



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

**SPECIAL PROVISIONS  
PROPOSAL, CONTRACT,  
BOND AND PLANS**

**FOR**

**FREEWAY MANAGEMENT SYSTEM  
PHASE 4**

**FEDERAL-AID PROJECT NO. NH-0300(176)R**

**DISTRICTS OF EWA, HONOLULU,  
AND KOOLAUPOKO**

**ISLAND OF OAHU**

**FY 2026**

**NOTICE TO BIDDERS**  
Hawaii Revised Statutes (HRS),  
Chapter 103D

The receiving of bids for **FREEWAY MANAGEMENT SYSTEM, PHASE 4, DISTRICTS OF EWA, HONOLULU, AND KOOLAUPOKO, ISLAND OF OAHU, FEDERAL-AID PROJECT NO. NH-0300(176)R**, will begin as of the HiePRO Release Date. Bidders shall register and submit complete bids through HiePRO only. Refer to the following HiePRO link for important information on Vendor Registration:

<https://hiepro.ehawaii.gov/welcome.html>.

The solicitation plans, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HiePRO.

HiePRO OFFER DUE DATE AND TIME is July 31, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HiePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection.**

**FAILURE TO UPLOAD THE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of the replacement of 72 existing closed-circuit television (CCTV) cameras along the H-3 Freeway and within the Tetsuo Harano Tunnel, installation and replacement of the corridor wide fiber optic trunk communication cable, installation of two (2) new CCTV cameras on H-3 Freeway, operator equipment upgrades at the Tetsuo Harano Tunnel

traffic operations center that includes the upgrade and provision of two (2) new workstations and replacement of the existing video switch and video wall display. Work also includes the installation of a fiber optic conduit between Kalihi Interchange and Houghtailing Street on the H-1 Freeway. The estimated cost of construction is between \$6,000,000 and \$10,000,000.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering “A” license **prior to the award of contract.**

A virtual pre-bid conference is scheduled for July 14, 2026, at 11:00 a.m., HST. Interested bidders shall contact Neal Honma, Project Manager, directly at [neal.k.honma@hawaii.gov](mailto:neal.k.honma@hawaii.gov), no later than five working days prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HiePRO.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HiePRO **July 16, 2026, at 2:00 p.m., HST.** RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HiePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS § 11-355 which states that campaign contributions are prohibited from

specified State or County government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled “Nondiscrimination in Federally Assisted Programs of the U.S. Department of Transportation”, Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, or sex (as directed by 23 CFR Part 200).

Disadvantaged Business Enterprise (DBE). The U.S. Department of Transportation Regulations entitled “Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs”, Title 49, CFR, Part 26, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall enforce compliance with the applicable requirements of the Disadvantaged Business Enterprise program with respect to this project.

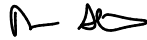
Bidders shall read the following included in the solicitation:

1. “CIVIL RIGHTS COMPLIANCE AND DISADVANTAGED BUSINESS ENTERPRISE SPECIAL PROVISIONS”

Driving While Impaired (DWI) Education. The Hawaii Department of Transportation (HDOT) encourages all organizations contracted with HDOT to have an employee education program preventing DWI. DWI is defined as operating a motor vehicle while impaired by alcohol or other legal or illegal substances. HDOT promotes this type of program to accomplish our mission to provide a safe environment for motorists, bicyclists, and pedestrians utilizing our State highways, and expects its contractors to do so as well.

For additional information, contact Neal Honma, Project Manager, by phone at (808) 768-2386, or by email at [neal.k.honma@hawaii.gov](mailto:neal.k.honma@hawaii.gov).

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.



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ROBIN K. SHISHIDO  
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: June 24, 2026

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## INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project (*See, HRS § 444-7 for the definitions of an "A" and "B" project.*), respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.*). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL  
EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Bidder's attention is called to the "Equal Opportunity" and the "Specific Equal Employment Opportunity Responsibilities" set forth in the "Required Federal Aid Construction Contract Provisions."

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work on this project are as follows:

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CATEGORY	TIMETABLE	GOAL
Female participation in each trade	Indefinite	6.9%
Minority participation in each	None	69.1% (Oahu)
Trade (female included)	None	70.4% (Hawaii, Maui, Kauai)

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These goals are applicable to all the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or Federally assisted construction contract or subcontract.

The Contractor's compliance with the Executive Order shall be based on its implementation of the Equal Opportunity Clause, and its efforts to meet the goals established for the contract resulting from this solicitation. The hours of female and minority employment and training must be substantially uniform throughout the length of the contract, and in trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract and Executive Order. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Area Director, Hawaii Area Office, Office of Federal Contract Compliance Programs, U.S. Department of Labor, 300 Ala Moana Blvd., P.O. Box 50149, Honolulu, Hawaii 96850, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; and estimated starting and completion dates of the subcontract. The Contractor shall indicate which are minority group subcontractors and the ethnic identity and sex of the owner(s) and policy-making official(s).

**CIVIL RIGHTS COMPLIANCE AND DISADVANTAGED BUSINESS  
ENTERPRISE SPECIAL PROVISIONS**

**I. GENERAL**

This project is subject to Title 49 Code of Federal Regulations (CFR), Part 26, entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs," hereinafter referred to as the "DBE Regulations" and is incorporated and made a part of this contract herein by this reference, as revised by the United States Department of Transportation's (USDOT) DBE Interim Final Rule (IFR) issued October 3, 2025 (hereinafter referred to as IFR). The following shall be incorporated as part of the contract documents for compliance. If any requirements herein conflict with the general provisions or special provisions applicable to this project, the requirements herein shall prevail unless specifically superseded or amended in the special provisions or by addendum.

**II. POLICY**

The Hawai'i Department of Transportation's (HDOT) and its political subdivision's Disadvantaged Business Enterprise (DBE) program will operate in a nondiscriminatory manner and without regard to race or sex, while maximizing efficiency of service.

Bidders/offerors, subcontractors, consultants, vendors, suppliers, distributors, manufacturers, trucking companies, service providers, etc. shall fully inform themselves with respect to the requirements of the DBE Regulations.

HDOT's DBE program remains in effect pursuant to 49 CFR Parts 23 and 26. However, consistent with the USDOT's IFR effective October 3, 2025, HDOT has suspended race-conscious measures including DBE contract goals, counting of DBE participation, and associated special provisions, pending the completion of HDOT's DBE certification reevaluation. Where indicated, HDOT reserves the right to reinstate or amend DBE special provisions at a later date, subject to approval by the appropriate USDOT operating administration.

HDOT reserves the right to reimplement, revise, or otherwise modify any reserved provisions, in whole or in part, following its reevaluation period or upon receipt of additional federal guidance. Upon such reimplementation, contractors will be notified in writing and shall comply with the updated requirements as directed by HDOT.

**III. NON-DISCRIMINATION POLICY**

Each contract signed with a prime contractor (and each subcontract the prime contractor signs with a subcontractor) shall include the following assurance:

*"The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26, as revised by the*

*DBE IFR, in the award and administration of USDOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate which may include, but is not limited to: 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible.”*

The prime contractor agrees to include the above statements in any subsequent contracts that it enters into with other contractors and shall require those contractors to include similar statements in further agreements.

- IV. **BIDDER/OFFEROR RESPONSIBILITIES (RESERVED)**
- V. **PROPOSAL REQUIREMENTS (RESERVED)**
- VI. **COUNTING DBE PARTICIPATION TOWARDS CONTRACT GOAL (RESERVED)**
- VII. **USE OF JOINT CHECKS UNDER THE DBE PROGRAM (RESERVED)**
- VIII. **DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD (RESERVED)**
- IX. **ADMINISTRATIVE RECONSIDERATION (RESERVED)**
- X. **AWARD OF CONTRACT (RESERVED)**
- XI. **REPLACEMENT OF A DBE ON A PROJECT WITH A CONTRACT GOAL (RESERVED)**
- XII. **CONTRACT COMPLIANCE**

This contract is subject to contract compliance tracking, and the prime contractor and all subcontractors are required to report payments electronically in the HDOT online Vendor Management System (hereafter referred to as “online tracking system”.) The prime contractor shall report the date payment was made by HDOT and shall report payment to all subcontractors for the audit period. The prime contractor and all subcontractors are responsible for responding by any noted response date or due date to any instructions or request for information, and to check the online tracking system on a regular basis to manage contact information and contract records.

The prime contractor is responsible for ensuring all subcontractors have completed all requested items and that their contact information is accurate and up-to-date. HDOT may require additional information related to the contract to be provided electronically through the online tracking system at any time before, during, or after contract award. Information related to contractor access of the online tracking system will be provided to designated point of contact with each contractor upon award of the contract. The online

tracking system is web-based and can be accessed at the following internet address:  
<https://hdot.dbesystem.com/>.

### **XIII. PAYMENT**

- A. HDOT will make an estimate in writing each month based on the items of work performed and materials incorporated in the work and the value therefore at the unit prices or lump sum prices set forth in the contract. All progress estimates and payments will be approximate only and shall be subject to correction at any time prior to or in the final estimate and payment. HDOT will not withhold any amount from any payment to the contractor, including retainage.
- B. The contractor shall pay all subcontractors within 10 calendar days after receipt of any progress payments from HDOT. This clause applies to all subcontractors, and all tiers of subcontracts. As per HRS § 103-10.5 Prompt payment, the contractor will verify that payment or retainage has been released to the subcontractors or its suppliers within the specified time through entries in HDOT's online tracking system during the corresponding monthly audits. Prompt payment will be monitored and enforced through the contractor's reporting of payments to its subcontractors and suppliers in the online tracking system.

Subcontractors, including lower tier subcontractors and/or suppliers will confirm the timeliness and the payment amounts received utilizing the online tracking system. Discrepancies will be investigated by the DBE Program Office and the project engineer. Payments to the subcontractors, including lower tier subcontractors, and including retainage released after the subcontractor or lower tier subcontractor's work has been completed to HDOT's satisfaction, will be reported by the Contractor or the subcontractor.

- C. When any subcontractor has satisfactorily completed its work as specified in the subcontract, and there are no bona fide disputes, the contractor shall make prompt and full payment to the subcontractor of all monies due, including retainage, within 10 calendar days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented, as required by HDOT. The contractor must obtain the prior written approval from HDOT before it can continue to withhold retainage from any subcontractor who has completed its portion of the work. This clause applies all subcontractors, and all tiers of subcontracts.

### **XIV. RECORDS**

The contractor shall maintain and keep all records necessary for HDOT to determine compliance with the contractor's compliance obligations. The records shall be available at reasonable times and places for inspection by HDOT and appropriate Federal agencies.

The records to be kept by the contractor shall include:

1. The names, address, phone number, and contact person of consultants, subcontractors, manufacturers, suppliers, distributors, truckers and vendors;
2. The nature of work of each consultant, subcontractor, manufacturer, supplier, distributor, trucker and vendor;
3. The dollar amount contracted with each consultant, subcontractor, manufacturer, supplier, distributor, trucker and vendor; and
4. Cumulative dollar amount of all change orders to the subcontract.

**XV. FAILURE TO COMPLY WITH STATED REQUIREMENTS**

The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. All contractors, subcontractors, manufacturers, suppliers, and distributors are hereby advised that failure to carry out all requirements specified herein shall constitute a material breach of contract that may result in termination of the contract or such other remedy as deemed appropriate by HDOT including but not limited to: 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible.

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

**ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

**I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

**II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)**

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### **6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

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

(ii) The classification is used in the area by the construction industry; and

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

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

### 3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must 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.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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](#); and

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

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

**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 as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

**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 as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.** a. By entering into this contract, the contractor certifies that neither it 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 [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons 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 he or she is employed on such work to work in excess of forty 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 forty hours in such workweek. 29 CFR 5.5.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

## **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

**IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

**X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

**1. Instructions for Certification – First Tier Participants:**

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

\* \* \* \* \*

**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

\*\*\*\*\*

**3. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

\* \* \* \* \*

#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

\* \* \* \* \*

#### **XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS** (23 CFR 633, Subpart B, Appendix B)

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

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

**SPECIAL PROVISIONS**

These Special Provisions shall supplement and/or amend the applicable provisions of the Hawaii Standard Specifications for Road and Bridge Construction, 2005, hereinafter referred to as the "Standard Specifications".

1 Amend **Section 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS** to read as  
2 follows:

3  
4 **“DIVISION 100 - GENERAL PROVISIONS**

5  
6  
7 **SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS**

8  
9 **101.01 Meaning of Terms.** The specifications are generally written in the  
10 imperative mood. In sentences using the imperative mood, the subject, “the  
11 Contractor shall”, is implied. In the material specifications, the subject may also  
12 be the supplier, fabricator, or manufacturer supplying material, products, or  
13 equipment for use on the project. The word “will” generally pertains to decisions  
14 or actions of the State.

15  
16 When a publication is specified, it refers to the most recent date of issue,  
17 including interim publications, before the bid opening date for the project, unless a  
18 specific date or year of issue is provided.

19  
20 **101.02 Abbreviations.** Meanings of abbreviations used in the specifications,  
21 on the plans, or in other contract documents are as follows:

22

23	AAN	American Association of Nurserymen
24		
25	AASHTO	American Association of State Highway and 26 Transportation Officials
27		
28	ACI	American Concrete Institute
29		
30	ADA	Americans with Disabilities Act
31		
32	ADAAG	Americans with Disabilities Act Accessibility Guidelines
33		
34	AGC	Associated General Contractors of America
35		
36	AIA	American Institute of Architects
37		
38	AISC	American Institute of Steel Construction
39		
40	AISI	American Iron and Steel Institute
41		
42	ANSI	American National Standards Institute
43		
44	APA	American Plywood Association
45		

46	ARA	American Railway Association
47		
48	AREA	American Railway Engineering Association
49		
50	ASA	American Standards Association
51		
52	ASCE	American Society of Civil Engineers
53		
54	ASLA	American Society of Landscape Architects
55		
56	ASTM	American Society for Testing and Materials
57		
58	AWG	American Wire Gauge
59		
60	AWPA	American Wood Preserver's Association
61		
62	AWS	American Welding Society
63		
64	AWWA	American Water Works Association
65		
66	BMP	Best Management Practice
67		
68	CCO	Contract Change Order
69		
70	CFR	Code of Federal Regulations
71		
72	CRSI	Concrete Reinforcing Steel Institute
73		
74	DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii
75		
76		
77	DOTAX	Department of Taxation, State of Hawaii
78		
79	EPA	U.S. Environmental Protection Agency
80		
81	FHWA	Federal Highway Administration, U.S. Department of Transportation
82		
83		
84	FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
85		
86		
87	HAR	Hawaii Administrative Rules
88		
89	HDOT	Department of Transportation, State of Hawaii
90		

91	HIOSH	Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii
92		
93		
94	HMA	Hot Mix Asphalt
95		
96	HRS	Hawaii Revised Statutes
97		
98	ICEA	Insulated Cable Engineers Association (formerly IPCEA)
99		
100	IMSA	International Municipal Signal Association
101		
102	IRS	Internal Revenue Service
103		
104	ITE	Institute of Transportation Engineers
105		
106	MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, U.S. Department of Transportation
107		
108		
109	NCHRP	National Cooperative Highway Research Program
110		
111	NEC	National Electric Code
112		
113	NEMA	National Electrical Manufacturers Association
114		
115	NFPA	National Forest Products Association
116		
117	NPDES	National Pollutant Discharge Elimination System
118		
119	OSHA	Occupational Safety and Health Administration/Act, U.S. Department of Labor
120		
121		
122	SAE	Society of Automotive Engineers
123		
124	SI	International Systems of Units
125		
126	UFAS	Uniform Federal Accessibility Standards
127		
128	UL	Underwriter's Laboratory
129		
130	USGS	U.S. Geological Survey
131		
132	VECP	Value Engineering Cost Proposal
133		
134		

135 **101.03 Definitions.** Whenever the following words, terms, or pronouns are  
136 used in the contract documents, unless otherwise prescribed therein and without  
137 regards to the use or omission of uppercase letters, the intent and meaning shall  
138 be interpreted as follows:

139  
140 **Addendum (plural - Addenda)** - A written or graphic document, including  
141 drawings and specifications, issued by the Director during the bidding period. This  
142 document modifies or interprets the bidding documents by additions, deletions,  
143 clarifications or corrections.

144  
145 **Addition** (to the contract sum) - Amount added to the contract sum by change  
146 order.

147  
148 **Advertisement** - A public announcement inviting bids for work to be performed or  
149 materials to be furnished.

150  
151 **Amendment** - A written document issued to amend the existing contract between  
152 the State and Contractor and properly executed by the Contractor and Director.

153  
154 **Award** - Written notification to the bidder that the bidder has been awarded a  
155 contract.

156  
157 **Bad Weather Day (or Unworkable Day)** - A day when weather or other conditions  
158 prevent a minimum of four hours of work with the Contractor's normal work force  
159 on critical path activities at the site.

160  
161 **Bag** - 94 pounds of cement.

162  
163 **Barrel** - 376 pounds of cement.

164  
165 **Base Course** - The layer or layers of specified material or selected material of a  
166 designed thickness placed on a subbase or subgrade to support a surface course.

167  
168 **Basement Material** - The material in excavation or embankments underlying the  
169 lowest layer of subbase, base, pavement, surfacing or other specified layer.

170  
171 **Bid** - See Proposal.

172  
173 **Bidder** - An individual, partnership, corporation, joint venture or other legal entity  
174 submitting, directly or through a duly authorized representative or agent, a  
175 proposal for the work or construction contemplated.

176  
177 **Bidding Documents (or Solicitation Documents)** - The published solicitation  
178 notice, bid requirements, bid forms and the proposed contract documents including  
179 all addenda and clarifications issued prior to receipt of the bid.

180

181 **Bid Security** - The security furnished by the bidder from which the State may  
182 recover its damages in the event the bidder breaches its promise to enter into a  
183 contract with the State, or fails to execute the required bonds covering the work  
184 contemplated, if its proposal is accepted.

185  
186 **Blue Book** - EquipmentWatch Cost Recovery (formerly known as  
187 EquipmentWatch Rental Rate Blue Book), available from EquipmentWatch, a  
188 division of Penton, Inc.

189  
190 **Calendar Day** - See Day.

191  
192 **Change Order (or Contract Change Order)** - A written order signed by the  
193 Engineer issued with or without the consent of the Contractor directing changes in  
194 the work, contract time or contract price. The purposes of a change order include,  
195 but are not limited to (1) establishing a price or time adjustment for changes in the  
196 work; (2) establishing full payment for direct, indirect, and consequential costs,  
197 including costs of delay; (3) establishing price adjustment or time adjustment for  
198 work covered and affected by one or more field orders; or (4) settling Contractor's  
199 claims for direct, indirect, and consequential costs, or for additional contract time,  
200 in whole or in part.

201  
202 **Completion** - See Substantial Completion and Final Completion.

203  
204 **Completion Date** - The date specified by the contract for the completion of all  
205 work on the project or of a designated portion of the project.

206  
207 **Comptroller** - the Comptroller of the State of Hawaii, Department of Accounting  
208 and General Services.

209  
210 **Contract** - The written agreement between the Contractor and the State, by which  
211 the Contractor shall provide all labor, equipment, and materials and perform the  
212 specified work within the contract time stipulated, and by which the State of Hawaii  
213 is obligated to compensate the Contractor at the prices set forth in the contract  
214 documents.

215  
216 **Contract Certification Date** - The Date on which the Deputy Comptroller for the  
217 State of Hawaii (or authorized representative) signs the Contract Certification.

218  
219 **Contract Completion Date** - The calendar day on which all work on the project,  
220 required by the contract, must be completed. See CONTRACT TIME.

221

222 **Contract Documents** - The contract, solicitation, addenda, notice to bidders,  
223 Contractor's bid proposal (including wage schedule, list of subcontractors and  
224 other documentations accompanying the bid), notice to proceed, bonds, general  
225 provisions, special provisions, specifications, drawings, all modifications, all written  
226 amendments, change orders, field orders, orders for minor changes in the work,  
227 the Engineer's written interpretations and clarifications issued on or after the  
228 effective date of the contract.  
229  
230 **Contract Item (Pay Item)** - A specific unit of work for which there is a price in the  
231 contract.  
232  
233 **Contract Modification (Modification)** - A change order that is mutually agreed to  
234 and signed by the parties to the contract.  
235  
236 **Contract Price** - The amount designated on the face of the contract for the  
237 performance of work.  
238  
239 **Contract Time (or Contract Duration)** - The number of calendar or working days  
240 provided for completion of the contract, inclusive of authorized time extensions.  
241 Contract time shall commence on the Start Work Date and end on the Substantial  
242 Completion Date. If in lieu of providing a number of calendar or working days, the  
243 contract requires completion by a certain date, the work shall be completed by that  
244 date.  
245  
246 **Contracting Officer** - See Engineer.  
247  
248 **Contractor** - Any individual, partnership, firm, corporation, joint venture, or other  
249 legal entity undertaking the execution of the work under the terms of the contract  
250 with the State.  
251  
252 **Critical Path** - Longest logical sequence of activities that must be completed on  
253 schedule for the entire project to be completed on schedule.  
254  
255 **Day** - Any day shown on the calendar, beginning at midnight and proceeding up  
256 to, but not including, midnight the following day. If no designation of calendar or  
257 working day is made, "day" shall mean calendar day.  
258  
259 **Department** - The Department of Transportation of the State of Hawaii  
260 (abbreviated HDOT).  
261  
262 **Director** - The Director of the HDOT acting directly or through duly authorized  
263 representatives.  
264  
265 **Plans (or Drawings)** - The contract drawings in graphic or pictorial form including  
266 the notes, tables and other notations thereon indicating the design, location,  
267 character, dimensions, and details of the work.

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**Engineer** - The Highway Administrator, Highways Division, HDOT, or the authorized person delegated to act on the Administrator's behalf.

**Equipment** - All machinery, tools, and apparatus needed to complete the contract.

**Field Order** - A written order issued by the Engineer or the Engineer's authorized representative to the Contractor requiring a change or changes to the contract work. A field order may (1) establish a price adjustment or time adjustment; or (2) may declare that no adjustment will be made to contract price or contract time; or (3) may request the Contractor to submit a proposal for an adjustment to the contract price or contract time.

**Final Acceptance** - The Status of the project when the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State.

**Final Completion** - The date set by the Director that all work required by the contract has been completed in full compliance with the contract documents.

**Final Inspection** - Inspection where all contract items (with the exception of Planting Period and Plant Establishment Period) are accepted by the Engineer. Substantial Completion will be issued by the Engineer based on the satisfactory results of the Final Inspection.

**Float** - The amount of time between when an activity can start and when an activity must start, i.e., the time available to complete non-critical activities required for the performance of the work without affecting the critical path.

**Guarantee** - Legally enforceable assurance of the duration of satisfactory performance of quality of a product or work.

**Hawaii Administrative Rules** - Rules adopted by the State in accordance with Chapter 91 of the Hawaii Revised Statutes, as amended.

**HAWAII ePROCUREMENT SYSTEM (HiePRO)** - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.

**Highway (Street, Road, or Roadway)** - A public way within a right-of-way designed, intended, and set aside for use by vehicles, bicyclists, or pedestrians.

**Highways Division** - The Highways Division of the Hawaii Department of Transportation constituted under the laws of Hawaii for the administration of highway work.

315 **Holidays** - The days of each year which are set apart and established as State  
316 holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.  
317  
318 **Inspector** - The Engineer's authorized representative assigned to make detailed  
319 inspections of contract performance, prescribed work, and materials supplied.  
320  
321 **Laboratory** - The testing laboratory of the Highways Division or other testing  
322 laboratories that may be designated by the Engineer.  
323  
324 **Laws** - All Federal, State, and local laws, executive orders and regulations having  
325 the force of law.  
326  
327 **Leveling Course** - An aggregate mixture course of variable thickness used to  
328 restore horizontal and vertical uniformity to existing pavements or shoulders.  
329  
330 **Liquidated Damages** - The amount prescribed in Subsection 108.08 - Liquidated  
331 Damages for Failure to Complete the Work or Portions of the Work on Time, to be  
332 paid to the State or to be deducted from any payments payable to or, which may  
333 become payable to the Contractor.  
334  
335 **Lump Sum (LS)** - When used as a payment method means complete payment  
336 for the item of work described in the contract documents.  
337  
338 **Material** - Any natural or manmade substance or item specified in the contract to  
339 be incorporated in the work.  
340  
341 **Notice to Bidders** - The advertisement for proposals for all work or materials on  
342 which bids are required. Such advertisement will indicate the location of the work  
343 to be done or the character of the material to be furnished and the time and place  
344 for the opening of proposals.  
345  
346 **Notice to Proceed** - Written notice from the Engineer to the Contractor identifying  
347 the date on which the Contractor is to begin procuring materials and required  
348 permits and adjusting work forces, equipment, schedules, etc. prior to beginning  
349 physical work.  
350  
351 **Pavement** - The uppermost layer of material placed on the traveled way or  
352 shoulders or both. Pavement and surfacing may be interchangeable.  
353  
354 **Pavement Structure** - The combination of subbase, base, pavement, surfacing or  
355 other specified layer of a roadway constructed on a subgrade to support the traffic  
356 load.  
357  
358 **Payment Bond** - The security executed by the Contractor and surety or sureties  
359 furnished to the Department to guarantee payment by the Contractor to laborers,  
360 material suppliers and subcontractors in accordance with the terms of the contract.  
361

362 **Physical Work** - Physical construction activities on the project site or at  
363 appurtenant facilities including staging areas. It includes; (i) building or installing  
364 any structures or facilities including, but not limited to sign erection; BMP  
365 installation; field office site grading and building; (ii) removal, adjustment, or  
366 demolition of physical obstructions on site; (iii) any ground breaking activities; and  
367 (iv) any utility work. It does not include pre-construction environmental testing  
368 (such as water quality baseline measurements) that may be required as part of  
369 contract.

370

371 **Pre-Final Inspection** - Inspection scheduled when Contractor notifies Engineer  
372 that all physical work on the project, with the exception of planting period and plant  
373 establishment period, has been completed. Notice from Contractor of substantial  
374 completion will suspend contract time until Contractor receives punchlist from  
375 Engineer.

376

377 **Profile Grade** - The elevation or gradient of a vertical plane intersecting the top  
378 surface of the proposed pavement.

379

380 **Project Acceptance Date** - The calendar day on which the Engineer accepts the  
381 project as completed. See Final Completion.

382

383 **Proposal (Or Bid)** - The offer of a Bidder, on the prescribed HDOT form, to  
384 perform the work and to furnish the labor and materials at the prices quoted.

385

386 **Public Traffic** - Vehicular or pedestrian movement on a public way.

387

388 **Punchlist** - A list compiled by the Engineer specifying work yet to be completed or  
389 corrected by the Contractor in order to substantially complete the contract.

390

391 **Questionnaire** - The specified forms on which the bidder shall furnish required  
392 information as to its ability to perform and finance the work.

393

394 **Request for Change Proposal** - A written notice from the Engineer to the  
395 Contractor requesting that the Contractor provide a price and/or time proposal for  
396 contemplated changes preparatory to the issuance of a field order or change order.

397

398 **Right-of-Way** - Land, property, or property interests acquired by a government  
399 agency for, or devoted to transportation purposes.

400

401 **Roadbed** - The graded portion of a highway within top and side slopes, prepared  
402 as a foundation for the pavement structure and shoulders.

403

404 **Roadside** - The area between the outside edges of the shoulders and the right-of-  
405 way boundaries. Unpaved median areas between inside shoulders of divided  
406 highways and infield areas of interchanges are included.

407

408 **Section and Subsection** - Section or subsection shall be understood to refer to  
409 these specifications unless otherwise specified.

410  
411 **Shop Drawings** - All drawings, diagrams, illustrations, schedules and other data  
412 or information which are specifically prepared or assembled by or for the  
413 Contractor and submitted by the Contractor to illustrate some portion of the work.

414  
415 **Shoulder** - The portion of the roadway next to the traveled way for:  
416 accommodation of stopped vehicles, placement of underground facilities,  
417 emergency use, and lateral support of base and surface courses.

418  
419 **Sidewalk** - That portion of the roadway primarily constructed for use by  
420 pedestrians.

421  
422 **Solicitation** - An invitation to bid or request for proposals or any other document  
423 issued by the Department to solicit bids or offers to perform a contract. The  
424 solicitation may indicate the time and place to receive the bids or offers and the  
425 location, nature and character of the work, construction or materials to be provided.

426  
427 **Specifications** - Compilation of provisions and requirements to perform  
428 prescribed work.

429  
430 **(A) Standard Specifications.** Specifications by the State intended for  
431 general application and repetitive use.

432  
433 **(B) Special Provisions.** Revisions and additions to the standard  
434 specifications applicable to an individual project.

435  
436 **Standard Plans** - Drawings provided by the State for specific items of work  
437 approved for repetitive use.

438  
439 **State** - The State of Hawaii, its Departments and agencies, acting through its  
440 authorized representative(s).

441  
442 **State Waters** – All waters, fresh, brackish, or salt, around and within the State,  
443 including, but not limited to, coastal waters, streams, rivers, drainage ditches,  
444 ponds, reservoirs, canals, ground waters, and lakes; provided that drainage  
445 ditches, ponds, and reservoirs required as a part of a water pollution control system  
446 are excluded.

447  
448 **Start Work Date** - Date on which Contractor begins physical work on the contract.  
449 This date shall also be the beginning of Contract Time.

450  
451 **Structures** - Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing,  
452 manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation  
453 drains, and other such features that may be encountered in the work.

454

455 **Subbase** - A layer of specified material of specified thickness between the  
456 subgrade and a base.

457  
458 **Subcontract** - Any written agreement between the Contractor and its  
459 subcontractors which contains the conditions under which the subcontractor is to  
460 perform a portion of the work for the Contractor.

461  
462 **Subcontractor** - An individual, partnership, firm, corporation, or joint venture, or  
463 other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii  
464 Revised Statutes, as amended, which enters into an agreement with the  
465 Contractor to perform a portion of the work.

466  
467 **Subgrade** - The top surface of completed earthwork on which subbase, base,  
468 surfacing, pavement, or a course of other material is to be placed.

469  
470 **Substantial Completion** - The Status of the project when the Contractor has  
471 completed the work, except for the planting period and plant establishment period,  
472 and each of the following requirements are met:

473  
474 (1) All traffic lanes (including shoulders, ramps, sidewalks and bike  
475 paths) are in their final configuration as designed and the final  
476 wearing surface has been installed;

477  
478 (2) All operational and safety devices have been installed in accordance  
479 with the contract documents including guardrails, end treatments,  
480 traffic barriers, required signs and pavement markings, drainage,  
481 parapet, and bridge and pavement structures;

482  
483 (3) All required illumination and lighting for normal and safe use and  
484 operation is installed and functional in accordance with the contract  
485 documents;

486  
487 (4) All utilities and services are connected and working;

488  
489 (5) The need for temporary traffic controls or lane closures at any time  
490 has ceased, except for lane closures required for routine  
491 maintenance;

492  
493 (6) The building, structure, improvement or facility can be used for its  
494 intended purpose.

495  
496 **Substantial Completion Date** - The date the Substantial Completion is granted  
497 by the Engineer in Writing and Contract Time stops.

498  
499 **Superintendent** - The employee of the Contractor who is responsible for all the  
500 work and is a Contractor's agent for communications to and from the State.

501

502 **Surety** - The qualified individual, firm or corporation other than the Contractor,  
503 which executes a bond with and for the Contractor to insure its acceptable  
504 performance of the contract.

505  
506 **Surfacing** - The uppermost layer of material placed on the traveled way or  
507 shoulders. This term is used interchangeably with pavement.

508  
509 **Traveled Way** - The portion of the roadway for the movement of vehicles,  
510 exclusive of shoulders.

511  
512 **Unsuitable Material** - Materials that contain organic matter, muck, humus, peat,  
513 sticks, debris, chemicals, toxic matter, or other deleterious materials not suitable  
514 for use in earthwork.

515  
516 **Utility** - A line, facility, or system for producing, transmitting, or distributing  
517 communications, power, electricity, heat, gas, oil, water, steam, waste, or storm  
518 water.

519  
520 **Utility Owner** - The entity, whether private or owned by a State, Federal, or County  
521 governmental body, that has the power and responsibility to grant approval for, or  
522 undertake construction work involving a particular utility.

523  
524 **Water Pollutant** - Dredged spoil, solid refuse, incinerator residue, sewage,  
525 garbage, sewage sludge, munitions, chemical waste, biological materials,  
526 radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil,  
527 sediment, cellar dirt and industrial, municipal, and agricultural waste.

528  
529 **Water Pollution** - **(1)** Such contamination or other alteration of the physical,  
530 chemical, or biological properties of any state waters, including change in  
531 temperature, taste, color, turbidity, or odor of the waters, or **(2)** Such discharge of  
532 any liquid, gaseous, solid, radioactive, or other substances into any state waters,  
533 as will or is likely to create a nuisance or render such waters unreasonably harmful,  
534 detrimental, or injurious to public health, safety, or welfare, including harm,  
535 detriment, or injury to public water supplies, fish and aquatic life and wildlife,  
536 recreational purposes and agricultural and industrial research and scientific uses  
537 of such waters or as will or is likely to violate any water quality standards, effluent  
538 standards, treatment and pretreatment standards, or standards of performance for  
539 new sources adopted by the Department of Health.

540  
541 **Work** - The furnishing of all labor, material, equipment, and other incidentals  
542 necessary or convenient for the successful execution of all the duties and  
543 obligations imposed by the contract.

544  
545 **Working Day** - A calendar day in which a Contractor is capable of working four or  
546 more hours with its normal work force, exclusive of:  
547

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557

(1) Saturdays, Sundays, and recognized legal State holidays and such other days specified by the contract documents as non-working days,

(2) Day in which the Engineer suspends work for four or more hours through no fault of the Contractor.”

**END OF SECTION 101**

1 Make this section a part of the Standard Specifications:

2  
3 **“SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS**

4  
5  
6 **102.01 Prequalification of Bidders.** Prospective bidders shall be capable of  
7 performing the work for which they are bidding.

8  
9 In accordance with HRS Chapter 103D-310, the Department may require  
10 any prospective bidder to submit answers to questions contained in the 'Standard  
11 Qualification Questionnaire For Prospective Bidders On Public Works Contracts'  
12 furnished by the Department, properly executed and notarized, setting forth a  
13 complete statement of the experience of such prospective bidder and its  
14 organization in performing similar work and a statement of the equipment  
15 proposed to be used, together with adequate proof of the availability of such  
16 equipment. Whenever it appears to the Department, from answers to the  
17 questionnaire or otherwise, that the prospective bidder is not fully qualified and  
18 able to perform the intended work, the Department will, after affording the  
19 prospective bidder an opportunity to be heard and if still of the opinion that the  
20 bidder is not fully qualified to perform the work, refuse to receive or consider any  
21 bid offered by the prospective bidder. All information contained in the answers to  
22 the questionnaire shall be kept confidential. Questionnaire so submitted shall be  
23 returned to the bidders after serving their purpose.

24  
25 No person, firm or corporation may bid where (1) the person, firm, or  
26 corporation, or (2) a corporation owned substantially by the person, firm, or  
27 corporation, or (3) a substantial stockholder or an officer of the corporation, or (4)  
28 a partner or substantial investor in the firm is in arrears in payments owed to the  
29 State or its political subdivisions or is in default as a surety or failure to do  
30 faithfully and diligently previous contracts with the State.

31  
32 **102.02 Contents of Proposal Forms.** The Department will furnish  
33 prospective bidders with proposal forms posted in HlePRO stating:

- 34  
35 (1) The location,  
36  
37 (2) Description of the proposed work,  
38  
39 (3) The approximate quantities,  
40  
41 (4) Items of work to be done or materials to be furnished,  
42  
43 (5) A schedule of items, and  
44  
45 (6) The time in which the work shall be completed.  
46

47 Papers bound with or attached to the proposal form are part of the  
48 proposal. The bidder shall not detach or alter the papers bound with or attached  
49 to the proposal when the bidder submits its proposal through HlePRO.  
50

51 Also, the bidder shall consider other documents including the plans and  
52 specifications a part of the proposal form whether attached or not.  
53

54 **102.03 (Unassigned).**  
55

56 **102.04 Estimated Quantities.** The quantities shown in the contract are  
57 approximate and are for the comparison of bids only. The actual quantity of work  
58 may not correspond with the quantities shown in the contract. The Department  
59 will make payment to the Contractor for unit price items in accordance with the  
60 contract for only the following:  
61

62 (1) Actual quantities of work done and accepted, not the estimated  
63 quantities; or  
64

65 (2) Actual quantities of materials furnished, not the estimated  
66 quantities.  
67

68 The Department may increase, decrease, or omit each scheduled  
69 quantities of work to be done and materials to be furnished. When the  
70 Department increases or decreases the estimated quantity of a contract item by  
71 more than 15% the Department will make payment for such items in accordance  
72 with Subsection 104.06 - Methods of Price Adjustment.  
73

74 **102.05 Examination of Contract and Site of Work.** The bidder shall  
75 examine carefully the site of the proposed work and contract before submitting a  
76 proposal.  
77

78 By the act of submitting a bid for the proposed contract, the bidder  
79 warrants that:  
80

81 (1) The bidder and its Subcontractors have reviewed the contract  
82 documents and found them free from ambiguities and sufficient for the  
83 purpose intended;  
84

85 (2) The bidder and its workers, employees and subcontractors have  
86 the skills and experience in the type of work required by the contract  
87 documents bid upon;  
88

89 (3) Neither the bidder nor its employees, agents, suppliers or  
90 subcontractors have relied upon verbal representations from the  
91 Department, its employees or agents, including architects, engineers or  
92 consultants, in assembling the bid figure; and

93 (4) The basis for the bid figure are solely on the construction contract  
94 documents.

95  
96 Also, the bidder warrants that the bidder has examined the site of the  
97 work. From its investigations, the bidder acknowledges satisfaction on:  
98

99 (1) The nature and location of the work;

100  
101 (2) The character, quality, and quantity of materials;

102  
103 (3) The difficulties to be encountered; and

104  
105 (4) The kind and amount of equipment and other facilities needed;

106  
107 Subsurface information or hydrographic survey data furnished are for the  
108 bidders' convenience only. The data and information furnished are the product of  
109 the Department's interpretation gathered in investigations made at the specific  
110 locations. These conditions may not be typical of conditions at other locations  
111 within the project area or that such conditions remain unchanged. Also,  
112 conditions found at the time of the subsurface explorations may not be the same  
113 conditions when work starts. The bidder shall be solely responsible for  
114 assumptions, deductions, or conclusions the bidder may derive from the  
115 subsurface information or data furnished.

116  
117 If the Engineer determines that the natural conditions differ from that  
118 originally anticipated or contemplated by the Contractor in the items of  
119 excavation, the State may treat the difference in natural conditions, as falling  
120 within the meaning of Subsection 104.02 – Changes.

121  
122 **102.06 Preparation of Proposal.** The submittal of its proposal shall be on  
123 forms furnished by the Department. The bidder shall specify in words or figures:

124  
125 (1) A unit price for each pay item with a quantity given;

126  
127 (2) The products of the respective unit prices and quantities

128  
129 (3) The lump sum amount; and

130  
131 (4) The total amount of the proposal obtained by adding the amounts  
132 of the several items.

133  
134 The words and figures shall be in ink or typed. If a discrepancy occurs  
135 between the prices written in words and those written in figures, the prices written  
136 in words shall govern.

137

138 When an item in the proposal contains an option to be made, the bidder  
139 shall choose in accordance with the contract for that particular item.  
140 Determination of an option will not permit the Contractor to choose again.

141  
142 The bidder shall sign the proposal properly in ink. A duly authorized  
143 representatives of the bidder or by an agent of the bidder legally qualified and  
144 acceptable to the Department shall sign, including one or more partners of the  
145 bidder and one or more representatives of each entity comprising a joint venture.

146  
147 When an agent, other than the officer(s) of a corporation authorized to  
148 sign contracts for the corporation or a partner of a partnership, signs the  
149 proposals, a 'Power of Attorney' shall be on file with the Department or submitted  
150 with the proposal. Otherwise, the Department will reject the proposal as irregular  
151 and unauthorized.

152  
153 The bidder shall submit acceptable evidence of the authority of the  
154 partner, member(s) or officer(s) to sign for the partnership, joint venture, or  
155 corporation respectively with the proposal. Otherwise, the Department will reject  
156 the proposal as irregular and unauthorized.

157  
158 **102.07 Irregular Proposals.** The Department may consider proposals  
159 irregular and may reject the proposals for the following reasons:

160  
161 (1) The proposal is a form not furnished by the Department, altered, or  
162 detached;

163  
164 (2) The proposal contains unauthorized additions, conditions, or  
165 alternates. Also, the proposal contains irregularities that may tend to  
166 make the proposal incomplete, indefinite, or ambiguous to its meaning;

167  
168 (3) The bidder adds provisions reserving the right to accept or reject an  
169 award. Also, the bidder adds provisions into a contract before an award;

170  
171 (4) The proposal does not contain a unit price for each pay item listed  
172 except authorized optional pay items; and

173  
174 (5) Prices for some items are out of proportion to the prices for other  
175 items.

176  
177 (6) If in the opinion of the Director, the bidder and its listed  
178 subcontractors do not have the Contractor's licenses or combination of  
179 Contractor's licenses necessary to complete the work.

180  
181 Where the prospective bidder is bidding on multiple projects  
182 simultaneously and the proposal limits the maximum gross amount of awards  
183 that the bidder can accept at one bid letting, the proposal is not irregular if the

184 limit on the gross amount of awards is clear, and the Department selects the  
185 awards that can be given.

186  
187 **102.08 Proposal Guaranty.** The Department will not consider a proposal of  
188 \$25,000 or more unless accompanied by:

189  
190 (1) A deposit of legal tender; or

191  
192 (2) A valid surety bid bond, underwritten by a company licensed to  
193 issue bonds in the State of Hawaii, in the form and composed,  
194 substantially, with the same language as provided herewith and signed by  
195 both parties; or

196  
197 (3) A certificate of deposit, share certificate, cashier's check,  
198 treasurer's check, teller's check, or official check drawn by, or a certified  
199 check accepted by and payable on demand to the State by a bank,  
200 savings institution, or credit union insured by the Federal Deposit  
201 Insurance Corporation (FDIC) or the National Credit Union Administration  
202 (NCUA).

203  
204 (a) The bidder may use these instruments only to a maximum of  
205 \$100,000.

206  
207 (b) If the required security or bond amount totals over \$100,000  
208 more than one instrument not exceeding \$100,000 each and issued  
209 by different financial institutions shall be acceptable.

210  
211 (c) The instrument shall be made payable at sight to the  
212 Department.

213  
214 (d) **If bidder elects options (1) or (3) above for its bid  
215 security, said bid security shall be in its original form and shall  
216 be submitted before the bid deadline to the Contract Office,  
217 Department of Transportation, Aliiaimoku Hale, 869 Punchbowl  
218 Street, Room 103, Honolulu, Hawaii 96813. Original surety bid  
219 bonds do not need to be submitted to the Contracts Office.  
220 Bidders are reminded that a copy of its surety bid bond shall  
221 be included with its bid submitted and uploaded to HlePRO.**

222  
223 In accordance with HRS Chapter 103D-323, the above shall be in a sum  
224 not less than 5% of the amount bid.

225  
226 **102.09 Delivery of Proposal.** Bidders shall submit and upload the  
227 complete proposal to HlePRO prior to the bid opening date and time.  
228 Proposals received after said due date and time shall not be considered.  
229 Any additional support documents explicitly designated as confidential

230 and/or proprietary shall be uploaded as a separate file to HlePRO. Bidders  
231 shall not include confidential and/or proprietary documents with the  
232 proposal. The record of each bidder and respective bid shall be open to  
233 public inspection. Original (wet ink, hard copy) proposal documents are not  
234 required to be submitted. Contract award shall be based on evaluation of  
235 proposals submitted and uploaded to HlePRO.

236  
237 **FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE**  
238 **GROUND FOR REJECTION OF THE BID.** If there is a conflict between the  
239 specification document and the HlePRO solicitation, the specifications  
240 shall govern and control, unless otherwise specified.

241  
242 **102.10 Withdrawal or Revision of Proposals.** Bids may be modified or  
243 withdrawn prior to the bid opening date and time. Withdrawal or revision of  
244 proposal shall be completed, and submitted and uploaded to HlePRO prior to the  
245 bid opening date and time.

246  
247 **102.11 Public Opening of Proposals.** Not applicable.

248  
249 **102.12 Disqualification of Bidders.** The Department may disqualify a bidder  
250 and reject its proposal for the following reasons:

251  
252 (1) Submittal of more than one proposal whether under the same or  
253 different name.

254  
255 (2) Evidence of collusion among bidders. The Department will not  
256 recognize participants in collusion as bidders for any future work of the  
257 Department until such participants are reinstated as qualified bidders.

258  
259 (3) Lack of proposal guaranty.

260  
261 (4) Submittal of an unsigned or improperly signed proposal.

262  
263 (5) Submittal of a proposal without a listing of subcontractors or  
264 containing only a partial or incomplete listing of subcontractors.

265  
266 (6) Submittal of an irregular proposal in accordance with Subsection  
267 102.07 - Irregular Proposals.

268  
269 (7) Evidence of assistance from a person who has been an employee  
270 of the agency within the preceding two years and who participated while in  
271 State office or employment in the matter with which the contract is directly  
272 concerned, pursuant to HRS Chapter 84-15.

273  
274 (8) Suspended or debarred in accordance with HRS Chapter 104-25.

275

276 (9) Failure to complete the prequalification questionnaire, if applicable.  
277  
278 (10) Failure to attend the mandatory pre-bid meeting, if applicable.  
279  
280 **102.13 Material Guaranty.** The successful bidder may be required to furnish  
281 a statement of the composition, origin, manufacture of materials, and samples.  
282  
283 **102.14 Substitution of Materials and Equipment Before Bid Opening.** See  
284 Subsection 106.13 for Substitution Of Materials and Equipment After Bid  
285 Opening.  
286  
287 (A) **General.** When brand names of materials or equipment are  
288 specified in the contract documents, they are to indicate a quality, style,  
289 appearance, or performance and not to limit competition. The bidder shall  
290 base its bid on one of the specified brand names unless alternate brands  
291 are qualified as equal or better in an addendum. As specified in the  
292 Notice to Bidders, all requests shall be posted as a question in HlePRO  
293 under the “Question and Answer” tab. Supporting documents for specific  
294 request shall be emailed to the Project Manager specified in the Notice to  
295 Bidders. Request must be posted in HlePRO and supporting documents  
296 received by the Project Manager no later than fourteen (14) calendar days  
297 before the bid opening date.  
298  
299 An addendum will be issued to inform all prospective bidders of any  
300 accepted substitution in accordance with Subsection 102.17 – Addenda.  
301  
302 (B) **Statement of Variances.** The statement of variances must list all  
303 features of the proposed substitution that differ from the contract  
304 documents and must further certify that the substitution has no other  
305 variant features. The brochure and information submitted shall be clearly  
306 marked showing make, model, size, options, and any other features  
307 requested by the Engineer and must include sufficient evidence to  
308 evaluate each feature listed as a variance. A request will be denied if  
309 submitted without sufficient evidence. If after installing the substituted  
310 product, an unlisted variance is discovered, the Contractor shall  
311 immediately replace the product with a specified product at no increase in  
312 contract price and contract time.  
313  
314 (C) **Substitution Denial.** Any substitution request not complying with  
315 the above requirements will be denied.  
316  
317 **102.15 Preferences.** Preferences shall not apply to this project.  
318  
319 **102.16 Certification for Safety and Health Program for Bids in excess of**  
320 **\$100,000.** In accordance with HRS Chapter 396-18, the bidder or offeror, by  
321 signing and submitting this proposal, certifies that a written safety and health plan  
322 for this project will be available and implemented by the notice to proceed date

323 for this project. Details of the requirements of this plan may be obtained from the  
324 State Department of Labor and Industrial Relations, Occupational Safety and  
325 Health Division (HIOSH).

326

327 **102.17 Addenda.** Addenda issued shall become part of the contract  
328 documents. Addenda to the bid documents will be provided to all prospective  
329 bidders via HlePRO. Each addendum shall be an addition to the contract  
330 documents. The terms and requirements of the bid documents (i.e., drawings,  
331 specifications and other bid and contract documents) cannot be changed prior to  
332 the bid opening except by a duly issued addendum.”

333

334

335

**END OF SECTION 102**

1 Make this section a part of the Standard Specifications:  
2

3 **“SECTION 103 - AWARD AND EXECUTION OF CONTRACT**  
4

5  
6 **103.01 Consideration of Proposals.** The Department will compare the  
7 proposals in terms of the summation of the products of the approximate quantities  
8 and the unit bid prices after the submittal date and time established in HlePRO. If  
9 a discrepancy occurs between the unit bid price and the bid price, the unit bid price  
10 shall govern.  
11

12 The “Buy America” provisions in the Surface Transportation Assistance Act  
13 of 1982 is applicable to Federal-aid projects. Bidders may submit a bid based  
14 upon the furnishing and use of domestic steel or foreign steel. Manufacturing  
15 processes for domestic steel shall occur in the United States.  
16

17 The Department reserves the right to reject proposals, waive technicalities  
18 or advertise for new proposals, if the rejection, waiver, or new advertisement favors  
19 the Department.  
20

21 **103.02 Award of Contract.** The award of contract, if it be awarded, will be  
22 made within 60 calendar days after the opening of bids, to the lowest responsible  
23 and responsive bidder whose proposal complies with all the prescribed  
24 requirements. The Department may request the bidders to allow the Department  
25 to consider the bids for the issuance of an award beyond the 60-calendar day  
26 period. Agreement to such an extension must be made by a bidder in writing. Only  
27 bidders who have agreed to such an extension will be eligible for the award. No  
28 response to request shall mean the bidder shall no longer be eligible for award.  
29

30 **(1) Requirement for Award.** The Bidder, as proof of compliance  
31 with the requirements of section 103D-310(c), HRS, upon award of  
32 a contract made pursuant to section 103D-302, HRS, shall provide  
33 the documents listed below. The documents shall be submitted  
34 promptly to the Department. If a valid certificate/clearance is not  
35 submitted on a timely basis upon award, the Bidder may be deemed  
36 non-responsible. See also Subsection 108.03 – Preconstruction  
37 Data Submittal.  
38

39  
40 **(A) Tax Clearance.** Pursuant to §103D-310(c), 103-53 and 103D-328,  
41 HRS, the bidder shall submit a tax clearance certificate from the State of  
42 Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service  
43 (IRS), subject to section 103D-328, HRS, current within six months of  
44 issuance date.  
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FORM A6, TAX CLEARANCE CERTIFICATE, is available at the following website:

<https://tax.hawaii.gov/>

To receive DOTAX Forms by fax or mail, phone (808) 587-4242 or 1-800-222-3229.

The application for the Tax Clearance Certificate is the responsibility of the bidder. Bidder shall submit directly to the DOTAX or IRS. The approved certificate may then be submitted to the Department.

**(B) DLIR Certificate of Compliance.** Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of compliance for Hawaii Employment Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter 386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii Department of Labor and Industrial Relations (DLIR), current within six months of issuance date..

FORM LIR#27, APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112, HAR, is available at the following website:

<http://labor.hawaii.gov/>

Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for additional information.

Inquiries regarding the status of a LIR#27 Form may be made by calling the DLIR Disability Compensation Division at (808) 586-9200.

The application for the Certificate of Compliance is the responsibility of the bidder. Bidder shall submit directly to the DLIR. The approved certificate may then be submitted to the Department.

**(C) DCCA Certificate of Good Standing.** Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of good standing from the business registration division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six months of issuance date, to demonstrate it is either:

- (1) Incorporated or organized under the laws of the State; or
- (2) Registered to do business in the State as a separate branch or division that is capable of fully performing under the contract.

92  
93 A Hawaii business that is a sole proprietorship, is not required  
94 to register with the BREG, and therefore not required to submit a  
95 certificate of good standing. Bidders are advised of costs associated  
96 with registering and obtaining a Certificate of Good Standing from  
97 the DCCA.

98  
99 To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line  
100 Services at the following website:

101  
102 <http://cca.hawaii.gov/>

103  
104 The application for the Certificate of Good Standing is the  
105 responsibility of the bidder. Bidder shall submit directly to the DCCA. The  
106 approved certificate may then be submitted to the Department.

107  
108 **(D) Hawaii Compliance Express (HCE).** In lieu of the certificates  
109 referenced in subsection A, B, and C, the bidder may make available proof  
110 of compliance through a state procurement office designated certification  
111 process.

112  
113 **103.03 Cancellation of Award.** The Department reserves the right to cancel  
114 the award of contracts before the execution of said contract by the parties. There  
115 will be no liability to the awardee and to other bidders.

116  
117 **103.04 Return of Proposal Guaranty.** The Department will return the proposal  
118 guaranties, except those of the three lowest bidders, after the Department checks  
119 the proposals. The Department will return the proposal guaranties of the remaining  
120 two lowest bidders, not awarded the contract, within five working days following  
121 the execution of the contract. The Department will return the successful bidder's  
122 proposal guaranty after the successful bidder furnishes a bond and executes the  
123 contract.

124  
125 **103.05 Requirement of Contract Bond.** At the time of execution of the  
126 contract, the successful bidder shall file a good and sufficient performance bond  
127 and a payment bond on the forms furnished by the Department conditioned for the  
128 full and faithful performance of the contract in accordance with the terms and intent  
129 thereof and for the prompt payment to all others for all labor and material furnished  
130 by them to the bidder and used in the prosecution of the work provided for in the  
131 contract. The bonds shall be of an amount equal to 100 percent of the amount of  
132 the contract price and include 5 percent of the contract amount estimated to be  
133 required for extra work. The bidder shall limit the acceptable performance and  
134 payment bonds to the following:

- 135  
136 (a) Legal tender;

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(b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or

(c) A certificate of deposit; share certificate; cashier's check; treasurer's check, teller's check drawn by or a certified check accepted by and payable on demand to the State by a bank savings institution or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

1. The bidder may use these instruments only to a maximum of \$100,000.
2. If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be acceptable.

Such bonds shall also by the terms insure to the benefit of any and all persons entitled to file claims for labor done or material furnished in the work so as to give them a right of action as contemplated by HRS Section 103D-324.

**103.06 Execution of the Contract.** The contract bond and HRS Chapter 104 - Compliance Certificate, similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned within ten days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

The contract shall not bind the Department unless said parties execute the contract and the Director of Finance endorses the bidder's certificate in accordance with HRS Section 103-39.

**103.07 Failure to Execute Contract.** Failure to execute the contract and file acceptable bonds shall be cause for the cancellation of the award in accordance with Subsection 103.06 - Execution of the Contract. Also, the Contractor forfeits the proposal guaranty which becomes the property of the Department. This is not a penalty, but liquidated damages sustained by the State. The Department may then make award to the next lowest responsible and responsive bidder or the Department may readvertise and construct the work under contract.”

**END OF SECTION 103**



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submission by the contractor of proper documentation of completed force account work, whether periodic (conforming to the applicable billing cycle) or final. The Engineer shall return any documentation that is defective, to the contractor within fifteen days after receipt, with a statement identifying the defect; or

**(B)** For change orders with value exceeding \$50,000 by a unilateral determination by the Engineer of the costs attributable to the events or situations with adjustment of profit and fee, all as computed by the Engineer in accordance with applicable sections of HAR Chapters 3-123 and 3-126, and Section 109.05 - Allowances for Overhead and Profit. When a unilateral determination has been made, a unilateral change order shall be issued within ten days. Upon receipt of the unilateral change order, if the contractor does not agree with any of the terms or conditions, or the adjustment or nonadjustment of the contract time or contract price, the contractor shall file a notice of intent to claim within thirty days after the receipt of the written unilateral change order. Failure to file a protest within the time specified shall constitute agreement on the part of the contractor with the terms, conditions, amounts, and adjustment or nonadjustment of the contract time or the contract price set forth in the unilateral change order.

A contractor shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of HAR Chapter 3-122, Subchapter 15. A fully executed change order or other document permitting billing for the adjustment in price under any method listed in Subsections 104.06(1) through 104.06(7) shall be issued within ten days after agreement on the method of adjustment."

**END OF SECTION 104**



47           **(C) Authority of the Consultant and Construction Management.** The  
48 State may engage consultants and construction managements to perform  
49 duties in connection with the work. Unless otherwise specified in writing to  
50 the Contractor, such retained consultants and construction managements  
51 shall have no greater authority than an Inspector.”

52  
53 **(II) Amend Subsection 105.02 - Submittals** by revising the first paragraph  
54 from lines 52 to 61 to read as follows:

55  
56 **“105.02 Submittals.** The contract contains the description of various items that  
57 the Contractor must submit to the Engineer for review and acceptance. The  
58 Contractor shall review all submittals for correctness, conformance with the  
59 requirements of the contract documents and completeness before submitting them  
60 to the Engineer. The submittal shall indicate the contract items and specifications  
61 subsections for which the submittal is provided. The submittal shall be legible and  
62 clearly indicate what portion of the submittal is being submitted for review. The  
63 Contractor shall provide six copies of the required submissions at the earliest  
64 possible date.”

65  
66 **(III) Amend Subsection 105.08 (A) - Furnishing Drawings and Special**  
67 **Provisions** to read as follows:

68  
69 **“(A) Furnishing Drawings and Special Provisions.** The State will  
70 furnish the Contractor an electronic set of the special provisions and plans.”  
71 The Contractor shall have and maintain at least one set of plans and  
72 specifications on the work site, at all times.”

73  
74 **(IV) Amend Subsection 105.14(D) – No Designated Storage Area** from lines  
75 421 to 432 to read as follows:

76  
77 **“(D) No Designated Storage Area.** If no storage area is designated  
78 within the contract documents, materials and equipment may be stored  
79 anywhere within the State highway right-of-way, provided such storage and  
80 access to and from such site, within the sole discretion of the Engineer,  
81 does not create a public or traffic hazard or an impediment to the movement  
82 of traffic.”

83  
84 **(V) Amend 105.16(A) – Subcontract Requirements** by adding the following  
85 paragraph after line 483:

86  
87           The ‘Specialty Items’ of work for this project are as follows:  
88

	<b>Section No.</b>	<b>Description</b>
89		
90		
91	301	Contract Item No. 301.0100 under Section 312 – Hot
92		Mix Asphalt Base Course
93		
94	401	Contract Item No. 401.0100 under Section 401 – Hot
95		Mix Asphalt Pavement
96		
97	606	All Contract Items under Section 606 - Guardrail
98		
99	645	All Contract Items under Section 645 – Work Zone
100		Traffic Control
101		
102	647	All Contract Items under Section 647 – Fiber Optic
103		Cables
104		
105	682	All Contract Items under Section 682 – Video System
106		Equipment
107		
108	683	All Contract Items under Section 683 – CCTV Camera
109		
110	687	All Contract Items under Section 687 – Fiber Optic
111		Communications System”
112		
113		

114 **(VI)** Amend **Subsection 105.16(B) – Substituting Subcontractors** from line  
115 487 to line 494 to read:

116  
117 **“(B) Substituting Subcontractors.** Under HRS Chapter 103D-302, the  
118 Contractor is required to list the names of persons or firms to be engaged  
119 by the Contractor as a subcontractor or joint contractor in the performance  
120 of the contract. No subcontractor may be added or deleted, unless  
121 authorized by the Engineer. Substitutions will be allowed only if the  
122 subcontractor:”

123  
124  
125  
126  
127  
**END OF SECTION 105**

1 Make the following amendments to said Section:

2  
3 **SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS**  
4

5  
6 **(I)** Amend **106.05(B) – Deviations** by revising the third sentence from line 106  
7 to 108 to read as follows:

8  
9 “Any deviations will be subject to Subsection 102.14 – Substitution of  
10 Materials and Equipment Before Bid Opening.  
11

12 **(II)** Replace **106.11 – Steel and Iron Construction Material** lines 238 through  
13 277 with the following:

14  
15 **106.11 Domestic Materials Procurement Preference.** Federal-aid contracts  
16 are subject to the Domestic Materials Procurement Preference, as established by  
17 the Buy America Act (1978 Surface Transportation Assistance Act) and the Build  
18 America, Buy America (BABA) Act (2021 Infrastructure Investment and Jobs Act).  
19 This requirement applies to the following categories of products and materials that  
20 are permanently incorporated into the project.  
21

22 **(1)** Iron or Steel Products, 23 CFR § 635.410 (Buy America).  
23

24 **(2)** Construction Materials, 2 CFR Part 184 (BABA).  
25

26 **(3)** Manufactured Products, 23 CFR § 635.410 (Buy America).  
27

28 **(4)** Other materials, including BABA Section 70917(c) materials.  
29

30 An article, material, or supply should not be considered to fall into multiple  
31 categories, except for precast concrete products and ITS and electronic hardware  
32 system cabinets and enclosures which are designated as falling into 2 categories:  
33 Manufactured Products and Steel or Iron in accordance with 23CFR  
34 635.410(c)(2)(i) and (ii) and 106.11(C). The classification of an article, material, or  
35 supply into the categories must be based on its status at the time it is brought to  
36 the work site for incorporation into an infrastructure project. In general, the work  
37 site is the location of the infrastructure project at which the iron, steel,  
38 manufactured products, and construction materials will be incorporated.  
39

40 **(A) Iron and Steel Products.** For Federal-aid projects, steel and iron  
41 products permanently incorporated into the project shall be melted and  
42 manufactured in the United States in accordance with 23 CFR § 635.410  
43 Buy America Requirements.  
44

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Steel or iron products means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both and the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product, and a good faith estimate of the cost of iron or steel components.

Manufacturing includes any process that modifies the chemical content, physical shape or size, or final finish of a product. The manufacturing process begins with initial melting and mixing and continues through fabrication (cutting, drilling, welding, bending, etc.) and coating. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron.

**(B) Construction Materials.** Construction materials mean articles, materials, or supplies that consist of only one of the items listed below, except as provided in Subsection 106.11(C) – Manufactured Products subparagraphs (1) and (2). All manufacturing processes, as defined in 2 CFR § 184.6 for these construction materials, must occur in the United States.

- (1) Non-ferrous metals.
- (2) Plastic and polymer-based products such as:
  - (a) Polyvinylchloride.
  - (b) Composite building materials.
  - (c) Polymers used in fiber optic cables.
- (3) Glass (including optic glass).
- (4) Fiber optic cable (including drop cable).
- (5) Optical fiber.
- (6) Lumber.
- (7) Engineered wood.
- (8) Drywall.

89 BABA Section 70917(c) materials, as defined in 2 CFR § 184.3, do  
90 not require domestic sourcing or domestic material certification. BABA  
91 Section 70917(c) materials means:

- 92
- 93 (1) Cement and cementitious materials.
  - 94
  - 95 (2) Aggregates such as stone, sand, or gravel.
  - 96
  - 97 (3) Aggregate binding agents or additives.
  - 98

99 **(C) Manufactured Products.** Buy America requirements apply to  
100 manufactured products. Manufactured products are defined as articles,  
101 materials, or supplies that have been processed into a specific form and  
102 shape or combined with other articles, materials, or supplies to create a  
103 product with different properties than the individual articles, materials, or  
104 supplies. For Federal-aid projects, all manufactured products must be  
105 produced in the United States.

106

107 For projects let on or after October 1, 2025, manufactured products  
108 shall be manufactured, including final assembly, in the United States.

109

110 For projects let on or after October 1, 2026, manufactured products  
111 shall be manufactured, including final assembly, in the United States. The  
112 cost of the components of the manufactured product that are mined,  
113 produced, or manufactured in the United States shall be greater than 55  
114 percent of the total cost of all components of the manufactured product.

115

- 116 (1) Precast Concrete – Precast Concrete products that are  
117 classified as manufactured products, components of precast  
118 concrete products that consist wholly or predominantly of iron or steel  
119 or a combination of both, shall also meet the requirements of  
120 Subsection 106.11(A) – Iron and Steel Products.

121

- 122 (2) Intelligent Transportation and Electronic Hardware Systems –  
123 Intelligent transportation systems and other electronic hardware  
124 systems that are installed in the highway right of way or other real  
125 property and classified as manufactured products. The cabinets or  
126 other enclosures of such systems that consist wholly or  
127 predominantly of iron or steel or a combination of both shall also  
128 meet the requirements of Subsection 106.11(A) – Iron and Steel  
129 Products.

130

131 **(D) Contractor Domestic Materials Preference (DMP) Form.** The  
132 Prime Contractor shall provide a Contractor Domestic Materials Preference  
133 Form using the E-Construction platform. A DMP form must be submitted for  
134 iron, steel, construction materials, and manufactured products delivered to  
135 the project and permanently incorporated into the work. The Prime  
136 Contractor shall provide supporting documentation to assure the article,  
137 material, or supply meets the Domestic Materials Procurement Preference  
138 requirements as established in the Buy America Act (1978 Surface  
139 Transportation Assistance Act) and the Build America, Buy America (BABA)  
140 Act (2021 Infrastructure Investment and Jobs Act).

1           **SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

2  
3       Make the following amendments to said Section:

4  
5       **(I)**       Amend **Section 107.01 Insurance Requirements** from lines 5 to 81 to  
6       read as follows:

7  
8           **“(A) Obligation of Contractor.** Contractor shall not commence any  
9       work until it obtains, at its own expense, all required insurance described  
10      herein. Such insurance shall be provided by an insurance company  
11      authorized by the laws of the State to issue such insurance in the State of  
12      Hawaii. Coverage by a “Non-Admitted” carrier is permissible provided the  
13      carrier has a Best’s Rating of “A-VII” or better. The Contractor shall  
14      maintain and ensure all insurance policies are current for the full period of  
15      the contract until final acceptance of the work by the State.

16  
17           The Certificate of Insurance shall contain: a clause that it is agreed  
18      that any insurance maintained by the State of Hawaii will apply in excess  
19      of, and not contribute with, insurance provided by this policy; and shall be  
20      accompanied by endorsement form CG2010 or equivalent naming the  
21      State as an additional insured to the policy which status shall be  
22      maintained for the full period of the contract until final acceptance of the  
23      work by State.

24  
25           The Contractor shall obtain all required insurance as part of the  
26      contract price. Where there is a requirement for the State of Hawaii and  
27      its officers and employees to be named as additional insureds under any  
28      Contractor’s insurance policy, before the State of Hawaii issues the Notice  
29      to Proceed, the Contractor shall obtain and submit to the Engineer a  
30      Certificate of Insurance and a written policy endorsement that confirms the  
31      State of Hawaii and its officers and employees are additional insureds for  
32      the specific State project number and project title under such insurance  
33      policies. The written policy endorsement must be issued by the insurance  
34      company insuring the Contractor for the specified policy type or by an  
35      agent of such insurance company who is vested with the authority to issue  
36      a written policy endorsement. The insurer’s agent shall also submit  
37      written confirmation of such authority to bind the insurer. Any delays in  
38      the issuance of the Notice to Proceed attributed to the failure to obtain the  
39      proof of the State of Hawaii and its officers and employees’ additional  
40      insured status shall be charged to the Contractor.

41  
42           A mere Certificate of Insurance issued by a broker who represents  
43      the Contractor (but not the Contractor’s insurer), or by any other party who  
44      is not authorized to contractually name the State as an additional insured  
45      under the Contractor’s insurance policy, is not sufficient to meet the  
46      Contractor’s insurance obligations.

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Certificates shall contain a provision that coverages being certified will not be cancelled or materially changed without giving the Engineer at least thirty (30) days prior written notice. Contractor will immediately provide written notice to the Director should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, reduced in scope or coverage, or not renewed upon expiration. Should any policy be canceled before final acceptance of the work by the State, and the Contractor fails to immediately procure replacement insurance as specified, the State, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due or to become due to the Contractor.

Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the State harmless pursuant to other provisions of this contract. In no instance will the State's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including but not limited to traffic detour work, barricades, warnings, diversions, lane closures, and other work performed outside the work area and all change order work.

The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.

**(B) Types of Insurance.** Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by any subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

92 (1) **Workers' Compensation.** The Contractor shall obtain  
93 worker's compensation insurance for all persons whom they  
94 employ in carrying out the work under this contract. This insurance  
95 shall be in strict conformity with the requirements of the most  
96 current and applicable State of Hawaii Worker's Compensation  
97 Insurance laws in effect on the date of the execution of this contract  
98 and as modified during the duration of the contract.  
99

100 (2) **Auto Liability.** The Contractor shall obtain Auto Liability  
101 Insurance covering all owned, non-owned and hired autos with a  
102 Combined single Limit of not less than \$1,000,000 per occurrence  
103 for bodily injury and property damage with the State of Hawaii  
104 named as additional insured. Refer to SPECIAL CONDITIONS for  
105 any additional requirements.  
106

107 (3) **General Liability.** The Contractor shall obtain General  
108 Liability insurance with a limit of not less than \$2,000,000 per  
109 occurrence and in the Aggregates for each of the following:  
110

111 (a) Products - Completed/Operations Aggregate,

112 (b) Personal & Advertising Injury, and

113 (c) Bodily Injury & Property Damage  
114  
115  
116

117 The General Liability insurance shall include the State as an  
118 Additional Insured. The required limit of insurance may be provided  
119 by a single policy or with a combination of primary and excess  
120 policies. Refer to SPECIAL CONDITIONS for any additional  
121 requirements.  
122

123 (4) **Builders Risk For All Work.** The Contractor shall take out  
124 a policy of builder's risk insurance for the full replacement value of  
125 the project work; from a company licensed or otherwise authorized  
126 to do business in the State of Hawaii; naming the State as an  
127 additional insured under each policy; and covering all work, labor,  
128 and materials furnished by such Contractor and all its  
129 subcontractors against loss by fire, windstorm, tsunamis,  
130 earthquakes, lightning, explosion, other perils covered by the  
131 standard Extended Coverage Endorsement, vandalism, and  
132 malicious mischief. Refer to SPECIAL CONDITIONS for any  
133 additional requirements."  
134  
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**END OF SECTION 107**

1 Amend **Section 108 – PROSECUTION AND PROGRESS** to read as follows:  
2

3 **“SECTION 108 – PROSECUTION AND PROGRESS**  
4

5  
6 **108.01 Notice to Proceed (NTP).** A Notice To Proceed will be issued to the  
7 Contractor not more 30 calendar days after the contract certification date. The  
8 Engineer may suspend the contract before issuing the Notice To Proceed, in which  
9 case the Contractor’s remedies are exclusively those set forth in Subsection 108.10  
10 – Suspension of Work.  
11

12 The Contractor shall be allowed up to 14 calendar days after the Notice to  
13 Proceed to begin physical work. The Start Work Date will be established when this  
14 period ends or on the actual day that physical work begins, whichever is first.  
15 Charging of Contract Time will begin on the Start Work Date. The Contractor shall  
16 notify the Engineer, in writing, at least five working days before beginning physical  
17 work.  
18

19 In the event that the Contractor fails to start physical work within the time  
20 specified, the Engineer may terminate the contract in accordance with Subsection  
21 108.11 – Termination of Contract for Cause.  
22

23 During the period between the Notice to Proceed and the Start Work Date  
24 the Contractor should adjust work forces, equipment, schedules, and procure  
25 materials and required permits, prior to beginning physical work.  
26

27 Any physical work done prior to the Start Work Date will be considered  
28 unauthorized work. If the Engineer does not direct that the unauthorized work be  
29 removed, it shall be paid for after the Start Work Date and only if it is acceptable.  
30

31 In the event that the Engineer establishes, in writing, a Start Work Date that  
32 is beyond 60 calendar days from the Notice to Proceed date, the Contractor may  
33 submit a claim in accordance with, Subsection 107.15 – Disputes and Claims for  
34 increased labor and material costs which are directly attributable to the delay  
35 beyond the first 60 calendar days after the Notice to Proceed date.  
36

37 The Contractor shall notify the Engineer at least 24 hours before restarting  
38 physical work after a suspension of work pursuant to Subsection 108.10 –  
39 Suspension of Work.  
40

41 Once physical work has begun, the Contractor shall work expeditiously and  
42 pursue the work diligently to completion with the contract time. If a portion of the  
43 work is to be done in stages, the Contractor shall leave the area safe and usable for  
44 the user agency and the public at the end of each stage.  
45

## 108.03

46 **108.02 Prosecution of Work.** Unless otherwise permitted by the Engineer, in  
47 writing, the Contractor shall not commence with physical construction unless  
48 sufficient materials and equipment are available for either continuous construction  
49 or completion of a specified portion of the work.

50  
51 **108.03 Preconstruction Submittals.** The awardee shall submit to the Engineer  
52 for information and review the pre-construction submittals within 21 calendar days  
53 from award. Until the items listed below are received and found acceptable by the  
54 Engineer, the Contractor shall not start physical work unless otherwise authorized  
55 to do so in writing and subject to such conditions set by the Engineer. Charging of  
56 Contract Time will not be delayed, and additional contract time will not be granted  
57 due to Contractor delay in submitting acceptable preconstruction submittals. No  
58 progress payment will be made to the Contractor until the Engineer acknowledges,  
59 in writing, receipt of the following preconstruction submittals acceptable to the  
60 Engineer:

- 61
- 62 (1) List of the Superintendent and other Supervisory Personnel, and their  
63 contact information.
  - 64
  - 65 (2) Name of person(s) authorized to sign for the Contractor.
  - 66
  - 67 (3) Work Schedule including hours of operation.
  - 68
  - 69 (4) Initial Progress Schedule (See Subsection 108.06 – Progress  
70 Schedule).
  - 71
  - 72 (5) Water Pollution and Siltation Control Submittals, including Site-  
73 Specific Best Management Practice Plan.
  - 74
  - 75 (6) Solid Waste Disposal form.
  - 76
  - 77 (7) Tax Rates.
  - 78
  - 79 (8) Insurance Rates.
  - 80
  - 81 (9) Certificate of Insurance, satisfactory to the Engineer, indicating that  
82 the Contractor has in place all insurance coverage required by the contract  
83 documents.
  - 84
  - 85 (10) Schedule of agreed prices.
  - 86
  - 87 (11) List of suppliers.
  - 88
  - 89 (12) Traffic Control Plan, if applicable.

90 **108.04 Character and Proficiency of Workers.** The Contractor shall at all times  
91 provide adequate supervision and sufficient labor and equipment for prosecuting the  
92 work to full completion in the manner and within the time required by the contract.  
93 The superintendent and all other representatives of the Contractor shall act in a civil  
94 and honest manner in all dealings with the Engineer, all other State officials and  
95 representatives, and the public, in connection with the work.

96  
97 All workers shall possess the proper license, certification, job classification,  
98 skill, training, and experience necessary to properly perform the work assigned to  
99 them.

100  
101 The Engineer may direct the removal of any worker(s) who does not carry  
102 out the assigned work in a proper and skillful manner or who is disrespectful,  
103 intemperate, violent, or disorderly. The worker shall be removed forthwith by the  
104 Contractor and will not work again without the written permission of the Engineer.

105  
106 **108.05 Contract Time.**

107  
108 **(A) Calculation of Contract Time.** When the contract time is on a  
109 working day basis, the total contract time allowed for the performance of the  
110 work will be the number of working days shown in the contract plus any  
111 additional working days authorized in writing as provided hereinafter. The  
112 count of elapsed working days to be charged against contract time, will begin  
113 from the Start Work Date and will continue consecutively to the date of  
114 Substantial Completion. When multiple shifts are used to perform the work,  
115 the State will not consider the hours worked over the normal eight working  
116 hours per day or night as an additional working day.

117  
118 When the contract is on a calendar day basis, the total contract time  
119 allowed for the performance of the work will be the number of days shown in  
120 the contract plus any additional days authorized in writing as provided  
121 hereinafter. The count of elapsed days to be charged against contract time  
122 will begin from the Start Work Date and will continue consecutively to the  
123 date of Substantial Completion. The Engineer will exclude days elapsing  
124 between the orders of the Engineer to suspend work and resume work for  
125 suspensions not the fault of the Contractor.

126  
127 **(B) Modifications of Contract Time.** Whenever the Contractor believes  
128 that an extension of contract time is justified, the Contractor shall serve  
129 written notice on the Engineer not more than five working days after the  
130 occurrence of the event that causes a delay or justifies a contract time  
131 extension. Contract time may be adjusted for the following reasons or  
132 events, but only if and to the extent the critical path has been affected:

133  
134 **(1) Changes in the Work, Additional Work, and Delays Caused**  
135 **by the State.** If the Contractor believes that an extension of time is

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justified on account of any act or omission by the State, and is not adequately provided for in a field order or change order, it must request the additional time as provided above. At the request of the Engineer, the Contractor must show how the critical path will be affected and must also support the time extension request with schedules, as well as statements from its subcontractors, suppliers, or manufacturers, as necessary. Claims for compensation for any altered or additional work will be determined pursuant to Subsection 104.02 – Changes.

Additional time to perform the extra work will be added to the time allowed in the contract without regard to the date the change directive was issued, even if the contract completion date has passed. A change requiring time issued after contract time has expired will not constitute an excusal or waiver of pre-existing Contractor delay.

**(2) Delay for Permits.** For delays in the routine application and processing time required to obtain necessary permits, including permits to be obtained from State agencies, the Engineer may grant an extension provided that the permit takes longer than 30 days to acquire and the delay is not caused by the Contractor, and provided that as soon as the delay occurs, the Contractor notifies the Engineer in writing that the permits are not available. Permits required by the contract that take less than 30 days to acquire from the time which the appropriate documents are granted shall be acquired between Notice to Proceed and Start Work Date or accounted for in the contractor’s progress schedule. Time extensions will be the exclusive relief granted on account of such delays.

**(3) Delays Beyond Contractor’s Control.** For delays caused by acts of God, a public enemy, fire, inclement weather days or adverse conditions resulting therefrom, earthquakes, floods, epidemics, quarantine restrictions, labor disputes impacting the Contractor or the State, freight embargoes and other reasons beyond the Contractor’s control, the Contractor may be granted an extension of time provided that:

**(a)** In the written notice of delay to the Engineer, the Contractor describes possible effects on the completion date of the contract. The description of delays shall:

1. State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.

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2. Include copies of pertinent documentation to support the time extension request.

3. Cite the anticipated period of delay and the time extension requested.

4. State either that the above circumstances have been cleared and normal working conditions restored as of a certain day or that the above circumstances will continue to prevent completion of the project.

(b) The Contractor shall notify the Engineer in writing when the delay ends. Time extensions will be the exclusive relief granted and no additional compensation will be paid the Contractor for such delays.

**(4) Delays in Delivery of Materials or Equipment.** For delays in delivery of materials or equipment, which occur as a result of unforeseeable causes beyond the control and without fault of the Contractor, its subcontractor(s) or supplier(s), time extensions shall be the exclusive relief granted and no additional compensation will be paid the Contractor on account of such delay. The delay shall not exceed the difference between the originally scheduled delivery date and the actual delivery date. The Contractor may be granted an extension of time provided that it complies with the following procedures:

(a) The Contractor's written notice to the Engineer must describe the delays and state the effect such delays may have on the critical path.

(b) The Contractor, if requested, must submit to the Engineer within five days after a firm delivery date for the material and equipment is established, a written statement regarding the delay. The Contractor must justify the delay as follows:

1. State specifically all reasons for the delay. Explain in a detailed chronology the effect of the delay on the critical path.

2. Submit copies of purchase order(s), factory invoice(s), bill(s) of lading, shipping manifest(s), delivery tag(s), and any other documents to support the time extension request.

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3. Cite the start and end date of the delay and the time extension requested.

**(5) Delays for Suspension of Work.** When the performance of the work is totally suspended for one or more days (calendar or working days, as appropriate) by order of the Engineer in accordance with Subsections 108.10(A)(1), 108.10(A)(2), or 108.10(A)(5) the number of days from the effective date of the Engineer’s order to suspend operations to the effective date of the Engineer’s order to resume operations shall not be counted as contract time and the contract completion date will be adjusted. During periods of partial suspensions of the work, the Contractor will be granted a time extension only if the partial suspension affects the critical path. If the Contractor believes that an extension of time is justified for a partial suspension of work, it must request the extension in writing at least five working days before the partial suspension will affect the critical operation(s) in progress. The Contractor must show how the critical path was increased based on the status of the work and must also support its claim if requested, with statements from its subcontractors. A suspension of work will not constitute a waiver of pre-existing Contractor delay.

**(6) Contractor Caused Delays.** No time extension will be granted under the following circumstances:

**(a)** Delays within the Contractor’s control in performing the work caused by the Contractor, subcontractor, supplier, or any combination thereof.

**(b)** Delays within the Contractor’s control in arrival of materials and equipment caused by the Contractor, subcontractor, supplier, or any combination thereof, in ordering, fabricating, and delivery.

**(c)** Delays requested for changes which do not affect the critical path.

263 (d) Delays caused by the failure of the Contractor to make  
264 submittals in a timely manner for review and acceptance by the  
265 Engineer, such as but not limited to shop drawings, descriptive  
266 sheets, material samples, and color samples except as covered  
267 in Subsection 108.05(B)(3) – Delays Beyond Contractor’s  
268 Control and 108.05(B)(4) – Delays in Delivery of Materials or  
269 Equipment.

271 (e) Delays caused by the failure to submit sufficient  
272 information and data in a timely manner in the proper form in  
273 order to obtain necessary permits related to the work.

275 (f) Failure to follow the procedure within the time allowed  
276 by contract to request a time extension.

278 (g) Failure of the Contractor to provide evidence sufficient  
279 to support the time extension request.

281 (7) **Reduction in Time.** If the State deletes or modifies any portion  
282 of the work, an appropriate reduction of contract time may be made in  
283 accordance with Subsection 104.02 - Changes.

284  
285 **108.06 Progress Schedules.**

286 (A) **Forms of Schedule.** All schedules shall be submitted using the  
287 specific computer program designated in the bid documents. If no such  
288 scheduling software program is designated, then all schedules shall be  
289 submitted using the latest version of Microsoft Project by Microsoft or  
290 approved equivalent software program.

292  
293 Schedule submittals shall be as follows:

294  
295 (1) **For Contracts \$2,000,000 or less or For Contract Time 100**  
296 **Working Days or 140 Calendar Days or Less.** For contracts of  
297 \$2,000,000 or less or for contract time of 100 working days or 140  
298 calendar days or less, the progress schedule will be a Time Scaled  
299 Logic Diagram (TSLD). The Contractor shall submit a TSLD submittal  
300 package meeting the following requirements and having these  
301 essential and distinctive elements:

302  
303 (a) The major features of work, such as but not limited to  
304 BMP installation, grubbing, roadway excavation, structure  
305 excavation, structure construction, shown in the chronological  
306 order in which the Contractor proposes to work that feature or  
307 work and its location on the project. The schedule shall account  
308 for normal inclement weather, unusual soil or other conditions

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that may influence the progress of the work, schedules, and coordination required by any utility, off or on site fabrications, and other pertinent factors that relate to progress;

**(b)** All features listed or not listed in the contract documents that the Contractor considers a controlling factor for the timely completion of the contract work.

**(c)** The time span and sequence of the activities or events for each feature, and its interrelationship and interdependencies in time and logic to other features in order to complete the project.

**(d)** The total anticipated time necessary to complete work required by the contract.

**(e)** A chronological listing of critical intermediate dates or time periods for features or milestones or phases that can affect timely completion of the project.

**(f)** Major activities related to the location on the project.

**(g)** Non-construction activities, such as submittal and acceptance periods for shop drawings and material, procurement, testing, fabrication, mobilization, and demobilization or order dates of long lead material.

**(h)** Set schedule logic for out of sequence activities to retain logic. In addition, open ends shall be non-critical.

**(i)** Show target bars for all activities.

**(j)** Vertical and horizontal sight lines both major and minor shall be used as well as a separator line between groups. The Engineer will determine frequency and style.

**(k)** The file name, print date, revision number, data and project title and number shall be included in the title block.

**(l)** Have columns with the appropriate data in them for activity ID, description, original duration, remaining duration, early start, early finish, total float, percent complete, resources. The resource column shall list who is responsible for the work to be done in the activity. These columns shall be to the left of the bar chart.

355 **(2) For Contracts Which Have A Contract Amount More Than**  
356 **\$2,000,000 Or Having A Contract Time Of More Than 100 Working**  
357 **Days Or 140 Calendar Days.** For contracts which have a contract  
358 amount more than \$2,000,000 or contract time of more than 100  
359 working days or 140 calendar days, the Contractor shall submit a  
360 Timed-Scaled Logic Diagram (TSLD) meeting the following  
361 requirements and having these essential and distinctive elements:  
362

363 **(a)** The information and requirements listed in Subsection  
364 108.06(A)(1) – For Contracts \$2,000,000 or Less or For  
365 Contract Time 100 Working Days or 140 Calendar Days or  
366 Less.

367  
368 **(b)** Additional reports and graphics available from the  
369 software as requested by the Engineer.

370  
371 **(c)** Sufficient detail to allow at least weekly monitoring of the  
372 Contractor and subcontractor's operations.

373  
374 **(d)** The time scaled schematic shall be on a calendar or  
375 working days basis. What will be used shall be determined by  
376 how the contract keeps track of time. It will be the same. Plot  
377 the critical calendar dates anticipated.

378  
379 **(e)** Breakdown of activity, such as forming, placing  
380 reinforcing steel, concrete pouring and curing, and stripping in  
381 concrete construction. Indicate location of work to be done in  
382 such detail that it would be easily determined where work would  
383 be occurring within approximately 200 feet.

384  
385 **(f)** Latest start and finish dates for critical path activities.

386  
387 **(g)** Identify responsible subcontractor, supplier, and others  
388 for their respective activity.

389  
390 **(h)** No individual activity shall have duration of more than 20  
391 calendar days unless requested and approved by the Engineer.

392  
393 **(i)** All activities shall have work breakdown structure codes  
394 and activity codes. The activity codes shall have coding that  
395 incorporates information for phase, location, who is responsible  
396 for doing work and type of operation and activity description.

397  
398 **(j)** Incorporate all physical access and availability  
399 restraints.  
400

401           **(B) Inspection and Testing.** All schedules shall provide reasonable time  
402 and opportunity for the Engineer to inspect and test each work activity.

403  
404           **(C) Engineer’s Acceptance of Progress Schedule.** The submittal of,  
405 and the Engineer’s receipt of any progress schedule, shall not be deemed an  
406 agreement to modify any terms or conditions of the contract. Any  
407 modifications to the contract terms and conditions that appear in or may be  
408 inferred from an acceptable schedule will not be valid or enforceable unless  
409 and until the Engineer exercises discretion to issue an appropriate change  
410 order. Nor shall any submittal or receipt imply the Engineer’s approval of the  
411 schedule’s breakdown, its individual elements, any critical path that may be  
412 shown, nor shall it obligate the State to make its personnel available outside  
413 normal working hours or the working hours established by the Contract in  
414 order to accommodate such schedule. The Contractor has the risk of all  
415 elements (whether or not shown) of the schedule and its execution. No claim  
416 for additional compensation, time, or both, shall be made by the Contractor  
417 or recognized by the Engineer for delays during any period for which an  
418 acceptable progress schedule or an updated progress schedule as required  
419 by Subsection 108.06(E) – Contractor’s Continuing Schedule Submittal  
420 Requirements had not been submitted. Any acceptance or approval of the  
421 schedule shall be for general format only and shall not be deemed an  
422 agreement by the State that the construction means, methods, and resources  
423 shown on the schedule will result in work that conforms to the contract  
424 requirements or that the sequences or durations indicated are feasible.

425  
426           **(D) Initial Progress Schedule.** The Contractor shall submit an initial  
427 progress schedule. The initial progress schedule shall consist of the  
428 following:

- 429           **(1)** Four sets of the TSLD schedule.
- 430
- 431           **(2)** All the software files and data to re-create the TSLD in a  
432 computerized software format as specified by the Engineer.
- 433
- 434           **(3)** A listing of equipment that is anticipated to be used on the  
435 project. Including the type, size, make, year of manufacture, and all  
436 information necessary to identify the equipment in the Rental Rate  
437 Blue Book for Construction Equipment.
- 438
- 439           **(4)** An anticipated manpower requirement graph plotting contract  
440 time and total manpower requirement. This may be superimposed  
441 over the payment graph.
- 442
- 443

444 (5) A Method Statement that is a detailed narrative describing the  
 445 work to be done and the method by which the work shall be  
 446 accomplished for each major activity. A major activity is an activity  
 447 that:

- 448
- 449 (a) Has a duration longer than five days.
- 450
- 451 (b) Is a milestone activity.
- 452
- 453 (c) Is a contract item that exceeds \$10,000 on the contract  
 454 cost proposal.
- 455
- 456 (d) Is a critical path activity.
- 457
- 458 (e) Is an activity designated as such by the Engineer.
- 459

460 Each Method Statement shall include the following items  
 461 needed to fulfill the schedule:

- 462
- 463 (a) Quantity, type, make, and model of equipment.
- 464
- 465 (b) The manpower to do the work, specifying worker  
 466 classification.
- 467
- 468 (c) The production rate per eight hour day, or the working  
 469 hours established by the contract documents needed to meet  
 470 the time indicated on the schedule. If the production rate is not  
 471 for eight hours, the number of working hours shall be indicated.
- 472
- 473 (6) Two sets of color time-scaled project evaluation and review  
 474 technique charts ("PERT") using the activity box template of Logic –  
 475 Early Start or such other template designated by the Engineer.
- 476

477 If the contract documents establish a sequence or order for the work,  
 478 the initial progress schedule shall conform to such sequence or order.

479

480 **(E) Contractor's Continuing Schedule Submittal Requirements.** After  
 481 the acceptance of the initial TSLD and when construction starts, the  
 482 Contractor shall submit four plotted progress schedules, two PERT charts,  
 483 and reports on all construction activities every two weeks (bi-weekly). This  
 484 scheduled bi-weekly submittal shall also include an updated version of the  
 485 project schedule in a computerized software format as specified by the  
 486 Engineer. The submittal shall have all the information needed to re-create  
 487 that time period's TSLD plot and reports. The bi-weekly submittal shall  
 488 include, but not limited to, an update of activities based on actual durations,

## 108.06

489 all new activities and any changes in duration or start or finish dates of any  
490 activity.

491  
492 The Contractor shall submit with every update, in report form  
493 acceptable to the Engineer, a list of changes to the progress schedule since  
494 the previous schedule submittal. The Engineer may change the frequency  
495 of the submittal requirements but may not require a submittal of the schedule  
496 to be more than once a week. The Engineer may decrease the frequency of  
497 the submittal of the bi-weekly schedule.

498  
499 The Contractor shall submit updates of the anticipated work  
500 completion graph, equipment listing, manpower requirement graph or  
501 method statement when requested by the Engineer. The Contractor shall  
502 submit such updates within 4 calendar days from the date of the request by  
503 the Engineer.

504  
505 The Engineer may withhold progress payment until the Contractor is  
506 in compliance with all schedule update requirements

507  
508 **(F) Float.** All float appearing on a schedule is a shared commodity. Float  
509 does not belong to or exist for the exclusive use or benefit of either the State  
510 or the Contractor. The State or the Contractor has the opportunity to use  
511 available float until it is depleted. Float has no monetary value.

512  
513 **(G) Scheduled Meetings.** The Contractor shall meet on a bi-weekly basis  
514 with the Engineer to review the progress schedule. The Contractor shall have  
515 someone attending the meeting that can answer all questions on the TSLD  
516 and other schedule related submittals.

517  
518 **(H) Accelerated Schedule; Early Completion.** If the Contractor submits  
519 an accelerated schedule (shorter than the contract time), the Engineer's  
520 review and acceptance of an accelerated schedule does not constitute an  
521 agreement or obligation by the State to modify the contract time or completion  
522 date. The Contractor is solely responsible for and shall accept all risks and  
523 any delays, other than those that can be directly and solely attributable to the  
524 State, that may occur during the work, until the contract completion date. The  
525 contract time or completion date is established for the benefit of the State  
526 and cannot be changed without an appropriate change order or Substantial  
527 Completion granted by the State. The State may accept the work before the  
528 completion date is established, but is not obligated to do so.

529 If the TSLD indicates an early completion of the project, the Contractor  
530 shall, upon submittal of the schedule, cooperate with the Engineer in  
531 explaining how it will be achieved. In addition, the Contractor shall submit  
532 the above explanation in writing which shall include the State's part, if any, in  
533 achieving the early completion date. Early completion of the project shall not  
534 rely on changes to the Contract Documents unless approved by the  
535 Engineer.  
536

537 **(I) Contractor Responsibilities.** The Contractor shall promptly respond  
538 to any inquiries from the Engineer regarding any schedule submission. The  
539 Contractor shall adjust the schedule to address directives from the Engineer  
540 and shall resubmit the TSLD package to the Engineer until the Engineer finds  
541 it acceptable.  
542

543 The Contractor shall perform the work in accordance with the  
544 submitted TSLD. The Engineer may require the Contractor to provide  
545 additional work forces and equipment to bring the progress of the work into  
546 conformance with the TSLD at no increase in contract price or contract time  
547 whenever the Engineer determines that the progress of the work does not  
548 insure completion within the specified contract time.  
549

550 **108.07 Weekly Meeting.** In addition to the bi-weekly schedule meetings, the  
551 Contractor shall be available to meet once a week with the Engineer at the time and  
552 place as determined by the Engineer to discuss the work and its progress including  
553 but not limited to, the progress of the project, potential problems, coordination of  
554 work, submittals, erosion control reports, etc. The Contractor's personnel attending  
555 shall have the authority to make decisions and answer questions.  
556

557 The Contractor shall bring to weekly meetings a detailed work schedule  
558 showing the next three weeks' work. Number of copies of the detailed work  
559 schedule to be submitted will be determined by the Engineer. The three-week  
560 schedule is in addition to the TSLD and shall in no way be considered as a substitute  
561 for the TSLD or vice versa. The three-week schedule shall show:  
562

563 **(a)** All construction events, traffic control and BMP related activities in  
564 such detail that the Engineer will be able to determine at what location and  
565 type of work will be done for any day for the next three weeks. This is for the  
566 State to use to plan its manpower requirements for that time period.  
567

568 **(b)** The duration of all events and delays.  
569

570 **(c)** The critical path clearly marked in red or marked in a manner that  
571 makes it clearly distinguishable from other paths and is acceptable to the  
572 Engineer.  
573

574 **(d)** Critical submittals and requests for information (RFI's).

**108.08**

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(e) The project title, project number, date created, period the schedule covers, Contractor's name and creator of the schedule on each page.

Two days prior to each weekly meeting, the Contractor shall submit a list of outstanding submittals, RFIs and issues that require discussion.

**108.08 Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time.** The actual amount of damages resulting from the Contractor's failure to complete the contract in a timely manner is difficult to accurately determine. Therefore, the amount of such damages shall be liquidated damages as set forth herein and in the special provisions. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract.

When the Contractor fails to reach substantial completion of the work for which liquidated damages are specified, within the time or times fixed in the contract or any extension thereof, in addition to all other remedies for breach that may be available to the State, the Contractor shall pay liquidated damages to the State, in the amount of \$ 2,000 per working day.

**(A) Liquidated Damages Upon Termination.** If the State terminates on account of Contractor's default, liquidated damages may be charged against the defaulting Contractor and its surety until final completion of work.

**(B) Liquidated Damages for Failure to Complete the Punchlist.** The Contractor shall complete the work on any punchlist created after the pre-final inspection, within the contract time or any extension thereof.

When the Contractor fails to complete the work on such punchlist within the contract time or any extension thereof, the Contractor shall pay liquidated damages to the State of 20 percent of the amount of liquidated damages established for failure to substantially complete the work within contract time. Liquidated damages shall not be assessed for the period between:

- (1) Notice from the Contractor that the project is substantially complete and the time the punchlist is delivered to the Contractor.
- (2) The date of the completion of punchlist as determined by the Engineer and the date of the successful final inspection, and
- (3) The date of the Final Inspection that results in Substantial Completion and the receipt by the Contractor of the written notice of Substantial Completion.

620           **(C) Actual Damages Recoverable If Liquidated Damages Deemed**  
621           **Unenforceable.** In the event a court of competent jurisdiction holds that any  
622           liquidated damages assessed pursuant to this contract are unenforceable,  
623           the State will be entitled to recover its actual damages for Contractor's failure  
624           to complete the work, or any designated portion of the work within the time  
625           set by the contract.

626  
627           **108.09 Rental Fees for Unauthorized Lane Closure or Occupancy.** In  
628           addition to all other remedies available to the State for Contractor's breach of the  
629           terms of the contract, the Engineer will assess the rental fees in the amount of \$500  
630           for every one-to fifteen-minute increment for each roadway lane closed to public use  
631           or occupied beyond the time periods authorized in the contract or by the Engineer.  
632           The maximum amount assessed per day shall be \$5,000. The State may, at its  
633           discretion, deduct the amount from monies due or that may become due under the  
634           contract. The rental fee may be waived in whole or part if the Engineer determines  
635           that the unauthorized period of lane closure or occupancy was due to factors beyond  
636           the control of the Contractor. Equipment breakdown is not a cause to waive  
637           liquidated damages.

638  
639           **108.10 Suspension of Work.**

640  
641           **(A) Suspension of Work.** The Engineer may, by written order, suspend  
642           the performance of the work, either in whole or in part, for such periods as  
643           the Engineer may deem necessary, for any cause, including but not limited  
644           to:

645  
646                   **(1)** Weather or soil conditions considered unsuitable for  
647                   prosecution of the work.

648  
649                   **(2)** Whenever a redesign that may affect the work is deemed  
650                   necessary by the Engineer.

651  
652                   **(3)** Unacceptable noise or dust arising from the construction even  
653                   if it does not violate any law or regulation.

654  
655                   **(4)** Failure on the part of the Contractor to:

656  
657                           **(a)** Correct conditions unsafe for the general public or for  
658                           the workers.

659  
660                           **(b)** Carry out orders given by the Engineer.

661 (c) Perform the work in strict compliance with the provisions  
662 of the contract.

663  
664 (d) Provide adequate supervision on the jobsite.  
665 (5) The convenience of the State.  
666

667 (B) **Partial and Total Suspension.** Suspension of work on some but not  
668 all items of work shall be considered a “partial suspension”. Suspension of  
669 work on all items shall be considered “total suspension”. The period of  
670 suspension shall be computed from the date set out in the written order for  
671 work to cease until the date of the order for work to resume.  
672

673 (C) **Reimbursement to Contractor.** In the event that the Contractor is  
674 ordered by the Engineer in writing as provided herein to suspend all work  
675 under the contract for the reasons specified in Subsections 108.10(A)(2),  
676 108.10(A)(3), or 108.10(A)(5) of the “Suspension of Work” paragraph, the  
677 Contractor may be reimbursed for actual direct costs incurred on work at the  
678 jobsite, as authorized in writing by the Engineer, including costs expended  
679 for the protection of the work. An allowance of 5 percent for indirect  
680 categories of delay costs will be paid on any reimbursed direct costs,  
681 including extended branch and home-office overhead and delay impact  
682 costs. No allowance will be made for anticipated profits. Payment for  
683 equipment which is ordered to standby during such suspension of work shall  
684 be made as described in Subsection 109.06(H) - Idle and Standby  
685 Equipment.  
686

687 (D) **Cost Adjustment.** If the performance of all or part of the work is  
688 suspended for reasons beyond the control of the Contractor except an  
689 adjustment shall be made for any increase in cost of performance of this  
690 contract (excluding profit) necessarily caused by such suspension, and the  
691 contract modified in writing accordingly.  
692

693 However, no adjustment to the contract price shall be made for any  
694 suspension, delay, or interruption:  
695

696 (1) For weather related conditions.  
697

698 (2) To the extent that performance would have been so  
699 suspended, delayed, or interrupted by any other cause, including the  
700 fault or negligence of the Contractor.  
701

702 (3) Or, for which an adjustment is provided for or excluded under  
703 any other provision of this Contract.  
704

705 **(E) Claims for Adjustment.** Any adjustment in contract price made shall  
 706 be determined in accordance with Subsections 104.02 – Changes and  
 707 104.06 – Methods of Price Adjustment.  
 708

709 Any claims for such compensation shall be filed in writing with the  
 710 Engineer within 30 days after the date of the order to resume work or the  
 711 claim will not be considered. The claim shall conform to the requirements of  
 712 Subsection 107.15(D) – Making of a Claim. The Engineer will take the claim  
 713 under consideration, may make such investigations as are deemed  
 714 necessary and will be the sole judge as to the equitability of the claim. The  
 715 Engineer’s decision will be final.  
 716

717 **(F) No Adjustment.** No provision of this clause shall entitle the  
 718 Contractor to any adjustments for delays due to failure of its surety, the  
 719 cancellation or expiration of any insurance coverage required by the contract  
 720 documents, for suspensions made at the request of the Contractor, for any  
 721 delay required under the contract, for suspensions, either partial or whole,  
 722 made by the Engineer under Subsection 108.10(A)(4) of the “Suspension of  
 723 work” paragraph.  
 724

725 **108.11 Termination of Contract for Cause.**  
 726

727 **(A) Default.** If the Contractor refuses or fails to perform the work, or any  
 728 separable part thereof, with such diligence as will assure its completion within  
 729 the time specified in this contract, or any extension thereof, or commits any  
 730 other material breach of this contract, and further fails within seven days after  
 731 receipt of written notice from the Engineer to commence and continue  
 732 correction of the refusal or failure with diligence and promptness, the  
 733 Engineer may, by written notice to the Contractor, declare the Contractor in  
 734 breach and terminate the Contractor’s right to proceed with the work or the  
 735 part of the work as to which there has been delay or other breach of contract.  
 736 In such event, the State may take over the work, perform the same to  
 737 completion, by contract or otherwise, and may take possession of, and utilize  
 738 in completing the work, the materials, appliances, and plants as may be on  
 739 the site of the work and necessary therefore. Whether or not the Contractor’s  
 740 right to proceed with the work is terminated, the Contractor and the  
 741 Contractor’s sureties shall be liable for any damage to the State resulting  
 742 from the Contractor’s refusal or failure to complete the work within the  
 743 specified time.  
 744

745 **(B) Additional Rights and Remedies.** The rights and remedies of the  
 746 State provided in this contract are in addition to any other rights and remedies  
 747 provided by law.  
 748

749 **(C) Costs and Charges.** All costs and charges incurred by the State,  
 750 together with the cost of completing the work under contract, will be deducted

751 from any monies due or which would or might have become due to the  
752 Contractor had it been allowed to complete the work under the contract. If  
753 such expense exceeds the sum which would have been payable under the  
754 contract, then the Contractor and the surety shall be liable and shall pay the  
755 State the amount of the excess.  
756

757 In case of termination, the Engineer will limit any payment to the  
758 Contractor to the part of the contract satisfactorily completed at the time of  
759 termination. Payment will not be made until the work has satisfactorily been  
760 completed and all required documents, including the tax clearance required  
761 by Subsection 109.11 – Final Payment are submitted by the Contractor.  
762 Termination shall not relieve the Contractor or Surety from liability for  
763 liquidated damages.  
764

765 **(D) Erroneous Termination for Cause.** If, after notice of termination of  
766 the Contractor's right to proceed under this section, it is determined for any  
767 reason that good cause did not exist to allow the State to terminate as  
768 provided herein, the rights and obligations of the parties shall be the same  
769 as, and the relief afforded the Contractor shall be limited to, the provisions  
770 contained in Subsection 108.12 – Termination for Convenience.  
771

#### 772 **108.12 Termination For Convenience.**

773

774 **(A) Terminations.** The Director may, when the interests of the State so  
775 require, terminate this contract in whole or in part, for the convenience of the  
776 State. The Director will give written notice of the termination to the Contractor  
777 specifying the part of the contract terminated and when termination becomes  
778 effective.  
779

780 **(B) Contractor's Obligations.** The Contractor shall incur no further  
781 obligations in connection with the terminated work and on the date set in the  
782 notice of termination the Contractor shall stop work to the extent specified.  
783 The Contractor shall also terminate outstanding orders and subcontracts as  
784 they relate to the terminated work. The Contractor shall settle the liabilities  
785 and claims arising out of the termination of subcontracts and orders  
786 connected with the terminated work subject to the State's approval. The  
787 Engineer may direct the Contractor to assign the Contractor's right, title, and  
788 interest under terminated orders or subcontracts to the State. The Contractor  
789 must still complete the work not terminated by the notice of termination and  
790 may incur obligations as necessary to do so.  
791

792 **(C) Right to Construction and Goods.** The Engineer may require the  
793 Contractor to transfer title and to deliver to the State in the manner and to the  
794 extent directed by the Engineer, the following:

- 795 (1) Any completed work.  
796  
797 (2) Any partially completed construction, goods, materials, parts,  
798 tools, dies, jigs, fixtures, drawings, information, and contract rights  
799 (hereinafter called "construction material") that the Contractor has  
800 specifically produced or specially acquired for the performance of the  
801 terminated part of this contract.  
802  
803 (3) The Contractor shall protect and preserve all property in the  
804 possession of the Contractor in which the State has an interest. If the  
805 Engineer does not elect to retain any such property, the Contractor  
806 shall use its best efforts to sell such property and construction  
807 materials for the State's account in accordance with the standards of  
808 HRS Chapter 490:2-706.  
809
- 810 **(D) Compensation.**  
811
- 812 (1) The Contractor shall submit a termination claim specifying the  
813 amounts due because of the termination for convenience together with  
814 cost or pricing data, submitted to the extent required by HAR  
815 Subchapter 15, Chapter 3-122. If the Contractor fails to file a  
816 termination claim within one year from the effective date of  
817 termination, the Engineer may pay the Contractor, if at all, an amount  
818 set in accordance with Subsection 108.12(D)(3).  
819
- 820 (2) The Engineer and the Contractor may agree to a settlement  
821 provided the Contractor has filed a termination claim supported by cost  
822 or pricing data submitted as required and that the settlement does not  
823 exceed the total contract price plus settlement costs reduced by  
824 payments previously made by the State, the proceeds of any sales of  
825 construction, supplies, and construction materials under Subsection  
826 108.12(C)(3), and the proportionate contract price of the work not  
827 terminated.  
828
- 829 (3) Absent complete agreement, the Engineer will pay the  
830 Contractor the following amounts less any payments previously made  
831 under the contract:  
832
- 833 (a) The cost of all contract work performed prior to the  
834 effective date of the notice of termination work plus a 5 percent  
835 markup on the actual direct costs, including amounts paid to  
836 subcontractor, less amounts paid or to be paid for completed  
837 portions of such work; provided, however, that if it appears that  
838 the Contractor would have sustained a loss if the entire contract  
839 would have been completed, no markup shall be allowed or  
840 included and the amount of compensation shall

841 be reduced to reflect the anticipated rate of loss. No anticipated  
842 profit or consequential damage will be due or paid.

843  
844 **(b)** Subcontractors shall be paid a markup of 10 percent on  
845 their direct job costs incurred to the date of termination. No  
846 anticipated profit or consequential damage will be due or paid  
847 to any subcontractor. These costs must not include payments  
848 made to the Contractor for subcontract work during the contract  
849 period.

850  
851 **(c)** The total sum to be paid the Contractor shall not exceed  
852 the total contract price reduced by the amount of any sales of  
853 construction supplies, and construction materials.

854  
855 **(4)** Cost claimed, agreed to, or established by the State shall be in  
856 accordance with HAR Chapter 3-123.

857  
858 **108.13 Pre-Final and Final Inspections.**

859  
860 **(A) Inspection Requirements.** Before the Engineer undertakes a final  
861 inspection of any work, a pre-final inspection must first be conducted. The  
862 Contractor shall notify the Engineer that the work has reached substantial  
863 completion and is ready for pre-final inspection.

864  
865 **(B) Pre-Final Inspection.** Before notifying the Engineer that the work has  
866 reached substantial completion, the Contractor shall inspect the project and  
867 test all installed items with all of its subcontractors as appropriate. The  
868 Contractor shall also submit the following documents as applicable to the  
869 work:

870  
871 **(1)** All written guarantees required by the contract.

872  
873 **(2)** Two accepted final field-posted drawings as specified in  
874 Section 648 – Field-Posted Drawings;

875  
876 **(3)** Complete weekly certified payroll records for the Contractor  
877 and Subcontractors.

878  
879 **(4)** Certificate of Plumbing and Electrical Inspection.

880  
881 **(5)** Certificate of building occupancy as required.

882  
883 **(6)** Certificate of Soil and Wood Treatments.

884  
885 **(7)** Certificate of Water System Chlorination.

886

887 (8) Certificate of Elevator Inspection, Boiler and Pressure Pipe  
888 Inspection.

889  
890 (9) Maintenance Service Contract and two copies of a list of all  
891 equipment installed.

892  
893 (10) Current Tax clearance. The contractor will be required to  
894 submit an additional tax clearance certificate when the final payment  
895 is made.

896  
897 (11) And any other final items and submittals required by the  
898 contract documents.

899  
900 (C) **Procedure.** When in compliance with the above requirements, the  
901 Contractor shall notify the Engineer in writing that the project has reached  
902 substantial completion and is ready for pre-final inspection.

903  
904 The Engineer will then make a preliminary determination as to whether  
905 or not the project is substantially complete and ready for pre-final inspection.  
906 The Engineer may, in writing, postpone until after the pre-final inspection the  
907 Contractor's submittal of any of the items listed in Subsection 108.13(B) –  
908 Pre-Final Inspection, herein, if in the Engineer's discretion it is in the interest  
909 of the State to do so.

910  
911 If, in the opinion of the Engineer, the project is not substantially  
912 complete, the Engineer will provide the Contractor a punchlist of specific  
913 deficiencies in writing which must be corrected or finished before the work  
914 will be ready for a pre-final inspection. The Engineer may add to or otherwise  
915 modify this punchlist from time to time. The Contractor shall take immediate  
916 action to correct the deficiencies and must repeat all steps described above  
917 including written notification that the work is ready for pre-final inspection.

918  
919 After the Engineer is satisfied that the project appears substantially  
920 complete a final inspection shall be scheduled within ten working days after  
921 receipt of the Contractor's latest letter of notification that the project is ready  
922 for final inspection.

923  
924 If, as a result of the pre-final inspection, the Engineer determines the  
925 work is not substantially complete, the Engineer will inform the Contractor in  
926 writing as to specific deficiencies which must be corrected before the work  
927 will be ready for another pre-final inspection. If the Engineer finds the work  
928 is substantially complete but finds deficiencies that must be corrected before  
929 the work is ready for final inspection, the Engineer will prepare in writing and  
930 deliver to the Contractor a punchlist describing such deficiencies.

931 At any time before final acceptance, the Engineer may revoke the  
 932 determination of substantial completion if the Engineer finds that it was not  
 933 warranted and will notify the Contractor in writing the reasons therefore  
 934 together with a description of the deficiencies negating the declaration.  
 935

936 When the date of substantial completion has been determined by the  
 937 State, liquidated damages for the failure to complete the punchlist, if due to  
 938 the State will be assessed in pursuant to Subsection 108.08(B) - Liquidated  
 939 Damages for Failure to Complete the Punchlist.  
 940

941 **(D) Punchlist; Clean Up and Final Inspection.** Upon receiving a  
 942 punchlist after pre-final inspection, the Contractor shall promptly devote all  
 943 required time, labor, equipment, materials and incidentals to correct and  
 944 remedy all punchlist deficiencies. The Engineer may add to or otherwise  
 945 modify this punchlist until substantial completion of the project.  
 946

947 Before final inspection of the work, the Contractor shall clean all  
 948 ground occupied by the Contractor in connection with the work of all rubbish,  
 949 excess materials temporary structures and equipment, shall remove all  
 950 graffiti and defacement of the work and all parts of the work and the worksite  
 951 must be left in a neat and presentable condition to the satisfaction of the  
 952 Engineer.  
 953

954 Final inspection will occur within ten working days after the Contractor  
 955 notifies the Engineer in writing that all punchlist deficiencies remaining after  
 956 the pre-final inspection have been completed and the Engineer concurs. If  
 957 the Engineer determines that deficiencies still remain at the final inspection,  
 958 the work will not be accepted and the Engineer will notify the Contractor, in  
 959 writing, of the deficiencies which shall be corrected and the steps above  
 960 repeated.  
 961

962 If the Contractor fails to correct the deficiencies and complete the work  
 963 by the established or agreed date, the State may correct the deficiencies by  
 964 whatever method it deems appropriate and deduct the cost from any  
 965 payments due the Contractor.  
 966

967 **108.14 Substantial Completion and Final Acceptance.**  
 968

969 **(A) Substantial Completion.** When the Engineer finds that the  
 970 Contractor has satisfactorily completed all work for the project in compliance  
 971 with the contract, with the exception of the planting period and the plant  
 972 establishment period, the Engineer will notify the Contractor, in writing, of the  
 973 project's substantial completion, effective as of the date of the final  
 974 inspection. The substantial completion date shall determine end of contract  
 975 time and relieve contractor of any additional accumulation of liquidated  
 976 damages for failure to complete the punchlist.

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**(B) Final Acceptance.** When the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State, the Engineer will issue a Final Acceptance Letter. The Final Acceptance date shall determine the commencement of all guaranty periods subject to Subsection 108.16 – Contractor’s Responsibility for Work; Risk of Loss or Damage.

**108.15 Use of Structure or Improvement.** The State has the right to use the structure, equipment, improvement, or any part thereof, at any time after it is considered by the Engineer as available. In the event that the structure, equipment or any part thereof is used by the State before final acceptance, the Contractor is not relieved of its responsibility to protect and preserve all the work until final acceptance.

**108.16 Contractor’s Responsibility for Work; Risk of Loss or Damage.** Until the written notice of final acceptance has been received, the Contractor shall take every precaution against loss or damage to any part of the work by the action of the elements or from any other cause whatsoever, whether arising from the performance or from the non-performance of the work. The Contractor shall rebuild, repair, restore and make good all loss or damage to any portion of the work resulting from any cause before its receipt of the written notice of final acceptance and shall bear the risk and expense thereof.

The risk of loss or damage to the work from any hazard or occurrence that may or may not be covered by a builder’s risk policy is that of the Contractor and Surety, unless such risk of loss is placed elsewhere by express language in the contract documents.

**108.17 Guarantee of Work.**

**(1)** Regardless of, and in addition to, any manufacturers’ warranties, all work and equipment shall be guaranteed by the Contractor against defects in materials, equipment or workmanship for one year from the date of final acceptance or as otherwise specified in the contract documents.

**(2)** When the Engineer determines that repairs or replacements of any guaranteed work and equipment is necessary due to materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, at no increase in contract price or contract time, and within five working days of receipt of written notice from the State, commence to all of the following:

**(a)** Correct all noted defects and make replacements, as directed by the Engineer, in the equipment and work.

**108.19**

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(b) Repair or replace to new or pre-existing condition any damages resulting from such defective materials, equipment or installation thereof.

(3) The State will be entitled to the benefit of all manufacturers and installers warranties that extend beyond the terms of the Contractor’s guaranty regardless of whether or not such extended warranty is required by the contract documents. The Contractor shall prepare and submit all documents required by the providers of such warranties to make them effective, and submit copies of such documents to the Engineer. If an available extended warranty cannot be transferred or assigned to the State as the ultimate user, the Contractor shall notify the Engineer who may direct that the warranted items be acquired in the name of the State as purchaser.

(4) If a defect is discovered during a guarantee period, all repairs and corrections to the defective items when corrected shall be guaranteed for a new duration equal to the original full guarantee period. The running of the guarantee period shall be suspended for all other work affected by any defect. The guarantee period for all other work affected by any such defect shall restart for its remaining duration upon confirmation by the Engineer that the deficiencies have been repaired or remedied.

(5) Nothing in this section is intended to limit or affect the State’s rights and remedies arising from the discovery of latent defects in the work after the expiration of any guarantee period.

**108.18 No Waiver of Legal Rights.** The following will not operate or be considered as a waiver of any portion of the contract, or any power herein reserved, or any right to damages provided herein or by law:

- (1) Any payment for, or acceptance of, the whole or any part of the work.
- (2) Any extension of time.
- (3) Any possession taken by the Engineer.

A waiver of any notice requirement or of any noncompliance with the contract will not be held to be a waiver of any other notice requirement or any other noncompliance with the contract.

**108.19 Final Settlement of Contract.**

(A) **Closing Requirements.** The contract will be considered settled after the project acceptance date and when the following items have been satisfactorily submitted, where applicable:

- 1069 (1) All written guarantees required by the contract.  
1070  
1071 (2) Complete and certified weekly payrolls for the Contractor and  
1072 its subcontractor's.  
1073  
1074 (3) Certificate of plumbing and electrical inspection.  
1075  
1076 (4) Certificate of building occupancy.  
1077  
1078 (5) Certificate for soil treatment and wood treatment.  
1079  
1080 (6) Certificate of water system chlorination.  
1081  
1082 (7) Certificate of elevator inspection, boiler and pressure pipe  
1083 installation.  
1084  
1085 (8) Tax clearance.  
1086  
1087 (9) All other documents required by the Contract or by law.  
1088

1089 **(B) Failure to Meet Closing Requirements.** The Contractor shall meet  
1090 the applicable closing requirements within 60 days from the date of Project  
1091 Acceptance or the agreed to Punchlist complete date. Should the Contractor  
1092 fail to comply with these requirements, the Engineer may terminate the  
1093 contract for cause."  
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**END OF SECTION 108**



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Sums necessary to meet the claims of any governmental agencies may be withheld from the sums due the Contractor until said claims have been fully and completely discharged or otherwise satisfied.”

**END OF SECTION 109**



1 Amend **Section 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**  
2 **CONTROL** to read as follows:

3  
4  
5 **“SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**  
6 **CONTROL**

7  
8  
9 **209.01 Description.** This section describes the following:

10  
11 **(A)** Including detailed plans, diagrams, and written Site-Specific Best  
12 Management Practices (BMP); constructing, maintaining, and repairing  
13 temporary water pollution, dust, and erosion control measures at the project  
14 site, including local material sources, work areas and haul roads; removing  
15 and disposing hazardous wastes; control of fugitive dust (defined as  
16 uncontrolled emission of solid airborne particulate matter from any source  
17 other than combustion); and complying with applicable State and Federal  
18 permit conditions.

19  
20 **(B)** Work associated with construction stormwater, dewatering, and  
21 hydrotesting activities and complying with conditions of the National Pollutant  
22 Discharge Elimination System (NPDES) permit(s) authorizing discharges  
23 associated with construction stormwater, dewatering, and hydrotesting  
24 activities.

25  
26 **(C)** Potential pollutant identification and mitigation measures are listed in  
27 Appendix A for use in the development of the Contractor’s Site-Specific BMP.

28  
29 Requirements of this section also apply to construction support  
30 activities including concrete or asphalt batch plants, rock crushing plants,  
31 equipment staging yards/areas, material storage areas, excavated material  
32 disposal areas, and borrow areas located outside the State Right-of-Way.  
33 For areas serving multiple construction projects, or operating beyond the  
34 completion of the construction project in which it supports, the Contractor  
35 shall be responsible for securing the necessary permits, clearances, and  
36 documents, and following the conditions of the permits and clearances, at no  
37 cost to the State.

38  
39 **209.02 Materials.** Comply with applicable materials described in Chapters 2 and  
40 3 of the current HDOT “Construction Best Management Practices Field Manual”. In  
41 addition, the materials shall comply with the following:

42  
43 **(A) Grass.** Grass shall be a quick growing species such as rye grass,  
44 Italian rye grass, or cereal grasses. Grass shall be suitable to the area and  
45 provide a temporary cover that will not compete later with permanent cover.  
46 Alternative grasses are allowable if acceptable to the Engineer.

47 **(B) Fertilizer and Soil Conditioners.** Fertilizer and soil conditioners shall  
48 be a standard commercial grade acceptable to the Engineer. Fertilizer shall  
49 conform to Subsection 619.02(H)(1) - Commercial Fertilizer.

50  
51 **(C) Hydro-mulching.** Hydro-mulching used as a temporary vegetative  
52 stabilization measure shall consist of materials in Subsections 209.02(A) -  
53 Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be  
54 recycled materials including bagasse, hay, straw, wood cellulose bark, wood  
55 chips, or other material acceptable to the Engineer. Mulches shall be clean  
56 and free of noxious weeds and deleterious materials. Potable water shall  
57 meet the requirements of Subsection 712.01 - Water. Submit alternate  
58 sources of irrigation water for the Engineer’s acceptance if deviating from  
59 712.01 - Water. Installation and other requirements shall be in accordance  
60 with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil  
61 and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period.  
62 Install non-vegetative controls including mulch or rolled erosion control  
63 products while the vegetation is being established. Water and fertilize grass.  
64 Apply fertilizer as recommended by the manufacturer. Replace grass the  
65 Engineer considers unsuitable or sick. Remove and dispose of trash and  
66 debris. Remove invasive species. Mow as needed to prevent site or signage  
67 obstructions, fire hazard, or nuisance to the public. Do not remove down  
68 stream sediment control measures until the vegetation is uniformly  
69 established, including no large bare areas, and provides 70 percent of the  
70 density of pre-disturbance vegetation. Temporary vegetative stabilization  
71 shall not be used longer than one year.

72  
73 **(D) Silt Fences.** Comply with ASTM D6462, Standard Practice for Silt  
74 Fence Installation.

75  
76 Alternative materials or methods to control, prevent, remove and dispose  
77 pollution are allowable if acceptable to the Engineer.

78  
79 **209.03 Construction.**

80  
81 **(A) Preconstruction Requirements.**

82  
83 **(1) Water Pollution, Dust, and Erosion Control Meeting.**  
84 Schedule a water pollution, dust, and erosion control meeting with the  
85 Engineer after Site-Specific BMP is accepted in writing by the  
86 Engineer. Meeting shall be scheduled a minimum of 7 calendar days  
87 prior to the Start Work Date. Discuss sequence of work, plans and  
88 proposals for water pollution, dust, and erosion control.  
89

90 **(2) Water Pollution, Dust, and Erosion Control Submittals.**

91 Submit a Site-Specific BMP Plan within 21 calendar days of date of  
92 award. Submission of complete and acceptable Site-Specific BMP  
93 Plan is the sole responsibility of the Contractor and additional contract  
94 time will not be issued for delays due to incompleteness. Include the  
95 following:

96  
97 **(a)** Written description of activities to minimize water  
98 pollution and soil erosion into State waters, drainage or sewer  
99 systems. BMP shall include the following:

100  
101 **1.** An identification of potential pollutants and their  
102 sources.

103  
104 **2.** A list of all materials and heavy equipment to be  
105 used during construction.

106  
107 **3.** Descriptions of the methods and devices used to  
108 minimize the discharge of pollutants into State waters,  
109 drainage or sewer systems.

110  
111 **4.** Details of the procedures used for the  
112 maintenance and subsequent removal of any erosion or  
113 siltation control devices.

114  
115 **5.** Methods of removing and disposing hazardous  
116 wastes encountered or generated during construction.

117  
118 **6.** Methods of removing and disposing concrete and  
119 asphalt pavement cutting slurry, concrete curing water,  
120 and hydrodemolition water.

121  
122 **7.** Spill Control and Prevention and Emergency Spill  
123 Response Plan.

124  
125 **8.** Fugitive dust control, including dust from grinding,  
126 sweeping, or brooming off operations or combination  
127 thereof.

128  
129 **9.** Methods of storing and handling of oils, paints  
130 and other products used for the project.

131  
132 **10.** Material storage and handling areas, and other  
133 staging areas.

134  
135 **11.** Concrete truck washouts.

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- 12.** Concrete waste control.
- 13.** Fueling and maintenance of vehicles and other equipment.
- 14.** Tracking of sediment offsite from project entries and exits.
- 15.** Litter management.
- 16.** Toilet facilities.
- 17.** Other factors that may cause water pollution, dust and erosion control.

**(b)** Provide plans indicating location of water pollution, dust and erosion control devices; provide plans and details of BMPs to be installed or utilized; show areas of soil disturbance in cut and fill, indicate areas used for construction staging and storage including items (1) through (17) above, storage of aggregate (indicate type of aggregate), asphalt cold mix, soil or solid waste, equipment and vehicle parking, and show areas where vegetative practices are to be implemented. Indicate intended drainage pattern on plans. Include flow arrows. Include separate drawing for each phase of construction that alters drainage patterns. Indicate approximate date when device will be installed and removed.

**(c)** Construction schedule.

**(d)** Name(s) of specific individual(s) designated responsible for water pollution, dust, and erosion controls on the project site. Include home, cellular, and business telephone numbers, fax numbers, and e-mail addresses.

**(e)** Description of fill material to be used.

**(f)** For projects with an NPDES Permit for Construction Activities, submit information to address all sections in the Storm Water Pollution Prevention Plan (SWPPP).

**(g)** For projects with an NPDES Permit, information required for compliance with the conditions of the Notice of General Permit Coverage (NGPC)/NPDES Permit.

181 (h) Site-Specific BMP Review Checklist. The checklist may  
182 be downloaded from HDOT’s Stormwater Management  
183 website at <http://stormwaterhawaii.com>.  
184

185 Date and sign Site-Specific BMP Plan. Keep accepted  
186 copy on site or at an accessible location so that it can be made  
187 available at the time of an on-site inspection or upon request by  
188 the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA  
189 Representative. Amendments to the Site-Specific BMP Plan  
190 shall be included with original Site-Specific BMP Plan. Modify  
191 SWPPP if necessary to conform to revisions. Include date of  
192 installation and removal of Site-Specific BMP measures.  
193 Obtain written acceptance by the Engineer before  
194 implementing revised Site-Specific BMPs in the field.  
195

196 Follow the guidelines in the current HDOT “Construction  
197 Best Management Practices Field Manual”, in developing,  
198 installing, and maintaining Site-Specific BMPs for all projects.  
199 For any conflicting requirements between the Manual and  
200 applicable bid documents, the applicable bid documents will  
201 govern. Should a requirement not be clearly described within  
202 the applicable bid documents, notify the Engineer immediately  
203 for interpretation. For the purposes of clarification “applicable  
204 bid documents” include the construction plans, standard  
205 specifications, special provisions, Permits, and the SWPPP  
206 when applicable.  
207

208 Follow Honolulu’s City and County “Rules for Soil  
209 Erosion Standards and Guidelines” for all projects on Oahu.  
210 Use respective Soil Erosion Guidelines for Maui, Kauai and  
211 Hawaii projects.  
212

213 **(B) Construction Requirements.** Do not begin work until submittals  
214 detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion  
215 Control Submittals are completed and accepted in writing by the Engineer.  
216

217 Install, maintain, monitor, repair and replace site-specific BMP  
218 measures, such as for water pollution, dust and erosion control; installation,  
219 monitoring, and operation of hydrotesting activities; removal and disposal of  
220 hazardous waste indicated on plans, concrete cutting slurry, concrete curing  
221 water; or hydrodemolition water. Site-Specific BMP measures shall be in  
222 place, functional and accepted by HDOT personnel prior to initiating any  
223 ground disturbing activities.  
224

225 If necessary, furnish and install rain gage in a secure location prior to  
226 field work including installation of site-specific BMP. Provide rain gage with  
227 a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site  
228 in an area that will not deter rainfall from entering the gate opening. Do not  
229 install in a location where rain water may splash into rain gage. The rain  
230 gage installation shall be stable and plumbed. Maintain rain gage and  
231 replace rain gage that is stolen, does not function properly or accurately, is  
232 worn out, or needs to be relocated. Do not begin field work until rain gage is  
233 installed and Site-Specific BMPs are in place. Rain gage data logs shall be  
234 readily available. Submit rain gage data logs weekly to the Engineer.

235  
236 Address all comments received from the Engineer.

237  
238 Modify and resubmit plans and construction schedules to correct  
239 conditions that develop during construction which were unforeseen during  
240 the design and pre-construction stages.

241  
242 Coordinate temporary control provisions with permanent control  
243 features throughout the construction and post-construction period.

244  
245 Limit maximum surface area of earth material exposed at any time to  
246 300,000 square feet. Do not expose or disturb surface area of earth material  
247 (including clearing and grubbing) until BMP measures are installed and  
248 accepted in writing by the Engineer. Protect temporarily or permanently  
249 disturbed soil surface from rainfall impact, runoff and wind before end of the  
250 work day.

251  
252 Immediately initiate stabilizing exposed soil areas upon completion of  
253 earth disturbing activities for areas permanently or temporarily ceased on any  
254 portion of the site. Earth-disturbing activities have permanently ceased when  
255 clearing and excavation within any area of the construction site that will not  
256 include permanent structures has been completed. Earth-disturbing  
257 activities have temporarily ceased when clearing, grading, and excavation  
258 within any area of the site that will not include permanent structures will not  
259 resume for a period of 14 or more calendar days, but such activities will  
260 resume in the future. The term "immediately" is used in this section to define  
261 the deadline for initiating stabilization measures. "Immediately" means as  
262 soon as practicable, but no later than the end of the next work day, following  
263 the day when the earth-disturbing activities have temporarily or permanently  
264 ceased.

265  
266 For projects with an NPDES Permit for Construction activities:  
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**(1)** For construction areas discharging into waters not impaired for nutrients or sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

**(2)** For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

For projects without an NPDES Permit for Construction activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Any of the following types of activities constitutes initiation of stabilization:

- (1)** Prepping the soil for vegetative or non-vegetative stabilization;
- (2)** Applying mulch or other non-vegetative product to the exposed area;
- (3)** Seeding or planting the exposed area;
- (4)** Starting any of the activities in items (1) – (3) above on a portion of the area to be stabilized, but not on the entire area; and
- (5)** Finalizing arrangements to have stabilization product fully installed in compliance with the deadline for completing initial stabilization activities.

Any of the following types of activities constitutes completion of initial stabilization activities:

- (1)** For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- (2)** For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor’s control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer:

314 (1) Immediately initiate, and complete within the timeframe shown  
315 above, the installation of temporary non-vegetative stabilization  
316 measures to prevent erosion;

317  
318 (2) Complete all soil conditioning, seeding, watering or irrigation  
319 installation, mulching, and other required activities related to the  
320 planting and initial establishment of vegetation as soon as conditions  
321 or circumstances allow it on the site; and

322  
323 (3) Notify and provide documentation to the Engineer the  
324 circumstances that prevent the Contractor from meeting the deadlines  
325 above for stabilization and the schedule the Contractor will follow for  
326 initiating and completing initial stabilization and as agreed to by the  
327 Engineer.

328  
329 Follow the applicable requirements of the specifications and special  
330 provisions including Section 619 Planting and Section 641 Hydro-Mulch  
331 Seeding.

332  
333 Immediately after seeding or planting the area to be vegetatively  
334 stabilized, to the extent necessary to prevent erosion on the seeded or  
335 planted area, select, design, and install non-vegetative erosion controls that  
336 provide cover (e.g., mulch, rolled erosion control products) to the area while  
337 vegetation is becoming established.

338  
339 Protect exposed or disturbed surface area with mulches, grass seeds  
340 or hydromulch. Spray mulches at a rate of 2,000 pounds per acre. Add  
341 tackifier to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate  
342 of 125 pounds per acre. For hydromulch, use the ingredients and rates  
343 required for mulches and grass seeds. Submit recommendations from a  
344 licensed Landscape Architect when deviating from the application rates  
345 above.

346  
347 Apply fertilizer to mulches, grass seed or hydromulch per  
348 manufacturer's recommendations. Submit recommendations from a licensed  
349 Landscape Architect when deviating from the manufacturer's  
350 recommendations.

351  
352 Install velocity dissipation measures when exposing erodible surfaces  
353 greater than 15 feet in height.

354  
355 BMP measures shall be in place and operational at the end of work  
356 day or as required by Section 209.03(B) Construction Requirements.

357

358 Install and maintain either or both stabilized construction entrances  
359 and wheel washes to minimize tracking of dirt and mud onto roadways.  
360 Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other  
361 material tracked onto the road, sidewalk, or other paved area by the end of  
362 the same day in which the track-out occurs. Modify stabilized construction  
363 entrances to prevent mud from being tracked onto road. Stabilize entire  
364 access roads if necessary.

365  
366 Chemicals may be used as soil stabilizers for either or both erosion  
367 and dust control if acceptable to the Engineer.

368  
369 Provide temporary slope drains of rigid or flexible conduits to carry  
370 runoff from cuts and embankments. Provide portable flume at the entrance.  
371 Shorten or extend temporary slope drains to ensure proper function.

372  
373 Protect ditches, channels, and other drainageways leading away from  
374 cuts and fills at all times by either:

- 375  
376 (1) Hydro-mulching the lower region of embankments in the  
377 immediate area.  
378  
379 (2) Installing check dams and siltation control devices.  
380  
381 (3) Other methods acceptable to the Engineer.

382  
383 Provide for controlled discharge of waters impounded, directed, or  
384 controlled by project activities or erosion control measures.

385  
386 Cover exposed surface of materials completely with tarpaulin or  
387 similar device when transporting aggregate, soil, excavated material or  
388 material that may be source of fugitive dust.

389  
390 Cleanup and remove any pollutant that can be attributed to the  
391 Contractor.

392  
393 Install or modify Site-Specific BMP measures due to change in the  
394 Contractor's means and methods, or for omitted condition that should have  
395 been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP  
396 that replaces an accepted Site-Specific BMP that is not satisfactorily  
397 performing. Modifications to Site-Specific BMP measures shall be accepted  
398 in writing by the Engineer prior to implementation.

399  
400 Properly maintain all Site-Specific BMP measures.

401  
402 For projects with an NPDES Permit for Construction Activities:  
403

404 (1) For construction areas discharging into nutrient or sediment  
405 impaired waters, inspect, prepare a written report, and make repairs  
406 to BMP measures at the following intervals:

- 407
- 408 (a) Weekly.
  - 409
  - 410 (b) Within 24 hours of any rainfall of 0.25 inch or greater  
411 which occurs in a 24-hour period.
  - 412
  - 413 (c) When existing erosion control measures are damaged  
414 or not operating properly as required by Site-Specific BMP.
  - 415

416 (2) For construction areas discharging to waters not impaired for  
417 nutrients or sediments, inspect, prepare a written report, and make  
418 repairs to BMP measures at the following intervals:

- 419
- 420 (a) Weekly.
  - 421
  - 422 (b) When existing erosion control measures are damaged  
423 or not operating properly as required by Site-Specific BMP.
  - 424

425 For projects without an NPDES Permit for Construction activities,  
426 inspect, prepare a written report, and make repairs to BMP measures at the  
427 following intervals:

- 428
- 429 (a) Weekly.
  - 430
  - 431 (b) When existing erosion control measures are damaged  
432 or not operating properly as required by Site-Specific BMP.
  - 433

434 Temporarily remove, replace or relocate any Site-Specific BMP that  
435 must be removed, replaced or relocated due to potential or actual flooding,  
436 or potential danger or damage to project or public.

437

438 Maintain records of inspections of Site-Specific BMP work. Keep  
439 continuous records for duration of the project. Submit copy of Inspection  
440 Report to the Engineer within 24 hours after each inspection.

441

442 The Contractor's designated representative specified in Subsection  
443 209.03(A)(2)(d) shall address any Site-Specific BMP deficiencies brought up  
444 by the Engineer immediately, including weekends and holidays, and  
445 complete work to fix the deficiencies by the close of the next work day if the  
446 problem does not require significant repair or replacement, or if the problem  
447 can be corrected through routine maintenance. Address any Site-Specific  
448 BMP deficiencies brought up by the State's Third-Party Inspector in the  
449 timeframe above or as specified in the Consent Decree or MS4 NPDES

450 Permit, whichever is more stringent. The Consent Decree timeframe  
451 requirement applies statewide. The MS4 NPDES Permit only applies to  
452 Oahu. In this section, "immediately" means the Contractor shall take all  
453 reasonable measures to minimize or prevent discharge of pollutants until a  
454 permanent solution is installed and made operational. If a problem is  
455 identified at a time in the day in which it is too late to initiate repair, initiation  
456 of repair shall begin on the following work day. When installation of a new  
457 pollution prevention control or a significant repair is needed, complete  
458 installation or repair no later than 7 calendar days from the time of  
459 notification/Contractor discovery. Notify the Engineer and document why it  
460 is infeasible to complete the installation or repair within 7 calendar days and  
461 complete the work as soon as practicable and as agreed to by the Engineer.  
462 Address Site-Specific BMP deficiencies discovered by the Contractor within  
463 the timeframe above. The Contractor's failure to satisfactorily address these  
464 Site-Specific BMP deficiencies, the Engineer reserves the right to employ  
465 outside assistance or use the Engineer's own labor forces to provide  
466 necessary corrective measures. The Engineer will charge the Contractor  
467 such incurred costs plus any associated project engineering costs. The  
468 Engineer will make appropriate deductions from the Contractor's monthly  
469 progress estimate. Failure to apply Site-Specific BMP measures may result  
470 in one or more of the following: assessment of liquidated damages,  
471 suspension, or cancellation of Contract with the Contractor being fully  
472 responsible for all additional costs incurred by the State.

473  
474 **(C) Discharges of Storm Water Associated with Construction**  
475 **Activities.** If work includes disturbance of one acre or more, an NPDES  
476 Permit authorizing Discharges of Storm Water Associated with Construction  
477 Activity (CWB-NOI Form C) or Individual Permit authorizing storm water  
478 discharges associated with construction activity is required from the  
479 Department of Health Clean Water Branch (DOH-CWB).

480  
481 Do not begin construction activities until all required conditions of the  
482 permit are met and submittals detailed in Subsection 209.03(A)(2) – Water  
483 Pollution, Dust, and Erosion Control Submittals are completed and accepted  
484 in writing by the Engineer.

485  
486 **(D) Discharges Associated with Hydrotesting Activities.** If  
487 hydrotesting activities require effluent discharge into State waters or drainage  
488 systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or  
489 Individual Permit authorizing discharges associated with hydrotesting from  
490 DOH-CWB is required from the DOH-CWB.

491  
492 Do not begin hydrotesting activities until the DOH-CWB has issued an  
493 Individual NPDES Permit or Notice of General Permit Coverage (NGPC).  
494 Conduct Hydrotesting operations in accordance with the conditions of the  
495 permit or NGPC.

496 **(E) Discharges Associated with Dewatering Activities.** If dewatering  
497 activities require effluent discharge into State waters or drainage systems, an  
498 NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit  
499 authorizing discharges associated with dewatering from DOH-CWB is  
500 required from the DOH-CWB.  
501

502 Do not begin dewatering activities until the DOH-CWB has issued an  
503 Individual NPDES Permit or Notice of General Permit Coverage (NGPC).  
504 Conduct dewatering operations in accordance with the conditions of the  
505 permit or NGPC.  
506

507 **(F) Solid Waste.** Submit the Solid Waste Disclosure Form for  
508 Construction Sites to the Engineer within 21 calendar days of date of award.  
509 Provide a copy of all the disposal receipts from the facility permitted by the  
510 Department of Health to receive solid waste to the Engineer monthly. This  
511 should also include documentation from any intermediary facility where solid  
512 waste is handled or processed, or as directed by the Engineer.  
513

514 **(G) Construction BMP Training.** The Contractor's representative  
515 responsible for development of the Site-Specific BMP Plan and  
516 implementation of Site-Specific BMPs in the field shall attend the State's  
517 Construction Best Management Practices Training. The Contractor shall  
518 keep training logs updated and readily available.  
519

520 **209.04 Measurement.**

521  
522 **(A)** Installation, maintenance, monitoring, and removal of BMP will be paid  
523 on a lump sum basis. Measurement for payment will not apply.  
524

525 **(B)** The Engineer will only measure additional water pollution, dust and  
526 erosion control required and requested by the Engineer on a force account  
527 basis in accordance with Subsection 109.06 – Force Account Provisions and  
528 Compensation.  
529

530 **209.05 Payment.** The Engineer will pay for accepted pay items listed below at  
531 contract price per pay unit, as shown in the proposal schedule. Payment will be full  
532 compensation for work prescribed in this section and contract documents.  
533

534 The Engineer will pay for each of the following pay items when included in  
535 proposal schedule:  
536

537 <b>Pay Item</b>	538 <b>Pay Unit</b>
539 Installation, Maintenance, Monitoring, and Removal of BMP	Lump Sum
540 Additional Water Pollution, Dust, and Erosion Control	Force Account

543 An estimated amount for force account is allocated in proposal schedule  
544 under 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to  
545 be paid will be the sum shown on accepted force account records, whether this sum  
546 be more or less than estimated amount allocated in proposal schedule. The  
547 Engineer will pay for BMP measures requested by the Engineer that are beyond  
548 scope of accepted Site-Specific BMP on a force account basis.

549  
550 No progress payment will be authorized until the Engineer accepts in writing  
551 Site-Specific BMP or when the Contractor fails to maintain project site in accordance  
552 with accepted BMP.

553  
554 For all citations or fines received by the Department for non-compliance,  
555 including compliance with NPDES Permit conditions, the Contractor shall reimburse  
556 State within 30 calendar days for full amount of outstanding cost State has incurred,  
557 or the Engineer will deduct cost from progress payment.

558  
559 The Engineer will assess liquidated damages up to \$27,500 per day for non-  
560 compliance of each BMP requirement and all other requirements in this section.  
561

562 **Appendix A**

563

564 The following list identifies potential pollutant sources and corresponding  
565 BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding  
566 section of the current HDOT Construction Best Management Practices Field Manual  
567 or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT  
568 Statewide Stormwater Management Program Website at  
569 <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/> under  
570 Construction Best Management Practices Field Manual. Supplemental BMP sheets  
571 are located at [http://www.stormwaterhawaii.com/resources/contractors-and-](http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/)  
572 [consultants/storm-water-pollution-prevention-plan-swppp/](http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/) under Concrete Curing  
573 and Irrigation Water.

574

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<p><i>Construction debris, green waste, general litter</i></p>	<ul style="list-style-type: none"> <li>• <i>Separate contaminated clean up materials from construction and demolition (C&amp;D) wastes.</i></li> <li>• <i>Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.</i></li> <li>• <i>Inspect construction waste and recycling areas regularly.</i></li> <li>• <i>Schedule solid waste collection regularly.</i></li> <li>• <i>Schedule recycling activities based on construction/demolition phases.</i></li> <li>• <i>Empty waste containers weekly or when they are two-thirds full, whichever is sooner.</i></li> <li>• <i>Do not allow containers to overflow. Clean up immediately if they do.</i></li> <li>• <i>On work days, clean up and dispose of waste in designated waste containers.</i></li> <li>• <i>See Solid Waste Management Section SM-6 for additional requirements.</i></li> <li>• <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></li> <li>• <i>Collect and dispose of all waste materials in trash dumpsters. Place dumpsters, with secure watertight lids, away from storm water conveyances and drains, in a covered materials storage area.</i></li> <li>• <i>Dispose of construction and non- construction solid waste in accordance with State DOH regs.</i></li> <li>• <i>Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility</i></li> </ul>	<p><i>See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i></p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<p><i>Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage</i></p>	<ul style="list-style-type: none"> <li>• <i>Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.</i></li> <li>• <i>Designate bermed wash area if cleaning on site is necessary.</i></li> <li>• <i>Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.</i></li> <li>• <i>Provide an ample supply of readily available spill cleanup materials.</i></li> <li>• <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i></li> <li>• <i>Do not clean surfaces or spills by hosing the area down.</i></li> <li>• <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i></li> <li>• <i>Inspect on-site vehicles and equipment regularly and immediately repair leaks.</i></li> <li>• <i>Regularly inspect fueling areas and storage tanks.</i></li> <li>• <i>Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures.</i></li> <li>• <i>Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment.</i></li> <li>• <i>Do not remove original product labels and comply with manufacturer's labels for proper disposal.</i></li> <li>• <i>Dispose of containers only after all the product has been used.</i></li> <li>• <i>Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements.</i></li> <li>• <i>Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater.</i></li> <li>• <i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Storage and Handling Section SM-2 for additional requirements.</i></li> </ul>	<p><i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Storage and Handling, Section SM-2, and Spill Prevention and Control SM-10.</i></p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
Soil erosion from the disturbed areas	<ul style="list-style-type: none"> <li>• Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-1, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-3 ,Level Spreader EC-6, Paving Operations SM-20, Construction Roads and Parking Area Stabilization SC-10, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Construction BMP Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-17).</li> <li>• Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP.</li> <li>• Preserve native topsoil where practicable.</li> <li>• In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth.</li> <li>• For Storm Drain Inlet Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised.</li> <li>• Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible.</li> <li>• Sediment basins shall be designed and maintained in accordance with HAR Chapter 11-55.</li> <li>• Minimize disturbance on steep slopes (Greater than 15% in grade).</li> <li>• If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades.</li> <li>• For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.</li> </ul>	<p>Soil Stabilization</p> <ol style="list-style-type: none"> <li>1. SM-22 Topsoil Management</li> <li>2. EC-12 Seeding and Planting</li> <li>3. EC-14 Mulching</li> <li>4. EC-11 Geotextiles and Mats</li> </ol> <p>Slope Protection</p> <ol style="list-style-type: none"> <li>1. EC-12 Seeding and Planting</li> <li>2. EC-14 Mulching</li> <li>3. EC-11 Geotextiles and Mats</li> <li>4. EC-4 Slope Roughening, Terracing, and Rounding</li> <li>5. EC-7 Slope Drains and Subsurface Drains</li> <li>6. EC-9 Slope Interceptor or Diversion Ditches/Berms</li> </ol> <p>SC-1 Storm Drain Inlet Protection</p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
		<p><i>Perimeter Controls and Sediment Barriers</i></p> <ol style="list-style-type: none"> <li>1. <i>SC-7 Silt Fence or Filter Fabric Fence</i></li> <li>2. <i>SC-2 Vegetated Filter Strips and Buffers</i></li> <li>3. <i>SC-6 Compost Filter Berm/Sock</i></li> <li>4. <i>SC-8 Sandbag Barrier</i></li> <li>5. <i>SC-9 Brush or Rock Filter</i></li> </ol> <p><i>Sediment Basins and Detention Ponds</i></p> <ol style="list-style-type: none"> <li>1. <i>SC-4 Sediment Trap</i></li> <li>2. <i>SC-5 Sediment Basin</i></li> </ol> <p><i>SC-3 Check Dams</i></p> <p><i>EC-6 Level Spreader</i>  <i>SM-20 Paving Operations</i>  <i>SC-10 Construction Roads and Parking Area Stabilization</i></p>

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<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
		<p><i>Controlling Storm Water Flowing onto and Through the Project</i></p> <ol style="list-style-type: none"> <li>1. <i>EC-3 Run-On Diversion</i></li> <li>2. <i>EC-5 Earth Dike, Swales and Ditches</i></li> </ol> <p><i>Post Construction BMPs</i></p> <ol style="list-style-type: none"> <li>1. <i>EC-2 Flared Culvert End Sections</i></li> <li>2. <i>EC-10 Rip-Rap and Gabion Inflow Protection</i></li> <li>3. <i>EC-8 Outlet Protection and Velocity Dissipation Devices</i></li> <li>4. <i>SM-22 Topsoil Management</i></li> </ol> <p><i>Non-Structural BMPs</i></p> <ol style="list-style-type: none"> <li>1. <i>SM-1 Construction BMP Training</i></li> <li>2. <i>SM-14 Scheduling</i></li> <li>3. <i>SM-15 Location of Potential Sources of Sediment</i></li> <li>4. <i>SM-17 Preservation of Existing Vegetation</i></li> </ol>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
Sediment from soil stockpiles	<ul style="list-style-type: none"> <li>• Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff or outside of any natural buffers identified on the SWPPP.</li> <li>• Place bagged materials on pallets and under cover.</li> <li>• Provide physical diversion to protect stockpiles from concentrated runoff.</li> <li>• Cover stockpiles with plastic or comparable material when practicable.</li> <li>• Place silt fence, fiber filtration tubes, or straw wattles around stockpiles.</li> <li>• Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water.</li> <li>• Unless infeasible, contain and securely protect stockpiles from the wind.</li> <li>• Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. See Stockpile Management Section SM-3 for additional requirements.</li> </ul>	See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.
Emulsified asphalt or prime/tack coat	<ul style="list-style-type: none"> <li>• Provide training for employees and contractors on proper material delivery and storage practices and procedures.</li> <li>• Restrict paving operations during wet weather to prevent paving materials from being discharged.</li> <li>• Use asphalt emulsions such as prime coat when possible.</li> <li>• Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal.</li> <li>• Keep ample supplies of drip pans and absorbent materials on site.</li> <li>• Inspect inlet protection devices.</li> <li>• See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements.</li> <li>• Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</li> </ul>	See Material Storage and Handling Section SM-2, and Stockpile Management Section SM-3, Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<p><i>Materials associated with painting, such as paint and paint wash solvent</i></p>	<ul style="list-style-type: none"> <li>• <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i></li> <li>• <i>Keep ample supply of cleanup materials on site.</i></li> <li>• <i>Dispose container only after all of the product has been used.</i></li> <li>• <i>Remove as much paint from brushes on painted surface.</i></li> <li>• <i>Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not, direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i></li> <li>• <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i></li> <li>• <i>Do not dump liquid wastes into the storm drainage system.</i></li> <li>• <i>Filter and re-use solvents and thinners.</i></li> <li>• <i>Dispose of oil-based paints and residue as a hazardous waste.</i></li> <li>• <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i></li> <li>• <i>Immediately clean up spills and leaks.</i></li> <li>• <i>Properly store paints, solvents, and epoxy compounds.</i></li> <li>• <i>Properly store and dispose waste materials generated from painting and structure repair and construction activities.</i></li> <li>• <i>Mix paints in a covered and contained area, when possible, to minimize adverse impacts from spills.</i></li> <li>• <i>Do not apply traffic paint or thermoplastic if rain is forecasted.</i></li> <li>• <i>See Material Storage and Handling Use SM-2, Hazardous Materials and Waste Management Section SM-9, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21 for additional requirements.</i></li> </ul> <p><i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></p>	<p><i>See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, Hazardous Materials and Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i></p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<p><i>Industrial chemicals, fertilizers, and/or pesticides</i></p>	<ul style="list-style-type: none"> <li>• <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i></li> <li>• <i>Keep ample supply of cleanup materials on site.</i></li> <li>• <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i></li> <li>• <i>Do not clean surfaces or spills by hosing the area down.</i></li> <li>• <i>Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.</i></li> <li>• <i>Dispose container only after all of the product has been used.</i></li> <li>• <i>Retain a complete set of safety data sheets (formerly MSDS) on site.</i></li> <li>• <i>Store industrial chemicals in water-tight containers and provide either cover or secondary containment.</i></li> <li>• <i>Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.</i></li> <li>• <i>Restrict amount of pesticide prepared to quantity necessary for the current application.</i></li> <li>• <i>Do not apply fertilizers or pesticides during or just before a rain event.</i></li> <li>• <i>Do not apply to stormwater conveyance channels with flowing water.</i></li> <li>• <i>Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment J.</i></li> <li>• <i>Apply fertilizers at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth.</i></li> <li>• <i>Follow federal, state, and local laws regarding fertilizer application.</i></li> <li>• <i>Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris.</i></li> </ul>	<p><i>See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, and Hazardous Materials and Waste Management Section SM-9, and Spill Prevention and Control SM-10</i></p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
	<ul style="list-style-type: none"> <li>• <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</i></li> <li>• <i>See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i></li> </ul>	
<p><i>Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)</i></p>	<ul style="list-style-type: none"> <li>• <i>Do not dispose of toxic materials in dumpsters allocated for construction debris.</i></li> <li>• <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i></li> <li>• <i>Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</i></li> <li>• <i>Segregate and recycle wastes from vehicle/equipment maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids.</i></li> <li>• <i>Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements.</i></li> <li>• <i>All containers stored outside shall be kept away from surface waters and within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible.</i></li> <li>• <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i></li> <li>• <i>Do not clean surfaces or spills by hosing the area down.</i></li> <li>• <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i></li> </ul>	<p><i>See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12</i></p>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
	<ul style="list-style-type: none"> <li>• <i>Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.</i></li> <li>• <i>See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.</i></li> </ul>	
<i>Metals and Building Materials</i>	<ul style="list-style-type: none"> <li>• <i>Inspect construction waste and recycling areas regularly.</i></li> <li>• <i>Schedule solid waste collection regularly.</i></li> <li>• <i>If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers.</i></li> <li>• <i>Minimize the amount of material stored on site.</i></li> <li>• <i>Do not stockpile uncovered metals or other building materials in close proximity to discharge points.</i></li> <li>• <i>See Solid Waste Management Section SM-6 for additional requirements.</i></li> </ul>	<i>See Solid Waste Management Section SM-6</i>
<i>Contaminated Soil</i>	<ul style="list-style-type: none"> <li>• <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i></li> <li>• <i>At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.</i></li> </ul>	<i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9</i>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<i>Fugitive Dust Control and Dust Control Water</i>	<ul style="list-style-type: none"> <li>• <i>Do not over spray water for dust control purposes which will result in runoff from the area.</i></li> <li>• <i>Apply water as conditions require.</i></li> <li>• <i>Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.</i></li> <li>• <i>Minimize exposed areas through the schedule of construction activities.</i></li> <li>• <i>Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil.</i></li> <li>• <i>Direct construction vehicle traffic to stabilized roadways.</i></li> <li>• <i>Cover dump trucks hauling material from the site with a tarpaulin.</i></li> </ul> <p><i>See Dust Control Section SM-19 for additional requirements.</i></p>	See Dust Control Section SM-19
<i>Concrete Truck Wash Water</i>	<ul style="list-style-type: none"> <li>• <i>Disposal of concrete truck wash water via percolation is prohibited.</i></li> <li>• <i>Wash concrete-coated vehicles or equipment off-site or in the designated wash area.</i></li> <li>• <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i></li> <li>• <i>Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.</i></li> <li>• <i>Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.</i></li> <li>• <i>The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.</i></li> <li>• <i>Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.</i></li> <li>• <i>Do not dump liquid wastes into storm drainage system.</i></li> <li>• <i>Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.</i></li> <li>• <i>See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements.</i></li> </ul>	See Waste Management, Concrete Wash and Waste Management Section SM-4

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<i>Sediment Track-Out</i>	<ul style="list-style-type: none"> <li>• <i>Include Stabilized Construction Entrance at all points that exit onto paved roads.</i></li> <li>• <i>A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.</i></li> <li>• <i>The pavement shall not be cleaned by washing down the street.</i></li> <li>• <i>If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.</i></li> <li>• <i>Use BMPs for adjacent drainage structures.</i></li> <li>• <i>Remove sediment tracked onto the street by the end of the day in which the track-out occurs.</i></li> <li>• <i>Restrict vehicle use to properly designated exit points.</i></li> <li>• <i>Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met.</i></li> </ul> <p><i>See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements.</i></p>	<i>See Stabilized Construction Entrance/Exit Section SC-11</i>
<i>Irrigation Water</i>	<ul style="list-style-type: none"> <li>• <i>Consider irrigation requirements.</i></li> <li>• <i>Where possible, avoid species which require irrigation.</i></li> <li>• <i>Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.</i></li> </ul> <p><i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements.</i></p>	<i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation</i>
<i>Hydrotesting Effluent</i>	<ul style="list-style-type: none"> <li>• <i>If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i></li> </ul>	<i>Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<i>Dewatering Effluent</i>	<i>If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if necessary. See Site Planning and General Practices, Dewatering Operations Section SM-18 for additional requirements.</i>	<i>See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.</i>
<i>Saw-cutting Slurry</i>	<ul style="list-style-type: none"> <li>• <i>Saw cut slurry shall be removed from the site by vacuuming.</i></li> <li>• <i>Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></li> </ul>	<i>See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable</i>
<i>Concrete Curing Water</i>	<ul style="list-style-type: none"> <li>• <i>Avoid overspraying of curing compounds.</i></li> <li>• <i>Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.</i></li> </ul> <i>See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements.</i>	<i>See California Stormwater BMP Handbook NS-12 Concrete Curing</i>

<b>Pollutant Source</b>	<b>Appropriate Site-Specific BMP to be Implemented</b>	<b>BMP Requirements</b>
<i>Plaster Waste Water</i>	<ul style="list-style-type: none"> <li>• <i>Direct all wastewater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i></li> <li>• <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i></li> <li>• <i>Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be removed and properly disposed of.</i></li> <li>• <i>Plaster waste water shall not be allowed to flow into drainage structures or State waters. See Material, Storage and Handling Use SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i></li> </ul>	<i>See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9</i>
<i>Water-Jet Wash Water</i>	<ul style="list-style-type: none"> <li>• <i>For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.</i></li> <li>• <i>See Vehicle and Equipment Cleaning Section SM-11 for additional information.</i></li> <li>• <i>For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.</i></li> </ul>	<i>See Vehicle and Equipment Cleaning Section SM-11</i>
<i>Sanitary/Septic Waste</i>	<ul style="list-style-type: none"> <li>• <i>Locate Sanitary facilities in a convenient place away from drainage facilities.</i></li> <li>• <i>Position sanitary facilities so they are secure and will not be tipped over or knocked down.</i></li> <li>• <i>Wastewater shall not be discharged to the ground or buried.</i></li> <li>• <i>A licensed service provider shall maintain sanitary/septic facilities in good working order.</i></li> <li>• <i>Schedule regular waste collection by a licensed transporter.</i></li> <li>• <i>See Sanitary Waste Section SM-7 for additional requirements.</i></li> </ul>	<i>See Sanitary Waste Section SM-7.</i>

590  
591  
592

“

**END OF SECTION 209**

1                                   **SECTION 301 – HOT MIX ASPHALT BASE COURSE**

2  
3    Make the following amendments to said Sections:

4  
5    **(I)**    Amend **Section 301.03(B)            Compaction** by revising the second  
6    paragraph from lines 84 to 87 to read as follows:

7  
8                    “Compact mixture immediately upon completion of spreading  
9                    operations to density of not less than 92.0 percent of maximum theoretical  
10                   specific gravity in accordance with AASHTO T 209, modified by deletion of  
11                   Supplemental Procedure for Mixtures Containing Porous Aggregate.”

12  
13  
14    **(II)**   Amend **Section 301.04   Measurement** from lines 98 to 100 to read as  
15    follows:

16  
17    **“301.04        Measurement.**        The Engineer will measure HMAB course per  
18    ton in accordance with contract documents.”

19  
20  
21    **(III)**   Amend **Section 301.05   Payment**, from lines 102 to 111 to read as  
22    follows:

23  
24    **“301.05        Payment.**        The Engineer will pay for the accepted pay item listed  
25    below at the contract price per pay unit, as shown in the proposal schedule.  
26    Payment will be full compensation for the work prescribed in this section and the  
27    contract documents.

28  
29                   The Engineer will pay for the following pay item when included in the  
30    proposal schedule:

31

<b>Pay Item</b>	<b>Pay Unit</b>
Hot Mix Asphalt Base Course	Ton

32  
33  
34  
35  
36                   **(1)**    80% of the contract unit price upon completion of submitting  
37                   a job-mix formula acceptable to the Engineer; preparing the  
38                   surface, spreading, and finishing the mixture; and compacting the  
39                   mixture by rolling;

40  
41                   **(2)**    20% of the contract unit price upon completion of cutting  
42                   samples from the compacted pavement for testing; placing and  
43                   compacting the sampled area with new material conforming to the  
44                   surrounding area; protecting the pavement; and final analysis.  
45

46 The Engineer may, in lieu of requiring removal and replacement, use the  
47 sliding scale factor to accept HMAB compacted below 92.0 percent. The  
48 Engineer will make payment for the material in that production day at a reduced  
49 price arrived at by multiplying the contract unit price by the pay factor shown in  
50 Table 301.05-1.  
51

<b>Table 301.05-1 – Sliding Scale Pay Factor</b>	
<b>Percent Compaction</b>	<b>Percent Payment</b>
92.0 or greater	100
90.0 – 91.9	80
<90.0	Removal

52  
53  
54  
55

**END OF SECTION 301**







- 46 (1) Blaw-Knox bituminous pavers shall be  
47 equipped with the Blaw-Knox Materials  
48 Management Kit (MMK).  
49  
50 (2) Cedarapids bituminous pavers shall be those  
51 that were manufactured in 1989 or later.  
52  
53 (3) Barber-Green/Caterpillar bituminous pavers  
54 shall be equipped with deflector plates as  
55 identified in the December 2000 Service  
56 Magazine entitled "New Asphalt Deflector Kit  
57 {6630, 6631, 6640}".  
58

59 Prior to the start of using the paver for placing plant  
60 mix, the Contractor shall submit for approval a full  
61 description in writing of the means and methodologies that  
62 will be used to prevent bituminous paver segregation. Use of  
63 the paver shall not commence prior to receiving approval  
64 from the Engineer.  
65

66 The Contractor shall supply a Certificate of  
67 Compliance that verifies that the approved means and  
68 methods used to prevent bituminous paver segregation have  
69 been implemented on all pavers used on the project and is  
70 working in accordance with the manufacturer's  
71 requirements."  
72

73 **(VI) Amend Section 401.03(F)(1) HMA Pavement Courses One and a**  
74 **Half Inches Thick Or Greater**, from lines 499 to 505 to read as follows:  
75

76 **"(1) HMA Pavement Courses One and a Half Inches Thick Or**  
77 **Greater.** Where HMA pavement compacted thickness indicated  
78 in the contract documents is 1-1/2 inches or greater, compact to not  
79 less than 92.0 percent nor greater than 97.0 percent of the  
80 maximum specific gravity determined in accordance with AASHTO  
81 T 209, modified by deletion of Supplemental Procedure for Mixtures  
82 Containing Porous Aggregate."  
83

84  
85 **(VII) Amend Section 401.03(F)(3) HMA Pavement Courses One and a**  
86 **Half Inches Thick or Greater In Special Areas Not Designated For Vehicular**  
87 **Traffic**, from lines 530 to 538 to read as follows:  
88

89 **"(3) HMA Pavement Courses One and a Half Inches Thick or**  
90 **Greater In Special Areas Not Designated For Vehicular Traffic.**  
91 For areas such as bikeways that are not part of roadway and other

92 areas not subjected to vehicular traffic, compact to not less than  
93 90.0 percent of maximum specific gravity determined in accordance  
94 with AASHTO T 209, modified by deletion of Supplemental  
95 Procedure for Mixtures Containing Porous Aggregate. Increase  
96 asphalt content by at least 0.5 percent above that used for HMA  
97 pavements designed for vehicular traffic.”  
98  
99

100 **(VIII) Amend Section 401.04 Measurement**, from lines 597 to 603 to read as  
101 follows:

102  
103 **“401.04 Measurement.** The Engineer will measure asphalt concrete  
104 pavement per ton in accordance with the contract documents.  
105

106  
107 **(IX) Amend Section 401.05 Payment**, from lines 605 to 635, to read as  
108 follows:

109  
110 **“401.05 Payment.** The Engineer will pay for the accepted pay items  
111 listed below at the contract price per pay unit, as shown in the proposal schedule.  
112 Payment will be full compensation for the work prescribed in this section and the  
113 contract documents.  
114

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

<b>Pay Item</b>	<b>Pay Unit</b>
HMA Pavement, Mix No. _____	Ton

117  
118  
119  
120  
121  
122 **(1)** 80% of the contract unit price upon completion of submitting  
123 a job-mix formula acceptable to the Engineer; preparing the  
124 surface, spreading, and finishing the mixture; and compacting the  
125 mixture;  
126

127 **(2)** 20% of the contract unit price upon completion of cutting  
128 samples from the compacted pavement for testing; placing and  
129 compacting the sampled area with new material conforming to the  
130 surrounding area; protecting the pavement; and final analysis.  
131

132 The Engineer will pay for cold planing in accordance with and under  
133 Section 415 – Cold Planing of Existing Pavement.  
134

135 The Engineer will pay for adjusting existing frames and covers and valve  
136 boxes in accordance with and under Section 604 – Manholes, Inlets and Catch

137 Basins and Section 626 – Manholes and Valve Boxes for Water and Sewer  
138 Systems.

139

140 The Engineer may, in lieu of requiring removal and replacement, use the  
141 sliding scale factor to accept HMA pavements compacted below 92.0 percent  
142 and above 97.0 percent. The Engineer will make payment for the material in that  
143 production day at a reduced price arrived at by multiplying the contract unit price  
144 by the pay factor shown in Table 401.05-1.

145

<b>Table 401.05-1 – Sliding Scale Pay Factor for Compaction</b>	
<b>Percent Compaction</b>	<b>Percentage Payment</b>
> 98.0	Removal
97.1 - 98.0	95
92.0 - 97.0	100
90.0 - 91.9	80
<90.0	Removal

146

147

148

149

150

151

**END OF SECTION 401**

1 Delete Section 601 in its entirety and replace with the following:

2  
3 **“DIVISION 600 - MISCELLANEOUS CONSTRUCTION**

4  
5 **SECTION 601 - STRUCTURAL CONCRETE**

6  
7  
8 **601.01 Description.** This section describes structural concrete consisting of  
9 Portland Cement, fine aggregate, coarse aggregate, and water. This will include  
10 adding admixtures for the purpose of entraining air, retarding or accelerating set,  
11 tinting, and other purposes as required or permitted. All concrete designs for  
12 structural concrete to be placed on HDOT Highway projects must use technology to  
13 reduce the embodied carbon footprint of concrete used in the highway infrastructure,  
14 e.g., carbon dioxide mineralization or equivalent technology such as C-S-H  
15 nanoparticle-based strength-enhancing admixture (CSH-SEA), or technology or  
16 material that allows the reduction in the size of the carbon footprint of the mix, e.g.  
17 strength improving admixtures, supplementary cementitious materials (SCMs), or  
18 other Engineer accepted methods that can reduce the embodied carbon footprint of  
19 the concrete.

20  
21 **601.02 Materials.**

22		
23	Portland Cement	701.01
24		
25	Fine Aggregate for Concrete	703.01
26		
27	Coarse Aggregate for Portland Cement Concrete	703.02
28		
29	Admixtures	711.03
30		
31	Water	712.01
32		

33 Use coarse aggregate for lightweight concrete conforming to ASTM C330  
34 except Sections 5, 7 and 9.

35  
36 **601.03 Construction.**

37  
38 **(A) Quality Control.** Portland Cement concrete production requires  
39 Contractor responsibility for quality control of materials during handling,  
40 blending, mixing, curing, and placement operations.

41  
42 Sample, test, and inspect concrete to ensure quality control of  
43 component materials and concrete. Sampling and testing for quality control  
44 in accordance with standard methods shall be performed by certified ACI  
45 Concrete Field Technician Grade I who must follow the requirements of the  
46 standard test methods. Perform quality control tests for the slump, air

## 601.03

47 content, temperature, unit weight, a Box Test for slip form concrete, or other  
48 required properties during the production of structural concrete other than  
49 concrete for incidental construction. Submit quality control test results.  
50

51 **(B) Design and Designation of Concrete.** Design concrete mixture for  
52 concrete work specified. Submit mix design using State Highways Division  
53 form DOT 4-151 or an Engineer accepted equivalent form. Do not start work  
54 until the Engineer accepts mix design. The Engineer will accept concrete mix  
55 design using information given in Table 601.03-1 - Design of Concrete (800  
56 Maximum Cement Contents lbs./c.y), and other pertinent requirements.  
57

58 Whenever 28-day compressive strength,  $f_c$ , is 4,000 psi or greater,  
59 designate concrete by required minimum 28-day compressive strength.  
60

61 The 28-day compressive strength,  $f_c$ , less than 4,000 psi listed in  
62 Table 601.03-1 – Design of Concrete (800 Maximum Cement Contents  
63 lbs./c.y), is for design information and designation of class only.  
64

65 Proportion concrete designated by compressive strength such that  
66 concrete conforms to required strength.  
67

68 Design concrete placed in bridge decks and pavements exposed to  
69 traffic wear, with air content of 3 percent, including entrapped and entrained  
70 air. Maintain air content for plastic concrete within tolerance of 1 percent air  
71 content, plus or minus, during the work.  
72

73 Use Class BD concrete in bridge deck unless concrete is designated  
74 by compressive strength. Incorporate anti-corrosion and shrinkage  
75 reduction, water-reducing and set-retarding admixture into concrete mix  
76 design, with capability of varying degree of retardation without adversely  
77 affecting other characteristics of concrete. Submit design admixture dosage.  
78

79 When type of concrete is not indicated in the contract documents, use  
80 Class A concrete.  
81

82 Design concrete as specified in Table 601.03-1 – Design of Concrete  
83 (800 Maximum Cement Contents lbs./c.y).  
84

<b>TABLE 601.03-1 - DESIGN OF CONCRETE (800 Maximum Cement Content lbs./c.y.)</b>					
<b>Class of Concrete</b>	<b>28-Day Strength <math>f'_c</math>, psi.</b>	<b>Minimum Cement Content lbs./c.y.</b>	<b>Maximum Water-Cement Ratio, lb./lb.</b>	<b>Minimum Cement Content with Mineralized CO2 lbs./c.y.</b>	<b>Maximum Water-Cement Ratio with Mineralized CO2 lb./lb.</b>
A	3000	532	0.59	504	0.62
B	2500	475	0.66	450	0.70
C	2000	418	0.75	396	0.79
D	1500	380	0.85	360	0.87
BD	3750	610	0.49	NA	NA
SEAL	3000	610	0.55	NA	NA
Designated by Strength $f'_c$ or $^*f'_r$	As Specified	610	0.49	NA	NA

$^*f'_r$  = Specified Modulus of Rupture

85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102

Proportion concrete materials in accordance with requirements of concrete designated by class, cement content in pounds per cubic yards, or specified 28-day compressive strength, using absolute volume method. Use volumetric proportioning methods as outlined in the American Concrete Institute (ACI) Standard 211.1, "Recommended Practices for Selecting Proportions for Normal and Heavyweight Concrete."

Use coarse aggregate size No. 57 (one inch to No. 4) or No. 67 (3/4 inch to No. 4) for concrete. For concrete placed in bottom slabs and stems of box girders, use No. 67 size aggregate. If accepted by the Engineer in writing, smaller size aggregates are permitted when encountering limited space between forms and reinforcement.

Use the following standard methods in Table 601.03-2 – Standard Methods for determining compliance with requirements indicated in this subsection:

<b>TABLE 601.03-2 – STANDARD METHODS</b>	
Sampling Fresh Mixed Concrete	AASHTO T 141
Mass Per Cubic Meter (Cubic Foot) Yield and Air Content (Gravimetric) of Concrete	AASHTO T 121
Slump of Hydraulic Cement Concrete	AASHTO T 119
Air Content of Freshly Mixed Concrete by the Pressure Method	AASHTO T 152
Specific Gravity and Absorption of Fine Aggregate	AASHTO T 84
Specific Gravity and Absorption of Coarse Aggregate	AASHTO T 85
Temperature of Freshly Mixed Portland Cement Concrete	ASTM C1064
Making and Curing Concrete Test Specimens in the Field	AASHTO T 23
Compressive Strength of Molded Concrete Cylindrical Specimens	AASHTO T 22 (4 inch by 8 inch or 6 inch by 12 inch cylinders)
Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	AASHTO T 97

103  
104

105           When concrete is designated by compressive strength,  $f'_c$ , or flexural  
106 strength,  $f'_r$ , or includes CO<sub>2</sub> Mineralization technology, CSH-SEA or SCMs,  
107 the Engineer will require prequalification of materials and mix proportions  
108 proposed for use before placing such concrete. The Engineer will prequalify  
109 concrete based on past performance records using statistical computations  
110 of population sizes and (n-1) weighting, or trial batch test reports in  
111 compliance with computed minimum average strength for material and mix  
112 proportions. The Engineer will determine minimum average strength on  
113 probability of not more than one in 20 tests falling below specified strength  
114 for the following conditions:

115  
116           **(1)**   When past performance records are available, furnish the  
117 following documented performance records:

118  
119                   **(a)**   Minimum of 15 consecutive 28-day strength tests from  
120 projects having same materials and mix proportions.

121  
122                   **(b)**   Two groups totaling 30 or more test results representing  
123 similar materials in which mix proportion strengths are within 20  
124 percent of specified strength, from data obtained within one  
125 year of proposed use.

126  
127           The Engineer will analyze performance records to establish  
128 standard deviation.

129  
130           **(2)**   When sufficient past performance records are not provided, the  
131 Engineer will assume current standard deviation to be 500 psi for  
132 compressive strength,  $f'_c$ , and 50 psi for flexural strength,  $f'_r$ .

133  
134           Unless sufficient performance records are available from other  
135 projects at DOT Materials Testing and Research Branch, submit test  
136 performance records or trial test reports for prequalifications, based on data  
137 of most recent tests made on concrete of proposed mix design, and data  
138 obtained within one year of proposed use.

139  
140           When shrinkage reducing admixtures are used, submit test results  
141 showing compliance to the Contract Documents' requirements.

142  
143           Include the following information in test data and trial batch test  
144 reports: date of mixing; mixing equipment and procedures used; size of batch  
145 in cubic yards and weight, type, and source of ingredients used; slump of  
146 concrete; air content of concrete when using air entraining agent; age at time  
147 of testing; and strength of concrete cylinders tested.

149 Show that concrete strength tests equal or exceed minimum average  
150 strength in trial test reports. Test is average 28-day test results of five  
151 consecutive concrete cylinders or concrete beams taken from single batch.  
152 No cylinder or beam shall have strength less than 85 percent of minimum  
153 average strength.

154  
155 Submit test data and trial test reports signed by official of firm that  
156 performed tests.

157  
158 The Engineer reserves the right to stop work when a series of low  
159 strength tests occur. Do not continue concrete work until cause is  
160 established and the Engineer is informed of and accepts, necessary  
161 corrective action to be taken.

162  
163 **(C) Batching.** Measure and batch materials in accordance with the  
164 following provisions:

165  
166 **(1) Portland Cement.** Either sacked or bulk cement may be used.  
167 Do not use fraction of sack of cement in concrete batch unless cement  
168 is weighed.

169  
170 Weigh bulk cement on weighing device accepted by the  
171 Engineer. Seal and vent bulk cement-weighing hopper properly to  
172 preclude dusting during operation. Do not suspend discharge chute  
173 from weighing hopper. Arrange discharge chute so that cement will  
174 not lodge in hopper or leak from hopper.

175  
176 Batching accuracy shall be within 1 percent, plus or minus, of  
177 required weight.

178  
179 **(2) Water.** Measure water by volume or by weight. Use readily  
180 adjustable device for measurement of water, with accuracy within 1  
181 percent, plus or minus, of quantity of water required for batch. Arrange  
182 device so that variable pressure in water supply line does not affect  
183 measurements. Equip measuring tanks with outside taps and valves  
184 or other accepted means to allow for checking calibration.

185  
186 **(3) Aggregates.** When storing and stockpiling aggregates,  
187 avoid separation of coarse and fine particles within each size, and do  
188 not intermix various sizes before proportioning. Protect stored or  
189 stockpiled aggregates from dust or other foreign matter. Do not  
190 stockpile together, aggregates from different sources and of different  
191 gradations.

192  
193 When transporting aggregates from stockpiles or other sources  
194 to batching plant, ensure uniform grading of material is maintained.

195 Do not use aggregates that have become segregated or mixed with  
196 earth or foreign matter. Stockpile or bin aggregates at least 12 hours  
197 before batching. Produce or handle aggregates by hydraulic methods  
198 and wash and drain aggregates. If aggregates exhibit high or  
199 non-uniform moisture content, the Engineer will order storage or  
200 stockpiling for more than 12 hours.

201  
202 Proportion aggregates by weight, with the exception that  
203 aggregates in concrete for minor structures, curbs, and sidewalks may  
204 be proportioned by either volume or weight. For volumetric  
205 proportioning, use measuring boxes of known capacity to measure  
206 quantity of each aggregate size.

207  
208 Use batch weight based on dry materials plus total weight of  
209 moisture (both absorbed and surface) contained in aggregate.  
210 Measure individual aggregates to within 2 percent, plus or minus, of  
211 required weight, and total weight of aggregates to within 1 percent,  
212 plus or minus, of required weight.

213  
214 **(4) Admixtures.** Store, proportion, and dispense admixtures in  
215 accordance with the following provisions:

216  
217 **(a) Liquid Admixtures.** Dispense chemical admixtures, air  
218 entraining admixtures, and corrosion inhibiting admixtures in  
219 liquid form. Use mechanical dispensers for liquid admixtures  
220 with sufficient capacity to measure prescribed quantity for each  
221 batch of concrete. Include graduated measuring unit in each  
222 dispenser to measure liquid admixtures to within 5 percent, plus  
223 or minus, of prescribed quantity for each batch. Read  
224 graduations accurately from point of measuring unit, and  
225 control proportioning operations to permit visual check of batch  
226 accuracy before discharging. Mark each measuring unit clearly  
227 for type and quantity of admixture.

228  
229 Arrange with supplier to provide sampling device  
230 consisting of valve located in safe and accessible location for  
231 sampling admixtures.

232  
233 When using more than one liquid admixture for concrete  
234 mix, use separate measuring unit for each liquid admixture and  
235 dispense separately to avoid interaction that may interfere with  
236 admixture efficiency and adversely affect concrete. Dispense  
237 liquid admixture by injecting so as not to mix admixture at high  
238 concentrations.

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240 When using liquid admixtures in concrete that is

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completely mixed in paving or continuous mixers, operate dispensers automatically with batching control equipment. Equip such dispensers with automatic warning system that shall provide visible or audible signals at points where proportioning operations are controlled, when the following occurs: quantity of admixture measured for each batch of concrete.

Unless liquid admixtures are added to batch with pre-measured water, discharge liquid admixtures into stream of water that disperses admixtures uniformly throughout batch. An exception is that air-entraining admixtures may be dispensed directly into moist sand in batching bins, provided adequate control of concrete air content can be maintained.

Measure and disperse special admixtures, as recommended by admixture manufacturer, and as accepted by the Engineer. Special admixtures include high-range water reducers requiring dosages greater than capacity of conventional dispensing equipment. For site-added, high-range water reducers, use calibrated, portable dispenser supplied by manufacturer.

**(b) Mineral Admixtures.** Protect mineral admixtures from exposure to moisture until used. Pile sacked material of each shipment to permit access for tally, inspection, and identification.

Provide adequate facilities to ensure that mineral admixtures meeting specified requirements are kept separate from other mineral admixtures and that only specified mineral admixtures are allowed to enter into the work. Provide safe and suitable facilities for sampling mineral admixtures at weigh hopper or in feed line immediately in advance of hopper.

Incorporate mineral admixtures into concrete using equipment conforming requirements for portland cement weigh hoppers and charging and discharging mechanisms specified in ASTM C94 and Subsection 601.03(C) - Batching.

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When concrete is completely mixed in stationary paving or continuous mixers, weigh mineral admixture in separate weigh hopper. Introduce mineral admixture and cement simultaneously into mixer, proportionately with aggregate.

When interlocks are required for cement-charging mechanisms, and cement and mineral admixtures are weighed cumulatively, interlock their charging mechanisms to prevent introduction of mineral admixture until mass of cement in weigh hopper is within tolerances specified in Subsection 601.03(C)(1) - Portland Cement.

In determining maximum quantity of free water that may be used in concrete, consider mineral admixture and supplementary cementitious materials (SCMs) to be cement.

**(5) Bins and Scales.** At batching plant, use individual bins, hoppers, and scale for each aggregate size. Include separate bin, hopper, and scale for bulk cement and fly ash.

Except when proportioning bulk cement for pavement or structures, cement weigh hopper may be attached to separate scale for individual weighing or to aggregate scale for cumulative weighing. If cement is weighed cumulatively, weigh cement before other ingredients.

When proportioning for pavement or structures, keep bulk cement scale and weigh hopper separate and distinct from aggregate weighing equipment.

Use springless-dial or beam-type batching scales. When using beam-type scales, make provisions to show operator that required load in weighing hopper is approaching. Use devices that show condition within last 200 pounds of load and within 50 pounds of overload.

Maintain scale accuracy to 0.5 percent throughout range of use. Design poises to lock to prevent unauthorized change of position. Use scales inspected by the State Measurement Standards Branch of the Department of Agriculture to ensure their continued accuracy. Provide not less than ten 50-pound weights for testing scales.

Batching plants may be equipped to proportion aggregates and bulk cement by automatic weighing devices.

326                   **(6) Batching and Hauling.** When mixing is to be performed at  
327 work site, transport aggregates from batching plant to mixer in batch  
328 boxes, vehicle bodies, or other containers of adequate capacity and  
329 construction. Use partitions to separate batches and prevent spilling  
330 from one compartment to another while in transit or during dumping.  
331

332                   Transport bulk cement to mixer in tight compartments carrying  
333 full quantity of cement required for batch. Once cement is placed in  
334 contact with aggregates, batches shall be mixed and placed within  
335 1-1/2 hours of contact. Cement in original shipping packages may be  
336 transported on top of aggregates. Ensure that each batch contains  
337 number of sacks required by job mix.  
338

339                   Deliver batches to mixer intact. Charge each batch into mixer  
340 without loss of cement. When carrying more than one batch on truck,  
341 charge batch into mixer without spilling material from one batch  
342 compartment into another.  
343

344                   **(D) Mixing.** Mix concrete in mechanically operated mixers. When  
345 accepted by the Engineer, batches not exceeding 1/3 cubic yard may be  
346 hand mixed in accordance with methods described at end of this subsection.  
347

348                   Use stationary or truck mixers that distribute materials thoroughly and  
349 produce concrete uniform in color and appearance. When there is variation  
350 in mixed concrete attributable to worn pickup or throw-over blades, the  
351 Engineer will inspect mixer. If inspection reveals that blades are worn more  
352 than one inch below original height of manufacturer's design, repair or  
353 replace blades. Upon request, make copy of manufacturer's design, showing  
354 dimensions and arrangement of blades.  
355

356                   Charge batches into central or truck mixers so that portion of mixing  
357 water enters ahead of cement and aggregates. Deliver uniform flow of water.  
358 Place entire amount of batch water in mixer by end of first quarter of mixing  
359 period. When mixers with multiple compartment drums are used, time  
360 required to transfer material between compartments will be included as  
361 mixing time. Use drum rotation speed as designated by manufacturer. If  
362 mixing does not produce concrete of uniform and smooth texture, provide  
363 additional revolutions at same speed until thorough mixing of each concrete  
364 batch is attained. Begin measuring mixing time from time cement,  
365 aggregates, and 60 percent of water are in drum. Do not exceed  
366 manufacturer's rated capacity for volume of concrete mixed in each batch.  
367

368 Equip central or truck mixers with attachment for automatically timing  
369 mixing of each concrete batch. Timing device shall include automatic feature  
370 for locking discharge chute and device for warning operator when required  
371 mixing duration has been met. If timing or locking device fails to operate,  
372 immediately furnish clock or watch that indicates seconds, to mixer operator.  
373 If timing device is not repaired within three days after becoming inoperative,  
374 shut down batching operation until timing device is repaired.  
375

376 For stationary mixers, use mixing time between 50 seconds and 5  
377 minutes. Select mixing time, as necessary, to produce concrete that meets  
378 uniformity criteria when tested in accordance with Section 11.3.3 of ASTM  
379 C94. The Contractor may designate mixing time for which uniformity tests  
380 are to be performed, provided mixing time is not less than 50 seconds or  
381 more than 5 minutes. Before using concrete for pavements or structures, mix  
382 concrete to meet specified uniformity requirements. The Contractor shall  
383 furnish labor, sampling equipment, and materials required for conducting  
384 uniformity tests of concrete mixture. The Engineer will furnish required  
385 testing equipment, including scales, cubic measure, and air meter; and will  
386 perform tests. The Engineer will not pay separately for labor, equipment,  
387 materials, or testing, but will consider the costs incidental to concrete. After  
388 batching and mixing operational procedures are established, the Engineer  
389 will not allow changes in procedures without the Contractor re-establishing  
390 procedures by conducting uniformity tests. Repeat mixer performance tests  
391 whenever appearance of concrete or coarse aggregate content of samples  
392 is not conforming to requirements of ASTM C94. For truck mixers, add four  
393 seconds to specified mixing time if timing starts as soon as skip reaches its  
394 maximum raised position.  
395

396 Unless otherwise indicated in the contract documents or accepted by  
397 the Engineer, concrete shall be mixed at proportioning plant. Operate mixer  
398 at agitating speed while in transit. Concrete may be truck-mixed only when  
399 cement or cement and mixing water are added at point of delivery. Begin  
400 mixing truck-mixed concrete immediately after introduction of mixing water to  
401 cement and aggregates, or introduction of cement to aggregates.  
402

403 Inclined-axis, revolving drum truck mixers shall conform to Truck  
404 Mixer, Agitator and Front Discharge Concrete Carrier Standards TMMB  
405 100-01, 15th Revision, published by Truck Mixer Manufacturers Bureau.  
406 Truck mixers shall produce thoroughly mixed and uniform mass of concrete  
407 and shall discharge concrete without segregation.  
408

409 Manufacturer's standard metal rating plate shall be attached to each  
410 truck mixer, stating maximum rating capacity in terms of volume of mixed  
411 concrete for various uses and maximum and minimum mixing speeds. When  
412 using truck mixers for mixing, adhere to maximum capacity shown on metal  
413 rating plate for volume of concrete in each batch.

## 601.03

414 Operate truck mixers at mixing speed designated by manufacturer, but  
415 at not less than 6 or more than 18 revolutions per minute. Mix truck-mixed  
416 concrete initially between 70 and 100 revolutions at manufacturer-designated  
417 mixing speed, after ingredients, including water, are in mixer. Water may be  
418 added to mixture not more than two times after initial mixing is completed.  
419 Each time that water is added, turn drum an additional 30 revolutions or more  
420 at mixing speed until concrete is mixed uniformly.

421  
422 When furnishing shrink-mixed concrete, transfer partially mixed  
423 concrete at central plant to truck mixer. Apply requirements for truck-mixed  
424 concrete. The Engineer will not credit number of revolutions at mixing speed  
425 for partial mixing in central plant.

426  
427 When accepted by the Engineer, concrete batches not exceeding 1/3  
428 cubic yard may be hand mixed on a watertight, level platform. Use no  
429 aluminum to construct platform. Measure proper amount of coarse  
430 aggregate in measuring boxes and spread on platform. Spread fine  
431 aggregate on that coarse aggregate layer. Limit coarse and fine  
432 aggregate layers to total depth of one foot. Spread dry cement on this  
433 mixture. Turn whole mass not less than two times dry. Add sufficient  
434 clean water, distributed evenly. Turn whole mass again, not less than  
435 three times, not including placing in carriers or forms.

436  
437 **(E) Transporting Mixed Concrete.** Transport central-mixed concrete to  
438 delivery point in truck agitators or truck mixers operating at speed designated  
439 by equipment manufacturer as agitating speed; or in non-agitating hauling  
440 equipment, provided consistency and workability of mixed concrete upon  
441 discharge at delivery point is suitable for placement and consolidation in  
442 place; and provided mixed concrete after hauling to delivery point conforms  
443 to uniformity criteria when tested as specified in Section 12.5 of ASTM C94.

444  
445 For revolving drum truck mixers transporting central-mixed concrete,  
446 limit concrete volume to manufacturer's rated capacity for agitator operation.  
447 Maintain agitating speed for both revolving drum mixers and revolving blade  
448 type agitators as designated on manufacturer's data plate. Equip truck  
449 mixers or truck agitators with electrically or mechanically actuated counters.  
450 Actuate counters after introducing cement to aggregates.

451  
452 Bodies of non-agitating hauling equipment shall be smooth, watertight,  
453 metal containers equipped with gates to permit control of concrete discharge.  
454 Protect open-topped haul vehicle against weather with cover accepted by the  
455 Engineer. When hauling concrete in non-agitating trucks, complete discharge  
456 within 30 minutes after introducing mixing water to cement and aggregates.

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When truck mixer or agitator is used for transporting central-mixed concrete to delivery point, complete discharge within 1-1/2 hours, or before 250 revolutions of drum or blades, whichever comes first after introduction of mixing water to cement and aggregates, or cement to aggregates. For truck-mixed concrete, complete concrete discharge within 1-1/2 hours, or before 300 revolutions of drum or blades, whichever comes first. These limitations are permitted to waived if concrete is of such slump after the 1-1/2 hour time or 300-revolution limit has been reached, that it can be placed, without addition of water to the batch.

Submit delivery tickets from manufacturers of truck-mixed concrete and central-mixed concrete with each truckload of concrete before unloading at jobsite. Printed, stamped, or written delivery ticket shall include the following information:

- (1) Name of concrete plants.
- (2) Serial number of ticket.
- (3) Date and truck number.
- (4) Name of Contractor.
- (5) Specific project, route, or designation of job (name and location), and truck overweight permit number when required.
- (6) Specific class or designation of concrete in accordance with contract documents.
- (7) Quantity of concrete in cubic yards.
- (8) Time of loading batch or mixing of cement and aggregates.
- (9) Water added by receiver of concrete and receiver's initials.
- (10) Information necessary to calculate total mixing water added by producer. Total mixing water includes free water on aggregates, water, and water added by truck operator from mixer tank.
- (11) Readings of non-resettable revolution counters of truck mixers after introduction of cement to aggregates, or introduction of mixing water to cement aggregates.
- (12) Supplier's mix number or code.

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Furnish additional information designated by the Engineer and required by job specifications upon request.

**(F) Consistency.** Regulate quantity of water used in concrete mixes so that concrete consistency, as determined by AASHTO T 119 test method, is within nominal slump range specified in Table 601.03-3 - Slump for Concrete or as stated on the accepted concrete mix design. If concrete slump exceeds nominal slump, adjust mixture of subsequent batches. If slump exceeds maximum slump, the Engineer will reject concrete unless deemed satisfactory for its use.

The Engineer will also reject harsh or unworkable concrete that cannot be properly placed. Remove rejected concrete at no increase in contract price or contract time.

Slump for concrete shall be as specified in Table 601.03-3 – Slump for Concrete.

TABLE 601.03-3 - SLUMP FOR CONCRETE		
Type of Work	Nominal Slump Inches	Maximum Slump Inches
Concrete Pavements	0 – 3	3-1/2
Reinforced Concrete Structures:		
Sections Over 12 Inches	0 – 4	5
Sections 12 Inches Thick or Less	2 – 5	6
Non-Reinforced Concrete Facilities	1 – 3	4
Concrete Placed Underwater	6 – 8	9
Bridge Decks	0 – 3	3-1/2

In adverse or difficult conditions that may affect placement of concrete, the above slump limitations may be exceeded for placement workability, with the addition of admixture conforming to Subsection 711.03 - Admixtures, if accepted by the Engineer in writing and provided water-cement ratio is maintained. Provide additional cement and water, or admixture at no increase in contract price or contract time.

- (G) Forms.** Construct forms in accordance with applicable sections.
- (H) Placing Concrete.** Place concrete in accordance with applicable sections.
- (I) Finishing Concrete Surfaces.** Finish concrete surfaces in accordance with applicable sections.

537           **(J) Curing Concrete.** Cure concrete in accordance with applicable  
538 sections.

539  
540   **601.04 Measurement.** The Engineer will measure concrete in accordance with  
541 the applicable sections.

542  
543   **601.05 Payment.** The Engineer will pay for the accepted concrete under the  
544 applicable sections.

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**END OF SECTION 601”**





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1. Project name
2. Location of project (city, state)
3. Owner
4. Owner Contact (name and current phone number)
5. Architect or Engineer Company Name
6. Architect or Engineer Contact (name and current phone number)
7. Construction Manager (name and current phone number)
8. Description of Project, Scope of Work Performed
9. Total Value of Construction (including change orders)
10. Original Scheduled Completion Date
11. Actual Date of Completion

**(d) Approval.** The Contractor shall submit the items under this section to the Engineer for approval prior to construction. If the applicant does not have proof of five continuous years of experience with a minimum of five completed projects similar in scope and size, the Contractor shall remove the applicant from the project upon receipt of a written notice from the Engineer. Requests to substitute an applicant will be allowed under Subsection 105.16 Subcontracts.”

**(III) Amend Subsection 619.03(I)(1) – Adding Fertilizer and Amendments** by revising the section from lines 310 to 314 to read:

“(1) Uniformly distribute fertilizer and amendments over planting areas as recommended by the Soil Analysis Report as specified in Section 617 – Planting Soil. Document if rates and amounts of fertilizer deviate from manufacturer’s specifications. Rototill top four inches of soil to evenly incorporate fertilizer and amendments. Rototill before installing drip irrigation system.”

86 (IV) Amend **Subsection 619.03(T)(3) – Fertilizing** by adding the following  
87 paragraph after line 478:

88  
89 “Submit recommendations from a licensed Landscape Architect  
90 when deviating from the application rates and amounts above. Document  
91 if the rates and amounts of fertilizer deviate from manufacturer’s  
92 specifications.”

93  
94  
95 (V) Amend **619.04 – Measurement** by revising lines 538 to 539 to read as  
96 follows:

97  
98 **“619.04 Measurement.** Planting will be paid on a lump sum basis.  
99 Measurement for payment will not apply. Planting soil is incidental and will not be  
100 paid for separately.”

101  
102  
103 (VI) Amend **619.05 – Payment** by revising lines 541 to 573 to read as follows:

104  
105 **“619.05 Payment.** The Engineer will pay for the accepted pay items listed  
106 below on a lump sum basis, as shown in the proposal schedule. Payment will be  
107 full compensation for the work prescribed in this section and the contract  
108 documents.

109  
110 The Engineer will pay for each of the following pay items when included in  
111 the proposal schedule:

112	<b>Pay Item</b>	<b>Pay Unit</b>
113		
114		
115	Planting	Lump Sum”
116		

117  
118 **END OF SECTION 619**  
119

1 Delete Section 636 in its entirety and replace with the following:  
2

3 **“SECTION 636 – E-CONSTRUCTION**  
4

5  
6 **636.01 Description.** This section specifies requirements for performing the  
7 Project in a “paperless” manner, using electronic tools for all submittals,  
8 communications, quantity tracking, testing and sampling, scheduling, quality  
9 control, and performance monitoring.  
10

11 **636.02 General Requirements.** The Contractor shall implement the use of the  
12 E-Construction platform, as provided by the HDOT and directed by the Engineer,  
13 for use throughout the project. Paper-based or hard copy submittals will not be  
14 accepted.  
15

16 This Special Provision shall take precedence over all other Specification  
17 sections with respect to providing and receiving paper copy communications,  
18 submittals, and any project records. Where conflicts exist, and a decision between  
19 a hard-copy item and a corresponding electronic version is needed, the electronic  
20 version shall be selected, unless otherwise directed by the Engineer.  
21

22 **636.03 Construction**  
23

24 **(A) Plans and Specifications.** Project drawings will not be provided to  
25 the Contractor in hard copy format. An electronic version will be provided  
26 in the E-Construction platform for use during the project.  
27

28 The Contractor shall note all changes to the work, including all  
29 subcontractor’s work, in electronic format using the E-Construction  
30 platform. Red annotations shall be used to note changes. Blue annotations  
31 shall be used for any additional notes that will be helpful for the State in  
32 interpreting the field posted drawings. Other drafting standards may be  
33 implemented by the Engineer and shall be adhered to by the Contractor.  
34 Changes shall be input by the Contractor and reviewed by the Engineer  
35 monthly. The Contractor shall make any changes that the Engineer  
36 requires.  
37

38 **(B) Submittals.** The Contractor shall provide all required submittals, as  
39 listed within the contract documents, via the E-Construction platform. All  
40 review, approval, and resubmittal regarding submittals shall also be  
41 documented within the E-Construction platform.  
42

43 **(C) Correspondence.** Electronic mail (email) shall be the preferred  
44 method of electronic communication. All communications that affect project  
45 scope, schedule, cost, or quality, including changes and requests for  
46 information, shall be submitted as directed by the Engineer.

47 **(D) Prosecution and Progress.** The Contractor shall provide all  
48 administrative, management, and project support documents required by  
49 various specification sections, using the E-Construction platform. These  
50 elements include, but are not limited to:

- 51
- 52 (1) Preconstruction Data Submittal (Section 108.03)
- 53 (2) Correspondence regarding Contract Time (Section 108.05)
- 54 and Delays
- 55 (3) Progress Schedules (Section 108.06)
- 56 (4) Weekly Meeting preparatory materials (Section 108.07)
- 57 (5) Samples, certifications, material data, installation instructions,
- 58 and shop drawings (Sections 105 – Control of Work and 106
- 59 – Material Restrictions and Requirements)
- 60 (6) Field-posted Drawings (Section 648)
- 61 (7) Pre-Final and Final Inspection submittals (Section 108.13)
- 62 (8) Warranty documentation – Guarantee of Work (Section
- 63 108.17)
- 64 (9) Project Closing Documents – Final Settlement of Contract
- 65 (Section 108.19)
- 66

67 In addition to the foregoing, the Contractor shall provide any  
68 other materials, correspondence, and submittals using the E-  
69 Construction platform as directed by the Engineer.

70

71 **(E) Resources.** The Contractor shall provide a comprehensive list of  
72 Contractor labor and equipment, including all subcontractor labor and  
73 equipment, that will be deployed on the project, using spreadsheet-based  
74 templates provided in the E-Construction platform. All template fields shall  
75 be completed. The submitted information shall comply with the  
76 requirements of Specification Section 108 – Prosecution and Progress  
77 (identification of labor and equipment resources) and Specification Section  
78 109 - Measurement and Payment (cost data) and represent all individual  
79 personnel with labor categories and rates, and all equipment owned or  
80 rented, with associated rates, on this project. Updates for additional  
81 personnel or equipment shall be accomplished by the Contractor at will and  
82 shall be completed when directed by the Engineer.

83

84 **(F) Electronic Ticketing.** The Contractor/supplier shall provide  
85 electronic material tickets for all loads of Asphalt Mix (Hot Mix Asphalt  
86 Concrete, Hot Mix Asphalt Base Course, or Stone Matrix Asphalt), Portland  
87 Cement Concrete (PCC), or Construction Aggregates delivered to the  
88 project.

89

90 The Contractor/supplier may use the plant ticketing system of their  
91 choice to create the material ticket data.

92

93 Digital material records created, altered, or voided by a person with  
94 direct knowledge of the event (the weighmaster or batch person) must be  
95 transmitted directly from the plant computer system (scale and batch) to the  
96 Department of Transportation at or near the time of the event.  
97

98 Should digital material records be transmitted to the Department of  
99 Transportation through other methods, the weighmaster or batch person  
100 must certify the digital material records received by the Department of  
101 Transportation daily.  
102

103 The Department's minimum service level expectation is to receive  
104 tickets no later than 5 minutes from when they were created, 99.5% of the  
105 time. The Department of Transportation may reject any ticket(s) received  
106 later than 5 minutes from when the ticket was created.  
107

108 **(1)** Ticket data shall include the following:  
109

110 **(a)** Material ticket data will be submitted to the agency via  
111 direct connection or a Hypertext Transfer Protocol (HTTPS)  
112 post as JavaScript Object Notation (JSON) documents.  
113

114 **(b)** Material suppliers must test to confirm that ticketing  
115 data can be shared from the originating system no less than  
116 10 days before the project starts. The topic shall be discussed  
117 at the pre-construction meeting.  
118

119 **(c)** Ticket data must be available immediately upon project  
120 start so that tickets can be viewed without delay.  
121

122 **(d)** Provide the same data currently accessible and viewed  
123 by agency users previously on printed tickets for state  
124 projects.  
125

126 **(2)** The Contractor shall submit material ticket data in accordance  
127 with the plant manufacturer's system recommendations to provide  
128 the following unless otherwise directed by the Engineer:  
129

130 **(a)** Net weight (or volume for ready mix concrete) of  
131 material being transported to the nearest 0.01 ton or cubic  
132 yard.  
133

134 **(b)** Running daily total of net weight of material (or volume  
135 for ready mix concrete) being transported to the nearest 0.01  
136 ton or cubic yard.  
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(c) Each material ticket shall contain the following:

a. General Ticket information (All Materials)

1. Date
2. State Project Name
3. State Project Number
4. Name of Contractor
5. Name of Material Supplier
6. Customer Name
7. Hauler
8. Unique Truck ID
9. Plant/scale name (source)
10. Unit of Measure
11. Ticketed time
12. Ticket Number

b. Asphalt Mix

1. Material Name/Description
2. Gross Weight (if not automatic)
3. Tare Weight (if not automatic)
4. Net weight
5. Mix Design Number
6. Weighmaster

c. Portland Cement Concrete

1. Loaded time (water/cement time)
2. Wet and dry batch weights (if computer generated)
3. Water:
  - i. In aggregate
  - ii. Total water
  - iii. Water/cement ratio
  - iv. Allowable water to add
4. Admixtures (including brand names if available):
  - i. Retarder and weights
  - ii. Water reducer and weights
  - iii. Air entrainment and weights
  - iv. Special performance admixtures and weights
  - v. Concrete fibers
5. Mix Design
6. Slump

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7. Truck Revolution

d. Construction Aggregates:

1. Material Name/Description
2. Gross Weight (if not automatic)
3. Tare Weight (if not automatic)
4. Net weight
5. Mix Design Number
6. Weighmaster

e. Optional Additional Truck Status (Will be accepted when available – All Materials)

1. Left plant
2. Arrive at project
3. Begin unload
4. Finish unload
5. Leave project

**636.04 Measurement.** The Engineer will measure additional E-Construction programs, additional licenses, or additional equipment, if ordered by the Engineer, on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

**636.05 Payment.** The Engineer will pay for the additional E-Construction programs, additional licenses, or additional equipment, on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

The Engineer may withhold progress payment until the Contractor is in compliance with all E-Construction requirements.

<b>Pay Item</b>	<b>Pay Unit</b>
Additional E-Construction Programs, additional licenses or additional equipment	Force Account

An estimated amount for force account may be allocated in the proposal schedule under “Additional E-Construction Programs, additional licenses or additional equipment.” The actual amount to be paid will be the sum shown on accepted force account records.

**END SECTION 636”**



1 Delete Section 645 in its entirety and replace with the following:

2  
3 **“SECTION 645 - WORK ZONE TRAFFIC CONTROL**

4  
5  
6 **645.01 Description.** This section describes the following:

7  
8 (A) Furnishing, installing, maintaining, and subsequently removing work  
9 zone traffic control devices, and personnel. Work zone traffic control shall  
10 include providing flaggers and police officers.

11  
12 (B) Keeping roads for public traffic open and in passable condition;  
13 providing and maintaining temporary access crossings for trails,  
14 businesses, parking lots, garages, residences, farms, parks, and other  
15 driveways; taking necessary work precautions for the protection, safety, and  
16 convenience of the public; should pedestrian facilities exist, taking  
17 necessary measures for safe and accessible passage, with route  
18 information and ADAAG compliance, for pedestrians traveling through or  
19 near work zone; taking necessary precautions to protect work zone workers  
20 from situations that place workers at increased risk from motorized traffic.

21  
22 (C) Taking safety and precautionary measures, such as illuminating  
23 roadway obstructions during hours of darkness, in accordance with Chapter  
24 286, HRS; Title 19, Subtitle 5, Chapters 127, 128, and 129, HAR; and  
25 *MUTCD*.

26  
27 **645.02 Materials.**

28		
29	Signs	750.01
30		
31	Sign Posts	750.02
32		
33	Fasteners for Signs and Route Markers	750.03
34		
35	Reflector Marker	750.07
36		
37	Flexible Delineator Posts and Reflectors	750.08
38		
39	Traffic Delineators	750.09
40		
41	Preformed Pavement Marking Tape	755.04
42		

43 Submit electronic crashworthy documentation, including but not limited to,  
44 drawings in pdf and CADD, crash test reports, and FHWA eligibility letters  
45 certifying compliance with MASH 2016, for signs, sign supports, barricades,  
46 tubular markers, cones, vertical panels, and other traffic control devices. Only

**645.03**

47 devices that are deemed crashworthy will be allowed.

48

49 Upon request of the Engineer, furnish self-certified MASH 2016 compliant  
50 letter from vendor(s) for each type of Category 1 traffic control device, as defined  
51 by FHWA and/or AASHTO, including single-piece traffic cone, single-piece drum,  
52 and tubular marker.

53

54 Traffic control devices, including signs, barricades, warning lights, arrow  
55 boards, portable changeable message signs, cones, tubular markers, and  
56 temporary concrete barriers shall conform to the American Traffic Safety Services  
57 Association (ATSSA), *Quality Guidelines for Temporary Traffic Control Devices*  
58 *and Features* and the *MUTCD*.

59

60 Protective devices including barricades, warning signs, lights, and  
61 temporary signals shall conform to Title 19, Subtitle 5, Chapters 127, 128, and 129,  
62 HAR. Retroreflectorization for protective devices such as barricades, tubular  
63 markers, and warning signs shall conform to Subsection 750.01 – Signs.

64

65 **645.03 Construction.** Furnish, install, and maintain barricades, signs, cones,  
66 tubular markers, lights, flashing signals, and other traffic control devices.

67

68 Furnish two police officers for each location that requires work zone traffic  
69 control. If the Traffic Control Plan (TCP) is included in the contract documents,  
70 furnish number of police officers indicated in the TCP, whichever is greater.

71

72 When directing traffic, flaggers, or police officers, or both shall be in direct  
73 communication with each other.

74

75 TCP for lane closure on two-lane road will consider intersections and  
76 driveway access. Maximum length of a lane closure on a two-lane road is 1,000  
77 feet.

78

79 Submit TCP and schedule at least 15 working days before work starts.  
80 Submit modifications and deviations from accepted TCP and schedule at least 15  
81 working days before start of work requiring modification or deviation. Illegible TCP  
82 will not be accepted.

83

84 Include the following in TCP and schedule:

85

86 (1) Signs (type, size, designation, and placement).

87

88 (2) Traffic movements shown by arrows.

89

90 (3) Positions of flaggers and police officers.

- 91                   **(4)** Barricades, cones, tubular markers, and additional traffic  
92 control devices and measures necessary for protection of work and  
93 public safety; and placement, spacing, distances, and reference  
94 points for traffic control devices.  
95  
96                   **(5)** Layout, drawn to scale, of traffic control devices, including  
97 information needed to layout TCP.  
98  
99                   **(6)** Brief description of work.  
100  
101                   **(7)** Dates of work.  
102  
103                   **(8)** Times of day affected.  
104  
105                   **(9)** Proposed public information sign.  
106  
107                   **(10)** Proposed news release.

108  
109                   Place sign or device situated farthest upstream from work zone first. Then  
110 place others progressively downstream toward work zone.

111  
112                   Extend cones or tubular markers to point where cones or tubular markers  
113 are visible to approaching traffic.

114  
115                   For signs with messages on both faces, cover inapplicable message before  
116 placement.

117  
118                   Keep barricades, construction and warning signs, and other traffic control  
119 devices in good condition. Repair, clean, or replace barricades, signs, or other  
120 devices as required to maintain effectiveness and appearance. The Engineer  
121 alone will decide suitable condition of each barricade, sign, or other traffic control  
122 device.

123  
124                   Remove or cover regulatory and warning signs that conflict with TCP.  
125 Restore signs upon completion of work or as ordered by the Engineer. Affix object  
126 markers to post(s) of covered sign.

127  
128                   Promptly remove or cover construction and warning signs that are not  
129 applicable or not in use.

130  
131                   For sign covers, fully covers signs as indicated in the Acceptable category  
132 of the ATSSA Quality Guidelines for Temporary Traffic Control Devices and  
133 Features. Covers that are deemed to be in the Marginal or Unacceptable  
134 categories will not be accepted. Covers that are fabricated from rigid materials will  
135 also not be accepted unless it is certified to be MASH 2016 compliant.

136

## 645.04

137 Promptly remove traffic control devices that are no longer needed.

138

139 Remove traffic control devices in reverse order of installation, starting  
140 closest to work zone and continuing away from work zone.

141

142 Maintain abutting owners' existing access until replacement access is  
143 usable. Obtain permission from abutting owners, including conditions for closing  
144 existing access. Submit copy of agreement with abutting owners before beginning  
145 work in the affected area.

146

147 When working on existing facility that will be kept open to traffic, provide  
148 smooth and even surface for public traffic use. Only work on a portion of roadway  
149 at one time, and stage construction from one side to other while routing traffic over  
150 opposite side.

151

152 During subgrade and paving operations, paved shoulders may be used for  
153 public traffic.

154

155 Do not store material or equipment where it will interfere with public traffic.  
156 Remove equipment and other obstructions out of right-of-way or clear zone to  
157 permit free and safe passage of public traffic during non-working hours or  
158 suspension of work. For storage of materials and equipment, see Subsection  
159 105.14 – Storage and Handling of Materials and Equipment.

160

161 Notify Fire Department, in writing, at least 24 hours before blocking or  
162 closing road access. Keep fire hydrants accessible to Fire Department by not  
163 placing material or other obstructions within five feet of fire hydrant or closer than  
164 permitted by applicable ordinances, rules, and regulations.

165

166 Notify the Engineer and County, including Bus Systems Division, Police  
167 Department, Fire Department, Emergency Medical Services, and Department of  
168 Health in writing at least five days before start of construction.

169

170 **(A) Signs.** Install signs sufficiently ahead of location where operations  
171 may interfere with use of road by traffic and at intermediate points where  
172 new work crosses or coincides with existing road.

173

174 Place signs in accordance with TCP as accepted by the Engineer.

175

176 **(B) Construction Signs.** Erect construction signs at the beginning of  
177 project and at the end of project at the location indicated by the Engineer.  
178 These signs shall remain for the duration of the highway project. Maintain  
179 these signs. Place these signs besides the required traffic control signs  
180 called for herein.

181

182

183 The construction signs shall be new and become the property of the  
184 Contractor.

185  
186 **(C) Barricades.**

187  
188 **(1) General.** Provide, erect, and maintain necessary barricades  
189 suitable for protection of work and safety of the public.

190  
191 Barricades shall be in good condition. Barricade application  
192 and installation shall be in accordance with accepted TCP.

193  
194 Provide sand bags if required or ordered by the Engineer.  
195 Sand bags and installation method shall comply with *MUTCD* and be  
196 accepted by the Engineer prior to use. Do not place sand bags on  
197 striped barricade rail.

198  
199 During hours of darkness, install steady burn or flashing lamps  
200 on barricades selected by the Engineer. Attach lamps on barricade  
201 ends closest to traveled way and visible to oncoming traffic.

202  
203 Do not install signs on barricades unless signs and barricades  
204 have been crash tested as a unit and accepted under NCHRP Report  
205 350.

206  
207 **(2) Retroreflectorization.** Retroreflectorize barricade rails and  
208 attachment with retroreflective sheeting in accordance with  
209 Subsection 750.01(C)(4) - Type III or IV Retroreflective Sheeting  
210 (High Intensity) or Subsection 750.01(C)(5) - Hardened Aluminum-  
211 Backed Retroreflective Sheeting.

212  
213 Retroreflectorize both vertical faces of each barricade rail.

214  
215 **(3) Color.** Provide white colored rails, frames, and braces with  
216 front and back rail faces having 6-inch-wide alternating orange or red  
217 and white stripes sloping downward toward traveled way at angle of  
218 45 degrees from vertical. Use stripe colors in accordance with the  
219 following:

220  
221 **(a)** Use orange and white stripes for the following  
222 conditions:

- 223  
224 1. Construction work.  
225  
226 2. Detours.  
227  
228 3. Maintenance work.

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(b) Use red and white stripes for the following conditions:

- 1. On roadways with no outlet, such as dead-ends and cul-de-sacs.
- 2. Ramps or lanes closed for operational purposes.
- 3. Permanent or semi-permanent closure or termination of roadway.

(4) **Maintenance.** Keep barricades in good condition. Repair, repaint, clean, or replace barricades to maintain effectiveness and appearance. Immediately replace missing or damaged barricades, lamps, sandbags, and other accepted weights.

Clean and repair barricades before relocating to other locations.

(D) **Traffic Delineators.** Install traffic delineators in accordance with accepted TCP.

Maintain traffic delineators in good condition. Immediately replace missing or damaged tubular markers.

Clean delineators prior to relocating to new location.

(E) **Cones.** Install traffic cones in accordance with accepted TCP.

Maintain traffic cones. Keep traffic cones clean and in good repair. Immediately replace lost, stolen, or damaged traffic cones.

Clean cones prior to relocating to new location.

(F) **Lane Closures.** Lane closures for night work at the sites shown on plans will only be allowed during the following hours:

<u>Location</u>	<u>Hours</u>
<u>Kalihi Interchange Conduit and Fiber</u>	
H-1 Westbound	
Shoulder and/or Lane Closed:	9:00 p.m. to 4:00 a.m., Sunday through Thursday

276 Closures for day work at the sites shown on plans will be allowed during  
277 the following hours:

<u>Location</u>	<u>Hours</u>
<u>H-3 CCTV and Fiber</u>	
H-3 Both Directions	
Shoulder or Lane Closed:	8:30 a.m. to 3:00 p.m., Monday through Friday

285  
286 For island of Oahu, no lane closures will be allowed during 24-hour  
287 periods as follows:

- (1) Day preceding holiday (3:00 p.m. to Midnight), except as otherwise specified.
- (2) Holidays (Midnight to Midnight).
- (3) Day before and day after Thanksgiving Day (Midnight to Midnight).
- (4) Three-week holiday period for Christmas and New Years (Midnight to Midnight).
- (5) Three-week "Beat-the-School-Jam" period, to be determined, (Midnight to Midnight) beginning approximately third week of August.
- (6) Other dates of events indicated in the contract documents.

304  
305 No time extension will be given for the above restrictions. The  
306 contract time for the project has accounted for any loss of time due to the  
307 above restrictions.

308  
309 Closure of only one lane of traffic will be allowed during lane-closure  
310 hours. Keep lanes open to traffic and allow flow at posted speed limit during  
311 non-lane closure hours.

312  
313 If applicable, coordinate lane closures with adjacent project(s) at no  
314 increase in contract price or contract time.

315  
316 Rental fees will be assessed in accordance with Subsection 108.10  
317 – Rental Fees for Unauthorized Lane Closure or Occupancy, for failure to  
318 open lanes to traffic during peak hours. Morning and afternoon peak hours  
319 shall be from 5:30 a.m. to 8:30 a.m. and 3:00 p.m. to 6:00 p.m., respectively,  
320 Monday through Friday.

**645.04**

323 Before scheduling work, submit requests for detours and lane  
 324 closures as follows:

- 325
- 326 (1) Detours - 8 weeks before implementing detours.
- 327
- 328 (2) Lane closures - 6 weeks before implementing lane closures.
- 329

330 Include the following with detour and lane closure requests:

- 331
- 332 (1) Explanation of proposed changes to existing traffic pattern.
- 333
- 334 (2) Installation schedule for informational and traffic control signs.
- 335
- 336 (3) Publication schedule for legal notices.
- 337
- 338 (4) Plan showing proposed informational signs.
- 339
- 340 (5) Plan showing lane changes or detours in accordance with
- 341 accepted TCP, including details at beginning of multi-lane highway
- 342 lane changes and detours.
- 343

344 Detours or lane closures will not be allowed before the Engineer  
 345 accepts detour or lane closure request.

346

TABLE 645-I - FOR TRAFFIC CONTROL PLAN							
POSTED SPEED LIMIT (M.P.H.)	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)		LONGI- TUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR TUBULAR MARKERS (FEET)		
		W = 12' OR LESS	W = GREATER THAN 12' *		TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x 20	85	30	30	10
35	250	250	W x 20	120	35	35	10
40	500	350	W x 30	170	40	40	10
45	500	550	W x 45	220	45	45	10
50	1000	600	W x 50	280	50	50	10
55	1000	700	W x 55	335	55	55	10

\* W = width of lane or shoulder

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**(G) Advisory Signs.** Submit advisory sign shop drawings. Construct, install, maintain, and remove two advisory signs as ordered by the Engineer. Place signs at locations designated by the Engineer. Provide signs, minimum 8 feet wide by 4 feet high, with black letters on orange background, and with three 4.00 pounds/foot flanged channel posts for each sign.

Include starting date and hours of construction in sign message. Use letter heights of 8 inches, Series D. The Engineer will review and accept advisory signs' wording before fabrication. Install advisory signs two weeks before start of construction. Remove advisory signs immediately after construction has been completed or as ordered by the Engineer.

**(H) Advertisement.** Place advertisement in newspaper, as ordered by the Engineer, for the following traffic pattern changes or night work:

- (1) Detours.
- (2) Lane closure.
- (3) Permanent road closure.
- (4) Permanent new route that changes previous route.

Include the following information:

- (1) Map of traffic pattern change limits.
- (2) Map showing lane(s) closure and detour pattern.
- (3) Notice of starting and ending dates and duration.
- (4) Explanation of lane(s) closure or detours in "Notice To Motorist".

Quality of map shall conform to the following requirements:

- (1) No freehand printing or penciling.
- (2) Highlight important features by darkening, cross-hatching, crossing-out, or coloring important words, as necessary.
- (3) Provide maps with minimum size of five columns wide and four columns deep. Lesser width columns may be considered to balance against size of drawing.

**645.04**

- 395                   **(4)**    Text specifications.
- 396
- 397                   **(a)**    Work being featured - 3/16-inch text.
- 398
- 399                   **(b)**    Major roads and features - 1/8-inch text.
- 400
- 401                   **(c)**    Other roads and features- first letter of sentence upper
- 402                   case.
- 403
- 404                   **(d)**    "NOTICE TO MOTORIST" in upper case.
- 405
- 406                   **(e)**    Message - first letter of sentence upper case.
- 407
- 408                   **(5)**    Line Thickness.
- 409
- 410                   **(a)**    Important feature being advertised - line thicker than
- 411                   rest of map.
- 412
- 413                   **(b)**    Directional arrow - bolder than rest of lines shown on
- 414                   map, when important, to show route traffic should use.
- 415
- 416                   **(6)**    Show reference direction such as "TO HONOLULU" with
- 417                   arrow Submit the following:
- 418
- 419                   **(a)**    "Notice to Motorists" before placement in newspaper,
- 420                   six weeks before start of work.
- 421
- 422                   **(b)**    Actual size of notice to be published in newspaper.
- 423                   The Engineer will not allow size reduction of notices once
- 424                   accepted. Submit final, camera-ready "Notice to Motorists"
- 425                   advertisement.
- 426

427                   Place advertisement for three consecutive days and within one week

428                   before traffic pattern changes, in publication as ordered by the Engineer.

429

430 **645.04 Measurement.**

- 431
- 432                   **(A)**    Contractor shall submit a certified payroll for all workers involved in
- 433                   the installation/removal of traffic control devices. Traffic control as specified
- 434                   in Subsection 645.03 - Construction will be measured on a contract lump
- 435                   sum basis. Measurement for payment will not apply. All public notices and
- 436                   advertisements shall be incidental to the lump sum pay items in this Section
- 437                   and will not be paid for separately, unless otherwise directed by Engineer.
- 438
- 439                   **(B)**    "Cones" will be considered incidental to traffic control Measurement
- 440                   for payment will not apply.

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(C) "Traffic Delineators" will be considered incidental to traffic control. Measurement for payment will not apply.

(D) "Construction Signs" will be considered incidental to traffic control.

(E) The Engineer will measure the following when ordered by the Engineer:

- a. Additional police officers, additional traffic control devices, that are beyond the required amount to allow the public to safely pass through the project and is not required, or a standard or guidance, or option, by the Contract Documents or the MUTCD or both.
- b. Additional items of work if ordered by the Engineer.

Measurement shall be on a force account basis, in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

**645.05 Payment.** The Engineer will pay for the accepted traffic control, traffic control device, police officers, flaggers, additional traffic control devices, specific traffic control contract bid items and advertisement at the contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

Costs associated with the provision of uniformed law enforcement to maintain safe and efficient travel through highway work zones and their payment terms are explained in more detail in Section III. D. of HDOT's WORK ZONE SAFETY MANAGEMENT GUIDELINES.

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

<b>Pay Item</b>	<b>Pay Unit</b>
Traffic Control, _____	Lump Sum
Additional Police Officers, Traffic Control Devices, And Advertisement	Force Account

An estimated amount for the force account may be allocated in the proposal schedule under "Additional Police Officers And Additional Traffic Control Devices", but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.

**645.04**

487

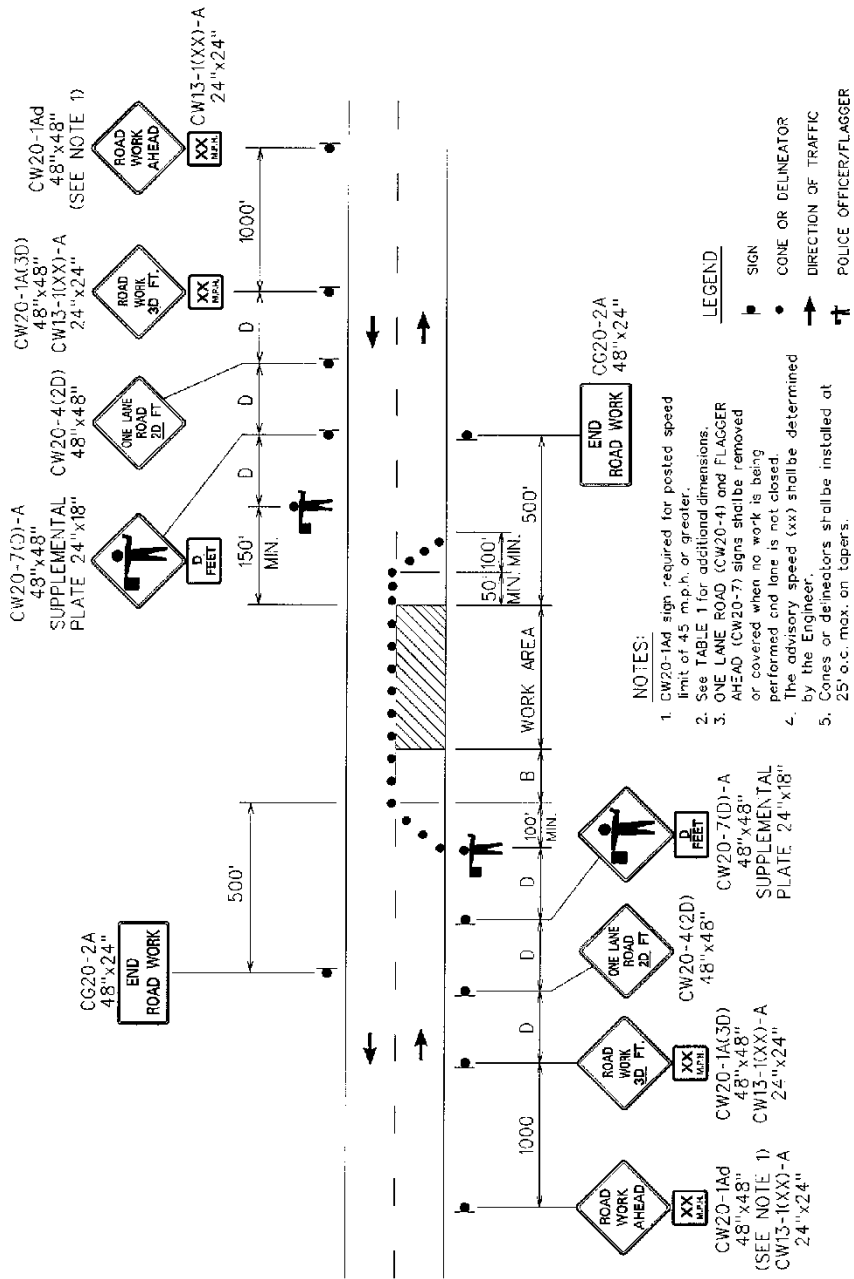
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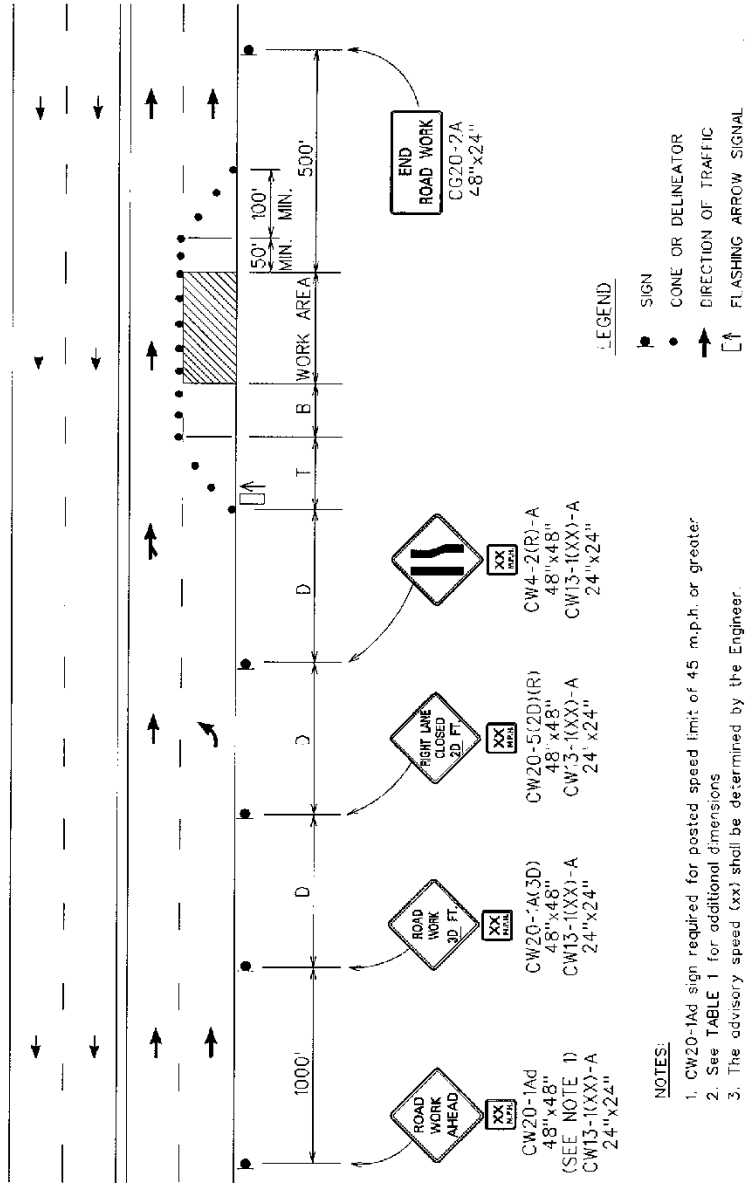
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The Engineer will not pay for request submittals. The Engineer will not consider claims for additional compensation of late submittals or requests by Contractor.



TWO-LANE HIGHWAY - ONE LANE CLOSED  
FIGURE 1 - TRAFFIC CONTROL PLAN

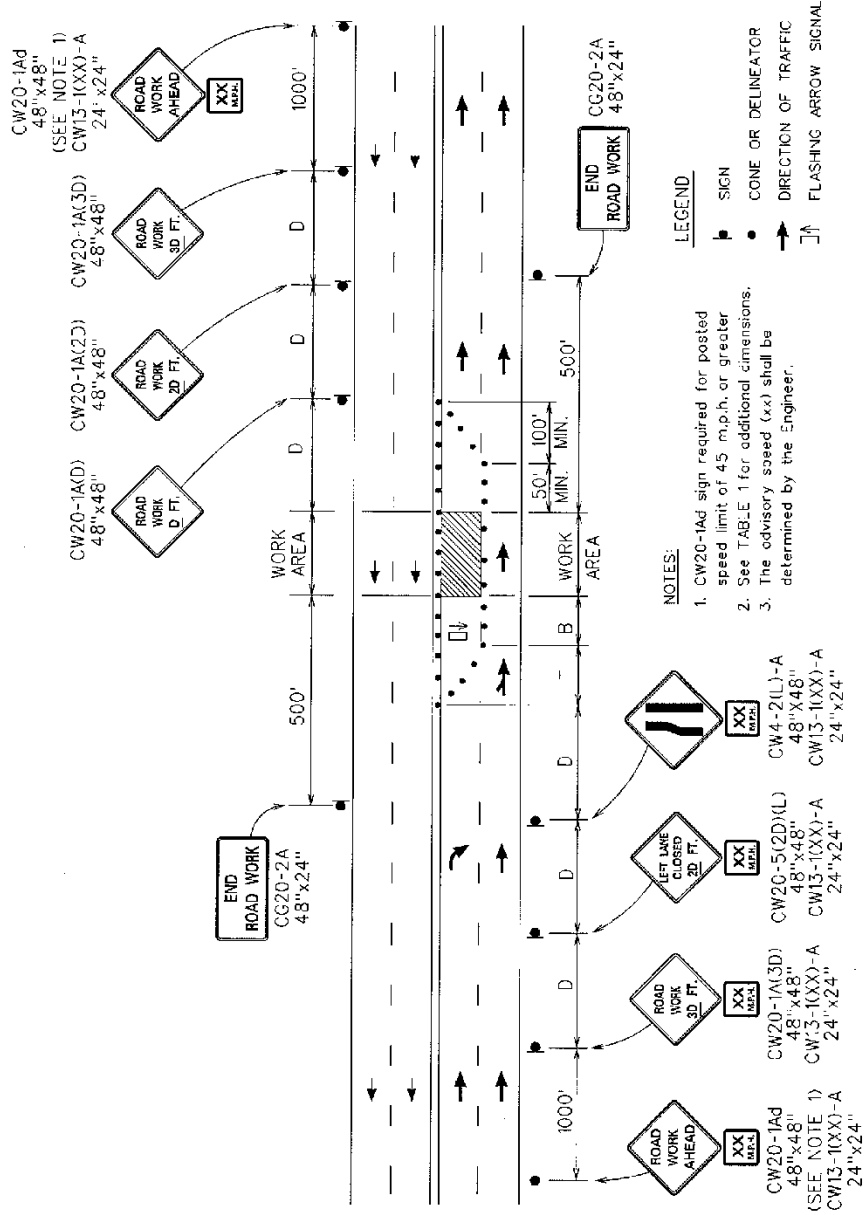


MULTILANE UNDIVIDED HIGHWAY - RIGHT LANE CLOSED

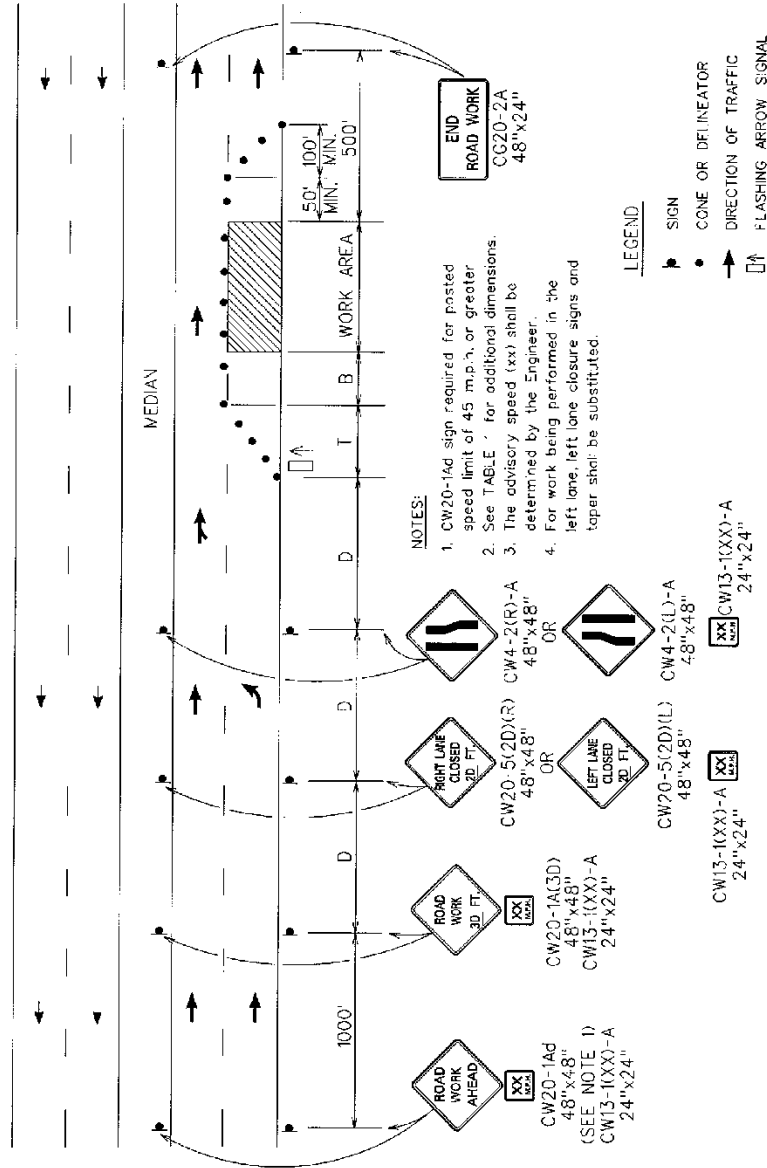
FIGURE 2 - TRAFFIC CONTROL PLAN

R2/97

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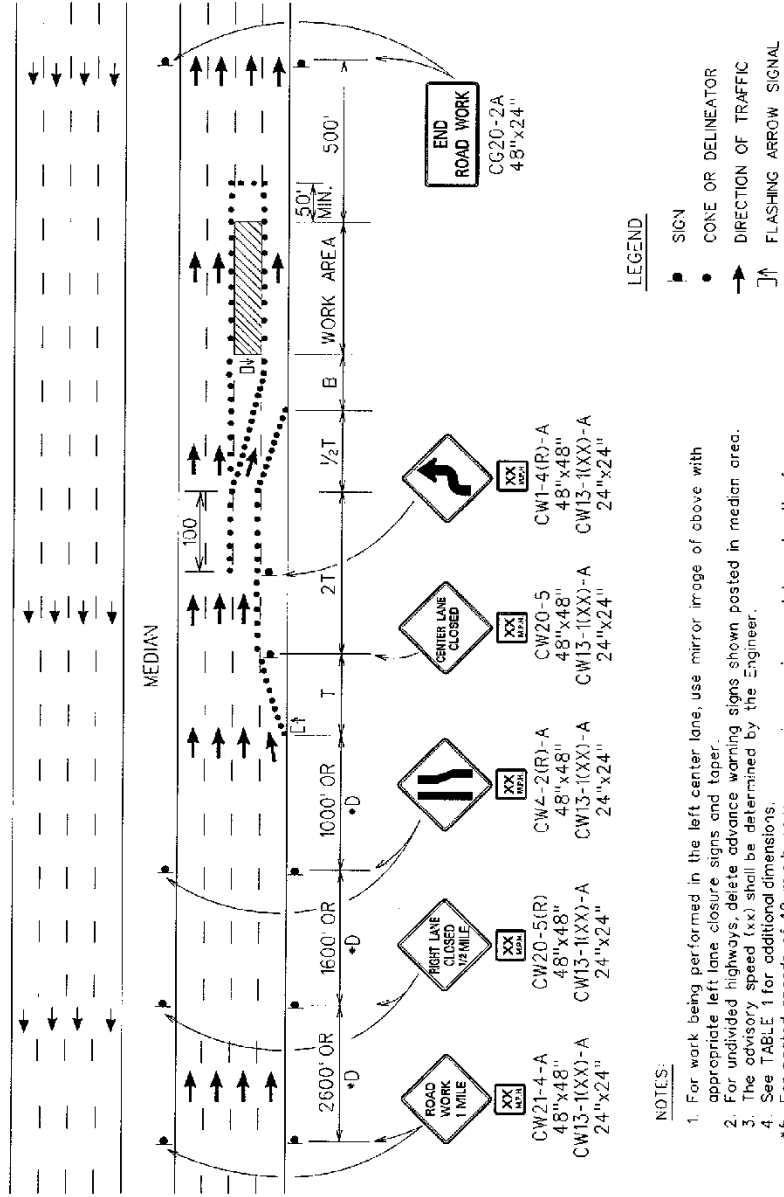
MULTILANE UNDIVIDED HIGHWAY - LEFT LANE CLOSED  
FIGURE 3 - TRAFFIC CONTROL PLAN



MULTILANE DIVIDED HIGHWAY - ONE LANE CLOSED

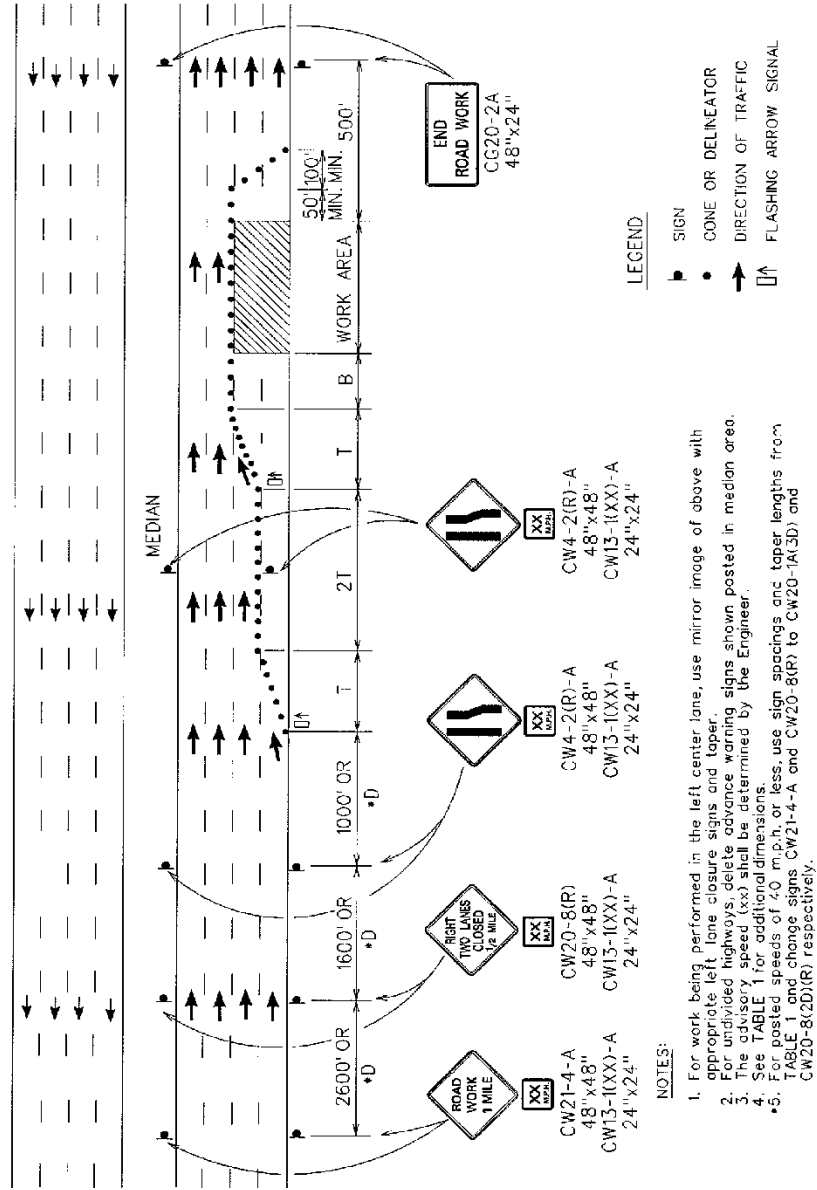
FIGURE 4 - TRAFFIC CONTROL PLAN

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MULTILANE HIGHWAY - CENTER LANE CLOSED

FIGURE 5 - TRAFFIC CONTROL PLAN



MULTILANE HIGHWAY - MULTIPLE LANE CLOSED

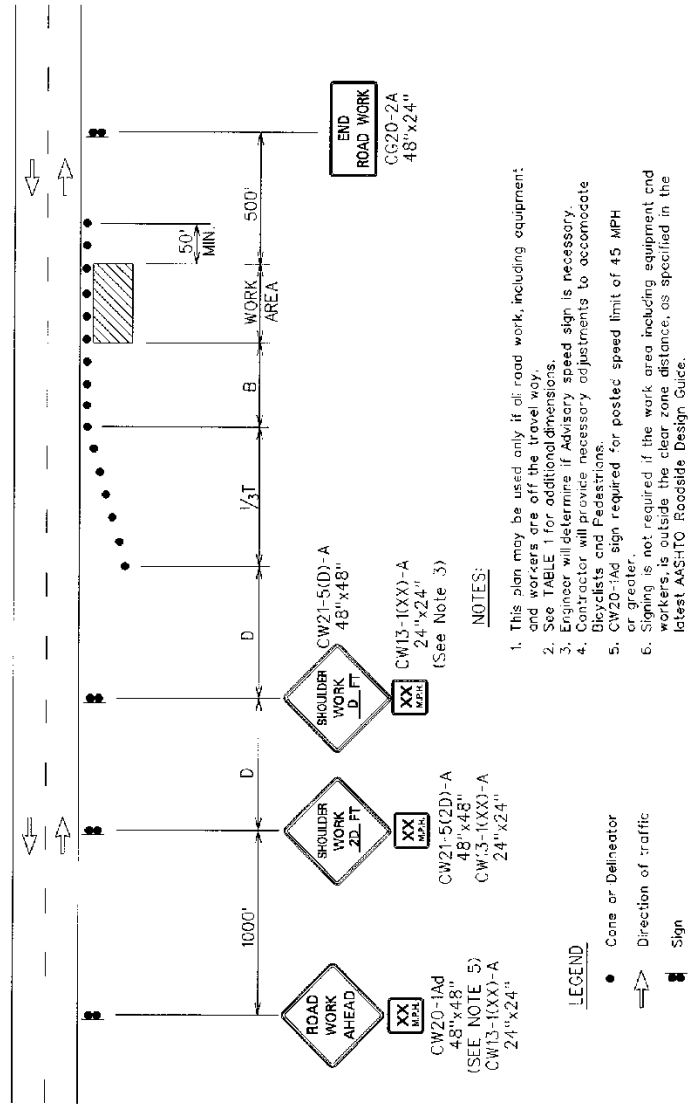
FIGURE 6 - TRAFFIC CONTROL PLAN

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END OF SECTION 645"

NH-0300(176)R  
645-19a



WORKING ON SHOULDER OR ROADSIDE  
FIGURE 7 - TRAFFIC CONTROL PLAN

R10/96

3/2/26

1 Delete Section 647 in its entirety and replace with the following:  
2

3 **“SECTION 647 – FIBER OPTIC CABLE**  
4

5 **647.01 Description.** This work includes furnishing labor, materials, tools,  
6 machinery, and equipment necessary to install fiber optic and communications  
7 cabling according to the Contract Documents.  
8

9 **(A)** There shall be a fiber optic cable Subcontractor, who shall have at  
10 least 3 (three) years’ experience in installing fiber optic and Ethernet based  
11 communication cabling systems, specifically for indoor/outdoor and  
12 underground in traffic-highway applications. The Subcontractor shall be  
13 responsible for testing all fiber optic and CAT6 cables providing  
14 documented fiber optic cable optical budget loss including OTDR and  
15 Power Meter readings and balanced twisted pair CAT6 cable analysis in  
16 accordance with EIA/TIA and Fiber Optic Association (FOA) standard test  
17 procedures. The fiber optic cable Subcontractor shall be responsible for all  
18 hookups, assignments, testing, matching, termination, and splicing of the  
19 fiber optic and CAT6 cables, unless otherwise indicated. All fiberoptic splice  
20 points shall have pigtailed on all fiberoptic members which attach to fiberoptic  
21 hardware and components with SC-connectors. CAT6 cables shall be  
22 terminated using a RJ-45 connector in accordance with TIA-568B. The fiber  
23 optic cable Subcontractor shall be fully responsible for all splices, budget  
24 loss, attenuators, appropriate fiber hardware, accessories, and pigtail  
25 connections providing for a fully operational system. All other hardware,  
26 equipment, testing and labor necessary shall be considered incidental.  
27

28 **647.02 Materials.** The fiber optic cables, which will be used to transmit video  
29 and data signals, will consist of single-mode fibers. Cables will be installed in  
30 existing and new conduits. The Contractor shall furnish and install fiber optic cable  
31 suitable, and meeting standards, for underground and aerial lashing installations.  
32 The fiber optic cables shall meet the following specifications:  
33

34 **(A) Single-Mode Fiber Optic Cables.** Armored loose-tube, 72 and 12  
35 single-mode OS2 fiber optic cable suitable for overhead or underground  
36 installation. Cable shall be 8.3/125 micron loose buffer, single-mode, step  
37 index optical fiber cable containing glass of type, SMF-28e, AFL SR-15e, or  
38 approved equal, and that meets the following specifications:  
39

40 ITU-T G.652 (Categories A, B, C and D)  
41 IEC Specification 60793-2-50 Type B1.3  
42 TIA/EIA 492-CAAB  
43 Telecordia GR-20  
44

45 **(1) Mechanical and Performance Requirements.** The cable  
46 shall be a rugged all dielectric armored outdoor cable containing

47 color coded buffer tubes with 12 single mode color-coded fibers per-  
48 buffer tube, dual window (1310 nm and 1550 nm) fibers with UV  
49 acrylate coating in color coded, gel-free, loose buffer tubes. Strand  
50 the loose buffer tubes around an all-dielectric center strength  
51 element using a reverse oscillation lay, wrapped by water blocking  
52 core separator or functional equivalent. The maximum allowable  
53 attenuation of the fiber is .35 dB/km for 1310 nm and .25 dB/km for  
54 1550 nm. Each buffer tube shall contain a water blocking element  
55 for water-blocking protection. The water blocking elements shall be  
56 non-nutritive to fungus, electrically non-conductive. The buffer-tube  
57 shall be gel-free. Apply water swellable tape longitudinally around  
58 the outside of the stranded tubes/fillers. The water swellable tape  
59 shall be non-nutritive to fungus, electrically non-conductive, and  
60 homogenous. It shall also be free from dirt and foreign matters. The  
61 cable manufacturer shall be TL 9000 registered.

62  
63 **(2) Outer Jacket.** Cables shall be all dielectric cable (with  
64 armoring) and shall be jacketed (sheathed) with black medium  
65 density polyethylene as defined by ASTM D1248, Type II, Class C,  
66 Category 4 and Grades J4, E7 and E8. Armored cable shall have  
67 two jackets, one molded to the outside of the armor and one that  
68 floats freely within the armor and contains the buffer tubes and other  
69 fiber optic cable construction components as required. Apply  
70 jacketing material directly over the tensile strength members to  
71 provide mechanical protection, and to serve as the primary moisture  
72 barrier. Design cable sheath to meet or exceed the tensile criteria  
73 defined in EIA-455-89a. Ensure the jacket or sheath is free of any  
74 holes, splits, or blisters. The cable jacket shall contain no metal  
75 elements and shall be of a consistent thickness. The cable shall  
76 contain at least one ripcord under the sheath for easy sheath  
77 removal.

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79 **(3) Temperature.** The shipping, storage, installation, and  
80 operating temperature range of the cable shall meet or exceed -20  
81 °F to +155 °F (-29 °C to +60°C).

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83 **(4) Loose Buffer.** Contain single-mode fibers in a loose buffer  
84 tube. The configuration shall be dimensionally sized to minimize  
85 local stresses and microbend losses. The optical fiber cable shall  
86 be an approved product of the U.S. Department of Agriculture, Rural  
87 Electrification Administration in accordance with the requirements  
88 of REA-PE-90, or as otherwise indicated, and shall conform to  
89 EIA/TIA-598. Each optical fiber shall consist of a doped silica core  
90 surrounded by a concentric silica cladding. Buffer tubes shall be  
91 polypropylene. Include fillers in the cable core to lend symmetry to  
92 the cable cross section where needed. E. Colors. All optical fibers

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shall be identifiable by standard color codes as defined in EIA/TIA-598. Each fiber shall be distinguishable, from others by means of color coding and shall conform to the sequence of colors as specified in Table 647.02-1 – EIA/TIA Sequence of Colors:

1. Blue	7. Red
2. Orange	8. Black
3. Green	9. Yellow
4. Brown	10. Violet
5. Slate	11. Rose
6. White	12. Aqua

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Buffer tubes containing fibers shall also be color-coded with distinct and recognizable colors according to the sequence of colors as specified in Table 647.02-2 – Buffer Tubes with Fibers Sequence of Colors:

1. Blue	7. Red
2. Orange	8. Black
3. Green	9. Yellow
4. Brown	10. Violet
5. Slate	11. Rose
6. White	12. Aqua

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The color formulation shall be compatible with the fiber coating and be heat stable. Color formulation shall not fade or smear or be susceptible to migration and it shall not affect the transmission characteristics of the optical fibers and shall not cause fibers to stick together.

**(5) Cable Marking.** The fiber optic cable outer jacket shall be marked with manufacturer's name, the year of manufacture, the words "optical fiber cable", fiber count, type of fiber, and sequential linear foot markings. Repeat the markings every 3 feet. The actual length of the cable shall be within -0/+1% of the length marking. The marking shall be in a contrasting color to the cable jacket. The marking shall be 2.5 mm in height and must be permanent weatherproof and shall not wear off during the installation in the underground conduit system.

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**(6) Quality Assurance Provision.** The fiber optic cable shall meet or exceed the requirements of this specification when measured in accordance with the methods of the individual requirements or the following methods as defined in EIA-455-A:

- (a) Fiber dimensions
- (b) Attenuation
- (c) Numerical aperture
- (d) Fiber proof test
- (e) Crush resistance
- (f) Cable bending
- (g) Tensile load
- (h) Impact resistance
- (i) Attenuation vs. Temperature

**(7) Packaging.** Top and bottom ends of the cable shall be available for testing. Both ends of the cable shall be sealed to prevent the ingress of moisture. Each reel shall have a weather resistant reel tag attached identifying the reel and cable.

The reel tag shall include the following information:

Cable number	Gross Weight
Shipped length in meters	Job order number
Product Number	Date cable tested

Each cable shall be accompanied by a cable data sheet. Cable data shall include manufacturer number, billable length, bandwidth specs and measured attenuation of each fiber.

**(B) LSZH Loose Tube, Gel-Free, Single-Jacket Single Mode (OS2) Fiber Optic Cables:** The cable shall meet IEC Fiber Compliance IEC 60754-2 and all requirements stated in this specification including, ANSI/ICEA Standard for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-104-696, UL 13, UL 444, UL 1277, UL 1685.

**(1) Tunnel Cable Mechanical and Performance**

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**Requirements.**

- (a) OS2 – 72 fiber 250 μm Singlemode Fiber LSZH, Loose Tube, Gel free, (OFN-LS)
- (b) Outer Jacket Material: Flame retardant,, non-corrosive/low-smoke, zero-halogen material.
- (c) Buffer Tube Diameter: 2.5mm (0.1 in)
- (d) Inner Jacket Material: Flame retardant
- (e) Number of Active Tubes: 4 – 12 fibers/tube
- (f) Number of Filling Elements: 2
- (g) Tape: Water-swellable
- (h) Maximum Attenuation: 0.4 dB/km/0.4 dB/km/0.3 dB/km
- (i) Wavelengths: 1310 nm/1383nm/1550nm
- (j) Max. Tensile Strength, Long-Term: 810 N (182.1 lbf)
- (k) Max. Tensile Strength, Short-Term: 2700 N (606.98 lbf)
- (l) Min. Bend Radius Installation: 192 mm (7.56 in)
- (m) Min. Bend Radius Operation: 128 mm (5.04 in)
- (n) Nominal Diameter: 12.8 mm (0.5 in)
- (o) Environmental: Operation -40° C to +70° C (-40 °F to 158 °F)

**(C) Extended Range CAT 6 Ethernet Cables.**

**(2) General Requirements.**

- (a) Cable jacketing materials shall conform to the project specific space and safety requirements. All cables shall be terminated with the appropriate RJ-45 connector as recommended by the manufacturer.
- (b) Cables shall be tested for their intended application and category.
- (c) All cabling shall be UL Verified, labeled with UL Verification Number A808170
- (d) In no circumstances shall any portion of the installation fail to meet national or local codes. It is the responsibility of the installer of this system to assure that all local requirements are met.
- (e) Must have ascending/descending length cable markings.

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(f) Transmission distances for data and power (IEEE802.3at Type 2 PoE+) for a minimum of 850' at 10Mb/s and 656' at 100/1000 Mb/s.

**(3) Materials.**

(p) Unshielded Twisted Pair FEP Indoor/Outdoor Plenum Rated Cable

(1) **Construction.** Solid Bare Copper 22 AWG

(2) **Insulation.** Ultra Low-loss Dielectric; OD: 0.044" nom

(3) **Color Code.**

1. Pair 1: White/Blue, Blue
2. Pair 2: White/Orange, Orange
3. Pair 3: White/Green, Green
4. Pair 4: White/Brown, Brown

(4) **Core Assembly.** 4 twisted pairs cabled together to form main core

(5) **Jacket.**

1. Material: FEP
2. OD: 0.208" nom
3. Color: Blue
4. Marking tape under jacket

(6) **Electrical Properties.**

1. **Conductor Resistance.**  $\leq 9.38\Omega/100m$
2. **Insulation Resistance.**  $\geq 5000M \Omega Km$  (DC500V charged 1 min.)
3. **Mutual Capacitance.**  $\leq 5.6nF/100m$

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**4. Maximum Voltage.** 300V (Per NEC, not suitable for Class 1 power applications)

**5. Temperature Rating.** -400°C to +200°C

**6. Power Over Ethernet Support.** (Class 1-8)

**(b) Unshielded Twisted Pair, (Tunnel Only) LSZH-FRPE Jacket**

**(1)** This cable consists of 4 pair solid bare copper; color-coded FEP insulation; overall LSFR-PVC jacket. RoHS-2 Compliant

**(2) Construction.** Solid Bare Copper 22 AWG

**(3) Insulation.** Ultra Low-loss Dielectric; OD: 1.1176 mm nom

**(4) Color Code:**

1. Pair 1: White/Blue, Blue

2. Pair 2: White/Orange, Orange

3. Pair 3: White/Green, Green

4. Pair 4: White/Brown, Brown

**5. Core Assembly.** 4 twisted pairs cabled together to form main core

**6. Jacket.**

1. Material: LSZH-FRPE with UV resistance

2. OD: 6.2992 mm nom

3. Color: Blue with White Stripe

4. Ripcord under jacket

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**7. Electrical Properties.**

1. Conductor Resistance.  $\leq 9.38 \Omega/100m$
2. Insulation Resistance.  $\geq 5000M \Omega Km$   
(DC500V charged 1 min.)
3. Voltage Endurance. DC 1500V/min
4. Mutual Capacitance.  $\leq 7.0nF/100m$
5. Core-Core Resistance Unbalance.  $\leq 5\%$
6. Temperature Rating.  $-20^{\circ}C$  to  $+75^{\circ}C$
7. Power Over Ethernet Support. (Class 1-8)

**(D) 3 Cell Fabric Innerduct.** Raceway Innerduct shall be installed in all new and existing raceways containing new cables. Innerduct will consist of flexible, textile material, commonly referred to as "fabric duct". Fabric duct will have the following minimum specifications:

(1) Three cell configuration shall be attached the entire length of the product, to help minimize twisting of cable. Maximum coefficient of friction shall be 0.08.

(2) Innerduct shall contain color coded stitching for cell identification, with a solid copper, polyvinyl color coated conductor (19 AWG minimum) for tracing, rated for a minimum of 6 amps and 600 volts. Conductor shall be located in the sidewall edge fold of the sleeve.

(3) All cells will contain a minimum 1250lb pull tape, color coded.

(4) MaxCell or approved BICSI compliant product.

**(E) Pigtails and Jumpers.** Pigtails shall be factory-made, buffered, and strengthened with aramid yarn to reduce the possibility that accidental mishandling will damage the fiber or connection. Pigtails shall be yellow or orange dependent upon the fiber type being spliced to. You must use a connector that is SC compatible with ceramic ferrules and suitable for use in traffic cabinets and shall be designed for single mode fibers. Each pigtail must contain one fiber. Length shall suffice to provide 2 feet of slack after installation.

350 Jumpers shall meet the requirements for pigtails, but shall have a  
351 connector on each end. The second connector shall be as specified above  
352 except where a different connector is required for compatibility with the  
353 equipment to which the jumper connects. Length shall suffice to provide  
354 approximately two feet of slack after installation.  
355

356 **(F) Rack Mounted Interconnect Center.** The fiber splice enclosure  
357 shall have brackets and all other hardware required for rack mounting in an  
358 EIA standard 19-inch equipment rack. The enclosure shall take up no more  
359 than five rack units in the cabinet. The enclosure shall have provisions for  
360 cable strain-relief. It shall have hinged front and rear doors.  
361

362 The enclosure shall include aluminum splice trays with clear plastic  
363 covers, designed for outdoor use. Each shall accommodate 12 fusion  
364 splices. The trays shall have a black powder coat finish. The trays shall have  
365 both perforations for cable ties and crimpable metal tabs for buffer tube  
366 strain relief. The Contractor shall provide enough splice trays for all the  
367 splices made in the enclosure. The enclosure shall include a splice tray  
368 holder with capacity for 22 trays. It shall be mounted on a sliding shelf inside  
369 the enclosure so that individual trays can be removed from the enclosure  
370 without disturbing the other trays or removing the enclosure itself from the  
371 cabinet. The patch panel modules shall have SC connectors on both sides  
372 and have 12 fiber slots in a 2 by 6 configuration. The Contractor shall  
373 provide enough patch panels for all of the connections made in the  
374 enclosure plus two spare 2 by 6 units. Splice trays shall be labeled clearly  
375 on their exterior,  
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### 378 **647.03 Construction.**

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380 **(A) Material Sample and Certificate of Compliance.** The Contractor  
381 shall submit material samples according to Subsection 106.04 – Material  
382 Sample, and any certificates of compliance according to Subsection 106.07  
383 – Certificate of Compliance.  
384

385 The Contractor shall submit a fiber optic cable pulling plan for review  
386 and approval by the Engineer prior to beginning fiber optic cable installation.  
387 The fiber optic cable pulling plan shall include:  
388

- 389 (1) Location of start and end of pulls
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- 391 (2) Location of cable reel trailers during installation
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- 393 (3) Location of any “figure-eight” of fiber optic cable, and
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- 395 (4) Location of staged equipment.

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Upon completion of the work, submit an “As Built” or corrected plan showing in detail the following:

- (1) Construction changes,
- (2) Location and attenuation of every event along the installed fiber optic cable,
- (3) Index of refraction of installed fiber,
- (4) Fiber optic cable index of refraction, and
- (5) Sequential fiber optic cable markings at each pullbox, cabinet, and splice closure.

**(B) Fiber Optic Cable.** Install fiber optic cable in new or existing conduit as indicated. Use appropriate installation techniques so the optical and mechanical characteristics of the cable are not degraded. Unless otherwise approved, use only the equipment and procedures specified by the manufacturer of the fiber optic cable. Install the cable in such a way neither the minimum bending radius nor the maximum pulling tension are violated before, during, or after installation.

Before any fiber optic cable installation is performed, provide the Engineer with four copies of the cable manufacturer's recommended and maximum pulling tensions for each cable size and type. These pulling tensions are to be specified for pulling from the cable's outer jacket. Also provide a list of the minimum allowable cable bending radius and the cable manufacturer's approved pulling lubricants and guidelines for their application. Only these lubricants are allowed. The installation system to be used is to be inspected and approved by the Engineer.

Establish adequate voice communications between the cable feeding location and the cable pulling equipment before starting any pulling operations. Set up the cable reels on the same side of the junction box as the conduit section in which the cable is to be placed. Make the reel level and bring it into proper alignment with the conduit section so the cable will pass from the top of the reel in a long smooth bend into the duct without twisting. Do not pull the cable from the bottom of the reel. Feed the cable by manually rotating the wheel.

Pull the cable in the conduit with a cable grip designed to provide a firm hold on the exterior covering of the cable. Use an approved cable feeder guide between the cable reel or storage stack and the face of the duct to protect the cable, and to guide the cable into the duct as it is prayed

442 off the reel or from the storage stack. The dimensions and set-up of the  
443 feeder guide are to be such that the cable does not bend at any location to  
444 a radius less than the cable's minimum allowable bending radius. Do not  
445 exceed this minimum-bending radius at any time during cable installation.  
446

447 Keep cable ends sealed at all times during installation, using an  
448 approved cable end cap. Do not use tape to seal the cable end. Keep the  
449 cable end sealed until termination takes place. Provide a minimum of 50  
450 feet of slack for cables that are not immediately terminated.  
451

452 Ensure the allowable pulling tension is not exceeded at any time  
453 during cable installation by using one of the following methods, as  
454 approved: pulling the cable by hand or approved mechanical means.  
455

456 If the cable is pulled by mechanical means, use a clutch device to  
457 ensure the allowable pulling tension is not exceeded. Also, attach a strain  
458 gauge to the pulling line at the cable exit location, and at a sufficient  
459 distance from the take-up device, so the strain gauge can be read  
460 throughout the entire cable pulling operation.  
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462 Use an approved lubricant if needed, in the amount recommended  
463 by the cable manufacturer, to facilitate pulling the cable. Lubricate the  
464 cable as it is payed off the cable reel or storage stack into the cable feeder.  
465 Place an approved cable lubricator (funnel) around the cable just ahead of  
466 the cable feeder to facilitate proper lubrication of the cable. After the cable  
467 has been installed, wipe the exposed cable in a junction box or cabinet  
468 clean of cable lubricant with a cloth before leaving the junction box or  
469 cabinet.  
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471 Take every precaution to ensure the cable is not damaged during  
472 storage and installation. Do not allow workers to step on the cable or run  
473 it over with any vehicle or equipment. Do not pull the cable along the  
474 ground, over edges or corners, over or around obstructions, or through  
475 unnecessary curves or bends. Use approved cable guides, feeders, shoes,  
476 and bushings to prevent damage to the cable during installation. Replace  
477 and reinstall all damaged cables at no additional cost to the Engineer.  
478

479 Cable runs are to be continuous between allowable termination  
480 points in equipment cabinets and multiplexer nodes. Carefully determine  
481 the length of cable necessary to reach from termination point to termination  
482 point. Do not splice fiber optic cable in conduit or junction boxes.  
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484 Cable may be furnished, installed, and pulled through an  
485 intermediate junction box if approved. Intermediate junction boxes will be  
486 considered part of cable installation, and no separate payment will be  
487 made for this work.

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Pull the necessary length of cable to be installed from one equipment cabinet or multiplexing node to the immediate next downstream equipment cabinet or multiplexing node. Carefully store the remaining length of cable to be installed in the next conduit in a manner that is not hazardous to pedestrian or vehicular traffic yet ensures no damage to the cable occurs. Store the cable in a manner that allows that length of cable to be safely pulled into the next conduit and is approved. In junction boxes, store **50 feet of slack fiber optic cable** for the distribution fiber and **10 feet of slack fiber** for the termination fiber spur that passes through the junction box. In addition, provide 50 feet of slack fiber for all fiber types at a junction box adjacent to an equipment field device cabinet. Neatly store slack cable on the side walls of the junction box using approved racking hardware.

No separate payment will be made for equipment used to install, terminate, splice and test the fiber optic cable. The unit price for fiber optic cables shall include all pigtails and jumpers, patch cables, interconnect centers, splice enclosures, cable ties, clamps, associated material, and labor required to install the cable.

All fiber optic splices shall be fusion splices. Mechanical splices shall not be used. Fiber optic splice locations are permitted only at splice points where splice cabinets are shown on the plans, or in existing State Department of Transportation pullboxes as is necessary, and only with the prior approval of the State Department of Transportation (DOT), Highways Division. Fiber optic fibers shall be spliced in every splice cabinet location, and it is the responsibility of the Contractor to maintain a continuous run throughout the system.

Terminate fiber optic cable only in equipment cabinets, multiplexer nodes, splice cabinets, and as shown on the plans, unless directed otherwise. Splice through all fibers not used at a particular cabinet, and cap unused fibers that end in a cabinet. Provide and install patch cables at the field communication HUBs or cabinet where connection is to be made from an existing patch panel to a communications device.

At fiber optic termination points provide a fiber optic splice enclosure. Make all fiber terminations by splicing the fiber to factory connected pigtails using fusion splicing only. The pigtails are to be buffered, strengthened with aramid, and meet the requirements for fiber optic cable. All pigtail connectors are to be the ceramic SC type. Use the pigtails to connect the fiber optic cable to the equipment in the cabinet or at the HUBs. Permanently label all fiber optic connectors, whether on pigtails or equipment, to preclude improper connection. The Engineer will approve the labeling method(s) before use.

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Provide documented historical cable pulling data indicating tensile forces exerted on the cable during the installation. Any tension measurements, which exceed the manufacturer's recommendation, will be considered means for the cable rejection. The fiber optic cable Subcontractor shall be fully responsible for the quality and integrity of the installed cable and the operability of the final fiber optic cable product. All fibers shall be spliced at camera cabinets, hubs, and splice cabinets and shall have no more than 0.07 dB loss per splice based on the appropriate system operating wavelength.

The Contractor shall complete all required fiber optic splices prior to final testing and acceptance. As part of the final testing and acceptance, submit optical time domain reflectometer (OTDR) readings in both hardcopy and electronic formats (such that it can be examined using the manufacturer's OTDR software) to the Engineer for review. Testing shall be conducted on all singlemode fibers at 1310 nm and 1550 nm.

**(C) Fiber Optic Link Testing.** Fiber optic links shall be tested as follows.

**(1)** Test the fiber after installation; including all splicing and termination, is complete. Note, however, that this test procedure involves measuring the loss of fiber installed by others before splicing to it.

**(2)** For each fiber optic link, including spare fibers, determine whether the optical loss is within the limits permitted by these specifications. A link is a continuous segment of fiber between one connector (or unterminated end) and another connector (or unterminated end).

**(3)** When testing links that do not have connectors on both ends, use a mechanical splice to attach a pigtail to the unterminated fiber for the duration of the test. Mechanical splices will not be measured for separate payment.

**(4)** For each fiber link, follow this procedure:

**(a)** If the link includes fiber installed by others, use an optical loss test set to measure and record the optical loss over that portion of the link before it is spliced to new fiber.

**(b)** Calculate the maximum allowable loss for the completed link, both at 1310 nm and at 1550 nm. Use the following formula:

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Maximum link loss =  
Measured loss over portion installed by others  
+ (Fiber length in km) x (0.35 for 1310 nm  
and 0.25 for 1550 nm)  
+ (Number of fusion splices) x (0.05)  
+ (Number of mechanical splices [for temp.  
connection]) x (0.3)  
+ (Number of connections) x (0.3)

Provide this calculation to the Engineer along  
with the test results.

**(c)** Calibrate an optical loss test set and provide evidence satisfactory to the Engineer that the set produces accurate results at both wavelengths. This can be a demonstration that the set correctly measures the loss of a test fiber whose loss is known.

**(d)** Use the test set to measure the loss of the link under test. Record the results at both 1310 nm and 1550 nm for single mode fiber.

**(e)** If the measured loss exceeds the calculated maximum, use an optical time domain reflectometer and other test equipment to troubleshoot the link. Take whatever corrective action is required, including cable replacement, to achieve a loss less than the calculated maximum.

**(5)** Documentation. Prepare a diagram showing all of the links tested in this project. For the portions installed in this project, show the cabinets, splices, and pigtails. On each line representing a link, show the maximum allowable loss and the actual loss. The actual loss shall be the one measured after all corrective actions have been taken.

**(6)** Perform Power meter attenuation testing in accordance with EIA/TIA-568 to measure coupled power of a fiber optic cable using a reference cable or patchcord connecting the source to the cable plant. Test and document the fiber optic cables at the same wavelength as the output as the source (e.g. singlemode 1310 nm or 1550 nm). Provide the test data in the following format:

- a. Date of test
- b. System being Tested and fiber identification
- c. Operator
- d. Test Equipment Used

- 626 e. Test wavelength
- 627 f. Measure optical power.

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629 **(D) Balanced Twisted Pair CAT6 Cable Testing**

630  
631 **(1)** Use field-test instruments that comply with ANSI/TIA-1152A,  
632 requirements for Field Test Instruments and Measurements for  
633 Balanced Twisted-Pair Cabling

634  
635 **(2)** Field-test instruments shall be within the calibration period  
636 recommended by the manufacturer.

637  
638 **(3)** Perform Permanent Link test results including the individual  
639 frequency measurements, length measurement, DC resistance,  
640 insertion loss, and cross talk attenuation of each cabling segment.

641  
642 **(4)** Testing shall be performed on each cabling segment  
643 (connector to connector). Sampling is not acceptable.

644  
645 **(5)** Test results documentation saved within the field-test  
646 instrument shall be transferred into a database (local or cloud-based)  
647 that allows for the maintenance, inspection and archiving of the test  
648 records. The database for the complete project, including twisted-  
649 pair copper cabling links, if applicable, shall be stored and delivered  
650 in digital format prior to Owner acceptance. The Contractor shall  
651 provide access to any software required to view, inspect, and print  
652 any selection of the test reports.

653  
654 **(E) CUT-OVER Plan.** The Contractor shall develop and submit for  
655 approval by the Engineer a fiber-optic cable cutover plan detailing the  
656 operation of switching network communication of the CCTV operations from  
657 the existing fiber-optic communications network to the newly installed  
658 parallel fiber-optic CCTV communication network. Currently, there are 3  
659 existing fiber optic rings comprising the existing network communication  
660 topology: Halawa Ring (Hubs 1, 2 and 14), Haiku Ring (Hubs 14, 13 and 8),  
661 and the Tunnel Ring. The existing Haiku and Halawa rings are 48-strand  
662 single mode fiber, while the Tunnel ring is multimode fiber (existing 24-  
663 strand). The existing 24-strand multimode cable currently operating in the  
664 tunnel supports and maintains the operation of the tunnel fire-life safety  
665 systems and must be maintained at all times and will not be impacted by  
666 the new work. The CCTV cameras to be installed in the tunnel are to be  
667 connected to the new 72-strand single mode fiber optic cable.

668  
669 For all 3 fiber optic rings, the existing communications shall be  
670 maintained until final switchover of network on proposed cables can be  
671 completed.

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The Cut-Over plan must be submitted and approved by the Engineer prior to performing any of the fiber network alterations.

**(F) Notification of Work and Network Downtime.** The following specifies the permitted duration of ITS system device disruption due to actions performed by the Contractor (includes all subcontractors) as part of this project.

CCTV Cameras – 24 hours  
Network backbone – No downtime

Additionally, the Contractor shall be capable of taking the appropriate actions necessary to maintain functionality of system devices, including but not limited to the installation of temporary communications and power services. If temporary network services are necessary to address an emergency network communication disruption, the Contractor will use whatever means possible (i.e. temporary fiber optic connectivity, third party communication or temporary wireless or cellular services) to maintain network connectivity. Contractor shall perform all work necessary to minimize the network down time. Any additional work for unforeseen temporary work will be paid on a Force Account Basis.

Unscheduled downtime resulting from damage to fiber optic cable or CCTV camera facilities shall be measured from the beginning of service disruption until the repairs, compliant with requirements of this specification, have been completed and accepted by the Engineer and connectivity has been fully restored.

**(G) Warranty.** Unless otherwise required herein, provide manufacturer’s warranty(ies) covering defects in materials, fabrication, and workmanship on cable, drop cable, patch panels, splice enclosures, and incidentals required for installation that are customarily issued by the equipment manufacturer and that are at least one (1) year in length from the date of final acceptance of the work as defined in Section 108.17 – Guarantee of Work by the Department. Include replacement or coverage for all parts and labor necessary to repair defective material, equipment, or workmanship that arises during the warranty period.

**647.04 Measurement.** The Cut-Over Plan is incidental to the work of this section and will not be paid separately. The Engineer will measure fiber optic cables of the type and design specified in the proposal per linear foot. Splicing, testing, termination, connectors, pigtails and patch-chords and Interconnect Centers are considered incidental to cables and will not be measured separately. The Engineer will measure the 3-Cell Fabric Innerduct and Extended Range Ethernet Cable as specified per linear foot. Temporary Network Services will be

718 paid on a force account basis, in accordance with Subsection 109.06 – Force  
719 Account Provisions and Compensation.

720

721 **647.05 Basis of Payment.** The Engineer will pay for the accepted Fiber  
722 Optic Cable type, Extended Range Ethernet Cable and 3-Cell Fabric Innerduct  
723 installed at the contract unit price per linear foot complete in place. The price  
724 includes full compensation for existing and new, testing, splicing, patch panels,  
725 and all other materials required to complete a fully functioning fiber optic  
726 communication infrastructure.

727

728 The Engineer will pay for the following pay items when included in the  
729 proposal schedule:

730

Pay Item	Pay Unit
72-Strand Single Mode Fiber Optic Cable, _____	Linear Foot
734 12-Strand Single Mode Fiber Optic Cable, _____	Linear Foot
736 3-Cell Fabric Innerduct, _____	Linear Foot
738 Extended Range Ethernet Cable, _____	Linear Foot
740 Temporary Network Services	Force Account

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**END OF SECTION 647”**

1 This Section shall be made a part of the Standard Specifications:  
2

3 **“SECTION 657 – CABINET ENCLOSURES**  
4

5 **657.01 Description.** This section shall consist of all work and materials  
6 necessary for providing the appropriate type and size cabinet enclosures at the  
7 various sites shown on the plans.  
8

9 **657.02 Materials.**

10  
11 **(A) ITS Enclosure.** Utilize enclosure for structurally mounted  
12 enclosure installations. House all ITS device electronics in the ITS  
13 enclosures as indicated in the contract documents. For pole-mounted and  
14 ground-mounted enclosures, provide all material, including mounting  
15 equipment, and a concrete pad or elevated pedestal.  
16

17 **(1) NEMA 3R Enclosure.** House device electronics in a locking,  
18 weather resistant NEMA 3R, UL50E listed aluminum enclosure.  
19 Furnish enclosure to provide protection from rain, sleet, snow,  
20 dripping water and corrosion. Construct complete enclosure from  
21 0.125 inch thick aluminum alloy type 5052-H32 to provide strong  
22 and rigid construction. Provide enclosure with minimal dimensions  
23 of height, depth, and width necessary to accommodate all electrical  
24 equipment and wiring, plus a minimum additional 20% of excess  
25 empty space for future equipment and maintenance access. Utilize  
26 weld nuts for mounting all enclosure inner panels.  
27

28 Provide enclosure seams that are continuous and ground  
29 smooth, solid welds made by the Heliarc or stitch welding method.  
30 Provide enclosure welds that are neatly formed and free from  
31 cracks, blowholes, and other irregularities. Where enclosures are  
32 not ground-mounted, provide welded brackets or brackets bolted to  
33 the back of the enclosure for enclosure mounting. Where bolted  
34 bracket is used, bolt the bracket to an interior reinforcing plate  
35 fabricated of the same material as the enclosure. Fabricate  
36 mounting plates of a minimum 0.125 inch thick aluminum. Add body  
37 stiffeners where required to prevent the enclosures from sagging or  
38 bowing.  
39

40 Equip enclosure with means for locking with pad lock.  
41 Furnish door handles which provide for positive latching of the door  
42 at three points as viewed if facing the door - top, bottom, and left  
43 side. Provide a pin tumbler type lock which serves to secure the  
44 door handles, thereby locking the cabinet doors. Door locks shall  
45 be of solid brass rim Best Lock Series 516RL3XA7559-606 and  
46 include two keys. Contractor shall install door locks when directed

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by HDOT.

Furnish door hinges and pins of 304 stainless steel conforming to ASTM A276. Provide continuous hinge mechanism along the entire side. Equip door with an adjustable doorstop to hold the door open at the angles of 90 degrees, 135 degrees, and 180 degrees with the front of the enclosure. Provide gasketing on all door openings that is permanently bonded to the metal. Cover mating surface of the gasketing with a silicone lubricant to prevent sticking to the mating surface. Provide bonding on the door and a grounding stud in the enclosure.

Provide shut-offs and panels with identification labels and appropriate warning labels. Place identification nameplate on the outside of the enclosure. Provide nameplate that does not deteriorate over time due to weather. Indelibly identify all devices, components, cables and wires on permanently attached labels for use in the intended environment using labels approved by the Engineer and inscribed according to the approved schematic shop drawing showing the component layout. Label all internal connectors and wire terminations with sufficient information to locate its connection point. Insert a block diagram of all components illustrating all connectors and connections used to interconnect the components, wiring diagrams and schematic drawings of all circuits in a resealable weather-resistant pocket that is permanently mounted on the inside of an accessible door in the controller enclosure. Inscribe the component name and model number using a permanent label or laminated name plate in a position adjacent to the location of each major or replaceable component on the inside of the enclosure.

Provide racks and shelves to mount equipment as needed, including communications, and power equipment. Do not stack equipment on top of other equipment. Equipment may be set on shelves, installed on 19-inch rack rails, or attached to panels mounted to the rear or side walls of the enclosure. Provide a laptop shelf within the enclosure to accommodate for laptops/other devices during commission, testing, and maintenance.

Furnish cabinet LED lighting fixture complete with lens or shield with LED driver. Provide lighting fixture that activates upon opening enclosure door and deactivates upon closing enclosure door. Position lamp assembly to provide light to all of the equipment within the enclosure. Shield lamp assembly to prevent light from shining directly in the eyes of servicing personnel.

93 Provide sufficient shelf space within the enclosures for  
94 shelf-mounted equipment. If plans indicate, provide an enclosure  
95 with a transparent anti-graffiti coating over the entire outer surface  
96 of the enclosure.  
97

98 **(2) Power Distribution Subsystem.** Provide full power  
99 distribution subsystem to all electronic components within the  
100 enclosure and the related ITS device. Furnish power distribution  
101 panel to distribute power to all equipment within the enclosure and  
102 ITS devices served by the enclosure. Provide circuit breakers sized  
103 to meet or exceed the NEC requirements for the loads supported,  
104 with a minimum of 10 A trips. Size the circuit breaker based on the  
105 loads of the ITS device(s) utilizing the enclosure. Provide circuit  
106 breakers on an electrical panel in a NEMA 1 enclosure, or DIN rail  
107 mounted with appropriately rated junction blocks and buses.  
108 Provide a power distribution panel that is fed directly by the main  
109 circuit breaker at the electrical point of service, or solar installation,  
110 where applicable. Provide interface and connection to UPS. Provide  
111 connection to grounding system.  
112

113 If DIN rail components are utilized, provide black, white, and  
114 green DIN rail terminal blocks for 120VAC Hot, Neutral, and  
115 Ground, respectively. Provide differently colored terminal blocks for  
116 low voltage power and signals. Provide end stops, dividers, and  
117 appurtenances as required.  
118

119 Provide a neutral bus of solid metallic strip rigidly mounted  
120 on the power panel which is isolated from enclosure ground.  
121 Provide all neutral conductors terminated on the neutral bus. Bond  
122 the control enclosure, the main disconnect, the power distribution  
123 panel, the service ground wire and the branch circuit ground wires  
124 to the ground bus. Bond the ground bus to the enclosure grounding  
125 system with AWG No. 4 Ground Wire.  
126

127 **(3) Ventilation Subsystem.** Provide insulation, thermostat-  
128 controlled ventilation to maintain internal temperature between 32F  
129 and 104F, with all installed components operating continuously at  
130 full capacity. Provide for other measures to allow the enclosure and  
131 internal component, as a single entity, to operate reliably in the  
132 ambient temperature between -40°F and 140°F, relative humidity  
133 between 20% to 95%, non-condensing. Where ventilation fan is  
134 used, provide thermostatically controlled enclosure ventilation fan  
135 that supplies a minimum airflow of 100 cubic feet per minute. Utilize  
136 enclosure openings to ensure continuous air circulation. Position  
137 the openings so short circuiting of air circulation is avoided, and the  
138 effect of removal of heat from inside the enclosure is maximized.

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Utilize louvers or other means to limit openings to 1/4 inches or smaller. Screen the fan to prevent the entrance of dust, small animals, and foreign matter. Screen all enclosure openings and vents besides the door opening with a filter that prevents small foreign objects from entering through these openings.

**(4) Duplex Outlet.** Provide one duplex NEMA 5-15R, ground-fault circuit interrupting, GFCI receptacle, with 120 VAC power, for use as a convenience outlet inside the enclosure. Provide two duplex, NEMA 5-15R, receptacles, with 120 VAC power, marked for “Equipment Use Only” inside the enclosure. Ground the outlets through the enclosure grounding system. Furnish UL-listed receptacles.

**(5) Transient Voltage Surge Suppression (TVSS).** Provide transient voltage surge suppressor (TVSS) for each copper cable entering/leaving the cabinet. The AC powerline TVSS is to be UL 1449 Third Edition listed as Type 1 or Type 2. Low voltage and signal circuit TVSS are to be UL 749 listed. TVSS protection is not required for fiber optic cables.

**(6) Ground Rod.** Section 691 – Electrical and Communication System and as follows:

If the enclosure and a device are mounted on the same support structure, provide a common grounding electrode system for both.

**(7) Sunshields.** Install cabinet sunshields on top and sides of cabinet.

**657.03 Construction Requirements**

**(A) ITS Enclosure.** Install an ITS enclosure to house ITS device communication, power and other related equipment necessary for the operation of field ITS devices. Provide enclosure at each device location, and as directed in the contract documents.

**(1) Component Mounting.** Fasten all internal components securely to the enclosure using explicit mechanical means such as clamps, bolt/nut sets and screws.

**(2) Enclosure Height.** For mounting on vertical support structure, unless otherwise specified, where practical, install the enclosure with related center line at a nominal height of 42 inches

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above adjacent finished grade/floor. For ground-mounted enclosure installation, apply Ultraviolet (UV)- resistant caulking material along the joints with the enclosure. For mounting under a camera lowering system, position the enclosure away from the space directly below the camera.

**(3) Enclosure Openings.** Include sealing lock nuts on each side of the enclosure wall on all penetration arrangements through the enclosure walls to prevent ingress of water. Use a bushing on the end of the conduit inside the enclosures to prevent chaffing of the cables. Seal all penetrations to the enclosure with rubber silicone sealant to impede entry of water.

After installing all related cables, seal all conduits connected to the enclosure, including all spare conduits, with self-expanding insulation foam, electrical putty or an approved sealant as recommended by the cable manufacturer, and in a manner that does not damage the cable, to a depth of minimum 4 inches. Provide measures to protect cables from all sharp edges at the end of the conduits. Insert steel wool before the sealant, to prevent rodent infestation.

**(4) Wiring.** Neatly bundle and label all wires/cables within the enclosure.

Terminate ground wire from all electric devices, including surge suppressors, directly to the dedicated grounding terminal in the enclosure. Provide a maximum separation possible between signal wiring and power wiring or control wiring, to avoid inductive pickup. The minimum separation between the signal wiring and power wiring or control wiring is 12 inches. If power wiring has to cross the signal wiring, orient crossing as close to a right angle as possible.

**(5) Grounding.** See Section 691 – Electrical and Communication System, Subsection 691.03(M) - Labeling.

**(6) TVSS.** Segregate TVSS devices by type and position the TVSS devices as close as practical to the main termination point for grounding.

**657.04 Measurement.** The Engineer will measure the cabinet enclosures per each in accordance with the contract documents.

**657.05 Payment.** The Engineer will pay for the accepted pay items listed below on a per each basis, as shown in proposal schedule. Payment will be full

231 compensation for work prescribed in this section and in contract documents.

232

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

235

236 **Pay Item** **Pay Unit**

237

238 CCTV Cabinet Parapet Mounted, \_\_\_\_\_ Each

239

240 24" x 24" x 12" ITS Enclosure, \_\_\_\_\_ Each

241

242 HUB Cabinet Enclosure, \_\_\_\_\_ Each

243

244

245

246

**END OF SECTION 657"**

1 Make the following section part of the Standard Specifications:

2  
3 **“SECTION 682 – VIDEO SYSTEM EQUIPMENT UPGRADES**

4  
5  
6 **682.01 Description.** This section shall consist of all work, labor and  
7 materials necessary to provide for and install a completely upgraded and  
8 integrated video processor and video wall display at the H-3 Tetsuo Harano Tunnel  
9 Operations Center. The video processor and video wall display will be integrated  
10 as part of the video surveillance system providing operators with the ability to view  
11 and control CCTV cameras across the display network.

12  
13 The Contractor shall not install any equipment or cabling until the Engineer  
14 has reviewed and ensured the Contractor has at a minimum provided the following  
15 information:

16  
17 **(A) Equipment Schedule.** Identifying the equipment type, location and  
18 interfaced equipment cabinet location for each component.

19  
20 **(B) Network Diagram.** Including but not limited to single line  
21 interconnections between the Local Area Network (LAN) switch and  
22 components.

23  
24 **(C) Wiring Diagrams.** Power, network, and control wiring of  
25 components, cabinets or enclosures, switches and rack mounted devices.

26  
27 **682.02 Materials.**

28  
29 **(A) Video Processor.** Open architecture-based platform processor and  
30 control software package with multi-4K, IP enabled video control. The  
31 processor shall be capable of powering up to 48 HD displays and capture  
32 up to 16 4K HDMI sources and support IP video streaming. Install video  
33 processor in existing equipment rack in the H-3 operations equipment room.  
34 Unit shall meet the following requirements:

35  
36 **(1)** 4RU with 7-slot chassis

37  
38 **(2)** CPU – InTel i9-10900E

39  
40 **(3)** Operating System – Windows 11 IoT Enterprise LTSC High  
41 End

42  
43 **(4)** System Memory – 16 GB DDR4

44  
45 **(5)** Storage – 500 GB SSD with backup drive

47 (6) IP Encoding/Decoding – up to 24 x 4K UHD (3840x2160) or  
48 up to 192 X HD (1920 x 1080) @ 60 Hz

49  
50 (a) 4K capture and IP decode card with 4-mini HDMI inputs  
51 supporting 4 X 4K or 16 HD IP video decodes

52  
53 (b) 4K capture and IP encode/decode card with 4-mini  
54 HDMI inputs supporting 4 X 4K or 16 HD IP video decodes

55  
56 (7) Outputs – up to 12 x 4K UHD (3840 X 2160) or up to 48 x HD  
57 (1920 x 1080) at 60 HZ

58  
59 (8) Inputs – up to 16 x (1920 x 1080) @60 HZ

60  
61 (B) **LCD Video Display.** Upgrade the existing video wall in the H-3  
62 operations room. Install a 3 x 3 video wall matrix using a series of e55”  
63 diagonal 1920 x 1080 resolution panels meeting the following display  
64 requirements:

- 65  
66 Per Panel Dimensions: 47.7 x 26.8 x 3.6 inches  
67 Aspect Ratio – 16:9  
68 Tiled Bezel Width – 0.88mm / .04 in.  
69 Power Consumption – 235W  
70 Power Supply Voltage – 100-230V AC 50 to 60 HZ  
71 Brightness: 700 cd/m<sup>2</sup>  
72 Contrast Ratio – 10000:1  
73 Full Viewing Angle - 178°  
74 Color Processing 14 Bit / 16,384 Levels  
75 Power (Max) – 56 (W/ft<sup>2</sup>)

76  
77 (C) **Workstation Computer.** The Contractor shall provide three (3)  
78 workstation computers to serve as the user interface to the CCTV camera  
79 control and video display. Install two (2) workstations within the H-3  
80 operations control room and one (1) on the Haiku-side of the tunnel.  
81 Integrate workstation computers with the video control network to allow  
82 operators to view and display video images from the CCTV cameras. The  
83 workstation equipment shall meet the following requirements:

84  
85 (1) **Workstation Computer.**

86  
87 (a) Intel® Core Ultra 7 265 Processor (20-Core, 66MB  
88 Total Cache, 1.8 GHZ to 5.3 GHZ)

89  
90 (b) Operating System – Windows 11

91  
92 (c) Graphics Card - Intel® UHD

93

- 94 (d) Memory – 16 GB DDR5
- 95
- 96 (e) Storage – 1 TB M.2 PCIe NVMe SSD
- 97
- 98 (f) Front Ports – 3- USB 3.2 Type-A Gen1, 1 -USB 3.2
- 99 Type C Gen 2, 1 headset jack, 1 SD card slot
- 100
- 101 (g) Rear Ports – 4 USB 2.0 Type A, 2- USB 3.2 Type A
- 102 Gen 1, 1 Thunderbolt 4K Video output, 1- HDMI 4K
- 103 video output, 1 – RJ-45 ethernet (2.5 Gbps), 1- 2x
- 104 Stereo Audio, 1- S/PDIF Optical
- 105
- 106 (h) Expansion Slots – 2x M.2 SSD, 2x 3.5” HDD bays, 3
- 107 PCIe expansion slots (x4, x4, x16)
- 108
- 109 (i) Wireless keyboard and mouse
- 110

111 **(2) Monitor.**

- 112
- 113 (a) Screen mode: 4K UHD, 27” In-Plane Switching
- 114 Technology
- 115
- 116 (b) Aspect Ratio 16:9
- 117
- 118 (c) Maximum Resolution: 3840 x 2160
- 119
- 120 (d) Native Contrast Ratio: 1,500:1, Brightness: 350 cd/m<sup>2</sup>
- 121
- 122 (e) Video Port: 1 HDMI port, 1 Display port 1.4, 1 RJ45
- 123 Ethernet port, 1GbE
- 124
- 125 (f) Operating Temperature Range (32° F to 104°F)
- 126
- 127 (g) Non-Operating Temperature Range (-4° F to 140°F)
- 128
- 129 (h) Input voltage range 100V AC to 240V AC
- 130
- 131 (i) Operating power 25.5 W
- 132

133 **682.03 Construction.**

134

135 **(A) General Requirements.**

136

- 137 **(1)** Install equipment according to manufacturer’s directions,
- 138 approved shop drawings, and referenced standards identified in this
- 139 Section.
- 140

- 141 (2) Install cables using techniques, practices, and methods that  
 142 are consistent with rating of components, and that ensure  
 143 performance of completed and linked signal paths, end-to-end.  
 144  
 145 (3) Install cables without damaging conductors, shield, or jacket.  
 146  
 147 (4) Contractor shall fully cooperate and coordinate with Engineer  
 148 and HDOT personnel as required to ensure proper integration and  
 149 connectivity between systems.  
 150  
 151 (5) Contractor shall provide adequate technical support to  
 152 Engineer during installation and connectivity of new Video network  
 153 equipment.  
 154  
 155 (6) Contractor to provide a video processor replacement parts  
 156 package for critical components including, PSU blade, RAM stick,  
 157 SSD, and fan.  
 158  
 159

160 **682.04 Measurement.** Measurement for payment for equipment and  
 161 materials in this section will be made as follows:  
 162

163 (A) TMC Video Equipment Upgrade will be measured as a Lump Sum  
 164 and will include the following incidental items:  
 165

- 166 Video Processor
- 167 LED Video Display
- 168 Workstation Computers

169  
 170 **682.05 Payment.** The Engineer will pay for the accepted quantities of the  
 171 various components of the system at the contract unit price, complete in place.  
 172

173 The Engineer will pay for each of the following pay items when included in  
 174 the proposal schedule:  
 175

176 Pay Item	177 Pay Unit
178 TMC Video Equipment Upgrade	179 Lump Sum

180  
 181 **END OF SECTION 682”**

1 This Section shall be made a part of the Standard Specifications:

2  
3 **“SECTION 683 – CCTV CAMERA**

4  
5 **683.01 Description.** This section shall consist of all work and materials  
6 necessary to provide a fully operational CCTV upgrade replacing the existing  
7 analog video cameras with new network video surveillance cameras at the various  
8 sites shown on the plans. The work shall involve installation of all equipment and  
9 labor necessary to incorporate and integrate the new upgraded digital CCTV sites.

10  
11 **683.02 Materials.**

12  
13 **(A) CCTV Camera Assembly (PTZ).**

14  
15 **(1) Camera.**

- 16  
17 **(a)** Image Sensor: 1/2.8” CMOS  
18 **(b)** Lens: Varifocal, 4.3 – 137.6 mm  
19 1. F1.4 – 4.0  
20 2. Horizontal field of view: 58.3° - 2.4°  
21 3. Vertical field of view: 34.9° - 1.3°  
22 4. Autofocus, auto-iris  
23 **(c)** Day and Night: Automatically removable infrared-cut  
24 filter  
25 **(d)** Frame Rate: Up to 50/60 fps (50/60 Hz) in 1080p  
26 **(e)** Shutter Speed Range – 1/66500s to 2s Automatic  
27 Day/Night Imaging with IR cut filter  
28 **(f)** Dimensions: Height 9.5 in Dia 6.4 in.  
29 **(g)** Weight: 6.6 lbs.  
30 **(h)** Connectors: RJ45 10Base-T/100Base-TX PoE

31 **(2) Video.**

- 32  
33 **(a)** Video Compression:  
34 1. H.264 (MPEG)-4 Part 10/AVC) Baseline, Main  
35 and High Profiles  
36 2. H.265 (MPEG-H Part 2/HEVC) Main Profile  
37 3.  
38 **(b)** Video Streaming: Multiple individually configurable  
39 streams in H.264, H.265 and motion JPEG,  
40 controllable frame rate and bandwidth  
41 **(d)** Image Settings:  
42 1. Compression, saturation, brightness, sharpness,  
43 contrast, local contrast, white balance, exposure  
44 control, exposure zones, Forensic WDR: Up to

45 120 dB depending upon scene, defogging,  
46 day/night shift level.

47 (e) Resolution: 1920x1080p (HDTV 1080p) to 320x180

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49

**(3) Network Interface.**

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(a) Network Protocols: IPv4, IPv6, USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, UPnP™, SNMP v1/v2c/v3 (MIB-11), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, SFTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, NTCIP, LLDP, CDP, MQTT v3.1.1.

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(b) API: Open API for software integration, ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T.

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(c) Event Condition Analytics: Support and provide device status, above or below operating temperature, fan failure, IP address removed, network lost, new IP address, shock detected, failure storage, PTZ malfunction, PTZ movement, PTZ preset reached, PTZ ready and PTZ autotracking.

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(d) Network Security: IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS, TLS v1.2/v1.3 Network Time Security (NTS) X-509 Certificate PKI, host-based firewall.

76

**(4) Environmental.**

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81

(a) Casing: IK08, IK10 housing and mounting, IP66 and NEMA 4X rated metal casing (aluminum), hard coated Polycarbonate (PC) clear dome.

82

83

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85

86

(b) Operate without degradation in performance under temperature range of -40°F to +165°F, and relative humidity of 100%, condensing, and a storage temperature range of -40°F to +158°F.

87

**(5) Electrical.**

88

89 (a) Camera to be PoE+ powered: 1-port: 100-240 VAC,  
90 Max 37 W IEEE 802.3at Type 2 Class 4. Typical  
91 Camera consumption 10.2 W., max 25W. The  
92 Contractor shall provide a PoE+ switch that meets the  
93 applicable power and cable length requirements.  
94

95 **(6) Camera Mounts.**

96  
97 (a) Camera: Wall mounts and adaptors per manufacturers  
98 recommendations:  
99 1. Outdoor type  
100 2. Aluminum or stainless steel components  
101 3. Mount cantilever style on pole shafts using straps  
102 4. Has cable pull throughs supporting up to 100 lbs.  
103 5. Painted white and have the ability to adjust  
104 camera to plumb  
105

106 **(B) CCTV Camera Assembly (Fixed).**

107  
108 **(1) Camera.**

109  
110 (a) Image Sensor: 1/2.9" Progressive Scan RGB CMOS  
111 (b) Lens: Fixed Iris, fixed focus  
112 1. 3.2 mm F1.4  
113 (i) Horizontal field of view: 101°  
114 (ii) Vertical field of view: 54°  
115 (iii) Maximum focus distance 1.2 m  
116 2. 7.5 mm F1.6  
117 (i) Horizontal field of view: 39°  
118 (ii) Vertical field of view: 22°  
119 (iii) minimum focus distance 3 m  
120 (c) Automatically removable infrared-cut filter  
121 (d) Frame Rate: Up to 25/30 fps (50/60 Hz)  
122 (e) Shutter Speed Range – 1/19000 s to 1/5 s  
123 (f) Dimensions: Length 6.7 in. Dia 4.0 in.  
124 (g) Weight: 1.1 lbs.  
125 (h) Connectors: RJ45 10Base-T/100Base-TX PoE  
126

127 **(2) Video.**

128  
129 (a) Video Compression:  
130 1. H.264 (MPEG)-4 Part 10/AVC) Baseline, Main  
131 and High Profiles  
132 2. H.265 (MPEG-H Part 2/HEVC) Main Profile

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(b) Video Streaming: Multiple individually configurable streams in H.264, H.265 and motion JPEG, controllable frame rate and bandwidth

(c) Image Settings:

1. Compression, color, brightness, sharpness, contrast, white balance, exposure control, Motion-adaptive exposure, WDR: Up to 115 dB depending upon scene, text and image overlay, privacy masks, mirroring of images, Rotation: 0°, 90°, 180° and 270°.

(d) Resolution: 1280x960 to 320x240 (4:3), 1920x1080 to 640x360 (16:9)

**(3) Network Interface.**

(a) Network Protocols: IPv4, IPv6, USGv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, SFTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, SSH, NTCIP, LLDP, CDP, MQTT v3.1.1.

(b) API: Open API for software integration, ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T.

(c) Event Condition Analytics: Support and provide device status, above or below operating temperature, fan failure, IP address removed, network lost, new IP address, shock detected, failure storage, PTZ malfunction, PTZ movement, PTZ preset reached, PTZ ready and PTZ autotracking.

(d) Network Security: IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE )MACsec PSK/EAP-TLS), HTTPS/HSTS, TLS v1.2/v1.3 Network Time Security (NTS) X-509 Certificate PKI, host-based firewall.

**(4) Environmental.**

- 176 (a) Casing: IK08, IP66/IP67 and NEMA 4X rated metal  
177 casing (aluminum), hard coated Polycarbonate (PC)  
178 clear dome.  
179  
180 (b) Operate without degradation in performance under  
181 temperature range of -40°F to +165°F, and relative  
182 humidity of 100%, condensing, and a storage  
183 temperature range of -40°F to +158°F.  
184

185 **(5) Electrical.**

- 186  
187 (a) Camera to be PoE+ powered: 1-port: 100-240 VAC,  
188 Max 37 W IEEE 802.3at Type 1 Class 3. Typical  
189 Camera consumption 5 W., max 12.95W. The  
190 Contractor shall provide a PoE+ switch that meets the  
191 applicable power and cable length requirements.  
192

193 **(6) Camera Mounts.**

- 194  
195 (a) Camera: Wall mounts and adaptors per manufacturers  
196 recommendations.  
197

198 **683.03 Construction.**

199  
200 **(A) CCTV Subsystem.** Install CCTV cameras and perform  
201 modifications in existing cabinets as indicated in the plans.  
202

203 **(B) CCTV System Cables.** See SECTION 647 – FIBER OPTIC CABLE.  
204

205 **(C) Modifications in Existing Cabinets.** See SECTION 687 –  
206 NETWORK COMMUNICATION SYSTEM.

207  
208 **(D) CCTV Camera Testing.** Complete all testing for the CCTV Camera  
209 Subsystem. Testing procedures described in this Section are intended to  
210 test the CCTV subsystem element to make certain that the elements are  
211 properly integrated to achieve a fully functioning subsystem. Make  
212 provisions for up to two Department personnel or their representatives to  
213 attend all tests and demonstrations. Conduct the following tests, in the order  
214 indicated:

215  
216 On-Site Standalone Tests  
217 System Tests  
218 30-Day Observation Period  
219

220 The acceptance of each stage of testing does not imply testing is

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complete at that stage. If problems are found at a later date or stage of testing, it may be necessary to return to an earlier stage of testing after repairs have been made to the system. If at a later stage of testing, a piece of equipment is replaced, repaired, or significantly modified, retest to the level necessary to isolate any problem and establish a course of action to remedy the situation.

Provide test documentation, including at a minimum, test procedures, checklist, test forms, and data summary sheets for each item. Tailor test documentation for each item being tested. Submit testing documentation before testing for the Engineer's acceptance. After test documentation is approved, provide the Engineer with advance notice, as specified for each test, so the Engineer can observe each test.

Failure to conform to the indicated requirements of all tests will be considered defective and equipment will be subject to rejection by the Engineer. In the event a defect is determined, identify whether it is limited to a specific unit or could be potential problems in all such units. Equipment rejected because of problems limited to the specific unit may be offered again for retest provided all issues of non-compliance have been corrected and re-tested, and evidence is submitted to the Engineer.

In the event equipment malfunctions during the test period, the Engineer may declare a subsystem defect and require replacement of all equipment at no additional cost to the Department. If a subsystem defect is declared, restart the test for that specific subsystem. Begin the test period when all similar equipment is replaced and retest has been successfully completed.

**(1) General.** Test the equipment according to approved test procedures only. Record test results on data summary sheets for each piece of equipment tested. Provide certification of test results by a qualified Engineer. Submit all test records, in electronic format, as required, to the Engineer, within one day of the test.

Complete testing for each equipment unit in as few consecutive days as possible as determined by the Engineer. Schedule testing with additional time allotted for the Engineer to request certain portions of a test be repeated. The Engineer has the right to witness or assign their designee to witness all tests.

At a minimum, all testing procedures must be signed by the following: The Engineer, or the Engineer's designee, and the Contractor's designee. The acceptance of test procedures and witness of such tests does not relieve the responsibility to provide a

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completely acceptable and operating subsystem that meets the indicated requirements.

**(2) On-Site Standalone Tests.** Submit test procedures, checklist, and summary sheets for the Engineer’s acceptance before performing tests. Provide Engineer with a testing schedule indicating the date and time of the tests. Provide at least 5 working days’ notice before all tests so the Engineer can observe each test.

Following the installation of the equipment in the field, conduct on-site standalone tests at each CCTV camera field location to verify the field device operates properly in their intended application. Provide the required testing equipment, including portable computer and test software to perform local subsystem operations and diagnostic test procedures. Conduct these tests before interconnection to the network domain.

**(3) System Tests.** Make network connection to the CCTV cameras and conduct system tests from the H-3 Operations Center to verify the overall subsystem meets the indicated requirements. Conduct system tests following completion and acceptance of all on-site standalone tests.

Provide at least 10 working days’ notice before all tests so the Engineer can observe each test. Using the device subsystem control software exercise all functions of the CCTV camera to test control and monitoring functions of the CCTV cameras remotely. Where new software, switching systems, or hardware are installed in the project, utilize this new equipment to test control and monitoring functions of the devices remotely.

Demonstrate the communications subsystem is fully functional. In the event of test failure, perform a partial or total re-test to demonstrate the subsystem is functioning as a complete subsystem.

**(4) 30-Day Observation Period.** After successful completion of the System Testing the Contractor must conduct a continuous 30-day Observation Period of the CCTV camera operation. Provide as needed operational and maintenance support for all installed equipment including troubleshooting and diagnostics in the event a malfunction of the CCTV cameras occurs.

In the case where equipment malfunctions during the 30-day observation period, the Engineer may declare a subsystem defect. Correct failures during the observation period by repairing or

312 replacing malfunctioning parts or equipment or faulty work, in less  
313 than 24 hours. If over 10% of the CCTV cameras fail during the 30-  
314 day observation period, the 30-day observation period will be  
315 restarted. If less than 10% of the CCTV cameras fail during the 30-  
316 day observation period, there will be no interruption of the 30-day  
317 test period.

318  
319 After the completion of 30-day observation period the  
320 constructed CCTV cameras will be accepted by the Engineer and the  
321 Warranty Period will begin.

322  
323 **(5) Warranty Period.** Provide a manufacturer's warranty for  
324 CCTV camera furnished in the project. Provide warranties of a one-  
325 year minimum duration. Manufacturer warranties in excess of one  
326 year will remain in full force and effect throughout the entire  
327 manufacturer's warranty period. The warranty period for all individual  
328 devices will begin upon conclusion and acceptance of the 30-day  
329 observation period.

330  
331 Provide a warranty that will enable the full replacement of a piece of  
332 equipment in the event of equipment failure, at no additional cost to  
333 the Engineer.

334  
335 **683.04 Measurement.** The Engineer will measure the CCTV camera per  
336 each in accordance with the contract documents. Testing of the CCTV cameras is  
337 incidental and will not be paid for separately.

338  
339 **683.05 Payment.** The Engineer will pay for the accepted pay items listed  
340 below on an Each basis, as shown in proposal schedule. Payment will be full  
341 compensation for work prescribed in this section and in contract documents.

342  
343 The Engineer will pay for each of the following pay items when included in  
344 proposal schedule:

345	346 <b>Pay Item</b>	347 <b>Pay Unit</b>
348	CCTV Camera Assembly (PTZ), _____	Each
349		
350	CCTV Camera Assembly (Fixed), _____	Each
351		

352  
353 **END OF SECTION 683"**

1 This Section shall be made a part of the Standard Specifications:

2  
3 **“SECTION 687 – NETWORK COMMUNICATION SYSTEM**

4  
5 **687.01 Description.** The work of this section includes, but is not limited to,  
6 providing all labor, materials, tools, equipment and incidentals necessary to  
7 perform network communication modifications in existing CCTV and Hub field  
8 cabinets to provide IP communications at the CCTV field cabinet locations  
9 designated on the plans.

10  
11 In general, the work of the section consists of the following components:

- 12  
13 **(A)** Installing Ethernet switches in the existing CCTV cabinets and at  
14 the H-3 Tunnel Control Room,  
15  
16 **(B)** Installation of underground (in duct), fiber optic and Ethernet  
17 cable,  
18  
19 **(C)** Splicing of fiber optic cable,  
20  
21 **(D)** Electrical power supply and distribution, and  
22  
23 **(E)** Testing and checkout of equipment.

24  
25 Contractor shall be responsible for physically installing the equipment and  
26 performing work in the existing cabinets as shown on the plans, connecting power  
27 and communications cables, and testing the equipment and communications  
28 network providing a fully integrated and operational system.

29  
30 Portions of the work on this project will require access to communications  
31 hubs, fiber splice cabinets, communications ducts and pull boxes, and other  
32 existing system components that support current system operations. The  
33 Contractor shall maintain communications with, and all normal operation of, all  
34 existing equipment and systems throughout the construction of this project. The  
35 Contractor shall coordinate with the appropriate agency(s) to notify them about  
36 possible disruptions and minimize down time to existing communications. Notify  
37 the appropriate agency at least 72 hours prior to beginning any work.

38  
39 Other portions of the work on this project will involve connecting to existing  
40 electrical power circuits that provide power to roadway lighting, sign lighting, or  
41 similar circuits. Access to these electrical circuits shall be coordinated through the  
42 Engineer and shall be done only during daylight hours; and all circuits shall be  
43 returned to fully operational condition before nightfall.

44  
45 **687.02 Materials.**

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**(A) GFE Ethernet Switch.**

**(1) Layer 2 Ethernet Switch.**

(a) HDOT will be providing the necessary switches for the project. The Contractor shall coordinate with the project Engineer to obtain the network switches and obtain switch and equipment IP schema to be programmed into the individual network switches to be installed at the designated CCTV cabinets.

**(2) Small Form-Factor Pluggable (SFP) Optical Transceiver**

(a) HDOT will be providing the required SFP Modules for the project. The Contractor shall coordinate with the project Engineer to obtain the SFP modules to be installed in the designated field cabinets.

**(B) CCTV Camera.** See Section 683 — CCTV Camera.

**(C) Fiber Optic Cable.** See Section 647 — Fiber Optic Cable.

**(D) Cabinet Enclosures.** See Section 657 — Cabinet Enclosures.

**687.03 Construction.**

**(A) Modifications in Existing Cabinets.** The project requires the Contractor to perform work in existing equipment cabinets as described below:

**(1) Hub Field Cabinets.** Maintain existing network communications and construct new parallel CCTV network as detailed in the drawings. Install new Layer 2 Switch in the cabinet. Terminate new fiber cables in the new interconnect center and patch through fibers. Remove existing CCTV device Video Transmitter cards, rack(s) and CCTV device serial modem connections from the cabinet serial splitter. Maintain existing serial communications through the existing RuggedCom Switch and cabinet terminal server connecting to the existing traffic control cabinets.

**(2) CCTV Field Cabinets.** Install new Layer 2 Switch in the existing CCTV field cabinet. Terminate new fiber cables in the new interconnect center and patch through fibers as indicated on the plans. Provide full power distribution to all electronic components within the cabinet enclosure. Provide circuit breakers sized to meet the supported electrical loads. Make required electrical modifications to cabinets. Remove existing analog CCTV cameras,

92 Video Receivers and CCTV-dedicated RS-232 serial modems in the  
93 cabinet. Install new camera and provide CAT 6 Ethernet connection  
94 to the newly installed switch and camera.  
95

96 **(3) Tunnel CCTV Cabinets.** The existing tunnel CCTV cameras  
97 are currently operating on an existing 24-fiber multimode ring. The  
98 existing tunnel fire-life safety systems are also operating on this 24-  
99 fiber multimode ring. This fiber ring must remain operational at all  
100 times. The existing tunnel cameras shall remain operational on the  
101 24-fiber multimode ring until the new 72 fiber singlemode fiber ring is  
102 installed. The tunnel cameras will then be switched over onto the new  
103 72-fiber singlemode ring. In the existing cross-passage tunnel CCTV  
104 cabinets install new Layer 2 Switch. Terminate new fiber cables in  
105 the new interconnect center and patch through fibers as indicated on  
106 the plans. Install new CCTV cameras within the vehicle and  
107 maintenance tunnels. Provide new CAT 6 Ethernet connectivity from  
108 the new Layer 2 Switch to the camera. For CCTV cameras to be  
109 installed within the maintenance tunnel, install the camera ensuring  
110 that the Ethernet cable run does not exceed 850 feet.  
111

112 **(B) ATMS Equipment Integration.** Network integration services  
113 include all equipment installations and equipment configuration work  
114 necessary to provide a complete parallel CCTV network as contained within  
115 the scope of this project. These services include, but are not limited to:  
116

117 **(1)** Integration of Ethernet equipment, CCTV cameras and  
118 switches.  
119

120 **(2)** All installed equipment shall comply with the current Network  
121 Security Protocols. Accordingly, the Contractor shall coordinate with  
122 Engineer to obtain current system network and switch configuration  
123 files to program the Ethernet switches ensuring that all necessary  
124 network security protocols have been implemented.  
125

126 **(3)** The Contractor shall coordinate with the Engineer and HDOT  
127 IT staff for the logical interfacing of the new IP CCTV cameras into  
128 the existing Cameleon CCTV Management System.  
129

130 **(4)** The Contractor shall provide a final configuration report to the  
131 Engineer detailing all the configuration parameters for all Contractor-  
132 configured devices that connect to the network, including but not  
133 limited to the following:  
134

135 **(a)** IP Address, subnet mask, default gateway  
136 assignments.  
137

- 138 (b) DNS hostname, domain, and server assignments.  
139  
140 (c) Speed and duplex configuration for each network  
141 interface.  
142  
143 (d) Access VLAN configuration or trunking mode for each  
144 switch port.  
145  
146 (e) User access passwords for network device  
147 management.  
148  
149 (f) Switch configuration files in text (CLI) format.  
150

151 (C) **Additional Testing, Splicing and Equipment.** The Contractor  
152 will perform "As directed" any additional system testing, fiber optic cable  
153 splicing and testing and adjustments of necessary field equipment to  
154 provide a completely tested and integrated network before acceptance by  
155 the Engineer. Work will be performed on a force account basis, in  
156 accordance with Subsection 109.06 – Force Account Provisions and  
157 Compensation.  
158

159 (D) **Equipment Cabinet Documentation.** Provide specific cabinet  
160 field-posted documentation for this project. All documentation, except as  
161 specifically approved by the Engineer, shall be no smaller than 8 1/2-inches  
162 x 11- inches and no larger than 24-inches x 36-inches. Information shall be  
163 placed in a clear protective envelope and stored in each cabinet.  
164 Information shall include cut sheets of product data used in the cabinet,  
165 electrical schematics of cabinet power distribution within the cabinet with  
166 fiber optic splice diagrams.  
167

168 Electronic documentation shall conform to the following file  
169 formats: tables shall be provided in current versions of Microsoft Excel or  
170 Microsoft Word file format; manuals, reports and other narrative text  
171 documents shall be provided in Microsoft Word file format; and drawings in  
172 PDF.  
173

174 All literature from manufacturers shall be original documents  
175 provided by the manufacturers or copies equal to originals. All  
176 documentation will be paid for under the item Field-Posted Drawings, as  
177 described in Section 648 of the Standard Specifications.  
178

179 **687.04 Measurement.** Measurement for payment of equipment and  
180 materials in this contract will be made as follows.  
181

182 (A) **Modifications in Existing Cabinets.** Will be measured as Lump  
183 Sum per facility. This item shall include all modifications in existing facilities

184 cabinets, and include any necessary mounting hardware, Ethernet patch  
185 cables, power cables, power supplies, to enable a fully operational Network  
186 Communications system.

187  
188 **(B) ATMS Equipment Integration.** Will be measured as Lump Sum.  
189 This item shall include all work requirements necessary to provide a  
190 completely integrated, unified, operational Network Communication System  
191 and CCTV and video equipment contained within the scope of this project  
192 into a fully unified, operational, tested, and certified system.

193  
194 **(C) Additional Testing, Splicing and Equipment.** The Engineer will  
195 measure additional testing, splicing and equipment as directed on a  
196 force account basis, in accordance with Subsection 109.06 – Force  
197 Account Provisions and Compensation.

198  
199  
200 **687.05 Payment.** The Engineer will pay for the accepted pay items listed  
201 below at the contract price per pay unit. Payment will be full compensation for work  
202 prescribed in this section and the contract documents.

203  
204 The Engineer will pay for each of the following pay items when included in  
205 proposal schedule:

206	207 <b>Pay Item</b>	208	209 <b>Pay Unit</b>
209	ATMS Equipment Integration, _____		Lump Sum
210	Additional Testing, Splicing, and Equipment, _____		Force Account
211	Modifications in Existing Cabinets, _____		Lump Sum

212  
213  
214  
215  
216 The Engineer will pay for fiber optic cable in accordance and under Section  
217 647 – Fiber Optic Cable.

218  
219 The Engineer will pay for Equipment Cabinet Documentation in accordance  
220 and under Section 648 – Field-Posted Drawings.

221  
222 The Engineer will pay for Cabinet Enclosures in accordance and under  
223 Section 657 – Cabinet Enclosures.

224  
225 The Engineer will pay for CCTV Camera in accordance and under Section  
226 683 – CCTV Camera.

227  
228  
229 **END OF SECTION 687”**

1 Make this section a part of the Standard Specifications:

2  
3 **“SECTION 691 – ELECTRICAL AND COMMUNICATION SYSTEM**

4  
5  
6 **691.01 Description.** This work shall consist of furnishing all labor, materials  
7 and equipment to install in place and in operating condition underground and  
8 surface mounted structures required for the facilities of the Department of  
9 Transportation, herein referred to as DOT. Such works shall be performed and  
10 tested at the indicated locations in accordance with the requirements herein  
11 specified and the indicated details, or as ordered by the Engineer, and includes  
12 but is not limited to the following:

13  
14 **(A)** Complete surface mounted conduit system including conduits and  
15 junction boxes to be used by the DOT for their cables and equipment. Work  
16 shall also include securing the approval of the DOT inspector.

17  
18 **(B)** Complete underground duct system including excavation, backfilling,  
19 concrete work, conduits, handholes, and transformers to be used by the  
20 DOT for their cables and equipment. Work shall also include securing the  
21 approval of the DOT inspector.

22  
23 **(C)** Coordinate work and arrange for periodic inspections by DOT and  
24 Engineer.

25  
26 **(D)** Pass test mandrel through all conduits, and make corrections as  
27 directed by the inspectors or Engineer.

28  
29 **(E)** Where cables are not being installed, provide each conduit run with  
30 a nominal 1/8-inch pull line made of polypropylene, polyester, or polyolefin  
31 extending through the entire length. Double additional 2 feet of  
32 polypropylene polyester or polyolefin pull line back into the conduit at each  
33 end of the run. The pull line installed in the conduits must have a minimum  
34 of 240 lbs. tensile strength, must be rot and mildew resistant. No slicing of  
35 the pull line is allowed.

36  
37 **(F)** Immediately report and pay for damages to existing equipment.

38  
39 **(G)** Obtain and pay for electrical permits, arrange for periodic inspection  
40 by local authorities and deliver certificate of final inspection to Engineer.

41  
42 **(H)** Contractor shall check and test the installation for completeness and  
43 functional operation as described by the drawings and specified herein.  
44 Final test shall be in the presence of Engineer and representatives of utility  
45 companies. Contractor shall arrange and pay for all testing costs.  
46

47 (I) Work shall include providing power and communication to CCTV  
48 cabinets and this shall include:

49  
50 (1) Installation of transformers and appropriate over current  
51 protection devices.

52  
53 (2) Supply and installation of transformer and OCPD mounting  
54 hardware.

55  
56 (3) Supply and installation of communication and power duct  
57 systems.

58  
59 (4) Supply and installation of pad and surface mounting for  
60 transformer and OCPD components.

61  
62 (5) Supply and installation of enclosed circuit breakers for  
63 electrical service to the cabinets.

64  
65 (6) Supply and installation of branch circuit wiring for all services.

66  
67 (7) Supply of traffic management during construction.

68  
69 (8) Support testing and commissioning of the components.

70  
71 Incidental parts which are not shown on the plans or specified herein and  
72 which are necessary to complete the underground electric duct systems shall be  
73 furnished and installed by the Contractor as though such parts were shown on the  
74 plans, or specified herein or in the special provisions.

75  
76 All electrical equipment shall conform to the NEMA Standards, and all  
77 electrical work shall conform to ordinances of City and County of Honolulu; latest  
78 edition of National Electrical Code; General Order No. 10, Public Utilities  
79 Commission, State of Hawaii; and Regulations.

80  
81 Applicable rules, standards and specifications of following associations  
82 shall apply to materials and workmanship:

- 83  
84 American National Standards Institute (ANSI)  
85 Edison Electric Institute (EEI)  
86 Illumination Engineer Society (IES)  
87 National Board of Fire Underwriters (NBFU)  
88 National Electrical Manufacturer's Association (NEMA)  
89 National Fire Protection Association (NFPA)  
90 Underwriters' Laboratories, Inc. (UL)

91  
92

93 **691.02 Materials.** Materials shall meet the requirements specified in the  
94 following subsections.

95  
96 **(A) Rigid Steel Conduit PVC Coated.**

97  
98 **(1)** Zinc-coated rigid steel conduits prior to PVC coating shall  
99 conform to Federal Specification WW-C-581d, ANSI Standard  
100 C80.1, UL Standard #6 and NEMA RN1-1980.

101  
102 **(2)** All conduits shall be hot dip zinc-coated inside and out with  
103 zinc-coated threads.

104  
105 **(3)** All conduit and connectors shall be PVC coated.

106  
107 **(4)** Prior to PVC coating, zinc-coated surfaces shall be coated  
108 with epoxy-acrylic primer to ensure bond greater than coating tensile  
109 strength.

110  
111 **(5)** 40 mil-thick, minimum, plastic coating shall be applied by dip-  
112 method.

113  
114 **(6)** Factory-applied plastic coating shall be applied by same  
115 manufacturer who produced the hot dip zinc-coated conduit. The  
116 coated conduit shall conform to NEMA Standard No. RN1-1980  
117 (Type 40).

118  
119 **(7)** Fittings and Accessories.

120  
121 **(a)** Conduit clamps, u-bolts, nuts and conduit support  
122 system shall be stainless steel. Nuts shall be installed with  
123 manufacturer supplied wrenches.

124  
125 **(b)** Couplings shall have 40-mil-thick longitudinal ribs.

126  
127 **(c)** All coated conduits shall be installed in accordance  
128 with manufacturer recommendations.

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130 **(d)** Fittings and accessories shall be provided to ensure a  
131 continuous grounded system.

132  
133 **(8)** Provide 5' maximum spacing between conduit supports and  
134 3' spacing between conduit support and junction box.

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136 **(9)** Provide minimum three (3) inches clearances from the edge  
137 of the bottom most conduit to the bottom of the unistruct.  
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- (10) Provide and install stainless steel spring nuts.
- (11) Conduits shall have bushings/caps on the end for entrances into junction boxes.
- (B) Ducts and Conduits.** Ducts and Conduits shall conform to the requirements of Section 712.27 - Conduits. Ducts and conduits required shall be new and provided by the Contractor in accordance with the construction drawings and specifications.
  - (1) Polyvinyl Chloride (PVC) Schedule 40 type ducts shall be provided for the electrical and communication duct systems. The fittings shall be of the same material as the conduit and duct.
  - (2) Conduit Riser Bends shall be polyvinyl chloride (PVC) pipes. The fittings shall be of the same material as the conduit and duct.
- (C) Concrete.** Concrete shall conform to the requirements of Section 601 - Structural Concrete, except that for concrete jackets and concrete caps, the maximum size of coarse aggregate shall be 3/4 inch in lieu of the one-inch to No. 4 specified and the slump shall be 6-inch minimum and 7-inch maximum. Concrete for manholes, handholes, and pullboxes shall be Class A. Concrete for jacketing conduits and ducts shall be Class B.
- (D) Junction Box.** NEMA 4X stainless steel. Provide as required to minimize cable pulling tension. Provide tamper proof screws on all boxes.
- (E) Single Conductors.** Stranded copper, XHHW-2 insulated unless otherwise noted on plans. Color coding to NEC and as shown on plans.
- (F) Enclosed Circuit Breaker**
  - (1) Enclosed circuit breaker shall be designed, manufactured, and tested in accordance with UL 489, CSA 22.2, and NEMA 250 standards and certifications.
  - (2) Provide NEMA 1 surface mounted general-purpose enclosure intended for indoor use.
  - (3) Provide necessary stainless steel mounting accessories for mounting enclosed circuit breaker within new pad mounted enclosures.
  - (4) All enclosed circuit breakers shall have nameplates that contain a permanent record of catalog number and maximum rating. Provide handle mechanisms that are pad-lockable in the "ON" or "OFF"

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position.

**(G) Transformer Foundation.** Construction per details on drawings.

**(H) Inspection.** Materials will be subject to inspection at any time. Failure of the Engineer to note faulty material or workmanship during construction will not relieve the Contractor of his responsibility for removing or replacing such materials and dredging the work at his expense.

**691.03 Construction.**

**(A) General.**

**(1)** The Contractor shall in performing required installation of conduit and equipment, exercise due care to avoid disturbing existing facilities. Shall remove and dispose of all demolished or excess material from the job site.

**(2)** Upon completion of the work, the Contractor shall submit an 'As Built' or corrected plan showing in detail thereon all construction changes.

**(3)** Before bidding, the Contractor shall visit project site, carefully review each section of the Specification and all Drawings of this Contract, and obtain and review the standards, specifications and drawings of the local utility companies.

The Contractor shall report any error, conflicts or omissions to the Engineer at least one week before submission of bids for interpretation or clarification. If errors or omissions are not reported, the Contractor shall provide necessary work at no cost to the State of Hawaii to properly complete intent of Specification and Plans.

**(B) Installation of Conduits and Duct Banks.** All joints shall be water tight.

**(C) Existing Utilities.** Existing utilities are shown on the drawings in approximate locations for the convenience of the Contractor. It is not the intention of plans to imply that all existing utilities are drawn and located, and the fact that any utility is not shown on the drawings shall not relieve the Contractor of his responsibility under this Section. It shall be the Contractor's responsibility to ascertain the location of all existing utilities which may be subject to damages by construction under this Contract. The Contractor shall:

- 231 (1) Support and protect all HECO, CATV and/or HECO utilities  
232 during construction,  
233  
234 (2) Notify HECO, CATV and/or HECO immediately of any  
235 damage to its system caused by construction under this Contract,  
236 and  
237  
238 (3) Reconstruct, at his expense, damaged portions of the utility  
239 system in accordance with the requirements and specifications of  
240 HECO, CATV and/or HECO.  
241  
242 (4) The Contractor shall be responsible for and shall pay for all  
243 damages to existing utilities of all types.  
244

245 **(D) HECO Facilities.** The Contractor shall provide HECO with 24hour  
246 access to all existing HECO facilities. The Contractor shall be responsible  
247 for any delays in utility company work due to his failure to provide access to  
248 utility company facilities. All existing HECO facilities shall remain in place.  
249 Any cost for temporary relocations arising during construction shall be borne  
250 by the Contractor.  
251

252 Electrical equipment or conductors, whether electrically energized or  
253 not, shall remain in place at all times during construction. Handling and  
254 moving of electrical equipment or conductors, when required by the  
255 Engineer, shall be done by HECO. Work by the Contractor in areas with  
256 energized electrical equipment shall be performed with extreme caution to  
257 prevent accidents and to avoid disturbing or damaging this equipment or  
258 conductors. Unless otherwise permitted by HECO, all work by the  
259 Contractor in areas with energized equipment of conductors shall be  
260 performed in the presence of a HECO inspector and/or standby man. The  
261 Contractor shall have the sole responsibility for maintaining safe and  
262 efficient working conditions and procedures in these areas.  
263

264 Any existing HECO facilities including equipment or conductors  
265 damaged by the Contractor during construction shall be replaced by HECO  
266 at the Contractor's expense.  
267

268 **(E) Excavation and Backfill.** All excavation and backfill for electric,  
269 telephone and cable television underground structures and trenches shall  
270 conform to the requirements of Section 204 - Excavation and Backfill for  
271 Miscellaneous Facilities, modified as follows:  
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- 273 **(1) Excavation.**  
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275 **(a)** The width of trenches for concrete encased ducts shall  
276 be not less than the width of the encasement nor more than

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that required to properly and safely execute the work.

**(b)** Ducts encased in concrete jackets which are bedded in disturbed (fill) ground shall be installed in the following manner: Embankments shall be built up and thoroughly compacted to the elevation which is three feet above the top-of-jacket- elevation, or to the required elevation shown on the plans, whichever is less than five times the width of the jacket. This work shall conform to the requirements of Section 203 Excavation and Embankment. The trench to accommodate the jacket shall then be excavated through the constructed embankment.

**(c)** The Contractor shall not excavate for manholes, handholes and duct lines until he has the locations for these structures staked out and verified to be correct, and approved by the respective utility company inspectors.

**(d)** Trenches shall be excavated at least 50 feet ahead of duct placement so that any obstruction to the duct line can be avoided through gradual alignment. The profile grade may be adjusted by the Engineer to increase or decrease the excavation depth (up to 3 feet) as a result of unforeseen obstruction at no additional cost.

**(e)** Excavation for each handhole and manhole, plus 50 feet of trenching for all ducts connected to those structures shall be completed, and the locations and depths of the handholes and manholes shall be verified and approved by the respective utility company inspectors prior to construction or installation of the structures. All cuts in excess of depths required shall be filled with concrete, beach sand, or Type A backfill. The lateral limit for handholes and manholes shall be the vertical surfaces two feet outside the neat lines of the structures.

**(f)** The bottom of the trench excavation shall be flat and smooth. All trenches shall be approved by the Engineer and the utility company inspectors before any ducts or conduits are placed or any structures and foundations are constructed.

**(g)** The trenches shall be widened at handholes and manholes to permit proper entry of the ducts and conduits.

**(h)** The Contractor shall provide all sheathing and bracing to support the sides of the excavated trench. Provision and

323 removal of these items are incidental to the trenching work.

324

325 (i) Saw cutting work shall be considered incidental to the  
326 trenching work.

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**(2) Backfill.**

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330 (a) No backfilling shall be done until the duct and conduit  
331 installations, and the handhole and manhole placements have  
332 been verified to be correct, and approved by the respective  
333 utility company inspectors.

334

335 (b) Material for use as trench backfill for direct buried  
336 conduit above select backfill shall be nonexpansive and shall  
337 conform to Section 204 – Excavation and Backfill for  
338 Miscellaneous Facilities and requirements stated below.  
339 Backfilling and compaction shall be as specified in Section  
340 204 Excavation- and Backfill for Miscellaneous Facilities.  
341 Backfill material shall be beach sand, earth or earth and gravel  
342 mixture. If earth and gravel, mixture must pass 1/2 inch mesh  
343 screen and contain no more than 20 percent of rock particles  
344 by volume.

345

346 (c) Backfilling shall be to finished grades indicated on  
347 accompanying drawings, and/or matching existing conditions.  
348 Backfill material shall be placed in maximum of 8" layers in  
349 loose thickness before compacting. Backfill shall be  
350 thoroughly compacted with hand or mechanical tampers to  
351 95% of the ASTM D1557 maximum dry density. In no case  
352 shall tamping be accomplished by using the wheels or tracks  
353 of a vehicle.

354

355 **(F) Installation of Conduits and Duct Banks.** All joints shall be water  
356 tight and all ducts shall be installed to drain towards pull points unless  
357 otherwise shown on the plans.

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**(1) Plastic Duct Joints.**

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361 (a) Field cutting of plastic ducts shall be performed by the  
362 Contractor and only with the use of a miter box. Burrs shall  
363 be removed by filing before the joint is made. All foreign  
364 matter shall be wiped off the sockets of the fittings and the  
365 edges of the duct with a clean cloth.

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367 (b) Cement for plastic duct joints shall be obtained from  
368 the duct manufacturer. Thinning of the cement will not be

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permitted. A liberal and uniform coat of cement shall be applied with a natural bristle brush to the inside of the coupling and to the outside of the duct end. Immediately thereafter, the duct shall be slipped into the socket of the fitting with a half-twisted, and the excess cement shall be wiped off.

(c) Allow the joined members to cure for at least five minutes before disturbing or applying stress to the joint. After this initial cure, care must be exercised in handling to prevent twisting or pulling the joint. In damp weather, this interval shall be increased to allow for slower evaporation of the solvent.

(d) Another fitting or section of conduit may be added to the opposite end within 2 or 3 minutes if care is exercised in handling so that strain is not placed on the previous assembly.

(e) Any joint included in a section of conduit to be bent in the trench shall be assembled above ground and allowed to lie undisturbed for at least two hours before installation. In cases where a plastic connection is made with the union under stress due to misalignment or other factors, the union shall be staked out to relieve stress on the joint until the conduit is backfilled or encased.

**(2) Plastic Duct Installation.**

(a) The Contractor shall provide spacers to maintain proper separation between ducts. The bottom duct spacers shall be placed on the prepared trench bottom, the first tier of ducts placed in the grooves of the spacers, and couplings attached to the duct ends. Spacers shall be 15 inches or more away from any coupling or joint. Successive lengths of ducts shall then be placed and connected to the preceding lengths as specified above. The second tier of duct spacers shall then be placed over the ducts previously placed and followed by installation of couplings. The operation shall be repeated for each successive tier until the top tier is set in place after which the top spacers are placed.

(b) When conduit is assembled above the ground, the spacer shall be supported in a vertical position by use of a No. 4 rebar and smooth black steel wire, No. 14 gage.

(c) Duct alignment shall be as straight as feasible. Such directional changes as are required shall be made by using

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field made bends or with segments using angle couplings or deflection couplings, except where otherwise indicated. The deflection angle between two adjacent lengths of duct shall not exceed five degrees, unless otherwise indicated.

Horizontal bends for conduits/ducts shall be constructed with 25-foot minimum radius curves unless indicated otherwise or approved by the respective utility company inspector. Vertical bends for conduits/ducts shall be constructed with 20-foot minimum radius curves unless indicated otherwise or approved by the respective utility company inspector.

Spacers shall not be located at the centers of a long radius bend. On prefabricated bends, the spacer shall be located in the tangent, free of the coupling. On trench formed bend, the spacer shall be located midway between the tangent and center of the bend.

**(d)** Precaution shall be taken to prevent damage in plastic duct lines from thermal expansion and contraction. All ducts shall be cool when placed in trenches and when the concrete jacket is being poured.

**(e)** Ducts ending in handholes and manholes shall be terminated with junior end bells. End bells, terminators or ducts shall be flush to inside wall surfaces; duct extension into boxes is not acceptable.

The terminated ends of the conduit in an underground structure shall be free of support for a distance of at least 10 feet from the structure. The conduit shall be aligned and supported inside the structure with proper spacing and shall be cut to length after the concrete envelope has cured.

**(f)** The ends of the conduit shall be sealed with a plastic cap, plug, or approved substitute at the end of each day's work, when work on duct installation has to be interrupted, where ducts may be submerged in water, and in stub outs.

**(3)** A minimum thickness of 4 thousandths of an inch (mils), with a solid aluminum core or aluminum backing for detection with metal detector. Tape shall be 6 inches wide, red in color for electrical power lines, and imprinted with "CAUTION BURIED ELECTRIC LINE BELOW" in black lettering.

- 461 (4) The Contractor shall apply a thin coat of sealing compound on  
462 ducts and conduits at couplings and bells.  
463
- 464 (5) Conduits stubbed for future connections shall be plugged and  
465 marked.  
466
- 467 (6) The Contractor shall securely anchor duct banks prior to  
468 pouring concrete encasement to prevent ducts from floating.  
469
- 470 (G) The Contractor shall test the completed ducts by passing a test  
471 mandrel through the length of each duct of each duct run. Scars in the  
472 mandrel deeper than 1/32 inch, other than that caused by normal abrasion  
473 between the duct line and bottom of mandrel shall be considered an  
474 indication of the presence of burrs and/or obstructions in the duct run. The  
475 Contractor shall remove such burrs and/or obstructions, after which the test  
476 mandrel will be passed through again. All tests shall be conducted in the  
477 presence of the Engineer and respective utility company inspectors, and  
478 shall be repeated until the results obtained are satisfactory to the Engineer  
479 and to the utility company inspectors.  
480
- 481 (H) Unless indicated otherwise, the Contractor shall furnish and install a  
482 1/8 inch Polyolefin pull line between pull points in all ducts after testing.  
483
- 484
- 485 (I) **Concrete.** The Contractor shall notify the utility company's inspector a  
486 minimum of 72 hours prior to placement of any concrete.  
487
- 488 (1) Securely anchor duct banks prior to pouring concrete  
489 encasement to prevent ducts from floating.  
490
- 491 (2) When pouring concrete, prevent heavy masses of concrete  
492 from falling directly on ducts. If unavoidable, protect ducts with plank.  
493
- 494 (3) Direct flow of concrete down sides of duct bank to bottom,  
495 allowing concrete to rise between ducts, filling all open spaces  
496 uniformly.  
497
- 498 (4) To insure against voids in concrete, work a long, flat splicing  
499 bar or spatula liberally and carefully up and down the vertical rows of  
500 ducts. Mechanical vibrators shall be used for stacked duct banks of  
501 three ducts or higher.  
502
- 503 (5) Cure concrete for a minimum of 72 hours before permitting  
504 traffic and/or backfilling.  
505
- 506 (6) Convey concrete from mixer to forms rapidly to prevent

507 segregation. Free drop shall be limited to five feet, unless authorized  
508 by inspector.

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**(7) Placing.**

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**(a)** Clean and remove all debris from inside forms and  
513 trenches before placing concrete.

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**(b)** Place concrete only on clean damp surfaces, free from  
516 water.

517

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**(c)** Place concrete in forms, in horizontal layers not  
519 exceeding 18" thickness.

520

521

**(d)** Place concrete to avoid segregation of materials and  
522 displacement of ducts, inserts and reinforcing.

523

524

**(e)** Vibrate structural concrete thoroughly during and  
525 immediately after placing to insure dense watertight concrete.

526

527

**(8) Forming.**

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529

**(a)** Forms shall be of good sound lumber with sufficient  
530 strength and conforming to shapes and dimensions indicated  
531 on drawings.

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533

**(b)** Forms shall be treated with nonstaining form oil  
534 immediately- before each use.

535

536

**(9) Patching.** Patch all voids, pour joints and holes before  
537 concrete is thoroughly dry. Use mortar of same proportions as  
538 original concrete.

539

540

**(10) Curing.** Curing of concrete shall be accomplished by  
541 impervious membrane method with liquid membrane compound.  
542 Apply two or more coats to obtain a total of one gallon for each 150  
543 square feet of concrete surface.

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545

**(J) Handholes and Pullboxes.**

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547

**(1)** Boxes shall be installed approximately where shown. The  
548 exact location of each box shall be determined after careful  
549 consideration has been given to the location of other utilities, grades,  
550 and pavement. Boxes shall be of the type noted on the Drawings  
551 and shall be constructed in accordance with the applicable details  
552 and standard drawings as indicated.

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(2) Pullboxes shall be installed on a minimum of 3" #3 crushed rock.

(3) Ducts ending in manholes and handholes shall be terminated with junior end bells. End bells, terminators or ducts shall be flush to inside wall surfaces; duct extension into boxes is not acceptable. Verify complement and arrangement of ducts entering each manhole or handhole and location of duct entrance with the respective utility company prior to fabrication of the respective manhole and handhole.

(4) State boxes shall be provided with a tamper proof cover.

**(K) Cable Installation in Duct**

(1) Install cables as indicated in ducts.

(2) Do not pull spliced cables inside ducts.

(3) Install multiple cables in duct simultaneously.

(4) Use NEC approved lubricants of type compatible with cable jacket to reduce pulling tension.

(5) Perform tests using qualified personnel. Provide necessary instruments and equipment.

(6) Acceptance Tests

(7) Ensure that terminations and accessory equipment are disconnected.

(8) Ground shields, ground wires, metallic armor and conductors not under test.

**(L) Grounding and Bonding.** All grounding and bonding shall conform to the NEC requirements with ground rod resistance of less than 25 ohms. Connect all ground rods, plates, conductors, and galvanized steel conduits together. Connect only one wire to any one ground bushing.

**(M) Labeling**

(1) Label all cables, conductors, ports, and terminals as shown on the Plans.

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(2) Label all cables and wiring in junction boxes, handholes, cabinets and any other access points using a permanent, durable, and waterproof printer-generated labeling system. Securely fasten the label tag to the cable using Ty-Wraps or equivalent fastening methods. Provide the Engineer with a sample of all proposed types of labels for review and approval 2 weeks prior to installation. Approval of the labeling system shall be at the sole discretion of the Engineer.

(3) All end of wire segments and all access points between source and destination shall be labeled. Wire labeling shall adhere to the following nomenclature: <Cabinet Name>.<Device Name>.<Cable Number>.<Wire Number>. Provide a sample of the proposed labeling to the Engineer for approval prior to installation.

(4) Label all electrical equipment and enclosures, including but not limited to, junction boxes, breakout boxes, and power supplies using the following systems:

(a) Label inside equipment as shown on the Plans using a lamicoid style label on the front face of each enclosure with the wording shown on Plans. Use 25mm high white characters on a red background. Rivet the nameplate using a minimum of 4 stainless steel rivets.

**(N) Restoration of Existing Streets and Other Improvements.** Street, sidewalks, curbs, gutters, traffic detection loops, and other improvements of the State, private owners, or those of the City and County which are maintained by the State, which are damaged by rearrangements to the electric, cable television or telephone system, shall be restored by the Contractor to their original condition. Existing concrete pavement, sidewalks, curbs, gutters, concrete facilities, etc. disturbed by the Contractor shall be removed and reconstructed at the pavement, sidewalks, curbs, gutters, concrete facilities, etc. scorelines or joints. Spot repairing of the concrete pavement, sidewalks, curbs, gutters, concrete facilities, etc. must not be allowed. Materials and workmanship shall conform to the applicable sections in these specifications.

Repairing of existing City streets and other improvements not maintained by the State and where such work is called for on the plans, inside and outside of the right-of-way, publicly or privately owned, which are damaged by the Contractor's operations shall be restored to their original condition, or better, at his expense. Materials and workmanship shall conform to the "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986, AS AMENDED", of the Department of Public Works, County of Kauai, City and County of Honolulu, County of

645 Maui, and County of Hawaii, of the State of Hawaii. Copies of the Standard  
646 Specifications are on file and may be inspected at the Division of  
647 Purchasing during regular business hours of the City.

648  
649 All disturbed unpaved surfaces shall be backfilled and graded to  
650 match the surrounding areas, and sodded areas shall be replanted with the  
651 same type of grass. Fences and other improvements shall be restored to  
652 their original condition.

653  
654 **691.04 Measurement.** The Engineer will measure conduit, cables, and trench  
655 excavation and backfill per linear foot in accordance with the contract documents.

656  
657 The Engineer will measure the transformer and other electrical equipment  
658 per each in accordance with the contract documents.

659  
660 **691.05 Payment.** The Engineer will pay for the accepted conduit, cables, and  
661 trench excavation and backfill per linear foot basis; transformers and associated  
662 equipment, mounting stands, handhole tie-ins, junction boxes, and pull boxes on  
663 a per each basis. The price shall include furnishing and installing the items, and  
664 all tools, labor, equipment, and incidentals necessary to complete the work.  
665 Payment will be full compensation for the work prescribed in this section and the  
666 contract documents.

667  
668 The Engineer will pay for the following pay items when included in the  
669 proposal schedule:

670	<b>Pay Item</b>	<b>Pay Unit</b>
671		
672		
673	3" PVC Coated GRC, _____	Linear Foot
674		
675	3" PVC Schedule 40 Conduit, _____	Linear Foot
676		
677	Trench Excavation and Backfill, _____	Linear Foot
678		
679	Power Trench Excavation and Backfill	Linear Foot
680		
681	1-2" Concrete Encased Conduit	Linear Foot
682		
683	1-2" Surface Mounted Conduit	Linear Foot
684		
685	1-1" Surface Mounted Liquid-Tight Flexible Metal Conduit, _____	Linear Foot
686		
687	Secondary Cables 2#6, #8 Ground XHHW CU Cable	Linear Foot
688		
689	1.5KVA Stepdown Transformer with Mounting Stand	Each
690		
691	26"x32" Traffic Signal Pullbox, Type A, _____	Each

692  
693 32"x32"x8" Stainless Steel Pullbox, \_\_\_\_\_ Each  
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**END OF SECTION 691"**

1 Make the following Section a part of the Standard Specifications:  
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3 **“SECTION 695 – PROJECT VEHICLES**  
4

5 **695.01 Description.** This work shall consist of furnishing and maintaining  
6 vehicles as specified hereinafter, for use by State personnel or as directed by the  
7 Engineer.  
8

9 **695.02 General Requirements.**

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11 **(A) Responsibility of the Contractor.** The Contractor shall:  
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13 **(1)** Maintain each vehicle in a good and safe operating condition  
14 at all times.  
15

16 **(2)** Provide complete maintenance of all vehicles including  
17 supplied accessories. This shall include but not be limited to, tune-  
18 ups, all types of lubrication work, all types of adjustments, all  
19 repairs requested by the Engineer and other related service work  
20 thereto.  
21

22 **(3)** Perform all repair and/or replacement work, including repair  
23 and replacement of tires. Repair and/or replacement work shall be  
24 performed in such a manner that the vehicle shall be equivalent to  
25 what it was when originally supplied, i.e. material used in the repair  
26 and/or replacement work shall be equal to or better than what was  
27 originally supplied on the vehicles.  
28

29 **(4)** Provide all oil and lubricants necessary for the mentioned  
30 maintenance and service work.  
31

32 **(5)** Respond to all trouble calls and requests for repairs  
33 immediately, but no more than three hours after the request or at a  
34 time designated by the State. Respond to all trouble calls and  
35 requests for repairs wherever the vehicle is located. This shall  
36 include the pickup and delivery of the vehicle during and after  
37 working hours including Saturdays, Sundays, and holidays at the  
38 location designated by the State.  
39

40 **(6)** Provide another vehicle in kind as a replacement any time a  
41 vehicle is detained by the Contractor or a vehicle is damaged or  
42 inoperable due to an accident or other causes. A replacement for  
43 every vehicle detained or out of service shall be provided within 24  
44 hours unless otherwise directed by the Engineer.  
45

46 **(7)** Provide all labor, equipment, tools, materials, and supplies

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necessary for all required maintenance and service work.

**(8)** Comply with all State and City and County safety ordinances, regulations, and inspections. The Contractor shall bear the cost of all fees necessary to meet these requirements.

**(9)** Provide insurance coverage for all furnished vehicles including but not limited to bodily injury liability, property damage liability, comprehensive loss damages, collision or upset, or other damages. Insurance coverage shall be valid anywhere in the State of Hawaii.

Automobile bodily injury and property damage liability insurance shall not be less than the following limits:

**Bodily Injury Liability:**

\$1,000,000 each occurrence

**Property Damage Liability:**

\$1,000,000 each occurrence

The Contractor shall submit to the Engineer within fifteen (15) days from the date of award of the contract three (3) copies each of insurance certification, stating that the Contractor has taken out the aforementioned coverages with the State of Hawaii named as additional insured. The Contractor shall provide a copy of a valid no-fault insurance card for each vehicle.

**(10)** Provide and bear the cost thereof, all safety checks, license plates, and all fees and taxes in connection with the vehicle.

**(11)** Provide two (2) complete sets of keys for each vehicle supplied.

**(12)** Provide a charge card for each vehicle to be used by the State to fuel vehicle at a local area gas station. Anticipated mileage is 1,000 miles per month.

**(B) Responsibility of the State.**

**(1)** The State will park vehicles after working hours at the State Project Field Office.

**(2)** The State will retain fuel receipts to be provided to the

93 Contractor at a time interval mutually agreed by the State and the  
94 Contractor.

95  
96 **(C) Delivery and Inspection.**  
97

98 **(1)** The Contractor shall deliver all vehicles to the State Project  
99 Field Office. The vehicles shall be delivered on the Notice to  
100 Proceed date or at a later date as designated by the Engineer.

101  
102 **(2)** A joint inspection of the vehicles shall be done by  
103 representatives of the Contractor and the State before acceptance  
104 of the vehicles. The State will document any deficiencies found,  
105 and the Contractor will remedy those deficiencies to the satisfaction  
106 of the State.  
107

108 **(D) Termination.**  
109

110 **(1)** The Contractor shall furnish and maintain the vehicles for  
111 use by the State from the delivery date to a date directed by the  
112 Engineer but no later than 30 days after the Contractor's approval  
113 and the Engineer's acceptance of the final monthly estimate.  
114

115 **(E) Vehicles to be Furnished for this Project.**  
116

117 **(1)** The vehicles furnished and maintained shall be new at the  
118 beginning of the contract, shall be unmarked, and shall be a 2-door  
119 white mid-sized pickup truck.  
120

121 **695.03 Liquidated Damages.** If the Contractor fails to furnish the vehicles  
122 within the time specified herein, including conditions described in Subsection  
123 695.02A(5)&(6), then damages will be sustained by the State. The amount of  
124 such damages resulting from loss of project management duties will be fixed at  
125 the sum of \$500.00 per vehicle for each and every calendar day, including  
126 weekends and holidays. The State may deduct such amount thereof from any  
127 monies due or that may become due the Contractor under this contract.  
128

129 **695.04 Measurement.** The Engineer will measure project vehicles per  
130 month.  
131

132 **695.05 Payment.** The Engineer will pay for the accepted project vehicles at  
133 the Contract unit price per month.  
134

135 The Engineer will pay for the following pay items when included in the  
136 proposal schedule:  
137  
138

	<b>Pay Item</b>	<b>Pay Unit</b>
139		
140		
141	Project Vehicles (1 Vehicle)	Month
142		
143		
144	<b>END OF SECTION 695”</b>	



1 Delete Section 701 in its entirety and replace with the following:

2  
3 **“DIVISION 700 – MATERIALS**

4  
5 **SECTION 701 – HYDRAULIC CEMENT**

6  
7  
8 **701.01 Portland Cement.** Portland cement shall consist of Type I or Type II  
9 Portland cement, **Type IL portland-limestone cement**, or Type IP Portland  
10 pozzolan cement.

11  
12 Type I and Type II portland cement shall conform to AASHTO M 85 and  
13 the 28-day compressive strength requirement cited in AASHTO M 85, Table 4.

14  
15 **Type IL portland-limestone cement and** Type IP portland-pozzolan cement  
16 shall conform to AASHTO M 240.

17  
18 Mineral admixtures may be used to replace a portion of the required  
19 portland cement in accordance with Subsection 711.03 - Admixtures.

20  
21 Safe and suitable facilities for sampling cement shall be provided at the  
22 weigh hopper or in the feedline immediately in advance of the hopper. Cement  
23 shall be stored in a weathertight building that will protect cement from dampness  
24 and minimize warehouse set, and stored in such a manner to permit easy access  
25 for proper inspection and identification of each shipment.

26  
27 Cement which for any reason has become partially set or which contains  
28 caked lumps shall not be used.

29  
30 Different types of cement shall not be mixed or used in the same unit of  
31 construction. Cement used in the manufacture of cast-in-place concrete for  
32 exposed surfaces of like elements of a structure shall be from the same mill.

33  
34 Certificate of compliance that complies with Subsection 106.07 –  
35 Certificate of Compliance shall be submitted to the Engineer before using any  
36 cement. Certificate of compliance shall include pertinent information as to the  
37 type of cement; and applicable chemical and physical test results from samples  
38 taken at local distribution sites or concrete batch plants.

39  
40 Once certificate of compliance has been accepted, the Engineer may  
41 permit use of cement before release by the laboratory. Cement furnished without  
42 an accepted certificate of compliance shall not be used until the Engineer has  
43 had sufficient time to make appropriate test and has accepted cement for use.

44

45           If cement does not conform to requirements of the contract documents as  
46 determined by laboratory test samples, use of cement from the same source  
47 shall be delayed until the Engineer can make tests on each cement lot delivered.

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**END OF SECTION 701”**



## **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; §12-22-4.1, HAR]

### **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. [§104-3(a), HRS; §12-22-10, HAR]
- 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; §12-22-10, HAR]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(b), HRS; §12-22-10, HAR]
  - the name and home address of each employee
  - the last four digits of social security number
  - a copy of the apprentice's registration with DLIR
  - 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
  - total net wages paid
  - date of payment
- Records shall be made available for examination by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

## 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

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice rates, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]
- The number of apprentices on any public work in relation to the number of journeyworkers in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. 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(3), 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: [§104-24, HRS]
  - 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**. [§104-24, HRS; §12-22-25(b), HAR]
- **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, HRS]
- **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), HRS; §12-22-26, HAR]
- 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), HRS; §12-22-26, HAR]
- 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), HRS]



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) 974-6464  
Maui and Kauai .....(808) 243-5322

"General Decision Number: HI20260001 05/27/2026

State: Hawaii

Construction Types: Building, Heavy, Highway and Residential

Counties: Hawaii Counties of Hawaii, Honolulu, Kalawao, Kauai and Maui

BUILDING CONSTRUCTION PROJECTS

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories)

HIGHWAY CONSTRUCTION PROJECTS

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
1	01/16/2026
2	05/18/2026
3	05/27/2026

ASBE0132-001 09/07/2025	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.).....	\$ 46.90	29.75

BOIL0627-005 01/01/2025	Rates	Fringes
BOILERMAKER.....	\$ 49.37	31.25

BRHI0001-001 09/05/2023	Rates	Fringes
BRICKLAYER: POINTERS, CAULKERS AND WEATHERPROOFERS..	\$ 48.28	32.23
BRICKLAYERS AND STONEMASONS.....	\$ 48.03	32.23

BRHI0001-002 09/05/2023	Rates	Fringes
TILE, MARBLE & TERRAZZO WORKER (TERRAZZO BASE GRINDERS).....	\$ 44.69	33.00
TILE, MARBLE & TERRAZZO WORKER (TERRAZZO FLOOR GRINDERS AND TENDERS).....	\$ 43.14	33.00
TILE, MARBLE & TERRAZZO WORKER (TILE, MARBLE AND TERRAZZO WORKERS).....	\$ 46.50	33.00

CARP0745-001 09/01/2025	Rates	Fringes
CARPENTERS: (CARPENTERS; HARDWOOD FLOOR LAYERS; PATENT SCAFFOLD ERECTORS (14 FT. AND OVER); PILEDRIERS; PNEUMATIC NAILERS; WOOD SHINGLERS AND TRANSIT AND/OR LAYOUT MAN).....	\$ 55.50	29.81
CARPENTERS: MILLWRIGHTS AND MACHINE ERECTORS.....	\$ 55.75	29.81
CARPENTERS: POWER SAW OPERATORS (2 H.P. AND OVER)...	\$ 55.65	29.81

CARP0745-002 09/01/2025		
	Rates	Fringes
DRYWALL AND ACOUSTICAL WORKERS AND LATHERS.....	\$ 55.75	29.81
-----		
ELEC1186-001 08/24/2025		
	Rates	Fringes
ELECTRICIANS.....	\$ 56.55	33.16
ELECTRICIANS: CABLE SPLICERS.....	\$ 63.90	33.38
ELECTRICIANS: TELECOMMUNICATION WORKER.....	\$ 41.00	16.28
-----		
ELEC1186-002 08/24/2025		
	Rates	Fringes
LINE CONSTRUCTION: CABLE SPLICERS.....	\$ 63.90	33.38
LINE CONSTRUCTION: GROUND MEN/TRUCK DRIVERS.....	\$ 42.41	27.14
LINE CONSTRUCTION: HEAVY EQUIPMENT OPERATORS.....	\$ 50.90	30.75
LINE CONSTRUCTION: LINEMEN.....	\$ 56.55	33.16
LINE CONSTRUCTION: TELECOMMUNICATION WORKER.....	\$ 41.00	16.28
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ELEV0126-001 01/01/2025		
	Rates	Fringes
ELEVATOR MECHANIC 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.....	\$ 73.85	38.44
-----		
ENGI0003-002 09/01/2025		
	Rates	Fringes
DIVER TENDER: OTHER THAN AQUA LUNG.....	\$ 59.94	35.68
DIVER: (AQUA LUNG) (SCUBA) (over 30 feet).....	\$ 81.72	35.68
DIVER: (AQUA LUNG) (SCUBA) (up to 30 feet).....	\$ 72.35	35.68
DIVER: OTHER THAN AQUA LUNG.....	\$ 81.72	35.68
HELICOPTER WORK, AIRBORNE HOIST OPERATOR FOR HELICOPTER.....	\$ 61.52	35.68
HELICOPTER WORK: CO-PILOT OF HELICOPTER.....	\$ 61.66	35.68
HELICOPTER WORK: PILOT OF HELICOPTER.....	\$ 62.83	35.68
POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 1: FORK LIFT (UP TO AND INCLUDING 10 TONS); PARTSMAN (HEAVY DUTY REPAIR SHOP PARTS ROOM WHEN NEEDED). 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.....	\$ 57.96	35.68
POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 2: CONVEYOR OPERATOR (HANDLING BUILDING MATERIAL); HYDRAULIC MONITOR; MIXER BOX OPERATOR (CONCRETE PLANT). 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

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.....\$ 58.07 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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. 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.....\$ 58.24 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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 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.....\$ 58.51

35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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. 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.....\$ 58.82

35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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). 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.....\$ 59.47

35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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). 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.....\$ 59.79

35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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). 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.....\$ 59.90 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 9: COMBINATION MIXER AND COMPRESSOR (GUNIT); 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.). 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.....\$ 60.01 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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). 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.....\$ 60.24 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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. 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.....\$ 60.30 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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). 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.....\$ 60.45 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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 TIED EARTHMOVING MACHINE (WITH TANDEM SCRAPER); TANDEM CATS; TRENCHER (PULLING ATTACHED SHIELD). 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.....\$ 60.60 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, 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).

.....\$ 60.96 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 12A: DOZER (D-11 OR SIMILAR OR LARGER); HYDRAULIC EXCAVATORS (OVER 4 CU. YDS.); LIFTING CRANES (50 TONS AND OVER); PIONEERING DOZER/BACKHOE (INITIAL CLEARING AND EXCAVATION FOR THE PURPOSE OF PROVIDING ACCESS FOR OTHER EQUIPMENT WHERE THE TERRAIN WORKED INVOLVES 1-TO-1 SLOPES THAT ARE 50 FEET IN HEIGHT OR DEPTH, THE SCOPE OF THIS WORK DOES NOT INCLUDE NORMAL CLEARING AND GRUBBING ON USUAL HILLY TERRAIN NOR THE EXCAVATION WORK ONCE THE ACCESS IS PROVIDED); POWER BLADE OPERATOR (CAT 12 OR EQUIVALENT OR OVER); STRADDLE LIFTS (OVER 50 TONS); TOWER CRANE, MOBILE; TRAVELING TRUSS CRANES; UNIVERSAL, LIEBHER, LINDEN, AND SIMILAR TYPES OF TOWER CRANES (IN THE ERECTION, DISMANTLING, AND MOVING OF EQUIPMENT THERE SHALL BE AN ADDITIONAL OPERATING ENGINEER OR HEAVY DUTY REPAIRMAN); YO-YO CAT OR DOZER. 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.....\$ 61.32

35.68

POWER EQUIPMENT OPERATORS:, GROUP 1: FORK LIFT (UP TO AND INCLUDING 10 TONS); PARTSMAN (HEAVY DUTY REPAIR SHOP PARTS ROOM WHEN NEEDED). 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.....\$ 57.66

35.68

POWER EQUIPMENT OPERATORS:, GROUP 2: CONVEYOR OPERATOR (HANDLING BUILDING MATERIAL); HYDRAULIC MONITOR; MIXER BOX OPERATOR (CONCRETE PLANT). 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.....\$ 57.77

35.68

POWER EQUIPMENT OPERATORS:, 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. 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.....\$ 57.94 35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 58.21 35.68

POWER EQUIPMENT OPERATORS:, 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 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.....\$ 58.52

35.68

POWER EQUIPMENT OPERATORS:, 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 TIERED TRACTORS; TRENCHER (UP TO AND INCLUDING 6 FEET); UNDERBRIDGE PERSONNEL AERIAL PLATFORM (50 FEET OF PLATFORM OR LESS). 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.....\$ 59.17

35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 59.49

35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 59.60

35.68

POWER EQUIPMENT OPERATORS:, 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.). 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.....\$ 59.71

35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 59.94

35.68

POWER EQUIPMENT OPERATORS:, 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. 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.....\$ 60.00

35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 60.15

35.68

POWER EQUIPMENT OPERATORS:, 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 TIERED EARTHMOVING MACHINE (WITH TANDEM SCRAPER); TANDEM CATS; TRENCHER (PULLING ATTACHED SHIELD). 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.....\$ 60.30

35.68

POWER EQUIPMENT OPERATORS:, 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). 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.....\$ 60.66

35.68

POWER EQUIPMENT OPERATORS:, 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. 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.....	\$ 61.02	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13: TRUCK DRIVER (UTILITY, FLATBED, ETC.).....	\$ 57.94	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13A: DUMP TRUCK, 8 CU.YDS. AND UNDER (WATER LEVEL); WATER TRUCK (UP TO AND INCLUDING 2,000 GALLONS).....	\$ 58.21	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13B: WATER TRUCK (OVER 2,000 GALLONS); TANDEM DUMP TRUCK, OVER 8 CU. YDS. (WATER LEVEL).....	\$ 58.52	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13C: TRUCK DRIVER (SEMI-TRAILER. ROCK CANS, SEMI-DUMP OR ROLL-OFFS)...	\$ 59.17	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13D: TRUCK DRIVER (SLIP-IN OR PUP).....	\$ 59.49	35.68
POWER EQUIPMENT OPERATORS:, GROUP 13E: END DUMPS, UNLICENSED (EUCLID, MACK, CATERPILLAR OR SIMILAR); TRACTOR TRAILER (HAULING EQUIPMENT); TANDEM TRUCKS HOOKED UP TO TRAILER (HAULING EQUIPMENT) .....	\$ 59.60	35.68
STAND-BY DIVER: (AQUA LUNG) (SCUBA).....	\$ 62.97	35.68
STAND-BY DIVER: OTHER THAN AQUA LUNG.....	\$ 62.97	35.68

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 ENGI003-004 09/01/2025

	Rates	Fringes
DREDGING (BOAT OPERATORS): BOAT DECKHAND.....	\$ 57.94	35.68
DREDGING (BOAT OPERATORS): BOAT OPERATOR.....	\$ 60.15	35.68
DREDGING (BOAT OPERATORS): MASTER BOAT OPERATOR.....	\$ 60.30	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 1: CLAMSHELL OR DIPPER OPERATOR.....	\$ 60.66	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 2: MECHANIC OR WELDER; WATCH ENGINEER.....	\$ 60.00	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 3: BARGE MATE; DECKMATE.....	\$ 59.60	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 4: BARGEMAN; DECKHAND; FIREMAN; OILER. HYDRAULIC SUCTION DREDGING CLASSIFICATIONS.....	\$ 57.94	35.68
DREDGING:, DERRICKS: GROUP 1: OPERATORS (DERRICKS, PILEDRIVERS AND CRANES). .....	\$ 60.66	35.68
DREDGING:, DERRICKS: GROUP 2: SAURMAN TYPE DRAGLINE (OVER 5 CUBIC YARDS). .....	\$ 60.00	35.68
DREDGING:, DERRICKS: GROUP 3: DECKMATE; SAURMAN TYPE DRAGLINE (UP TO AND INCLUDING 5 YARDS). .....	\$ 59.60	35.68
DREDGING:, DERRICKS: GROUP 4: DECKHAND, FIREMAN, OILER.....	\$ 57.94	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 1: LEVERMAN. ....	\$ 60.30	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 2: WATCH ENGINEER (STEAM OR ELECTRIC). ....	\$ 60.15	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 3: MECHANIC OR WELDER. ....	\$ 60.00	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 4: DOZER OPERATOR. ....	\$ 59.94	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 5: DECKMATE. ....	\$ 59.60	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 6: WINCHMAN (STERN WINCH ON DREDGE).....	\$ 59.49	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 7: DECKHAND (CAN OPERATE ANCHOR SCOW UNDER DIRECTION OF DECKMATE); FIREMAN; LEVEEMAN; OILER.....	\$ 57.94	35.68

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 ENGI003-044 09/01/2025

	Rates	Fringes
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT CONCRETE MATERIAL TRANSFER.....	\$ 58.67	34.86
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT PLANT OPERATOR.....	\$ 59.07	34.86
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT RAKER...	\$ 57.68	34.86

POWER EQUIPMENT OPERATORS (PAVING): ASPHALT SPREADER OPERATOR.....	\$ 59.16	34.86
POWER EQUIPMENT OPERATORS (PAVING): COLD PLANER.....	\$ 59.47	34.86
POWER EQUIPMENT OPERATORS (PAVING): COMBINATION LOADER/BACKHOE (OVER 3/4 CU.YD.).....	\$ 57.68	34.86
POWER EQUIPMENT OPERATORS (PAVING): COMBINATION LOADER/BACKHOE (UP TO 3/4 CU.YD.).....	\$ 56.70	34.86
POWER EQUIPMENT OPERATORS (PAVING): CONCRETE SAWS AND/OR GRINDER (SELF-PROPELLED UNIT ON STREETS, HIGHWAYS, AIRPORTS AND CANALS).....	\$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): GRADER.....	\$ 59.47	34.86
POWER EQUIPMENT OPERATORS (PAVING): LABORER, HAND ROLLER.....	\$ 57.18	34.86
POWER EQUIPMENT OPERATORS (PAVING): LOADER (2 1/2 CU. YDS. AND UNDER).....	\$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): LOADER (OVER 2 1/2 CU. YDS. TO AND INCLUDING 5 CU. YDS.).....	\$ 58.96	34.86
POWER EQUIPMENT OPERATORS (PAVING): ROLLER OPERATOR (FIVE TONS AND UNDER).....	\$ 57.41	34.86
POWER EQUIPMENT OPERATORS (PAVING): ROLLER OPERATOR (OVER FIVE TONS).....	\$ 58.84	34.86
POWER EQUIPMENT OPERATORS (PAVING): SCREED PERSON...	\$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): SOIL STABILIZER.	\$ 59.47	34.86

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IRON0625-001 09/01/2025

	Rates	Fringes
IRONWORKERS 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.....	\$ 50.50	43.46

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LAB00368-001 09/02/2024

	Rates	Fringes
LABORERS: DRILLER.....	\$ 44.75	25.96
LABORERS: FINAL CLEAN UP.....	\$ 31.40	21.37
LABORERS: GUNITE/SHOTCRETE OPERATOR AND HIGH SCALER.	\$ 42.25	25.96
LABORERS: MASON TENDER/HOD CARRIER.....	\$ 42.25	25.96
LABORERS: POWDERMAN.....	\$ 42.75	25.96
LABORERS: WINDOW WASHER (BOSUN CHAIR).....	\$ 41.25	25.96
SEE LABORERS: LABORER I IN FOOTER.....	\$ 41.75	25.96
SEE LABORERS: LABORER II IN FOOTER.....	\$ 39.15	25.96

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LAB00368-002 09/03/2024

	Rates	Fringes
LANDSCAPE & IRRIGATION LABORERS, 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): .....\$ 28.40

17.15

LANDSCAPE & IRRIGATION LABORERS, 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.....\$ 23.00

17.15

LANDSCAPE & IRRIGATION LABORERS, 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).....	\$ 29.40	17.15
LANDSCAPE & IRRIGATION LABORERS: 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).....	\$ 29.40	17.15

LAB00368-003 09/02/2024

	Rates	Fringes
UNDERGROUND LABORER, GROUP 1: WATCHMEN; CHANGE HOUSE ATTENDANT.....	\$ 42.35	25.91
UNDERGROUND LABORER, GROUP 2: SWAMPER; BRAKEMAN; BULL GANG-MUCKERS, TRACKMEN; DUMPMEN (ANY METHOD); CONCRETE CREW (INCLUDES RODDING AND SPREADING); GROUT CREW; REBOUNDMEN.....	\$ 43.85	25.91
UNDERGROUND LABORER, GROUP 3: CHUCKTENDERS AND CABLETENDERS; POWDERMAN (PRIME HOUSE); VIBRATORMAN, PAVEMENT BREAKERS.....	\$ 44.35	25.91
UNDERGROUND LABORER, 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.....	\$ 45.35	25.91
UNDERGROUND LABORER, GROUP 5: SHAFT WORK & RAISE (BELOW ACTUAL OR EXCAVATED GROUND LEVEL); DIAMOND DRILLER; GUNITE OR SHOTCRETE NOZZLEMAN; RODMAN; GROUNDMAN.....	\$ 45.70	25.91
UNDERGROUND LABORER, GROUP 6: SHIFTER.....	\$ 45.95	25.91
UNDERGROUND LABORER, GROUP 7: SHIFTER (SHAFT WORK & RAISER).....	\$ 46.40	25.91

PAIN1791-001 07/01/2025

	Rates	Fringes
PAINTERS: BRUSH.....	\$ 44.05	30.05
PAINTERS: SANDBLASTER; SPRAY.....	\$ 44.05	30.05

PAIN1889-001 07/01/2025

	Rates	Fringes
GLAZIERS.....	\$ 48.50	40.20

PAIN1926-001 03/02/2025

	Rates	Fringes
SOFT FLOOR LAYERS.....	\$ 43.27	35.18

PAIN1944-001 01/01/2025

	Rates	Fringes
TAPER.....	\$ 47.36	32.00

PLAS0630-001 09/04/2023

	Rates	Fringes
PLASTERER.....	\$ 46.12	34.53

PLAS0630-002 09/04/2023

	Rates	Fringes
CEMENT MASONS.....	\$ 44.12	33.63
CEMENT MASONS: TROWEL MACHINE OPERATORS.....	\$ 44.27	33.63

PLUM0675-001 07/06/2025

	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER & SPRINKLER FITTER.....	\$ 53.83	33.19

ROOF0221-001 11/06/2022

	Rates	Fringes
ROOFERS (INCLUDING BUILT UP, COMPOSITION AND SINGLE PLY).....	\$ 43.15	21.21

SHEE0293-001 03/02/2025

	Rates	Fringes
SHEET METAL WORKER.....	\$ 50.16	33.32

SUHI1997-002 09/15/1997

	Rates	Fringes
DRAPERY INSTALLER.....	\$ 13.60	1.20
FENCE ERECTOR (CHAIN LINK FENCE).....	\$ 9.33	1.65

LABORERS: LABORER I: AIR BLASTING RUN BY ELECTRIC OR PNEUMATIC COMPRESSOR; ASPHALT  
LABORER, IRONER, RAKER, LUTEMAN, & HANDROLLER, AND ALL TYPES OF ASPHALT SPREADER  
BOXES; ASPHALT SHOVELER; ASSEMBLY & INSTALLATION OF MULTIPLATES, LINER PLATES, RINGS,  
MESH, MATS; BATCHING PLANT (PORTABLE & TEMPORARY); BORING MACHINE OPERATOR  
(UNDER STREETS & SIDEWALKS); BUGGYMOBILE; BURNING & WELDING; CHAINSAW, FALLER,  
LOGLOADER, & BUCKER; COMPACTORS (JACKSON JUMPING JACK & 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, & SIDEWALKS); CONCRETE CORE CUTTER (WALLS, FLOORS, & 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 & CLEANING OF EQUIPMENT); 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 & THE POURING OF CONCRETE TO SECURE THE HOLE; CRIBBERS, SHORER, LAGGING, SHEETING, & TRENCH JACKING & BRACING, HAND-GUIDED LAGGING HAMMER WHALING BRACING; CURBING (CONCRETE & ASPHALT); CURING OF CONCRETE (IMPERVIOUS MEMBRANE & FORM OILER) MORTAR & OTHER MATERIALS BY ANY MODE OR METHOD; CUT GRANITE CURB SETTER (SETTING, LEVELING & GROUTING OF ALL PRECAST CONCRETE OR STONE CURBS); CUTTING & BURNING TORCH (DEMOLITION); DRI PAK-IT MACHINE; ENVIRONMENTAL ABATEMENT: REMOVAL OF ASBESTOS, LEAD, & BIO HAZARDOUS MATERIALS (EPA &/OR OSHA CERTIFIED); FALLING, BUCKING, YARDING, LOADING OR BURNING OF ALL TREES OR TIMBER ON CONSTRUCTION SITE; FORKLIFT (9 FT. & UNDER); GAS, PNEUMATIC, & ELECTRIC TOOLS; GRATING & GRILL WORK FOR DRAINS OR OTHER PURPOSES; GREEN CUTTER OF CONCRETE OR AGGREGATE IN ANY FORM, BY HAND, MECHANICAL MEANS, GRINDSTONE OR AIR &/OR WATER; GROUT: SPREADING FOR ANY PURPOSE; GUINEA CHASER (GRADE CHECKER) FOR GENERAL UTILITY TRENCHES, SITEWORK, & EXCAVATION; HEADERBOARD MAN (ASPHALT OR CONCRETE); HEAT WELDER OF PLASTIC (LABORERS' AGC CERTIFIED WORKERS) (WHEN WORK INVOLVES WATERPROOFING FOR WATERPONDS, ARTIFICIAL LAKES & RESERVOIR) HEAT WELDING FOR SEWER PIPES & FUSION OF HDPE PIPES; HEAVY HIGHWAY LABORER (RIGGING, SIGNALING, HANDLING, & INSTALLATION OF PRE-CAST CATCH BASINS, MANHOLES, CURBS & GUTTERS); HIGH PRESSURE NOZZLEMAN - HYDRAULIC MONITOR (OVER 100# PRESSURE); JACKHAMMER OPERATOR; JACKING OF SLIP FORMS: ALL SEMI & UNSKILLED WORK CONNECTED THEREWITHIN; LAYING OF ALL MULTI-CELL CONDUIT OR MULTI-PURPOSE PIPE; MAGNESITE & MASTIC WORKERS (WET OR DRY) (INCLUDING MIXER OPERATOR); MORTAR MAN; MORTAR MIXER (BLOCK, BRICK, MASONRY, & PLASTERING); NOZZLEMAN (SANDBLASTING &/OR WATER BLASTING): HANDLING, PLACING & OPERATION OF NOZZLE; OPERATION, MANUAL OR HYDRAULIC JACKING OF SHIELDS & THE USE OF SUCH OTHER MECHANICAL EQUIPMENT AS MAY BE NECESSARY; PAVEMENT BREAKERS; PAVING, CURBING & SURFACING OF STREETS, WAYS, COURTS, UNDER & OVERPASSES, BRIDGES, APPROACHES, SLOPE WALLS, & ALL OTHER LABOR CONNECTED THEREWITH; PILECUTTERS; PIPE ACCESSMENT IN PLACE, BOLTING & LINING UP OF SECTIONAL METAL OR OTHER PIPE INCLUDING CORRUGATED PIPE; PIPELAYER PERFORMING ALL SERVICES IN THE LAYING & INSTALLATION OF PIPE FROM THE POINT OF RECEIVING PIPE IN THE DITCH UNTIL COMPLETION OF OPERATION, INCLUDING ANY & ALL FORMS OF TUBULAR MATERIAL, WHETHER PIPE, HDPE, METALLIC OR NON-METALLIC, CONDUIT, & 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 & WITHOUT REGARD TO THE NATURE OF MATERIAL FROM WHICH TUBULAR MATERIAL IS FABRICATED; NO-JOINT PIPE & STRIPPING OF SAME, PIPEWRAPPER, CAULKER, BANDER, KETTLEMEN, & MEN APPLYING ASPHALT, LAYKOLD, TREATING CREOSOTE & SIMILAR-TYPE MATERIALS (6-INCH) PIPE & OVER); PIPING: RESURFACING & 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 & MARKING OF THE JOINT USED FOR MAIN OR SIDE SEWERS & STORM SEWERS; LAYING OF ALL CLAY, TERRA COTTA, IRONSTONE, VITRIFIED CONCRETE, HDPE OR OTHER PIPE FOR DRAINAGE; PLACING & SETTING OF WATER MAINS, GAS MAINS & ALL PIPE INCLUDING REMOVAL OF SKIDS; PLASTER MORTAR MIXER/PUMP; PNEUMATIC IMPACT WRENCH; PORTABLE SAWMILL OPERATION: CHOKER SETTERS, OFF BEARERS, & LUMBER HANDLERS CONNECTED WITH CLEARING; POSTHOLE DIGGER (HAND HELD, GAS, AIR & ELECTRIC); POWDERMAN'S TENDER; POWER BROOM SWEEPERS (SMALL); PREPARATION & COMPACTION OF ROADBEDS FOR RAILROAD TRACK LAYING, HIGHWAY CONSTRUCTION, & 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 & 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) CHOKER SETTING, TAG LINE USAGE; TAGGING & SIGNALING OF BUILDING MATERIALS INTO HIGH RISE UNITS; RIPRAP, STONEPAVER, & ROCK SLINGER (INCLUDES PLACEMENT OF STACKED CONCRETE, WET OR DRY & LOADING, UNLOADING, SIGNALING, SLINGING & 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 & HANGING) INCLUDING MAINTENANCE THEREOF; SCALER; SEPTIC TANK/CESSPOOL & DRAIN FIELDS DIGGER & INSTALLER; SHREDDER/CHIPPER (TREE

BRANCHES, BRUSH, ETC.); STRIPPING & SETTING FORMS; STRIPPING OF FORMS: OTHER THAN PANEL FORMS WHICH ARE TO BE RE-USED IN THEIR ORIGINAL FORM, & STRIPPING OF FORMS ON ALL FLAT ARCH WORK; TAMPERS (BARKO, WACKER, & SIMILAR TYPE); TANK SCALER & CLEANERS; TARMAN; TREE CLIMBERS & TRIMMERS; TRENCHER (INCLUDES HAND-HELD, DAVIS T-66 & SIMILAR TYPE); TRUCKS (FLATBED UP TO & INCLUDING 2 1/2 TONS WHEN USED IN CONNECTION WITH ON-SITE LABORERS' WORK; TRUCKS (REFUSE & 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.

LABORERS: LABORER II: ASPHALT PLANT LABORER; BORING MACHINE TENDER; BRIDGE LABORER; BURNING OF ALL DEBRIS (CRATES, BOXES, PACKAGING WASTE MATERIALS); CHAINMAN, RODMEN, & GRADE MARKERS; CLEANING, CLEARING, GRADING &/OR REMOVAL FOR STREETS, HIGHWAYS, ROADWAYS, APRONS, RUNWAYS, SIDEWALKS, PARKING AREAS, AIRPORTS, APPROACHES, & OTHER SIMILAR INSTALLATIONS; CLEANING OR RECONDITIONING OF STREETS, WAYS, SEWERS & WATERLINES, ALL MAINTENANCE WORK & WORK OF AN UNSKILLED & SEMI-SKILLED NATURE; CONCRETE BUCKET TENDER (GROUNDMAN) HOOKING & UNHOOKING OF BUCKET; CONCRETE FORMS; MOVING, CLEANING, OILING & CARRYING TO THE NEXT POINT OF ERECTION OF ALL FORMS; CONCRETE PRODUCTS PLANT LABORERS; CONVEYOR TENDER (CONVEYING OF BUILDING MATERIALS); CRUSHED STONE YARDS & GRAVEL & SAND PIT LABORERS & ALL OTHER SIMILAR PLANTS; DEMOLITION, WRECKING & SALVAGE LABORERS: WRECKING & DISMANTLING OF BUILDINGS & ALL STRUCTURES, WITH USE OF CUTTING OR WRECKING TOOLS, BREAKING AWAY, CLEANING & 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 & FILLING OF SHE-BOLT HOLES); FENCE &/OR GUARDRAIL ERECTOR: DISMANTLING &/OR RE-INSTALLATION OF ALL FENCE; FINEGRADER; FIREWATCHER; FLAGMAN (CONING, PREPARING, STABLISHING & 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 & ALL OTHER LABOR CONNECTED THEREWITH; DIGGING OF TRENCHES, DITCHES & MANHOLES & THE LEVELING, GRADING & OTHER PREPARATION PRIOR TO LAYING PIPE OR CONDUIT FOR ANY PURPOSE; EXCAVATIONS & FOUNDATIONS FOR BUILDINGS, PIERS, FOUNDATIONS & HOLES, & ALL OTHER CONSTRUCTION. PREPARATION OF STREET WAYS & BRIDGES; GENERAL LABORER: CLEANING & CLEARING OF ALL DEBRIS & SURPLUS MATERIAL. CLEAN-UP OF RIGHT-OF-WAY. CLEARING & SLASHING OF BRUSH OR TREES BY HAND OR MECHANICAL CUTTING. GENERAL CLEAN UP: SWEEPING, CLEANING, WASH-DOWN, WIPING OF CONSTRUCTION FACILITY & EQUIPMENT (OTHER THAN ""LIGHT CLEAN UP (JANITORIAL) LABORER. GARBAGE & DEBRIS HANDLERS & CLEANERS. APPLIANCE HANDLING (JOB SITE) (AFTER DELIVERY UNLADING IN STORAGE AREA); GROUND & SOIL TREATMENT WORK (PEST CONTROL); GUNITE/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 & RESERVOIRS); LIMBERS, BRUSH LOADERS, & PILERS; LOADING, UNLOADING, CARRYING, DISTRIBUTING & HANDLING OF ALL RODS & 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 & DISTRIBUTION OF WATER MAINS, GAS MAINS & ALL PIPES; LOADING & UNLOADING OF ALL MATERIALS, FIXTURES, FURNISHINGS & APPLIANCES FROM POINT OF DELIVERY TO STOCKPILE TO POINT OF INSTALLATION; HOOKING & SIGNALING FROM TRUCK, CONVEYANCE OR STOCKPILE; MATERIAL YARD LABORERS; PIPELAYER TENDER; PIPEWRAPPER, CAULKER, BANDER, KETTLEMEN, & MEN APPLYING ASPHALT, LAYKOLD, CREOSOTE, & SIMILAR-TYPE MATERIALS (PIPE UNDER 6 INCHES); PLASTERER LABORER; PREPARATION, CONSTRUCTION & MAINTENANCE OF ROADBEDS & SUB-GRADE FOR ALL PAVING, INCLUDING EXCAVATION, DUMPING, & 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, & RAIL TRANSIT MAINTENANCE & REPAIR; ROUSTABOUT; RUBBISH TRUCKS IN CONNECTION WITH BUILDING CONSTRUCTION PROJECTS (EXCLUDING CLEARING, GRUBBING, & EXCAVATING); SALVAGE YARD: ALL WORK CONNECTED WITH CUTTING, CLEANING, STORING, STOCKPILING OR HANDLING OF MATERIALS, ALL CLEANUP, REMOVAL OF DEBRIS, BURNING, BACK-FILLING & LANDSCAPING OF THE SITE; SANDBLASTING TENDER (POT TENDER): HOSES & POTS OR MARKERS; SCAFFOLDS: ERECTION, PLANKING & REMOVAL OF ALL SCAFFOLDS USED FOR SUPPORT FOR LATHERS, PLASTERS, BRICK LAYERS, MASONS, & OTHER CONSTRUCTION TRADES CRAFTS; SCAFFOLDS: (SPECIALLY DESIGNED BY CARPENTERS) LABORERS SHALL TEND SAID CARPENTER ON ERECTION & DISMANTLING THEREOF, PREPARATION FOR FOUNDATION OR MUDSILLS, MAINTENANCE; SCRAPING OF FLOORS; SCREEDS: HANDLING OF ALL SCREEDS TO BE REUSED; HANDLING, DISMANTLING & CONVEYANCE OF SCREEDS; SETTING, LEVELING & SECURING OR BRACING OF METAL OR OTHER ROAD FORMS & EXPANSION JOINTS; SHEETING PILING/TRENCH SHORING (HANDLING & PLACING OF SKIP SHEET OR WOOD PLANK TRENCH SHORING); SHIP SCALERS; SHIPWRIGHT TENDER; SIGN ERECTOR (SUBDIVISION TRAFFIC, REGULATORY, & STREET-NAME SIGNS); SLOPER; SLURRY SEAL CREWS (MIXER OPERATOR, APPLICATOR, SQUEEGEE MAN, SHUTTLE MAN, TOP MAN); SNAPPING OF WALL TIES & REMOVAL OF TIE RODS; SOIL TEST OPERATIONS OF SEMI & UNSKILLED LABOR SUCH AS FILLING SAND

BAGS; STRIPER (ASPHALT, CONCRETE OR OTHER PAVED SURFACES); TOOL ROOM ATTENDANT (JOB SITE); TRAFFIC DELINEATING DEVICE APPLICATOR; UNDERPINNING, LAGGING, BRACING, PROPPING & 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 & HANDLING CONCRETE FORMS AN FALSE WORK.

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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 <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 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) (iii)).

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

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than **U**, **UAVG**, **SA**, or **SC** denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the

example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

#### Survey Rate Identifiers

The **◆SU◆** identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

**◆SU◆** wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The **◆SA◆** identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the **◆SA◆** identifier took effect under state law in the state from which the rates were adopted.

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#### WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to

davisbaconinfo@dol.gov or by mail to:  
Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION"

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

**P R O P O S A L**

**6/02/98**

**PROPOSAL TO THE  
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION**

**PROJECT:** FREEWAY MANAGEMENT SYSTEM, PHASE 4  
Districts of Ewa, Honolulu, and Koolauapoko  
Island of O'ahu

**FEDERAL AID:  
PROJECT NO.** NH-0300(176)R

**COMPLETION TIME:** 410 Working days from the Start Work Date  
from the Department. No night work between  
September 15 through December 15.

**DBE PROJECT GOAL:** None Specified.

**DESIGN PROJECT MANAGER:**

<b>NAME</b>	Neal Honma
<b>ADDRESS</b>	601 Kamokila Boulevard, Room 602 Kapolei, Hawaii 96707
<b>PHONE NO.</b>	(808) 768-2386
<b>EMAIL</b>	<a href="mailto:neal.k.honma@hawaii.gov">neal.k.honma@hawaii.gov</a>

**ELECTRONIC SUBMITTAL:** Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. See SPECIAL PROVISIONS 102.09 DELIVERY OF PROPOSALS for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

Director of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Sir:

The undersigned Bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e., an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.
4. It will not maintain for its employees any segregated facilities at any of its establishments.
5. Does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.

The undersigned Bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 1032D-323, Hawaii Revised Statutes.
2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.

3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.
4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Unless amended by Special Provision, agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.
7. The undersigned Bidder further agrees to the following: Pursuant to HAR §3-122-13(e), any contractor (including consultants) paid for services to develop or prepare specifications or work statements shall be precluded from submitting an offer or receiving a contract for that particular solicitation. This includes the preparation of reports relied upon by HDOT in the development of the project scope.

The Bidder acknowledges receipt of and certifies that it has completely examined the following listed items: Hawaii Standard Specifications for Road and Bridge Construction, 2005, and/or the General Provisions for Construction Projects for AIR and WATER Transportation Facilities Division dated 2016, as applicable, the Notice to Bidders, Special Provisions, Proposal, Contract, Bond Forms, and Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid, in the form checked below. (Check applicable bid security submitted with bid.)

\_\_\_\_\_ Surety Bid Bond (Use standard form),

\_\_\_\_\_ Cash,

\_\_\_\_\_ Cashier's Check,

\_\_\_\_\_ Certified Check, or

\_\_\_\_\_  
(Fill in other acceptable security.)

The undersigned Bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 \_\_\_\_\_ Addendum No. 3 \_\_\_\_\_

Addendum No. 2 \_\_\_\_\_ Addendum No. 4 \_\_\_\_\_

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as Bidder has listed the name of each person or firm who will be engaged by the Bidder on the project as Subcontractor or Joint Contractor and the nature of work to be done by each on the following page. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor. For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and is subject to evaluation as a Subcontractor or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

**SUBCONTRACTOR LISTING**  
 (Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
<b>SUBCONTRACTOR:</b>		
1.	_____	_____
	1a <sup>1</sup> . _____	_____
2.	_____	_____
	2a. _____	_____
3.	_____	_____
	3a. _____	_____
4.	_____	_____
	4a. _____	_____
5.	_____	_____
	5a. _____	_____
6.	_____	_____
	6a. _____	_____
7.	_____	_____
	7a. _____	_____

**NOTES:**

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

\_\_\_\_\_

<sup>1</sup> Second tier subcontractors

**JOINT CONTRACTOR LISTING**  
 (Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
<b>JOINT CONTRACTOR:</b>		
1.	_____	_____
	1a <sup>1</sup> . _____	_____
2.	_____	_____
	2a. _____	_____
3.	_____	_____
	3a. _____	_____
4.	_____	_____
	4a. _____	_____
5.	_____	_____
	5a. _____	_____
6.	_____	_____
	6a. _____	_____
7.	_____	_____
	7a. _____	_____

**NOTES:**

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

\_\_\_\_\_

<sup>1</sup> Second tier joint contractors

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

\_\_\_\_\_  
Bidder (Company Name)

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Business Telephone                      Email

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contact Person (If different from above.)

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**NOTE:**

If Bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If Bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If Bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a **POWER OF ATTORNEY** must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

**PROPOSAL SCHEDULE**

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.0100	Clearing and Grubbing	L.S.	L.S.	L.S.	\$ _____
202.0100	Removal of Existing Metal Guardrail, Posts, and Anchors	80	Lin. Ft.	\$ _____	\$ _____
209.0100	Installation, Maintenance, Monitoring, and Removal of BMP	L.S.	L.S.	L.S.	\$ _____
209.0200	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	\$ <u>20,000.00</u>
301.0100	Hot Mix Asphalt Base Course	13	Ton	\$ _____	\$ _____
304.0100	Aggregate Base Course	7	Cu. Yd.	\$ _____	\$ _____
305.0100	Aggregate Subbase Course	13	Cu. Yd.	\$ _____	\$ _____
401.0100	HMA Pavement, Mix No. IV	5	Ton	\$ _____	\$ _____
606.0100	Guardrail Type 31" W-Beam with Standard 8" Offset Block	160	Lin. Ft.	\$ _____	\$ _____
606.0200	End Anchorage Type with Trailing End Anchorage System	1	Each	\$ _____	\$ _____
606.0300	Terminal Section Type "A" MASH Flare	1	Each	\$ _____	\$ _____
619.0100	Planting	L.S.	L.S.	L.S.	\$ _____
636.0100	Additional E-Construction Programs, additional licenses or additional equipment	F.A.	F.A.	F.A.	\$ <u>30,000.00</u>
641.0100	Hydro-mulch Seeding	L.S.	L.S.	L.S.	\$ _____

**PROPOSAL SCHEDULE**

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
643.0100	Maintenance of Existing Landscape Areas	F.A.	F.A.	F.A.	\$ <u>50,000.00</u>
645.0100	Traffic Control, H-3 Freeway Sites	L.S.	L.S.	L.S.	\$ _____
645.0200	Traffic Control, H-1 Freeway Site	L.S.	L.S.	L.S.	\$ _____
645.0300	Additional Police Officers, Traffic Control Devices, And Advertisement	F.A.	F.A.	F.A.	\$ <u>90,000.00</u>
647.0101	72-Strand Single Mode Fiber Optic Cable, H-3	139,545	Lin. Ft.	\$ _____	\$ _____
647.0102	12-Strand Single Mode Fiber Optic Cable, H-3	64,671	Lin. Ft.	\$ _____	\$ _____
647.0103	72-Strand Single Mode Fiber Optic Cable, LSZH	14,515	Lin. Ft.	\$ _____	\$ _____
647.0104	3-Cell Fabric Innerduct, H-3	130,057	Lin. Ft.	\$ _____	\$ _____
647.0105	Extended Range Ethernet Cable, H-3	14,665	Lin. Ft.	\$ _____	\$ _____
647.0301	72-Strand Single Mode Fiber Optic Cable, H-1	2,900	Lin. Ft.	\$ _____	\$ _____
647.0302	3-Cell Fabric Innerduct, H-1	2,115	Lin. Ft.	\$ _____	\$ _____
647.0400	Temporary Network Services	F.A.	F.A.	F.A.	\$ <u>50,000.00</u>
648.0100	Field-Posted Drawings	L.S.	L.S.	L.S.	\$ _____
657.0101	CCTV Cabinet Parapet Mounted, H-3	2	Each	\$ _____	\$ _____

**PROPOSAL SCHEDULE**

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
657.0102	24" x 24" x 12" ITS Enclosure, H-3	1	Each	\$ _____	\$ _____
657.0103	HUB Cabinet Enclosure, H-3	1	Each	\$ _____	\$ _____
682.0100	TMC Video Equipment Upgrade	L.S.	L.S.	L.S.	\$ _____
683.0101	CCTV Camera Assembly (PTZ), H-3	29	Each	\$ _____	\$ _____
683.0102	CCTV Camera Assembly (PTZ), H-3 Harano Tunnel	26	Each	\$ _____	\$ _____
683.0103	CCTV Camera Assembly (Fixed), H-3 Harano Tunnel	21	Each	\$ _____	\$ _____
687.0101	ATMS Equipment Integration, H-3	L.S.	L.S.	L.S.	\$ _____
687.0102	Additional Testing, Splicing, and Equipment, H-3	F.A.	F.A.	F.A.	\$ <u>31,250.00</u>
687.0103	Modifications in Existing Cabinets, H-3	L.S.	L.S.	L.S.	\$ _____
687.0301	Modifications in Existing Cabinets, H-1	L.S.	L.S.	L.S.	\$ _____
687.0302	Additional Testing, Splicing, and Equipment, H-1	F.A.	F.A.	F.A.	\$ <u>3,150.00</u>
691.0101	3" PVC Coated GRC, H-3	80	Lin. Ft.	\$ _____	\$ _____
691.0102	1-1" Surface Mounted Liquid-Tight Flexible Metal Conduit, H-3	40	Lin. Ft.	\$ _____	\$ _____
691.0301	26"x32" Traffic Signal Pullbox, Type A, H-1	1	Each	\$ _____	\$ _____

**PROPOSAL SCHEDULE**

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
691.0302	32"x32"x8" Stainless Steel Pullbox, H-1	2	Each	\$ _____	\$ _____
691.0303	Trench Excavation and Backfill, H-1	657	Lin. Ft.	\$ _____	\$ _____
691.0304	3" PVC Schedule 40 Conduit, H-1	657	Lin. Ft.	\$ _____	\$ _____
691.0305	3" PVC Coated GRC, H-1	911	Lin. Ft.	\$ _____	\$ _____
691.0401	Secondary Cables 2#6, #8 Ground XHHW CU Cable	210	Lin. Ft.	\$ _____	\$ _____
691.0402	1-2" Concrete Encased Conduit	135	Lin. Ft.	\$ _____	\$ _____
691.0403	1-2" Surface Mounted Conduit	600	Lin. Ft.	\$ _____	\$ _____
691.0404	1.5KVA Stepdown Transformer with Mounting Stand	5	Each	\$ _____	\$ _____
691.0405	Power Trench Excavation and Backfill	150	Lin. Ft.	\$ _____	\$ _____
695.0100	Project Vehicles (1 Vehicle)	14	Month	\$ _____	\$ _____
696.1000	Maintenance of Trailers	F.A.	F.A.	F.A.	\$ <u>50,000.00</u>
699.1000	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of This Item)	L.S.	L.S.	L.S.	\$ _____
Total Amount for Comparison of Bids.....					\$ _____

## PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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Notes:

1. Bid shall include all Federal, State, County and other applicable taxes and fees.
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest responsible bidder.
3. Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.
4. In case of a discrepancy between unit price and the total in said bid, the unit price shall prevail.
5. **Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HlePRO. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF BID.**  
If there is a conflict between the specification document and the HlePRO solicitation, the specifications shall govern and control, unless otherwise specified.

1 **PROPOSAL SCHEDULE**

2  
3 The bidder is directed to Subsection 105.16 – Subcontracts.

4  
5 The bidder’s attention is directed to Sections 696 - Field Office and Project  
6 Site Laboratory and 699 - Mobilization for the limitation of the amount bidders are  
7 allowed to bid.

8  
9 If the bid price for any proposal item having a maximum allowable bid  
10 indicated therefore in any of the contract documents is in excess of such a  
11 maximum amount, the bid price for such proposal item shall be adjusted to reflect  
12 the limitation thereon. The comparison of bids to determine the successful bidder  
13 and the amount of contract to be awarded shall be determined after such  
14 adjustments are made, and such adjustments shall be binding upon the bidder.

15  
16 The bidder is directed to Section 717 – Cullet and Cullet-Made Materials  
17 regarding recycling of waste glass.

# SURETY BID BOND

Bond No. \_\_\_\_\_

KNOW TO ALL BY THESE PRESENTS:

That we, \_\_\_\_\_  
(full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

\_\_\_\_\_  
(name of bonding company)

as Surety, hereinafter called Surety, a corporation authorized to transact business as a Surety in the State of Hawaii, are held and firmly bound unto

\_\_\_\_\_  
(State/county entity)

as Owner, hereinafter called Owner, in the penal sum of

\_\_\_\_\_  
(required amount of bid security)

Dollars(\$ \_\_\_\_\_), lawful money of the United States of America, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

## WHEREAS:

The Principal has submitted an offer for

\_\_\_\_\_  
(project by number and brief description)

## NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or in the alternate, accept the offer of the Principal and the Principal shall enter into a contract with the Owner in accordance with the terms of such offer, and give such bond or bonds as may be specified in the solicitation or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof as specified in the solicitation then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Principal (Offeror) (Seal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Name of Surety (Seal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name and Title

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HONOLULU, HAWAII

SAMPLE FORMS

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Disclosure of Lobbying Activities (Standard Form - LLL and LLL-A)

Statement of Compliance (Form WH-348)

Chapter 104, HRS Compliance Certificate

C O N T R A C T

THIS AGREEMENT, made this day \_\_\_\_\_, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE\_OF\_INCORPORATON», whose business/post office address is «ADDRESS» hereinafter referred to as "CONTRACTOR",

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for

“«PROJECT\_NAME\_AND\_NO»”,

or such a part thereof as shall be required by the STATE, the total amount of which labor, materials and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----- DOLLARS

(\$«BASIC\_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS.....\$«BASIC\_NUMERIC»

which shall be provided from the following funds:

Federal Funds.....	.....
State Funds.....	.....
TOTAL AMOUNT.....	.....

all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT NO ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING DAYS», from the date indicated in the notice to proceed from the STATE, subject, however, to such extensions as may be provided for under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS (\$«BASIC NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA NUMERIC») is hereby provided for extra work and shall be provided from the following funds:

Federal Funds.....  
State Funds.....  
Total.....

Where Federal funds are involved, it is covenanted and agreed by and between the parties hereto that the sum of ----«FEDERAL\_BASIC»----DOLLARS (\$«FEDERAL\_BASIC\_NUMERIC») and ----«FEDERAL\_EXTRAS»----DOLLARS (\$«FEDERAL\_EXTRAS\_NUMERIC»), a portion of the contract price and extras, respectively, shall be paid out of the applicable Federal funds, and that this contract shall be construed to be an agreement to pay said sums to the Contractor only out of the aforesaid Federal funds if and when such Federal funds shall be received from the Federal Government, and that this contract shall not be construed to be a general agreement to pay said portions at all events out of any funds other than those which may be so received from the Federal Government; provided, that if the Federal share of the cost of the project is not immediately forthcoming from the Federal Government, the STATE may advance the CONTRACTOR the anticipated Federal reimbursement of the cost of the completed portions of the work from funds which have been appropriated by the STATE for its pro rata share.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

\_\_\_\_\_  
Director of Transportation

«CONTRACTOR»

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print name

\_\_\_\_\_  
Print Title

\_\_\_\_\_  
Date

**PERFORMANCE BOND (SURETY)**  
(6/21/07)

**KNOW TO ALL BY THESE PRESENTS:**

That \_\_\_\_\_,  
*(Full Legal Name and Street Address of Contractor)*

as Contractor, hereinafter called Principal, and \_\_\_\_\_  
\_\_\_\_\_  
*(Name and Street Address of Bonding Company)*

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a  
surety in the State of Hawaii, are held and firmly bound unto the \_\_\_\_\_,  
*(State/County Entity)*

its successors and assigns, hereinafter called Obligee, in the amount of \_\_\_\_\_

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_), to which payment Principal and Surety bind themselves,  
their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by  
these presents.

**WHEREAS**, the above-bound Principal has signed a Contract with Obligee on  
\_\_\_\_\_, for the following project: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

hereinafter called Contract, which Contract is incorporated herein by reference and made a part  
hereof.

**NOW THEREFORE**, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in  
strict accordance with the terms of the Contract as said Contract may be modified or amended  
from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligee to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal)

\_\_\_\_\_  
Name of Principal (Contractor)

\*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

(Seal)

\_\_\_\_\_  
Name of Surety

\*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**\*ALL SIGNATURES MUST BE ACKNOWLEDGED  
BY A NOTARY PUBLIC**

# PERFORMANCE BOND

## KNOW ALL BY THESE PRESENTS:

That we, \_\_\_\_\_  
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

\_\_\_\_\_  
(State/County entity)

its successors and assigns, as Oblige, hereinafter called Oblige, in the amount

\_\_\_\_\_ DOLLARS  
(\$ \_\_\_\_\_),  
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Oblige, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;**
- Share Certificate** unconditionally assigned to or made payable at sight to \_\_\_\_\_  
Description: \_\_\_\_\_;
- Certificate of Deposit, No.** \_\_\_\_\_, dated \_\_\_\_\_  
issued by \_\_\_\_\_  
drawn on a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
- Cashier's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
- Teller's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
- Treasurer's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
- Official Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
- Certified Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;

**WHEREAS:**

The Contractor has by written agreement dated \_\_\_\_\_ entered into a contract with Obligee for the following Project: \_\_\_\_\_

\_\_\_\_\_ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

**NOW THEREFORE,**

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Obligee, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

**AND IT IS HEREBY STIPULATED AND AGREED** that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal) \_\_\_\_\_  
Name of Contractor

\* \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\*ALL SIGNATURES MUST BE  
ACKNOWLEDGED BY A NOTARY PUBLIC

**LABOR AND MATERIAL PAYMENT BOND (SURETY)**  
(6/21/07)

**KNOW TO ALL BY THESE PRESENTS:**

That \_\_\_\_\_,  
*(Full Legal Name and Street Address of Contractor)*

as Contractor, hereinafter called Principal, and \_\_\_\_\_  
\_\_\_\_\_  
*(Name and Street Address of Bonding Company)*

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the \_\_\_\_\_,  
*(State/County Entity)*

its successors and assigns, hereinafter called Oblige, in the amount of \_\_\_\_\_

\_\_\_\_\_ Dollars (\$\_\_\_\_\_), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the above-bound Principal has signed Contract with the Oblige on \_\_\_\_\_ for the following project: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

**NOW THEREFORE**, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal)

\_\_\_\_\_  
Name of Principal (Contractor)

\*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

(Seal)

\_\_\_\_\_  
Name of Surety

\*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**\*ALL SIGNATURES MUST BE ACKNOWLEDGED  
BY A NOTARY PUBLIC**

# LABOR AND MATERIAL PAYMENT BOND

## KNOW ALL BY THESE PRESENTS:

That we, \_\_\_\_\_  
(full legal name and street address of Contractor)  
as Contractor, hereinafter called Contractor, is held and firmly bound unto \_\_\_\_\_  
(State/County entity)  
its successors and assigns, as Obligee, hereinafter called Obligee, in the amount  
\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_),  
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;**
  
- Share Certificate** unconditionally assigned to or made payable at sight to \_\_\_\_\_  
Description: \_\_\_\_\_
  
- Certificate of Deposit, No.** \_\_\_\_\_, dated \_\_\_\_\_  
issued by \_\_\_\_\_  
drawn on \_\_\_\_\_  
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
  
- Cashier's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on \_\_\_\_\_  
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
  
- Teller's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on \_\_\_\_\_  
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
  
- Treasurer's Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on \_\_\_\_\_  
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
  
- Official Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
drawn on \_\_\_\_\_  
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;
  
- Certified Check No.** \_\_\_\_\_, dated \_\_\_\_\_  
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to \_\_\_\_\_;

**WHEREAS:**

The Contractor has by written agreement dated \_\_\_\_\_ entered into a contract with Obligee for the following Project: \_\_\_\_\_ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

**NOW THEREFORE,**

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

**AND IT IS HEREBY STIPULATED AND AGREED** that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

**AND IT IS HEREBY STIPULATED AND AGREED** that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal) \_\_\_\_\_  
Name of Contractor

\* \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\*ALL SIGNATURES MUST BE  
ACKNOWLEDGED BY A NOTARY PUBLIC

**DISCLOSURE OF LOBBYING ACTIVITIES**  
 Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352  
 (See reverse for public burden disclosure.)

Approved by  
 0348-0046

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known</i> :  Congressional District, <i>if known</i> :		5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime  Congressional District, <i>if known</i> :
6. Federal Department/Agency:	7. Federal Program Name/Destination:  CFDA Number, <i>if applicable</i> :	
8. Federal Action Number, <i>if known</i> :	9. Award Amount, <i>if known</i> : \$	
10. a. Name and address of Lobbying Entity (if individual, last name, first name, MI):		b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):
(attach Continuation Sheet(s) SF-LLL-A, if necessary)		
11. Amount of Payment ( <i>check all that apply</i> ): \$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned	13. Type of Payment ( <i>check all that apply</i> ): <input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferred <input type="checkbox"/> f. other; specify: _____	
12. Form of Payment ( <i>check all that apply</i> ): <input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind; specify: nature _____ value _____		
14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employees(s) or Member(s) contacted, for Payment Indicated in Item 11:   (attach Continuation Sheet(s) SF-LLL-A, if necessary)		
15. Continuation Sheet(s) SF-LLL-A attached: <input type="checkbox"/> Yes <input type="checkbox"/> No		
16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only:		Authorized for Local Reproduction Standard Form - LLL

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal Agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10.
  - (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.
  - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) or Congress that were contacted.
15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES  
CONTINUATION SHEET

Approved by  
0348-0046

Reporting Entity: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

STATEMENT OF COMPLIANCE

Date \_\_\_\_\_

I, \_\_\_\_\_ do hereby state:

(Name of signatory party) (Title)  
(1) That I pay or supervise the payment of the persons employed by \_\_\_\_\_ on  
(Contractor or subcontractor)  
the \_\_\_\_\_; that during the payroll period commencing on the \_\_\_\_\_ day of \_\_\_\_\_,  
(Building or work)  
\_\_\_\_\_ and ending the \_\_\_\_\_ day of \_\_\_\_\_, all persons employed on said project have been paid the  
full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said  
\_\_\_\_\_ from the full weekly wages earned by any person and that no deductions have  
(Contractor or subcontractor)  
been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in  
Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948.63  
Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 2760), and described below:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborers or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS  
 In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above-  
Referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to  
appropriate program for the benefit of such employees, except as noted in Section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH  
 Each Laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an  
amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe  
benefits as listed in the contract, except as noted in Section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARK

NAME AND TITLE	SIGNATURE
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THE WILFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

## INSTRUCTIONS FOR PREPARATION OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting from the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay fringe benefits as predetermined by the Department of Labor, in addition to payment of the minimum rates. The contractor's obligation to pay fringe benefits may be met by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

The contractor should show on the face of his payroll all monies paid to the employees whether as basic or as cash in lieu of fringes. The contractor shall represent in the statement of compliance that he is paying to others fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions follow:

### Contractors who pay all required fringe benefits:

A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of his payroll the basic cash hourly rate and overtime rate paid to his employees, just as he has always done. Such a contractor shall check paragraph 4(a) of the statement to indicate that he is also paying to approved plans, funds, or programs not less than the amount predetermined as fringe benefits for each craft. Any exception shall be noted in Section 4(c).

### Contractors who pay no fringe benefits:

A contractor who pays no fringe benefits shall pay to the employee and insert in the straight time hourly rate column of his payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on the basic or regular rate plus the required cash in lieu of fringes at the straight time rate. To simplify computation of overtime, it is suggested that the straight time basic rate and cash in lieu of fringes be separately stated in the hourly rate column, thus \$3.25/.40. In addition, the contractor shall check paragraph 4(b) of the statement to indicate that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

### Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employees as cash in lieu of fringes, and the hourly amount paid to plans, funds, or programs as fringes.

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:

A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and

B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.

2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
«CONTRACTOR»  
Name of Corporation, Partnership, or Individual

\_\_\_\_\_  
Signature and Title of Signer

Notary Seal  
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_  
Notary signature \_\_\_\_\_  
Notary public, State of \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

Notary Seal  
NOTARY CERTIFICATION

Doc. Date: \_\_\_\_\_ #Pages: \_\_\_\_\_  
Notary Name: \_\_\_\_\_ Circuit \_\_\_\_\_  
Doc. Description: \_\_\_\_\_  
\_\_\_\_\_  
Notary signature \_\_\_\_\_  
Date \_\_\_\_\_