shoal of Time: History of the Hawaiian Islands*. University of Hawai`i Press, Honolulu.
- Dole, S.B.  
1892 "Evolution of Hawaiian land tenure." *Hawaiian Historical Society Papers*. No. 3. Honolulu.
- Earle, T.  
1978 "Economic and Social Organization of a Complex Chiefdom: The Halele`a District, Kaua`i, Hawaii." *Anthropological Papers* No. 63. University of Michigan, Ann Arbor, Michigan.
- Foote, D.E., E. Hill, S. Nakamura, and F. Stephens  
1972 *Soil Survey of the Islands of Oahu, Maui, Molokai, and Lanai, State of Hawaii*. U.S. Department of Agriculture Soil Conservation Service, Washington, D.C.
- Griffin, P.B.  
1984 "Where Lohi`au Ruled: Excavations at Ha`ena, Halele`a, Kaua`i." *Hawaiian Archaeology* 1:1-18.
- Griffin, P.B., R. Bordner, H.H. Hammatt, M. Morgenstein, and C. Strauder  
1977 *Preliminary Archaeological Investigations at Ha`ena, Halele`a, Kaua`i Island*. Typescript, Archaeological Research Center Hawai`i. Lawa`i, Kaua`i.
- Handy, E.S. Craighill, and Elizabeth G. Handy  
1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*, Bishop Museum Press Bulletin 233, Honolulu.
- Kame`eleihiwa, L.  
1992 *Native Land and Foreign Desires: Pehea La E Pono Ai?* Bishop Museum Press, Honolulu.



Kaua'i Historical Society

1991 *The Kauai Papers*. Kauai Historical Society, Lihue.

Kelly, M.

1983 *Nā Māla o Kona: Gardens of Kona*. Dept. of Anthropology Report Series 83-2. Bishop Museum, Honolulu.

Kikuchi, William A.

1983 *Cursory Survey of Agricultural Terraces at the Reservoir Site, Anahola Farm Plots, Anahola, District of Kawaihau, Island of Kaua'i*.

Kirch, P.V.

1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. University of Hawaii Press, Honolulu.

Kirch, P.V. and M. Sahlins

1992 *Anahulu*. Vol. 1 and 2. University of Chicago Press, Chicago.

Kuykendall, R.S.

1938 *The Hawaiian Kingdom*. Vol. 1. University of Hawai'i Press. Honolulu.

Lyons, C.J.

1875 *Land Matters in Hawaii*. The Islander, Vol.1. Honolulu.

Macdonald, G. A., Abbott, A. T. & Peterson, F. L.

1983 *Volcanoes in the Sea: The Geology of Hawaii* (2nd Ed) (Univ. of Hawaii Press, Honolulu).

Ono, Susumu

1983, August 17 Memorandum to the Honorable Georgiana K. Padeken regarding the Anahola Farm Lots Subdivision Project Anahola, Kauai.

Padeken, Georgiana K.

1983, August 3 Memorandum to the Mr. Roy Sue regarding the Location of Rock Wall at Anahola Farm Lots Subdivision Project Anahola, Kauai, Hawaii.

Price, S.

1983 "Climate." In *Atlas of Hawaii* (2nd edition), ed. By R.W. Armstrong. University of Hawaii Press, Honolulu.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online. Accessed [2/15/2018].

Tome, Guerin, and Michael Dega

2009 *An Archaeological Monitoring Report For Construction On 2.754-Acres Of Land In Anahola, Anahola Ahupua'a, Kawaihau District, Island Of Kaua'i*,

*Hawai`i. [TMK (4) 4-8-001: 001 (POR.) AND (4) 4-8-005: 037 (POR.)].* Scientific Consultant Services, Honolulu.

Tomonari-Tuggle, M.J.

1988 *North Kohala Perception of a Changing Community, a Cultural Resources Study.* Division of State Parks, Outdoor Recreation and Historic Sites. Department of Land and Natural Resources, Honolulu.

U.S. Geological Survey

2013 Kapaa quadrangle, Hawaii-Kaua`i Co. [map]. 1:24,000. 7.5 Minute Series. Reston, VA: United States Department of the Interior, USGS.

Wall, W.E. (Surveyor)

1923 Portion of Hanamā`ulu Showing L.C. Awards Puna, Kaua`i. Hawaii Territory Survey Plat 3046 traced from Registered Map 2142.