

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION HONOLULU, HAWAII

SPECIAL PROVISIONS PROPOSAL CONTRACT AND BOND

FOR

ASPHALT PAVEMENT PRESERVATION, RESURFACING, AND RECONSTRUCTION AT VARIOUS LOCATIONS

FEDERAL-AID PROJECT NO. STP-0900(109)

ISLANDS OF MOLOKAI AND LANAI

FY 2025

NOTICE TO BIDDERS

Hawaii Revised Statutes (HRS), Chapter 103D

The receiving of bids for ASPHALT PAVEMENT PRESERVATION,

RESURFACING, AND RECONSTRUCTION AT VARIOUS LOCATIONS,

ISLANDS OF MOLOKAI AND LANAI, FEDERAL-AID PROJECT NO. STP-0900(109),

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 specifications, proposal, and additional documents designated or incorporated by reference shall be available in HIePRO.

HIEPRO OFFER DUE DATE & TIME is November 4, 2024, 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 furnishing all labor, necessary equipment, materials, and traffic control, to perform asphalt pavement preservation, resurfacing, and reconstruction at various locations on an open end, "as needed" basis.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A" or Specialty Contractors "C-3" or "C-3a" license <u>prior to the award of contract</u>.

A virtual pre-bid conference is scheduled for October 14, 2024, at 9:00 a.m., HST. Please call Microsoft Teams to join the pre-bid conference at 1-808-829-4853,

Phone Conference ID: 274 227 935 #. 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 <u>no later than October 21, 2024, at 2:00 p.m., HST</u>. 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.

<u>Protests</u>. 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 Hawaii Department of Transportation (HDOT) 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).

The U.S. Department of Transportation Regulations entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs", Title 49, CFR, Part 26, is applicable to this project. Bidders are hereby notified that the HDOT shall strictly enforce full compliance with all the requirements of the Disadvantaged Business Enterprise program with respect to this project.

Bidders shall read the Disadvantaged Business Enterprise Requirements, included in this solicitation, which establishes the program requirements pursuant to Title 49, CFR, Part 26, and includes the requirements of certification, method of award, and evidence of good faith. All Bidders shall email Larry D. Hail, Project Manager, at Larry.D.Hail@hawaii.gov, the following: "Disadvantaged Business Enterprise Contract Goal Verification and Good Faith Efforts Documentation for Construction"; "Disadvantaged Business Enterprise Confirmation and Commitment Agreement – Trucking Company"; and "Disadvantaged Business Enterprise Confirmation and Commitment Agreement – Subcontractor, Manufacturer, or Supplier", no later than November 12, 2024, at 2:00 p.m., HST. Failure to provide the respective documents

shall be grounds for rejection of bid.

<u>Driving While Impaired (DWI) Education</u>. The 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 Larry D. Hail, Project Manager, by phone at

(808) 873-3535, or by email at Larry.D.Hail@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: October 7, 2024

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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:

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)

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).

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

I. GENERAL

This project is subject to Title 49, Code of Federal Regulations, 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. The following shall be incorporated as part of the contract documents for compliance. If any requirements herein are in 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

It is the policy of the U.S. Department of Transportation ("USDOT") and the State of Hawaii, Department of Transportation and its political subdivisions ("Department") that Disadvantaged Business Enterprises ("DBE"), as defined in the DBE Regulations, have an equal opportunity to receive and participate in federally assisted contracts.

III. <u>DBE ASSURANCES</u>

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 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

All bidders/offerors are required to register with the Department's OCR, DBE Section, using the Bidder Registration Form, which can be downloaded from the Department's website at http://hidot.hawaii.gov/administration/ocr/dbe/dbe-program-forms/. Certified DBEs are considered registered with the Department and are not required to submit a

Bidder Registration Form. All other bidders/offerors are required to complete this form which may be faxed to (808) 831-7944, e-mailed to HDOT-DBE@hawaii.gov, or mailed to the HDOT DBE Section at 200 Rodgers Boulevard, Honolulu, Hawaii, 96819. Registered bidders/offerors are posted on the website listed above.

Bidders/offerors, subcontractors, manufacturers, vendors or suppliers, and trucking companies shall fully inform themselves with respect to the requirements of the DBE Regulations. Particular attention is directed to the following matters:

- A. Bidders/offerors shall take all necessary steps to ensure that DBEs have an opportunity to participate in this contract.
- B. DBEs may participate as a consultant, prime contractor, subcontractor, trucking company, or vendor of materials or supplies. DBEs may also team with other DBEs or non-DBE firms as part of a joint venture or partnership.
- C. Agreements between a bidder/offeror and a DBE in which an DBE promises not to provide subcontracting quotations to other bidders/offerors are strictly prohibited.
- D. A DBE shall be certified by the Department under the appropriate North American Industry Classification System (NAICS) code and work in their registered field of work in order for credit to be allowed.
- E. Information regarding the current certification status of DBEs is available on the internet at https://hdot.dbesystem.com/.
- F. <u>Commercially Useful Function ("CUF")</u>. An DBE must perform a CUF. This means that an DBE must be responsible for the execution of a distinct element of the work, must carry out its responsibility by actually performing, managing, and supervising at least 30% of the work involved by using its own employees and equipment, must negotiate price, determine quality and quantity, order and install material (when applicable), and must pay for the material itself.¹

To determine whether an DBE is performing a CUF, the Department must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, the DBE credit claimed for performance of the work, and other relevant factors. The prime contractor is responsible to ensure that the DBE performs a CUF.

V. PROPOSAL REQUIREMENTS

A. DBEs must be certified by the bid opening date.

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¹ The use of joint checks payable to an DBE subcontractor and supplier may be allowed to purchase materials and supplies under limited circumstances. See VII USE OF JOINT CHECKS UNDER THE DBE PROGRAM

- B. DBE subcontractors, manufacturers, suppliers, trucking companies, and any second tier subcontractors shall be listed on the respective DBE forms as specified below in order to receive credit.
- C. The following forms are due to the Department's Project Manager or designee by the close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) days after bid opening:²
 - 1. <u>DBE Confirmation and Commitment Agreement</u>. This form must be signed by the bidder/offeror and each DBE subcontractor, manufacturer, supplier, or trucking company. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information DBE name and contact information and subcontractor name and contact information if the DBE is a second tier subcontractor.
 - DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form (See paragraph D below regarding goal calculation). The bidder/offeror must submit documentation demonstrating how the DBE goal was met or how the bidder/offeror attempted to meet the goal if the goal was not met. This documentation shall include quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project. Documentation of good faith efforts is required irrespective of whether the bidder/offeror met the DBE project goal.

The above forms must be complete and provide the necessary information to properly evaluate bids/proposals. Failure to provide any of the above shall be cause for bid/proposal rejection.

- D. Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:
 - 1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).

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² In computing calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or holiday.

2. The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

VI. COUNTING DBE PARTICIPATION TOWARDS CONTRACT GOAL

- A. Count the entire amount of the portion of a contract (or other contract not covered by paragraph B below) that is performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work on the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).
- B. Count the entire amount of fees or commissions charged by an DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, toward DBE goals, provided the Department determines the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- C. When an DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself an DBE. Work that an DBE subcontracts to a non-DBE firm does not count toward DBE goals.
- D. When an DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
- E. Count expenditures to an DBE contractor toward DBE goals only if the DBE is performing a CUF on that contract.
- F. The following is a list of appropriate DBE credit to be allowed for work to be performed by an DBE subcontractor. Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:
 - 1. If the materials or supplies are obtained from an DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals;
 - 2. For purposes of determining DBE goal credit, a manufacturer is a firm that operates or maintains a factory or establishment that produces (on the premises) the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications;

- 3. If the materials or supplies are purchased from an DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals;
- 4. For purposes of determining DBE goal credit, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business;
- 5. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question;
- 6. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in the DBE Regulations, if the person both owns and operates distribution equipment for the products. Any supplementing of a regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis;
- 7. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers;
- 8. With respect to materials or supplies purchased from an DBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals; however,
- 9. If a firm is not currently certified as an DBE in accordance with standards of this part at the time of the execution of the contract, do not count the firm's participation toward any DBE goals, except as provided for in §26.87(i);
- 10. Do not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward the Department's overall goal; and
- 11. Do not count the participation of an DBE subcontractor toward a contractor's final compliance with its DBE obligations on a contract until the amount being counted has actually been paid to the DBE.
- G. The following factors are used in counting DBE participation for trucking companies:
 - 1. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular

- contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals;
- 2. The DBE must itself own and operate at least one (1) fully licensed, insured, and operational truck used on the contract;
- 3. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs;
- 4. The DBE may lease trucks from another DBE firm, including an owneroperator who is certified as an DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract;
- 5. The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBEowned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement. If a recipient chooses this approach, it must obtain written consent from the appropriate Department operating administration. EXAMPLE: DBE firm X uses two (2) of its own trucks on a contract, leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four (4) of the six (6) trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight (8) trucks. With respect to the other two (2) trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks Firm X receives as a result of the lease with Firm Z;
- 6. The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.
 EXAMPLE: DBE Firm X uses two (2) of its own trucks on a contract. It leases two (2) additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four (4) trucks; and
- 7. For purposes of determining whether a trucking firm performs a CUF, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

- H. The bidder/offeror may be a joint venture or partnership that has a certified DBE as a partner. A "Joint Venture" means an association between an DBE firm and one (1) or more other firms to carry out a single, for-profit, business enterprise for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract, and whose share in the capital contribution, control, management, risks and profits are commensurate with its ownership interest.
- I. <u>Effects of a Summary Suspension of an DBE</u>. When an DBE's certification is suspended, the DBE may not be considered to meet a contract goal on a new contract and any work it does on a contract received during the suspension shall not be counted towards the overall goal. The DBE may continue to perform work under an existing contract executed before the DBE received a Notice of Suspension and may be counted towards the contract goal during the period of suspension as long as the DBE is performing a CUF under the existing contract.
- J. <u>Effects of Decertification of an DBE</u>. Should an DBE become decertified during the term of the subcontract for reasons beyond the control of and with no fault or negligence on the part of the contractor, the work remaining under the subcontract may be credited towards the contract goal, but are not included in the overall accomplishments.

Should the DBE be decertified after contract award and before notice to proceed, the contractor must still meet the DBE goal by either: a) withdrawing the subcontract from the DBE and expending good faith efforts to replace it with an DBE that is currently certified for that same work; or b) continuing with the subcontract with the decertified firm and expending good faith efforts to find other work not already subcontracted out to DBEs in an amount to meet the DBE goal either by; 1) increasing the participation of other DBEs on the project; 2) documenting good faith efforts; or 3) by a combination of the above.

VII. USE OF JOINT CHECKS UNDER THE DBE PROGRAM

- A. The following guidelines apply to the use of joint checks:
 - 1. The second party (typically the prime contractor) acts solely as a guarantor;
 - 2. The DBE must release the check to the supplier;
 - 3. The use of joint checks is a commonly recognized business practice;
 - 4. The Department must approve the use of joint checks prior to use by contractors and/or DBEs. As part of this approval process the Department will analyze industry practice to confirm that the use of joint checks is commonly employed outside of the DBE program for non-DBE subcontractors on both federal and state funded contracts. Using joint checks shall not be approved if it conflicts with other aspects of the DBE Regulations regarding CUF; and
 - 5. The Department will monitor the use of joint checks closely to avoid abuse.

- B. Contractors and DBEs should review the following general guidelines when determining whether to use joint checks closely to avoid abuse:
 - 1. That standard industry practice applies to all contractors (federal and state contracts);
 - 2. Use of joint checks must be available to all subcontractors;
 - 3. Material industry sets the standard industry practice, not prime contractors;
 - 4. Short term, not to exceed reasonable time (i.e., one (1) year, two (2) years) to establish/increase a credit line with the material supplier;
 - 5. No exclusive arrangement between one (1) prime and one (1) DBE in the use of joint checks that might bring the independence of the DBE into question;
 - 6. Non-proportionate ratio of DBE's normal capacity to size of contract and quantity of material to be provided under the contract;
 - 7. The DBE is normally responsible to install and furnish the work item; and
 - 8. The DBE must be more than an extra participant in releasing the check to the material supplier.
- C. The Department shall allow the use of joint checks if the following general conditions are met:
 - 1. DBE submits request to the Department for action;
 - 2. There is a formalized agreement between all parties that specify the conditions under which the arrangement shall be permitted;
 - 3. There is a full and prompt disclosure of the expected use of joint checks;
 - 4. The Department will provide prior approval;
 - 5. DBE remains responsible for all other elements of 49 CFR 26.55(c)(1);
 - 6. The agreement states clearly and determines that independence is not threatened because the DBE retains final decision making responsibility;
 - 7. The Department will determine that the request is not an attempt to artificially inflate DBE participation;
 - 8. Standard industry practice is only one (1) factor;
 - 9. The Department will monitor and maintain oversight of the arrangement by reviewing cancelled checks and/or certification statement of payment; and
 - 10. The Department will verify there is no requirement by prime contractor that the DBE is to use a specific supplier nor the prime contractor's negotiated unit price.

VIII. <u>DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD</u>

A. When a project goal is not met, the Department shall conduct the initial review of GFE submitted by the bidder/offeror and shall determine whether the bidder/offeror has performed the quality, quantity, and intensity of efforts that demonstrate a reasonably active and aggressive attempt to meet the contract goal in accordance with 49 CFR Part 26, Appendix A.

- B. The bidder/offeror bears the responsibility of demonstrating that it met the contract goal, or if the contract goal was not met, by documenting the GFE it made in an attempt to meet the goal. It is the sole responsibility of the bidder/offeror to submit any and all documents, logs, correspondence, and any other records or information to the Department that will demonstrate that the bidder/offeror made good faith efforts to meet the DBE goal.
- C. In its good faith evaluation, the Department shall perform the following as part of its evaluation: a) compare the bidder's/offeror's bid against the bids/offers of other bidders/offerors, and compare the DBEs and DBE work areas utilized by the bidder/offeror with the DBEs listed in other bids/offers submitted for this contract (If other bidders obtained DBEs in a particular work area in which the low bidder did not, the Department shall take this into consideration in its evaluation); b) verify contacts by bidders/offerors with DBEs; and c) compare the DBE and the categories of DBE work targeted by the bidder/offeror for participation in the contract, with the total pool of available DBEs ready, willing and able to perform work on each particular subcontract targeted by the bidder/offeror.
- D. Actions on the part of the bidder/offeror that will be considered demonstrative of good faith efforts include, but are not limited to, the following:
 - 1. Whether the bidder/offeror submitted the required information (i.e., DBE name, address, NAICS code, description of work, project name, and number), and dollar amounts for all subcontractors, within five (5) days of bid opening;
 - 2. Whether the bidder/offeror solicited through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract. The Department will also consider whether the bidder/offeror solicited the participation of potential DBEs as early in the procurement process as practicable, and allowed sufficient time for the DBEs to properly inquire about the project and respond to the solicitation. The Department will also review whether the bidder/offeror took appropriate steps to follow up with interested DBEs in a timely manner to facilitate participation by DBEs in this project;
 - 3. Whether the bidder/offeror identified and broke up portions of work that can be performed by DBEs in order to increase the likelihood that an DBE will be able to participate, and that the DBE goal could be achieved (e.g., breaking out contract items into economically feasible units to facilitate DBE participation even when the bidder/offeror might otherwise prefer to self-perform these work items with its own forces);
 - 4. Whether the bidder/offeror made available or provided interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assisted them in responding to the bidder's/offeror's solicitation;

- 5. Whether the bidder/offeror negotiated in good faith with interested DBEs. Evidence of such negotiations includes documenting: a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project;
- 6. Whether the bidder/offeror solely relied on price in determining whether to use an DBE. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by itself, sufficient reasons for a bidder's/offeror's refusal to utilize an DBE, or the failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desire of a bidder/offeror to perform a portion of the work with its own forces, that could have been undertaken by an available DBE, does not relieve the bidder/offeror of the responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participation in other areas of the project to meet the DBE goal;
- 7. Whether the bidder/offeror rejected DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The DBEs standing within the industry, membership in specific groups, organizations or associations, and political or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs;
- 8. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance;
- 9. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services;
- 10. Whether the bidder/offeror effectively used the services of available minority/women community organizations, minority/women business groups, contractors' groups, and local, state and federal minority/women business assistance offices or other organizations to provide assistance in recruitment and placement of DBEs;
- 11. Whether the bidder/offeror, who selects a non-DBE over an DBE subcontractor, has quotes of each DBE and non-DBE subcontractor submitted to the bidder for work on the contract; and for each DBE that was contacted but not utilized by the bidder/offeror for a contract, the bidder/offeror has a detailed written explanation for each DBE detailing the reasons for the bidder's/offeror's failure or inability to utilize, or to allow the DBE to participate in the contract; and
- 12. Whether other bidders/offerors met the goal and whether the apparent successful bidder/offeror could have met the goal with additional efforts. The Department may determine that an apparent successful bidder/offeror who fell short of meeting the goal, made good faith efforts when it met or exceeded the average DBE participation obtained by other bidders/offerors.

IX. ADMINISTRATIVE RECONSIDERATION.

If it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of 49 CFR Section 26.53(a), the bidder/offeror may submit a request for administrative reconsideration. If under the provisions of 49 CFR, Section 26.53(d), it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of this subsection, the bidder/offeror may submit a written request for administrative reconsideration.

A. Within five (5) working days of being informed in writing by the Department that the bidder/offeror has not documented sufficient GFE, a bidder/offeror may request administrative reconsideration. Bidders/offerors should make this request in writing to the following official:

Director of Transportation Hawaii Department of Transportation 869 Punchbowl Street, Room 509 Honolulu, Hawaii 96813

- B. The reconsideration official, or his or her designee (referred to as "reconsideration official"), shall not have played any role in the original determination that the bidder/offeror failed to meet the goal or make adequate good faith efforts to do so.
- C. As part of this reconsideration, the bidder/offeror will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate GFE to do so. The bidder/offeror will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate GFE to do so.
- D. In an administrative reconsideration, the reconsideration official will review all previously submitted documents, oral and written arguments, and other evidence presented in the reconsideration, in making the decision.
- E. The Department shall inform the bidder/offeror of the decision within thirty (30) days of the proceeding. The decision will state the Department's findings, and explain the basis of those findings, with respect to whether or not the bidder/offeror met the contract goal, or whether or not the bidder/offeror made adequate GFE to achieve the contract goal.
- F. The reconsideration decision is not administratively appealable to USDOT but is appealable under HRS 103D-709.

X. AWARD OF CONTRACT

A. In a sealed bid procurement, the Department reserves the right to reject any or all bids. The award of contract, if it is awarded, will be to the lowest responsive and responsible bidder who meets or exceeds the DBE project goal, or who makes

good faith efforts to meet or exceed the DBE project goal, as determined by the Department.

B. If the lowest responsible bidder does not meet the DBE project goal and does not demonstrate to the satisfaction of the Department that it made good faith efforts to meet the DBE project goal, such bid shall be rejected as non-responsive. The Department will then consider the next lowest responsive and responsible bidder for award in accordance with paragraph A above.

XI. REPLACEMENT OF AN DBE ON A PROJECT WITH A CONTRACT GOAL

Under this contract, the prime contractor shall utilize the specific DBE listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department to replace an DBE. If the Department's consent is not provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. The Department reserves the right to request copies of all DBE subcontracts.

The Department will require a contractor to make good faith efforts to replace an DBE that is terminated or has otherwise failed to complete its work on a contract with another certified DBE, to the extent needed to meet the contract goal. A prime contractor's inability to find a replacement DBE at the original price is not sufficient to demonstrate that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

The Department will require the prime contractor to promptly provide written notice to the project manager of the DBE's inability or unwillingness to perform and provide reasonable documentation.

The written notice by the contractor must include the following:

- 1. The date the contractor determined the certified DBE to be unwilling, unable or ineligible to perform work on the contract;
- 2. The projected date that the contractor shall require a substitution or replacement DBE to commence work if consent is granted by the Department;
- 3. Documentation of facts that describe and cite specific actions or inactions on the part of the affected DBE that led to the contractor's conclusion that the DBE is unwilling, unable, or ineligible to perform work on the contract;
- 4. A brief statement of the affected DBE's capacity and ability or inability to perform the work as determined by the contractor;
- 5. Documentation of contractor's good faith efforts to enable affected DBE to perform the work;
- 6. The current percentage of work completed on each bid item by the affected DBE;

- 7. The total dollar amount currently paid per bid item for work performed by the affected DBE:
- 8. The total dollar amount per bid item remaining to be paid to the DBE for work completed but for which the DBE has not received payment, and with which the contractor has no dispute; and
- 9. The total dollar amount per bid item remaining to be paid to the DBE for work completed, for which the DBE has not received payment, and with which the contractor and DBE have a dispute.

The prime contractor shall send a copy of the written notice to replace a certified DBE on a contract to the affected DBE. The affected DBE may submit a written response within five (5) calendar days to the Department to explain its position on its performance on the committed work. The Department shall consider both the prime contractor's request and DBE's stated position before approving the termination or substitution request, or determining if any action shall be taken against the contractor.

There shall be no substitution or termination of an DBE subcontractor at any time without the prior written consent of the Department. The Department will provide written consent only if the contractor has good cause, as determined by the Department, to terminate the DBE. Good cause may include, but is not limited to the following circumstances:

- 1. The DBE subcontractor fails or refuses to execute a written contract;
- 2. The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards;
- 3. The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
- 4. The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness:
- 5. The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1200 or applicable state law;
- 6. The Department has determined that the listed DBE subcontractor is not a responsible contractor;
- 7. The listed DBE subcontractor voluntarily withdraws from the project and provides to the Department written notice of its withdrawal;
- 8. The listed DBE is ineligible to receive DBE credit for the type of work required; and
- 9. An DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Upon approval from the Department to replace an DBE, the contractor's good faith efforts shall be documented and submitted to the Department within seven (7) calendar days. This time period may be extended for another seven (7) calendar days upon request by the prime contractor.

If an DBE subcontractor is unable to perform work under the contract, and is to be

replaced, the contractor's failure to obtain a substitute certified DBE or to make good faith efforts to obtain such a substitute DBE subcontractor to perform said work, may constitute a breach of this contract for which the Department may terminate the contract or pursue such remedy as deemed appropriate by the Department.

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 Certification and Contract Compliance Management System (hereafter referred to as "online tracking system"). The prime contractor shall report the date payment was made by the Department 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. The Department 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. The Department will not withhold any amount from any payment to the contractor, including retainage.
- B. The contractor shall pay all subcontractors within ten (10) calendar days after receipt of any progress payments from the Department. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.
- C. The contractor will verify that payment or retainage has been released to the subcontractors or its suppliers within the specified time through entries in the Department'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 the Department's satisfaction, will be reported by the Contractor or the subcontractor.

D. 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 ten (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 the Department. The contractor must obtain the prior written approval from the Department before it can continue to withhold retainage from any subcontractor who has completed its portion of the work. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.

XIV. RECORDS

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

- 1. The names, race/ethnicity, gender, address, phone number, and contact person of all DBE and non-DBE consultants, subcontractors, manufacturers, suppliers, truckers and vendors identified as DBEs;
- 2. The nature of work of each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor;
- 3. The dollar amount contracted with each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor; and
- 4. Cumulative dollar amount of all change orders to the subcontract.

XV. FAILURE TO COMPLY WITH DBE 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 and suppliers are hereby advised that failure to carry out all DBE 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 the Department 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.



Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation For Construction

	Project #:	County:
	DBE Project Goal:	Prime Contractor:
aı	L s required by the specifications " <i>Disadvantaged Business Enterpris</i> a nd non-DBE firms) for all subcontractors, manufacturers, suppliers,	, and trucking companies is due by the close of business, $4:30\ P.M.$
Н	awaii Standard Time (HST) five (5) days after bid opening. Failure t	o provide required information sufficient to evaluate the
h	id/proposal shall be cause for hid/proposal rejection	

Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items, and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:

- 1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).
- 2. The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

DBE (Y/N)	Bid Item Number and Description	Approx. Quantity/ Hours	Unit	Unit Price/ Rate	Dollar Amount
			Unit		Dollar Amount
(Y/N)	Description	Hours	Unit	Rate	Dollar Amount
					1

A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking	
companies, plus 60% of the dollar amount of DBE suppliers	
B. Sum of all work items less mobilization, force account items, allowance items	
A/B = DBE contract goal	
NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR:	DATE:

Page 1 of 3

Summary of Good Faith Efforts (GFE)

As required by the specifications "Disadvantaged Business Enterprise Requirements," documentation of GFE shall be submitted by the close of business, 4:30 P.M. HST five (5) days of bid opening. The bidder/offeror shall respond to the following questions and describe efforts to obtain DBE participation whether or not the DBE project goal is met. Responses must be sufficient to properly evaluate the bidder's/offeror's good faith efforts. Copies of correspondence return receipts, telephone logs, or other documentation will be required to support GFE. Attach additional sheets, if necessary. Based on responses given, HDOT shall make a determination of the bidders' GFE. Failure to provide required information sufficient to evaluate the bid/proposal shall be cause for bid/proposal rejection.

- 1. Did you submit the required information by the close of business, 4:30 P.M. HST, five (5) days after bid opening (i.e. DBE name, address, NAICS code, description of work, project name, and number)?
- Explain your GFE if any, to solicit through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract.
 - Explain your GFE if any, to solicit the participation of potential DBEs as early in the procurement process as practicable.
 - b. Explain your GFE if any, to allow sufficient time for the DBEs to properly inquire about the project and respond to the solicitation.
 - c. Explain your GFE if any, to take appropriate steps to follow up with interested DBEs in a timely manner to facilitateparticipation by DBEs in this project.
- Explain your GFE if any, to identify and break up portions of work that can be performed by DBEs in order to increase the likelihood that a DBE will be able to participate, and that the DBE goal could be achieved (e.g. breaking out contract items into economically feasible units to facilitate DBE participation even when you might otherwise prefer to self-perform these work items).
- Explain your GFE if any, to make available or provide interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assist them in responding to your solicitation.
- Explain your GFE if any, to negotiate in good faith with interested DBEs. Evidence of such negotiations includes documenting: a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project.
- Did you solely rely on price in determining whether to use a DBE? If yes please explain. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by themselves, sufficient reasons for your refusal to utilize a DBE or

NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR:	DATE:
Page 2 of 3	

	failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desportion of the work with your own forces, that could have been undertaken by an available DBE, does not relieve responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participated the project to meet the DBE goal.	eve you of the
7.	Did you reject DBEs as being unqualified without sound reasons based on a thorough investigation of their cap please explain. The DBEs standing within the industry, membership in specific groups, organizations or associated or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs.	
8.	Explain your GFE to assist interested DBEs in obtaining bonding, lines of credit, or insurance.	
9.	Explain your GFE if any, to assist interested DBEs in obtaining necessary equipment, supplies, materials or relaservices.	ted assistance or
10.	If you selected a non-DBE over a DBE subcontractor, please provide the quotes of each DBE and non-DBE subcontract to you for work on the contract; and for each DBE that was contacted but not utilized for a contract detailed written explanation for each DBE detailing the reasons for not utilizing or allowing the DBE to particip contract.	t, provide a
11.	Explain your GFE if any, to effectively use the services of available minority/women community organizations, r business groups, contractors' groups, and local, state and federal minority/women business assistance offices organizations to provide assistance in recruitment and placement of DBEs.	-
NA	ME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR:	DATE:



Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation For Construction INSTRUCTIONS

Project #	Self-explanatory
County	County where project is located
DBE Project Goal	Indicate DBE goal listed in the proposal on P-1
Prime Contractor	Name of prime contractor
Name of Subcontractor, Supplier, Manufacturer, and	Company name of subcontractor, supplier,
Trucking Company	manufacturer, or trucking firm
DBE (Y/N)	Y for yes and N for no
Bid Item Number and Description	Pay item and description
Approx. Quantity/ Hours	Self-explanatory
Unit	Unit of measure
Unit Price/ Rate	Self-explanatory
Dollar Amount	Total dollar amount committed to subcontractor,
	supplier, manufacturer, or trucking firm
A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking companies, plus 60% of the dollar amount of DBE suppliers	Total amount of DBE participation
B. Sum of all work items less mobilization, force	List total of work items minus mobilization, force
account items, allowance items	accounts and allowances. DBE credit shall not be
	given for mobilization, force account items, and
	allowance items.
A/B = DBE contract goal	Self-explanatory
Name and Signature of Authorized Representative of Prime Contractor	Self-explanatory (Note: bidder must sign and date every page of form.)
Date	Date form is signed
Summary of Good Faith Efforts (GFE)	Complete by answering questions in detail and providing documentation to support how bidder demonstrated good faith efforts to meet the goal, irrespective of whether or not the goal was met.



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

Project #:				Cour	County:				
NAICS CODE/DESCRIPTION OF WORK:				SECONDARY NAICS CODE:					
•			d tab item whenever	•					
			dates when the truck					nder the subcontract.	
Estimated Beginni	ng Date (Mo	onth/Year):		Estin	nated Co	mplet	ion Date (Month,	Year):	
TRUCKING	Item	No	Item Description		Tu	nit	Unit Price /	Amount	
COMPANY:	reem		reem Bescription				Rate		
							\$	\$	
							\$	\$	
							\$	\$	
				Т	OTAL CO	MMIT	MENT AMOUNT	\$	
 Number of fully Number of fully 	operational operational	trucks to be	es to be hauled:e used:ed by DBE:eg companies are to b	Tr D	ump truc	ks:	Dump f		
4. If Owner Operators or additional trucking companies are to be Name of Trucking Company DBE Y/N Estimated Dollar Am to be Contracted									
			\$						
			\$						
If a DBE trucking cor substitution/replace prime contractor, a	mpany is una ement appro nd subcontr	able to perfo val process a actor (only i	rm the work as listed as outlined in the con	on this tract DI cond ti	agreeme BE require er sub) co	ent for ement onfirn	rm, the prime conts. IMPORTANT! 1	ed on the agreement form. tractor will follow the The signatures of the DBE, ation on this Agreement is	
DBE NAME:					e/Title (p		print):		
Address:				Signature:					
Phone:		Fax:							
Email:				Date:					
Prime Contractor:				Name/Title (please print):					
Address:			Signature:						
Phone:				7 ~					
Email:				Date:					
Subcontractor (on	ly if the DBE	will be a se	cond tier sub):	Nam	e/Title (p	lease	print):		
Address:				Signa	ature:				
Phone:		Fax:			1 -				
Email:				Date:					
HDOT retains the inf	formation co	ollected thro	ugh this form. With fo	ew exce	ptions, y	ou are	e entitled on requ	est to be informed about	
he information that	t we collect	about you.							



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE trucking company, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

Project #	Self-explanatory
County	County where project is located
NAICS Code/Description of Work	Primary North American Industry Classification
·	System code under which DBE is certified to
	performand description of work to be done
Secondary NAICS Code	List other NAICS codes firm is certified to perform
Estimated Beginning Date (Month/Year)	Date DBE shall begin work on the project
Estimated Completion Date (Month/Year)	Date DBE's work will be completed
Trucking Company	Name of DBE trucking company
Item No.	List pay item number
Item Description	Description of item
Unit	Unit of measure – e.g. weight or hours
Unit Price/Rate	Cost per unit or hourly rate
Amount	Total amount per pay item
Total Commitment Amount	Sum of all pay items and total commitment of
	bidder/offeror to DBE
Number of hours contracted or quantities to be	Approximate number of hours or tonnage to be
hauled	hauled
Number of fully operational trucks to be used:	Total number of trucks to be used for the project
Tractor/Trailers	Number of tractor trailers to be used
Dump Trucks	Number of dump trucks to be used
Number of fully operational trucks owned by DBE	Number of listed DBE's trucks to be used on
	thisproject
Name of Trucking Company	If other trucking companies (DBE or non-DBE) are to
	be leased, list name and information about type of
	trucks in this section
Estimated Dollar Amount to be Contracted	Provide information about estimated cost to lease
Number of Dump Trucks, Tractor/Trailer	trucks Self-explanatory
DBE NAME	
Name/Title	DBE Company name Name and title of DBE's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of DBE's representative
Date	Date agreement is signed
Prime Contractor	Company name
FIIIIE COILLIACIOI	Company name

Name/Title	Name and title of prime contractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of prime contractor's representative
Date	Date agreement is signed
Subcontractor (only if the DBE will be a second tier sub):	Name of subcontractor only if the listed DBE trucking company will be performing work under this subcontractor
Name/Title	Name and title of the subcontractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of subcontractor
Date	Date agreement is signed



Address:

Phone:

Email:

Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Subcontractor, Manufacturer, or Supplier

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

Project #:			County:				
NAICS CODE/DESCRIPTION OF WORK:			SECONDARY NAICS CODE:				
*All quantities and units	should match	the bid tab ite	m whenever p	ossible.			
The prime contractor sh	all inform HDO	T of the dates	when the sub	contractor star	ts and completes a	Ill work under the subcontract.	
Estimated Beginning Date (Month/Year):			Estimated Completion Date (Month/Year):				
SUBCONTRACTOR:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount	
					\$	\$	
					\$	\$	
					\$	\$	
					\$	\$	
			7	TOTAL COMMI	TMENT AMOUNT	\$	
	•					1 -	
MANUFACTURER:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount	
					\$	\$	
					\$	\$	
		· ·	1	TOTAL COMMI	TMENT AMOUNT	\$	
	1						
SUPPLIER:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount	
					\$	\$	
					\$	\$	
			1	TOTAL COMMI	TMENT AMOUNT	\$	
and the DBE subcontrac agreement form, the pri requirements. IMPORT A	tors as listed o ime contractor ANT! The signa	n the agreeme will follow the tures of the D	ent form. If a E e substitution/ BBE, prime con	DBE subcontrac replacement a otractor, and su	tor is unable to pe pproval process as abcontractor (only	etween the prime contractor rform the work as listed on this outlined in the contract DBE if the DBE will be a second tier ement in the order in which	
DBE NAME:				Name/Title (p	olease print):		
Address:			Signature:				
Phone: Fax:			J.B.Iacare.				
Email:				Date:			
Prime Contractor:				Name/Title (p	olease print):		
Address:				Signature:			
Phone:	Fax	:		3.5.1.4.4.6.			
Email:	1 : 201			Date:			
Subcontractor (only if	e a second tie	r sub):	Name/Title (please print):				

HDOT retains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you.

Fax:

Signature:

Date:



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Subcontractor, Manufacturer, or Supplier INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

Project #	Self-explanatory
County	County where project is located
NAICS Code/Description of Work	Primary North American Industry Classification
·	System code under which DBE is certified to
	performand description of work to be done
Secondary NAICS Code	List other NAICS codes firm is certified to perform
Estimated Beginning Date (Month/Year)	Date DBE shall begin work on the project
Estimated Completion Date (Month/Year)	Date DBE's work will be completed
Subcontractor	Name of DBE subcontractor (company name)
Item No.	List pay item number
Item	Description of item
Approx. Quantity	Self-explanatory
Unit	List unit of measure
Unit Price	Cost per unit
Amount	Total amount per pay item
Total Commitment Amount	Sum of all pay items and total commitment of
	bidder/offeror to DBE
Manufacturer	Name of DBE manufacturer
Supplier	Name of DBE supplier (aka regular dealer)
DBE NAME	DBE Company name
Name/Title	Name and title of DBE's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of DBE's representative
Date	Date agreement is signed
Prime Contractor	Company name
Name/Title	Name and title of prime contractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of prime contractor's representative
Date	Date agreement is signed
Subcontractor (only if the DBE will be a second tier	Name of subcontractor only if the listed DBE will be
sub):	performing work under this subcontractor as a second
	tier subcontractor/supplier/manufacturer

Name/Title	Name and title of the subcontractor's representative that the listed DBE will work under as a second tier subcontractor/supplier/manufacturer
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of subcontractor's representative
Date	Date agreement is signed

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
- 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 designbuild 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 nonminority 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. 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, 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 reprocurement 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, <u>31</u> 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 <u>40 U.S.C. 3144(b)</u> 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, <u>18</u> 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 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 reprocurement 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, <u>31</u> 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".

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

"DIVISION 100 - GENERAL PROVISIONS

SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS

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

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

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

23	AAN	American Association of Nurserymen
24 25	AASHTO	American Association of State Highway and
26	AASHTO	American Association of State Highway and Transportation Officials
27		Talleportation officials
28	ACI	American Concrete Institute
29	A D A	Amaniaana wikh Diaahilikiaa Aak
30 31	ADA	Americans with Disabilities Act
32	ADAAG	Americans with Disabilities Act Accessibility Guidelines
33		·
34	AGC	Associated General Contractors of America
35 36	AIA	American Institute of Architects
37	,	7 mondan monda of 7 normooto
38	AISC	American Institute of Steel Construction
39	AICI	Annania and Inana and Ota al Inatituta
40 41	AISI	American Iron and Steel Institute
42	ANSI	American National Standards Institute
43		
44	APA	American Plywood Association
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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 57	ASTM	American Society for Testing and Materials
58 59	AWG	American Wire Gauge
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 71	CFR	Code of Federal Regulations
72 73	CRSI	Concrete Reinforcing Steel Institute
74 75	DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii
76 77	DOTAX	Department of Taxation, State of Hawaii
78		LIC Environmental Protection Agency
79 80	EPA	U.S. Environmental Protection Agency
81 82	FHWA	Federal Highway Administration, U.S. Department of Transportation
83		·
84 85	FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
86 87	HAR	Hawaii Administrative Rules
88 89	HDOT	Department of Transportation, State of Hawaii
90		

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

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	bo interpreted do renewe.
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	ciamications of corrections.
144	Addition (to the contract sum) - Amount added to the contract sum by change
145	order.
	order.
147	Advanticement A public appaumement inviting hide for work to be performed or
148	Advertisement - A public announcement inviting bids for work to be performed or
149	materials to be furnished.
150	Amendment Amendment Amendment is a second to a second the amendment in the form
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	- 1 0-70
163	Barrel - 376 pounds of cement.
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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.
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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.
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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.

Bidding Documents (or Solicitation Documents) - The published solicitation

notice, bid requirements, bid forms and the proposed contract documents including

all addenda and clarifications issued prior to receipt of the bid.

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

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

Calendar Day - See Day.

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

Completion - See Substantial Completion and Final Completion.

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

Comptroller - the Comptroller of the State of Hawaii, Department of Accounting and General Services.

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

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

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

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 amendments, change orders, field orders, orders for minor changes in the work, 226 227 the Engineer's written interpretations and clarifications issued on or after the 228 effective date of the contract.

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Contract Item (Pay Item) - A specific unit of work for which there is a price in the contract.

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233 **Contract Modification (Modification) -** A change order that is mutually agreed to 234 and signed by the parties to the contract.

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236 Contract Price - The amount designated on the face of the contract for the 237 performance of work.

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239 Contract Time (or Contract Duration) - The number of calendar or working days provided for completion of the contract, inclusive of authorized time extensions. 240 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.

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Contracting Officer - See Engineer.

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Contractor - Any individual, partnership, firm, corporation, joint venture, or other legal entity undertaking the execution of the work under the terms of the contract with the State.

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Critical Path - Longest logical sequence of activities that must be completed on schedule for the entire project to be completed on schedule.

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Day - Any day shown on the calendar, beginning at midnight and proceeding up to, but not including, midnight the following day. If no designation of calendar or working day is made, "day" shall mean calendar day.

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259 **Department** - The Department of Transportation of the State of Hawaii 260 (abbreviated HDOT).

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262 **Director** - The Director of the HDOT acting directly or through duly authorized 263 representatives.

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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, character, dimensions, and details of the work. 267

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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 (HlePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposal 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.

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315 316 317	Holidays - The days of each year which are set apart and established as State holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.
318 319 320	Inspector - The Engineer's authorized representative assigned to make detailed inspections of contract performance, prescribed work, and materials supplied.
321 322 323	Laboratory - The testing laboratory of the Highways Division or other testing laboratories that may be designated by the Engineer.
324 325 326	Laws - All Federal, State, and local laws, executive orders and regulations having the force of law.
327 328 329	Leveling Course - An aggregate mixture course of variable thickness used to restore horizontal and vertical uniformity to existing pavements or shoulders.
330 331 332 333 334	Liquidated Damages - The amount prescribed in Subsection 108.08 - Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time, to be paid to the State or to be deducted from any payments payable to or, which may become payable to the Contractor.
335 336	Lump Sum (LS) - When used as a payment method means complete payment 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

be incorporated in the work.

Notice to Bidders - The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate the location of the work to be done or the character of the material to be furnished and the time and place for the opening of proposals.

Notice to Proceed - Written notice from the Engineer to the Contractor identifying the date on which the Contractor is to begin procuring materials and required permits and adjusting work forces, equipment, schedules, etc. prior to beginning physical work.

Pavement - The uppermost layer of material placed on the traveled way or shoulders or both. Pavement and surfacing may be interchangeable.

Pavement Structure - The combination of subbase, base, pavement, surfacing or other specified layer of a roadway constructed on a subgrade to support the traffic load.

Payment Bond - The security executed by the Contractor and surety or sureties furnished to the Department to guarantee payment by the Contractor to laborers, material suppliers and subcontractors in accordance with the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sidewalk - That portion of the roadway primarily constructed for use by pedestrians.

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

Specifications - Compilation of provisions and requirements to perform prescribed work.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Traveled Way - The portion of the roadway for the movement of vehicles, exclusive of shoulders.

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

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

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

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

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

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

Working Day (WD) - A calendar day in which a Contractor is capable of working four or more hours with its normal work force, exclusive of:

547	(1) Saturdays, Sundays, and recognized legal State holidays and such
548	other days specified by the contract documents as non-working days,
549	
550	(2) Day in which the Engineer suspends work for four or more hours
551	through no fault of the Contractor."
552	
553	
554	
555	
556	END OF SECTION 101

"SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification of Bidders. Prospective bidders shall be capable of performing the work for which they are bidding.

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

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

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

(1) The location,

(2) Description of the proposed work,

(3) The approximate quantities,

(4) Items of work to be done or materials to be furnished,

(5) A schedule of items, and

(6) The time in which the work shall be completed.

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

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

- **102.03 Estimated Quantities.** The quantities shown in the contract are approximate and are for the comparison of bids only. The actual quantity of work may not correspond with the quantities shown in the contract. The Department will make payment to the Contractor for unit price items in accordance with the contract for only the following:
 - (1) Actual quantities of work done and accepted, not the estimated quantities; or
 - (2) Actual quantities of materials furnished, not the estimated quantities.

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

102.04 Examination of Contract and Site of Work. The bidder shall examine carefully the site of the proposed work and contract before submitting a proposal.

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

- (1) The bidder and its Subcontractors have reviewed the contract documents and found them free from ambiguities and sufficient for the purpose intended;
- (2) The bidder and its workers, employees and subcontractors have the skills and experience in the type of work required by the contract documents bid upon;
- (3) Neither the bidder nor its employees, agents, suppliers, or subcontractors have relied upon verbal representations from the Department, its employees, or agents, including architects, engineers, or consultants, in assembling the bid figure; and
- **(4)** The basis for the bid figure are solely on the construction contract documents.

93 94		, the bidder warrants that the bidder has examined the site of the work. restigations, the bidder acknowledges satisfaction on:
95		
96 97	(1)	The nature and location of the work;
98 99	(2)	The character, quality, and quantity of materials;
100	(3)	The difficulties to be encountered; and
101 102	(4)	The kind and amount of equipment and other facilities needed.
103		
104 105 106 107	bidders' cor the Departr	surface information or hydrographic survey data furnished are for the nvenience only. The data and information furnished are the product of ment's interpretation gathered in investigations made at the specific These conditions may not be typical of conditions at other locations
108	within the p	roject area or that such conditions remain unchanged. Also, conditions
109		e time of the subsurface explorations may not be the same conditions
110		starts. The bidder shall be solely responsible for assumptions,
111	deductions,	or conclusions the bidder may derive from the subsurface information
112	or data furn	ished.
113		
114	If the	e Engineer determines that the natural conditions differ from that
115		nticipated or contemplated by the Contractor in the items of excavation,
116		may treat the difference in natural conditions, as falling within the
117		· · · · · · · · · · · · · · · · · · ·
	meaning or	Subsection 104.02 – Changes.
118	400.0E B	Assessed to a Company of the Company
119 120		Preparation of Proposal. The submittal of its proposal shall be on shed by the Department. The bidder shall specify in words or figures:
121	(4)	
122	(1)	A unit price for each pay item with a quantity given;
123		
124	(2)	The products of the respective unit prices and quantities;
125		
126	(3)	The lump sum amount; and
127	` ,	
128	(4)	The total amount of the proposal obtained by adding the amounts of
129	` '	several items.
130	110 3	everal terms.
	The	words and figures shall be in ink or typed. If a discrepancy accure
131		words and figures shall be in ink or typed. If a discrepancy occurs
132		e prices written in words and those written in figures, the prices written
133	in words sh	all govern.
134		
135	Whe	n an item in the proposal contains an option to be made, the bidder
136	shall choose	e in accordance with the contract for that particular item. Determination
137		will not permit the Contractor to choose again.

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

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

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

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102.06 **Irregular Proposals.** The Department may consider proposals irregular and may reject the proposals for the following reasons:

- (1) The proposal is a form not furnished by the Department, altered, or detached;
- The proposal contains unauthorized additions, conditions, or (2) alternates. Also, the proposal contains irregularities that may tend to make the proposal incomplete, indefinite, or ambiguous to its meaning;
- The bidder adds provisions reserving the right to accept or reject an award. Also, the bidder adds provisions into a contract before an award;
- The proposal does not contain a unit price for each pay item listed except authorized optional pay items; and
- (5) Prices for some items are out of proportion to the prices for other items.
- If in the opinion of the Director, the bidder and its listed subcontractors do not have the Contactor's licenses or combination of Contractor's licenses necessary to complete the work.

Where the prospective bidder is bidding on multiple projects simultaneously and the proposal limits the maximum gross amount of awards that the bidder can accept at one bid letting, the proposal is not irregular if the limit on the gross amount of awards is clear, and the Department selects the awards that can be given.

182 183

184 102.07 Proposal Guaranty. In as much as the contract to be executed is a 185 price-term, open end, or requirements contract under which the contract price or total amount to be paid the Contractor cannot be determined at the time the 186 187 contract is executed, the proposal guaranty required shall be in the following 188 amounts. 189 190 Proposal Security Amount 191 192 Area 1 – Molokai \$250.000.00 193 Area 2 – Lanai \$150,000.00 194 195 The Department will not consider a proposal of \$25,000 or more unless 196 accompanied by: 197 198 A deposit of legal tender; or (1) 199 200 A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii, in the form and composed, substantially, with 201 202 the same language as provided herewith and signed by both parties; or 203 204 A certificate of deposit, share certificate, cashier's check, treasurer's 205 check, teller's check, or official check drawn by, or a certified check accepted by and payable on demand to the State by a bank, savings 206 institution, or credit union insured by the Federal Deposit Insurance 207 208 Corporation (FDIC) or the National Credit Union Administration (NCUA). 209 210 The bidder may use these instruments only to a maximum of 211 \$100.000. 212 213 If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued 214 215 by different financial institutions shall be acceptable. 216 The instrument shall be made payable at sight to the 217 (c) 218 Department. 219 220 If bidder elects options (1) or (3) above for its bid security, said 221 bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of 222 223 Transportation, Aliiaimoku Hale, 869 Punchbowl Street, Room 105, Honolulu, Hawaii 96813. Original surety bid bonds do not need to be 224 submitted to the Contracts Office. Bidders are reminded that a copy 225 of its surety bid bond shall be included with its bid submitted and 226 uploaded to HlePRO. 227 228

229	The above shall be in the amount of \$250,000.00 for Area 1 – Molokai and
230	\$150,000.00 for Area 2 – Lanai.

102.08 Delivery of Proposal. Bidders shall submit and <u>upload the complete proposal to HlePRO</u> 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 <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HlePRO. Do 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 HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.

102.09 Withdrawal or Revision of Proposals. Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, submitted, and uploaded to HlePRO prior to the bid opening date and time.

102.10 Public Opening of Proposals. Not applicable.

102.11 Disqualification of Bidders. The Department may disqualify a bidder and reject its proposal for the following reasons:

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

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

(3) Lack of proposal guaranty.

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

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

(6) Submittal of an irregular proposal in accordance with Subsection 102.06 - Irregular Proposals.

Preferences. Preferences shall not apply to this project.

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323	

102.15 Certification for Safety and Health Program for Bids in excess of \$100,000. In accordance with HRS Chapter 396-18, the bidder or offeror, by signing and submitting this proposal, certifies that a written safety and health plan for this project will be available and implemented by the notice to proceed date for this project. Details of the requirements of this plan may be obtained from the State Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH).

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

END OF SECTION 102

1	Make this section a part of the Standard Specifications:
2 3	"SECTION 103 - AWARD AND EXECUTION OF CONTRACT
3 4	SECTION 103 - AWARD AND EXECUTION OF CONTRACT
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 HIePRO.
9	If a discrepancy occurs between the unit bid price and the bid price, the unit bid
10	price shall govern.
11	The "Duy America" provisions in the Curfees Transportation Assistance Act
12 13	The "Buy America" provisions in the Surface Transportation Assistance Act 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	F
17	The Department reserves the right to reject proposals, waive technicalities
18	or advertise for new proposals, if the rejection, waiver, or new advertisement
19	favors the Department.
20	400 00 A 1 CO 4 A TI
21	103.02 Award of Contract. The award of contract, if it be awarded, will be
2223	made within 60 calendar days after the opening of bids, to the lowest responsible 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.
28	
29	(1) Requirement for Award. The Bidder, as proof of compliance
30	with the requirements of section 103D-310(c), HRS, upon award of
31	a contract made pursuant to section 103D-302, HRS, shall provide the documents listed below. The documents shall be submitted
32 33	promptly to the Department. If a valid certificate/clearance is not
33 34	submitted on a timely basis upon award, the Bidder may be deemed
35	non-responsible. See also Subsection 108.03 – Preconstruction
36	Data Submittal.
37	
38	(A) Tax Clearance. Pursuant to §103D-310(c), 103-53 and 103D-328,
39	HRS, the bidder shall submit a tax clearance certificate from the State
40	of Hawaii Department of Taxation (DOTAX) and the Internal Revenue
41	Service (IRS), subject to section 103D-328, HRS, current within six
42	months of issuance date.

following website:

FORM A6, TAX CLEARANCE CERTIFICATE, is available at the

43

44

47	https://tax.hawaii.gov/
48	
49	To receive DOTAX Forms by fax or mail, phone
50	(808) 587-4242 or 1-800-222-3229.
51	
52	The application for the Tax Clearance Certificate is the responsibility
53	of the bidder. Bidder shall submit directly to the DOTAX or IRS. The
54	approved certificate may then be submitted to the Department.
55	
56	(B) DLIR Certificate of Compliance. Pursuant to §103D-310(c), HRS,
57	the bidder shall submit a certificate of compliance for Hawaii Employment
58	Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter
59	386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and
60	Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii
61	Department of Labor and Industrial Relations (DLIR), current within six
62	months of issuance date.
63	FORM LIBUOT APPLICATION FOR OFFICIALE OF
64	FORM LIR#27, APPLICATION FOR CERTIFICATE OF
65	COMPLIANCE WITH SECTION 3-122-112, HAR, is available
66 6 7	at the following website:
67	hatta ellish such seessii masel
68	http://labor.hawaii.gov/
69 70	Contact the DLD Unexpolerment Incurrence Division at (000) E06 0006 for
70 71	Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for
71 72	additional information.
72 72	Inquirios regarding the status of a LID#27 Form may be made by calling the DLID
73 74	Inquiries regarding the status of a LIR#27 Form may be made by calling the DLIR Disability Compensation Division at (808) 586-9200.
74 75	Disability Compensation Division at (600) 300-9200.
75 76	The application for the Certificate of Compliance is the responsibility of the bidder.
70 77	Bidder shall submit directly to the DLIR. The approved certificate may then be
77 78	submitted to the Department.
78 79	
80	(C) DCCA Certificate of Good Standing. Pursuant to §103D-310(c),
81	HRS, the bidder shall submit a certificate of good standing from the
82	business registration division (BREG) of the State of Hawaii
83	Department of Commerce and Consumer Affairs (DCCA), current
84	within six months of issuance date, to demonstrate it is either:
85	Within the months of locations date, to demonstrate it is outlon.
86	(1) Incorporated or organized under the laws of the State; or
87	(1) moorporated or organized under the laws of the state, or
88	(2) Registered to do business in the State as a separate branch
89	or division that is capable of fully performing under the contract.
90	2. arrioren marie sapante er iang periorinning arraer are contidet.
91	A Hawaii business that is a sole proprietorship, is not required
92	to register with the BREG, and therefore not required to submit a

93 94 95	certificate of good standing. Bidders are advised of costs associated with registering and obtaining a Certificate of Good Standing from the DCCA.
96 97 98	To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line Services at the following website:
99 100	http://cca.hawaii.gov/
101 102 103 104	The application for the Certificate of Good Standing is the responsibility of the bidder. Bidder shall submit directly to the DCCA. The approved certificate may then be submitted to the Department.
105 106 107 108 109 110	(D) Hawaii Compliance Express (HCE). In lieu of the certificates referenced in subsection A, B, and C, the bidder may make available proof of compliance through a state procurement office designated certification process.
111 112 113 114	103.03 Cancellation of Award. The Department reserves the right to cancel the award of contracts before the execution of said contract by the parties. There will be no liability to the awardee and to other bidders.
115 116 117 118 119 120 121 122	103.04 Return of Proposal Guaranty. The Department will return the proposal guaranties, except those of the three lowest bidders, after the Department checks the proposals. The Department will return the proposal guaranties of the remaining two lowest bidders not awarded the contract within five working days following the execution of the contract. The Department will return the successful bidder's proposal guaranty after the successful bidder furnishes a bond and executes the contract.
123 124 125 126 127 128 129 130 131	103.05 Requirement of Contract Bond. At the time of execution of the contract, the successful bidder shall file a good and sufficient performance bond and a payment bond on the forms furnished by the Department conditioned for the full and faithful performance of the contract in accordance with the terms and intent thereof and for the prompt payment to all others for all labor and material furnished by them to the bidder and used in the prosecution of the work provided for in the contract. The bidder shall limit the acceptable performance and payment bonds to the following:
131 132 133	(a) Legal tender;
134 135	(b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or
136 137 138	(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 inure 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.

The contract bond required shall be furnished by the Contractor for the term of the contract (12 months). The bond of the contract shall be submitted to the State, or such additional time as may be granted by the State. Such bond for each extended year may be extensions of the original bond by endorsements thereto.

In as much as the contract to be executed is a price-term, open end, or requirements contract under which the contract price, or total amount to be paid the Contractor cannot be determined at the time the contract is executed, the performance and payment bond amounts required for the work at each Area shall be as follows:

5	<u>Proposal</u>	Security Amount
6		
7	Area 1 – Molokai	\$5,000,000.00
8	Area 2 – Lanai	\$3,000,000.00

The Contractor shall submit the required contract bond(s) together with the signed contract in accordance with <u>Section 103.06 Execution of Contract</u>.

The above amounts represent the performance and payment bond amounts required for the initial term of the contract. If work orders issued during the initial contract term exceed the original bond requirements, the procurement officer shall require additional performance and payment bonds to cover said work orders.

If the contract is extended beyond the initial term, the State shall require new bonds for each subsequent term. Such performance and payment bonds for each subsequent term, may be extensions of the original bond(s) by endorsements thereto, provided that, as to any claims which may have arisen or may arise while said bonds were in effect, said bonds shall remain in full force and effect. The performance and payment bond amounts may be reduced upon written determination by the head of the purchasing agency, if it is deemed to be in the best interest of the State.

103.06 Execution of the Contract. The contract, contract performance and payment bonds, and HRS Chapter 104 Compliance Certificate, shall be executed by the successful bidder and returned within ten (10) days or within such further time as the Department may allow after the bidder has received the contract for execution. The contract shall not bind the State in any way unless said contract has been fully and properly executed by all the parties thereto, the Comptroller has endorsed thereon its certificate that there is available an unexpended appropriation over and above all outstanding contracts, sufficient to cover the amount required by the contract, and the fully executed contract is received by the Contractor. If the Contractor fails to execute the contract and file acceptable bond(s) within ten (10) days, or within such further time as the Department may allow, the Department may cancel the award and award the contract to the next lowest, responsive and responsible bidder. The Department may recover its damages against the bid security as described in Subsection 102.07 herein.

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."

- (a) For change orders with value not exceeding \$50,000 by documented actual costs of the work, allowing for overhead and profit as set forth in Section 109.05 Allowances for Overhead and Profit. A change order shall be issued within fifteen days of 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
- For change orders with value exceeding \$50,000 by a (b) 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 non-adjustment 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(A)(1) through 104.06(A)(7) shall be issued within ten days after agreement on the method of adjustment."
- (III) Amend Section 104.11(B) Contractor's Duty to Locate and Protect Utility by adding the following after line 291:
 - "(4) The Contractor shall contact the Hawaii One Call Center at 811 prior to any excavation in a public right of way or on private property."
- (IV) Amend Subsection 104 Scope of Work by adding the following after line 318:

"104.13 Performance of Work. The Contractor shall perform work satisfactorily in the judgment of the Engineer during the contract period. If it appears at any time that the work contracted to be performed is not satisfactory, the Engineer may require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to satisfactory status. In case the Contractor fails to comply after five working days from the date of receipt of such a written order from the Engineer, the Engineer may employ a working force and equipment and charge the Contractor for the reasonable cost thereof including depreciation for equipment or he may terminate the contract.

104.14 Contract to be Open-Ended. The requirement for service to be furnished by the Contractor will be on an "as-needed" basis as called for in these specifications at the applicable unit price bid during the term of this contract and in such numbers as may be required by the State. The unit price bid indicated by the Contractor shall be applicable and binding under the terms of this contract.

Payment for services will be made by purchase order."

END OF SECTION 104

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

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

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

"(A) Furnishing Drawings and Special Provisions. The State will furnish the Contractor an electronic set of the special provisions and plans."

(IV) Amend 105.11 – Inspection of the Work and Materials by adding the following paragraph after line 366:

 All materials generated within the project site are considered solid waste. Solid waste shall be disposed of in accordance with Hawaii State Law HAR 11-58.1 and HRS Section 342H to the facility listed on the Solid Waste Disclosure Form. The contractor shall request and receive written approval from the Engineer before reusing any material in any other way than disposal.

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

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

92	(VI) Amend Subsection 105.16(B) - Substituting Subcontractors from line
93	487 to line 494 to read:
94	
95	(B) Substituting Subcontractors. Under HRS Chapter 103D-302, the
96	Contractor is required to list the names of persons or firms to be engaged
97	by the Contractor as a subcontractor or joint contractor in the performance
98	of the contract. No subcontractor may be added or deleted, unless
99	authorized by the Engineer.
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104	END OF SECTION 105

SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS

Make the following amendments to said Section:

(I) Amend **106.04 – Material Sample** by revising lines 42 to 48 to read as follows:

"106.04 Contractor Sampling and Testing. Acceptance Sampling and Testing by Contractor with Verification by District or County, or their designated agents.

(A) Contractor Sampling and Testing.

The Contractor shall provide to the Department a testing plan for each material. The testing plan shall be submitted prior to the beginning of production or placement of the material.

The laboratory the contractor uses for testing needs to be AASHTO re:source (Formerly AMRL) accredited or a comparable laboratory accreditation program approved by Federal Highway Administration (FHWA), with testing personnel qualified under the Personnel Qualification Program, in the test methods used for the testing. Documentation showing the accreditation needs to be submitted to the HDOT Construction office responsible for the project and Materials Testing and Research Branch (MTRB) before any testing occurs.

- (1) Project specifications shall specify minimum quantity of tests required for Contractor Sampling and Testing. Except as otherwise specified, minimum sampling and testing shall be in accordance with the requirements shown on the most current Sampling and Testing Guide for Acceptance and Verification (Appendix 3). Sampling location shall be as indicated on the Sampling and Testing Guide for Acceptance and Verification.
- (2) Project specifications shall require the Contractor to designate a Quality Control (CQC) Manager, who shall be responsible for managing, controlling, and documenting all activities to ensure material compliance with the contract plans and specifications.
- (3) Project specifications shall require the Contractor to prepare and submit a Quality Control Plan for projects over \$1,000,000.
- **(4)** Samples shall be selected by the random sampling method according to ASTM D 3665, Random Sampling of Construction Materials.

48 49		(5) The Project Engineer shall transmit the Design Contractor's test results with the yellow sample card (Form MTRB CJC 2 or
50		CJC-2a — Appendix 2) to MTRB.
51 52	(B)	Verification Sampling and Testing.
53	(-)	vormoution outlipining und rooting.
54		(1) To validate product quality, Verification Sampling and
55 56		Testing shall be performed by qualified sampling and testing
56 57		personnel employed by the State or County or its designated
58		agent, excluding qualified sampling and testing personnel employed by the Contractor. When the Contractor and State or
59		County test results differ by more than the allowable standards
60		established by MTRB, dispute resolution procedures shall be
61		followed.
62		(O) For we see a file of the continuous of Teather a leaffile of
63 64		(2) Frequency of Verification Sampling and Testing shall be a minimum of 10 percent of the Contractor Sampling and Testing
65		requirements. Frequency may be increased by the State or the
66		County based on a history of dissimilar test results between
67		Contractor and Verification testing.
68		
69		(3) Verification samples shall be random samples (ASTM D
70		3665) taken at the same general location of the Design-
71 72		Contractor's sample.
73		(4) Verification samples or test data shall be transmitted with
74		the blue sample card (Form MTRB VJC-3 or VJC 3a — Appendix
75		2) to MTRB.
76		
77	(C)	Dispute Resolution Procedures. Conflicts between the Engineer
78 70		he Contractor, resulting from discrepancies in testing or non-test-
79 80		ed material quality disputes, shall be resolved by using the steps led below. Non-test-related disputes may include such items as
81		egation, workmanship, flushing, open joints, non-uniform mats, and
82		issues. If mutually agreed to by the disputed parties, other forms of
83		ution may be used. Any deviations from the following procedures
84		be agreed to in writing.
85		
86		(1) Case I: Test Related Disputes:
87		(a) Ston I: Project Investigation
88 89		(a) Step I: Project Investigation.
90		Personnel responsible for the Contractor
91		Sampling and Testing and Verification Sampling and
92		Testing shall review sampling procedures, testing
93		procedures, testing equipment, and computations.
94		The intent of this investigation is to ensure that

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proper procedures are followed, equipment used is properly calibrated and functioning, and computational errors are ruled out. If problems are found, corrective action shall be taken.

If Step I does not resolve conflict, procedures in Step II shall be followed.

(b) Step II: Third Party Investigation.

Third party shall be the MTRB or a non-Highways Division laboratory designated by the Engineer. The MTRB shall be viewed as an "unbiased" third party, although technically not totally independent. The designated non-Highways Division laboratory shall be accredited in the applicable test by the AASHTO Accreditation Program or a comparable laboratory accreditation program approved by Federal Highway Administration (FHWA), with testing personnel qualified under the Personnel Qualification Program. The non-Highways Division laboratory third party shall not, in any way, be involved in the Contractor Sampling and Testing, Verification Sampling and Testing, or IA Sampling and Testing on the disputed project.

Designated third party shall examine the following:

- (i) Past similar/dissimilar comparisons for the disputed item to identify any particular trends.
- (ii) Results of the project-level investigation.
- (iii) Results of the Independent Assurance Program.

A sample shall be split among the Contractor, Engineer, and third party to compare test results. Third party may perform additional verification testing, at the project-level investigation, as necessary.

Results obtained from split samples or new samples and verification testing shall be evaluated to

142		decide whether initial test results obtained by the
143		Contractor or the Engineer more accurately represent
144		the particular material property. Third party shall
145		submit a written report describing dispute, all
146		subsequent actions, and final recommendation.
147		·
148		If this investigation shows that the Engineer's
149		tests are correct, the Contractor shall pay for the cost
150		of the third party investigation. Similarly, if the
151		investigation shows that the Contractor's tests are
152		correct, the Engineer will pay the cost of the third
153		party investigation.
154		•
155	(2) C	Case II: Non-Test Related Disputes:
156		
157	(a	a) Step I: Project Investigation.
158		
159		The Contractor and the Engineer will jointly
160		quantify the dispute (e.g., the area of segregation,
161		etc.), its severity, and impact on facility performance.
162		When testing is required to assist in dispute
163		resolution, all parties shall agree to the sampling and
164		testing plan, testing agency, and disposition of these
165		findings before starting.
166		
167		If Step I does not resolve dispute to the
168		satisfaction of all parties within a previously agreed
169		time, procedures in Step II shall be followed.
170		
171		(b) Step II: Third Party Investigation.
172		
173		Resolution shall be arbitrated by an unbiased
174		third party designated by the Engineer. Third party
175		shall submit a written report describing dispute, all
176		subsequent required actions, and final
177		recommendation.
178		
179		When disputes are resolved by an unbiased
180		third party, the Engineer and the Contractor shall
181		share cost of third party investigation. Conclusions
182		and recommendations made by any unbiased third
183		party shall be binding.
184		
185	• ,	s. Acceptance, Contractor, and Verification Test data, and
186		esolution reports shall be submitted to MTRB. MTRB will
187		ect test data to ensure that materials incorporated in
188	construction we	ork conform to approved plans and specifications. Based

189		on this information, MTRB will issue a materials certification to FHWA for
190		each construction project that is subject to FHWA construction oversight
191		activities (see Section VII)."
192		
193	(II)	Amend 106.05(B) - Deviation by revising the third sentence from line 106
194	to 10	8 to read as follows:
195		
196	"Any	deviations will be subject to Subsection 102.13 – Substitution of Materials
197	and I	Equipment Before Bid Opening."
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203		END OF SECTION 106

Make the following amendments to said Section:

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

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

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

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

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

 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	and do modified during the duration of the contract.
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	any additional roquitomonies.
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	
113	(b) Personal & Advertising Injury, and
114	
115	(c) Bodily Injury & Property Damage
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."
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137	END OF SECTION 107

Engineer. Charging of Contract Time will not be delayed, and additional contract time will not be granted due to Contractor delay in submitting acceptable preconstruction submittals. No progress payment will be made to the Contractor until the Engineer acknowledges, in writing, receipt of the following preconstruction submittals acceptable to the Engineer:

List of the Superintendent and other Supervisory Personnel, and their contact information.

- Name of person(s) authorized to sign for the Contractor. (2)
- (3) Work Schedule including hours of operation.
- Initial Progress Schedule (See Subsection 108.06 Progress (4) Schedule).
- (5) Water Pollution and Siltation Control Submittals, including Site-Specific Best Management Practice Plan.
- (6) Solid Waste Disposal form.
- Tax Rates. **(7)**
- (8) Insurance Rates.
- Certificate of Insurance, satisfactory to the Engineer, indicating that the Contractor has in place all insurance coverage required by the contract documents.
- Schedule of agreed prices. (10)
- (11) List of suppliers.
- Traffic Control Plan, if applicable. (12)
- Character and Proficiency of Workers. The Contractor shall at all times provide adequate supervision and sufficient labor and equipment for prosecuting the work to full completion in the manner and within the time required by the contract. The superintendent and all other representatives of the Contractor shall act in a civil and honest manner in all dealings with the Engineer, all other State officials and representatives, and the public, in connection with the work.
- All workers shall possess the proper license, certification, job classification, skill, training, and experience necessary to properly perform the work assigned to them.

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

108.05 Contract Time.

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

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

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

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

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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.
 - **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.
 - **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

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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.
 - (d) Delays caused by the failure of the Contractor to make submittals in a timely manner for review and acceptance by the Engineer, such as but not limited to shop drawings, descriptive sheets, material samples, and color samples except as covered in Subsection 108.05(B)(3) Delays Beyond Contractor's Control and 108.05(B)(4) Delays in Delivery of Materials or Equipment.
 - **(e)** Delays caused by the failure to submit sufficient information and data in a timely manner in the proper form in order to obtain necessary permits related to the work.
 - **(f)** Failure to follow the procedure within the time allowed by contract to request a time extension.
 - **(g)** Failure of the Contractor to provide evidence sufficient to support the time extension request.

275	(7) Reduction in Time. If the State deletes or modifies any
276	portion of the work, an appropriate reduction of contract time may be
277	made in accordance with Subsection 104.02 - Changes.
278	made in accordance with Subsection 104.02 - Changes.
279 280	108.06 Progress Schedules.
281	(A) Forms of Schedule. All schedules shall be submitted using the
282	specific computer program designated in the bid documents. If no such
283	scheduling software program is designated, then all schedules shall be
284	submitted using the latest version of Microsoft Project by Microsoft or
285	approved equivalent software program.
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287	Schedule submittals shall be as follows:
288	Corlocatio Submittais Shail be as follows.
289	(1) For Contracts \$2,000,000 or less or For Contract Time 100
290	Working Days or 140 Calendar Days or Less. For contracts of
291	\$2,000,000 or less or for contract time of 100 working days or 140
292	calendar days or less, the progress schedule will be a Time Scaled
293	Logic Diagram (TSLD). The Contractor shall submit a TSLD
294	submittal package meeting the following requirements and having
295	these essential and distinctive elements:
296	areas assertial and alcunotive elements.
297	(a) The major features of work, such as but not limited to
298	BMP installation, grubbing, roadway excavation, structure
299	excavation, structure construction, shown in the chronological
300	order in which the Contractor proposes to work that feature or
301	work and its location on the project. The schedule shall
302	account for normal inclement weather, unusual soil or other
303	conditions that may influence the progress of the work,
304	schedules, and coordination required by any utility, off or on-
305	site fabrications, and other pertinent factors that relate to
306	progress;
307	1 5 ,
308	(b) All features listed or not listed in the contract
309	documents that the Contractor considers a controlling factor
310	for the timely completion of the contract work.
311	
312	(c) The time span and sequence of the activities or events
313	for each feature, and its interrelationship and
314	interdependencies in time and logic to other features in order
315	to complete the project.
316	
317	(d) The total anticipated time necessary to complete work
318	required by the contract.
319	

320	(e) A chronological listing of critical intermediate dates or
321	time periods for features or milestones or phases that can
322	affect timely completion of the project.
323	
324	(f) Major activities related to the location on the project.
325	
326	(g) Non-construction activities, such as submittal and
327	acceptance periods for shop drawings and material,
328	procurement, testing, fabrication, mobilization, and
329	demobilization or order dates of long lead material.
330	
331	(h) Set schedule logic for out of sequence activities to
332	retain logic. In addition, open ends shall be non-critical.
333	
334	(i) Show target bars for all activities.
335	
336	(j) Vertical and horizontal sight lines both major and minor
337	shall be used as well as a separator line between groups. The
338	Engineer will determine frequency and style.
339	
340	(k) The file name, print date, revision number, data and
341	project title and number shall be included in the title block.
342	
343	(I) Have columns with the appropriate data in them for
344	activity ID, description, original duration, remaining duration,
345	early start, early finish, total float, percent complete,
346	resources. The resource column shall list who is responsible
347	for the work to be done in the activity. These columns shall
348	be to the left of the bar chart.
349	
350	(2) For Contracts Which Have A Contract Amount More Than
351	\$2,000,000 Or Having A Contract Time Of More Than 100
352	Working Days Or 140 Calendar Days. For contracts which have a
353	contract amount more than \$2,000,000 or contract time of more than
354	100 working days or 140 calendar days, the Contractor shall submit
355	a Timed-Scaled Logic Diagram (TSLD) meeting the following
356	requirements and having these essential and distinctive elements:
357	
358	(a) The information and requirements listed in Subsection
359	108.06(A)(1) - For Contracts \$2,000,000 or Less or For
360	Contract Time 100 Working Days or 140 Calendar Days or
361	Less.
362	
363	(b) Additional reports and graphics available from the
364	software as requested by the Engineer.
365	, , ,
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366	(c) Sufficient detail to allow at least weekly monitoring of
367	the Contractor and subcontractor's operations.
368	(d) The time engled appearationshall be an englander of
369	(d) The time scaled schematic shall be on a calendar of
370	working days basis. What will be used shall be determined b
371	how the contract keeps track of time. It will be the same. Plo
372	the critical calendar dates anticipated.
373	(a) Decelelation of article, and a familiar allocia
374	(e) Breakdown of activity, such as forming, placing
375	reinforcing steel, concrete pouring and curing, and stripping i
376	concrete construction. Indicate location of work to be done in
377	such detail that it would be easily determined where wor
378	would be occurring within approximately 200 feet.
379	
380	(f) Latest start and finish dates for critical path activities.
381	
382	(g) Identify responsible subcontractor, supplier, and other
383	for their respective activity.
384	
385	(h) No individual activity shall have duration of more that
386	20 calendar days unless requested and approved by the
387	Engineer.
388	
389	(i) All activities shall have work breakdown structure
390	codes and activity codes. The activity codes shall have
391	coding that incorporates information for phase, location, who
392	is responsible for doing work and type of operation and activit
393	description.
394	
395	(j) Incorporate all physical access and availabilit
396	restraints.
397	
398	(B) Inspection and Testing. All schedules shall provide reasonable
399	time and opportunity for the Engineer to inspect and test each work activity
400	
401	(C) Engineer's Acceptance of Progress Schedule. The submittal of
402	and the Engineer's receipt of any progress schedule, shall not be deeme
403	an agreement to modify any terms or conditions of the contract. An
404	modifications to the contract terms and conditions that appear in or may be
405	inferred from an acceptable schedule will not be valid or enforceable unles
406	and until the Engineer exercises discretion to issue an appropriate change
407	order. Nor shall any submittal or receipt imply the Engineer's approval of
408	the schedule's breakdown, its individual elements, any critical path that ma
409	be shown, nor shall it obligate the State to make its personnel available
410	outside normal working hours or the working hours established by the
411	Contract in order to accommodate such schedule. The Contractor has the
111	Contract in Graci to accommodate such schedule. The Contractor has the

412	risk of all elemen	ts (whether or not shown) of the schedule and its			
413	execution. No clai	execution. No claim for additional compensation, time, or both, shall be			
414		made by the Contractor or recognized by the Engineer for delays during any			
415		period for which an acceptable progress schedule or an updated progress			
416		schedule as required by Subsection 108.06(E) - Contractor's Continuing			
417		Schedule Submittal Requirements had not been submitted. Any			
418		acceptance or approval of the schedule shall be for general format only and			
419		shall not be deemed an agreement by the State that the construction			
420		means, methods, and resources shown on the schedule will result in work			
421		that conforms to the contract requirements or that the sequences or			
422		durations indicated are feasible.			
423					
424	(D) Initial Progr	ress Schedule. The Contractor shall submit an initial			
425	` '	The initial progress schedule shall consist of the			
426	following:	The initial progress constant entire of the			
427	ionownig.				
428	(1) Four:	sets of the TSLD schedule.			
429	(1)	solo of the fold solicule.			
430	(2) All th	e software files and data to re-create the TSLD in a			
431	• •	d software format as specified by the Engineer.			
432	oompatenze	a software format as specimed by the Engineer.			
433	(3) A listi	ng of equipment that is anticipated to be used on the			
434		uding the type, size, make, year of manufacture, and all			
435	• •	necessary to identify the equipment in the Rental Rate			
436		or Construction Equipment.			
437	Blue Book le	or Construction Equipment.			
438	(4) An an	ticipated manpower requirement graph plotting contract			
439	` ,	al manpower requirement. This may be superimposed			
440	over the pay				
441	over the pay	mont graph.			
442	(5) A Met	hod Statement that is a detailed narrative describing the			
443		done and the method by which the work shall be			
444		d for each major activity. A major activity is an activity			
445	that:	a for each major activity. A major activity is an activity			
446	tiat.				
447	(a)	Has a duration longer than five days.			
448	(a)	rias a duration longer than live days.			
449	(b)	Is a milestone activity.			
450	(6)	is a fillestone activity.			
451	(c)	Is a contract item that exceeds \$10,000 on the contract			
452	• •				
452 453	ουδί μ	proposal.			
453 454	(/ /	ls a critical nath activity			
454 455	(d)	Is a critical path activity.			
	(0)	le an activity designated as such by the Engineer			
456 457	(e)	Is an activity designated as such by the Engineer.			
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Each Method Statement shall include the following items needed to fulfill the schedule:

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

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

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

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

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

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

- Float. All float appearing on a schedule is a shared commodity. Float does not belong to or exist for the exclusive use or benefit of either the State or the Contractor. The State or the Contractor has the opportunity to use available float until it is depleted. Float has no monetary value.
- **Scheduled Meetings.** The Contractor shall meet on a bi-weekly basis with the Engineer to review the progress schedule. The Contractor shall have someone attending the meeting that can answer all questions on the TSLD and other schedule related submittals.
- Accelerated Schedule; Early Completion. (H) If the Contractor submits an accelerated schedule (shorter than the contract time), the Engineer's review and acceptance of an accelerated schedule does not constitute an agreement or obligation by the State to modify the contract time or completion date. The Contractor is solely responsible for and shall accept all risks and any delays, other than those that can be directly and solely attributable to the State, that may occur during the work, until the contract completion date. The contract time or completion date is established for the benefit of the State and cannot be changed without an appropriate change order or Substantial Completion granted by the State. The State may accept the work before the completion date is established, but is not obligated to do so.

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

Contractor Responsibilities. The Contractor shall promptly respond to any inquiries from the Engineer regarding any schedule submission. The Contractor shall adjust the schedule to address directives from the Engineer and shall resubmit the TSLD package to the Engineer until the Engineer finds it acceptable.

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

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

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

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

(b) The duration of all events and delays.

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

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

(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 \$ 2,500 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 prefinal 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.

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

 108.09 Rental Fees for Unauthorized Lane Closure or Occupancy. In addition to all other remedies available to the State for Contractor's breach of the terms of the contract, the Engineer will assess the rental fees in the amount of \$500 for every one- to fifteen-minute increment for each roadway lane closed to public use or occupied beyond the time periods authorized in the contract or by the Engineer. The maximum amount assessed per day shall be \$5,000. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract. The rental fee may be waived in whole or part if the Engineer determines that the unauthorized period of lane closure or occupancy

640 641			beyond the control of the Contractor. Equipment breakdown is e liquidated damages.		
642 643	108.10 St	ıspens	ion of Work.		
644 645	(A)	Suen	ension of Work. The Engineer may, by written order, suspend		
646 647 648	the pe	erforma	nce of the work, either in whole or in part, for such periods as may deem necessary, for any cause, including but not limited		
649 650		(4)	Weather or sail conditions considered unquitable for		
650 651 652		(1) prose	Weather or soil conditions considered unsuitable for cution of the work.		
653 654 655		(2) neces	Whenever a redesign that may affect the work is deemed sary by the Engineer.		
656 657		(3) if it do	Unacceptable noise or dust arising from the construction even es not violate any law or regulation.		
658		(4)	Failure on the part of the Contractor to:		
659 660		(4)	Failure on the part of the Contractor to:		
661 662			(a) Correct conditions unsafe for the general public or for the workers.		
663 664 665			(b) Carry out orders given by the Engineer.		
666 667			(c) Perform the work in strict compliance with the provisions of the contract.		
668 669 670			(d) Provide adequate supervision on the jobsite.		
671		(5)	The convenience of the State.		
672					
673 674		items	al and Total Suspension. Suspension of work on some but of work shall be considered a "partial suspension". Suspension		
675 676			Il items shall be considered "total suspension". The period of shall be computed from the date set out in the written order for		
677	•		e until the date of the order for work to resume.		
678	(0)				
679 680	(C)		bursement to Contractor. In the event that the Contractor is		
681		ordered by the Engineer in writing as provided herein to suspend all work under the contract for the reasons specified in Subsections 108.10(A)(2),			
682			, or 108.10(A)(5) of the "Suspension of Work" paragraph, the		
683			nay be reimbursed for actual direct costs incurred on work at		
684 685	•		as authorized in writing by the Engineer, including costs r the protection of the work. An allowance of 5 percent for		

indirect categories of delay costs will be paid on any reimbursed direct costs, including extended branch and home-office overhead and delay impact costs. No allowance will be made for anticipated profits. Payment for equipment which is ordered to standby during such suspension of work shall be made as described in Subsection 109.06(H) - Idle and Standby Equipment.

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

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

- (1) For weather related conditions.
- (2) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.
- (3) Or, for which an adjustment is provided for or excluded under any other provision of this Contract.
- **(E)** Claims for Adjustment. Any adjustment in contract price made shall be determined in accordance with Subsections 104.02 Changes and 104.06 Methods of Price Adjustment.

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

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

108.11 Termination of Contract for Cause.

- (A) **Default.** If the Contractor refuses or fails to perform the work, or any separable part thereof, with such diligence as will assure its completion within the time specified in this contract, or any extension thereof, or commits any other material breach of this contract, and further fails within seven days after receipt of written notice from the Engineer to commence and continue correction of the refusal or failure with diligence and promptness, the Engineer may, by written notice to the Contractor, declare the Contractor in breach and terminate the Contractor's right to proceed with the work or the part of the work as to which there has been delay or other breach of contract. In such event, the State may take over the work, perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the work, the materials, appliances, and plants as may be on the site of the work and necessary, therefore. Whether or not the Contractor's right to proceed with the work is terminated, the Contractor and the Contractor's sureties shall be liable for any damage to the State resulting from the Contractor's refusal or failure to complete the work within the specified time.
- **(B)** Additional Rights and Remedies. The rights and remedies of the State provided in this contract are in addition to any other rights and remedies provided by law.
- **(C)** Costs and Charges. All costs and charges incurred by the State, together with the cost of completing the work under contract, will be deducted from any monies due or which would or might have become due to the Contractor had it been allowed to complete the work under the contract. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay the State the amount of the excess.

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

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

108.12 Termination For Convenience.

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

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

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

(1) Any completed work.

 (2) Any partially completed construction, goods, materials, parts, tools, dies, jigs, fixtures, drawings, information, and contract rights (hereinafter called "construction material") that the Contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

(3) The Contractor shall protect and preserve all property in the possession of the Contractor in which the State has an interest. If the Engineer does not elect to retain any such property, the Contractor shall use its best efforts to sell such property and construction materials for the State's account in accordance with the standards of HRS Chapter 490:2-706.

(D) Compensation.

 (1) The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by HAR Subchapter 15, Chapter 3-122. If the Contractor fails to file a termination claim within one year from the effective date of

823	termination, the Engineer may pay the Contractor, if at all, an amou
824	set in accordance with Subsection 108.12(D)(3).
825	
826	(2) The Engineer and the Contractor may agree to a settlement
827	provided the Contractor has filed a termination claim supported
828	cost or pricing data submitted as required and that the settleme
829	does not exceed the total contract price plus settlement cos
830	reduced by payments previously made by the State, the proceeds
831	any sales of construction, supplies, and construction materials und
832	Subsection 108.12(C)(3), and the proportionate contract price of t
833	work not terminated.
834	
835	(3) Absent complete agreement, the Engineer will pay t
836	Contractor the following amounts less any payments previous
837	made under the contract:
838	made and the contract.
839	(a) The cost of all contract work performed prior to t
840	effective date of the notice of termination work plus a
841	percent markup on the actual direct costs, including amour
842	paid to subcontractor, less amounts paid or to be paid
843	completed portions of such work; provided, however, that i
844	appears that the Contractor would have sustained a loss if t
845	entire contract would have been completed, no markup sh
846	be allowed or included and the amount of compensation sh
847	be reduced to reflect the anticipated rate of loss.
848	anticipated profit or consequential damage will be due or pa
849	anticipated profit of consequential damage will be due of pa
	(b) Subcontractors shall be noid a markup of 10 paras
850	(b) Subcontractors shall be paid a markup of 10 perce
851	on their direct job costs incurred to the date of termination. I
852	anticipated profit or consequential damage will be due or pa
853	to any subcontractor. These costs must not include paymen
854	made to the Contractor for subcontract work during t
855	contract period.
856	(a) The fetal come to be united the Ocutor stan about
857	(c) The total sum to be paid the Contractor shall r
858	exceed the total contract price reduced by the amount of a
859	sales of construction supplies, and construction materials.
860	
861	(4) Cost claimed, agreed to, or established by the State shall
862	in accordance with HAR Chapter 3-123.
863 864	108.13 Pre-Final and Final Inspections.
865	(A) Increation Possingments - Defere the Engineer undertakes a fin
866 867	(A) Inspection Requirements. Before the Engineer undertakes a fire inspection of any work, a pro-final inspection must first be conducted. T
867	inspection of any work, a pre-final inspection must first be conducted. T

868	Contrac	tor shall notify the Engineer that the work has reached substantial
869	complet	ion and is ready for pre-final inspection.
870		
871	(B) P	Pre-Final Inspection. Before notifying the Engineer that the work
872	has read	ched substantial completion, the Contractor shall inspect the project
873		all installed items with all of its subcontractors as appropriate. The
874		tor shall also submit the following documents as applicable to the
875	work:	ion chair and carrier and remaining account and approxime as and
876	WOIK.	
877	(*	1) All written guarantees required by the contract.
878	'	7 th whiteh guarantees required by the contract.
879	14	2) Two accepted final field-posted drawings as specified in
880	•	, , , , , , , , , , , , , , , , , , , ,
	3	Section 648 – Field-Posted Drawings;
881	/-	2) Complete weekly certified neverall records for the Contractor
882	•	 Complete weekly certified payroll records for the Contractor
883	a	nd Subcontractors.
884	,	
885	(4	4) Certificate of Plumbing and Electrical Inspection.
886		
887	(;	5) Certificate of building occupancy as required.
888		
889	((6) Certificate of Soil and Wood Treatments.
890		
891	(7	7) Certificate of Water System Chlorination.
892		
893	(8	Certificate of Elevator Inspection, Boiler and Pressure Pipe
894	Ir	nspection.
895		
896	(9	9) Maintenance Service Contract and two copies of a list of all
897	ė	quipment installed.
898		
899	(*	10) Current Tax clearance. The contractor will be required to
900	-	ubmit an additional tax clearance certificate when the final payment
901		s made.
902		
903	(*	11) And any other final items and submittals required by the
904	•	ontract documents.
905	J	onitable documento.
906	(C) P	Procedure. When in compliance with the above requirements, the
907	· ,	tor shall notify the Engineer in writing that the project has reached
908		tial completion and is ready for pre-final inspection.
909	Substail	tial completion and is ready for pre-final inspection.
910	т	he Engineer will then make a preliminary determination as to
910		or not the project is substantially complete and ready for pre-final
912 913	•	on. The Engineer may, in writing, postpone until after the pre-final on the Contractor's submittal of any of the items listed in Subsection
		STD 0000/400\

108.13(B) – Pre-Final Inspection, herein, if in the Engineer's discretion it is in the interest of the State to do so.

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

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

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

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

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

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

Before final inspection of the work, the Contractor shall clean all ground occupied by the Contractor in connection with the work of all rubbish, excess materials temporary structures and equipment, shall remove all graffiti and defacement of the work and all parts of the work and

the worksite must be left in a neat and presentable condition to the satisfaction of the Engineer.

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

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

108.14 Substantial Completion and Final Acceptance.

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

(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.

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

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.

 (3)

- (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

1051			for its remaining duration upon confirmation by the Engineer	
1052	that	t the defic	ciencies have been repaired or remedied.	
1053				
1054	(5)		ng in this section is intended to limit or affect the State's rights	
1055	and remedies arising from the discovery of latent defects in the work after			
1056	the	expiratio	n of any guarantee period.	
1057				
1058			ver of Legal Rights. The following will not operate or be	
1059	considered	d as a v	vaiver of any portion of the contract, or any power herein	
1060	reserved,	or any rig	ht to damages provided herein or by law:	
1061				
1062	(1)	Any p	ayment for, or acceptance of, the whole or any part of the work.	
1063				
1064	(2)	Any e	extension of time.	
1065				
1066	(3)	Any p	ossession taken by the Engineer.	
1067	. ,			
1068	Αv	vaiver of	any notice requirement or of any noncompliance with the	
1069			held to be a waiver of any other notice requirement or any other	
1070			n the contract.	
1071	·			
1072	108.19	Final Se	ttlement of Contract.	
1073				
1074	(A)	Closi	ng Requirements. The contract will be considered settled	
1075	afte	r the pro	ject acceptance date and when the following items have been	
1076			submitted, where applicable:	
1077		,	, , , , , , , , , , , , , , , , , , , ,	
1078		(1)	All written guarantees required by the contract.	
1079		` ,		
1080		(2)	Complete and certified weekly payrolls for the Contractor and	
1081		its su	bcontractor's.	
1082		(3)	Certificate of plumbing and electrical inspection.	
1083		` '		
1084		(4)	Certificate of building occupancy.	
1085		` '		
1086		(5)	Certificate for soil treatment and wood treatment.	
1087		()		
1088		(6)	Certificate of water system chlorination.	
1089		()	,	
1090		(7)	Certificate of elevator inspection, boiler and pressure pipe	
1091		` '	lation.	
1092				
1093		(8)	Tax clearance.	
1094		(-)		
1095		(9)	All other documents required by the Contract or by law.	
1096		(-)		
2000				

1097	(B) Failure to Meet Closing Requirements. The Contractor shall meet
1098	the applicable closing requirements within 60 days from the date of Project
1099	Acceptance or the agreed to Punchlist complete date. Should the
1100	Contractor fail to comply with these requirements, the Engineer may
1101	terminate the contract for cause."
1102	
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1106	END OF SECTION 108

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claims have b	een fully	and	completely	discharged	or	otherwise
satisfied."						
E	ND OF S	ECT	ION 109			
	satisfied."	satisfied."	satisfied."		satisfied."	

1 2	Make this section part of the standard specifications:
3 4 5	"SECTION 110 – ASPHALT PAVEMENT PRESERVATION, RESURFACING, AND RECONSTRUCTION AT VARIOUS LOCATIONS
6 7 8 9 10 11 12 13 14	110.01 Scope of Work. The work shall consist of furnishing all labor, necessary equipment, materials and traffic control, to perform asphalt pavement preservation, resurfacing, and reconstruction at various locations as requested. All work shall be performed within the existing pavement structure. All work shall be performed in a professional manner in accordance with current practices and this document. All asphalt and asphalt concrete base debris shall be removed daily at all locations. See Subsection 110.03 – Area of Coverage.
15 16 17 18	The Contractor shall work as directed by the Engineer or by the Highways Division's Maui District Engineer. The Contractor, as per Section 110.04 – Safety and Convenience, shall provide traffic control. See Section 645 – Work Zone Traffic Control. A Traffic Control Plan (TCP) shall be submitted to the Engineer for approval.
19 20 21	The Department agrees to provide at least two weeks of pavement repair work for each request.
22 23 24 25 26	The Contractor shall refer to the <u>STP-0900(109) Notice to Bidders</u> for Contractor's License requirements. Failure to meet this requirement shall be cause for disqualification.
26 27	Pavement repair shall consist of one of the following:
28 29 30 31 32	1. 2" Asphalt Pavement Overlay. Resurface pavement with new two (2) inches of Hot Mix Asphalt (HMA) Pavement, Mix No. IV or two (2) inches of Polymer Modified Asphalt (PMA) Pavement, Mix No. IV.
33 34 35 36	2. Cold Planing and Resurfacing with Asphalt Pavement. Cold-plane damaged or deteriorated pavement areas at a depth specified in each work order. The depth will vary for each pavement types listed below:
37 38	1. HMA Pavement, Mix No. IV – Depth will be two (2) inches.
39 40	2. PMA Pavement, Mix No. IV – Depth will be two (2) inches.
41 42 43 44	 HMA Base Course – Depth will vary between two (2) inches to six (6) inches.
45 46	 HMA Base Course, PG 64E-22 – Depth will vary between two (2) inches to six (6) inches.

The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

3. Reconstruction of Weakened Pavement Areas. Excavate to the depth as directed by the Engineer, backfill the excavated weakened pavement areas with Hot Mix Asphalt Base Course, and resurface with HMA Pavement, Mix No. IV. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition.

The Contractor may elect to reconstruct the entire depth of the pavement reconstruction with HMA base course in preparation of cold planing as a separate operation, but the State will not pay for the extra HMA base course and excavation.

Schedule the work so that the excavated areas are backfilled before the completion of the day's work.

- 4. Scarify Existing Pavement. Scarify pavement as directed. The intention of this work is to enhance skid resistance on the highway. Scarifying shall be parallel to the direction of traffic flow, shall be accomplished with a cold planer, and at an amplitude not to exceed one-quarter inch (1/4") or as directed by the Engineer. The pavement shall be scarified as a width of 10 feet or as directed by the Engineer on the travel way only, and all existing pavement markings shall be preserved (in other words, scarify between the yellow and white stripes only). A seal coat of emulsified asphalt, diluted with water at a ratio of 1:1, shall be applied to the scarified areas.
- **5. Cut Cores in Existing Pavement.** Cut four-inch (4") diameter sample cores to the full depth of the existing pavement. The intention of this work is to determine the condition of the underlying pavement structure and base. The number of cores and

93 the location of the sampling shall be as directed. The core holes 94 shall be filled with hot mix AC of the type used in the paving of the 95 section being repaired. 96 Leveling of Existing Pavement. Install HMA Concrete 6.

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Pavement to level dips, sags, and depressions as directed by the Engineer. The new leveled surface finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

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> 7. **Slurry Seal.** See Section 404 – Slurry Seal.

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8. Crack Seal. See Section 408 – Crack Seal.

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If the existing pavement marking is required to be removed during pavement repair or other work done under this contract, the Contractor shall install temporary pavement markings. This work shall be considered incidental to the appropriate pavement repairs.

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110.02 **Contract Period and Option to Extend**. The period of the contract shall be for 12 months commencing from the Start Work Date indicated from the Department. There is an option to extend for 4 additional 12-month periods, without re-bidding, upon mutual agreement in writing prior to the contract expiration date. The maximum contract period is 60 months.

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Failure by the Contractor to execute the amendment to extend the contract within the number of days specified under Section 103.07 - Failure to Execute Contract may be cause for cancellation of the written agreement to extend the contract and may be subject to disqualification from bidding future projects for a two-year period in accordance with Section 102.12 - Disqualification of Bidders.

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To compensate for escalation during the maximum contract period the Department will adjust the Unit Prices of all items on the Proposal Schedule by 2% on the start date of an extension period. The price adjustment shall not be applied to contract change orders issued within the current contract year or work orders that have already been issued to the contractor.

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The Department shall adjust the prevailing wages in accordance with 23 U.S.C. 113 when the option to extend is mutually agreed to in writing prior to the contract expiration date. The current prevailing wage rates, as determined by the U.S. Department of Labor, in effect on the date of the execution of the contract extension shall apply to work covered under the contract extension.

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110.03 Area of Coverage. The project requires the Contractor to repair pavement at various locations on the Islands Molokai and Lanai. Work shall be grouped into two areas along with the corresponding routes as shown on the attached map of the islands of Molokai (Figure 1) and Lanai (Figure 2). Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets.

The two areas are:

(A) Area 1 (Molokai):

Route 450, Kamehameha V Highway

Route 460, Kaunakakai Place and Maunaloa Highway

Route 470, Kalae Highway

Route 480, Farrington Avenue and Puupeelua Avenue

(B) Area 2 (Lanai):

Route 440, Kaumalapau Highway and Manele Road

110.04 Safety and Convenience. The Contractor shall at all times conduct his work to assure the least possible obstruction to public traffic. The Safety and convenience of the general public and the protection of persons and property is of utmost importance, and the Contractor shall provide appropriate traffic control and safety measures. The Contractor and his employees shall treat members of the public in a fair and polite manner. Workers shall present a professional appearance and conduct themselves in a professional manner at all times.

All Traffic Control and safety measures shall be done in Conformance with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition. Costs for traffic control shall include set-up and removal of all signs, cones, delineators, barricades, flag persons, police officers, arrow boards, etc., and shall be included in the sign replacement proposal price. See Section 645 – Work Zone Traffic Control.

Do not close traffic lanes or slow down traffic during the following peak hours (unless otherwise approved by the engineer):

Morning Peak Hours 6:00 A.M. to 8:30 A.M. Afternoon Peak Hours 3:00 P.M. to 6:00 P.M.

Above peak hours are daily except Saturdays, Sundays and holidays.

The Contractor must notify all private property owners in the vicinity where pavement repair is performed in the event that the work may hinder access to their property. The Contractor must also secure permission prior to entering private property to do pavement repair, if any.

The Contractor shall remove debris daily and shall leave the work site in a condition equal to or cleaner than prior to commencing work. The Contractor shall be responsible for all hauling and lawful disposal of debris. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.05 Hours of Operation. The Contractor shall be available to provide the specified services during normal working hours and complete the services within the period specified in the work order or as directed by the Engineer. Normal working days and hours for the project are defined as Monday through Friday, 8:30 A.M. to 3:00 P.M., except for State holidays. Refer to Section 645 – Work Zone Traffic Control. Authorized Highways personnel will contact the Contractor to schedule work, as needed.

110.06 Disposal of Debris. The Contractor shall be responsible for all hauling and dump fees and shall include the cost of these items in his bid. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.07 Work Orders. The Engineer or his representative shall prepare a work order (Figure 3) for each pavement repair or group of pavement repairs in the same location. Within 48 hours of receiving a work order, the Contractor shall submit a proposed work schedule that demonstrates that work will begin within 2 weeks and be completed by the date indicated on the work order. At certain work sites, erosion control plans or BMP plans will be requested by the Engineer. Submit the signed work order, proposed schedule and BMP plans for approval to the Maui District Highways Office, 650 Palapala Drive, Kahului, Hawaii 96732. Work shall not be performed unless the Contractor receives an approval from the Engineer. The Engineer or his representative shall authorize any increases in the total price.

110.08 Basis of Payment. Pavement repairs will be made through work orders placed with the Contractor during the contract period for which payment will be based on the quantities placed and the unit bid prices in the proposal schedule which prices shall include payment for all materials, equipment, tools, labor, and incidentals necessary to complete the pavement repairs.

The Contractor shall submit monthly invoices to the Maui District Highways Office, 650 Palapala Drive, Kahului, Hawaii 96732, if services are rendered. (See Subsection 109.08 - Progress Payments).

229	The contract unit prices shall be full compensation for furnishing all labor,
230	materials (as listed in Section 104 - Scope of Work), tools, equipment, trucks
231	traffic control, applicable taxes and incidentals to complete the work."
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235	END OF SECTION 110

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

"SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL

209.01 **Description.** This section describes the following:

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

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

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

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

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209.02 Materials. Comply with applicable materials described in Chapters 2 and 3 of the current HDOT "Construction Best Management Practices Field Manual". In addition, the materials shall comply with the following:

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

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- **(B) Fertilizer and Soil Conditioners.** Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Engineer. Fertilizer shall conform to Subsection 619.02(H)(1) Commercial Fertilizer.
- **Hydro-mulching**. Hydro-mulching used as a temporary vegetative (C) stabilization measure shall consist of materials in Subsections 209.02(A) -Grass, and 209.02(B) - Fertilizer and Soil Conditioners. Mulches shall be recycled materials including bagasse, hay, straw, wood cellulose bark, wood chips, or other material acceptable to the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Potable water shall meet the requirements of Subsection 712.01 - Water. Submit alternate sources of irrigation water for the Engineer's acceptance if deviating from 712.01 - Water. Installation and other requirements shall be in accordance with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. Install non-vegetative controls including mulch or rolled erosion control products while the vegetation is being established. Water and fertilize grass. Apply fertilizer as recommended by the manufacturer. Replace grass the Engineer considers unsuitable or sick. Remove and dispose of trash and debris. Remove invasive species. Mow as needed to prevent site or signage obstructions, fire hazard, or nuisance to the public. Do not remove down stream sediment control measures until the vegetation is uniformly established, including no large bare areas, and provides 70 percent of the density of pre-disturbance vegetation. Temporary vegetative stabilization shall not be used longer than one year.
- **(D) Silt Fences.** Comply with ASTM D6462, Standard Practice for Silt Fence Installation.

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

209.03 Construction.

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

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	, o
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.
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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	drainage of cower cycleme.
111	4. Details of the procedures used for the
112	maintenance and subsequent removal of any erosion or
113	siltation control devices.
114	Situation control devices.
115	5. Methods of removing and disposing hazardous
116	wastes encountered or generated during construction.
117	wastes encountered or generated during construction.
117	6. Methods of removing and disposing concrete and
119	asphalt pavement cutting slurry, concrete curing water,
120	and hydrodemolition water.
120	and hydrodemonilon water.
121	7. Spill Control and Prevention and Emergency Spill
	Response Plan.
123 124	певропве пап.
	8. Fugitive dust control, including dust from grinding,
125	
126	sweeping, or brooming off operations or combination
127	thereof.
128	Mothede of staring and handling of alla nainte
129	9. Methods of storing and handling of oils, paints
130	and other products used for the project.
131	40 Metarial atarana and bandling ansa- and attara
132	10. Material storage and handling areas, and other
133	staging areas.
134	A4 Compando Americano de contra
135	11. Concrete truck washouts.

136 137	12. Concrete waste control.
138 139	13. Fueling and maintenance of vehicles and other equipment.
140 141	14. Tracking of sediment offsite from project entries
142 143	and exits.
144 145	15. Litter management.
146 147	16. Toilet facilities.
148 149	17. Other factors that may cause water pollution, dus and erosion control.
150 151 152 153 154 155 156 157 158 159 160 161 162 163	(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 cur and fill, indicate areas used for construction staging and storage including items (1) through (17) above, storage or 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.
164 165	(c) Construction schedule.
166 167 168 169 170	(d) Name(s) of specific individual(s) designated responsible for water pollution, dust, and erosion controls on the projec site. Include home, cellular, and business telephone numbers fax numbers, and e-mail addresses.
171 172	(e) Description of fill material to be used.
173 174 175 176	(f) For projects with an NPDES Permit for Construction Activities, submit information to address all sections in the Storm Water Pollution Prevention Plan (SWPPP).
177 178 179 180	(g) For projects with an NPDES Permit, information required for compliance with the conditions of the Notice of Genera Permit Coverage (NGPC)/NPDES Permit.

(h) Site-Specific BMP Review Checklist. The checklist may be downloaded from HDOT's Stormwater Management website at http://stormwaterhawaii.com.

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

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

Follow Honolulu's City and County "Rules for Soil Erosion Standards and Guidelines" for all projects on Oahu. Use respective Soil Erosion Guidelines for Maui, Kauai and Hawaii projects.

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

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

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

Address all comments received from the Engineer.

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

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

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

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

For projects with an NPDES Permit for Construction activities:

268	(1) For construction areas discharging into waters not impaired for
269	nutrients or sediments, complete initial stabilization within 14 calendar
270	days after the temporary or permanent cessation of earth-disturbing
271	activities.
272	
273	(2) For construction areas discharging into nutrient or sediment
274	impaired waters, complete initial stabilization within 7 calendar days
275	after the temporary or permanent cessation of earth-disturbing
276	activities.
277	
278	For projects without an NPDES Permit for Construction activities,
279	complete initial stabilization within 14 calendar days after the temporary or
280	permanent cessation of earth-disturbing activities.
281	h
282	Any of the following types of activities constitutes initiation of
283	stabilization:
284	
285	(1) Prepping the soil for vegetative or non-vegetative stabilization;
286	(1) Tropping the content regulative of their regulative classing attention,
287	(2) Applying mulch or other non-vegetative product to the exposed
288	area;
289	aroa,
290	(3) Seeding or planting the exposed area;
291	(v) Geoding of planting the expeded area,
292	(4) Starting any of the activities in items $(1) - (3)$ above on a portion
293	of the area to be stabilized, but not on the entire area; and
294	of the area to be stabilized, but not on the entire area, and
295	(5) Finalizing arrangements to have stabilization product fully
296	installed in compliance with the deadline for completing initial
297	stabilization activities.
298	Stabilization activities.
299	Any of the following types of activities constitutes completion of initial
300	stabilization activities:
301	Stabilization activities.
302	(1) For vegetative stabilization, all activities necessary to initially
303	
	seed or plant the area to be stabilized; and/or
304	(2) For non-vagatative atabilization, the installation or application
305	(2) For non-vegetative stabilization, the installation or application
306	of all such non-vegetative measures.
307	If the Company is smaller to make the decilines above due to
308	If the Contractor is unable to meet the deadlines above due to
309	circumstances beyond the Contractor's control, and the Contractor is using
310	vegetative cover for temporary or permanent stabilization, the Contractor
311	may comply with the following stabilization deadlines instead as agreed to by
312	the Engineer:
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- (1) Immediately initiate, and complete within the timeframe shown above, the installation of temporary non-vegetative stabilization measures to prevent erosion;
- (2) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and
- (3) Notify and provide documentation to the Engineer the circumstances that prevent the Contractor from meeting the deadlines above for stabilization and the schedule the Contractor will follow for initiating and completing initial stabilization and as agreed to by the Engineer.

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

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

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

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

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

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

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

Chemicals may be used as soil stabilizers for either or both erosion and dust control if acceptable to the Engineer.

Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide portable flume at the entrance. Shorten or extend temporary slope drains to ensure proper function.

Protect ditches, channels, and other drainageways leading away from cuts and fills at all times by either:

- (1) Hydro-mulching the lower region of embankments in the immediate area.
- (2) Installing check dams and siltation control devices.
- (3) Other methods acceptable to the Engineer.

Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.

Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be source of fugitive dust.

Cleanup and remove any pollutant that can be attributed to the Contractor.

Install or modify Site-Specific BMP measures due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that replaces an accepted Site-Specific BMP that is not satisfactorily performing. Modifications to Site-Specific BMP measures shall be accepted in writing by the Engineer prior to implementation.

Properly maintain all Site-Specific BMP measures.

For projects with an NPDES Permit for Construction Activities:

(1) For	construction areas discharging into nutrient or sediment	
impaired w	red waters, inspect, prepare a written report, and make repairs	
to BMP me	easures at the following intervals:	
(a)	Weekly.	
(b)	Within 24 hours of any rainfall of 0.25 inch or greater	
which	ch occurs in a 24-hour period.	
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(c)	When existing erosion control measures are damaged	
or n	ot operating properly as required by Site-Specific BMP.	
(2) For	construction areas discharging to waters not impaired for	
	or sediments, inspect, prepare a written report, and make	
	BMP measures at the following intervals:	
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(a)	Weekly.	
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(b)	When existing erosion control measures are damaged	
• •	ot operating properly as required by Site-Specific BMP.	
For project	ts without an NPDES Permit for Construction activities,	
. ,	a written report, and make repairs to BMP measures at the	
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(a)	Weekly.	
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(b)	When existing erosion control measures are damaged	
	ot operating properly as required by Site-Specific BMP.	
5	er operaning properly are required by one operanic zim.	
Temporari	ly remove, replace or relocate any Site-Specific BMP that	
•	I, replaced or relocated due to potential or actual flooding,	
	er or damage to project or public.	
or potertial darige	or damage to project or public.	
Maintain r	ecords of inspections of Site-Specific BMP work. Keep	
	ds for duration of the project. Submit copy of Inspection	
	gineer within 24 hours after each inspection.	
report to the Eng	incer within 24 hours after each inspection.	
The Contr	actor's designated representative specified in Subsection	
	hall address any Site-Specific BMP deficiencies brought up	
() () ()	r immediately, including weekends and holidays, and	
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<u>-</u>	fix the deficiencies by the close of the next work day if the	
	require significant repair or replacement, or if the problem	
	through routine maintenance. Address any Site-Specific	
	s brought up by the State's Third-Party Inspector in the	
umerrame above	or as specified in the Consent Decree or MS4 NPDES	
	impaired we to BMP med (a) (b) whice (c) or note the end of the Engineer complete work to problem does not can be corrected BMP deficiencies.	

Permit, whichever is more stringent. The Consent Decree timeframe requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, "immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day. When installation of a new pollution prevention control or a significant repair is needed, complete installation or repair no later than 7 calendar days from the time of notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within 7 calendar days and complete the work as soon as practicable and as agreed to by the Engineer. Address Site-Specific BMP deficiencies discovered by the Contractor within the timeframe above. The Contractor's failure to satisfactorily address these Site-Specific BMP deficiencies, the Engineer reserves the right to employ outside assistance or use the Engineer's own labor forces to provide necessary corrective measures. The Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of liquidated damages, suspension, or cancellation of Contract with the Contractor being fully responsible for all additional costs incurred by the State.

(C) Discharges of Storm Water Associated with Construction Activities. If work includes disturbance of one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing storm water discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 209.03(A)(2) – Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

(D) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting from DOH-CWB is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

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(E) Discharges Associated with Dewatering Activities. If dewatering activities require effluent discharge into State waters or drainage systems, an NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit authorizing discharges associated with dewatering from DOH-CWB is required from the DOH-CWB.

Do not begin dewatering activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct dewatering operations in accordance with the conditions of the permit or NGPC.

- **(F) Solid Waste.** Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 21 calendar days of date of award. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed, or as directed by the Engineer.
- **(G) Construction BMP Training.** The Contractor's representative responsible for development of the Site-Specific BMP Plan and implementation of Site-Specific BMPs in the field shall attend the State's Construction Best Management Practices Training. The Contractor shall keep training logs updated and readily available.

209.04 Measurement.

- (A) Installation, maintenance, monitoring, and removal of BMP will be paid on a lump sum basis. Measurement for payment will not apply.
- **(B)** The Engineer will only measure additional water pollution, dust and erosion control required and requested by the Engineer on a force account basis in accordance with Subsection 109.06 Force Account Provisions and Compensation.
- **209.05 Payment.** The Engineer will pay for accepted pay items listed below at contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for work prescribed in this section and contract documents.

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

Pay Item Pay Unit

Installation, Maintenance, Monitoring, and Removal of BMP Force Account

An estimated amount for force account is allocated in proposal schedule under 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than estimated amount allocated in proposal schedule. The Engineer will pay for BMP measures requested by the Engineer that are beyond scope of accepted Site-Specific BMP on a force account basis.

No progress payment will be authorized until the Engineer accepts in writing Site-Specific BMP or when the Contractor fails to maintain project site in accordance with accepted BMP.

For all citations or fines received by the Department for non-compliance, including compliance with NPDES Permit conditions, the Contractor shall reimburse State within 30 calendar days for full amount of outstanding cost State has incurred, or the Engineer will deduct cost from progress payment.

The Engineer will assess liquidated damages up to \$27,500 per day for non-compliance of each BMP requirement and all other requirements in this section.

Appendix A

The following list identifies potential pollutant sources and corresponding BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/ under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/ under Concrete Curing and Irrigation Water.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Construction debris, green waste, general litter	 Separate contaminated clean up materials from construction and demolition (C&D) wastes. Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. Inspect construction waste and recycling areas regularly. Schedule solid waste collection regularly. Schedule recycling activities based on construction/demolition phases. Empty waste containers weekly or when they are two-thirds full, whichever is sooner. Do not allow containers to overflow. Clean up immediately if they do. On work days, clean up and dispose of waste in designated waste containers. See Solid Waste Management Section SM-6 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 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. Dispose of construction and non- construction solid waste in accordance with State DOH regs. Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility 	See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.

Pollutant	Appropriate Site-Specific BMP to be	ВМР
Source	Implemented	
	Appropriate Site-Specific BMP to be Implemented Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical. Designate bermed wash area if cleaning on site is necessary. Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks. Provide an ample supply of readily available spill cleanup materials. Clean up spills immediately, using dry cleanup methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge. Inspect on-site vehicles and equipment regularly and immediately repair leaks. Regularly inspect fueling areas and storage tanks. Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures. Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in watertight containers and provide cover or secondary containment. Do not remove original product labels and comply with manufacturer's labels for proper disposal. Dispose of containers only after all the product has been used. Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements. Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater. See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11,	BMP Requirements 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.
	SM-12, and SM-13 and Material Storage and	

Pollutant	Appropriate Site-Specific BMP to be	ВМР
Source	Implemented	Requirements
Soil erosion from the disturbed areas	• 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).	Soil Stabilization 1. SM-22 Topsoil Management 2. EC-12 Seeding and Planting 3. EC-14 Mulching 4. EC-11 Geotextiles and Mats
	 Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP. Preserve native topsoil where practicable. In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth. 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. 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. Sediment basins shall be designed and maintained in accordance with HAR Chapter 11-55. Minimize disturbance on steep slopes (Greater than 15% in grade). If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades. For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities. 	Slope Protection 1. EC-12 Seeding and Planting 2. EC-14 Mulching 3. EC-11 Geotextiles and Mats 4. EC-4 Slope Roughening, Terracing, and Rounding 5. EC-7 Slope Drains and Subsurface Drains 6. EC-9 Slope Interceptor or Diversion Ditches/Berms SC-1 Storm Drain Inlet

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
		Perimeter Controls and Sediment Barriers 1. SC-7 Silt Fence or Filter Fabric Fence 2. SC-2 Vegetated Filter Strips and Buffers 3. SC-6 Compost Filter Berm/Sock 4. SC-8 Sandbag Barrier 5. SC-9 Brush or Rock Filter
		Sediment Basins and Detention Ponds 1. SC-4 Sediment Trap 2. SC-5 Sediment Basin SC-3 Check Dams
		EC-6 Level Spreader SM-20 Paving Operations SC-10 Construction Roads and Parking Area Stabilization

Pollutant	Appropriate Site-Specific BMP to be	ВМР
Source	Implemented	Requirements
		Controlling Storm Water Flowing onto and Through the Project 1. EC-3 Run-On Diversion 2. EC-5 Earth Dike, Swales and Ditches
		Post Construction BMPs 1. EC-2 Flared Culvert End Sections 2. EC-10 Rip-Rap and Gabion Inflow Protection 3. EC-8 Outlet Protection and Velocity Dissipation Devices 4. SM-22 Topsoil Management
		Non-Structural BMPs 1. SM-1 Construction BMP Training 2. SM-14 Scheduling 3. SM-15 Location of Potential Sources of Sediment 4. SM-17 Preservation of Existing Vegetation

Pollutant	Appropriate Site-Specific BMP to be	ВМР
Source	Implemented	Requirements
Sediment from soil stockpiles	 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. Place bagged materials on pallets and under cover. Provide physical diversion to protect stockpiles from concentrated runoff. Cover stockpiles with plastic or comparable material when practicable. Place silt fence, fiber filtration tubes, or straw wattles around stockpiles. 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. Unless infeasible, contain and securely protect stockpiles from the wind. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. See Stockpile Management Section SM-3 for additional requirements. 	See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.
Emulsified asphalt or prime/tack coat	 Provide training for employees and contractors on proper material delivery and storage practices and procedures. Restrict paving operations during wet weather to prevent paving materials from being discharged. Use asphalt emulsions such as prime coat when possible. Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal. Keep ample supplies of drip pans and absorbent materials on site. Inspect inlet protection devices. See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 	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.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Materials associated with painting, such as paint and paint wash solvent		Requirements 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.
	Perimeter Sediment Controls as applicable.	

Dellestant	Annuanyieta Cita Cracific BMD to be	DMD
Pollutant Source	Appropriate Site-Specific BMP to be	BMP
	Implemented	Requirements
Industrial	Hazardous chemicals shall be well-labeled and	See Material
chemicals,	stored in original containers.	Storage and
fertilizers,	Keep ample supply of cleanup materials on site.	Handling Use
and/or	Clean up spills immediately, using dry clean-up	Section SM-2,
pesticides	methods where possible, and dispose of used	Stockpile Management
	materials properly.	Section SM-3,
	Do not clean surfaces or spills by hosing the area down.	and Hazardous
		Materials and
	Eliminate the source of the spill to prevent a discharge or a furtherance of an engoing	Waste
	discharge or a furtherance of an ongoing discharge.	Management
	 Dispose container only after all of the product 	Section SM-9,
	has been used.	and Spill
	 Retain a complete set of safety data sheets 	Prevention and
	(formerly MSDS) on site.	Control SM-10
	Store industrial chemicals in water-tight	
	containers and provide either cover or secondary	
	containment.	
	Provide cover when storing fertilizers or	
	pesticides to prevent these chemicals from coming	
	into contact with rainwater.	
	Restrict amount of pesticide prepared to quantity	
	necessary for the current application.	
	Do not apply fertilizers or pesticides during or	
	just before a rain event.	
	Do not apply to stormwater conveyance	
	channels with flowing water.	
	Comply with fertilizer and pesticide	
	manufacturer's recommended usage and disposal	
	instructions. Document departures from	
	manufacturer's specifications in Attachment J.	
	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.	
	Follow federal, state, and local laws regarding fortilizer application.	
	fertilizer application.	
	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.	

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Hazardous	 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. See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements. Do not dispose of toxic materials in dumpsters 	See Hazardous
waste (Batteries, Solvents, Treated Lumber, etc.)	allocated for construction debris. 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. 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. 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. 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. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.	Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12

Pollutant Source		
	 Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements. See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements. 	
Metals and Building Materials	 Inspect construction waste and recycling areas regularly. Schedule solid waste collection regularly. If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers. Minimize the amount of material stored on site. Do not stockpile uncovered metals or other building materials in close proximity to discharge points. See Solid Waste Management Section SM-6 for additional requirements. 	See Solid Waste Management Section SM-6
Contaminated Soil	 See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements. At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets. 	See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9

Pollutant Source	Appropriate Site-Specific BMP to be	BMP Poquiroments
	Implemented	Requirements
Fugitive Dust Control and Dust Control Water	 Do not over spray water for dust control purposes which will result in runoff from the area. Apply water as conditions require. Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed. Minimize exposed areas through the schedule of construction activities. Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil. Direct construction vehicle traffic to stabilized roadways. Cover dump trucks hauling material from the site with a tarpaulin. See Dust Control Section SM-19 for additional 	See Dust Control Section SM-19
Concrete Truck Wash Water	 Disposal of concrete truck wash water via percolation is prohibited. Wash concrete-coated vehicles or equipment off-site or in the designated wash area. 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. Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set. Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation. The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground. Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin. Do not dump liquid wastes into storm drainage system. Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards. See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements. 	See Waste Management, Concrete Wash and Waste Management Section SM-4

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Sediment Track-Out	 Include Stabilized Construction Entrance at all points that exit onto paved roads. A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit. The pavement shall not be cleaned by washing down the street. 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. Use BMPs for adjacent drainage structures. Remove sediment tracked onto the street by the end of the day in which the track-out occurs. Restrict vehicle use to properly designated exit points. Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met. See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements. 	See Stabilized Construction Entrance/Exit Section SC-11
Irrigation Water	 Consider irrigation requirements. Where possible, avoid species which require irrigation. Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system. See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements. 	See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD- 12 Efficient Irrigation
Hydrotesting Effluent	• 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.	Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Dewatering Effluent	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.	See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.
Saw-cutting Slurry	 Saw cut slurry shall be removed from the site by vacuuming. 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. 	See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable
Concrete Curing Water	 Avoid overspraying of curing compounds. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound. See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements. 	See California Stormwater BMP Handbook NS- 12 Concrete Curing

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Plaster Waste Water	 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. 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. 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. 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. 	See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9
Water-Jet Wash Water	 For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical. See Vehicle and Equipment Cleaning Section SM-11 for additional information. For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters. 	See Vehicle and Equipment Cleaning Section SM-11
Sanitary/Septic Waste	 Locate Sanitary facilities in a convenient place away from drainage facilities. Position sanitary facilities so they are secure and will not be tipped over or knocked down. Wastewater shall not be discharged to the ground or buried. A licensed service provider shall maintain sanitary/septic facilities in good working order. Schedule regular waste collection by a licensed transporter. See Sanitary Waste Section SM-7 for additional requirements. 	See Sanitary Waste Section SM-7.

4	4′	7
4	48	8
4	49	9

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

50 51

52

55

6 Inch HMA Base Course

Pay Item

Pay Unit

SY

53 54

56 57 58

59 60

61 62 63

64 65

66

(1) 80% of the contract unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture by rolling;

20% of the contract unit price upon completion of cutting **(2)** samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and final analysis.

The Engineer may, in lieu of requiring removal and replacement, use the sliding scale factor to accept HMAB compacted below 92.0 percent. The Engineer will make payment for the material in that production day at a reduced price arrived at by multiplying the contract unit price by the pay factor shown in Table 301.05-1.

Table 301.05-1 – Sliding Scale Pay Factor			
Percent Compaction Percent Payment			
92.0 or greater	100		
90.0 – 91.9	80		
<90.0 Removal			

71 72

73 74

END OF SECTION 301

1		SECTION 401 – HOT MIX ASPHALT (HMA) PAVEMENT	
2 3	Make the	e following amendments to said Sections:	
4 5 6 7	401.01 HMA pay	Description. This section describes furnishing and placing dervement (herein referred to as HMA) on a prepared surface.	nse graded
8 9	401.02	Materials.	
10	Asphalt 0	Cement (PG 64-16)	702.01(A)
11 12	Use for n	non-surface mixes, unless otherwise specified in the project doc	uments.
13 14	Asphalt (Cement (PG 64E-22)	702.01(B)
15 16 17 18	specified	all surface mixes, except for on Lanai and Molokai, and unless in the project documents. Polymer modified asphalt (PMA) asphalt mix using PG 64E-22, unless otherwise indicated.	
19 20	Emulsifie	ed Asphalt	702.04
21 22	Warm Mi	ix Asphalt Additive	702.06
23 24	Aggregat	te for Hot Mix Asphalt Pavement	703.09
2526	Filler		703.15
27 28	Hydrated	Lime or a liquid anti-strip approved by the engineer	712.03
29 30 31 32		(a) General. HMA pavement shall be plant mixed and sh ixture of aggregate and asphalt binder and may include reclaim evement (RAP) or filler, or both.	
33 34 35 36 37		The manufacture of HMA may include warm mix asphocesses in accordance with these specifications. WMA process ombinations of organic additives, chemical additives, and foaming	ses includé
38 39 40 41		HMA pavement shall include surface course and may inclore binder courses, depending on HMA pavement thickness in e contract documents.	
42 43 44 45 46	pe ma	RAP is defined as removed or reprocessed pavement ontaining asphalt and aggregates. Process RAP by crushing ercent of RAP passes 3/4-inch sieve. Size, grade uniformly, an aterials such that blend of RAP and aggregate material conforms quirements of Subsection 703.09 - Aggregate for Hot M	g until 100 nd combine s to grading

In surface and binder courses, aggregate for HMA may include RAP quantities up to 20 percent of total mix weight.

Quantity of filler material to correct deficiencies in aggregate gradation passing the No. 200 sieve shall not exceed 3 percent by weight of fine aggregates.

(B) Job-Mix Formula and Tests. Design job-mix formula in accordance with procedures contained in current edition of Asphalt Institute's *Mix Design Methods for Asphalt Concrete and Other Hot Mix Types,* Manual Series No. 2 (MS-2) for either Marshall Method or Hveem Method of Mix Design.

Limit compacted lift thickness and asphalt content of job-mix formula as specified in Table 401.02-1 - Limits of Compacted Lift Thickness and Asphalt Content.

TABLE 401.02-1 - LIMITS OF COMPACTED LIFT THICKNESS AND ASPHALT CONTENT				
MIX NO.	II	III	IV	V
Minimum to Maximum	2-1/4	2	1-1/2	1-1/4
Compacted Thickness for	to	to	to	to
Individual Lifts (Inches)	3	3	3	3
Asphalt Content Limits	3.8	4.3	4.3	4.8
(Percent of Total Weight of	to	to	to	to
Mix)	6.1	6.1	6.5	7.0

Asphalt content limits for porous aggregate may be exceeded only if it is requested ahead of placement and is reviewed then accepted in writing by the Engineer.

Meet job-mix formula design criteria specified in Table 401.02-2 - Job-Mix Formula Design Criteria.

TABLE 401.02-2 - JOB-MIX FORMULA DESIGN CRITERIA		
Hveem Method Mix Criteria (AASHTO T 246 and AASHTO T 247)		
Stability, minimum	37	
Air Voids (percent) ¹	3 - 5	
Marshall Method Mix Criteria (AASHTO T 245)		
Compaction (number of blows each end of specimen)	75	
Stability, minimum (pounds)	1,800	
Flow (x 0.01 inch)	8 - 16	
Air Voids (percent) ¹	3 - 5	
Notes: 1. Air Voids: AASHTO T 166 or AASHTO T 275; AASHTO T 209, AASHTO T 269.		

Minimum percent voids in mineral aggregates (VMA) of job-mix formula shall be as specified in Table 401.02-3 - Minimum Percent Voids in Mineral Aggregates (VMA).

TABLE 401.02-3 - MINIMUM PERCENT VOIDS IN MINERAL AGGREGATES (VMA)						
Nominal Maximum Particle Size, (Inches) 1-1/2 1 3/4 1/2 3/8						
VMA, (percent) ¹ 11.0 12.0 13.0 14.0 15.0						
Notes: 1. VMA: See Asphalt Institute Manual MS-2						

(C) Submittals. Establish and submit job-mix formula for each type of HMA pavement mix indicated in the contract documents a minimum of 30 days before paving production. Job mix shall include the following applicable information:

(1) Design percent of aggregate passing each required sieve size.

(2) Design percent of asphalt binder material (type determined by type of mix) added to the aggregate (expressed as % by weight of total mix),

(3) Design proportion of processed RAP.

(4) Design temperature of mixture at point of discharge at paver.

98	
99	(7) Test data used to deve
100	
101	Except for item (4) in this s
102	modified after the Engineer accepts
103	formula before using HMA produced
104	changes to the design temperature
105	acceptance by the Engineer.
106	
107	Submit a certificate of complia
108	by substantiating test data from a ce
109	(D) Donne of Toloronous for I
110	(D) Range of Tolerances for I
111	tolerances of accepted job-mix form
112	Range of Tolerances HMA. These
113	design of the job mix, they are sole
114	production field sample of the HMA r
115	
	TABLE 401.02-4 - RANGE
	Passing No. 4 and larger sieves (pe
	Passing No. 8 to No. 100 sieves (in
	Passing No. 200 sieve (percent)
	Asphalt Content (percent)
	Mixture Temperature (degrees F)
116	
117	The tolerances shown are the allo
118	characteristics of laboratory job mix s
119	or operational mix, i.e., field samples
120	404.00
121	401.03 Construction.
122	(A) Mostley Limitations Discou
123	(A) Weather Limitations. Placer
124	the following conditions:
125	(4) On wat auriana a a
126	(1) On wet surfaces, e.g.,
127	surface that has aggregate o
128 129	saturated dry, as determined l
177	

(5)	Source o	f aggregate.
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- (6) Grade of asphalt binder.
- lop job-mix formula.

subsection, if design requirements are s job-mix formula, submit new job-mix from modified mix design. Submit any e of mixture at point of discharge for

nce for the asphalt binder, accompanied rtified testing laboratory.

HMA. Provide HMA within allowable nula as specified in Table 401.02-4 tolerances are not to be used for the ely to be used during the testing of the nix.

TABLE 401.02-4 - RANGE OF TOLERANCES HMA		
Passing No. 4 and larger sieves (percent)	± 7.0	
Passing No. 8 to No. 100 sieves (inclusive) (percent)	± 4.0	
Passing No. 200 sieve (percent)	± 3.0	
Asphalt Content (percent)	± 0.4	
Mixture Temperature (degrees F)	± 20	

owable variance between the physical submitted mix design and the production

- ment of HMA shall not be allowed under
 - surface with ponding or running water, or surface that appears beyond surface by the Engineer.

130		(2) When	air temperature is below 50 degrees F and falling. HMA
131		` '	olied when air temperature is above 40 degrees F and
132		• • • •	emperature will be measured in shade and away from
133		artificial hea	
134			
135		(3) When	n weather conditions prevent proper method of
136		construction	· · · · · · · · · · · · · · · · · · ·
137			•
138	(B)	Equipment.	
139	(-)	_qa.po	
140		(1) Mixin	g Plant. Use mixing plants that conform to AASHTO M
141			mented as follows:
142		100, Supplei	nonted as follows.
143		(a)	All Plants.
144		(α)	All Fiditio.
145			1. Automated Controls. Control proportioning,
146			mixing, and mix discharging automatically. When RAP
147			is incorporated into mixture, provide positive controls for
148			proportioning processed RAP.
149			proportioning processed IVAF.
150			2. Dust Collector. AASHTO M 156, Requirements
			•
151			for All Plants, Emission Controls is amended as follows:
152			Equip plant with dust collector. Dispose of
153			Equip plant with dust collector. Dispose of
154			collected material. In the case of baghouse dust
155			collectors, dispose of collected material or return
156			collected material uniformly.
157			2 Modifications for Drossesing DAD W/b or DAD
158			3. Modifications for Processing RAP. When RAP
159			is incorporated into mixture, modify mixing plant in
160			accordance with plant manufacturer's recommendations
161			to process RAP.
162		41.5	
163		(b)	Drum Dryer-Mixer Plants.
164			
165			1. Bins. Provide separate bin in cold aggregate
166			feeder for each individual aggregate stockpile in mix.
167			Use bins of sufficient size to keep plant in continuous
168			operation and of proper design to prevent overflow of
169			material from one bin to another.
170			

171	2. Stockpiling Procedures. Separate aggregate
172	for Mix II, Mix III and Mix IV into at least three stockpiles
173	with different gradations as follows: coarse,
174	intermediate, and fine. Separate aggregates for Mix V
175	into at least two stockpiles. Stockpile RAP separately
176	from virgin aggregates.
177	
178	3. Checking Aggregate Stockpile. Check
179	condition of the aggregate stockpile often enough to
180	ensure that the aggregate is in optimal condition.
181	
182	(c) Batch and Continuous Mix Plants.
183	
184	1. Hot Aggregate Bin. Provide bin with three or
185	more separate compartments for storage of screened
186	aggregate fractions to be combined for mix. Make
187	partitions between compartments tight and of sufficient
188	height to prevent spillage of aggregate from one
189	compartment into another.
190	
191	2. Load Cells. Calibrated load cells may be used in
192	batch plants instead of scales.
193	
194	(2) Hauling Equipment. Use trucks that have tight, clean, smooth
195	metal beds for hauling HMA.
196	
197	Thinly coat truck beds with a minimum quantity of non-stripping
198	release agent to prevent mixture from adhering to beds. Diesel or
199	petroleum-based liquid release agents, except for paraffin oil, shall not
200	be used. Drain excess release agent from truck bed before loading
201	with HMA.
202	
203	Provide a designated clean up area for the haul trucks.
204	
205	Equip each truck with a tarpaulin conforming to the following:
206	
207	(a) In good condition, without tears and holes.
208	
209	(b) Large enough to be stretched tightly over truck bed,
210	completely covering mix. The tarpaulin shall be secured in such
211	a manner that it remains stretched tightly over truck bed and
212	HMA mix until the bed is about to be raised up in preparation
213	for discharge.
214	

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- (3) Asphalt Pavers. Use asphalt pavers that are:
 - (a) Self-contained, power-propelled units.
 - **(b)** Equipped with activated screed or strike-off assembly, heated if necessary.
 - **(c)** Capable of spreading and finishing courses of HMA mixtures in lane widths applicable to typical section and thicknesses indicated in the contract documents.
 - **(d)** Equipped with receiving hopper having sufficient capacity for uniform spreading operation.
 - **(e)** Equipped with automatic feed controls to maintain uniform depth of material ahead of screed.
 - **(f)** Equipped with automatic screed controls with sensors capable of sensing grade from outside reference line, sensing transverse slope of screed, and providing automatic signals to control screed grade and transverse slope.
 - **(g)** Capable of operating at constant forward speeds consistent with satisfactory laying of mixture.
 - (h) Equipped with a means of preventing the segregation of the coarse aggregate particles from the remainder of the bituminous plant mix when that mix is carried from the paver hopper back to the paver augers. The means and methods used shall be approved by the paver manufacturer and may consist of chain curtains, deflector plates, or other such devices and any combination of these.

The following specific requirements shall apply to the identified bituminous pavers:

- 1. Blaw-Knox Bituminous Pavers. Blaw-Knox bituminous pavers shall be equipped with the Blaw-Knox Materials Management Kit (MMK).
- Cedarapids Bituminous Pavers. Cedarapids bituminous pavers shall be those that were manufactured in 1989 or later.

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3. Barber-Green/Caterpillar Bituminous Pavers.
Barber-Green/Caterpillar bituminous pavers shall be equipped with deflector plates as identified in the December 2000 Service Magazine entitled "New Asphalt Deflector Kit {6630, 6631, 6640}".

Bituminous pavers not listed above shall have similar attachments or designs that shall make them equivalent to the bituminous pavers listed above. The Engineer will solely decide if it is equal to or better that the setups described for the equipment listed above.

Submit for review and acceptance, prior to the start of using the paver for the placing of plant mix, a full description in writing of the means and methods that will be used to prevent the bituminous paver from having both aggregate and temperature segregation. Use of any paver that has not been accepted is prohibited until acceptance of the paver is received from the Engineer. Any pavement placed with an unaccepted paver will be regarded as not compliant work and may not be paid for and may require removal.

Supply a Certificate of Compliance that verifies that the manufacturer's approved means and methods used to prevent bituminous paver from having both aggregate and temperature segregation have been implemented on all pavers used on the project and are working in accordance with the manufacturer's requirements and Contract Documents.

- (4) Rollers. Rollers shall be self-propelled, steel-tired tandem, pneumatic-tired, or vibratory-type rollers capable of reversing without shoving or tearing the just placed HMA mixture. Provide sufficient number, sequencing, type, and rollers of sufficient weight to compact the mixture to required density while mixture is still in workable condition unless otherwise indicated. Equipment shall not excessively crush aggregate. Operate rollers in accordance with manufacturer's recommendations and Contract Documents. The use of intelligent compaction is encouraged and may be required elsewhere in the Contract Documents.
 - (a) Steel-Tired Tandem Rollers. Steel-tired tandem rollers used for initial breakdown or intermediate roller passes shall have minimum gross weight of 12 tons and shall provide minimum 250-pound weight per linear inch of width on drive wheel.

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Steel-tired tandem rollers used for finish roller passes shall have minimum total gross weight of 3 tons.

Do not use roller with grooved or pitted rolling drum or worn scrapers or wetting pads. Replace excessively worn scrapers and wetting pads before use.

(b) Pneumatic-Tired Rollers. Pneumatic-tired rollers shall be oscillating-type, equipped with smooth-tread pneumatic tires of equal size and diameter. Maintain tire pressure within 5 pounds per square inch of designated operational pressure when hot. Space tires so that gaps between adjacent tires are covered by following set of tires.

Pneumatic-tired rollers used for breakdown or intermediate roller passes shall have a ballast capable of establishing an operating weight per tire of not less than 3,000 pounds. Equip rollers with tires having minimum 20-inch wheel diameter with tires inflated to 70 to 75 pounds per square inch pressure when cold and 90 pounds per square inch when hot. Equip rollers with skirt-type devices to maintain temperature of tires during rolling operations.

Pneumatic-tired rollers used for kneading finished asphalt surfaces shall have a ballast capable of establishing an operating weight per tire of not less than 1,500 pounds. Equip rollers with tires having minimum 15-inch wheel diameter with tires inflated to 50 to 60 pounds per square inch pressure. If required, equip rollers with skirt-type devices to maintain temperature of tires during rolling operations.

- (c) Vibratory Rollers. Vibratory rollers shall be steel-tired tandem rollers having minimum total weight of 3 tons. Equip vibratory rollers with amplitude and frequency controls and speedometer. Operate vibratory roller in accordance with manufacturer's recommendations. For very thin lifts, 1 inch or less in thickness, vibratory rollers shall not be used in the vibratory mode. Instead, operate the unit in the static mode.
- (5) Hand Tools. Keep hand tools used in production, hauling, and placement of HMA clean and free of contaminants. Diesel or mineral spirits or other cleaning material that is potentially deleterious to HMA may be used to clean hand tools providing:
 - (a) It does not contaminate HMA with cleaning material.

351		` '	n hand tools over catch pan with capacity to hold all
352		the cleaning	g material.
353		(a) Dom	ave all discal or mineral enivite or other election
354 355		` '	ove all diesel or mineral spirits or other cleaning
356			at is potentially deleterious to HMA from hand tools g with HMA.
357		before dailing	g with thin.
358		(d) Hand	d tools used shall be in a condition such that it meets
359		` '	ements that it was manufactured for, e.g., a
360		•	e shall meet the straightness requirement of the
361		manufactur	· ·
362			
363	(6)	Material Tr	ansfer Vehicle (MTV).
364			
365		` '	ge. MTV usage applies to surface courses of paving
366			all Islands except Lanai, unless otherwise indicated.
367		•	ng HMA surface course use MTV to independently
368			rures from hauling equipment to paving equipment.
369 370		wii v usage	will not be required for the following:
370 371		1.	Projects with less than 1,000 tons of HMA.
372		••	1 Tojecta with 1633 than 1,000 tona of ThinA.
373		2.	Temporary pavements.
374			
375		3.	Bridge deck approaches.
376			
377		4.	Shoulders.
378		_	-
379		5.	Tapers.
380 381		6.	Turning lanes.
382		0.	running lanes.
383		7.	Driveways.
384			·
385		8.	Areas with low overhead clearances.
386			
387			pment. When using MTV, install minimum 10-ton-
388			pper insert in conventional paver hopper. Provide
389 390		the followin	g equipment:
390 391		1.	High-capacity truck unloading system in MTV
392			ble of receiving HMA from hauling equipment.
393		25.00	gg
394		2.	MTV storage bin with minimum 15-ton capacity.
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3. An auger mixing system in one of the following: the MTV storage bin, or paver hopper insert, or paver hopper to continuously mix HMA prior to discharging to the paver's conveyor system.

Avoid stop-and-go operations by coordinating plant production rate, number of haul units, and MTV and paver speeds to provide a continuous, uniform, segregation-free material flow and smooth HMA pavement. Maintain uniform paver speed to produce smooth pavements.

(c) Performance Evaluation. Evaluate the performance of MTV and mixing equipment by measuring mat temperature profile immediately behind paver screed on first day of paving and when it feels the need to do so due to perceived changes in performance or as directed by the Engineer.

Use a hand-held temperature device that has been calibrated within the past 12 months. It shall be an infrared temperature gun is capable of measuring in one degree or finer increments between the temperatures of 80 degrees to 400 degrees F with a laser to indicate where the temperature reading is being taken. Six temperature profile measurements shall be taken of mat surface using infrared temperature gun at 50-foot intervals behind paver. Each temperature profile shall consist of three surface temperature measurements taken transversely across the mat in approximately a straight line from screed while paver is operating. For each profile, temperatures shall be measured approximately 1 foot from each edge and in middle of mat. The difference between maximum and minimum temperature measurements for each temperature profile shall not exceed 10 degrees F. If any two or more temperature profiles exceeds the allowable 10-degree F temperature differential, halt paving operation and adjust MTV or mixing equipment to ensure that material placed by paver meets specified temperature requirements. Redo the measuring of mat temperature profile until adjustment of the MTV or mixing equipment is adequate. Submit all temperature profiles to the Engineer by next business day. Information on the report shall show location and temperature readings and time test was performed. Enough information shall be given, so the Engineer will be able to easily locate the test site of the individual measurement.

When requested temperature profile measurements shall be done in the presence of the Engineer.

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Once adjustments are made, repeat measurement procedure for the next two placements to verify that material placed by paver meets specified temperature requirements. Terminate paving if temperature profile requirements are not met during repeated measurement procedure. If equipment fails to meet requirements after measurement procedure is repeated once, replace equipment before conducting any further temperature profile measurements

The Engineer may perform surface temperature profile measurements at any time during project. The Engineer may in lieu of a hand-held infrared temperature device use an infrared camera or device that is capable of measuring temperatures to locate cold spots. If such cold spots exist, the Engineer may require adjustments to the MTV.

If bleeding or fat spots occur in the pavement adjust means and methods to eliminate such pavement defects and perform remedial repair to pavement acceptable to the Engineer. Bleeding is defined as excess binder occurring on the surface of the pavement. It may create a shiny, glass-like, reflective appearance and may be tacky to the touch. Fat spots are localized bleeding.

(d) Transport.

- 1. Trailered MTV. Transport MTV by means of truck-tractor/trailer combination in accordance with Chapter 104 of Title 19, Department of Transportation, entitled "The Movement by Permit of Oversize and Overweight Vehicles on State Highways".
- 2. Crossing Bridges for Self-Powered MTV. When self-powered MTV exceeds legal axle or total weight limits for vehicles under the HRS, Chapter 291, conform to the following when crossing bridges within project limits unless otherwise indicated:
 - **a.** Completely remove mix from MTV.
 - **b.** Move MTV at relatively constant speed not exceeding 5 miles per hour. MTV will not be allowed to stop on bridge.

486		С	. No other vehi	cle or equipment	will	be
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495	(C)	Preparation of Surfa				
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498	applic	ation of joint adhesive.				
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501		n by furnishing and pla				
502		/. Spread leveling course in variable thicknesses to eliminate irregularities				
503		sting surface. Place le			າ of ea	ich
504	course	e, when thoroughly cor	npacted, does not ex	ceed 3 inches.		
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506		In multiple-lift leveling	g course construction	n, spread subseq	uent li	ifts
507	beyon	d edges of previousl	y spread lifts in acc	cordance with pro	cedur	res
508	contai	ned in current edition of	of the Asphalt Institut	e's Construction o	f Hot N	Mix
509		alt Pavements, Manual				
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511		Notify the Engineer of	f existing surfaces tha	at mav not be in a	conditi	ion
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513		and should be removed or have remedial repairs done before new pavemer				
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516	(D)	Plant Operation.				
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518		(1) Preparation of	f Asphalt Binder . Ur	niformly heat asnh:	alt hind	der
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522		binders.	inca binacis or abov	c 550 degrees i	101 110	cat
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524		(2) Preparation o	f Aggregate . Dry ar	nd heat aggregate	matei	rial
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526 527		formula. Do not exce	<u> </u>	•		
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531		and drying into three	e or more tractions.	Convey aggrega	ates II	ΠĮΟ
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532 separate compartments ready for batching and mixing with asphalt 533 binder. 534 535 (3) **Mixing.** Measure aggregate and asphalt; or aggregate, RAP, and asphalt into mixer in accordance with an accepted job-mix 536 formula. Mix until components are completely mixed and adequately 537 538 coated with asphalt binder in accordance with AASHTO M 156. 539 Percent of coated particles shall be 95 percent when tested in 540 accordance with AASHTO T 195. 541 542 (4) **Plant Inspection.** For control and acceptance testing during periods of production, provide a testing laboratory that meets the 543 requirements of AASHTO M 156. Provide space, utilities, and 544 545 equipment required for performing specified tests. 546 547 **Spreading and Finishing.** Prior to each day's paving operation, (E) check screed or strike-off assembly surface with straight edge to ensure 548 straight alignment and there is no damage or wear to the machine that will 549 affect performance. Provide screed or strike-off assembly that produces 550 551 finished surface without tearing, shoving, and gouging HMA. Discontinue using spreading equipment that leaves ridges, indentations, or other marks, 552 553 or combination thereof in surface that cannot be eliminated by rolling or 554 affects the final smoothness of the pavement or be prevented by adjustment 555 in operation. 556 557 Maintain HMA at minimum 250 degrees F temperature at discharge to paver. The Engineer shall observe the contractor measuring the temperature 558 of mix in hauling vehicle just before depositing into spreader or paver or MTV. 559 560 561 Deposit HMA in a manner that minimizes segregation. Raise truck beds with tailgates closed before discharging HMA. 562 563 564 Lay, spread, and strike off HMA upon prepared surface. Where practical, use asphalt pavers to distribute mixture. 565 566 567 Where practical, control horizontal alignment using automatic grade and slope controls from reference line, slope control device. 568 pavements or features shall not be used for grade control alone. 569 570 571 Obtain sensor grade reference, horizontal alignment by using established grade and slope controls. For subsequent passes, substitution 572 573 of one ski with joint-matching shoe riding on finished adjacent pavement is acceptable. Use of a comparable non-contact mobile reference system and 574 joint matching shoe is acceptable. 575 576

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Avoid stop-and-go operation. Maintain a constant forward speed of paver during paving operation and minimize other methods that impact smoothness.

Offset longitudinal joint in successive lifts by approximately 6 inches. Incorporate into paving method an overlap of material of 1-inch +/- 0.5 inches at the longitudinal joint. The HMA overlap material shall be left alone when initially placed and shall not be bumped back or pushed back with a lute or any other hand-held device. If the overlap exceeds the maximum amount, remove the excess with a flat shovel, allowing recommended amount of overlap HMA material to remain in place to be compacted. Do not throw the removed excess HMA material on to the paving mat. The longitudinal joint in a surface course when total roadway width is comprised of two lanes shall be near the centerline of pavement or near lane lines when roadway is more than two lanes in width. The longitudinal joint shall not be constructed in the wheel path or under the longitudinal lane lines. Make a paving plan drawing showing how the longitudinal joint will not be located in these areas.

Control the horizontal alignment of the longitudinal edge of the HMA mat being installed so that the edge is parallel to the centerline or has a uniform alignment, e.g., the edge of the mat is straight line or uniform curve, no wavy edge, etc. to have a consistent amount of HMA material at the joint.

Check the compaction of the longitudinal joint during paving often enough to ensure that it will meet the compaction requirements.

If nuclear gauges and ground penetrating radar are used as the contractor's quality control method, they shall be properly calibrated and periodically checked by comparison to cores taken from the pavement. The use of sand as an aid in properly seating the gauge may also be considered for improving the accuracy of the gauge.

In areas where irregularities or unavoidable obstacles make use of mechanical spreading and finishing equipment impracticable, spread, rake, and lute mixture by hand tools. For such areas, deposit, spread evenly, and screed mixture to required compacted thickness.

Demonstrate competence of personnel operating grade and crown control device before placing surface courses. If automatic control system becomes inoperative during the day's work, the Engineer will permit the Contractor to finish day's work using manual controls. The Engineer may also allow additional HMA to be ordered and placed using manual controls if it will provide a safer work site for the public to travel through. Do not resume work until automatic control system is made operative. The Engineer may waive requirement for electronic screed control device when paving gores,

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shoulders, transitions, and miscellaneous reconstruction areas where the use of the devices is not practical.

When production of HMA can be maintained and when practicable, use pavers in echelon shall be used to place surface course in adjacent lanes.

At the end of each workday, HMA pavement that is open to traffic shall not extend beyond the panel of the adjacent new lane pavement by more than the distance normally placed in one workday. At end of each day's production, construct tapered transitions along all longitudinal and transverse pavement drop-offs; this shall apply to areas where existing pavement is to meet newly placed pavement. Use slopes of 6:1 for longitudinal taper transitions and 48:1 for transverse tapered transitions. Maximum drop-off height along the joints shall be 3 inches. Also, using a 48:1 slope provides a taper around any protruding object, e.g., manholes, drain boxes, survey monuments, inlets, etc., that may be above pavement surface when opened to the public. If the object is below the surface of the pavement then fill the depression until it is level with the surrounding pavement or raise depressed objects to the finish grade of the placed pavement. Remove and dispose of all transition tapers before placing adjoining panel or next layer of HMA. Notify traveling public of pavement drop-offs or raised objects with signs placed in every direction of traffic that may use and encounter pavement drop-offs or protruding objects or holes.

Use the same taper rates for areas where there is a difference in elevation due to construction work.

At end of each workweek, complete full width of the roadway's pavement, including shoulders, to same elevation with no drop-offs.

(F) Compaction. Immediately after spreading and striking off HMA and adjusting surface irregularities, uniformly compact mixture by rolling.

Initiate compaction at highest mix temperature allowing compaction without excessive horizontal movement. Temperature shall not be less than 220 degrees F.

Finish rolling using tandem roller while HMA temperature is at or above 175 degrees F.

On superelevated curves, begin rolling at lower edge and progress to higher edge by overlapping of longitudinal trips parallel to centerline.

If necessary, repair damage immediately using rakes and fresh mix. Do not displace line and grade of HMA edges during rolling.

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711 712 713 Keep roller wheels properly moistened with water or water mixed with small quantities of detergent. Use of excess liquid, diesel, and petroleumbased liquids will not be allowed on rollers.

Along forms, curbs, headers, walls and other places not accessible to rollers, compact mixture with hot hand tampers, smoothing irons, or mechanical tampers. On depressed areas, trench roller or cleated compression strips under roller may be used to transmit compression.

Before the start of compaction or during compaction or both remove pavement that is loose, broken, or contaminated, or combination thereof; pavement that shows an excess or deficiency in asphalt binder content; and pavement that is defective in any way. Replace with fresh HMA pavement of same type, and compact. Remove and replace defective pavement and compact at no increase in contract price or contract time.

Operate rollers at slow and uniform speed with no sudden stops. The drive wheels shall be nearest to the paver. Continue rolling to attain specified density and until roller marks are eliminated.

Rollers shall not be parked on the pavement placed that day or shift.

(1) HMA Pavement Courses One and a Half Inches Thick or Greater. Where HMA pavement compacted thickness indicated in the Contract Documents is 1-1/2 inches or greater, compact to not less than 93.0 percent nor greater than 97.0 percent of the maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate.

Place HMA pavement in individual lifts that are within minimum and maximum allowable compacted thickness for various types of mixture as specified in Table 401.02-1 - Limits of Compacted Lift Thickness and Asphalt Content.

(2) HMA Pavement Courses Less Than One and a Half Inches Thick. Where HMA pavement compacted thickness indicated in the contract documents is less than 1-1/2 inches, compaction to a specified density will not be required.

Use only non-vibratory, steel-tired, tandem roller. Roll entire surface with minimum of two roller passes. A roller pass is defined as one trip of the roller in one direction over any one spot.

For intermediate rolling, roll entire surface with minimum of four

passes of roller.

Finish rolling using steel-tired, tandem roller. Continue rolling until entire surface has been compacted with minimum of three passes of roller, and roller marks have been eliminated.

Do not use rollers that will excessively crush aggregate.

- (3) HMA Pavement Courses One and a Half Inches Thick or Greater In Special Areas Not Designated For Vehicular Traffic. For areas such as bikeways that are not part of roadway and other areas not subjected to vehicular traffic, compact to not less than 90.0 percent of maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. Increase asphalt content by at least 0.5 percent above that used for HMA pavements designed for vehicular traffic. Paved shoulders shall be compacted in the same manner as pavements designed for vehicular traffic.
- (G) Joints, Trimming Edges and Utility Marking. At HMA pavement connections to existing pavements, make joints vertical to depth of new pavement. Saw cut existing pavement and cold plane in accordance with Section 415 Cold Planing of Existing Pavement to depth equal to thickness of surface course or as indicated in the Contract Documents.

At HMA connections to previously placed lifts, form transverse joints by cutting back on previous run to expose full depth of course. Dispose of material trimmed from edges. Protect end of freshly laid mixture from rollers.

Before and after paving, identify and mark location of existing utility manholes, valves, and handholes on finished surface. Adjust existing frames and covers and valve boxes to final pavement finish grade in accordance with Section 604 - Manholes, Inlets and Catch Basins and Section 626 - Manholes and Valve Boxes for Water and Sewer Systems.

(1) Longitudinal joints. Submit for review the means and methods that will be used to install longitudinal joints at the required compaction and density. Compact longitudinal joints to be not less than 91.0 percent of the maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. Verify the compaction of the longitudinal joints meets requirements by using non-destructive testing methods during paving and submit the results on the daily quality control test reports.

 Test for compaction and density regardless of layer thickness. Compaction and density of the longitudinal joint shall be determined by using six-inch diameter cores. For longitudinal joints made using butt joints cores shall be taken over the joint with half of the core being on each side of the joint. For longitudinal joints using butt wedge joints, center core over the center of the wedge so that 50 percent of the material is from the most recently paved material and the remaining 50 percent of the core is from the material used to pave the previous layer. One core shall be taken at a maximum of every 250 tons of longitudinal joint and any fraction of that length for each day of paving with a minimum of one core taken for each longitudinal joint per day. Cores taken for the testing of the longitudinal joint may be used to determine pavement thickness.

When the longitudinal joints are found to have less than 91.0 percent of the maximum specific gravity, overband all longitudinal joints within the entire lot represented by the non-compliant core, PG binder seal coat, or other type of joint enrichment accepted by the Engineer. The overband shall not decrease the skid resistance of the pavement under any ambient weather Submit overband material's catalog cuts, test results and application procedure for review and acceptance by the Engineer before use. Center the overband over the longitudinal joint. The overband shall be placed in a uniform width and horizontal alignment. The overband shall have no holidays or streaking in its placement. The width of the overband shall be based on how the longitudinal joint was constructed or as directed by the Engineer. If a butt joint is used, the overband width shall be a minimum of 12-inches. For butt wedge or wedge joints the overband width shall be the width of the wedge plus an additional six-inches minimum. Replace any pavement markings damaged or soiled by the overband remedial repair process.

For longitudinal joints that have a compaction of less than 89 percent of the maximum specific gravity; removal may be required by the Engineer instead of overbanding the non-compliant joint.

Persistent low compaction results may be a cause to suspend work and remove non-conforming work. During the suspension of paving, revise means and methods used in constructing longitudinal joints and submit to the Engineer for review and acceptance. Suspension may occur when:

- (1) Two or more longitudinal joints tests fail to meet the minimum compaction
- (2) One sample reveals that the joint compaction is 89 percent or less.

Compaction results for longitudinal joints until January 1, 2023 will not be included in any Sliding Scale Pay Factor for Compaction payment calculation. After, January 1, 2023 it will be included.

(H) HMA Pavement Samples. Obtain test samples from compacted HMA pavement within 72 hours of lay down. Provide minimum 4-inch diameter cores consisting of undisturbed, full-depth portion of compacted mixture taken at locations designated by the Engineer in accordance with the "Sampling and Testing Guide for Acceptance and Verification" in Hawaii DOT Highways Division, *Quality Assurance Manual for Materials*, Appendix 3. Cores shall be taken in the presence of the Engineer. Turn cores over to Engineer immediately after cores have been taken.

For pavement samples for longitudinal joints provide 6-inch diameter cores minimum. For pavement samples for other than longitudinal joints 4-inch diameter cores minimum shall be taken. All cores shall consist of undisturbed, full-depth of the lift of the compacted mixture taken at locations designated by the Engineer in accordance with the "Sampling and Testing Guide for Acceptance and Verification" in Hawaii DOT Highways Division, *Quality Assurance Manual for Materials*, appendix 3. Coring of longitudinal joints shall use a modified HDOT Sampling and Testing Guide as required by the Contract Documents.

Cores that separate shall indicate to the Engineer that there is insufficient bonding of layers. Modify the previously used paving means and methods to prevent future debonding of layers. Debonding of a core sample after adjustment of the Contractor's methods will be an indication of continued non-conforming work and the Engineer may direct removal of the layer at no additional cost or contract time.

Restore HMA pavement immediately after obtaining samples. Clean core hole and walls of all deleterious material that will prevent the complete filling of the core hole and the bonding of the new HMA to the existing. Apply tack coat to vertical faces of sample holes. Fill sampled area with new HMA pavement of same type as that removed. If hand compaction is used; fill in layers not exceeding the minimum thickness stated in Table 401.02-1 - Limits of Compacted Lift Thickness And Asphalt Content. Compact each layer to compaction requirements. If Mechanical Compaction methods are used, then layers may be the maximum layer thickness stated in Table 401.02-1 - Limits of Compacted Lift Thickness And Asphalt Content. Using tires or hand tamping to compact the HMA material to restore the pavement shall not be considered as mechanical compaction.

Only sample and test leveling course if 1-1/2 inches or greater. No compaction requirements for less than 1-1/2 inches.

(I) HMA Pavement Thickness Tolerances.

The Engineer will measure thickness of pavement by cores obtained by the Contractor in accordance with HDOT TM 09-19 Field Sampling Bituminous Material after Compaction (Obtaining Cores). The Engineer will measure cores in accordance with HDOT TM 09-19, except that measurement will be taken to nearest one thousandth of an inch; and average of such measurements will be taken to nearest one hundredth of an inch.

Thickness of finished HMA pavement shall be within 0.25 inch of thickness indicated in the Contract Documents. Pavement not meeting the thickness requirements of the Contract Documents may be required by the Engineer to be removed and replaced.

Corrective methods taken on pavement exceeding specified tolerances, e.g., insufficient thickness by methods accepted by the Engineer, including removal and replacement, shall be at no increase in contract price or contract time.

The checking of pavement thickness shall be done after all remedial repairs, e.g., smoothness compliance repairs, compaction, have been completed, reviewed, and accepted by the Engineer.

(J) Quality Control Using New Technology. The Engineer and MTRB reserves the right to utilize new technology and methods to improve the detection of noncompliant work on the project. The technology or method may be used to locate defects in the work, e.g., ground penetrating radar to locate delaminations, moisture damage, thin sections, voids, non-compliant compaction, other non-destructive testing to locate flaws. The defect will be verified by the methods stated in the Contract Documents or by other established conventional means. If the technology or method has already been accepted elsewhere or has standardized testing procedures the results may be judged acceptable by the Engineer and no further testing will be required. These new technologies and methods may be used for the selection of sampling locations.

(K) Protection of HMA Pavement. Except for construction equipment directly connected with paving operations, keep traffic off HMA pavement.

Protect HMA pavement from damage until it has cooled and set.

Do not refuel equipment or clean equipment or hand tools over paved surfaces unless catch pan or device that will contain spilled fuel and other products is provided. After completion of refueling or cleaning, remove catch pan or device without spilling any of the collected content.

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Do not park roller or other paving equipment on HMA pavement paved within 24 hours of laydown.

(L) Pavement Joint Adhesive

- (1) Pavement Joint Adhesive on Joints. Use on all asphalt pavement construction where joints are formed at such locations but not limited to the following:
 - **(a)** Adjacent asphalt pavements, e.g., trafficked lanes, shoulders, etc.
 - **(b)** Asphalt pavement and adjacent concrete pavement or curb and gutter or any other surface where the bonding of the asphalt pavement and concrete surface is desired,
 - **(c)** Transverse joints between asphalt pavements not placed at the same time or if the pavement's temperature on one side of the joint is below the minimum temperature the mix can be at, during asphalt pavement compaction or installation.
 - **(d)** Cut face of an existing pavement where it will have new HMA pavement placed against it, e.g., utility trenches, partial or full depth repairs, etc.

Pavement joint adhesive is not required on a longitudinal construction joint between adjacent hot mix asphalt pavements formed by echelon paving. Echelon paving is defined as paving multiple lanes side-by-side with adjacent pavers slightly offset at the same time.

A longitudinal construction joint between one shift's work and another shall have pavement joint adhesive applied at the joint. Any longitudinal construction joint formed, with the temperature on one side of the joint that is below the minimum temperature the mix can be when compacted to contract requirements during asphalt pavement installation, shall have pavement joint adhesive applied at the joint.

(2) Material requirements. Asphalt joint adhesive shall meet requirements as specified in Table 401.03-1 - Asphalt Joint Adhesive Specifications.

TABLE 401.03-1 – ASPHALT JOINT ADHESIVE SPECIFICATIONS			
TEST		SPECIFICATION	
Brookfield Viscosity, 204 °C [400 °F]	ASTM D 3236	4,000-10,000 cp	
Cone Penetration, 25 °C [77 °F]	ASTM D 5329	60-100 dmm	
Resilience, 25 °C [77 °F]	ASTM D 5329	30% minimum	
Ductility, 25 °C [77 °F]	ASTM D 113	30 cm minimum	
Ductility, 4 °C [39.2 °F]	ASTM D 113	30 cm minimum	
Tensile Adhesion, 25 °C [77 °F]	ASTM D 5329	500% minimum	
Softening Point	ASTM D 36	77 °C [170 °F] min.	
Asphalt Compatibility	ASTM D 5329	Pass	

(3) Construction Requirements for Asphalt Joint Adhesive

(a) Equipment Requirements. Use a jacketed double boiler type melting unit, with both agitation and recirculation systems. Provide a pressure feed wand application system.

(b) Material Handling. Submit a copy of the manufacturer's recommendations for heating, re-heating, and applying the joint adhesive material. Follow manufacturer's recommendations. Do not remove the joint adhesive from the package until immediately before it is placed in the melter. Joint adhesive boxes must be clearly marked with the name of the manufacturer, the trade name of the adhesive, the manufacturer's batch and lot number, the application/pour temperature, and the safe heating temperature. Feed additional material into the melter at a rate equal to the rate of material used.

Verify the pouring temperature of the joint adhesive at least once per hour at the point of discharge. Stop production if the adhesive falls below the recommended application/pour temperature. When the temperature of the adhesive exceeds the maximum safe heating temperature, stop production, empty the melter, and dispose of that adhesive in an environmentally safe method. No payment will be made for this material or its disposal.

Do not blend or mix different manufacturer's brands or different types of adhesives.

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- (c) Joint Adhesive Application: The face of the joint that the new asphalt pavement will bind to shall be clean and dry before the joint adhesive is applied. Apply the pavement joint adhesive material to the entire face of the surface where HMA pavement shall be installed. The thickness of the asphalt adhesive application shall be approximately 1/8 inch. Use an application shoe attached to the end of application wand. Do not overlap the joint by greater than 1/2-inch at the top of the joint or two-inches at the bottom of the joint. Apply the joint adhesive immediately in front of the paving operation. If the adhesive is tracked by construction vehicles, repair the damaged area, and restrict traffic from driving on the adhesive.
- (d) Field Sampling. Take a sample from the application wand during the first 20 minutes of placing sealant. One sample should be taken per manufacturer's batch or minimum of every 6 months on the Project in the presence of the Engineer.

Each sample shall consist of one quart in an aluminum or steel sample container. The sampling container shall be labeled with Contractor's name; project name and number; date and time sample taken; location of where material was used at, e.g., from where to where it was used at in stations; manufacturer and lot number of the sealant. Turn over samples to Engineer without Engineer losing sight of the sample. The Engineer reserves the right to conduct supplementary sampling and testing of the sealant material.

(M) Pavement Smoothness Rideability Test. Perform surface profile tests frequently to ensure that the means and methods being used produces pavement that is compliant with the surface profile smoothness requirement. Test the pavement surface for smoothness with High-Speed Inertial Profiler to determine the International Roughness Index (IRI) of the pavement. For the locations determined by the Engineer, a 10-foot straightedge shall be used to measure smoothness.

All smoothness testing must be performed with the presence of the Engineer. The High-Speed Inertial Profiler operator shall be a certified operator by MTRB or the manufacturer.

The High-Speed Inertial Profiler operator's certification shall be no older than five years old at the date of the Notice to Proceed and at the day of the pavement profile measurement.

1015	The finished pavement shall comp
1016	
1017	(a) Smoothness Test using 1
1018	rolling) The 10-foot straightedge
1019	vary more than 3/16 inch from
1020	straightedge is laid on finished pay
1021	the centerline or perpendicular to
1022	that cause the surface to exceed t
1023	
1024	The Contractor shall use a 10-f
1025	locations:
1026	
1027	 Longitudinal profiling
1028	15 feet of a bridge approa
1029	being joined.
1030	
1031	2. Transverse profiling
1032	otherwise directed with resp
1033	
1034	a) Lay the straig
1035	to the centerline.
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1037	3. When pavement about
1038	not under this Contract, e
1039	deviations of the finished
1040	Document's requirements.
1041	4 Obt
1042	4. Short pavement sec
1043	both mainline and non-mai
1044	and on horizontal curves w
1045	than 1,000 feet.
1046	F \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
1047	5. Within a supereleva
1048	having centerline curve r
1049	curves, turn lanes, ramps
1050	pavements.
1051	•
1052	6. Within 15 feet of
1053	pavement from existing pa
1054	contract, or from bridge de
1055	profiling.
1056	
1057	7. At miscellaneous are
1058	less than 11 feet, such as m
1059	

The finished pavement shall comply to all the following requirements:

(a) Smoothness Test using 10-Foot Straightedge (Manual or rolling) The 10-foot straightedge is used to Identify the locations that vary more than 3/16 inch from the lower edge when the 10-foot straightedge is laid on finished pavement on the direction parallel with the centerline or perpendicular to centerline. Remove the high points that cause the surface to exceed that 3/16 inch tolerance by grinding.

The Contractor shall use a 10-foot straightedge for the following locations:

- **1.** Longitudinal profiling parallel to centerline, when within 15 feet of a bridge approach or existing pavement which is being joined.
- **2.** Transverse profiling of cross slopes, approaches, and as otherwise directed with respect to the requirements below:
 - **a)** Lay the straightedge in a direction perpendicular to the centerline.
- **3.** When pavement abuts bridge approaches or pavement not under this Contract, ensure that the longitudinal slope deviations of the finished pavement comply with Contract Document's requirements.
- **4.** Short pavement sections up to 600 feet long, including both mainline and non-mainline sections on tangent sections and on horizontal curves with a centerline radius of curve less than 1,000 feet.
- **5.** Within a superelevation transition on horizontal curves having centerline curve radius less than 1,000 feet, e.g., curves, turn lanes, ramps, tapers, and other non-mainline pavements.
- **6.** Within 15 feet of transverse joint that separates pavement from existing pavement not constructed under the contract, or from bridge deck or approach slab for longitudinal profiling.
- 7. At miscellaneous areas of improvement where width is less than 11 feet, such as medians, gore areas, and shoulders.

use it at locations not specifically stated in this Section.

(b) High-Speed Inertial Profiler

 There shall be a minimum 3 profile runs per lane, for each wheel path (left and right) which is approximately three feet from edge lane line. The segment length shall be 0.1 mi. The final segments in a lane that are less than 0.1 mi shall be evaluated as an independent segment and pay adjustments will be prorated for length. The profiles shall be taken in the direction of traffic only.

As otherwise directed by the Engineer. The Engineer

may confine the checking of through traffic lanes with the straightedge to joints and obvious irregularities or choose to

The latest version of FHWA ProVAL software shall be used to conduct profile analysis to determine IRI and areas of localized roughness. The IRI values shall be reported in units of in/mi.

Areas of localized roughness will be identified by using ProVAL's "Smoothness Assurance" analysis, calculating IRI with a continuous short interval of 25 feet and the 250-mm filter applied.

Additional runs may be required by the Engineer if the data indicate a lack of repeatability of results. A 92% agreement is required for repeatability and IRI values shall have at minimum a 95% confidence level.

(N) Required Pavement Smoothness

The IRI for the left and right wheel paths in an individual lane will be computed and then averaged to determine the Mean Roughness Index (MRI) values. The MRI will be used to determine acceptance and pay adjustment. Each lane shall be tested and evaluated separately.

There are three (3) categories of target MRI values:

TABLE 401.03-2 - PAVEMENT SMOOTHNESS CATEGORIES			
Category	Description	MRI	
Type A	Three or more opportunities for improving ride	Shall not exceed 60 in/mi	
Type B	Two opportunities for improving ride	Shall not exceed 70 in/mi	
Type C One opportunities for improving ride		Shall not exceed 75 in/mi	

1097 An opportunity for improving ride is considered as one (1) lift of asphalt 1098 pavement, including but not limited to HMAB, HMA, PMA, and SMA 1099 For the location where a 10-foot manual straightedge is required, the 1100 surface shall not vary more than 3/16 inch from the lower edge of a straightedge. 1101 1102 1103 No pre-final inspection, final inspection, and substantial completion 1104 granted will be made until the pavement meets smoothness requirement and all required profile reports are submitted to the Engineer and MTRB and are 1105 1106 accepted. 1107 1108 **(O)** Request for Profile Testing by the Department. 1109 1110 For Type C, prior to pavement activities, the Engineer will measure the smoothness of the existing pavement. 1111 1112 1113 The Contractor shall submit a written request to the Engineer to perform all required profile tests. 1114 1115 1116 The request shall be made at least 30 days before desired testing date and shall include an approximate acceptance profile testing date, a plan view 1117 drawing of the area to be tested with the limits of the test area highlighted. 1118 1119 The Contractor shall reimburse HDOT for any incurred cost related to 1120 any Contractor-caused cancellation or a deduction to the monthly payment 1121 1122 will be made. 1123 **Department Requirements for Profile Testing.** When a request for 1124 (P) 1125 testing is made, the requested area to be tested shall be 100% of the total area indicated to be paved in the Contract Documents unless the requirement 1126 is waived by the Engineer and MTRB. 1127 1128 1129 Department acceptance surface tests will not be performed earlier than 14 days after HMA placement. 1130 1131 1132 Clean debris and clear obstructions from area to be tested, as well as a minimum of 100 feet before and beyond the area to be tested before testing 1133 1134 starts for use as staging areas. Provide traffic control for all profile testing. 1135 1136 The Engineer or MTRB or both may cancel the profile testing if the test area is not sufficiently clean, traffic control is unsatisfactory, or the area is not 1137 a safe work environment or test area does not meet Contract Document 1138 requirements. This canceled profile test will count as one profile test. 1139 1140

1141 1142 1143	(Q) Engine profile
1144 1145 1146	used to
1147 1148 1149	Contra
1150 1151 1152	correct MRI, i.e
1153 1154 1155	
1156 1157 1158	
1159 1160 1161	(R)
1162 1163 1164	
1165 1166 1167	
1168 1169 1170	
1171 1172 1173 1174	
1174 1175 1176 1177	
1177 1178 1179 1180	
1181 1182 1183	
1184 1185 1186	

(Q) Cost of Acceptance Profile Testing by The Department. The Engineer, MTRB, or State's Third-Party Consultant will perform one initial profile test, at no cost to the Contractor for each area to be tested.

The Department's High-Speed Inertial Profiler pavement profile will be used to determine if the pavement's profile, i.e., smoothness is acceptable.

If the profile of the pavement does not meet the requirements of the Contract Documents, the Contractor shall perform remedial work, i.e. corrective work then retest the area to ensure that the area has the required MRI, i.e., smoothness, before requesting another profile test by the Engineer.

- (1) Additional testing. Additional testing, by the Department beyond the initial test will be performed at cost to the Contractor as follows:
 - (a) \$2,500 per test will be required when Department personnel or State's Third-Party Consultant is used.

(R) Remedial Work for Pavements.

- (1) Corrective work shall be required for any 25 ft interval with a localized roughness in excess of 160 in/mi. The Engineer may waive localized roughness requirements for deficiencies resulting from manholes or other similar appurtenances. Adjust manholes or other similar appurtenances so that using a 10-ft. straightedge the area around that manhole or other similar appurtenance shall not have more than 3/16-in. variation between any 2 contacts on the straightedge.
 - i. If corrective action is not successful, the Engineer may require continued corrective action, or apply a payment adjustment of \$250 per occurrence.
- (2) Corrective work shall also be required for any 0.1 mile interval with an average MRI above 95.0 in/mi for Types A and B. For Type A, correct the deficient section to an MRI of 60 in/mi or less. For Type B, correct the deficient section to an MRI of 70 in/mi or less. For Type C, corrective work may be required by the Engineer for 0.1 mile intervals that have an average MRI above the threshold shown in Tables 401.03-4 and 5 as applicable.
 - i. If corrective action does not produce the required improvement, the Engineer may require continued corrective action, or apply payment adjustment per Section 401.03S.

1187	(3) The Contractor shall notify the Engineer at least 24 hours prior
1188	to commencement of the corrective work. The Contractor shall not
1189	commence corrective work until the methods and procedure have
1190	been approved in writing by the Engineer.
1191	
1192	(4) All smoothness corrective work for areas of localized
1193	roughness shall be for the entire lane width. Pavement cross slope
1194	shall be maintained through corrective areas.
1195	3
1196	(5) The remedial repair areas shall be neat, rectangular areas
1197	having a uniform surface appearance.
1198	
1199	If grinding is used on HMA pavement, the surface shall have nearly
1200	invisible grinding marks to passing motorist.
1201	invisible gillianing mainte to passing meterion
1202	(6) Other methods may include milling and overlaying HMA
1203	pavement. The length, depth of the milling and the replacement
1204	material will be solely decided by the Engineer.
1205	material will be colory accided by the Engineer.
1206	(7) The finished repaired pavement surface shall leave no ridges
1207	or valleys or fins of pavement other than those allowed below.
1208	or valleye or line or parement out or main those allowed below.
1209	(8) Remedial repairs shall not leave any drainage structures' inlets
1210	higher than the surrounding pavement or alter the Contract
1211	Document's drainage pattern.
1212	5 1
1213	(8) For items in the pavement other than drainage structures, e.g.,
1214	manhole frame and covers, survey monuments, expansion joints etc.,
1215	the finish pavement, ground or not, shall not be more than 1/4 inch in
1216	elevation difference. Submit to the Engineer remedial repair method
1217	to correct these conditions for acceptance.
1218	·
1219	(9) Pick up immediately grinding operation residue by using a
1220	vacuum attached to grinding machine or other method acceptable to
1221	the Engineer.
1222	
1223	(a) Any remaining residue shall be picked up before the end
1224	of shift or before the area is open to traffic, whichever is earlier.
1225	•
1226	(b) Prevent residue from flowing across pavement or from
1227	being left on pavement surface or both.
1228	-
1229	(c) Residue shall not be allowed to enter the drainage
1230	system.
1231	-

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1277	including but not limited to furnishing all labor, materials, tool
1276	materials specified in the various paving sections and this section
1275	Mix Asphalt Pavement), shall be full compensation for all work ar
1274	(1) Price and payment in various paying sections, e.g., 401 (Health Applications for all works are
1273	(4) Dries and normant in various naving sections as 404 (1)
` '	i avement omootimess and Acceptance.
1271 1272 (S)	Pavement Smoothness and Acceptance.
1270	Successiul.
1270	successful.
1269	results that show the corrective action, i.e., remedial repairs well
1268	(14) Reprofile the corrected area and provide the Engineer th
1267	· · · · · · · · · · · · · · · · · · ·
1266	remedial repairs.
1265	(13) Replace all pavement markings damaged or discolored by
1264	
1263	temperature is not an acceptable remedial repair method.
1262	(12) Recompacting cold HMA, i.e., HMA that has reached ambie
1261	
1260	the coating without acceptance from the Engineer.
1259	Engineer or MTRB for review and acceptance. Do not proceed with
1258	Submit means and methods of the coating and type of coating to the
1257	it cannot be picked up or tracked by passing vehicles or degrade
1256	the coating shall not be open to traffic until it has cured enough so the
1255	a color that matches the surrounding pavement. The areas receivir
1254	on it, i.e., make the road look uniform in color. The coating shall be
1253	coating area to look like the rest of the road and does not have patche
1252	lane width also. Extend the length of coating areas in order for the
1251	repair area extends into the next lane, then the repair area will be fu
1250	shall be the full width of the lane regardless how small. If the remedi
1249	shall not decrease the pavement's friction value. The coating's limit
1248	a service life equal to or greater than the HMA pavement. The coatir
1247	be degraded after a short period of time has passed, i.e., it shall have
1246	coating used shall not be picked up or tracked by passing vehicles
1245	impermeability of the HMA due to the grinding of the surface. The
1244	receive a coating, e.g., a coating material that will restore any lo
1243	(11) All HMA wearing surface areas that have been ground sha
1242	
1241	401.03(I) – HMA Pavement Thickness Tolerances.
1240	thickness for HMA pavements in accordance with Subsection
1239	(10) Complete corrective work before determining pavement
1238	
1237	legal facility.
1236	repair operation, e.g., HMA residue, wastewater, and dust at
1235	(e) Dispose of all material that is the result of the remedi

 (d) The residue shall not be allowed to dry or remain on the pavement.

1278	equipment, testing, incidentals and for doing all work involved in micro
1279	milling, milling,(cold planing), grinding existing or new pavement,
1280	removing residue, cleaning the pavement, necessary disposal of
1281	residue, furnishing of any water or air used in cleaning the pavement
1282	and any other related ancillary work or material or services. Also, it
1283	includes any remedial work, e.g., re-paving, surface grinding,
1284	application of a coating, curing compound, and replacement of
1285	damaged pavement markings.
1286	
1287	(2) The contract price in those sections may be adjusted for
1288	pavement smoothness by the Engineer. The pavement smoothness
1289	contract unit price adjustments and work acceptance will be made in
1290	accordance with the following schedules.

TABLE 401.03-3 -SMOOTHNESS PAY INCENTIVES		
Category	MRI (in/mi)	Pay Adjustment \$ per 0.1 mi
	<30.0	\$580
	30.0- less than 35.0	\$480
	35.0- less than 40.0	\$380
Type A	40.0- less than 45.0	\$280
	45.0- less than 50.0	\$180
	50.0- less than 55.0	\$80
	55.0- less than 60.0	\$0
	<35.0	\$420
	35.0- less than 40.0	\$360
	40.0- less than 45.0	\$300
Type B	45.0- less than 50.0	\$240
• •	50.0- less than 55.0	\$180
	55.0- less than 60.0	\$120
	60.0- less than 65.0	\$60
	65.0- less than 70.0	\$0
	<40.0	\$280
	40.0- less than 45.0	\$240
	45.0- less than 50.0	\$200
Type C	50.0- less than 55.0	\$160
	55.0- less than 60.0	\$120
	60.0- less than 65.0	\$80
	65.0- less than 70.0	\$40
	70.0- less than 75.0	\$0

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- (3) Pay Pavement Smoothness Adjustment will be based on the initial measured MRI for both left and right wheel path, <u>prior to any</u> corrective work for the 0.10-mile section, except for sections that the Contractor has chosen to remove and replace. For sections that are replaced, assessments will be based on the MRI determined after replacement.
 - (a) The Pavement Smoothness Adjustment will be computed using the plan surface area of pavement shown in the Contract Documents. This Pavement Smoothness Adjustment will apply to the total area of the 0.10-mile section for the lane width represented by MRI for the same lane. It does not include any other price adjustments specified in the Contract Documents. Those price adjustments will be, for each adjustment, calculated separately using the original contract price to determine the amount of adjustment to be made to the contract price. Sections shorter than 0.1 mile and longer than 50 feet shall be prorated.
 - **(b)** For 0.1 mile intervals with an average MRI above the threshold shown in Table 401.03-3, the Engineer shall apply a disincentive payment adjustment up to the limit shown.
 - i. For Types A and B, payment adjustments shall be applied up to an MRI of 95.0 per Table 401.03-4.
 - For Type C, the payment adjustment shall be dependent on the average MRI of the pavement prior to paving activities
 - 1. If the MRI of the pavement prior to paving activities is 125.0 in/mi or less, the payment adjustment shall be per Table 401.03-4.
 - 2. If the MRI of the pavement prior to paving activities is more than 125.0 in/mi, the disincentive payment adjustment shall be per Table 401.03-5, and based on the percent improvement using the following formula:

% Improvement = (Initial segment MRI – Final segment MRI) x 100 / (Initial Segment MRI)

TABLE 401.03-4 -SMOOTHNESS PAY DISINCENTIVES WITH MRI		
Category	MRI (in/mi)	Pay Adjustment \$ per 0.1 mi
	60.0- less than 65.0	-\$100
	65.0- less than 70.0	-\$250
Туре А	75.0- less than 80.0	-\$350
• •	80.0- less than 85.0	-\$450
	85.0- less than 95.0	-\$550
	> 95.0	Corrective Work
Туре В	70.0- less than 75.0	-\$100
	75.0- less than 80.0	-\$200
	80.0- less than 85.0	-\$300
	85.0- less than 95.0	-\$400
	> 95.0	Corrective Work
	75.0- less than 80.0	-\$50
Type C (pre-paving MRI < 125)	80.0- less than 85.0	-\$100
	85.0- less than 90.0	-\$150
	90.0- less than 100.0	-\$200
	>100.0	-\$250

TABLE 401.03-5 -SMOOTHNESS PAY DISINCENTIVES FOR PERCENT IMPROVEMENT		
Category	Percent Improvement %	Pay Adjustment \$ per 0.1 mi
Type C	≥ 40	\$0
	20.0- less than 40.0	-\$100
(pre-paving MRI > 125)	< 20	-\$200

1341		(c) Incentives will not apply to areas where payment
1342		deductions or remedial repairs has been made for
1343		non-compliant work, e.g., low compaction, thin pavement,
1344		thermal segregation, low compressive or flexural strength,
1345		non-compliant alignment. Incentives will also not apply to
1346		areas where corrective work was required to meet contract
1347		smoothness requirements, unless the pavement section was
1348		replaced.–All areas where corrective work was performed shall
1349		be tested again to ensure the smoothness requirements are
1350		met.
1351		
1352		(d) There will be no incentive price adjustments to the
1353		contract prices regardless of the pavement meeting the
1354		Contract Documents' requirements for incentive contract price
1355		adjustment, when 25% of the total area paved of that particular
1356		type of pavement on the project has failed to meet any of the
1357		Contract document requirements, e.g., smoothness, thickness,
1358		unit weight, asphalt content, pavement defects, compaction,
1359		flexural or compressive strength. Areas exempt from the
1360		smoothness requirements may not be included in the total area
1361		calculation unless it is non-compliant.
1362		
1363		(e) For contracts using lump sum the method described in
1364		Subsection 104.06 Methods of Price Adjustment paragraph (3),
1365		will be used to calculated proportionate unit price, i.e., the
1366		Engineer's calculated theoretical unit price. This calculated
1367		proportionate unit price will be used to calculate the unit price
1368		adjustment.
1369		
1370	(T)	Third-party Profile Testing.
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1372		(1) The Engineer may choose to have a third-party testing entity
1373		do the pavement profile and to process the data into a
1374		recommendation for acceptance or rejection of the pavement's
1375		smoothness.
1376		(2) The third-party testing entity will be chosen by agreement and
1377		acceptance by the HDOT's Highway Materials Testing Research
1378		Branch (MTRB), and the Engineer. If no agreement can be reached
1379		the MTRB will choose the third-party testing entity as its sole
1380		recognizance.
1381		1000g.m_a.1001
1382		(3) The third-party testing entity will be paid by the Department by
1383		deducting the Allowance amount from the Contractor's payment.
1384		addadang the / momanico amount nom the Contractor o payment.
1385		(a) The Allowance amount will cover the third-party testing
1386		entity's cost to do the project's pavement profile, e.g., fees,
1300		entity a cost to do the project a pavement profile, e.g., fees,

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transportation, lodging, additional equipment, training and supplies, plus a 10-percent processing fee for the Department. This includes all the initial acceptance profile testing. All surplus material will be turned over to the MTRB at the end of the pavement profile testing including all data and reports generated by the third-party testing entity or items requested by the MTRB. Surplus material, data, reports, etc. will be in the sole custody of the Department for its use and reference.

(b) If retesting of the pavement profile is done by the third-party testing entity it will be paid based on the submitted invoices and receipts plus a 10-percent processing fee for HDOT. This testing is retesting required due to the Contractor's failure to meet the Contract Document's requirements and not the profile testing done for the dispute resolution process.

(U) Dispute Resolution Procedures.

- (1) If the Contractor has determined that its pavement profile has met the Contract Document requirements, but the Engineer's pavement profile has found the pavement profile does not meet the Contract Documents requirements it may dispute the Engineer's findings if it is so inclined. It shall follow the Pavement Smoothness Dispute Resolution Procedure.
- (2) The Pavement Smoothness Dispute Resolution Procedure is as follows:
 - (a) Submit with the resubmittal of the pavement profile and data of the disputed area, a notice informing the Engineer that the results of the Engineer's pavement profile are being disputed and request a copy of the Engineer's pavement profile and data.
 - (b) If after receiving the Engineer's pavement profile and data and doing a detail analysis of the documents, the Contractor still feels that the Engineer's pavement profile is in error submit a document notifying the Engineer of that fact along with the detailed analysis of the Engineer's pavement profile and data showing where the errors were made and if corrected the pavement profile would meet the Contract Document requirements.
 - **(c)** The Engineer upon receiving the Contractor's pavement profile documents will do a detailed analysis of the document

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to find any errors that may have caused the Contractor to believe the pavement profile was acceptable.

- (d) If either party discovers their position was in error notify the other party of the change in position and take appropriate action.
- (e) If both parties maintain that their positions are correct, then both parties shall meet to discuss and present their positions. If the Department used a third-party testing entity it shall also attend. Both the Department and the Contractor shall and will bring a copy of their submittal to the meeting. Parties involved shall be allowed to inspect the other party's documents to verify that it had been presented to them before. Before the meeting starting, the submittals are to be placed in a box and sealed and given to a Materials Testing Research Branch (MTRB) personnel. The MTRB is an HDOT entity, however in this instance it shall be regarded as a neutral party. It is mandatory that during the meeting all parties are to be transparent and have an open discussion with the goal being reaching an agreement. If after the following has occurred:
- (f) If after meeting or after having several meetings with all parties and having performed their due diligence in meeting the above meeting's requirements the Department and the Contractor agree that they have come to an impasse in discussions i.e., further discussions would be futile.
- (3) An impasse will be declared, and no further meeting shall be suspended. If an impasse cannot be agreed to then one more meeting shall be held with both parties attending giving their due diligence in the goal of coming to an agreement. Within 48 hours after the last meeting a third-party pavement profile testing entity will be chosen to evaluate the Department's and Contractor's submittals or run a new smoothness profile or both.
- (4) The third-party pavement profile testing entity shall evaluate the documents being held in the sealed box by the MTRB.
- (5) No additional documents shall be added by the Contractor or the Department unless it was presented during the meetings. If additional documents were used during the meetings the following shall be done.
 - (a) Both HDOT and the Contractor will meet to put the documents presented during the meetings into a box, then seal it and turn it over to MTRB.

- **(b)** Parties involved shall be allowed to inspect the other party's documents to verify that it had been presented during the meetings.
- (c) If it should feel that this is new material the document can be marked as such. The document then will be put into the box and sealed.
- (d) The party that feels it discovered a new document is required to submit a document listing the document it feels was previously not presented and any additional information related to it. It shall not be used to submit additional information or arguments not previously discussed. This submittal shall be submitted to the other party and the third-party pavement profile testing entity through the MTRB.
- (7) The third-party pavement profile testing entity after analyzing all the data it gathered and was given shall make a report and provide a recommendation. It shall meet with all parties at one time, discuss the recommendations and show where the errors occurred causing the erroneous position.
- (8) The Department or the Contractor may reject the third-party pavement profile testing entity's recommendation. Notification of the rejection shall be within three working days after the meeting. The Contractor shall perform any additional work required if the recommendation is not favorable to it. The Contractor shall pay the third-party pavement profile testing entity invoice for its work done regardless of recommendation. The Contractor may file a claim if it still feels it is correct. The Contractor shall comply with the requirements in Subsection 107.16 Disputes and Claims. The Contractor's claim shall be regarded as a new claim and the Engineer will regard it as such. Since all documents have been evaluated the Engineer will expedite the claim process after it initial claim requirements are met to Subsection 107.16(G) Appeal of the Engineer's Decision to obtain the Director's decision.
- (9) Payment for the total cost of the third-party pavement profile testing entity's dispute resolution work is the responsibility of the party that its recommendation found was in error. If the recommendation finds the Department the erroneous party the Department will reimburse the Contractor in the amount of the third-party pavement profile testing entity's invoice with no additional overhead or profit added. If portions of the profile testing were correct in some areas and erroneous in others the cost of the third-party pavement profile

1524	testing entity's dispute resolution work shall be split in proportion to
1525	the erroneous area verses the total area reviewed.
1526	
1527	401.04 Measurement.
1528	
1529	(A) The Engineer will measure HMA pavement per square yard in
1530	accordance with the Contract Documents.
1531	
1532	(B) The Engineer will measure per each 2-Lane Raised Crosswalk
1533	Installation for installation of raised crosswalks that extend across two (2)
1534	lanes of roadway in accordance with the Contract Documents.
1535	
1536	(C) The Engineer will measure the per each 2-Lane Speed Table
1537	Installation for the installation of speed tables that extend across two (2) lanes
1538	of roadway in accordance with the Contract Documents.
1539	
1540	(D) The Engineer will measure overtime labor premium on a force account
1541	basis in accordance with Subsection 109.06 – Force Account Provisions and
1542	Compensation and as ordered by the Engineer.
1543	404.05 Decrees The Francisco will never few the accounted LIMA represent at the
1544	401.05 Payment. The Engineer will pay for the accepted HMA pavement at the
1545 1546	contract price per pay unit, as shown in the proposal schedule. Payment will be full
1540 1547	compensation for the work prescribed in this section and the contract documents.
1548	(A) Price and payment in Section 401 – HMA Pavement will be full
1549	compensation for all work and materials specified in this Section including
1550	furnishing all labor, materials, tools, equipment, testing, pavement profiles,
1551	cold planing, and incidentals and for doing all work involved in grinding
1552	existing or new pavement, removing residue, and cleaning the pavement,
1553	including necessary disposal of residue and furnishing any water or air used
1554	in cleaning the pavement and remedial work needed to conform to the
1555	requirements of the Contract Documents.
1556	'
1557	(B) Price and payment in Section 401 – HMA Pavement will be full
1558	compensation for all work and materials specified in this Section including
1559	furnishing all labor, materials, tools, equipment, testing, pavement profiles,
1560	cold planing, and incidentals and for doing all work involved in grinding
1561	existing or new pavement, removing residue, and cleaning the pavement,
1562	including necessary disposal of residue and furnishing any water or air used
1563	in cleaning the pavement and remedial work needed to conform to the
1564	requirements of the Contract Documents.
1565	
1566	(C) The Engineer will pay for the 2-Lane Raised Crosswalk Installation at
1567	the contract price per each according to the contract, complete in place.
1568	
1569	a. The contract unit price of each 2-Lane Raised Crosswalk Installation

1570 will be full compensation of all work and materials specified in this 1571 Section including furnishing labor, materials, tools, equipment, testing, pavement profiles, cold planning, and incidentals and for doing all 1572 1573 work involved in furnishing and installing the raised crosswalks completely in place according to the contract. 1574 1575 (D) The Engineer will pay for the 2-Lane Speed Table Installation at the 1576 1577 contract price per each according to the contract, complete in place. 1578 1579 a. The contract unit price of each 2-Lane Speed Table Installation will be full compensation of all work and materials specified in this Section 1580 including furnishing labor, materials, tools, equipment, testing, 1581 pavement profiles, cold planning, and incidentals and for doing all 1582 1583 work involved in furnishing and installing the speed tables completely in place according to the contract. 1584 1585 1586 (E) The Engineer will pay for the accepted overtime labor premium on a force account basis in accordance with Subsection 109.06 - Force Account 1587 Provisions and Compensation. An estimated amount may be allocated in the 1588 proposal schedule under "Overtime Labor Premium", but the actual amount 1589 to be paid will be the sum shown on the accepted force account records, 1590 1591 whether this sum be more or less than the estimated amount allocated in the 1592 proposal schedule. 1593 1594 Engineer will deduct from the Contractor's monthly estimate the (F) amount necessary to pay for the services of a third-party pavement profile 1595 testing entity plus the additions specified in the Contract documents. 1596 Payment will be full compensation for work prescribed in this section, 1597 1598 required by the Engineer and Contract Documents. No payment for the Contractor's pavement profile work required in this section will be made. It 1599 will be considered incidental to the various paving items unless stated 1600 1601 otherwise. 1602 Engineer will pay or deduct for the following pay items when included 1603 1604 in proposal schedule: 1605 1606 Pay Item Pay Unit 1607 1608 Pavement Smoothness Incentive Allowance 1609 1610 Third-Party Profile Testing and Equipment Allowance 1611 1612 Third-Party Dispute Resolution Profile Testing Allowance 1613 1614 Overtime Labor Premium Force Account 1615

2 Inch HMA Pavement, Mix No. IV	Square Yard
2-Lane Raised Crosswalk Installation, HMA Pavement,	Each
Mix No. IV	
2-Lane Speed Table Installation, HMA Pavement,	Each
Mix No. IV	
	2-Lane Raised Crosswalk Installation, HMA Pavement, Mix No. IV2-Lane Speed Table Installation, HMA Pavement,

 (1) 70% of the contract unit price or the theoretical calculated unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture.

(2) 20% of the contract unit price or the theoretical calculated unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and compaction acceptance. Maintain temporary pavement markings and other temporary work zone items, maintain a clean work site.

(3) 10% of the contract unit price or calculate the unit price when the final configuration of the pavement markings is in place.

The Engineer will pay for adjusting existing frames and covers and valve boxes in accordance with and under Section 604 – Manholes, Inlets and Catch Basins. Adjustments for existing street survey monument frames and covers will be paid for as if each were a valve box frame and cover.

The Engineer may, at its sole discretion, in lieu of requiring removal and replacement, use the sliding scale factor to accept HMA pavements compacted below 93.0 percent and above 97.0 percent. The Engineer will make payment for the material in that production day, if the Engineer decides to use a sliding scale factor, at a reduced price arrived at by multiplying the contract unit price by the pay factor. The Engineer is not obligated to allow non-compliant work to remain in place and may at any time chose not to use a sliding scale factor method of payment and instead require removal of the noncompliant pavement that is greater than 97.0 or less than 93.0.

In compliance with Subsection 105.12 Removal of Non-Conforming and Unauthorized Work remove and replace HMA compacted below 90.0 percent.

The Engineer will solely decide if the noncompliant work would be acceptable if a reduced payment for the noncompliant work is made. The Engineer is not obligated to allow noncompliant work to remain in place and may at any time choose not to use a sliding scale factor method of payment as a method of resolution.

Instead, utilize the remedy allowed in Subsection 105.12 Removal of Non-Conforming and Unauthorized Work, requiring removal of the noncompliant pavement, shall be used.

Such a reduced payment, if made and accepted by the Contractor, shall be a mutually agreeable resolution to the noncompliant work being addressed. If it is not mutually acceptable, the noncompliant work shall be removed. If the reduced payment is acceptable; the Engineer will make the reduced payments for the noncompliant work in accordance with Table 401.05-2 - Sliding Scale Pay Factor for Compaction. The amount of tonnage to be reduced will be determined by the Engineer by using the initial cores taken on the mat. No additional cores shall be taken to determine the limits of the non-compliant area unless requested by the Engineer.

The Engineer, for determining the reduced tonnage for noncompliant work, will assume the level of compaction is linear and will proportion the compaction level from the last core that indicated an acceptable compaction level to the nearest core indicating a noncompliant compaction level to determine the calculated limit of acceptable compaction. The length will be the linear distance between the cores measured along the baseline. If there is no core that was taken for the shift's or day's work that were compliant then the limit will be the end or start of the day's or shift's work. The width will be the nominal paving width. Use the day's specific gravity of the mix to determine tonnage. The thickness will be the nominal paving thickness.

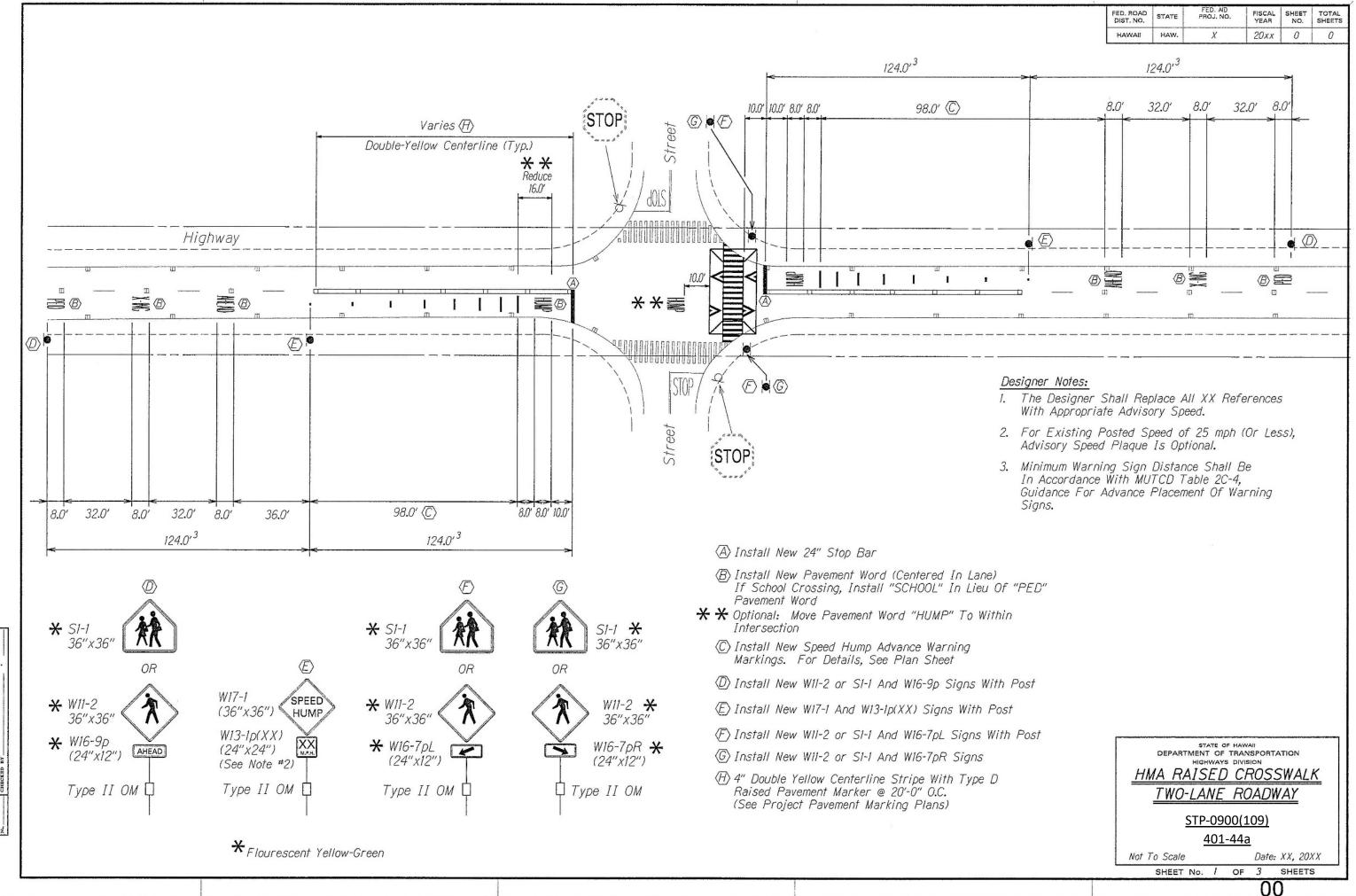
The total reduced noncompliant tonnage to be paid will be determined by multiplying the applicable percent of reduction by the computed tonnage of the noncompliant work. Percent of Quantity Paid shall be the percentage shown in Table 401.05-2 - Sliding Scale Pay Factor for Compaction. The reduced tonnage shall be used as the payment quantity for the noncompliant work. The reduced quantity paid that is used for the monthly payment will be arrived at by multiplying the contract unit price by the reduced tonnage.

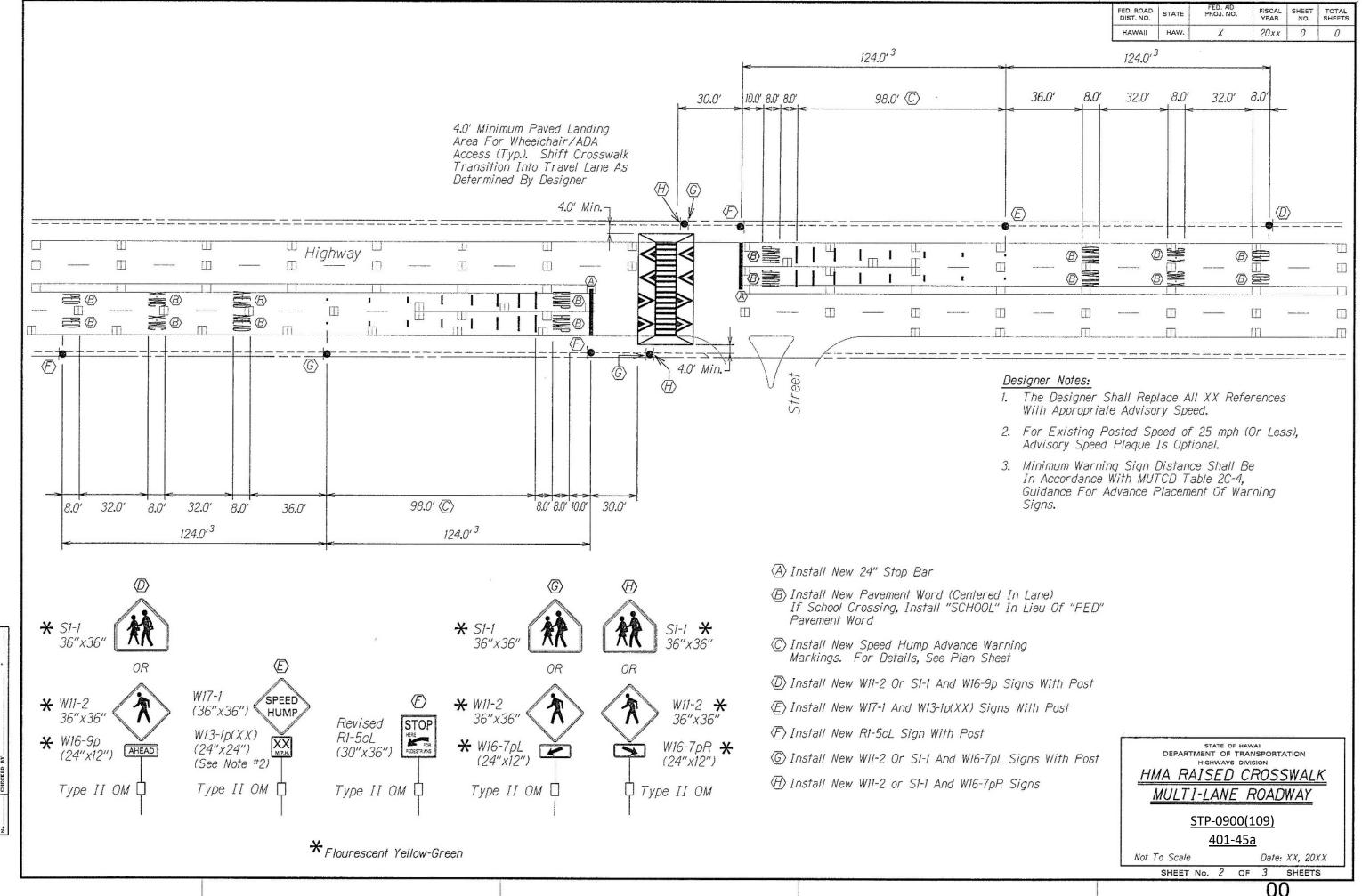
Table 401.05-2 – Sliding Sc	Table 401.05-2 – Sliding Scale Pay Factor for Compaction			
Percent Compaction	Percent of Quantity Paid			
> 98.0	Removal			
>97.0 - 98.0	95			
93.0- 97.0	100			
90.0 - <93.0	80			
<90.0	Removal			

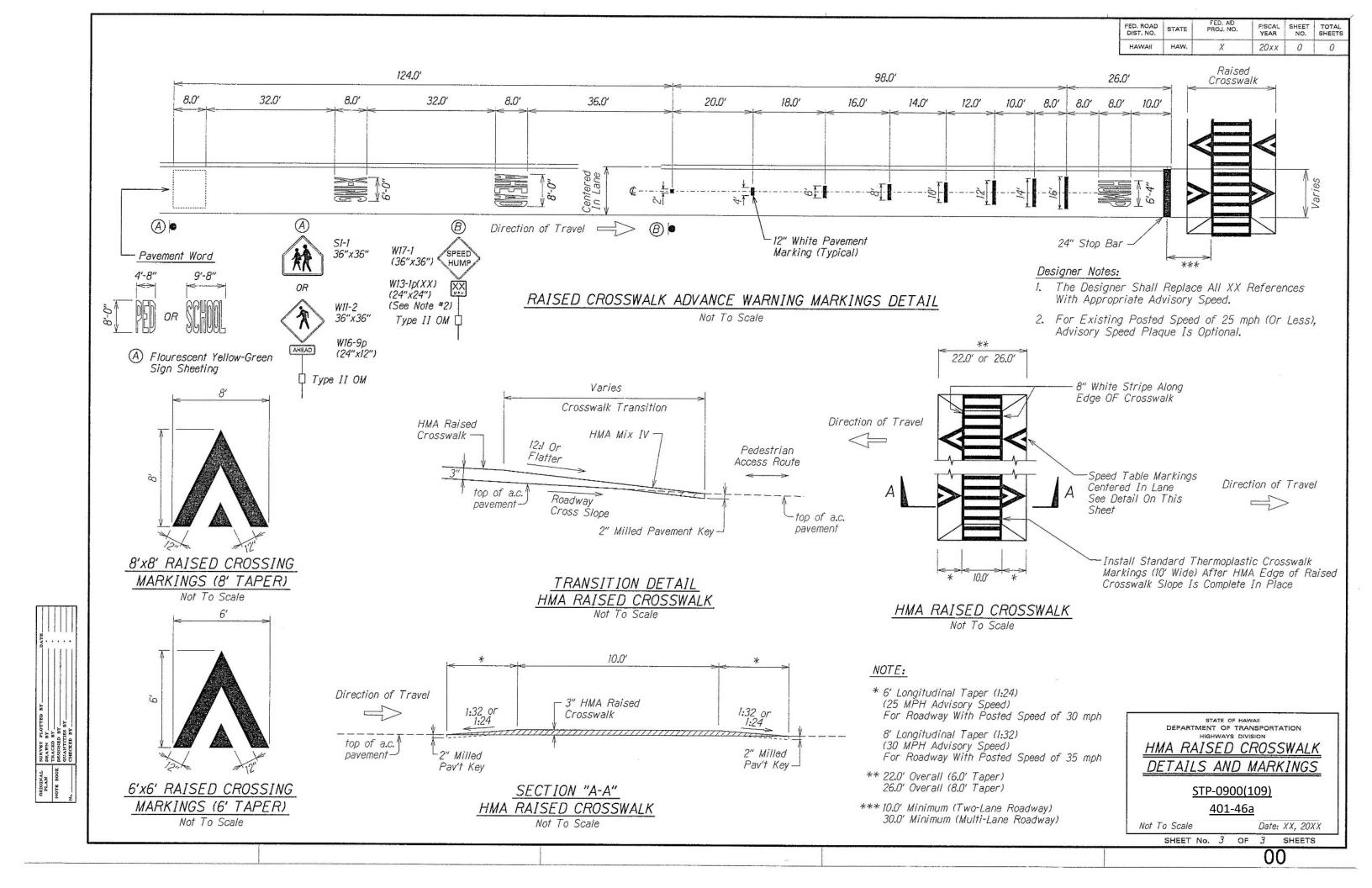
1696 " 1697 1698

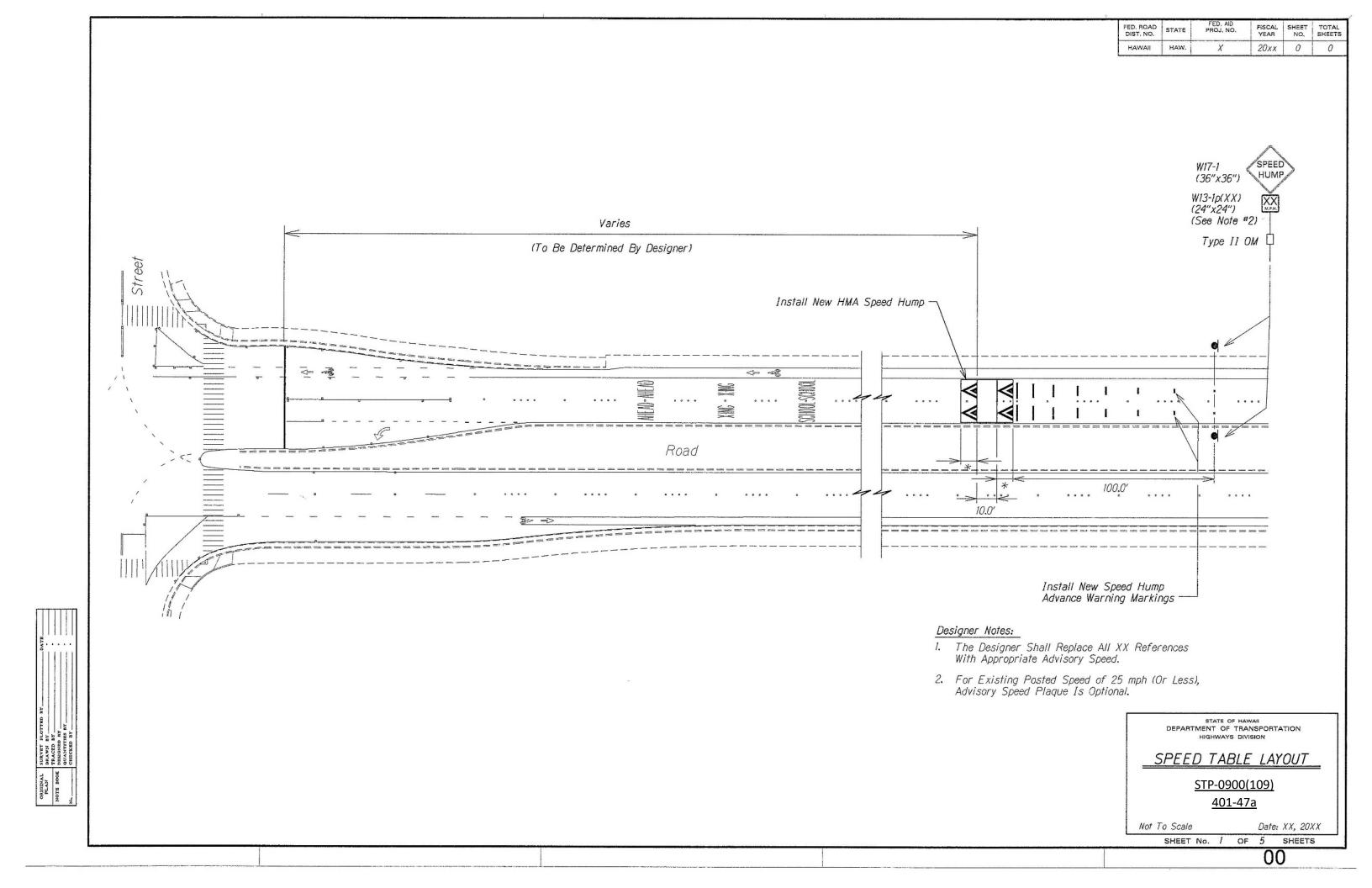
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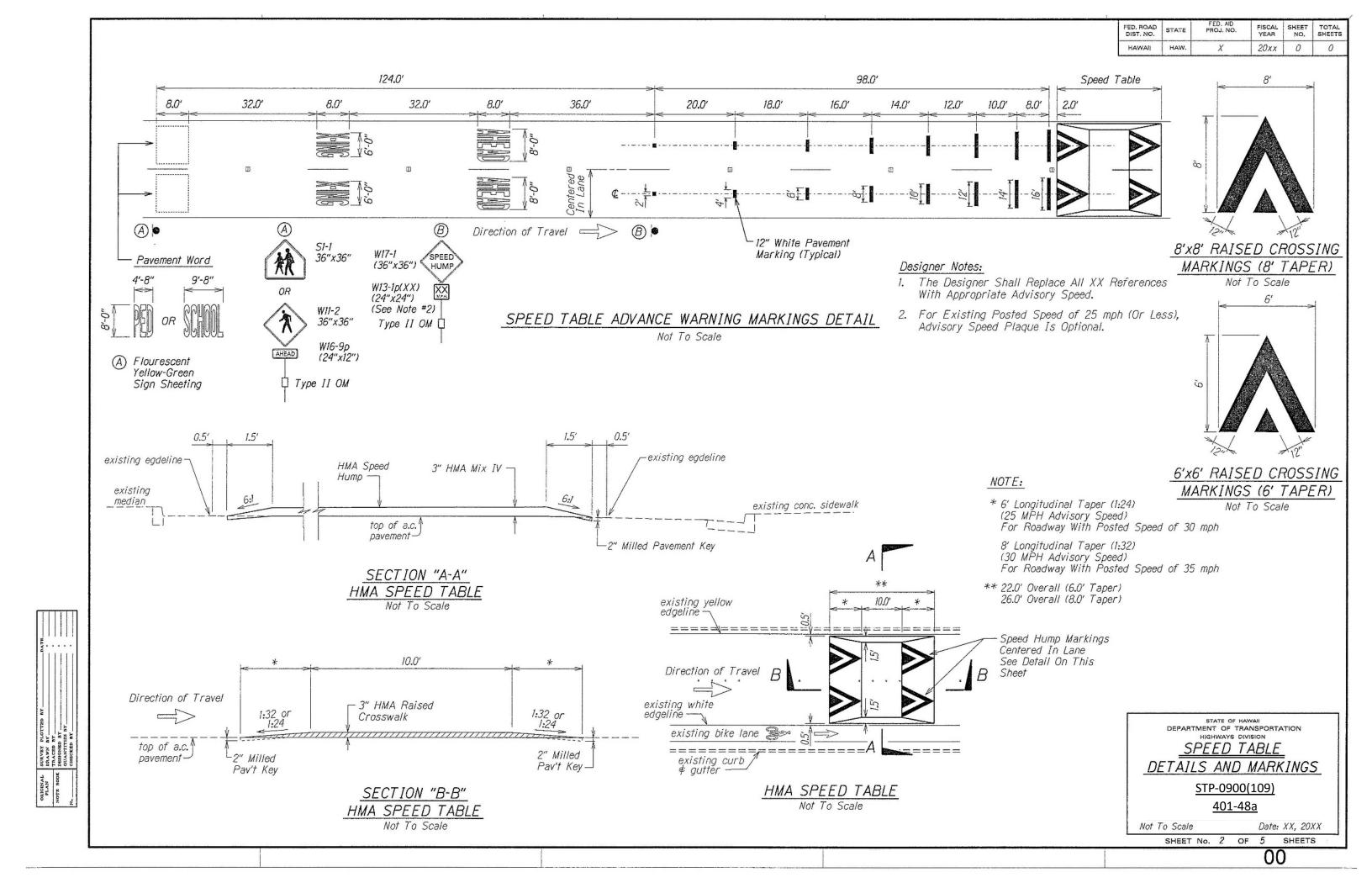
END OF SECTION 401

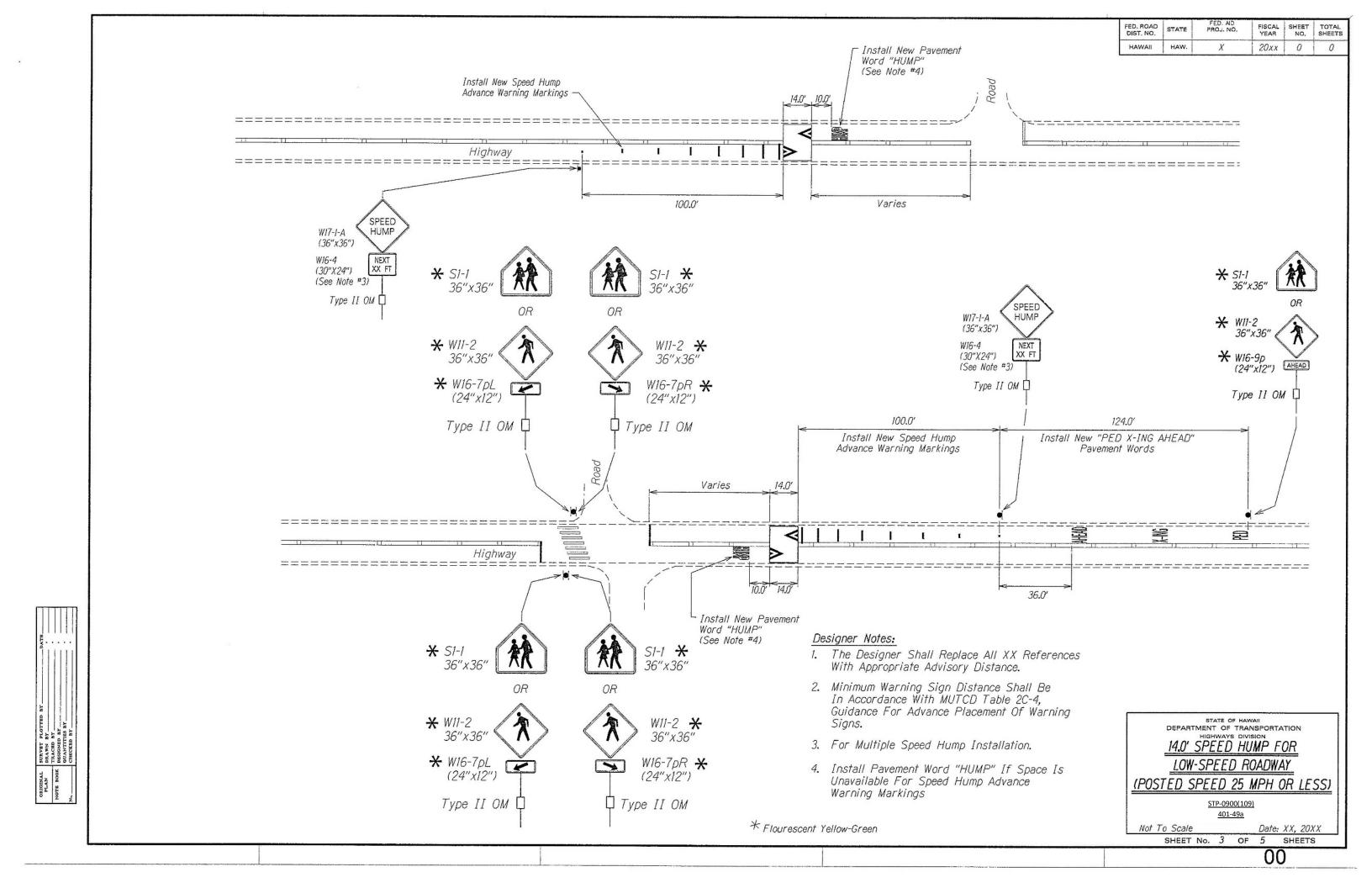




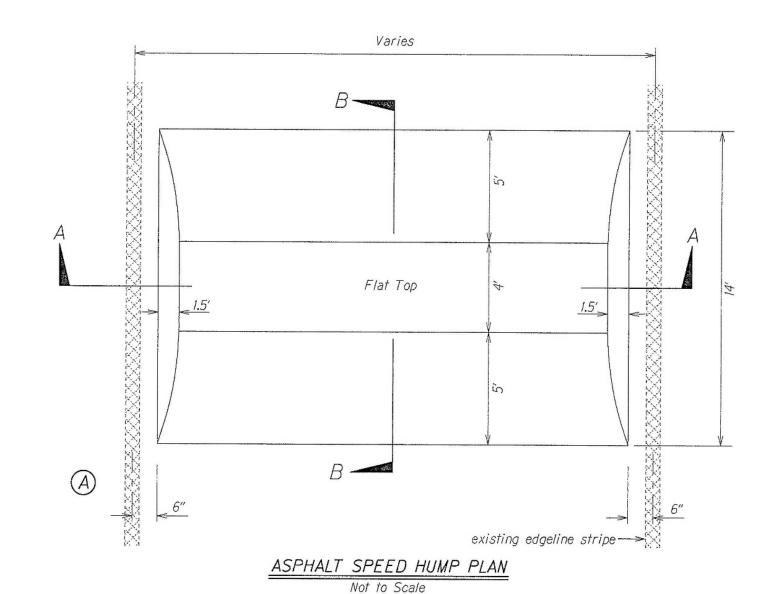


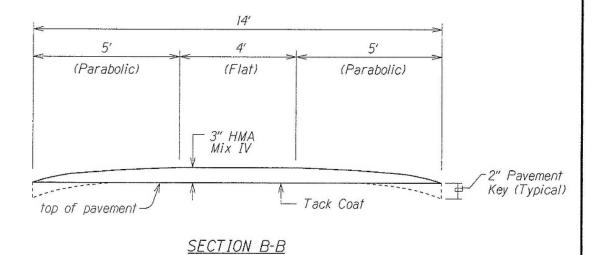


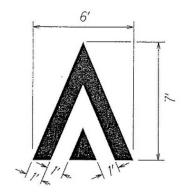




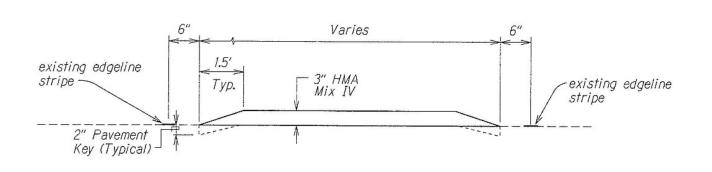
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	X	20xx	0	0







SPEED HUMP MARKING Not to Scale



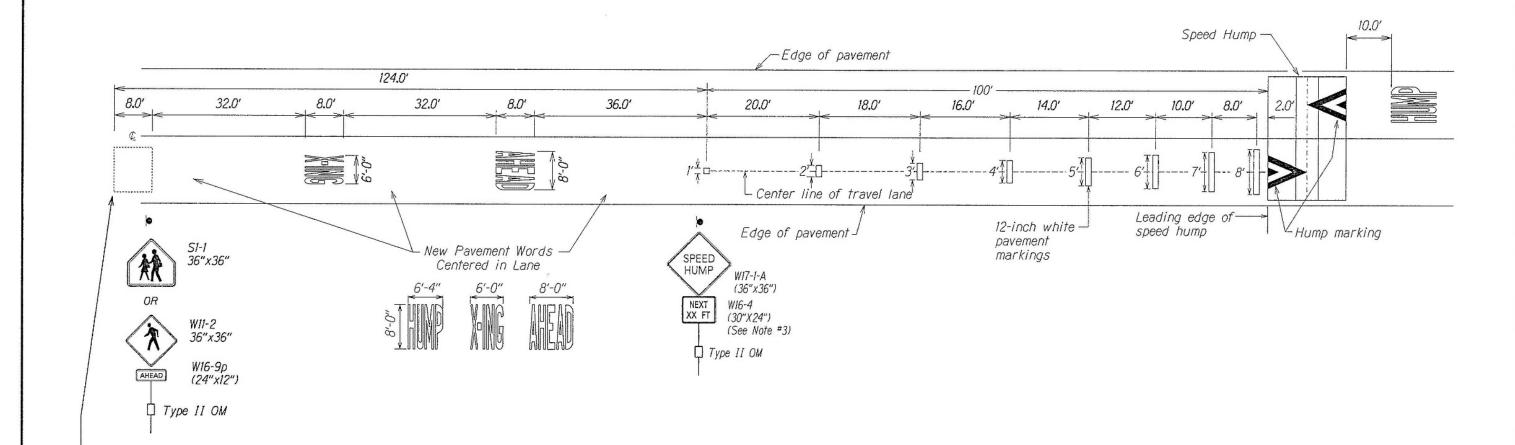
SECTION A-A

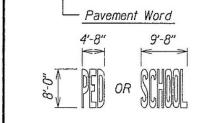
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION 14,0' SPEED HUMP FOR LOW-SPEED ROADWAY (POSTED SPEED 25 MPH OR LESS) STP-0900(109) 401-50a

Not To Scale Date: XX, 20XX

SHEET No. 4 OF 5 SHEETS

FED. RC DIST. N		STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWA	di	HAW.	Χ	20xx	0	0





SPEED HUMP ADVANCE WARNING MARKINGS DETAIL

Not to Scale

Designer Notes:

- 1. The Designer Shall Replace All XX References With Appropriate Advisory Distance.
- 2. Minimum Warning Sign Distance Shall Be In Accordance With MUTCD Table 2C-4, Guidance For Advance Placement Of Warning Signs.
- 3. For Multiple Speed Hump Installation.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
14.0' SPEED HUMP FOR

LOW-SPEED ROADWAY

(POSTED SPEED 25 MPH OR LESS)

STP-0900(109) 401-51a

Not To Scale Date: XX, 20XX

SHEET No. 5 OF 5 SHEETS



1 2		SECTION 405 – MICRO SURFACING	
3 4 5 6 7 8 9 10	construction filling ruts ar be a mixture mineral aggin the field.	escription. This section covers the materials, equipment and application procedures for placing micro surfacing and for surfacing existing paved surfaces. The micro surface of a polymer modified asphalt emulsion, 100 percent coregate, mineral filler, water and other additives for control All ingredients shall be properly proportioned, mixed an aurface in accordance with this Specification and as direct	material for facing shall rushed ol of set time d spread on
12 13	405.02 M	aterials.	
14 15	(A)	Emulsified Asphalt (Type CQS-1P or CQS-1hP)	702.04
16 17 18 19 20		(1) The polymer material shall be milled or blended asphalt or emulsifier solution prior to the emulsification. The amount of polymer modifier shall contain at least polymer solids based on the weight of asphalt (asphalt).	n process. 3.0 percent
21 22 23		(2) Formulate the emulsified asphalt so the paving sufficiently cure so that traffic can be allowed in one h	
24 25 26 27 28		(3) Emulsified asphalt for tack coat, if required, sha accordance with Section 702.04. Specialized or prefer materials may be allowed with approval of the Engine If diluted, certification must be provided from the supp Tack coat will be measured for separate payment.	erred tack coat er before use.
29 30	(B)	Aggregate	703.11
31 32 33 34		(1) Establish a job mix or target gradation within the band as specified in Table 703.11-2 for Type 2 or 3 m	
35 36		(a) Base the mix design on the target grada	tion.
37 38 39		(b) The gradation of the aggregate stockpile vary by more than the stockpile tolerance as in 703.11-2 from the mix design gradation. The p	dicated in ercentage of
40 41 42 43 44		aggregate passing any two successive sieves so change from one end of the specified range to Aggregates shipped to the project shall be uniform not require blending or pre-mixing at the storagouse. Additionally, the aggregate shall remain we	the other end. orm and shall e area before
45 46		master gradation band. Mineral filler shall not l satisfy the requirements as set in 703.11-2	

- (C) Mineral Filler
 - (1) Mineral filler may be used to improve mixture consistency and to adjust mixture breaking and curing properties. Portland cement, hydrated lime, or other approved filler as approved by the Engineer shall be used if required by the mix design. Mineral filler shall meet the requirements of ASTM D 242.
 - (2) Determine the amount of mineral filler needed through the laboratory mix design.
 - (a) The amount of filler used must be between 0.0 percent and 3.0 percent by the weight of dry aggregate
 - **(b)** Adjust the percentage of mineral filler ±0.5 percent as necessary for better consistency or to optimize set times with Engineer's approval.
 - **(c)** Mineral filler is considered part of the aggregate gradation.
- **(D)** Water. The water for the micro surfacing mixture shall be potable and free from any contaminants detrimental to the mixture.
- **(E)** Approved Additives. The emulsion manufacturer shall provide approved additives as required to control the set time of the mixture in the field. Approved additives shall be approved by the Engineer if required by the mix design.
- (F) Job Mix Design
 - (1) Before work begins, the Contractor shall submit a signed mix design to the Engineer. Mix designs shall be developed by an AASHTO accredited laboratory experienced in the design of micro surfacing systems and must be submitted to the engineer prior to beginning the work. The Mix Design shall be supplied by the Contractor. As a minimum, the design shall include the following: aggregate test properties, aggregate target gradation, results of Table 405.02-1 design requirements, design asphalt residue and mineral filler percentages based on dry weight of the aggregate. At least 10 days prior to construction, the Contractor shall submit to the Central Laboratory representative samples of each ingredient to be used in the micro surfacing mixture. The samples shall include information relative to sources, type of materials and project number. No micro surfacing work shall begin nor shall any mixture

be accepted until the Laboratory has approved the micro surfacing design. Acceptance of the design by the Engineer is solely for the purpose of quality control and in no way releases the Contractor from the responsibilities to perform acceptable work under this specification.

The micro surfacing material shall be a uniform mixture of aggregate, emulsified asphalt, mineral filler, water and other additives as required to control the set time in the field. The emulsion and aggregate shall be compatible so that a complete, uniform coating of the aggregate shall be obtained in the mixing unit. The mixture shall have sufficient working life to allow for proper placement as the existing ambient temperature and humidity. The Engineer shall require the mixture to be redesigned if replacement of a constituent, or change in gradation, is needed to produce an acceptable mixture. The constituents shall be proportioned to produce a uniform mixture meeting the requirements of Table 405.02-1, which includes reference to International Slurry Surfacing Association (ISSA) Technical Bulletins (TB).

The laboratory should verify that mix and set times are appropriate for the climate conditions expected during the project. The laboratory shall also report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) according to AASHTO T19.

- (2) The mix design shall use the same materials and aggregate gradation to be used on the project.
- (3) Changes in aggregate source, emulsion, or mineral filler will require a new mix design submitted for approval by the Engineer and a new test strip.
- **(4)** The mix design shall provide a micro surfacing mixture that can be spread in variable thicknesses for ruts, scratch courses, and surfaces.

TABLE 405.02-1 - MIX DESIGN SPECIFICATIONS			
	Mixture Control Tolerance	Type 2	Type 3
Range for Residual Asphalt, %a	+/- 0.50	6.5 -9.5	6.0-9.0
Range for Mineral Filler, % ^a	+/- 0.50	0.5-3.0	0.5-3.0
Test	Test Method	Val	ue
Mixing Time, Seconds @ 77°F (25°C) Minimum	TB 113	18	30
Set Time, 30 Minutes Minimum Early Rolling Traffic Time, @ 60 Minutes Minimum	TB 139	12 kç 20 kç	
Wet Stripping Test, % Coating, Minimum	TB 114	90	%
Wet-Track Abrasion Loss, Maximum One-hour Soak Six-day Soak	TB 100 (a)	38 <u>g</u> 75 g	
Lateral Displacement, Maximum % Bulk Specific Gravity (b)	TB 147	59 2.100 -	
Excess Asphalt by LWT, Maximum	TB 109	50 g/ft ² (5	338 g/m²)
System Compatibility, Minimum	TB 144	11 Grad	e Points
Water Resistance, 30 Minutes	TB 102	No Disco	oloration
Cantabro Mass Loss, %, Maximum	TX 245-F	2.	0
Indirect Tensile Stiffness Modulus, MPa, Minimum (b)	EN 12697-26 Annex C	10,0	000

Notes:

(a) Perform the wet track abrasion test under laboratory conditions as a component of the mix design process

(b) Samples to be prepared by ISSA TB 148 Marshall Compaction only (30 blows/side) and tested in dry condition at 25° C.

132133134

(G) Submittals.

135 136

(1) Submit mix design for review a minimum of 30 days before beginning construction.

139	(2)	Provide the following with job-mix design.
140		
141		(a) Test reports for asphalt emulsion in compliance with
142		Section 702.04.
143		
144		(b) Certificate of analysis and compliance from the
145		manufacturer for each batch of asphalt emulsion.
146		
147		(c) Target gradation for combined aggregate and mineral
148		filler.
149		
150		(d) Name of the asphalt and polymer emulsion supplier.
151		
152		(e) Test reports for mineral aggregate in compliance with
153		Section 703.11.
154		
155		(f) Certificate of compliance from the manufacturer for
156		mineral filler.
157		
158		(g) Calibration documentation for each mixing unit
159		including an individual calibration for each material at various
160		settings that corresponds to the mixing unit metering device.
161		
162	(3)	For changes in the job mix gradation:
163		
164		(a) Submit a written request for a change in the job mix
165		gradation.
166		
167		(b) Submit a new job mix design if changes in gradation
168		are outside the gradation band allowed by the stockpile
169		tolerance.
170		
171		
172		ction Requirements. It shall be the responsibility of the
173	•	ice, transport and place the specified materials in accordance
174	•	ations and as approved by the Engineer. The finished micro
175	•	e a uniform texture free from excessive scratch marks, tears
176		egularities. The cured mixture shall adhere fully to the
177		Based upon a visual examination or test results the Engineer
178		k due to poor workmanship, loss of texture, raveling or
179	apparent instability	
180		
181	(A) Weat	her Limitations.
182		
183	(1)	The micro surfacing mixture shall be spread only when both
184	the pa	avement surface and ambient temperature is at least 50 F and

185 186		rising and the weather is not foggy or rainy and there is no forecast of temperatures below 32 F within 48 hours from the time of
187		placement.
188		
189		(2) Cease micro surfacing operations when weather conditions
190		prolong opening the road surface to traffic beyond a reasonable
191		time.
192		
193	(B)	Notification. Homeowners and businesses affected by the
194		ruction shall be notified at least one day in advance of the surfacing.
195		d work not occur on the specified day, a new notification will be
196		uted. The notification shall be in the form of a written posting, stating
197		ne and date that the surfacing will take place. If necessary, signage
198	alertin	g traffic to the intended project should be posted.
199	(0)	
200	(C)	Preparation
201		(4) Demonstrate and the annual settle state in a marketic land and a
202		(1) Remove any thermoplastic striping materials and retro-
203		reflective pavement markers in the areas to be micro surfaced.
204		Provide temporary striping as necessary to comply with plan
205		requirements.
206		
207		(2) Clean the pavement surface of dirt, sand, dust, oil,
208		vegetation, and other objectionable material immediately before
209		applying micro surfacing.
210 211		(3) Allow un-sealed cracks to dry thoroughly before applying
212		(3) Allow un-sealed cracks to dry thoroughly before applying micro surfacing when using water to clean the road surface.
212		micro surfacing when using water to clean the road surface.
214		(4) Cover manholes, valve boxes, drop inlets, and other service
215		utility entrances before surfacing.
216		dunty entrances before surfacing.
217		(5) Protect all structures, including items such as guardrail,
218		guideposts, concrete barriers, drains, and parapet walls.
219		garack conditions are a surred and a surred parackets are an experienced
220		(6) Cracks. It is recommended that any cracks wider than 1/4
221		inch are treated. Crack sealing shall be completed at least thirty
222		(30) calendar days prior to application of micro surfacing.
223		
224		(7) Tack Coat. Tack coat is required when shown on the plans.
225		In general, a tack coat is not required unless the existing asphalt
226		surface is extremely dry and raveled. Apply the tack coat in a
227		uniform manner to avoid streaks and other irregular patterns.
228		Dilute the emulsified asphalt to one-part emulsified asphalt to one
229		to three-part (s) water. Apply the diluted tack coat at a residual

asphalt rate of 0.05 to 0.10 gal/yd². The tack coat shall be allowed to cure sufficiently before application of the micro surfacing.

- General. Keep equipment, tools, and machinery clean and maintained in satisfactory working condition. No work shall be attempted with equipment that is malfunctioning. The Engineer may order that the work be discontinued if sufficient equipment and tools are not in use to place the materials satisfactorily.
- Mixing Equipment. Use mixing equipment specifically designed and manufactured to mix and place micro surfacing.
 - Either continuous run or truck mounted machines may be used, except as required on the contract documents.
 - The paving mixture shall be blended by a selfpropelled, positive, non-slipping aggregate delivery system (belt over chain) micro surfacing mixing machine which shall have a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, filed control additives and water to a revolving multiblade, twin shafted mixer and discharge the mixed product on a continuous flow basis. The mixture shall be thoroughly blended so that no uncoated aggregate is visible upon
 - Continuous-run equipment may be required on the contract documents to ensure continuity of mix and reduction of startup joints. The continuous-run machine shall be equipped with self-loading devices which provide for the loading of all materials while continuing to lay micro surfacing, thereby minimizing construction joints. The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the operator to have full hydrostatic control of the forward and reverse speed during the application of the micro surfacing material.
 - Truck mounted units shall be equipped with a positive, non-slipping aggregate delivery system (belt over chain) have the capability of applying a minimum of 10 tons of aggregate without recharging the aggregate bin.

- (3) Water Pressure System. The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray ahead of and outside the spreader box when required.
- Calibration & Proportioning Devices. The machine shall be (4) equipped with individual volume or mass controls or other gauging devices for measuring and proportioning each material added to the mix. Each material control device shall be calibrated, properly marked, and positively interlocked. The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so that the amount of asphalt emulsion, aggregate and mineral filler used may be determined at any time. Each mixing unit shall be calibrated prior to commencement of the work. The calibrations shall be performed and verified in the presence of the Engineer or the Engineer's representative. Once calibrated, the aggregate and emulsion flows shall not be changed without the approval of the Engineer. The water and additive may be adjusted in the field to control the mix properties to produce an acceptable mix. With the Engineer's approval, previous calibration documentation covering the exact materials to be used may be acceptable provided they were made within the last three months.
- (5) Emulsion Pump. The emulsion pump shall be a heated, positive displacement type pump.
- (6) Spreading Equipment.
 - (a) Attached to the machine shall be a hydraulically adjustable (adjustable while applying mixture) type spreader box with a positive screed adjustment for yield control. The box shall be attached to the mixer, equipped with ribbon flights mounted on an adjustable shaft to continually agitate and distribute the material throughout the box. The box will be equipped with curb bumpers and replaceable runners with a minimum of 5-foot long end runners. The box shall be equipped with a sufficient walkway to provide access to either side of the spreader box without walking through the freshly applied material. The box must be capable of laying mix to a width of 14 feet.
 - **(b)** The equipment shall provide sufficient turbulence to prevent the mix from setting in the box or causing excessive build-up or lumps.

322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348		1 3 1 1 3	() first silver
343 344 345 346 347 348 349 350 351			s s ii V s t
352 353 354 355 356 357		;	tı s
358 359 360 361 362		İ	(h
363 364 365 366 367		;	(i

- **(c)** To prevent the loss of mixture from the box, the Contractor shall attach flexible seals, front and rear, in contact with the road.
- (d) The full width application box shall be equipped with a secondary strike-off located approximately 2 to 3 feet behind the primary strike-off to minimize transverse corrugations.
- **(e)** The secondary strike-off shall have elevation and width adjustments similar to the primary strike-off. It shall have a pivot point where it can be tilted for texturing or raised completely off the surface.
- (f) The use of burlap drags or other drags necessary to obtain the desired surface texture, shall require approval by the Engineer. Drags having excessive build-up shall be replaced. Drags shall be kept in a completely flexible condition at all times.
- **(7)** Rut Filling and Leveling Course. When required, before the final surface course is placed, preliminary micro surfacing materials shall be required to fill ruts, utility cuts, depressions in the existing surface, etc. Ruts greater than ½ inch in depth shall be filled ndependently with a rut filling spreader box either 5 ft or 6 ft in width as needed. For irregular to shallow rutting ½" or less in depth, a leveling course may be used as directed by the Engineer. The spreader box used for the leveling course shall be the same as used for the surface course; however, a steel or high density strikeoff shall be used in lieu of a flexible rubber. Using a rut fill spreader box, each individual rut fill shall be crowned to compensate for raffic compaction at a rate of 1/8" per 1" of rut depth. Rut filling shall be placed and opened to traffic a minimum of 24 hours prior to surfacing. All materials, mixture composition, equipment, and construction procedures and requirements shall be as specified above.
- (8) Auxiliary Equipment. Provide suitable surface cleaning equipment such as motorized brooms, traffic control equipment, hand tools, and other support and safety equipment necessary to perform the work.
- (9) Rolling. When required in the Contract Documents, use a self-propelled, 10-ton maximum pneumatic tire roller equipped with a water spray system. All tires shall be inflated per the manufacturer's specifications.

368	(E)	Calibration
369		
370		(1) Calibrate the paver in the presence of the Engineer prior to
371		the beginning of each project, according to the method
372		recommended by the mix paver manufacturer.
373		
374		(2) Calibration documentation shall include an individual
375 376		calibration of each material at various settings that can be related to the machine metering devices. Calibration procedure shall include
377		a metered verification for each material used.
378		
379		(3) Do not use any machine until calibration has been
380 381		completed and/or accepted for the project.
		(4) Any machanical changes during construction to the
382		(4) Any mechanical changes during construction to the
383 384		equipment components that deliver micro surfacing material to the pug mill mixer shall require new calibration.
385		
386	(F)	Test Strip
387	, ,	
388		(1) Construct a test strip at least 500 feet long on the roadway.
389		The test strip shall be constructed on the project site under
390		representative placement conditions, and with the job mix design,
391		materials, and equipment to be used on the project.
392		
393		(2) Adjustments to the mixture formula shall be permitted
394		provided they do not exceed the values stated in the mix design.
395		
396		(3) The Engineer will evaluate the test strip to determine if the
397		mixture set and cure properties, equipment, placement technique,
398		and finished appearance are acceptable.
399		
400		(a) Verify that the surface shows no signs of distress
401		when exposed to traffic after curing for 1 to 2 hours.
402		•
403		(b) As determined by the Engineer, repair or remove and
404		replace any unacceptable test strip at no additional cost to
405		the State.
406		
407		(4) Make necessary adjustments if test strip does not perform as
408		required and repeat the test strip process until acceptable
409		performance. The Engineer may require a new job mix design if
410		failures indicate an ingredient problem.
411		·
412		(5) After acceptance by the Engineer, the Contractor shall match
413		the performance of the test strip unless another test strip is

414		constructed and accepted by the Engineer. No micro surfacing on
415		the project shall start until the test strip is accepted by the Engineer.
416		
417	(G)	Stockpiling and Storage
418		
419		(1) Aggregate Storage.
420		
421		(a) The mineral aggregate shall be handled in such a
422		manner as to prevent segregation, mixing of the various
423		materials or sizes, and contamination with foreign materials.
424		The grading of aggregates proposed for use and as supplied
425		to the project shall be uniform.
426		
427		(b) Suitable equipment of acceptable size shall be
428		furnished by the Contractor to maintain the stockpiles and
429		prevent segregation of aggregates.
430		
431		(c) The aggregate shall be passed over a scalping
432		screen immediately prior to transfer to the micro surfacing
433		mixing machine to remove oversized material.
434		
435		(d) Take necessary precautions to protect the aggregate
436		stockpiles from moisture variation due to weather. If
437		necessary, re-work the stockpiles to reach an acceptable
438		moisture content in the mix design.
439		· ·
440		(2) Storage of Bituminous Material. The bituminous storage
441		shall be adequate to meet the requirements of the production rate.
442		All equipment used in the storage and handling of bituminous
443		material shall be kept in a clean condition at all times and shall be
444		operated in such a manner that there will be no contamination with
445		foreign matter.
446		
447	(H)	Application.
448	` ,	••
449		(1) The paving mixture shall be spread on the prepared surface
450		in such a way to leave a uniform finished surface. Care shall be
451		taken when filling ruts to restore the designed profile of the
452		pavement cross section. Excess crowning or overfilling of the rut
453		area will not be permitted. The Contractor shall use squeegees
454		and lutes to spread the mixture in areas inaccessible to the
455		spreader box and areas requiring hand spreading. A sufficient
456		amount of material shall be carried at all times in all parts of the
457		spreader box to ensure complete coverage.
458		,

459	(2)	Adjust	ments to the additive will be permitted if necessary to			
460	` '	•	wer setting time when hand spreading is needed. If			
461	•		ing is necessary, the mixture shall be poured in a small			
462		windrow along one edge of the surface to be covered and then				
463		spread uniformly by a hand squeegee or lute. A smooth, neat				
464			e provided where two passes meet. Excess material			
465			ately be removed from ends of each run.			
466	Orian ii	i i i i i i i i i i i i i i i i i i i	atory be formered from onde of edentrum.			
467	(3)	Pre-w	et the pavement surface as required due to local			
468			of the parement surface as required as to lead to lead to lead of the micro surfacing box.			
469		Do not create standing water on the pavement in front of the micro				
470		surfacing box.				
471	Juliao	ing box	.			
472	(4)	Place	micro surfacing mix that meets the job mix design.			
473	(-)	1 1000	milioro sarraoling mix triat mooto trio job mix dosign.			
474		(a)	Control the ingredient proportions with metering or			
475		` '	uring devices on the micro surfacing equipment. Use			
476			igs from the metering or measuring devices to			
477			nine compliance with limits stated in the approved job			
478		mix de	·			
479		IIIIX GC	osign.			
480		(b)	The emulsion used throughout the project must be the			
481		` '	emulsion submitted with the job mix design. Calculate			
482			ercent emulsion from the calibrated paver for emulsion			
483		-	agregate quantities.			
484		ana a	ggrogate quantities.			
485	(5)	Engin	eer may require a new job mix design and re-			
486	` '	_	of the micro surfacing if large disparities occur.			
487	autiloi	ization	of the fillero surfacing it large dispartites occur.			
488	(6)	Produ	ce a mixture according to the authorized mix design			
489	` '		ty control tolerances.			
490	and th	io quaii	ty control toleranocs.			
491	(7)	Carry	a sufficient amount of micro surfacing in all parts of the			
492			so that full width and complete coverage is obtained			
493	•		ks or narrow spots.			
494	vvici i i i	o oli od	no of flatfow opote.			
495		(a)	Avoid overloading the spreader box.			
496		(α)	Avoid overloading the optoduct box.			
497		(b)	Do not spray water directly into the spreader box			
498		` '	the application of micro surfacing under any			
499		_	nstances.			
500		onoun	iotaliooo.			
501	(8)	Apply	micro surfacing for rut filling.			
502	(-)	, יין				

503	(a) For ruts less than ½ inch deep or as directed by the
504	Engineer, apply micro surfacing as a scratch-coat pass using
505	a metal or stiff rubber strike-off.
506	
507	(b) For ruts ½ inch deep or more, fill ruts independently
508	with a rut-filling box. Multiple passes with the rut filling
509	spreader box may be required for ruts greater than 1 inch
510	deep or as directed by the Engineer.
511	(a) Apply at a sufficient rate to level the payament
512 513	(c) Apply at a sufficient rate to level the pavement surface.
513 514	Surface.
51 4 515	(d) Allow 24-hour cure time after filling ruts, before
516	placing additional micro surfacing layer.
517	placing additional micro surfacing layer.
518	(9) Aggregate Application Rate. The target spread rate for all
519	full width micro surfacing not intended as a leveling course shall be
520	controlled to within plus or minus 2 pounds per square yard of
521	spread rate and shall be based on the weight of dry aggregate.
522	Unless otherwise approved by the Engineer, the full width spread
523	rate shall be 18 pounds per square yard for Type 2, and 25 pounds
524	per square yard for Type 3. A five percent reduction in unit price
525	will be applied for each pound of aggregate per square yard outside
526	the spread rate tolerances established above for each day's
527	placement of material. In lieu of pay reduction, the Contractor may
528	elect to overlay the deficient area at no additional cost to the
529	Department. Continued operation and placement of materials
530	outside the spread rate tolerance shall not be allowed. The
531	Contractor shall make adjustment as necessary in the placement
532	operation to maintain production within the tolerances given.
533 524	(40) Do not apply water to freehly placed migra surfacing
534 535	(10) Do not apply water to freshly placed micro surfacing.
536	(11) When required in the contract documents, roll pavement
537	surfaces with a minimum of two full coverage passes after the
538	mixture has cured to the point where it will not be damaged by the
539	roller.
540	
541	(12) Remove any loose debris from the micro surfacing work
542	daily.
543	
544	(I) Mixture. The micro surfacing mixture shall be sufficiently stable so
545	that premature breaking of the material in the spreader box does not
546	occur. The mixture shall be homogeneous during and following mixing
547	and spreading. Spraying of additional water into the spreader box is not

548	permi	tted. Ir	nmediately take corrective action if any of the following
549	occur	s:	
550			
551		(1)	Lumping, balling, or unmixed aggregates.
552		` ,	
553		(2)	Separation of the coarse aggregate from the emulsion and
554		fines.	1 33 3
555			
556		(3)	Premature breaking of emulsion inside the spreader box.
557		(-)	3
558	(J)	Work	manship
559	(-)		Р
560		(1)	Joints and Edges
561		(· /	Jointo and Lagos
562			(a) Longitudinal and transverse joints shall be uniform,
563			neat in appearance and shall not contain material build-up or
564			uncovered areas.
565			anocyclod areas.
566			(b) Construct longitudinal joints on lane lines, edge lines,
567			shoulder lines, or along the centerline. Longitudinal joints
568			shall be placed on lane lines when possible. Longitudinal
569			joints shall not be constructed in the wheel path. Care shall
570			be taken to ensure straight lines, and longitudinal alignment
570			shall be parallel to the roadway centerline. Do not overlap
572			on concrete pavements or concrete curb and gutter.
573			on concrete pavements of concrete curb and gutter.
			(a) The everten of miero surfacing at any icint shall be a
574			(c) The overlap of micro surfacing at any joint shall be a maximum of 3 inches.
575 576			maximum or 3 inches.
576			(d) Langitudinal adda lines shall not vary by more than 2
577			(d) Longitudinal edge lines shall not vary by more than 2
578			inches in 100 linear feet. If the Contractor is unable to meet
579			this requirement, they shall be required to establish a pilot
580			line. Line at intersections shall be kept straight to provide a
581			near and uniform appearance.
582			(a) The second is into the Hilbert constructed as both towns
583			(e) Transverse joints shall be constructed as butt-type
584			joints. If necessary, a suitable material will be used to mask
585			off the end of surfacing work or streets to provide straight
586			lines.
587			
588			(f) Gaps between applications shall not be permitted.
589			Joints will be considered acceptable if no more than a ½ inch
590			vertical space exists between the pavement surface and a 4
591			foot straight edge placed perpendicular on the longitudinal
592			joint, and no more than ¼ inch for transverse joint.
593			

594		(2)	Finished Surface.
595			
596			(a) The finished micro surfacing shall have a uniform
597			texture free from excessive scratch marks, tears, or other
598			surface irregularities, such as those caused by oversized
599			aggregate or broken mix. Excessive tear marks are
600			considered as four drag marks within 100 linear feet in a
601			single pass, or drag marks that are more than ½ inch in
602			width and more than 6 inch in length per 100 square yards,
603			or any marks greater than 1inch in width and more than 4
604			inch in length.
605			mon in longin.
606			(b) No transverse ripples or longitudinal streaks of 0.25
607			inch in depth will be permitted, when measured by placing a
608			10-foot straight edge over the surface.
			10-100t straight edge over the surface.
609			(a) The curface shall not have any flushing or evenesively
610			(c) The surface shall not have any flushing or excessively
611			rich areas that appear in the micro surfacing after two hours
612			from the time of placement.
613		(0)	
614		(3)	Irregular Areas. Areas which cannot be reached with the
615		•	g machine shall be surfaced using hand tools to provide
616		•	lete and uniform coverage. The area to be hand worked shall
617			eaned and lightly dampened prior to mix placement. Care
618			be exercised in areas that require handwork so that the
619			ed surface is uniform in texture, dense and of overall neat
620			arance comparable to that produced by the spreader box.
621		When	n transitions are included as part of the work, then these areas
622		are to	be surfaced prior to application of the main line. This shall
623		includ	le intersections, turnouts, radii, ramps etc.
624			
625		(4)	If workmanship criteria are not met, the Contractor shall stop
626		work a	and correct them at the Contractor's expense. Repair
627		sectio	ons shall be the same width as the existing pass of micro
628		surfac	cing. Small areas of patching are not permitted.
629			
630	(K)	Openi	ing to Traffic
631	()	- [9
632		(1)	The emulsified asphalt shall be formulated in such a way to
633		` '	the paving mixture to cure at a rate which will permit straight
634			g traffic on the pavement within one hour after application
635		_	ut damaging the pavement surface. The Contractor shall
636			ain traffic control as necessary to prevent damage to the
637			re. Any such damage done by traffic to the mixture shall be
638			red by the Contractor at the Contractor's expense.
		iepail	ca by the contractor at the contractor's expense.
639			

640 641 642			temporary pavement markings after the micro res. The permanent pavement markings shall not be I days.
643			
644	(L) Qua	lity Con	trol. The Contractor is responsible for quality control
645	(QC) samp	ling and	testing and shall submit a written Quality Control Plan
646	(QPC) acce	eptable t	o the Engineer.
647			
648	(1)	Projed	ct Documentation
649			
650		(a)	Maintain quality control documentation and make
651			ble to the Engineer upon request or at completion of
652		daily \	vork.
653			
654		(b)	Submit a daily report and log sheet containing the
655		follow	ing information:
656			
657		1.	Aggregate used, ton (dry)
658		0	National actions are all the second s
659		2.	Micro surfacing emulsion used, ton
660		2	Materials for took post used if appointed too
661		ა.	Materials for tack coat used, if specified, ton
662		4	Minoral filler used the
663 664		4.	Mineral filler used, lbs
665		5	Water used in mixture, gallons
666		J.	Water used in mixture, gailons
667		6	Additive used in mixture, gallons
668		0.	Additive asea in mixtare, gailens
669		7.	Surface area completed (square yards)
670			Canada and Compressor (Copular years)
671		8.	Surface area application rate (dry lbs aggregate per
672			square yard)
673			1 7 7
674		9.	Percentage of emulsified asphalt based on dry
675			aggregate.
676			
677	(2)	Perso	nnel. The Contractor is responsible for staffing their
678	proje	ect with o	qualified personnel.
679	. ,		·
680	(3)	Testin	ng Facilities and Equipment. The Contractor shall
681	sup	oly any te	esting and equipment needed to comply with their
682	appi	roved Q0	CP.
683	- •		

684		(4)	Material Testing. The Contractor shall test the materials
685			d in a manner to comply with their approved QCP and as
686	1	require	ed by the Engineer.
687			
688		(5)	Compliance with Specifications. The Contractor shall attest
689	i	in writi	ng to the Engineer that the micro surfacing has been
690			ucted in accordance with and meets the requirement of the
691			cations and their approved QCP at the conclusion of the
692		, project	• •
693	'		
694	(M)	Agenc	y Acceptance. The Department will conduct acceptance
695	• •	-	ting, and inspection activities to ensure material quality,
696			eation rates, and traffic control are within specification
697			. These activities along with the frequencies will be done at
698	•		of the Department.
699	uic dist	Ciction	Tor the Department.
700	,	(1)	Material Testing
700	,	(1)	Material resulty
701			(a) Aggregate. A sample of aggregate should be
702			(a) Aggregate. A sample of aggregate should be obtained and tested from the Contractor's project
			•
704			stockpile(s) at the discretion of the Engineer.
705			(b) Emulaified Applied Applied of amulaified capital
706			(b) Emulsified Asphalt. A sample of emulsified asphalt
707			should be obtained from the Contractor's distributor on the
708			first day of production and thereafter at a frequency not to
709			exceed 1 sample per 50,000 gallons. Because the time
710			between sampling of the emulsified asphalt and the testing
711			of the material can affect the test results, samples should be
712			sent to the HDOT Central Lab for testing as soon as
713			possible.
714			
715		(2)	Equipment. All equipment to be used on the project shall be
716	(evalua	ited by the Engineer.
717			
718		` '	Final inspection. A final inspection will be done with the
719			actor to assure that the project has been constructed and
720		compli	es with the project specifications.
721			
722			
723			nt. The Engineer will measure micro surfacing per square
724	yard in accord	dance v	with the contract documents.
725			
726			ot measure preparation of surfaces except for distressed
727	asphalt recons	struction	on work. All other work mentioned in the preparation of
728	surfaces shall	be co	nsidered incidental to micro surfacing activities.
729			-

730		
731	405.05 Payment. The Engineer will pay for the accepted micro surfacing at the	
732	contract unit price basis, as shown in the proposal schedule. Payment will be fu	υl
733	compensation for the work prescribed in this section and the contract document	ts
734		
735	The Engineer will pay for the following pay item when included in the proposal	
736	schedule:	
737		
738	Pay Item Pay Unit	
739		
740	Micro Surfacing Square Yar	ď
741		
742		
743	The Engineer will pay 100 percent of the contract bid price upon completion of	
744	the micro surfacing installation.	
745		
746		
747	END OF SECTION 405	
748		
749		

1 2	Make	this section a part of the Standard Specifications:
3 4		SECTION 408 – CRACK SEAL
5 6 7	408.0 seal o	Description. This section describes furnishing and applying crack n existing asphalt pavement.
8 9 10	408.0	2 Materials.
10 11 12	Crack	Seal ASTM D 6690-15
13 14 15	D6690	Crack seal shall be hot applied and meet the requirements of ASTM 0-15. Submit crack seal product information and test data for approval.
16 17	408.0	3 Construction.
18 19 20		(A) Weather Limitations. Do not apply crack seal if any moisture is or the pavement or in the cracks.
21 22 23		(B) Surface Preparation. Remove all vegetation, loose material and debris from the cracks. Clean cracks with compressed air. Hot air blas cracks immediately prior to application of crack seal.
24252627		(C) Routing. For cracks and joints less than 1/2-inch wide, route to a uniform width of 1/2-inch and depth of 3/4-inch to 1-inch prior to crack sealing.
28 29 30 31 32 33 34 35 36 37 38 39 40		(D) Melters. Use an indirectly heated double boiler melter which shall be capable of heating and applying all grades of asphalt rubber sealant fiber modified sealant and specification joint sealant without any further equipment modification. The melter heating system shall be thermostatically controlled and calibrated. The machine shall be capable of starting at ambient temperature and bringing sealant material up to application temperature in one hour at 70 degrees Fahrenheit ambient temperature. The melter shall have continuous sealant agitation and a mixing system to provide uniform viscosity and temperature of material being applied. All equipment shall be in good working order and functioning properly.
41 42 43 44 45		(E) Application. Seal cracks and joints 1/2-inch to 1-inch with approved hot-applied crack seal. For cracks and joints less than 1/2-inch wide, route to a uniform width of 1/2-inch and depth of 3/4-inch to 1-inch and fill with an approved hot-applied crack seal. The router shall also have a dust control system designed to reduce the particle pollution inherent in

46 47	asphalt pavement crack routing that protects people from excessive dust, and surrounding areas and vehicles from flying debris.
48	
49	(F) Protecting the Work. Crack seal shall be allowed to cool
50	sufficiently before opening to traffic. If the pavement temperature is
51	expected to exceed 85°F within 24 hours after placement, apply a
52	manufactured detackifying agent to the sealant before opening to traffic.
53	
54	(G) Cure Time. Crack seal shall be allowed to cure for a minimum of
55	30 days before any surface treatment is applied over it.
56	
57	408.04 Measurement. Crack sealing of existing pavement will be
58	measured per linear foot in accordance with the contract documents.
59	
60	408.05 Payment. The Engineer will pay for the accepted crack sealing at
61	the contract unit price, as shown in the proposal schedule.
62	
63	Payment will be full compensation for the work prescribed in this section
64	and the contract documents.
65	The Engineer will now for the following new items when included in the
66	The Engineer will pay for the following pay items when included in the
67 68	proposal schedule:
69	Pay Item Pay Unit
70	Pay item Pay Office
71	Crack Sealing – Less than 1/2" Linear Foot
72	Crack Sealing – Less than 1/2 Linear 1 oot
73	Crack Sealing – 1/2" to 1" Linear Foot"
74	Crack Sealing – 1/2 to 1
7 5	
76	
77	END OF SECTION 408

SECTION 415 - COLD PLANING OF EXISTING PAVEMENT

415.01 Description. This section describes removing existing pavement by a cold-planing process and establishing grade controls to provide a basis for a smooth riding surface.

415.02 Materials. None.

415.03 Construction.

(A) Equipment. Cold-planing machines shall be self-propelled, equipped with an automatically controlled and activated cutting drum that is capable of grade reference, maintaining transverse slope control and producing a uniformly textured surface. An Engineer accepted grade 1-piece referencing attachment, not less than 30 feet in length, shall be used. The cold-planing machine shall be capable of accurately removing the pavement surface, in one or more passes, to the required grade or cross-section indicated in the Contract Documents, without tearing or gouging underlying surface that is to remain and without contaminating milled pavement with underlying base course material. The final cut shall result in a neat and uniform milled surface.

Equip machine with cutting drum capable of producing a uniform surface finish and texture. Enclose the cutting drum in shroud to prevent discharge of loosened material into adjacent work areas. As standard equipment, provide dust suppression system, storage tanks with an adequate water, and high-pressure spray bar with spray nozzles. Provide a machine capable of cutting a crown and a depth by tilting drum axis and it shall be equipped with guidance system that controls transverse slope and longitudinal profile, matches adjacent pavements, and controls depth of cut. A mobile referencing system shall be used. Provide at minimum a 30-foot long 1-piece mobile reference to provide average elevation variations. The entire length shall be used in activating the sensor.

If referencing from existing pavement, the cold-planing machine shall be controlled by a self-contained grade reference system. The system shall be used at or near the centerline of the roadway. On the adjacent pass with the cold-planing machine, a joint-matching shoe may be used on the newly placed HMA surface. Using the existing newly paved pavement as a reference is discouraged and should not be used unless the profile of the existing pavement meets the smoothness requirements of the Contract Documents and even then, shall be used at the Contractor's own volition.

- **(B)** Cold-Planing Pavement Profile. Prior to the start of cold-planing (planing) take a pavement surface profile test of all areas where planing is to occur. Use these profiles to create a surface profile that shall be used to install a smooth finish pavement that meets the Contract Document smoothness requirements. The planing profile shall allow the finish HMA pavement's profile in general to:
 - (a) Not change the drainage patterns of the existing roadway.
 - **(b)** Decrease the clearance between overhead objects, e.g., overpasses, utility lines, and the finish pavement.
 - **(c)** Decrease the effectiveness or make existing safety apparatuses non-compliant.
 - **(d)** Change geometric properties, e.g., sight distance, slopes of the roadway shall not be changed.

The method used by the Contractor to obtain planing pavement profiles will be left up to the Contractor. The Engineer will use a profile obtained using the Contractor supplied profilograph to determine the profile index, i.e., smoothness, of the new pavement regardless of what method the Contractor uses to determine the planing pavement profile. Submit all planing pavement profiles for review and acceptance by the Engineer at a minimum of 30 days before planing starts. Inform the Engineer of any existing feature that may need adjustment to obtain a smooth riding surface. Adjustments to the existing feature if made will be paid for by contract change order.

Planing shall be used to create the initial base that shall improve the existing pavement profile when paving work is properly performed. Set guidance system grade sensor on string line or other grade device to guide the planing machine to the proper cutting profile established by the planing pavement profile.

- (C) Cold-Milled Surface and Removed Material. Cold-mill (mill) surface to remove pavement and to eliminate high spots and surface irregularities for a smooth roadway resurfacing. Remove thickness of existing pavement to the average minimum depth indicated in the Contract Documents. In general, the depth, length, width, and shape of the cut shall be as shown in the Contract Documents or as directed by the Engineer. Examine the milled surface and inform the Engineer if:
 - (a) There are any weakened pavement areas not shown in the Contract Documents.
 - (b) A thin milled 90 subsurface layer exists.

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- (c) Holes are present in the milled surface.
- **(d)** There are indications of poor bonding of the milled layer to the layer below.
- (e) Base course showing.
- **(f)** Any condition that may be deleterious to the service life of the new overlay exists.

The Engineer may direct remedial work in these areas to provide increased pavement life as well as a smoother ride, e.g., increase the depth of the planing or do additional work to the weakened pavement areas. Additional remedial work will be considered extra work unless the Contractor over milled the pavement.

Furnish, install, and maintain grade and transverse slope references.

Adjust machine blades to avoid damaging existing items that are to remain, such as underlying pavement structure, monuments, manholes, and pipes. Remove and replace or reconstruct items damaged by planing operations.

Maintain an appropriate consistent planing speed that shall give a smooth consistent texture for the milled surface. Planing speed shall be adjusted so that the milled surface is not scalloped or individually gouged or both. The travel speed in feet per minute shall not exceed 2/3 of the cutter drum RPM, e.g., 100 RPM > 66 feet per minute. If the planing machine does not have a drum RPM gage, assume the drum speed is 1/19th of the engine RPM.

For roadways open to traffic, cold plane each day across full width of traffic lanes to avoid longitudinal pavement drop-off between lanes. Make every effort to avoid longitudinal drop offs between lanes. If this cannot be avoided at the end of the day's production, or in areas opened to public traffic, construct tapered transitions for all longitudinal and transverse pavement drop-offs before opening area to public traffic. Use the same quality of HMA for temporary tapers that is used for the HMA overlay or pavement. Use maximum slopes of 8:1 for longitudinal and 48:1 for transverse tapered transitions. When cross streets are encountered use a 48:1 taper; minimize the transition piece from being in the lane perpendicular to the cross-street. Use 48:1 slope for transition pieces for utility features found in milled areas. The difference in elevation between adjacent existing pavement and milled areas shall not exceed 3 inches. Compact transition in such a manner that the transition shall provide a smooth riding transition and shall not change its shape for the duration of its use. The transition shall be uniform in shape and

 the toe of the transition shall be a set distance parallel to the unmilled edge of the adjacent pavement, i.e., the toe of the transition shall form a straight line parallel to the milled edge. Remove all transition material in the area to be resurfaced before placing the overlay.

Provide for drainage of milled surface areas and adjacent pavement. Drainage of the milled areas shall be installed on same work shift as when planing is performed.

The finished milled surface shall be suitable for public traffic to use safely and not cause damage to its vehicles or to the existing pavement. The completed surface of the milled asphalt concrete pavement shall not vary more than 0.02 foot when measured with a 12-foot straightedge parallel with the centerline. With the straightedge at right angles to the centerline, the transverse slope of the planed surface must not vary more than 0.03 foot. Check the milled surface profile every 24 feet to verify that the planing is compliant. Record drum speed and planing machine speed at every 30 minutes. Record results of checks, in a manner acceptable to the Engineer showing at a minimum:

- (a) Location of the profile check showing station and offset from centerline or station and lane location for both profile check and drum speed and planing machine speed.
- **(b)** Date and time for both profile check and drum speed and planing machine speed.
- **(c)** When planing machine started planing and stationing, all stopping and restarting times. End of shift planing work station.
- **(d)** Variances from straightedge, location of the variance on the straight edge.
- **(e)** Person performing checks and recording the information shall sign and print full name on report.
- (f) Submit reports weekly to the Engineer.

Re-mill areas that do not conform to Contract Document requirements or perform an Engineer accepted remedial repair if existing subsurface pavement would be too thin to re-mill and still provided the needed structural support to the pavement section.

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The Engineer may reduce the number of profile and planing machine speed checks if the reports show a consistent pattern of best practices and performance. The Engineer reserves the right to reinstate the former level of checks at any time should the quality of the work start to degrade.

Clean and sweep surface of milled pavement in accordance with Section 310 - Brooming Off, with the additional requirement that all loose material shall be picked up within the roadway surface including gutters, before opening milled area to public traffic. Repeat the cleaning and sweeping of the milled pavement to the same requirements used on the first day for each day the milled area is opened to public traffic including Saturday, Sunday and holidays.

Install all temporary traffic pavement markings before opening to public traffic and maintain them until overlay is placed. Pavement markings shall be of the same size, e.g., width and length as required in the Standard Plans. For example, no Arrows made with a single 4-inch tape will be allowed, the width of arrow shall be as show in TE-29.

Dispose of milled and removed transition materials in accordance with Subsection 201.03(F) - Removal and Disposal of Material.

Minimize dust escaping from cold-planing operation and contain or remove runoff water used for dust control in accordance with Section 209 – Temporary Water Pollution, Dust and Erosion Control.

The milled surface shall not be exposed to public traffic for more than three days prior to placement of resurfacing material. Place a leveling course over the entire milled area before the end of the third day if the permanent overlay cannot be placed. The leveling course shall be removed before the installation of the overlay. The leveling course, its installation and removal and any additional HMA needed due to increased depth shall be at the Contractor's expense. Failure to install an acceptable leveling course will result in the assessment of rental fees for unauthorized lane closure charges for the areas that are non-compliant, e.g., milled areas open longer than three days, until they have received an acceptable leveling course layer or the permanent overlay. Lane rental fee charges shall start at the end of the third day's normal working hours as defined in the Contract Documents, i.e., the third day's normal end of non-overtime shift. There will be no maximum amount of lane rental assessed by the Engineer for this situation. The Engineer will unilaterally calculate the amount of rental fees to be assessed. The Engineer reserves the right to suspend the Contractor's work and continue to charge lane rental when the Engineer determines that the Contractor's work is adversely impacting the public.

226	415.04 Measurement. The Engineer will not measure cold planing and planing
227	pavement profile for Section 401 – Hot Mix Asphalt (HMA) Pavement for payment.
228	
229	415.05 Payment. The Engineer will not pay for cold planing and planing pavement
230	profile for Section 401 - Hot Mix Asphalt (HMA) Pavement separately. The Engineer
231	will consider the cost for cold planing and planing pavement profile in the contract
232	price of the various contract items in Section 401 – Hot Mix Asphalt (HMA) Pavement.
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234	
235	END OF SECTION 415

1	Make this	s section a part	of the Standard Specific	cations:	
2 3		"SECTION 4"	17 – CUT CORES IN E	XISTING PAVEMENT	
4 5	417.01	Description.	This section is for o	btaining 4-inch diameter	sample
6	cores of	•	ement structure.	· ·	·
7					
8	417.02	Materials. No	ne specified.		
9 10	417.03	Construction	Ohtain 4-inch diamet	er sample cores of the f	iull denth
11				and in quantities as dire	•
12		O .		core drill, and in accorda	-
13	_			e and Verification" in Hav	
14		. •	•	<i>I for Material</i> , Appendix	
15	coring, th	ne hole shall be	filled and compacted w	ith new material to confor	rm to the
16	surround	ing area.			
17					_
18	417.04	Measurement	. The Engineer will me	asure the sample cores p	er each.
19	447 OE	Dowmont The	o Engineer will now for	the accepted comple cor	oo ot the
20 21	417.05	unit price per ea		the accepted sample cor	es at the
22	Contract	unit price per ca	OH.		
23	Pa	ay Item		Р	ay Unit
24					,
25	Cut Core	s in Existing Pa	vement		Each"
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27			END OF SECTION	417	

SE	ECTION 613 - CENTERLINE AND REFERENCE SURVEY MONUME	ENTS
Make	e the following amendments to said Sections:	
(I) follow	Amend Section 613.04 Measurements from lines 48 to 60 to vs:	read as
"613.0	04 Measurement.	
	(A) Reconstructing Centerline and Reference Survey Monur The Engineer will measure reconstructing centerline and reference monuments per each.	
	(B) Adjusting Centerline and Reference Survey Monument. The Engineer will measure adjusting centerline and reference monument per each."	survey
(I)	Amend Section 613.05 Payment from lines 62 to 88 to read as	follows:
"613.	.05 Payment.	
	(A) Reconstructing Centerline and Reference Survey Mor The Engineer will pay for accepted reconstructing centerline and resurvey monument at contract unit price per each. Payment will compensation for work prescribed in this section and contract docu	eference I be full
	(B) Adjusting Centerline and Reference Survey Monument Engineer will pay for accepted adjusting centerline and reference monument at contract unit price per each. Payment will be full competer work prescribed in this section and contract documents.	survey
propo	The Engineer will pay for each of following pay items when inclosal schedule:	luded in
	Pay Item P	ay Unit
Recor	nstructing Centerline and Reference Survey Monuments	Each
Adjus	sting Centerline and Reference Survey Monuments	Each
	The Engineer will pay for:	
	(A) 80 percent of contract bid price upon completion of a centerline and reference monument.	djusting

47	(B) 20 percent of contract bid price upon completion of providing reference
48	survey data to the Engineer for all new monuments."
49	
50	END OF SECTION 613
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1 2 3	SECTION 626 – MANHOLES AND VALVE BOXES FOR WATER AND SEWER SYSTEMS
3 4 5	Make the following amendment to said Section:
6 7	(I) Amend 626.04 - Measurement by replacing lines 172 to 173 to read:
8 9 10	"626.04 Measurement. The Engineer will measure adjusting standard manholes and valve boxes per each for water and sewer systems."
11 12	(II) Amend 626.05 – Payment by revising lines 174 to 192 to read as follows:
13 14 15 16	"626.05 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 compensation for work prescribed in this section and in contract documents.
17 18 19	The Engineer will pay for each of the following pay items when included in proposal schedule:
20 21	Pay Item Pay Unit
22 23 24 25	Adjusting Standard Manhole and Valve Box Frames and Covers for Water and Sewer Systems Each"
26	END OF SECTION 626

1 2 2	SECT	ION 627 – ENHANCED VEHICLE CLASSIFICATION TRAFFIC COUNTING SYSTEM
3 4	Make this S	Section a part of the Standard Specifications:
5 6 7 8 9 10	machinery, Vehicular C	Pescription. The work includes furnishing labor, materials, tools, and equipment to repair any damages to the existing Enhanced lassification (EVC) traffic counting system due to the paving work. The shall make repairs to the damaged system as ordered by the Engineer, e following:
11 12 13 14 15 16 17	(A)	Provide necessary provisions for traffic counting operations by installing and testing piezoelectric sensors, vehicle detector loops, installing conduit, cable wiring, providing electrical connections, warning sign and system integration and testing according to the contract.
18 19 20 21	(B)	Provide underground conduit systems including trenching, structural excavation, furnish and install pull boxes, backfilling and restoration work.
22 23 24 25 26	(C)	Conduct required testing for the vehicle detector loops and piezo sensors. Submit for acceptance test procedures and criteria for acceptance test results to the Engineer. Notify the Engineer a minimum of one week before the date scheduled for testing.
27 28 29 30	(D)	Coordinate and arrange for inspection of work with the Engineer. Arrange for a representative from piezo sensor's manufacturer to supervise installation of piezo sensors.
31 32	(E)	Turn over to the Engineer a complete and operating vehicle counting system according to the contract.
33 34 35 36		I install incidental parts necessary to complete the vehicular counting and n system as though such parts were in the contract.
37 38 39 40 41 42	Materials ar General Ord standards;	quipment shall conform to the NEMA Standards and this contract. Ind workmanship shall conform to "National Electric Code", (the code); der Nos. 6, and 10 of the Hawaii Public Utilities Commission; ASTM the ANSI and applicable revisions for all the above codes and standards redinances that may apply.
43 44	627.02 M	laterials.
45 46	(A) Syst	Enhanced Vehicular Classification (EVC) Traffic Counting em. The EVC system is intended to count vehicle volume and perform

vehicle classification, including but not, limited to the 13 FHWA vehicle types, and data for environmental impact analysis per FHWA requirements.

(1) General Requirements. Install EVC system in each lane at the system's existing location. The EVC system contains a set of piezoelectric sensors and magnetic loop detectors. The EVC system will be used to classify the number of axles in accordance with FHWA requirements.

The EVC system shall also be capable of monitoring traffic volume data using one or more magnetic induction vehicle detector loops. Such loops shall be installed as called for in the submitted plans.

- **(2) EVC System Components.** Installation and setup per manufacturer's recommendation for all sensors, lead-in cables, and related components.
 - (a) Traffic Classification Data System Requirements.
 - 1. In-Road Piezo and Classification Sensor System. A Piezo Sensor System is the type of classification sensor system required for this project.
 - (i) The piezo sensors shall have an operating life of a minimum of one year from the date of acceptance. Sensor failure during this period shall require replacement of the faulty unit at the Contractor's expense for furnishing, delivering and installing the replacement equipment, system, and components including any traffic control measures required for the safe installation of the replacement sensor.
 - (ii) Install piezo sensors under the supervision of the manufacturer's representative for the Piezo system. All necessary components, process, system modifications, and installation requirements shall be provided as incidentals to the system.
 - (iii) Piezo Sensor System: The following are requirements for the Piezoelectric Sensor system:

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- **a)** Configuration: Install piezoelectric sensors in the roadway for each lane in both traffic directions.
- b) Class 1 BL unencapsulated piezoelectric sensors must be supplied complete with custom length lead-in coaxial cable with pre-made termination connectors. The sensor design and installation technique must have been proven reliable in conditions (soil and environmental), similar to those in Hawaii.
- c) Piezo Sensor shall be Class I Weigh in Motion Sensor, 12-foot length (or based on actual roadway width), complete with coaxial lead cable (non-spliced). The sensor shall have 16 gauge flat braided silver plated copper wire center core with highly compressed piezoelectric copolymer P(VDF-TrFE) and outer sheath of 0.16-inch thick brass meeting CDA-260 and ASTM B87-88 requirements. The sensor shall be approximately 0.26-inches wide with a maximum thickness of 0.063-inches (plus/minus 0.05 inches). Insulation resistance between core and shield shall be greater than 500M ohms. Piezoelectric coefficient shall be greater or equal to 20 pC/N nominal.
 - 1) Embed piezo sensors in a grout with clips for mounting at six inch intervals. The sensors shall be of the type suitable for the application. Install piezo lead-in cables and piezo sensors in slots cut in the road surface, approximately 3/4-inch wide by two inches deep and provide supporting clips at six inch centers.
 - 2) Lay sensor in a groove at one inch below the surface of the roadway or as recommended by the manufacturer. Secure sensor in

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place along the entire length of the sensor in the slot by quick setting grout clips.

- 3) Sensor shall be manufactured to produce uniform, high amplitude piezoelectric output with signal to noise ratio of 10:1 minimum.
- **4)** Groove shall be constructed in strict accordance with specifications of the manufacturer. Install sensor straight and flat in groove.
- 5) Epoxy fill voids of the groove. The epoxy grout fill shall be prepared in accordance with the manufacturer's instructions, and shall result in a concave finish approximately 1/16-inch above the surface of pavement or as shown on the plans. The grout curing requirements of the manufacturer shall be complied with and traffic loading shall not be permitted until the grout is fully cured.
- Passive signal cable shall be RG 58 rated for underground direct burial, with outer jacket of 0.187-inch outside diameter and nominal capacitance of 27 pF/Ft, with factory termination to sensor and BNC Each cable shall have connector. field measured custom length to suit the installation conditions. event that the cables provided have insufficient length to reach the equipment harness inside cabinet, the cables shall be rejected and splicing to lengthen the cable will not be allowed.
- **7)** Install sensor in clean saw cut grooves in strict conformance to the

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sensor manufacturer's installation requirements.

- **8)** Hot tar shall not be used. Installation of encapsulating material shall be allowed to cure and shall be ground flat.
- Do not allow traffic on the 9) completed system until the manufacturer's representative approves all conditions of the installation with the acceptance by the Engineer. Thereafter, testing accordance with manufacturer's requirements shall be completed before public traffic is allowed.
- **10)** Grooves shall be made by wet cutting. Dry cutting shall not be allowed.
- **11)** Overall length of the passive cable shall be 300-feet maximum or as required. Provide loop of five feet in handhole for each cable.
- 12) In the event that heating of the encapsulating material is allowed by the Engineer, the temperature of the material shall not be allowed to exceed 170 degrees F. In the event that the temperature exceeds the maximum allowed, the entire sensor system installed shall be replaced.
- 13) Provide adequate power for all test equipment to meet the detailed and specific requirements of the manufacturer for all tests required for certification and acceptance. Provide all necessary equipment to perform the required tests.

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- **d)** One 12-foot piezoelectric sensors (or as determined by the Engineer) must be supplied for each lane for both directions.
- **e)** The sensors shall be able to withstand at least one million cycles and interface with the counting equipment to perform the above mentioned, applications.
- The sensors shall include f) mounting hardware and installation grout. The supplied installation grout must be suitable for installation in both asphalt and cement pavements. Portland The installation grout must require no special equipment to facilitate installation. grout must have a short curing time (less than 75 minutes) to minimize lane closure The grout should be of sufficient consistency to prevent "running" when being applied on road surfaces with a drainage cross-slope. Particulate matter within the grout must not separate or settle. The grout must not shrink during the curing process.
- **(iv)** Sensor (inductive) loops shall be furnished and installed in each traffic lane, to measure speed and length of vehicles and also to classify vehicles in conjunction with the axle detectors.
- (v) If the number and configuration of the inroadway sensors, and sensor loops, need to be modified from the number and configuration shown in the field, the Contractor shall inform the State at the time of submitting the proposal, or earlier, and submit Shop Drawings of the revised configuration for approval.
- (vi) Grout and Epoxy. The sensor manufacturer must approve and the Engineer must accept all grout and epoxy used for the sensor installation.

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Vehicle Inductive Loops. Install two vehicle (b) inductive loops per lane for measuring volume, speed and vehicle lenath. The inductive loops shall be completely tested prior to shipment with no splices and ready to install. (Note: The lead-in wire(s) for the new inductive loops can be spliced (soldered connection/waterproof insulation) to an sufficient wire lengths for the piezo sensors must be provided to be able to connect wires into the terminal block inside cabinet without splices. HDOT or its representative will make the final connection into the terminal block inside the cabinet, however, the Contractor shall label the wires clearly to identify traffic direction, lane number, and sequence of loops and piezo sensors in each lane per direction).

Each loop and its two lead-in-wires, shall be one continuous piece of #14 AWG, 19 strand bare copper, IMSA 51-conforming to the requirements of ASTM B-3 as manufactured by Berkshire Electric Cable Company or approved equal. The loop cable shall be continuous within the roadway. The loop itself includes four turns of wire of a size, as specified in the contract. Do not twist lead-in-wires from one loop pair with another loop pair.

Embed loop and lead-in-wires in a 3/8-inch minimum width saw-cut in the pavement. Saw cut depth to the top layer of wire shall be at least two inches deep. The saw cut groove shall be air blown to remove debris before installing the loop cable. Fill the saw cut groove with approved epoxy sealer. Install Vehicle Detector Loops such that they are centered in the lane relative to the final lane stripping. Replace loops not centered in each lane relative to the final lane stripping at no additional cost to the State.

(c) EVC Controller Cabinet. The new EVC controller cabinet shall house all required communications and control equipment necessary to control the EVC System and to remotely communicate with the Department of Transportation, Highways Division, Planning Branch via modem.

The EVC controller cabinet shall consist of a ground-mounted cabinet similar to a CALTRANS Model 332 Controller Cabinet or approved equal capable of housing and mounting the data collection unit.

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319	require	emer	its:				
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321		1.	Cabinets	fabricated	from	0.125	anodized
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324		2.	Cabinet's	Main Break	ers sha	II be ra	ted as 50
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330		4.	Convenie	ence GFI Rece	eptacles) .	
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332		5.	Door lock	ks of solid br	ass rim	Best Lo	ock Series
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335		6.	Labeling	by Silk-Screei	ning onl	у.	
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337		7.	Attach on	e each 24 inc	h x 36 ir	nch Cabii	net Print in
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341		8.	The cabin	net shall be pa	ainted w	<i>i</i> ith an "a	ınti-graffiti"
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345		Inter	nal wiring	shall be modi	ified to i	neet the	functional
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348	(d)	Flec	trical Co	nductors shal	ll he as	follows:	
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359		2.	Type 2	Detector-Loc	•		
360				the roadway			
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364			e inclusive in the Detector Loop
365		Bid.	
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367		_	cables required for the installation
368			shall be as required by the
369		manufacturer's requi	rements and recommendations.
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371	(e)	Excavation Warnin	g Signs. The Contractor shall
372		furnish and install tw	o warning signs and appropriate
373		mountings on each s	ide of the roadway adjacent to the
374		sensor lead-in cable i	runs or as close as possible. Signs
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376			ns) of the Standard Specifications
377			E-01. Signs shall be a minimum
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379		follows:	rionico. Cign toxt chair road de
380		WARNING	
381		BURIED TRAFFIC S	ICNAL LINES
		NOTIFY HWY-PLAN	
382			
383		(808) 587-6352 BEF	ORE DIGGING/EXCAVATION
384		T	
385			nall be a minimum of two inches in
386		•	of text shall be one inch in height.
387			ut a margin of 1/4 inch shall be
388	mainta	ained. For the letter	s and background, use black and
389	yellow	<i>r</i> paints, respectively	. The first line of text shall be
390	cente	red. Subsequent line	es shall also be centered, however,
391	the Co	ontractor shall have the	e option to more the wording within
392	these	lines to allow for bes	t fit. Furnishing warning signs,
393			shall be incidental to the Contract.
394		3 ,	
395	(B) Other Mater	rials. Concrete sha	all conform to the requirements of
396	• •		Other materials shall meet the
397	requirements specif		Care materiale erial meet are
398	. oquii om om op ooii	ned in the reneming.	
399	Trench Backfill Mat	erial	Subsection 703.21
400	TICHOTI Dackilli Mat	Cital	Subsection 703.21
400	Conduits		Subsection 712.27
	Conduits		Subsection 712.27
402	O		Cl +: 740 00(D)
403	Concrete Pull Box		Subsection 712.06(B)
404			0
405	Conductors and Ca	bles	Subsection 770.06
406			
407			
408			
409			

410	627.03	Cor	nstruction	Requirem	nents.	
411 412	1	A)	Equipmor	t List and	l Drawings.	Submit the equipment list and
413	•	•			r acceptance.	Submit the equipment list and
414	u	ııawııı	gs to the L	ngineer ioi	acceptance.	
415	/1	B)	Evcavatio	n and Rac	kfill Evcaya	ation and backfill shall conform to
416	•	•				discellaneous Facilities. Place
417						ent damage and obstruction to
418					•	rence with surface drainage.
419	v	Cilicai	ai aila pec	icoman na		reflee with surface drainage.
420	((C)	Installatio	n		
421	•	O ,	motanatio	•••		
422			(1) Pro	vide super	vision for the F	VC installation and testing of the
423			entire EVC	•	VIOIOTI 101 1110 E	To motamation and tooting of the
424						
425			(a)	Install p	iezo (EVC) se	nsors under supervision of EVC
426			` ,	em Contra	` ,	
427			,			
428			(b)	Provide	other work ne	cessary such that the completed
429			` ,		ady for HDOT	·
430					,	
431			(2) Veh	icle Detec	t ors. Install v	vehicle inductive loops as ordered
432			by the Eng	ineer and a	as required by tl	he EVC system Contractor, or as
433		I	recommen	ded by the	manufacturer.	•
434						
435		((3) Cor	nduits.	Conduits, if a	any, shall be direct burial and
436		(concrete e	ncased as	shown in the co	ontract. Conduits shall be PVC,
437		;	Schedule 8	30.		
438						
439						rds either one or both pullboxes.
440		(Conduits s	hall not dra	ain towards the	EVC Controller cabinet.
441						
442					_	the conduits, such as bends and
443						curved segments using accepted
444						lengths of straight ducts and
445			couplings.		•	petween two adjacent lengths of
446					•	6°). The bends shall not have a
447						minal size of the conduit. The
448		(Contractor	may use t	actory-made e	lls.
449			0	16.		W 1
450 451			•			er cutting to remove rough edges.
451 452						ent weld type. Make the solvent
452 452			•		to the conduit r	nanufacturer's recommendations
453 454		•	and as acc	epied.		
454						

455	Seal the ends of the duct with plugs at the end of each day of
456	work, whenever problems interrupt the duct installation work and
457	whenever ducts are subject to submergence in water.
458	
459	Keep the conduits clean during construction.
460	
461	Use only hand shovels in compacting concrete encasements.
462	Cure the concrete for at least 72 hours before permitting vehicular
463	traffic to run over the concrete.
464	
465	Provide each conduit run with a No. 10 gage flexible, zinc
466	coated pull wire extending through its entire length. Double an
467	additional two feet back into the conduit at each end of the run.
468	Conduits and sleeves entering pullboxes shall end flush in the wall
469	with ends ground smooth. Plug the conduits and sleeves temporarily.
470	, and the second
471	Give the exterior portions of the direct burial steel conduits not
472	encased in concrete two coats of asphaltic base paint.
473	оположения обществення в доринали в дострании
474	The entire length of a conduit run between pullboxes or
475	standards shall be of one type of material.
476	Starradiae Grian Do Grieno typo Grimaterian
477	The completed duct lines shall be subject to a field test. Pass
478	a bullet-shaped test mandrel about 14 inches long with a diameter 0.5
479	inch less than the inside diameter of the ducts through the entire
480	length of each duct run. The Engineer will consider scouring found
481	on the mandrel deeper than one thirty-seconds inch an indication of
482	burrs and/or obstructions in the duct run. Normal abrasion between
483	the duct line and bottom of mandrel is not an indication of burrs and/or
484	obstructions in the duct run. Remove such burrs and/or
485	obstructions. Pass the test mandrel through again. Repeat the
486	process until the Contractor gets a satisfactory result.
487	process until the Contractor gets a satisfactory result.
488	(D) Electrical Service. Electric power shall be 120 volts, 60 cycles.
489	Install the service underground in a steel conduit of the size shown in the
490	contract from the local power company's pole to the controller.
490 491	contract from the local power company's pole to the controller.
491 492	Furnish and install carries connections such as conduits, weatherhead
	Furnish and install service connections such as conduits, weatherhead,
493	wires and meter loop, and comply with the power company's requirement for
494 405	electrical service. The cost of service connections shall be the
495	responsibility of the contractor.
496	(E) Lagrantin and Tartin
497	(E) Inspection and Testing.
498	(4) Dualinainama Amanananata The amainment of the C
499 500	(1) Preliminary Arrangements. The equipment shall be given
500	requisite factory tests as necessary to determine that the

501	workmanship and materials are free from defects and to establish that
502	the design and construction are satisfactory.
503	
504	Arrange for and conduct shop tests of the equipment to
505	establish compliance of the contract documents and all applicable
506	codes and standards. Furnish certified reports showing the results
507	of all such tests. Test facilities shall be subject to prior inspection by
508	the Engineer. Notify the Engineer at least 21 calendar days before
509	the scheduled start of a test so that the Engineer may elect to witness
510	any or all such tests. Furnish protection of equipment to prevent
511	damage during the test period. All repair or replacement costs of
512	any item damaged as a result directly or indirectly of the test will be at
513	no cost to the State.
514	
515	Unless otherwise noted in the contract documents, shop testing
516	and inspection of the components or the complete system shall be in
517	accordance with the Contractor's standard practice. Supply a list of
518	all Contractor's standard testing with the equipment submittal. The
519	Engineer shall not be charged for any of the preliminary testing.
520	
521	(2) Inspection. The Engineer reserves the right to inspect all
522	material during fabrication and before shipment and shall have access
523	to the manufacturer's or Contractor's plant as required.
524	
525	(3) Tests.
526	(a) After in talleties of views and envisor and formish
527 529	(a) After installation of piezo sensors, perform and furnish
528	written test results for each piezo sensor showing:
529 520	1) Resistance: The resistance should be at least
530 531	 Resistance: The resistance should be at least one MegaOhm.
532	one wegaonin.
533	2) Capacitance: The capacitance should range
534	from five to 20 nano Farads.
535	nomine to 20 hand rarads.
536	3) Dissipation Factor: The reading should be less
537	than 0.04.
538	tilali 0.04.
539	Provide all testing equipment such as BK 875A or
540	equivalent LCR meter, Fluke 75 or higher/equivalent
541	multimeter, Megohmeter, and Scope meter or oscilloscope for
542	the above tests.
543	
544	(b) After the installation of the inductive loop detectors,
545	furnish written test results for each loop sensor showing:
546	, s

547	1) Induced voltage (V)
548	
549	2) f = Frequency of Loop (KHz)
550	
551	3) L = Inductance of Loop (uH)
552	
553	4) R = Resistance of Loop (Ohm)
554	
555	5) Meg Test = Loop insulation resistance should be
556	> 100M ohm
557	
558	Correct any defects discovered as a result of the Static
559	tests at no additional cost to the State.
560	
561	(4) Acceptance of EVC System.
562	
563	(a) The EVC system shall not be accepted and payment
564	shall not be made until the system has successfully met the
565	required testing.
566	(1) I (1) TI (2) (1) (1) (1)
567	(b) Inspection. The Owner reserves the right to inspect
568	all material during fabrication and before shipment and shall
569	have access to the manufacturer's or Contractor's plant as
570	required.
571	
572	(5) Restoring Pavements and Other Improvements. Restore
573	the existing pavements and other improvements disturbed by
574	excavation to their original condition according to the contract.
575	Materials used for restoration work shall meet specifications match
576	thickness, texture, and color whenever applicable. The grades of
577	the restored surfaces shall match the existing grades.
578	
579	(6) Warranty. Materials and equipment installed for permanent
580	construction shall be new. Use first-class material and equipment
581	throughout the performance of the contract.
582	
583	Secure from the manufacturer(s), a warranty or warranties
584	guaranteeing equipment from defects in materials, design and
585	workmanship for not less than 12 months from the date of
586	acceptance.
587	
588	When requiring adjustments or repairs during the warranty
589	period, adjust or repair the existing unit within 24 hours from the time
590	of notification.
591	

592	When requiring repairs that need factory corrections during the
593	warranty period, replace the existing unit with an accepted temporary
594	operational replacement unit within 24 hours from the time of
595	notification until the Contractor can install the new unit. Install the
596	new, identical non-defective unit within 30 days from the time of
597	notification.
598	
599	627.04 Measurement. The Engineer will measure the new Vehicular Counting
600	and Classification System Sensor Replacement, if ordered by the Engineer, on a
601	force account basis, in accordance with Subsection 109.06 - Force Account
602	Provisions and Compensation.
603	
604	627.05 Basis of Payment. The Engineer will pay for the accepted Vehicular
605	Counting and Classification System Sensor Replacement at the contract price per
606	pay unit, as shown in the proposal schedule. Payment will be full compensation
607	for the work prescribed in this section and the contract documents.
608	The Conjugate will have few the fallowing may item when included in the
609	The Engineer will pay for the following pay item when included in the
610	proposal schedule:
611 612	Pay Item Pay Unit
613	r ay nem
614	Vehicular Counting and Classification System
615	Sensor Replacement Force Account"
616	Total Academic
617	
618	
619	
620	
621	END OF SECTION 627

Make the following amendments to said Section:

(I) Amend **Subsection 645.03 – Construction** by adding this paragraph after line 70:

"Furnish two Electronic Message Boards or the amount requested by the Engineer for each work site that requires work zone traffic control on a daily basis."

(II) Amend **Subsection 645.03 – Construction** from line 71 to 100 to read as follows:

"TCP Development. Contractor shall develop site-specific Traffic Control Plan (TCP) and work schedule based on work hours and lane closure restrictions stipulated in the contract documents.

TCP shall be developed after Contractor conducted field investigation of traffic conditions, including but not limited to, traffic volume counts taken during anticipated work hours, detour routes, interchange ramp & city street traffic signal timing, and public gathering places such as schools, businesses and shopping malls within the project limits and surrounding areas.

If excessive work zone traffic delays within project limits were observed during construction, the State reserves the rights to suspend TCP if Contractor failed to adjust his work and/or TCP to address traffic concerns brought forth by the State in a timely and responsive manner.

If TCP affects State of Hawaii streets, such as but not limited to, work upon State highways, lane closures, or traffic detours on State highways, State of Hawaii, Department of Transportation services (DTS) Permits for Street Usage shall be obtained prior to starting work. A TCP stamped by a registered Civil Engineer from the State of Hawaii may be required to obtain the DTS Permit for Street Usage.

If TCP affects County of Maui streets on the islands of Molokai and Lanai, such as but not limited to, traffic detours onto City streets, or traffic control devices placed on City streets, a City & County of Maui, Department of Transportation services (DTS) Permit for Street Usage shall be obtained prior to starting work. A TCP stamped by a registered Civil Engineer from the State of Hawaii may be required to obtain the DTS Permit for Street Usage.

TCP Submittal. Submit TCP and work schedule for review and acceptance following the procedures established in Subsection 105.04 – Review and Acceptance Process. TCP and schedule shall be accepted by the Engineer prior to starting work in each area. Submit modifications and deviations from accepted TCP following the procedures established in Subsection 105.04. Illegible TCP will not be accepted.

Amend Subsection 645.03 (F) - Lane Closures from line 253 to 270 to read

93

94

(IV)

as follows:

95	
96	"For the islands of Molokai and Lanai, no lane closures will be allowed during
97	24-hour periods as follows:
98	
99	(1) Day preceding Holidays (3:00 p.m. to Midnight).
100	
101	(2) Holidays (Midnight to Midnight).
102	
103	(3) Thanksgiving weekend (Thursday to Sunday).
104	(4) Holiday paried for Christman and New Year (Two Weeks prior to
105	(4) Holiday period for Christmas and New Year (Two Weeks prior to
106 107	Christmas and the week between Christmas and New Year).
107	(5) Other dates of events indicated in the contract documents."
109	(b) Other dates of events indicated in the contract documents.
110	(V) Amend Subsection 645.04 – Measurement from lines 394 to 403 to read as
111	follow:
112	
113	"645.04 Measurement. The Engineer will measure Traffic Control and
114	Electronic Message Boards per working day in accordance with the contract
115	documents.
116	
117	Traffic Control (Shoulder Closure) will be measured by the number of full
118	shoulder closure installed and removed as required.
119	
120	Traffic Control (Flagging Operation for Contra-flow) will be measured by the
121	number of flagging operations installed and removed as required. A flagging
122	operation is defined as active control of traffic flow by flag person(s), such as 1-lane,
123	2-way traffic operation.
124	Traffic Control / and Classings) will be increasingd by the increasing of full land
125	Traffic Control (Lane Closures) will be measured by the number of full lane
126	closures installed and removed. A full lane closure is defined as closing one lane
127 128	to traffic.
128 129	The Engineer will measure Additional Police Officers, Additional Traffic
130	Control Devices, and Advertisement, if ordered by the Engineer, on a force account
131	basis, in accordance with Subsection 109.06 – Force Account Provisions and
132	Compensation."
133	Compensation.
134	(VI) Amend Subsection 645.05 - Payment from lines 405 to 424 to read as
135	follows:
136	
137	645.05 Payment. The Engineer will pay for the accepted Traffic Control at
138	the contract price per working day.
139	
140	The payment for Traffic Control (Shoulder Closure) includes full
141	compensation for renting/furnishing, installing, maintaining, relocating and removing

all signs, barricades, delineators, cones as required.

142 143 144

145

146

The payment for Traffic Control (Flagging Operation for Contra-Flow) includes full compensation for renting/furnishing, installing, setting up, relocating and removing all signs, cones, flag persons, flagging/communication equipment as required.

147 148 149

150

The payment for Traffic Control (Lane Closures) includes full compensation for renting/furnishing, installing, maintaining, relocating and removing all signs, barricades, delineators, cones, arrow boards, police officers, etc. as required.

151 152 153

154

155 156

The Engineer will pay for the accepted Electronic Message Boards at the contract price per working day. The price includes full compensation for renting/furnishing, installing, setting up, maintaining and removing one electronic message board for a 24-hour period, and furnishing labor, materials, tools, equipment, and incidentals necessary to operate the Electronic Message Boards.

157 158 159

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

160 161 162

Pay Unit Pay Item

163 164

Traffic Control (Shoulder Closure, per day Unit Price not to Exceed \$4,000)(1-60 WD) Working Day

165 166 167

Traffic Control (Flagging Operation for Contra-Flow, per day Unit Price not to Exceed \$6,000)(1-60 WD)

Working Day

168 169

170 Traffic Control (Lane Closures, per lane, per day 171

Unit Price not to Exceed \$3,000)(1-60 WD)

172 173

Electronic Message Board (each, per day Unit Price not to Exceed \$1,500)(1-60 WD)

Working Day

Working Day

174 175 176

177

178

179

180

181

182

Maximum bids allowable for Traffic Control and Electronic Message Boards amount in excess of the allowable maximum for either or both items, the indicated amount or amounts shall be reduced to allowable maximum, as appropriate. "Sum of All Items" in proposal schedule shall be adjusted to reflect any such reduction. For purposes of comparing bids and determining contract price to be inserted in contract awarded to bidder, if so awarded, "Sum of All Items" adjusted in accordance with foregoing shall be used and bidder's proposal shall be deemed to have been submitted for amounts as reduced and adjusted in accordance herewith.

183 184 185

Additional Police Officers, Additional Traffic Control

186 Devices, and Advertisement Force Account

187 188

189

An estimated amount for the force account may be allocated in the proposal schedule, but the actual amount to be paid will be the sum shown on the accepted

190	force account records, whether this sum be more or less than the estimated amount
191	allocated in the proposal schedule. The Engineer will negotiate the force account
192	amounts for the respective pay items when each work order is issued.
193	
194	The State reserves the right to use other means for Traffic Control. The
195	Engineer shall determine when to include the respective pay items in each work
196	order."
197	
198	
199	
200	END OF SECTION 645

18 19 20

SECTION 703 - AGGREGATES

Make the following amendments to said Section:

Amend **Subsection 703.11** by replacing subsection to read: **(l)**

"703.11 Aggregate for Slurry Seal and Micro Surfacing. Aggregate for slurry seal and micro surfacing shall consist of crushed rock and shall be free of dirt, clay, and other deleterious material. Aggregate shall be nonplastic in accordance with AASHTO T 89 and AASHTO T 90 and shall not contain free water, which is defined as water that is free to move under influence of gravity.

Aggregate for slurry seal and micro surfacing shall conform to Table 703.11-1 - Slurry System Test Requirements and Table 703-11-2 - Slurry System Grading Requirements:

TABLE 703.11-1 - SLURRY SYSTEM TEST REQUIREMENTS					
Test	Method	Slurry Seal	Micro Surfacing		
Sand Equivalent, min	AASHTO T 176	45	65		
Magnesium Sulfate Soundness, max loss, %, 4 cycles ^c	AASHTO T 104	25	25		
Los Angeles Abrasion, %, max ^c	AASHTO T 96	35	30 (a)		

Notes:

- Perform tests on aggregate before crushing. (a)
- Do not use predominantly limestone or dolomite aggregate. (b)
- The abrasion and soundness test is to be run on the parent (c) aggregate.

21

TABLE 703.11-2 - SLURRY SYSTEM GRADING REQUIREMENTS					
Sieve Size	Percent I	Passing by W	eight.325	Stockpile Tolerance (Percent)	
	Type 1	Type 2	Type 3		
3/8 Inch	-	100	100	-	
No. 4	100	90 - 100	70 - 90	± 5	
No. 8	90 - 100	65 - 90	45 - 70	± 5	
No. 16	65 - 90	45 - 70	28 - 50	± 5	
No. 30	40 - 65	30 - 50	19 - 34	± 5	
No. 50	25 - 42	18 - 30	12 - 25	± 4	
No. 100	15 - 30	10 - 21	7 - 18	± 3	
No. 200	10 - 20	5 - 15	5 - 15	± 2	

Type 1 - Crack filling and fine seal.

Type 2 - Medium seal.

Type 3 - 1st and/or 2nd application, two-course seal.

22

23

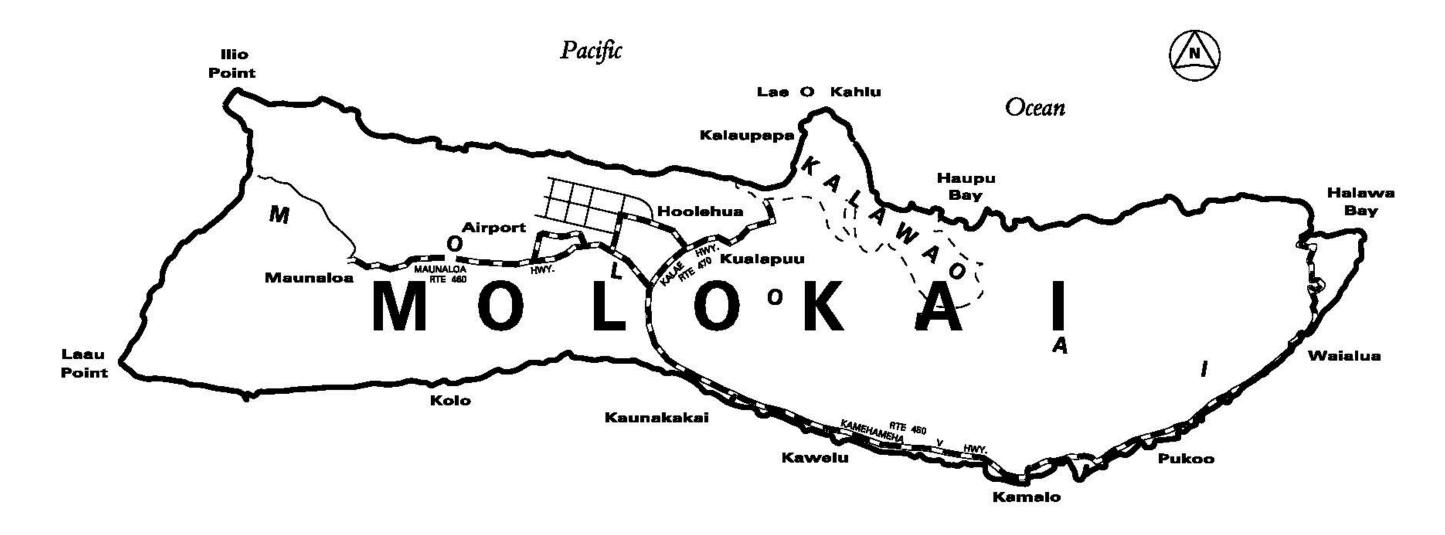
24 25

26

END OF SECTION 703

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	NO.	TOTAL SHEETS
HAWAII	HAW.		3		

— — State Highways





ISLAND OF MOLOKAI

AREA 1 – MOLOKAI

Route 450

Route 460

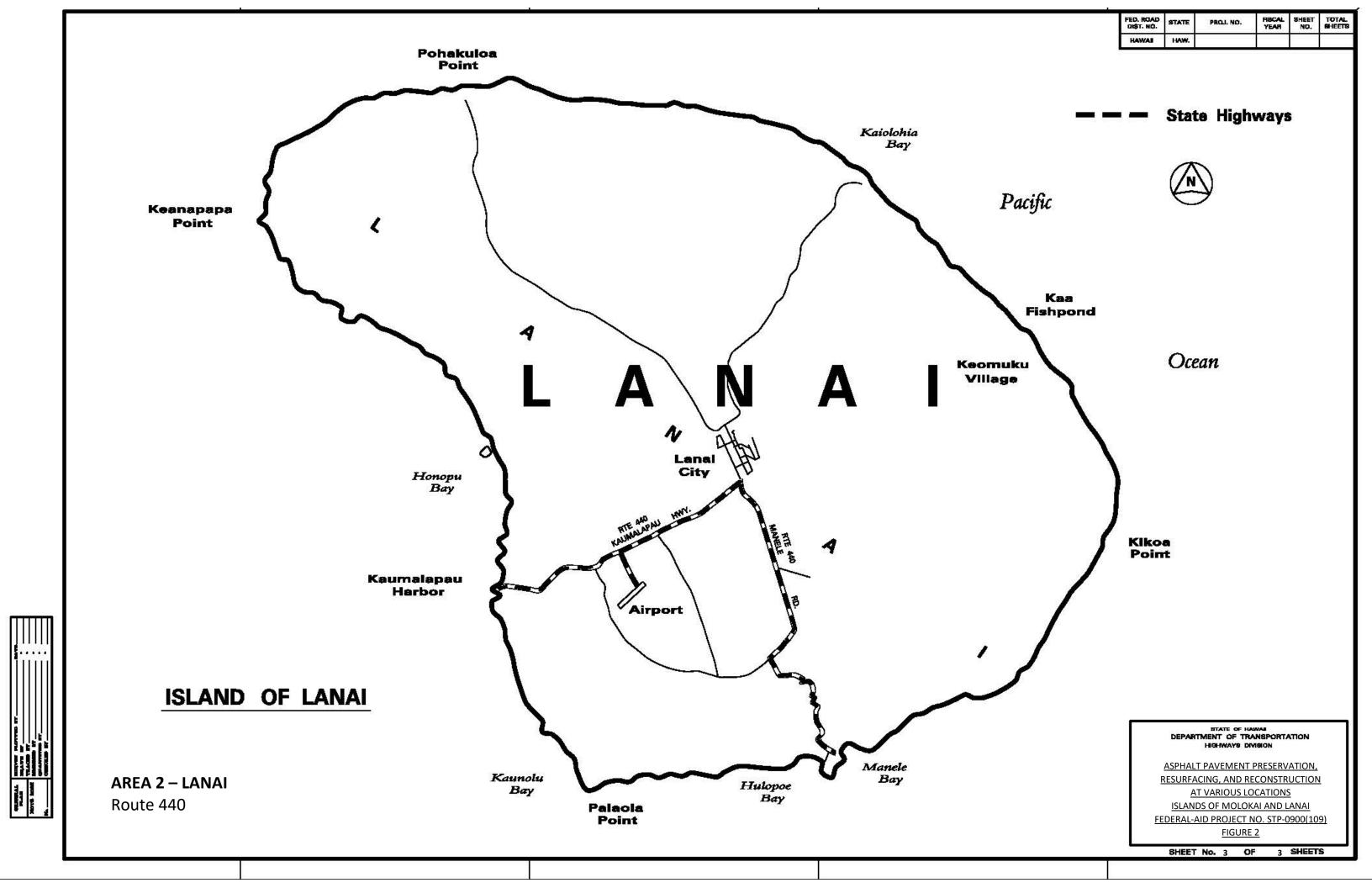
Route 470

Route 480

BITATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

ASPHALT PAVEMENT PRESERVATION,
RESURFACING, AND RECONSTRUCTION
AT VARIOUS LOCATIONS
ISLANDS OF MOLOKAI AND LANAI
FEDERAL-AID PROJECT NO. STP-0900(109)
FIGURE 1

SHEET No. 2 OF 3 SHEETS



State of Hawaii Department of Transportation Highways

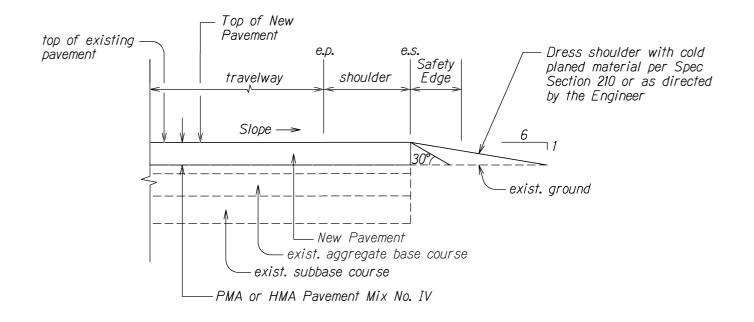
ASPHALT PAVEMENT PRESERVATION, RESURFACING, AND RECONSTRUCTION AT VARIOUS LOCATIONS

WORK ORDER

Project No.:	Contract No.:		_		Order No.:	
Route/Section:	Begin Mile Post:				CC/Func:	
	End Mile Post:		_			
Contractor:		PR No.:			Billing Invoice No.:	
Work to be completed no later than:						
Description of	of Work	Estimated Quantity	Unit	Unit Price *	Total	Remarks
				Total of Items		
Work Ordered By:				Grand Total		
	Date	•				•
Work Inspected By:						
. ,	Date	•				
Work Accepted By:						
WORK Accepted by.	Date					
	24.0					
Contractor:						

STP-0900(109)

Date

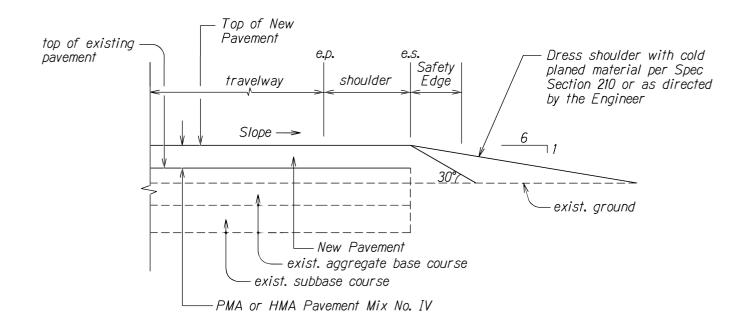


TYPICAL PAVEMENT SAFETY EDGE DETAIL (FOR COLD PLANING PROJECT) Not To Scale

Note: Contractor shall mount a device directly on the paver screed extension to provide a 30° beveled shoulder edge. Installation of the Safety Edge and shoulder dressing shall be considered incidental to the various contract paving pay items.

STP-0900(109)

FIGURE - 4



TYPICAL PAVEMENT SAFETY EDGE DETAIL (FOR OVERLAYING PROJECT) Not To Scale

Note: Contractor shall mount a device directly on the paver screed extension to provide a 30° beveled shoulder edge. Installation of the Safety Edge and shoulder dressing shall be considered incidental to the various contract paving pay items.

STP-0900(109)

FIGURE - 5

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

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

eH104-3 Rev. 04/21

"General Decision Number: HI20240001 09/06/2024

Superseded General Decision Number: HI20230001

State: Hawaii

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

Highway and Residential

Counties: Hawaii Statewide.

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/05/2024	
1		01/12/2024	
2		01/19/2024	
3		04/19/2024	
4		05/17/2024	
5		06/07/2024	
6		07/19/2024	
7		08/30/2024	
8		09/06/2024	

* ASBE0132-001 09/01/2024

Asbestos Workers/Insulator
Includes application of
all insulating materials,

Rates

Fringes

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.....\$ 45.80 30.35

BOIL0627-005 01/01/2021

Rates Fringes
BOILERMAKER.....\$ 37.25 31.25

BRHI0001-001 09/05/2023

Rates Fringes

BRICKLAYER Bricklayers and Stonemasons.\$	48.03	32.23
Pointers, Caulkers and		
Weatherproofers\$		32.23
BRHI0001-002 09/05/2023		
	Rates	Fringes
		0
File, Marble & Terrazzo Worker Terrazzo Base Grinders\$	44.69	33.00
Terrazzo Floor Grinders		22.00
<pre>and Tenders\$ Tile, Marble and Terrazzo</pre>	43.14	33.00
Workers\$	46.50	33.00
 CARP0745-001 10/01/2021		
	D-t	Fuin
	Rates	Fringes
Carpenters: Carpenters; Hardwood Floor		
Layers; Patent Scaffold		
<pre>Erectors (14 ft. and over); Piledrivers;</pre>		
Pneumatic Nailers; Wood		
Shinglers and Transit	F1 2F	24.04
<pre>and/or Layout Man\$ Millwrights and Machine</pre>	51.25	24.84
Erectors\$	51.50	24.84
Power Saw Operators (2 h.p. and over)\$	51.40	24.84
CARP0745-002 09/04/2023		
	Rates	Fringes
Drywall and Acoustical		
Workers and Lathers\$	53.00	27.74
ELEC1186-001 08/25/2024		
	D-t	Future
	Rates	Fringes
Electricians:		
Cable Splicers\$ Electricians\$		32.46 32.25
Telecommunication worker\$		15.50
ELEC1186-002 08/25/2024		
2224		
	Rates	Fringes
Line Construction:		
Cable Splicers\$ Groundmen/Truck Drivers\$		32.46 26.50
Heavy Equipment Operators\$		29.90
Linemen\$ Telecommunication worker\$		32.25
refeconinumication worker\$		15.50
ELEV0126-001 01/01/2024		
	Rates	Fringes
ELEVATOR MECHANIC\$	70.90 37	7.885+a+b
a. VACATION: Employer contribute5 years service and 6% of basic5 years service as vacation pay	hourly rate for	
b. PAID HOLIDAYS: New Year's Day Day, Labor Day, Veterans' Day, T after Thanksgiving Day and Chris	hanksgiving Day	, Independence /, the Friday
ENGI0003-002 09/03/2018		
	Rates	Fringes
Diver (Aqua Lung) (Scuba))		
Diver (Aqua Lung) (Scuba)		
<pre>(over a depth of 30 feet)\$ Diver (Aqua Lung) (Scuba)</pre>	66.00	31.26
(up to a depth of 30 feet)\$	56.63	31.26
Stand-by Diver (Aqua Lung) (Scuba)\$	47.25	31.26
Diver (Other than Aqua Lung)	71.43	J1.2U
Diver (Other than Aqua Lung)\$	66 00	31.26
Diver Tender (Other than	JU. 99	31.20
Aqua Lung)\$	44.22	31.26
Stand-by Diver (Other than Aqua Lung)\$	47.25	31.26
Helicopter Work	-	- ·
Airborne Hoist Operator for Helicopter\$	45.80	31.26
Co-Pilot of Helicopter\$	45.98	31.26
Pilot of Helicopter\$ Power equipment operator -	46.11	31.26
tunnel work		
GROUP 3\$		31.26
GROUP 1\$ GROUP 2\$		31.26 31.26

GROUP	3\$ 42.52	31.26
GROUP	4\$ 42.79	31.26
GROUP	5\$ 43.10	31.26
GROUP	6\$ 43.75	31.26
GROUP	7\$ 44.07	31.26
GROUP	8\$ 44.18	31.26
GROUP	9\$ 44.29	31.26
GROUP	9A\$ 44.52	31.26
GROUP	10\$ 44.58	31.26
GROUP	10A\$ 44.73	31.26
GROUP	11\$ 44.88	31.26
GROUP	12\$ 45.24	31.26
GROUP	12A\$ 45.60	31.26
Power equip	oment operators:	
GROUP	1\$ 41.94	31.26
GROUP	2\$ 42.05	31.26
GROUP	3\$ 42.22	31.26
GROUP	4\$ 42.49	31.26
GROUP	5\$ 42.80	31.26
GROUP	6\$ 43.45	31.26
GROUP	7\$ 43.77	31.26
GROUP	8\$ 43.88	31.26
GROUP	9\$ 43.99	31.26
GROUP	9A\$ 44.22	31.26
GROUP	10\$ 44.28	31.26
GROUP	10A\$ 44.43	31.26
GROUP	11\$ 44.58	31.26
GROUP	12\$ 44.94	31.26
GROUP	12A\$ 45.30	31.26
GROUP	13\$ 42.22	31.26
GROUP	13A\$ 42.49	31.26
GROUP	13B\$ 42.80	31.26
GROUP	13C\$ 43.45	31.26
GROUP	13D\$ 43.77	31.26
GROUP	13E\$ 43.88	31.26

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

GROUP 3: Brakeman; Deckhand; Fireman; Oiler; Oiler/Gradechecker; Signalman; Switchman; Highline Cableway Signalman; Bargeman; Bunkerman; Concrete Curing Machine (self-propelled, automatically applied unit on streets, highways, airports and canals); Leveeman; Roller (5 tons and under); Tugger Hoist.

GROUP 4: Boom Truck or dual purpose ""A"" Frame Truck (5 tons or less); Concrete Placing Boom (Building Construction); Dinky Operator; Elevator Operator; Hoist and/or Winch (one drum); Straddle Truck (Ross Carrier, Hyster and similar).

GROUP 5: Asphalt Plant Fireman; Compressors, Pumps, Generators and Welding Machines (""Bank"" of 9 or more, individually or collectively); Concrete Pumps or Pumpcrete Guns; Lubrication and Service Engineer (Grease Rack); Screedman.

GROUP 6: Boom Truck or Dual Purpose ""A""Frame Truck (over 5 tons); Combination Loader/Backhoe (up to and including 3/4 cu. yd.); Concrete Batch Plants (wet or dry); Concrete Cutter, Groover and/or Grinder (self-propelled unit on streets, highways, airports, and canals); Conveyor or Concrete Pump (Truck or Equipment Mounted); Drilling Machinery (not to apply to waterliners, wagon drills or jack hammers); Fork Lift (over 10 tons); Loader (up to and including 3 and 1/2 cu. yds); Lull High Lift (under 40 feet); Lubrication and Service Engineer (Mobile); Maginnis Internal Full Slab Vibrator (on airports, highways, canals and warehouses); Man or Material Hoist; Mechanical Concrete Finisher (Large Clary, Johnson Bidwell, Bridge Deck and similar); Mobile Truck Crane Driver; Portable Shotblast Concrete Cleaning Machine; Portable Boring Machine (under streets, highways, etc.); Portable Crusher; Power Jumbo Operator (setting slip forms, etc., in tunnels); Rollers (over 5 tons); Self-propelled Compactor (single engine); Self-propelled Pavement Breaker; Skidsteer Loader with attachments; Slip Form Pumps (Power driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms); Small Rubber Tired Tractors; Trencher (up to and including 6 feet); Underbridge Personnel Aerial Platform (50 feet of platform or less).

GROUP 7: Crusher Plant Engineer, Dozer (D-4, Case 450, John Deere 450, and similar); Dual Drum Mixer, Extend Lift; Hoist and/or Winch (2 drums); Loader (over 3 and 1/2 cu. yds. up to and including 6 yards.); Mechanical Finisher or Spreader Machine (asphalt), (Barber Greene and similar) (Screedman required); Mine or Shaft Hoist; Mobile Concrete Mixer (over 5 tons); Pipe Bending Machine (pipelines only); Pipe Cleaning Machine (tractor propelled and supported); Pipe Wrapping Machine (tractor propelled and supported); Roller Operator (Asphalt); Self-Propelled Elevating Grade Plane; Slusher Operator; Tractor (with boom) (D-6, or similar); Trencher (over 6 feet and less than 200 h.p.); Water Tanker (pulled by Euclids, T-Pulls, DW-10, 20 or 21, or similar); Winchman (Stern Winch on Dredge).

GROUP 8: Asphalt Plant Operator; Barge Mate (Seagoing);

Cast-in-Place Pipe Laying Machine; Concrete Batch Plant (multiple units); Conveyor Operator (tunnel); Deckmate; Dozer (D-6 and similar); Finishing Machine Operator (airports and highways); Gradesetter; Kolman Loader (and similar); Mucking Machine (Crawler-type); Mucking Machine (Conveyor-type); No-Joint Pipe Laying Machine; Portable Crushing and Screening Plant; Power Blade Operator (under 12); Saurman Type Dragline (up to and including 5 yds.); Stationary Pipe Wrapping, Cleaning and Bending Machine; Surface Heater and Planer Operator, Tractor (D-6 and similar); Tri-Batch Paver; Tunnel Badger; Tunnel Mole and/or Boring Machine Operator Underbridge Personnel Aerial Platform (over 50 feet of platform).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loaderand Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).

GROUP 9A: Dozer (D-8 and similar); Gradesetter (when required by the Contractor to work from drawings, plans or specifications without the direct supervision of a foreman or superintendent); Push Cat; Scrapers (up to and including 20 cu. yds); Self-propelled Compactor with Dozer; Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds) (621 Band and similar); Sheep's Foot; Tractor (D-8 and similar); Tractors with boom (larger than D-6, and similar).

GROUP 10: Chicago Boom; Cold Planers; Heavy Duty Repairman or Welder; Hoist and/or Winch (3 drums); Hydraulic Skooper (Koehring and similar); Loader (over 6 cu. yds. up to and including 12 cu. yds.); Saurman type Dragline (over 5 cu. yds.); Self-propelled, rubber-tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar); Soil Stabilizer (P & H or equal); Sub-Grader (Gurries or other automatic type); Tractors (D-9 or equivalent, all attachments); Tractor (Tandem Scraper); Watch Engineer.

GROUP 10A: Boat Operator; Cable-operated Crawler Crane (up to and including 25 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (up to and including 1 cu. yd.); Dozer D9-L; Dozer (D-10, HD41 and similar) (all attachments); Gradall (up to and including 1 cu. yd.); Hydraulic Backhoe (over 3/4 cu. yds. up to and including 2 cu. yds.); Mobile Truck Crane Operator (up to and including 25 tons) (Mobile Truck Crane Driver Required); Self-propelled Boom Type Lifting Device (Center Mount) (up to and including 25 tons) (Grove, Drott, P&H, Pettibone and similar; Trencher (over 6 feet and 750 h.p. or more); Watch Engineer (steam or electric).

GROUP 11: Automatic Slip Form Paver (concrete or asphalt); Band Wagon (in conjunction with Wheel Excavator); Cable-operated Crawler Cranes (over 25 tons but less than 50 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (over 1 cu. yd. up to 7 cu. yds.); Gradall (over 1 cu. yds. up to 7 cu. yds.); DW-10, 20, etc. (Tandem); Earthmoving Machines (multiple propulsion power units and 2 or more Scrapers) (up to and including 35 cu. yds.,"" struck"" m.r.c.); Highline Cableway; Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.); Leverman; Lift Slab Machine; Loader (over 12 cu. yds); Master Boat Operator; Mobile Truck Crane Operator (over 25 tons but less than 50 tons); (Mobile Truck Crane Driver required); Pre-stress Wire Wrapping Machine; Self-propelled Boom-type Lifting Device (Center Mount) (over 25 tons m.r.c); Self-propelled Compactor (with multiple-propulsion power units); Single Engine Rubber Tired Earthmoving Machine (with Tandem Scraper); Tandem Cats; Trencher (pulling attached shield).

GROUP 12: Clamshell or Dipper Operator; Derricks; Drill Rigs; Multi-Propulsion Earthmoving Machines (2 or more Scrapers) (over 35 cu. yds ""struck""m.r.c.); Operators (Derricks, Piledrivers and Cranes); Power Shovels and Draglines (7 cu. yds. m.r.c. and over); Self-propelled rubber-tired Earthmoving equipment (over 31 cu. yds.) (657B and similar); Wheel Excavator (up to and including 750 cu. yds. per hour); Wheel Excavator (over 750 cu. yds. per hour).

GROUP 12A: Dozer (D-11 or similar or larger); Hydraulic Excavators (over 4 cu. yds.); Lifting cranes (50 tons and over); Pioneering Dozer/Backhoe (initial clearing and excavation for the purpose of providing access for other equipment where the terrain worked involves 1-to-1 slopes that are 50 feet in height or depth, the scope of this work does not include normal clearing and grubbing on usual hilly terrain nor the excavation work once the access is provided); Power Blade Operator (Cat 12 or equivalent or over); Straddle Lifts (over 50 tons); Tower Crane, Mobile; Traveling Truss Cranes; Universal, Liebher, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level); Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump

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Truck, over 8 cu. yds. (water level).
 GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump
 or Roll-Offs).
GROUP 13D: Truck Driver (Slip-In or Pup).
 GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar
 or similar); Tractor Trailer (Hauling Equipment); Tandem
 Trucks hooked up to Trailer (Hauling Equipment)
BOOMS AND/OR LEADS (HOURLY PREMIUMS):
 The Operator of a crane (under 50 tons) with a boom of 80
 feet or more (including jib), or of a crane (under 50 tons)
 with leads of 100 feet or more, shall receive a per hour
 premium for each hour worked on said crane (under 50 tons)
 in accordance with the following schedule:
Booms of 80 feet up to but
not including 130 feet or
Leads of 100 feet up to but
not including 130 feet
                                      0.50
Booms and/or Leads of 130 feet
up to but not including 180 feet
                                      0.75
Booms and/or Leads of 180 feet up
to and including 250 feet
                                      1.15
Booms and/or Leads over 250 feet
                                      1.50
 The Operator of a crane (50 tons and over) with a boom of 180
 feet or more (including jib) shall receive a per hour
 premium for each hour worked on said crane (50 tons and
 over) in accordance with the following schedule:
Booms of 180 feet up to
and including 250 feet
                                    1.25
Booms over 250 feet
                                     1.75
ENGI0003-004 09/04/2017
                              Rates
                                           Fringes
Dredging: (Boat Operators)
    Boat Deckhand.....$ 41.22
                                              30.93
    Boat Operator..... $ 43.43
                                              30.93
    Master Boat Operator.....$ 43.58
                                              30.93
Dredging: (Clamshell or
Dipper Dredging)
    GROUP 1.....$ 43.94
                                              30.93
    GROUP 2.....$ 43.28
                                              30.93
    GROUP 3.....$ 42.88
                                              30.93
    GROUP 4.....$ 41.22
                                              30.93
Dredging: (Derricks)
    GROUP 1.....$ 43.94
                                              30.93
    GROUP 2.....$ 43.28
                                              30.93
    GROUP 3.....$ 42.88
                                              30.93
    GROUP 4.....$ 41.22
                                              30.93
Dredging: (Hydraulic Suction
Dredges)
    GROUP 1.....$ 43.58
                                              30.93
    GROUP 2.....$ 43.43
                                              30.93
    GROUP 3.....$ 43.28
                                              30.93
    GROUP 4.....$ 43.22
                                              30.93
    GROUP 5.....$ 37.88
                                              26.76
    Group 5.....$ 42.88
                                              30.93
    GROUP 6.....$ 37.77
                                              26.76
    Group 6.....$ 42.77
                                              30.93
    GROUP 7.....$ 36.22
                                              26.76
    Group 7.....$ 41.22
                                              30.93
CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS
GROUP 1: Clamshell or Dipper Operator.
GROUP 2: Mechanic or Welder; Watch Engineer.
GROUP 3: Barge Mate; Deckmate.
GROUP 4: Bargeman; Deckhand; Fireman; Oiler.
HYDRAULIC SUCTION DREDGING CLASSIFICATIONS
GROUP 1: Leverman.
GROUP 2: Watch Engineer (steam or electric).
GROUP 3: Mechanic or Welder.
GROUP 4: Dozer Operator.
GROUP 5: Deckmate.
GROUP 6: Winchman (Stern Winch on Dredge)
 GROUP 7: Deckhand (can operate anchor scow under direction of
 Deckmate); Fireman; Leveeman; Oiler.
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GROUP 1: Operators (Derricks, Piledrivers and Cranes). GROUP 2: Saurman Type Dragline (over 5 cubic yards). GROUP 3: Deckmate; Saurman Type Dragline (up to and including 5 yards).

GROUP 4: Deckhand, Fireman, Oiler.

Power Equipment Operators (PAVING) The Concrete Material

Asphalt Concrete Material		
Transfer\$	42.92	32.08
Asphalt Plant Operator\$	43.35	32.08
Asphalt Raker\$	41.96	32.08
Asphalt Spreader Operator\$	43.44	32.08
Cold Planer\$	43.75	32.08
Combination Loader/Backhoe		
(over 3/4 cu.yd.)\$	41.96	32.08
Combination Loader/Backhoe		
(up to 3/4 cu.yd.)\$	40.98	32.08
Concrete Saws and/or		
Grinder (self-propelled		
unit on streets, highways,		
airports and canals)\$	42.92	32.08
Grader\$	43.75	32.08
Laborer, Hand Roller\$	41.46	32.08
Loader (2 1/2 cu. yds. and		
under)\$	42.92	32.08
Loader (over 2 1/2 cu.		
yds. to and including 5		
cu. yds.)\$	43.24	32.08
Roller Operator (five tons		
and under)\$	41.69	32.08
Roller Operator (over five		
tons)\$		32.08
Screed Person\$		32.08
Soil Stabilizer\$	43.75	32.08

IRON0625-001 09/01/2023

Rates Fringes

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.

* LAB00368-001 09/02/2024

	Rates	Fringes
Laborers:		
Driller	\$ 44.75	25.96
Final Clean Up	\$ 31.40	21.37
Gunite/Shotcrete Operator		
and High Scaler	\$ 42.25	25.96
Laborer I	\$ 41.75	25.96
Laborer II	\$ 39.15	25.96
Mason Tender/Hod Carrier	\$ 42.25	25.96
Powderman	\$ 42.75	25.96
Window Washer (bosun chair).	\$ 41.25	25.96

LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter (Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for treme work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site;

Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator); Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers'work; Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools,

breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, stablishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than ""Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unlading in storage area); Ground and 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 and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and material for use in reinforcing concrete construction (except when a derrick or outrigger operated by other than hand power is used); Loading, unloading, sorting, stockpiling, handling and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs, walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Striper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms an false

* LAB00368-002 09/03/2024

	Rates	Fringes
Landscape & Irrigation		
GROUP 1	\$ 28.40	17.15
GROUP 2	\$ 29.40	17.15
GROUP 3	\$ 23.00	17.15

LABORERS CLASSIFICATIONS

GROUP 1: Installation of non-potable permanent or temporary irrigation water systems performed for the purposes of Landscaping and Irrigation architectural horticultural work; the installation of drinking fountains and permanent or temporary irrigation systems using potable water for

Landscaping and Irrigation architectural horticultural purposes only. This work includes (a) the installation of all heads, risers, valves, valve boxes, vacuum breakers (pressure and non-pressure), low voltage electrical lines and, provided such work involves electrical wiring that will carry 24 volts or less, the installation of sensors, master control panels, display boards, junction boxes, conductors, including all other components for controllers, (b) and metallic (copper, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe including all work incidental thereto, i.e., unloading, handling and distribution of all pipes fittings, tools, materials and equipment, (c) all soldering work in connection with the above whether done by torch, soldering iron, or other means; (d) tie-in to main lines, thrust blocks (both precast and poured in place), pipe hangers and supports incidental to installation of the entire irrigation system, (e) making of pressure tests, start-up testing, flushing, purging, water balancing, placing into operation all irrigation equipment, fixtures and appurtenances installed under this agreement, and (f) the fabrication, replacement, repair and servicing oflandscaping and irrigation systems. Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons).:

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

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

LAB00368-003 09/05/2023

	Rates	Fringes
Underground Laborer		
GROUP 1	.\$ 41.25	24.96
GROUP 2	.\$ 42.75	24.96
GROUP 3	.\$ 43.25	24.96
GROUP 4	.\$ 44.25	24.96

GROUP 5		24.96
GROUP 6GROUP 7	•	24.96 24.96
GROUP 1: Watchmen; Change House	Attendant.	
GROUP 2: Swamper; Brakeman; Bui Dumpmen (any method); Concrete spreading); Grout Crew; Rebound	Crew (includes	
GROUP 3: Chucktenders and Cable House); Vibratorman, Pavement B		rman (Prime
GROUP 4: Miners - Tunnel (inclushaft and raise work); Timbermasteel or substitute materials of Powderman (in heading); Microto Cherry Pickerman (where car is Gunmen; Grout Pumpman & Potman Potmen; Concrete Finisher (in Bit Grinder; Steel Form Raisers Nozzleman; Nozzleman (on slick (combination work assignment in	an, Retimberman thereof); Blaste unnel Laborer; H lifted); Nipper ; Gunite, Shotor tunnel); Concret s & Setters; Hig line); Sandblas	(wood or ers, Drillers, Headman; ers, Grout rete Gunmen & ce Screed Man; gh Pressure ster-Potman
GROUP 5: Shaft Work & Raise (be level); Diamond Driller; Gunite Rodman; Groundman		
GROUP 6: Shifter		
GROUP 7: Shifter (Shaft Work &	Raiser)	
PAIN1791-001 01/01/2024		
FAIN1/91-001 01/01/2024	Dates	Eningos
D	Rates	Fringes
Painters: Brush	.\$ 41.65	30.05
Sandblaster; Spray	.\$ 41.65 	30.05
PAIN1889-001 07/01/2024		
	Rates	Fringes
Glaziers		37.15
PAIN1926-001 03/05/2023		
	Rates	Fringes
Soft Floor Layers		33.80
PAIN1944-001 01/07/2024		
	Rates	Fringes
Taper		31.40
PLAS0630-001 09/04/2023		
1 LASOUSO 001 05/04/2025	Rates	Fringes
DLACTEDED		-
PLASTERER	.\$ 46.12 	34.53
PLAS0630-002 09/04/2023		
	Rates	Fringes
Cement Masons	.\$ 44.12	33.63
Trowel Machine Operators	.\$ 44.27 	33.63
PLUM0675-001 01/07/2024		
	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter	¢ [2 02	31.02
	.p 32.03	
ROOF0221-001 11/06/2022		
	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply)	.\$ 43.15	21.21
SHEE0293-001 03/05/2023		
	Rates	Fringes
Sheet metal worker	.\$ 47.37	31.71
551557, 502 65/15/1597	Rates	Fringes
Donony Installer		-
Drapery Installer	.φ ⊥ኃ.υυ ^{⊤⊤}	1.20
FENCE ERECTOR (Chain Link Fence)	.\$ 9.33 **	1.65

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

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.

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)).

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was 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. 01/03/2024 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.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION'

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION HONOLULU, HAWAII

<u>PROPOSAL</u>

PROPOSAL TO THE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

PROJECT: ASPHALT PAVEMENT PRESERVATION,

RESURFACING, AND RECONSTRUCTION

AT VARIOUS LOCATIONS

ISLANDS OF MOLOKAI AND LANAI

FEDERAL-AID

PROJECT NO.: STP-0900(109)

COMPLETION TIME: Twelve (12) Months from the Start Work Date from

the Department with an option to extend for four (4) additional twelve (12) month periods upon

mutual agreement.

DBE PROJECT GOAL: 0.6% - Area 1 - Molokai

1.3% - Area 2 - Lanai

DESIGN PROJECT MANAGER:

NAME: Larry D. Hail

ADDRESS: 650 Palapala Drive

Kahului, Hawaii 96793

PHONE NO.: (808) 873-3535

EMAIL: larry.d.hail@hawaii.gov

ELECTRONIC SUBMITTAL:

Bidders shall submit and <u>upload the complete proposal to HlePRO prior</u> to the bid opening date and time. Any additional support documents explicitly designated as <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HlePRO. Do not include confidential and/or proprietary documents with the proposal. See SPECIAL PROVISIONS 102.08 – PREPARATION AND DELIVERY OF BID for complete details. <u>FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID.</u>

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.

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 \$250,000.00 per Area, in the form checked below. (Check applicable bid security submitted with bid.)

Su	rety Bid Bond (Use standard form),
Ca	sh,
Ca	shier's Check,
Ce	rtified 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.

The undersigned Bidder asserts that affirmative action has been taken to seek out and consider Disadvantaged Business Enterprises (DBEs) for portions of the work which can be subcontracted, and the affirmative actions of the Bidder are fully documented in its records and are available upon request by the Department. It is also understood that it must meet or exceed the DBE contract goal listed on page P-1 or demonstrate that it made good faith efforts to meet the DBE project goal. The undersigned as Bidder, agrees to utilize each participating DBE that it submitted to meet the contract goal of:

(percentage to be completed by Bidder) DBE participation if the contract is awarded to it, and shall maintain such DBE participation during the construction of this project.

SUBCONTRACTOR LISTING FOR AREA 1

(Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
SUE	BCONTRACTOR:	
1.		
	1a¹	
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 Subcontractor 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 Subcontractor or Joint Contractor.

¹ Second tier subcontractors

JOINT CONTRACTOR LISTING FOR AREA 1

(Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
JOII	NT CONTRACTOR:	
1.		
	1a¹	
1.		
	2a	
2.		
	3a	
3.		
	4a	
4.		
	5a	
5.		
	6a.	
6.		
	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 Subcontractor or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and subject to evaluation as a Subcontractor or Joint Contractor.

¹ Second tier subcontractors

SUBCONTRACTOR LISTING FOR AREA 2

(Attach additional sheets if necessary.)

	NAME OF FIRM		NATURE OF WORK
SUBCONTI	RACTOR:		
1		_	
1a¹.		_	
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 Subcontractor 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 Subcontractor or Joint Contractor.

¹ Second tier subcontractors

JOINT CONTRACTOR LISTING FOR AREA 2

(Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
JOII	NT CONTRACTOR:	
1.		
	1a¹	
1.		
	2a	
2.		
	3a	
3.		
	4a	
4.		
	5a	
5.		
	6a.	
6.		
	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 Subcontractor or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and subject to evaluation as a Subcontractor or Joint Contractor.

¹ Second tier subcontractors

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 abo	ove.)
Phone:	Email:

NOTE:

If Bidder is a <u>CORPORATION</u>, 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 ofthe officer(s) to sign for the corporation.

If Bidder is a <u>PARTNERSHIP</u>, 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 - AREA 1

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.0100	Installation, Maintenance, Monitoring, and Removal of BMP	F.A.	F.A.	F.A.	\$ 100,000.00
301.0601	6 Inch HMA Base Course (1,000-10,000 SY)	10,000	SY	\$	\$
301.0602	6 Inch HMA Base Course (10,001-100,000 SY)	100,000	SY	\$	\$
401.0201	2 Inch HMA Pavement, Mix No. IV (1,000-10,000 SY)	10,000	SY	\$	\$
401.0202	2 Inch HMA Pavement, Mix No. IV (10,001-100,000 SY)	100,000	SY	\$	\$
401.0203	2 Inch HMA Pavement, Mix No. IV (100,001-200,000 SY)	200,000	SY	\$	\$
401.3010	2-Lane Raised Crosswalk Installation, HMA Pavement, Mix No. IV (1-10 EA)	10	EA	\$	\$
401.4010	2-Lane Speed Table Installation, HMA Pavement, Mix No. IV (1-10 EA)	10	EA	\$	\$
401.5000	Pavement Smoothness Incentive	Allow	Allow	Allow	\$ 50,000.00
401.6000	Third-Party Profile Testing and Equipment	Allow	Allow	Allow	\$ 10,000.00
401.7000	Third-Party Dispute Resolution Profile Testing	Allow	Allow	Allow	\$ 5,000.00
401.8000	Overtime Labor Premium	F.A.	F.A.	F.A.	\$ 100,000.00
405.0101	Micro Surfacing (1,000-10,000 SY)	10,000	SY	\$	\$
405.0102	Micro Surfacing (10,001-100,000 SY)	100,000	SY	\$	\$
405.0103	Micro Surfacing (100,001-200,000 SY)	200,000	SY	\$	\$

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
408.0110	Crack Sealing - Less than 1/2"	150,000	LF	\$	\$
408.0120	Crack Sealing - 1/2" to 1"	150,000	LF	\$	\$
417.1000	Cut Cores in Existing Pavement (1-100 EA)	100	EA	\$	\$
417.1001	Cut Cores in Existing Pavement (101-250 EA)	250	EA	\$	\$
604.0100	Adjusting Manhole Cast Iron Frame and Cover (1-50 EA)	50	EA	\$	\$
613.0100	Reconstructing Centerline and Reference Survey Monuments (1-20 EA)	20	EA	\$	\$
613.0200	Adjusting Centerline and Reference Survey Monuments (1-20 EA)	20	EA	\$	\$
626.0100	Adjusting Standard Manhole and Valve Box Frames and Covers for Water and Sewer Systems (1-50 EA)	50	EA	\$	\$
627.0100	Vehicular Counting and Classification System Sensor Replacement	F.A.	F.A.	F.A.	\$ 100,000.00
645.0100	Traffic Control (Shoulder Closure, per day Unit Price not to exceed \$4,000)(1-60 WD)	60	WD	\$	\$
645.0200	Traffic Control (Flagging Operation for Contra-Flow, per day Unit Price not to exceed \$6,000)(1-60 WD)	60	WD	\$	\$
645.0300	Traffic Control (Lane Closures, per lane, per day Unit Price not to Exceed \$3,000)(1-60 WD)	60	WD	\$	\$
645.1000	Electronic Message Board (each, per day Unit Price not to Exceed \$1,500)(1-60 WD)	60	WD	\$	\$
645.2000	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 100,000.00

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Sum of All Items - Area 1 (Molokai) Note: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of the state of the st			\$	

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.0100	Installation, Maintenance, Monitoring, and Removal of BMP	F.A.	F.A.	F.A.	\$ 100,000.00
301.0601	6 Inch HMA Base Course (1,000-10,000 SY)	10,000	SY	\$	\$
401.0201	2 Inch HMA Pavement, Mix No. IV (1,000-10,000 SY)	10,000	SY	\$	\$
401.0202	2 Inch HMA Pavement, Mix No. IV (10,001-100,000 SY)	100,000	SY	\$	\$
401.4010	2-Lane Speed Table Installation, HMA Pavement, Mix No. IV (1-4 EA)	4	EA	\$	\$
401.5000	Pavement Smoothness Incentive	Allow	Allow	Allow	\$ 50,000.00
401.6000	Third-Party Profile Testing and Equipment	Allow	Allow	Allow	\$ 10,000.00
401.7000	Third-Party Dispute Resolution Profile Testing	Allow	Allow	Allow	\$ 5,000.00
401.8000	Overtime Labor Premium	F.A.	F.A.	F.A.	\$ 100,000.00
417.1000	Cut Cores in Existing Pavement (1-20 EA)	20	EA	\$	\$
604.0100	Adjusting Manhole Cast Iron Frame and Cover (1-10 EA)	10	EA	\$	\$
613.0100	Reconstructing Centerline and Reference Survey Monuments (1-10 EA)	10	EA	\$	\$
613.0200	Adjusting Centerline and Reference Survey Monuments (1-10 EA)	10	EA	\$	\$
626.0100	Adjusting Standard Manhole and Valve Box Frames and Covers for Water and Sewer Systems (1-10 EA)	10	EA	\$	\$
627.0100	Vehicular Counting and Classification System Sensor Replacement	F.A.	F.A.	F.A.	\$ 100,000.00

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
645.0200	Traffic Control (Flagging Operation for Contra-Flow, per day Unit Price not to exceed \$6,000)(1-60 WD)	60	WD	\$	\$
645.1000	Electronic Message Board (each, per day Unit Price not to Exceed \$1,500)(1-60 WD)		WD	\$	\$
645.2000	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 100,000.00
a. Sum of All Items - Area 2 (Lanai)					\$
	Note: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.				

PROPOSAL SCHEDULE - SUMMARY

ITEM DESCRIPTION	AMOUNT
SUM OF ALL ITEMS - AREA 1 (Molokai)	\$
SUM OF ALL ITEMS - AREA 2 (Lanai)	\$

PROPOSAL SCHEDULE

The bidder is directed to Subsection 105.16 – Subcontracts.

4 5

If the bid price for any proposal item having a maximum allowable bid indicated therefore in any of the contract documents is in excess of such a maximum amount, the bid price for such proposal item shall be adjusted to reflect the limitation thereon. The comparison of bids to determine the successful bidder and the amount of contract to be awarded shall be determined after such adjustments are made, and such adjustments shall be binding upon the bidder.

The "SUM OF ALL ITEMS" will be used to determine the lowest responsible bidder per area.

Notes:

1. Bid prices are for travel time, mileage and furnishing all labor, tools, traffic controls, all applicable taxes, fees and equipment necessary for all work shown and called for in accordance with the true intent and meaning of the specifications.

2. Bidder may bid on any or all areas. To be considered, bidder must submit a bid for all items within an area. Separate contracts will be awarded for each area. If a bidder is determined the lowest bidder for multiple areas, one combined contract will be awarded.

3. Any contract which is awarded shall be an open-ended contract since the exact value of work to be performed during the contract period cannot be determined beforehand. The unit price for each item of work on any particular work order shall be that which corresponds to the quantity of work for that item actually performed for each work order.

4. The sum of all work and materials required to perform the required repairs are issued on a "single work order." A single work order shall be a work order submitted by the Engineer for work that can be performed by the Contractor without relocating a distance of more than 1 mile between any two adjacent repair locations.

5. The "Approx. Minimum and Maximum Quantity" on the proposal schedule is for bidding purposes only, and this is no guarantee of the quantity of work that will be issued.

6. Bids shall include all Federal, State, County and other applicable taxes and fees.

 7. If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.

8. Bidders shall submit and upload the complete proposal to HIePRO 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 HIePRO. Do 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 HIePRO.

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.

9. The bidder is directed to Section 717 – Cullet and Cullet-Made Materials regarding recycling of waste glass.

SURETY BID BOND

	Bond No			
KNOW ALL BY THESE PRESENTS	S:			
That we,				
(Full name or legal title of offeror)				
as Offeror, hereinafter called the Pr	incipal	, and		
	у, ас	oonding company) orporation authorized to transact business as a , are held and firmly bound unto		
as Owner, hereinafter called Owner	r, in th	(State/county entity) e penal sum of		
Dollars (\$	sum w ur hei	nount of bid security)), lawful money of the United States of rell and truly to be made, the said Principal and rs, executors, administrators, successors and ese presents.		
WHEREAS: The Principal has submitted	an off	er for		
(Project	by numb	per and brief description)		
in the alternate, accept the offer contract with the Owner in accorda or bonds as may be specified in the sufficient surety for the faithful payment of labor and material furnity.	of the ince wi ne soli- perform nished	such that if the Owner shall reject said offer, or Principal and the Principal shall enter into a ith the terms of such offer, and give such bond citation or Contract Documents with good and nance of such Contract and for the prompt in the prosecution thereof as specified in the null and void, otherwise to remain in full force		
	-l			
Signed this(day Seal)	Name of Principal (Offeror)		
(Seal)		Signature		
		Title		
		Name of Surety		
		Signature		
		Title		

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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

CONTRACT

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 <u>«PROJECT_NO_ONLY»</u>, 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 www.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
<u>«BASIC»-----</u>DOLLARS (<u>\$«BASIC_NUMERIC»</u>) 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 <u>«EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC»)</u> 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	of Contractor)
	er called Principal, and	
	(Name and Street Address of Bonding	g Company)
•	illed Surety, a corporation(s) authori	
surety in the State of Hav	waii, are held and firmly bound unto	the, (State/County Entity)
its successors and assig	ns, hereinafter called Obligee, in the	e amount of
), to which payment Prin Iministrators, successors and assigr	
	above-bound Principal has signed a for the following project:	
hereinafter called Contra hereof.	ict, which Contract is incorporated h	nerein by reference and made a part

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)
	actor, hereinafter called Contractor, is held and firmly bound unto the
	(State/County entity)
its succe	ssors and assigns, as Obligee, hereinafter called Obligee, in the amount
70	DOLLARS
(⊅	DOLLARS
lawful mo	oney of the United States of America, for the payment of which to the said Obligee, well to be made, Contractor binds itself, its heir, executors, administrators, successors and 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
	drawn
	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 drawnon
	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
	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;
	drawn
	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;
	drawn
	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

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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 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

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^{*}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				
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 Contract with the 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 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				

A "Claimant" shall be defined herein as any person who has furnished labor or materials

time, alterations, or additions, and agrees that they shall become part of the Contract.

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
	(Seal)	Title
		* Signature
		 Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

Т	hat we,		
	hat we,		
as Contra	actor, hereinafter called Contractor, is held and firmly bound unto (State/County entity)		
	ssors and assigns, as Obligee, hereinafter called Obligee, in the amount		
	DOLLARS (\$), (Dollar amount of Contract)		
	(Dollar amount of Contract)		
and truly	oney of the United States of America, for the payment of which to the said Obligee, well to be made, Contractor binds itself, its heir, executors, administrators, successors and firmly by these presents. Said amount is evidenced by:		
0	Legal Tender;		
	Share Certificate unconditionally assigned to or made payable at sight to		
	Description:		
0	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		

LB-1 r11/17/98

WHEREAS:

The Contractor has by written agreement datedentered into a contract with Obligee for the following Project:	
hereinafter called Contract, which Contract is incorporated herein by reference and hereof.	made a part

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	da	ay of	
	(Seal)		
	, ,	Name of Contractor	
	*	Signature	
		Title	

*ALL SIGNATURES MUST BE ACKNOWLEDGED BY A NOTARY PUBLIC

LB-2 r11/17/98

Approved by 0348-0046

DISCLOSURE OF LOBBYING ACTIVITIES
Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action: a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: a. bid/offer/application b. initial award c. post-award		3. Report Type: a. initial filing b. material change For Material Change Only: year quarter date of last report		
4. Name and Address of Reporting Prime Subawardee Tier, if		5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime			
Congressional District, if known	n :	Congressional District, if known:			
6. Federal Department/Agency:		7. Federal Program Name/Destination: CFDA Number, <i>if applicable</i> :			
8. Federal Action Number, <i>if kno</i>	own:	9. Award Amou			
10. a. Name and address of Lobb (if individual, last name, first name)	ying Entity ne, 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)					
\$ actual 12. Form of Payment (check all the actual actual actual be in-kind; specify: nature value	planned planned plant apply):	13. Type of Payment (check all that apply): a. retainer b. one-time fee c. commission d. contingent fee e. deferred f. other; specify:			
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-LLI	A attached:	□ Yes	□ 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.		Print Name:	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	

STATEMENT OF COMPLIANCE

Date				
I,(Name of signatory party) (Tit	do haby state:			
(Name of signatory party) (Tit (1) That I pay or supervise the payment of the persons emp				
•	(Contractor or subcontractor) payroll period commencing on theday of,			
(Building or work)				
and ending theday 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 earne Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretar Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 2769, and describ	ed by any person, other than permissible deductions as defined in y of Labor under the Copeland Act, as amended (48 Stat. 948.63 bed below:			
the wage rates for laborers or mechanics contained therein are	I to be submitted for the above period are correct and complete; that e not less than the applicable wage rates contained in any wage tions set forth therein for each laborers or mechanic conform with			
with a State apprenticeship agency recognized by the Bureau of	duly registered in a bona fide apprenticeship program registered Apprenticeship and Training, United States Department of Labor, i with the Bureau of Apprenticeship and Training, United States			
(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			
Zite Zite Zite Zite Zite Zite Zite Zite				
	^			
REMARK				
NAME AND TITLE	SIGNATURE			
THE WILFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS M CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTI				

INSTRUCTIONS FOR PREPARATION OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting form 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.

complica with.		
DATED at Honolulu, Hawaii, this	day of	, 20
	Name of Corporation, Partner	CONTRACTOR ship, or Individu
	Signature a	and Title of Signo
Notary Seal NOTARY ACKNOWLEDGEMENT	Notary Seal NOTARY CERTIFICATION	ı
Subscribed and sworn before me thisday of Notary signature	Doc. Date: Notary Name: Doc. Description:	Circuit
Notary public, State of My Commission Expires:	Notary signature Date	