

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

SPECIAL PROVISIONS, SPECIFICATIONS, PROPOSAL
AND CONTRACT

FOR

FURNISHING OF DIGITAL VIDEOLOG
GOODS AND SERVICES - STATEWIDE
FEDERAL-AID PROJECT NO. SPR-0010(050) UNIT 1 DV

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NOTICE TO BIDDERS
(Chapter 103D, HRS)

The receiving of SEALED BIDS for FURNISHING OF DIGITAL VIDEOLOG GOOD AND SERVICES-STATEWIDE FEDERAL-AID PROJECT NO. SPR-0010(050) UNIT 1 DV, will begin as advertised on October 4, 2022 in HiePRO. Bidders are to register and submit bids through HiePro only. See the following HiePRO link for important information on registering: <https://hiepro.ehawaii.gov/welcome.html>.

The deadline to submit bids is October 25, 2022 at 2:00 p.m., Hawaii Standard Time (HST). Bids received after said due date and time shall not be considered.

The scope of work consists of providing digital videolog survey and data collection services on all roads with a Federal functional classification of Arterial or Collector in the State Highway System (approximately 5,000 chainage/odometer miles) on the islands of Kauai, Oahu, Maui, Molokai, Lanai, and Hawaii. The Oahu mileage additionally incorporates approximately 270 ramps, which, combined with access and frontage roads make up approximately 100 miles.

ALL requests for information (RFI) shall be received in writing via HiePRO prior to the Question Due Date in General Information of the HiePRO solicitation. Questions received after the deadline will not be addressed. Verbal requests for information will not receive a response.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of Section 11-355, HRS, 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 the legislative

body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

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

The U.S. Department of Transportation Regulation entitled “Nondiscrimination in Federally-Assisted Programs of the U.S. Department of Transportation,” Title 49, Code of Federal Regulations (CFR), Part 21 is applicable to this project. Bidders are hereby notified that the Department of Transportation will affirmatively ensure that the contract entered into pursuant to this advertisement will 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 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 Regulations entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Programs", Title 49, Code of Federal Regulations, Part 26 is applicable to this project. Bidders are hereby notified that the Department of Transportation will strictly enforce full compliance with all of the requirements of the Disadvantaged Business Enterprise (DBE) program with respect to this project.

Bidders are directed to read and be familiar with the Disadvantaged Business Enterprise (DBE) Requirements for Federal-Aid Projects regarding Disadvantaged Business Enterprise (DBE), which establishes the program requirements pursuant to Title

49 Code of Federal Regulations Part 26 and, particularly, the requirements of certification, method of award, and evidence of good faith.

Driving While Impaired (DWI) Education. HDOT encourages all organizations contracted with the DOT 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 on this project, contact Richard Akana at (808) 587-6345 or by email at richard.akana@hawaii.gov.

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



JADE T. BUTAY
Director of Transportation

**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. DBE ASSURANCES

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. Commercially Useful Function (“CUF”). 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.

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. DBE Confirmation and Commitment Agreement. 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.
 2. 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).

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 owner-operator 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 DBE-owned 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. Effects of a Summary Suspension of an DBE. 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. Effects of Decertification of an DBE. 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. DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD

- 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.

SPECIAL PROVISIONS

The Specifications contained herein are amended as follows:

A. SECTION 1 – DEFINITIONS AND TERMS is amended as follows:

1.33 SUBCONTRACTOR is amended by deleting it and replacing it with the following:

“1.33 SUBCONTRACTOR – An individual, partnership, firm, corporation, or 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.”

“1.38 WORKING DAY – add the following:

“Every day, except Saturdays, Sundays and the following holidays

New Year’s Day (1st day in January)
Dr. Martin Luther King, Jr. Day (3rd Monday in January)
President’s Day (3rd Monday in February)
Prince Kuhio Day (26th day in March)
Good Friday (day preceding Easter Sunday)
Memorial Day (last Monday in May)
King Kamehameha Day (11th day in June)
Independence Day (4th day in July)
Admissions Day (3rd Friday in August)
Labor Day (1st Monday in September)
General Election Day (1st Tuesday in November)
Veterans Day (11th day in November)
Thanksgiving Day (4th Thursday in November)
Christmas Day (25th day in December)

The Contractor will follow the observed State holiday schedule”

“1.39 ENGINEER – The Administrator of the Highways Division, acting directly or through his duly authorized representative, who is responsible for engineering supervision of construction and other highway matters.”

B. SECTION 2 – PROPOSAL REQUIREMENTS AND CONDITIONS is amended as follows:

2.1 QUALIFICATION OF BIDDERS – is to be amended by adding the following after the second paragraph:

“Prior to award, the Contractor, upon written request from the State, shall complete and sign the “Pre-Qualification Questionnaire” and return it to the Project Manager no later than seven (7) working days from the date of receipt of the written request from the State.

The Contractor may be considered non-compliant with the requirements of the Special Provisions if the bidder fails to submit the completed questionnaire to the Project Manager within the specified time. This failure may result in an adverse decision of an award by the Department of Transportation.”

2.2. REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES, OR IRREGULARITIES – is to be amended by adding the following after the last paragraph:

“Bids will be considered irregular and may be rejected for any of the following reasons: (1) If the bid is in a form other than that furnished by the Department or if the form is altered or any part thereof is missing. (2) If there are additions or irregularities of any kind which make the bid incomplete, indefinite, or ambiguous as to its meaning. (3) If the bid does not contain a bid price for each pay item listed. (4) Unbalanced proposals in which the prices for some items are out of proportion to the prices for other items.”

2.4 DELIVERY OF PROPOSALS is amended in its entirety to read as follows:

“2.4 DELIVERY OF PROPOSALS – The bidder shall submit the proposal as indicated in the Notice to Bidders in HlePRO, upon the forms furnished by the Department or a facsimile thereof. Proposals will be received up to the time fixed in the Notice to Bidders for the opening of bids.”

2.5 WITHDRAWAL OF PROPOSALS is amended in its entirety to read as follows:

“2.5 WITHDRAWAL OF PROPOSALS – A bidder may withdraw or revise a proposal at any time prior to the time fixed in the Notice to Bidders for the opening of the proposals through HlePRO.”

2.6 PUBLIC OPENING OF PROPOSALS is not applicable.

Add the following to the end of the Section:

“2.9 CERTIFICATION FOR PERFORMANCE OF SERVICES – Pursuant to Section 103.55, Hawaii Revised Statutes, and unless indicated otherwise, each bidder is required to submit the attached “Certificate for Performance of Services” in the event he submits a bid in excess of \$25,000. This notarized original certificate must be submitted to said Contracts Office, Department of Transportation, 869 Punchbowl Street, Honolulu, Hawaii 96813, before entering into a contract to perform the services.

As of the bid opening date, salaries of public officers and employees performing work similar to the work called for under this contract are as follows:

| <u>Class</u> | <u>Salary Range</u> | <u>Minimum Hourly Pay Rate</u> |
|----------------------------|---------------------|------------------------------------|
| Engineering Technician VII | SR-19 | \$ 24.94 |
| Engineering Technician V | SR-15 | \$ 21.34 |
| Engineering Aide III | SR-11 | \$ 18.23 |
| Engineering Aide II | SR-07 | \$ 16.19 |

The above information is provided to the Contractor for guidance only and is subject to change in accordance with existing collective bargaining contracts or shall change as contracts are renegotiated. It is the bidders' responsibility to verify the accuracy of the wage rates contained herein and to provide for changes in the minimum wages, which must be paid to personnel working in this project at all times. Information on the status of the Bargaining Unit (BU) contracts can be obtained from the State Department of Transportation, Highways Division, Personnel Management office (808-587-2229).

Bidders are further advised that they are not restricted to hire only those classifications of employees as listed but are free to employ such other classifications of workers as the bidder deems proper and proposes to use on the project, as may be according to the bidder's common hiring practice. However, the principal duties of employees other than those listed herein above working on the project will be matched against those of State workers to determine the closest equivalent State employee classification, and the Contractor must compensate such employee(s) at a rate which is no less than that of the equivalent State employee."

C. SECTION 4 – SCOPE OF WORK is amended as follows:

4.2 PERFORMANCE OF WORK shall be amended by adding the following:

"The Contractor shall adhere to all traffic control and safety related procedures for the protection of the public and the Contractor's operations. The Contractor shall maintain traffic flow as much as possible during the field survey work, exclusive of any roadway or bridge maintenance, signing or rerouting of traffic. The vehicle shall be equipped with rotating or flashing amber warning lights, which are visible from the front and rear of the vehicle.

During all phases of traffic counting and related work, the Contractor shall comply with all safety requirements outlined in the Manual on Uniform Traffic Control Devices (MUTCD), 2009, Federal Highway Administration, U.S. Department of Transportation, including any amendments or revisions. To view the MUTCD, log on to:
<http://mutcd.fhwa.dot.gov>

D. SECTION 5 – CONTROL OF WORK is amended as follows:

5.3 COOPERATION OF CONTRACTOR AND DIRECTOR is amended by adding the following:

“The Contractor shall submit the names of project team members before starting work on the project and inform the HDOT Project Manager in writing of any changes in such assigned responsibilities.

The Contractor shall furnish the State with a telephone number where he can be reached at all times during normal working hours during the contract period.”

5.4 INSPECTION is amended by adding the following:

“The contractor shall maintain all books, documents, papers, records and other evidence pertaining to payroll, employee’s name and social security number, wage rates, and hours worked and to make such materials and information available at their respective offices at all reasonable times during the contract period and for three (3) years from the date of final payment under the contract, for inspection by the State. Failure to comply with the conditions of this Section during the contract period shall result in the cancellation of the contract.”

E. SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY is amended as follows:

7.8 LABOR AND COMPENSATION REQUIREMENTS is amended by replacing the first two paragraphs with the following:

“7.8 LABOR AND COMPENSATION REQUIREMENTS - Pursuant to Section 103-55, H.R.S., Wages, Hours, Working Conditions of Employees of Contractor's Supplying Services, services to be rendered shall be performed by employees paid at wages or salaries not less than the wages paid to public officers and employees for similar work. Additional information on the requirements of Section 103-55, H.R.S. may be obtained at http://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0103/HRS_0103-0055.htm

The Contractor shall be required to comply with the laws of the U.S. Immigration and Naturalization Service (USINS) and Section 103-57, Hawaii Revised Statutes, whichever is more severe. The Department reserves the right to periodically check the employable status of persons listed on the certified payroll certificates. Any person who is found to be an illegal alien (undocumented alien) under the laws of the USINS or Section 103-57, HRS, shall be immediately dismissed from the project and not be rehired until he or she is properly cleared.”

F. SECTION 9 – PAYMENT is amended by adding the following:

9.4 PROGRESS PAYMENT is amended by adding the following:

“To expedite processing of all payments for services rendered, the Contractor shall forward copies of the invoice as specified in Section 9.4, Progress Payment of the Specifications, to: Planning Survey Engineer, Highways Planning Branch, 869 Punchbowl Street, Room 301, Honolulu, Hawaii 96813. Each invoice shall include but is not limited to the following information:

- (a) Contractor’s name, address and phone number.
- (b) Contract number, project number, and project title.
- (c) Invoice number, invoice date
- (d) Bid item number, description of services, periods covered/date of services performed, quality, unit price, amount, subtotal, and total.
- (e) Deductions, as applicable, shall be included in the invoices and subtotals and labeled as “Retainage” as specified in Section 9.2, Retainage/Deduction from Payment of the Specifications.”

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

S P E C I F I C A T I O N S

SECTION 1 - DEFINITION AND TERMS

Whenever the following pronouns are used in these specifications, or in any documents or instruments where these specifications govern, the intent and meaning shall be interpreted as follows:

1.1 ADDENDA - A written document which may be issued by the Director during the bidding period involving changes to the specifications and plans, if any, which shall be considered and made a part of the contract.

1.2 AIRPORTS DIVISION - Airports Division, Department of Transportation, State of Hawaii.

1.3 AWARD - The written acceptance of a proposal by the State.

1.4 BIDDER - Any individual, partnership, corporation or other legal entity, or combination thereof, submitting a proposal for the work contemplated, acting either directly or through a duly authorized representative.

1.5 CALENDAR DAY - Every day shown on the calendar. If no designation of calendar or working day is made, "day" shall mean calendar day.

1.6 CHANGE ORDER - A written order issued by the Director to the Contractor requiring the contract work to be performed in accordance with a change or changes that may involve an adjustment in contract time and price or requiring performance of any unforeseen work essential to complete the contract.

1.7 CONTRACT - The written agreement between the State and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract includes the (1) notice to bidders, (2) proposal, (3) contract form and contract bond, (4) specifications, (5) special provisions and plans, if any, (6) addenda, (7) notice to proceed, and (8) change orders and agreements that are required to complete the work, all of which constitute one instrument.

1.8 CONTRACT BOND - The approved form of security, executed by the Contractor and its Surety or Sureties, guaranteeing the completion of the work in accordance with the terms of the contract, and guaranteeing full payment of all claims for labor, materials, and supplies used or incorporated in the work.

1.9 CONTRACT TIME - The number of working days or calendar days allowed for completion of the contract, including authorized time extensions.

If a calendar date is specified as the date of completion in lieu of the number of working days or calendar days, the contract shall be completed by that date.

In case the contract is for a specified period of time, the contract time shall be for said specified period of time.

1.10 CONTRACTOR - The individual, partnership, corporation or other legal entity, or combination thereof, contracting with the State for performance of the prescribed work.

1.11 DEPARTMENT - The State Department of Transportation.

1.12 DIRECTOR - The Director of Transportation, acting either directly or through the Director's duly authorized representative.

1.13 EQUAL OR APPROVED EQUAL - Whenever this term is used in the specifications and plans, if any, it means a brand or article pre-qualified in accordance with Section 6.2 Trade Names and Alternates and which may be used in place of the one specified.

1.14 H.A.R. or HAR - Hawaii Administrative Rules.

1.15 H.R.S. or HRS - Hawaii Revised Statutes.

1.16 HARBORS DIVISION - Harbors Division, Department of Transportation, State of Hawaii.

1.17 HIGHWAYS DIVISION - Highways Division, Department of Transportation, State of Hawaii.

1.18 HOLIDAYS - The days which are set apart and established as State holidays pursuant to Section 8-1, H.R.S.

1.19 INSPECTOR - The Director's authorized representative assigned to make detailed inspections of contract performance and materials supplied.

1.20 NOTICE TO BIDDERS - The public announcement, as required by law, inviting proposals for the work to be performed or materials to be furnished.

1.21 NOTICE OF FINAL ACCEPTANCE - Written notice from the Director to the Contractor that the entire contract has been completed in all respects in accordance with the specifications and plans, if any, and any changes thereof previously approved by the Director.

1.22 NOTICE TO PROCEED - Written notice from the Director to the Contractor advising the Contractor of the date on which he is to begin the prosecution of the work.

1.23 PLANS - The contract drawings approved by the Director which show the location, character, dimensions and details of the work to be done and shall be a part of the contract.

1.24 PROCUREMENT OFFICER - The Director's duly authorized representative including project managers, project engineers and contract administrators assigned to prepare, evaluate and administer contracts for the purchasing of goods and services.

1.25 PROPOSAL (OR BID) - The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

1.26 PROPOSAL FORM - The approved format prepared by the Department or a facsimile thereof on which bids for the work must be prepared and submitted. (Reasonable facsimile acceptable for bidding.)

1.27 PROPOSAL GUARANTY - The security furnished with a proposal to guarantee that the bidder will enter into the contract and furnish all other requirements if the bidder's proposal is accepted.

1.28 QUALIFICATION QUESTIONNAIRE - The specified forms on which the bidder shall furnish required information as to the bidder's ability to perform and finance the work.

1.29 S.L.H. or SLH - Session Laws of Hawaii.

1.30 SPECIAL PROVISIONS - Revisions to the specifications. The specific clauses setting forth conditions or requirements peculiar to the project under consideration which are not thoroughly or satisfactorily stipulated in these specifications.

1.31 SPECIFICATIONS - The directions, provisions, and requirements pertaining to the method and manner of performing the work and to the quantities and qualities of materials to be furnished under the contract.

1.32 STATE - The State of Hawaii.

1.33 SUBCONTRACTOR - An individual, partnership, corporation, other legal entity, or any combination thereof, that enters into an agreement with the Contractor to perform a portion of the work for the Contractor.

1.34 SUPERINTENDENT - The Contractor's representative who is responsible for and in charge of the work.

1.35 SURETY - The corporation, partnership or individual, other than the Contractor, executing a bond furnished by the Contractor and guaranteeing performance by the Contractor.

1.36 TITLES (OR HEADINGS) - The titles or headings of the Sections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation. Unless otherwise indicated, whenever the word "Section" is used, reference is being made to a Section in these specifications.

1.37 WORK - The furnishing of all labor, materials, equipment, and other incidentals necessary or convenient for the successful completion of the project and the execution of all the duties and obligations imposed by the contract.

1.38 WORKING DAY - Any day, except Saturdays, Sundays and State holidays.

SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS

2.1 QUALIFICATION OF BIDDERS - Prospective bidders must be capable of performing the work for which bids are called.

In accordance with Section 103D-310, HRS, 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" on the form 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.

Failure to complete the qualification questionnaire will be sufficient cause for the Department to disqualify a prospective bidder.

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 of Hawaii or its political subdivisions or is in default as a surety or failure to do faithfully and diligently previous contracts with the State.

2.2 REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES, OR IRREGULARITIES - Proposals may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind.

When proposals are signed by any agent, other than the officer or officers of a corporation authorized to sign contract on its behalf or a member of copartnership, a Power of Attorney must be on file with the Department prior to opening bids or shall be submitted with the proposal; otherwise, the proposal may be rejected as irregular and unauthorized.

Members of a joint venture may be requested to supply the Department with a copy of their joint venture agreement or each member of the joint venture may be required to sign the proposal.

2.3 PROPOSAL GUARANTY - A proposal guaranty (bid bond) is not required except when specifically noted in the proposal section of the bid document.

When a proposal guaranty is required with a bid, it will be specifically stated in the proposal; and no proposal totaling \$25,000 or more will be considered unless accompanied by one of the following forms of bidder's security:

- A. a deposit of legal tender; or
 - B. a surety bid bond underwritten by a company licensed to issue bonds in the State of Hawaii and submitted on the standard form provided herewith; or
 - C. a certificate of deposit, share certificate, cashier's check, treasurer's 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 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 one hundred thousand dollars (\$100,000.00).
 - 2. If the required security or bond amount totals over one hundred thousand dollars (\$100,000.00), more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be acceptable.
 - 3. The instrument shall be made payable at sight to the Department of Transportation, State of Hawaii.

According to Section 103D-323, HRS, the above shall be in a sum not less than five percent (5%) of the amount bid.

2.4 DELIVERY OF PROPOSALS - Each proposal shall be placed, together with the proposal guaranty when required, in an envelope and sealed and so marked as to indicate the identity of the project, the name and address of the bidder, and other required information and then delivered as indicated in the Notice to Bidders. Proposals will be received up to the time fixed in the Notice to Bidders for the opening of bids.

2.5 WITHDRAWAL OF PROPOSALS - Any proposal may be withdrawn at any time prior to the time fixed in the Notice to Bidders for the opening of proposals upon the filing of a written request therefore with the Department, executed by the bidder or a duly authorized representative. The withdrawal of a proposal shall not preclude a bidder from submitting a new proposal.

2.6 PUBLIC OPENING OF PROPOSALS - Proposals will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

2.7 DISQUALIFICATION OF BIDDERS - Any of the following reasons may be considered as being sufficient grounds for the disqualification of a bidder and the rejection of his proposal or proposals.

- A. More than one proposal for the same work from an individual, firm, or corporation under the same or different name.
- B. Evidence of collusion among bidders. Participants in such collusion will receive no recognition as bidders for any future work of the Department until such participant shall have been reinstated as a qualified bidder.
- C. Evidence of assistance from a person who has been an employee of the agency within the preceding two years and who participated while in State office or employment in the matter with which the contract is directly concerned, pursuant to Section 84-15, H.R.S.
- D. Lack of proposal guaranty.
- E. Unsigned proposal or proposal not signed in ink by person or persons legally authorized to submit a proposal on behalf of the bidder.

2.8 MATERIAL GUARANTY - The bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the prosecution of the work, together with samples. Such samples may be subjected to tests to determine their quality and fitness for the work.

SECTION 3 - AWARD AND EXECUTION OF CONTRACT

3.1 AWARD OF CONTRACT - The State reserves the right to reject any and all proposals and to waive any defects as may be deemed to be in the best interest of the public.

The award of contract, if it be awarded, will be made within sixty (60) calendar days after the opening of bids to the lowest responsive and responsible bidder whose proposal complies with all the prescribed requirements. The successful bidder will be notified, by letter mailed to the address shown in its proposal, that its proposal has been accepted and it has been awarded the contract.

Requirement for award. To be eligible for award, the apparent low Bidder will be contacted to submit copies of the documents listed below to demonstrate compliance with Section 103D-310(c), HRS. The documents should be submitted to the Department as soon as possible. If a valid certificate/clearance is not submitted on a timely basis for award of a contract, a Bidder otherwise responsive and responsible may not receive the award.

A. Tax Clearance.

Pursuant to §103D-310(c), 103-53 and 103D-328, HRS, the successful bidder shall be required to submit a certified copy of its tax clearance issued by the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS) to demonstrate its compliance with Chapter 237, HRS. A tax clearance is valid for six (6) months from the most recent approval stamp date on the tax clearance and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date.

FORM A6, TAX CLEARANCE CERTIFICATE, is available at the following website:

<http://www.hawaii.gov/tax/>

To receive DOTAX Forms by fax or mail, phone (808)587-7572 or 1-800-222-7572.

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

B. DLIR Certificate of Compliance.

Pursuant to §103D-310(c), HRS, the successful bidder shall be required to submit a copy (faxed copies are acceptable) of its approved Certificate of Compliance issued by the Hawaii State Department of Labor and Industrial Relations (DLIR) to demonstrate its compliance with unemployment insurance (Chapter 383, HRS), workers' compensation (Chapter 386, HRS), temporary disability insurance (Chapter 392, HRS), and prepaid health care (Chapter 393, HRS). The certificate is valid for six (6) months from the most recent approval stamp date on the certificate and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date. For certificates which receive a "pending" approval stamp, a DLIR approval stamp is required prior to the issuance of the Notice to Proceed.

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

www.hawaii.gov/labor

More information is available by calling the DLIR Unemployment Insurance Division at (808) 586-8926.

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

The application for the Certificate of Compliance is the responsibility of the bidder, and must be submitted directly to the DLIR. The approved certificate may then be submitted to the Department.

C. DCCA Certificate of Good Standing.

Pursuant to §103D-310(c), HRS, the successful bidder shall be required to submit a copy (faxed copies are acceptable) of its approved Certificate of Good Standing issued by the Hawaii State Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) to demonstrate that it is either:

- (1) incorporated or organized under the laws of the State; or
- (2) registered to do business in the State as

a separate branch or division that is capable of fully performing under the contract.

A Certificate of Good Standing is valid for six (6) months from the approval date on the certificate and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date. A Hawaii business that is a sole proprietorship, is not required to register with the BREG, and therefore not required to submit a Certificate of Good Standing. Bidders are advised that there are costs associated with registering and obtaining a Certificate of Good Standing from the DCCA.

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

www.hawaii.gov/dcca/

The application for the Certificate of Good Standing is the responsibility of the bidder, and must be submitted directly to the DCCA. The approved certificate may then be submitted to the Department.

3.2 CANCELLATION OF AWARD - The State reserves the right to cancel the award of any contract any time before the execution of said contract by all parties without any liability to the successful bidder or any other bidder.

3.3 RETURN OF PROPOSAL GUARANTY - All proposal guaranties, except those of the lowest two (2) bidders, will be returned immediately following the opening and checking of the proposals. The retained proposal guaranty of the second lowest bidder, if not a bid bond, will be returned within ten (10) calendar days following execution of contract by the successful bidder. The successful bidder's proposal guaranty, if not a bid bond, will be returned after a satisfactory contract bond has been furnished and the contract has been executed.

3.4 REQUIREMENT OF CONTRACT BOND - Only when required by the proposal, the successful bidder at the time of the execution of the contract shall file good and sufficient performance and payment bonds on the forms furnished by the Department, or a facsimile thereof, conditioned for the full and faithful performance of the contract in accordance with the terms and intent thereof and also for the prompt payment to all others for all labor and materials furnished by them to it and use in the prosecution of the work provided for in such contract,

in the manner, form and amount required by Section 3-122-224(b)(2), H.A.R., which bonds shall be in an amount equal to fifty per cent (50%) of the contract price, including amounts estimated to be required for extra work, or in the case of price-term, open-end, or requirements contract under which the total amount to be paid to the Contractor cannot be accurately estimated at the time the contract is to be awarded, the bond amounts shall be as designated in the bid documents. Such bonds shall also by their terms inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in the work so as to give them a right of action as contemplated by Section 103D-324, H.R.S.

The bidder shall limit the acceptable performance and payment bonds to the following:

- (a) Legal tender; or
- (b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or
- (c) A certificate of deposit; share certificate;; cashier's check; treasurer's check; teller's check drawn by or a certified check accepted by and payable on demand to the State by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

1. The bidder may use these instruments only to a maximum of one hundred thousand dollars (\$100,000.00).

2. If the required security or bond amount totals over one hundred thousand dollars (\$100,000.00) more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be acceptable.

3.5 EXECUTION OF CONTRACT - The contract and the "Certificate for Performance of Services", similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned, together with the contract bonds, when required, within ten (10) days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

Pursuant to Section 103D-309, H.R.S., the contract shall not bind the State in any way unless said contract has been fully and properly executed by all the parties thereto and

the Comptroller has endorsed thereon a certificate that there is available an unexpended appropriation over and above all outstanding contracts, sufficient to cover the amount required by the contract.

3.6 FAILURE TO EXECUTE CONTRACT - Failure to execute the contract, Certificate for Performance of Services and file acceptable bonds, when required, within ten (10) days after the award of the contract, or within such further time as the Director may allow, shall be cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award of the contract may then be made to the next lowest responsible bidder.

SECTION 4 - SCOPE OF WORK

4.1 WORK TO BE DONE - The work to be done is described in the Section(s) following Section 9 of these specifications.

4.2 PERFORMANCE OF WORK - The Contractor shall employ, so far as possible, such methods and means in carrying out his work so as not to cause any interruption, disturbance, or interference with the public.

In case the Contractor is performing work in a building, the Contractor shall conduct the work in such a manner so as not to cause any interruption, disturbance, or interference with the business activities of the tenants in the building.

4.3 EXTRA WORK - New and unforeseen items of work will be classed as extra work when they cannot be covered by any of the various items for which there is a bid price.

4.4 CHANGES AND CLAIMS FOR ADJUSTMENT

A. Change order. By a written order, at any time, and without notice to any surety, the procurement officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:

1. Drawings, designs, or specifications, if the goods to be furnished are to be specially manufactured for the State in accordance therewith;
2. Method of shipment or packing;
3. Place of delivery;
4. Changes in the work within the scope of the contract; or
5. Changes in the time of performance of the contract that do not alter the scope of work.

B. Adjustments of price or time for performance. If any change order increases or decreases the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, an adjustment shall be made and the contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract. Failure of the parties to agree to an adjustment shall not excuse the contractor from proceeding with the contract as changed, provided that the procurement officer promptly and duly make the provisional adjustments in payment or time for performance as may be reasonable. By proceeding with the work, the contractor shall not be deemed to have

prejudiced any claim for additional compensation, or an extension of time for completion.

C. Time period for claim. Within thirty (30) days after receipt of a written change order under subsection (a) unless the period is extended by the procurement officer in writing, the contractor shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the contractor's claim unless the State or county is prejudiced by the delay in notification.

D. Claim barred after final payment. No claim by the contractor for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.

E. Other claims not barred. In the absence of a change order, nothing in this clause shall be deemed to restrict the contractor's right to pursue a claim as under the contract or for breach of contract.

4.5 PRICE ADJUSTMENT

Any adjustment in contract price pursuant to a clause in this contract shall be made in one or more of the following ways:

A. By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;

B. By unit prices specified in the contract or subsequently agreed upon;

C. By the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as specified in the contract or subsequently agreed upon;

D. In such other manner as the parties may mutually agree; or

E. In the absence of agreement between the parties, by a unilateral determination by the procurement officer of the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as computed by the procurement officer in accordance with generally accepted accounting principles and applicable sections of chapters 3-123 and 3-126 of the Hawaii Administrative Rules.

4.6 VARIATION IN QUANTITY

Upon agreement of the parties, the quantity of goods or services or both specified in this contract may be increased by a maximum of ten (10) percent provided (1) the unit prices will remain the same except for any price adjustments otherwise applicable and (2) the procurement officer makes a written determination that such an increase will either be more economical than awarding another contract or that it would not be practical to award another contract.

SECTION 5 - CONTROL OF WORK

5.1 AUTHORITY OF DIRECTOR - The Director shall decide all questions which may arise as to the quality or acceptability of materials furnished and work performed; the manner of performance and rate of progress of the work; the compensation for work performed; the interpretation of the contract and the fulfillment of the contract on the part of the Contractor. The Director's decision shall be final and the Director shall have the authority to enforce any such decision and order which the Contractor fails to carry out promptly and diligently. The Director shall have the following powers in the way of enforcement:

- A. The right to suspend the work.
- B. The right to withhold payment due the Contractor.

5.2 COORDINATION OF PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS - These specifications, the plans, special provisions, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to describe and provide for the complete work.

5.3 COOPERATION OF CONTRACTOR AND DIRECTOR - The Contractor shall have available at the work site at all times, a copy of the specifications, special provisions and plans. The Contractor shall give the work constant attention to facilitate the progress thereof and shall cooperate with the Director in every way possible.

Before starting work on the project, the Contractor shall designate in writing a superintendent who shall have complete authority to represent and to act for the Contractor.

5.4 INSPECTION - The Director at all times shall have access to the work during its prosecution and shall be furnished with every reasonable facility for ascertaining that the materials and the workmanship are in accordance with the requirements and intentions of these specifications and special provisions. All work done and all materials furnished shall be subject to the Director's inspection and approval.

The inspection of the work shall not relieve the Contractor of any of its obligations to fulfill its contract as prescribed, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials may have been previously overlooked by the Director and accepted or included in an estimate for payment.

Projects financed in whole or in part with Federal funds shall be subject to inspection at all times by representatives of the Federal agency involved.

5.5 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK - All work which has been rejected shall be corrected or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed the Contractor for such correction or removal and replacement. Upon failure on the part of the Contractor to comply promptly with any order of the Director, the Director may cause any rejected work to be corrected or removed and replaced and to deduct the costs thereof from any monies due or to become due the Contractor.

5.6 CLAIMS AND DISPUTES - The Contractor may give notice in writing to the Director for claims that extra compensation, damages, or an extension of time for completion is due the Contractor for one or more of the following reasons:

- A. Requirements not clearly covered in the contract, or not ordered by the Director as extra work;
- B. Failure between the State and the Contractor to agree to an adjustment in price for a contract change order issued by the State; or
- C. An action or omission on the part of the Director requiring performance changes within the scope of the contract.

The Contractor shall continue with performance of the contract in compliance with the directions or orders of the procurement officer, but by so doing, the Contractor shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- A. The notice in writing be given:
 - 1. Before the commencement of the work involved, if at that time the Contractor knows of such requirements or the occurrence of such actions or omissions; or
 - 2. Within thirty (30) calendar days after the Contractor knows of such requirements or the occurrence of such action or omission if the Contractor did not have such knowledge before the commencement of the work; or
 - 3. Within thirty (30) calendar days after receipt of the written contract change order that was not

agreed upon by both parties; or

4. Within such further time as may be allowed by the Director in writing.

B. The notice shall clearly state the Contractor's intention to make claim and the reasons why the Contractor believes that additional compensation, changes or an extension of time may be remedies to which the Contractor is entitled; and afford the Director every facility for keeping records of the actual cost of work. Failure on the part of the Contractor to give such notification or to afford the procurement officer proper facilities for keeping strict account of actual cost shall constitute waiver of the claim for such extra compensation. The filing of such notice by the Contractor and the keeping of costs by the procurement officer shall not in any way be construed to prove the validity of the claim.

The Director will review the notice and render a decision. The Director's decision shall be final and conclusive unless, within thirty (30) calendar days from the date of the decision, the Contractor mails or otherwise furnishes a written appeal to the Director. The decision of the Director shall be final. Later notification of such claims shall not bar the Contractor's claim unless the State is prejudiced by the delay in notification. No claim by the Contractor for an adjustment hereunder shall be allowed if notice is not given before final payment under this contract.

Any adjustment in the contract price made pursuant to this clause shall be determined according to Section 4.5 - Price Adjustment.

The provisions of this Section shall not be construed as establishing any claims contrary to the terms of Section 4.4 - Changes and Claims for Adjustment.

Nothing herein contained, however, shall excuse the Contractor from compliance with any rules of law precluding any state officers and any Contractors from acting in collusion or bad faith in issuing or performing contract change orders which are clearly not within the scope of the contract.

SECTION 6 - CONTROL OF MATERIAL AND EQUIPMENT

6.1 DEFECTIVE MATERIALS - All materials not conforming to the requirements of these specifications or the special provisions shall be considered defective and all such materials, whether in place or not, shall be rejected. They shall be removed immediately from the site of the work, unless otherwise permitted by the Director. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Director. Upon failure on the part of the Contractor to comply promptly with any order to remove and replace defective materials, the Director may remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

6.2 TRADE NAMES AND ALTERNATES - For convenience in designation on the plans or in the specifications, certain equipment or articles or materials may be designated under a trade name or the name of a manufacturer and its information catalogue. The use of alternate equipment or an article or material which is of equal quality and of the required characteristics for the purposes intended will be permitted, subject to the written approval of the Director, in accordance with the following requirements:

A. QUALIFICATION BEFORE BID OPENING - When the specifications and/or plans specify one or more manufacturer's brand names of materials or equipment to indicate a quality, style, appearance, or performance, the bidder will be assumed to have based its bid on one of the specified named products, except where such proprietary product are specified, alternate brands may be qualified if found equal or better by the Director. Bidders requesting qualification of alternate proprietary products must submit a request to the Director for review and approval at the earliest date possible, but in any event, such request must be received at the Contracts office not later than ten (10) days before the bid opening date, not including the bid opening date.

It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Director that the alternate brand is qualified. The evidence shall be transmitted with a covering letter which shall list the evidence submitted and the items for which the substitution is requested.

If the evidence accompanying a request for substitution is insufficient to qualify a particular

model, the request shall be denied provided that further evidence may be submitted to qualify the item five (5) days prior to the bid opening date if the initial request was made prior to the deadline set above.

B. SUBSTITUTION AFTER BID OPENING - Substitution of material or equipment will not be allowed after the bid opening date except under the following unforeseen circumstances:

1. If a specified or pre qualified item is delayed by a lengthy strike in the factory or other unforeseeable contingency beyond the control of the Contractor which would cause an abnormal delay in the project completion.

2. If a specified or pre qualified item is found to be unusable due to change or other circumstances.

3. If the Contractor is willing to provide a more recently developed or manufactured item of material or equipment of the same manufacturer which the Director determines to be equal or better than the one specified or pre-qualified.

A substitution request, regardless of reason, shall be fully explained in writing by the Contractor and shall include its justification for said request, the quantities and unit prices involved, quotations and such other documents as are deemed necessary to support the request. Any savings in cost will accrue to the State and any additional cost for the substituted items will be paid by the Contractor.

The burden of proof as to the comparative quality and suitability of alternate equipment, articles, or materials shall be upon the bidder or Contractor and bidder or Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Director. The Director shall be the sole judge as to the comparative quality and suitability of alternate equipment, articles or materials and the Director's decisions shall be final.

The above shall not be construed to mean that substitution for brand name specified materials and equipment will be allowed; the Director reserves the right to deny any request he deems irregular or not in the best interest of the State.

6.3 ASSIGNMENT OF ANTITRUST CLAIMS FOR OVERCHARGES FOR GOODS
AND MATERIALS PURCHASED

A. Vendor and purchaser recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, vendor hereby assigns to purchaser any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and which are not passed on to the purchaser under an escalation clause.

B. Contractor and owner recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the owner. Therefore, contractor hereby assigns to owner any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and any change order. In addition, contractor warrants and represents that each of its first tier suppliers and subcontractors shall assign any and all such claims to owner, subject to the aforementioned exception.

SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY

7.1 LAWS TO BE OBSERVED - The Contractor shall comply with all federal, state, city and county laws, ordinances, rules and regulations which in any manner affect those engaged or employed in the work, the materials used in the work, and the conduct of the work. Any reference to such laws, ordinances, rules and regulations shall include any amendments thereto effective as of the date of the call for sealed proposals.

The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees against any claim or liability arising from or based on the violation of any such laws, ordinances, rules or regulations. If any discrepancy or inconsistency is discovered in the contract for the work in relation to any law, ordinance, rule, regulation, order or decree, the Contractor shall forthwith report the same to the Director in writing.

7.2 PERMITS AND LICENSES - The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

7.3 PATENTS - The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees from all suits at law or actions of every nature, for or on account of the use of any patented materials, equipment, devices or processes.

7.4 RESPONSIBILITY FOR INJURY AND DAMAGE - The State, its officers, agents and employees shall not be held accountable in any manner for any loss or damage to the work or any part thereof, or for any of the materials and equipment used or employed in performing the work, or for any injury to any person or persons either workers or the public, or for any damage to property caused by the Contractor or its workers or any one employed by the Contractor. The Contractor shall be responsible for any liability imposed by law for any injury to any person or any damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The acceptance of the completed work of the Contractor by the Director shall not relieve the Contractor from any liability which may have accrued or may accrue as a result of the performance of the work by the Contractor. The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees, from all suits or actions of every name, kind and description, brought for or on account of

any injuries or damages sustained by any persons or property caused by the Contractor, its servants or agents, or by or on account of any act or omission of the Contractor or its servants or agents, regardless of whether such actions or any claim is brought against them or any one of them before or after the final acceptance of the work. In addition to any remedy authorized by law, the State may withhold payment of any money due to Contractor as shall be reasonable until disposition has been made of any suits or claims for injuries or damages.

It is not the intention of the parties to this contract to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party hereto to maintain a suit for personal injuries or property damage based on a contract theory of liability. In any event, the Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State from suits and claims for personal injuries or property damage where such injuries or damage are caused by the negligent acts or omissions of the Contractor, its agents or employees.

7.5 COOPERATION BETWEEN CONTRACTORS - Where two or more Contractors are employed on related or adjacent work, each shall conduct its operations in such a manner as not to cause any unnecessary delay or hindrance to the other.

7.6 CONTRACTOR'S RESPONSIBILITY FOR WORK - Until the acceptance of the contract, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expenses thereof.

7.7 NO PERSONAL LIABILITY - Neither the Director nor any other officer or authorized employee of the Department shall be personally responsible for any liability arising under the contract.

7.8 LABOR AND COMPENSATION REQUIREMENTS - Wages paid each laborer employed by the Contractor or any subcontractor shall not be less than the prevailing minimum wage rate prescribed by law.

Every laborer employed by the Contractor or any subcontractor whose rate of compensation is Five Dollars (\$5.00) or less per day shall be paid his wages weekly pursuant to Section 103-54, H.R.S.

The Contractor's attention is directed to Chapter 377, H.R.S., Hawaii Employment Relations Act; Chapter 378, H.R.S., Employment Practices; Chapter 383, H.R.S., Hawaii Employment Security Law; Chapter 386, H.R.S., Workers' Compensation Law; Chapter 387, H.R.S., Wage and Hour Law; Chapter 392, H.R.S., Temporary Disability Insurance; Chapter 393, H.R.S., Prepared Health Care Act; Chapter 396, H.R.S., Occupational Safety and Health; and Section 103-55, H.R.S., Wages, Hours, Working Conditions of Employees of Contractor's Supplying Services.

7.9 INSURANCE - Prior to commencing with the work, the Contractor shall, at its own expense, obtain and submit to the Department, Certificate of Insurance from an insurance company authorized by the laws of the State to issue such insurance in the State of Hawaii showing full policy coverage of the Contractor.

TYPES OF INSURANCE:

A. Workers' Compensation:

The Contractor shall obtain worker's compensation insurance for all persons whom they employ in carrying out the work under this contract. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract. The minimum limit of liability for workers compensation is the HRS 386 statutory limit.

B. Comprehensive Automobile Liability:

The Contractor shall obtain Auto Liability Insurance covering all owned, non-owned and hired autos with a combined single Limit of not less than \$1,000,000 per accident for bodily injury and property damage with the State of Hawaii named as additional insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess

policies.

C. Commercial General Liability:

The Contractor shall obtain General Liability insurance with a limit of not less than \$1,000,000 per occurrence and in the aggregates. The General liability insurance shall include the State of Hawaii as an additional insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies.

All policies must provide that 30 days prior written notice of cancellation or material change in coverage be given to certificate holders stated above.

Such insurance when accepted by the Director in writing shall become applicable and shall remain unmodified throughout the entire term of the contract and in no event shall be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the State. Such insurance aforementioned shall cover the State for all work performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including other work performed outside of the work area, and all change orders.

Any delay in the submission and approval of insurance certificates shall not be justification of or grounds for a request by the Contractor postponing the issuance of a notice to proceed notwithstanding the fact that the Contractor shall not be allowed to proceed with the work until said certificates are submitted and approved.

Failure to obtain insurance in accordance with the Section, on the part of the Contractor, shall be considered a major breach of the contract; and should the State be forced to expend funds which would have been covered under the insurance, the Contractor agrees to assume the liability for such funds and to indemnify and hold the State harmless.

SECTION 8 - PROSECUTION AND PROGRESS

8.1 NOTICE TO PROCEED - A "Notice to Proceed" letter will be written to the Contractor by the Director. Such letter will indicate the date the Contractor is to begin work and from which date the contract time will commence to run.

The Contractor shall diligently perform the required duties during the term of the contract, or if the work is to be completed within a specified time limit, the Contractor shall diligently prosecute the work to completion within the specified time limit.

8.2 SUBCONTRACTING - The Contractor shall give its personal attention to the fulfillment of the contract and shall keep the work under its control.

Subject to Section 103D-302, H.R.S., the Contractor may subcontract a portion of the work pursuant to the provisions of this section, but the Contractor shall be primarily responsible for the work so subcontracted. The Contractor shall not subcontract any work to any subcontractor who has been suspended by the State.

Before any work is started under a subcontract, the Contractor shall have the written approval of the Director on a written statement on forms furnished by the Department, indicating the work to be subcontracted, the names of the subcontractors and the description of each portion of the work to be so subcontracted and showing that the subcontractors are particularly experienced and equipped to do the work subcontracted. The Contractor shall give assurance that the minimum wage rate schedule as stated in the contract shall apply to labor performed on the work so subcontracted. Consent of the Director to the subcontracting of work shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

When any portion of the work which has been subcontracted by the Contractor is not prosecuted in a manner satisfactory to the Director, the Contractor, upon receipt of a notice thereof in writing from the Director, shall remove the subcontractor immediately from the project and the subcontractor shall not again be employed on the work.

8.3 ASSIGNMENT OF CONTRACT - The performance of the contract may be assigned only with the prior written consent of the Director and when applicable, the Contractor's surety. Consent to any assignment shall not relieve the Contractor or the Contractor's surety of any obligations of the contract.

8.4 INSUBORDINATION - If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the Director or shall appear to the Director to be incompetent or to act in a disorderly or improper manner, the subcontractor or person shall be removed immediately upon request by the Director and shall not again be employed on the work, nor shall it be employed upon any other Department project currently under contract to the same Contractor or subcontractor.

8.5 TEMPORARY SUSPENSION OF WORK

A. Order to stop work. The Director, may, by written order to the contractor, at any time, and without notice to any surety, require the contractor to stop all or any part of the work called for by this contract. This order shall be for a specified period not exceeding sixty (60) days after the order is delivered to the contractor, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this section. Upon receipt of such an order, the contractor shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the Director shall either:

1. Cancel the stop work order; or
2. Terminate the work covered by such order as provided in the "termination for default clause" or the "termination for convenience clause" of this contract.

B. Cancellation or expiration of the order. If a stop work order issued under this section is canceled or if the period of the order or any extension thereof expires, the contractor shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or contract price, or both, and the contract shall be modified in writing accordingly; if:

1. The stop work order results in an increase in the time required for, or in the contractor's cost properly allocable to, the performance of any part of this contract; and
2. The contractor asserts a claim for such an adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Director decides that the facts justify such

action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.

C. Termination of stopped work. If a stop work order is not canceled and the work covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop work order shall be allowable by adjustment or otherwise.

D. Adjustment of price. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract.

8.6 LIQUIDATED DAMAGES - It is mutually understood and agreed by and between the parties to the contract that the performance by the Contractor of its duties every calendar/working day is an essential part of the contract and in case of failure on the part of the Contractor to perform its duties for the time specified in the contract, the State will be damaged thereby and the amounts of said damages being difficult, if not impossible of definite ascertainment and proof, shall be estimated, agreed upon and fixed at the sum shown in the proposal for each and every calendar/working day that the Contractor fails to perform its duties during the period the contract is in effect; and the Contractor shall pay the liquidated damages as provided for in the proposal and, in case the same are not paid, the Department may deduct the amount thereof from any monies due or that may become due the Contractor under the contract.

8.7 DEFAULT AND TERMINATION OF CONTRACT

A. Termination by Default. If the contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract, or any extension thereof, otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Director may notify the contractor in writing of the delay or non-performance and if not cured in ten (10) days or any longer time specified in writing by the Director, such officer may terminate the contractor's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part the Director may procure similar goods or services in the manner and upon terms deemed appropriate by the Director. The contractor shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring

similar goods or services.

1. Contractor's duties. Notwithstanding termination of the contract and subject to any directions from the Director, the contractor shall take timely, reasonable, and necessary action to protect and preserve property in the possession of the contractor in which the State or county has an interest.

2. Compensation. Payment for completed goods delivered and accepted by the State shall be at the contract price. Payment for the protection and preservation of property shall be in an amount agreed upon by the contractor and Director; if the parties fail to agree, the Director shall set an amount subject to the contractor's rights under chapter 3-126, HAR. The State may withhold from amounts due the contractor such sums as the Director deems to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods and services.

3. Excuse for nonperformance or delayed performance. Except with respect to defaults of subcontractors, the contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms, including any failure by the contractor to make progress in the prosecution of the work hereunder which endangers such performance, if the contractor has notified the Director within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; acts of the State and any other governmental body in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the contractor shall not be deemed to be in default, unless the goods or services to be furnished by the subcontractor were unreasonably obtained from other sources in sufficient time to permit the contractor to meet the contract requirements. Upon request of the contractor, the Director shall ascertain the facts and extent of such failure, and if such officer determines that any failure to perform was

occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the contractor's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the State under the clause entitled "Termination for Convenience". As used in this paragraph of this clause, the term "subcontractor" means subcontractor at any tier.

4. Erroneous termination for default. If, after notice of termination of the contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contractor was not in default under the provisions of the clause, or that the delay was excusable under the provisions of paragraph 3 above, Excuse for nonperformance or delayed performance of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the State, be the same as if the notice of termination had been issued pursuant to such clause.

5. Additional rights and remedies. The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

B. Termination for convenience. 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 shall give written notice of the termination to the contractor specifying the part of the contract terminated and when termination becomes effective.

1. Contractor's obligation. The contractor shall incur no further obligations in connection with the terminated work and on the dates set in the notice of termination the contractor will 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. The Director 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 are necessary to do so.

2. Right to goods. The Director may require the contractor to transfer title and deliver to the State in the manner and to the extent directed by the Director:

- a. Any completed goods; and
- b. The partially completed goods and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights hereinafter called "manufacturing material," as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

The Contractor shall, upon direction of the Director, protect and preserve property in the possession of the contractor in which the State has an interest. If the Director does not exercise this right, the contractor shall use the Contractor's best efforts to sell such goods and manufacturing materials. Use of this section in no way implies that the State has breached the contract by exercise of the termination for convenience clause.

3. Compensation:

- a. The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, bearing on such claim. If the Contractor fails to file a termination claim within one (1) year from the effective date of termination, the Director may pay the Contractor, if at all, an amount set in accordance with subparagraph c. below.
- b. The Director and the Contractor may agree to settlement provided the Contractor has filed a termination claim supported by cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State, the proceeds of any sales of goods and manufacturing materials under paragraph (2) of this clause, and the contract price of the work not terminated.

c. Absent complete agreement under subparagraph b above, the Director shall pay the Contractor the following amounts, provided payments agreed to under subparagraph b shall not duplicate payments under this subparagraph for the following:

(i) Contract prices for goods or services accepted under the contract;

(ii) Costs incurred in preparing to perform and performing the terminated portion of the work plus a fair and reasonable profit on such portion of the work, such profit shall not include anticipatory profit or consequential damages, less amounts paid or to be paid for accepted goods or services; provided that if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(iii) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to paragraph 1 of this clause. These costs must not include costs paid in accordance with subparagraph (ii) above.

(iv) The reasonable settlement costs of the Contractor including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this contract. The total sum to be paid the Contractor under this subparagraph shall not exceed the total contract price plus the reasonable settlement cost of the Contractor reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph b of this paragraph, and the contract price of work not terminated.

d. Cost claimed, agreed to, or established under subparagraphs b and c shall be in accordance with chapter 3-123, HAR. bearing on such claim.

8.8 FINAL INSPECTION - Upon notice from the Contractor of the completion of the work or contract, the Director shall make an inspection. If the contract is found completed to the Director's satisfaction, such inspection shall constitute the final inspection and acceptance of the work.

If the work is unsatisfactory in whole or in part, the Director shall notify the Contractor of the work necessary for final completion and acceptance and the Contractor shall forthwith perform the work required by the Director. Upon performance of such required work by the Contractor, another inspection shall be made which shall constitute the final inspection if the work is completed satisfactorily.

Within ten (10) days after final inspection and acceptance of the work, or as soon thereafter as is practicable, the Contractor shall be notified by the Director in writing of such acceptance.

8.9 TERMINATION OF CONTRACTOR'S RESPONSIBILITY - The contract will be considered complete when all work has been completed, the final inspection made, the work accepted by the Director, and the final estimate paid. The Contractor will then be released from further obligation except as set forth in the contract and bond, when applicable.

SECTION 9 - PAYMENT

9.1 SCOPE OF PAYMENT - The Contractor's bid price shall be inclusive of all costs, direct or indirect, including all taxes, required for the fulfillment of the contract.

Contract payments to the Contractor by the State shall be full payment for the furnishing of all labor, tools, equipment, and other incidentals, including all taxes, necessary for performing all work and services contemplated and embraced under the contract.

9.2 RETAINAGE/DEDUCTION FROM PAYMENT - The Director may at any time retain or deduct out of any sums due the Contractor to cover claims of the State against the Contractor, or such sums sufficient to cover any unpaid claims of others supported by sworn statements filed in the office of the Director, without any liability for damages, interest or otherwise to the Contractor for such retention or deduction.

Provided the work of the Contractor is progressing satisfactorily in the judgment of the Director and in accordance with the provisions of this contract, monthly payments, less five percent (5%), will be made to the Contractor. The amount of such monthly payments shall be determined by the Director based on the Director's estimate of the items of work performed and materials incorporated in the work and the value therefor at the unit prices or lump sum prices set forth in the contract. All monthly payments are shall be subject to correction at any time prior to or in the final payment.

At any time after fifty per cent (50%) of the work has been completed, if the State determines that the work contracted to be performed is progressing satisfactorily, the State may make any of the remaining monthly payments in full.

If the Director finds that unsatisfactory progress is being made, the State may, from the beginning of such unsatisfactory progress, withhold any amount up to five per cent (5%) of any subsequent monthly payment.

9.3 ASSIGNMENT OF PAYMENTS - All monies payable under the contract, or any part thereof, shall be paid to the Contractor in accordance with the provisions of this Section and no assignment or order executed by the Contractor directing payment of any portion or all of such funds to any other person or persons shall be recognized by the State unless such assignment or order specifies the amounts to be so paid and the purposes for which the assignment or order is given. Such assignment or order shall have attached thereto, by endorsement or otherwise, the consent of the surety, when

applicable. No such assignment or order shall be binding on the State.

Any assignment of money shall, however, be subject to all proper set-offs in favor of the State, to all deductions provided for in the contract and to all liens and rights conferred by law on the State. All money withheld, whether assigned or not, shall be subject to being used by the State for the completion of the work in the event of the Contractor's default.

9.4 PROGRESS PAYMENTS - Payments under this contract shall be made only upon submission by the Contractor of an original invoice and 2 copies. The invoice shall specify the amount due less retainage and shall also certify that services requested under the contract have been performed by the Contractor according to the contract.

9.5 FINAL PAYMENT - Final payment will only be made after the Contractor receives final acceptance by the Director as provided in Section 8.8, and until the Contractor has filed with the Department the following:

A. Consent of the surety, when applicable, to payment of the final estimate;

B. Satisfactory evidence by affidavit that all debts resulting from the contract have been fully paid or satisfactorily secured;

C. A current "Certificate of Vendor Compliance" issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor's compliance with (a) Section 103D-328, HRS (for all contracts \$25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the Internal Revenue Service; (b) Chapters 383, 386, 392, and 393, HRS; and (c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in final payment being withheld until compliance is attained.

The filing of willfully false affidavits will disqualify the Contractor from bidding on future work of the Department.

SECTION 10 – FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES

10.1 SCOPE OF WORK – Provide Digital Videolog (DV) survey services of all roads with a Federal functional classification of Arterial or Collector in the State of Hawaii highway system (approximately 5,000 chainage/lane miles) on the islands of Kauai, Oahu, Maui, Molokai, Lanai and Hawaii (see Table 1 below). The State maintained portion of these highways, known as the State Highway System (SHS), covers about 2,800 lane miles of the approximately 5,000 lane miles to be surveyed. The Oahu SHS mileage incorporates approximately 270 ramps in 35 interchanges which, combined with access and frontage roads make up approximately 100 miles along with about 500 miles of the interstate and freeway facilities.

Table 1. Approximate State and County Highway Lane Mileages by Island

| Island | Total Miles | State Miles | County Miles |
|---------|-------------|-------------|--------------|
| Hawaii | 1,490 | 915 | 575 |
| Kauai | 415 | 240 | 175 |
| Lanai | 60 | 35 | 25 |
| Maui | 750 | 425 | 325 |
| Molokai | 250 | 110 | 140 |
| Oahu | 1,885 | 1,005 | 880 |
| TOTAL | 4,850 | 2,730 | 2,120 |

This project shall include the following components:

- A. Mobilization, Management, and Training
- B. Digital Videolog Images
- C. GPS, DMI, Inertial, and Road Geometric Data
- D. Pavement Condition Databases and Reports
- E. LIDAR and Roadway Asset Features Databases
- F. Roadside Rating Assessment Report
- G. Base Maps
- H. Data Submission for Approval
- I. HDOT Verification of Data
- J. Data Collection Systems Calibration and Testing
- K. Software and Licenses
- L. Training of HDOT Staff

The software products should be cloud-based or compatible with the State of Hawaii, Department of Transportation, Highways Division, Planning Branch, Survey Section (HDOT) Coordinated Data System/Geographic Information System (CDS/GIS), which includes standard commercial off-the-shelf (COTS) software such as Oracle Spatial RDBMS, Hexagon's GeoMedia, and Bentley's Microstation/InRoads. Software should enable users to perform measurements, extract, and export features from the digital images and Light Detection and

Ranging (LIDAR) data. Users should also be able to modify base maps, audit/populate the pavement condition and roadway asset features inventory databases, and generate custom asset reports.

10.2 QUALIFICATION REQUIREMENTS – Bidders shall have at least 5 years of experience and performed at least 10 major videolog projects for government agencies within the past five (5) years. Bidders are directed to Section 2.1 Qualification of Bidders of the Special Provisions and Specifications. The winning bidder will be required to fill out and submit the “Pre-Qualification Questionnaire” when requested by the State and prior to award.

10.3 DESCRIPTION OF GOODS AND SERVICES – The Contractor shall provide all labor, material, shipping, equipment, personnel travel and lodging necessary to provide DV survey services of designated roadways (approximately 5,000 lane miles including access roads, frontage roads and approximately 270 ramps) on the islands of Hawaii, Kauai, Lanai, Maui, Molokai and Oahu. HDOT will designate the roads to be surveyed and coordinate with the Contractor.

The DV survey shall provide high definition (HD) progressive scan digital color images at every 10.56 feet or two thousandth (.002) mile, or five hundred (500) images from each camera per mile and the associated roadway feature data extracted from LIDAR of the designated roadways along with 3D basemaps of the designated roadways. See Digital Videolog Images section below for image requirements. Simultaneously, the Contractor shall perform a pavement condition survey collecting International Roughness Index (IRI), rutting, faulting and pavement distresses using 2D digital pavement scan images with a 3D laser based automated pavement condition assessment system for mapping the length, width and depth of cracks and for classifying the distresses. The Contractor shall have experience providing these services and provide references (see Qualifications) to that effect. Knowledge of, and adherence to, these specifications is mandatory for acceptable work for HDOT.

HDOT prefers a cloud-based environment and requests the Contractor’s written recommendations for access to and maintenance (upkeep) of captured information, base maps and photo images after the services provided by the Contractor have been completed. HDOT assumes the Contractor shall take existing departmental resources and business processes into consideration, as well as identifying new cloud-based directions, when making these recommendations in a data management plan submitted to the HDOT.

The components of this project listed in the Scope of Work above are detailed below.

A. MOBILIZATION, MANAGEMENT, AND TRAINING

The first two weeks of the project shall include a project kick-off meeting, project work plan and schedule submission, training, and equipment calibration and certification. No payments for mobilization and management will be made before a final workplan is approved. No more than 50 percent (%) of payment for this mobilization bid item will be paid until all these activities in the first two weeks have been certified in writing by HDOT to have been successfully completed.

A.1. Project Management, Kick-off, and Status Meetings

In order to ensure that all the requirements of the project are met, it will be necessary for the Contractor to work closely with the HDOT. The Contractor shall appoint a project manager (PM) that will act as the main point of contact for all discussions, managing the technical and administrative aspects of implementing and maintaining the contents of this project for conformance with these specifications. The management of the project also shall include, but not be limited to the following:

- A.1.1. Project Kick-off Meeting – The Contractor shall meet with HDOT on site to discuss its proposed work plan covering the project requirements, standard operating procedures, methodology, submittals, schedule, and Contractor needs prior to the commencement of any work.
- A.1.2. Project Workplan – The Contractor shall submit a draft project workplan at least one week prior to the kick-off meeting for all tasks that will be discussed and refined with input from HDOT. The workplan shall define the requirements for each project related task and all of its subtasks. The workplan shall be a detailed and unambiguous roadmap to guide the development of each subtask. Changes to the PM and work plan need to be concurred to in writing by both HDOT and the Contractor.
- A.1.3. Project Schedule – The Contractor shall submit a draft overall annual project schedule prior to the Kick-off meeting. The schedule shall include an outline of the order in which the islands will be covered and should also include the proposed start/end date(s) for the data collection and delivery for that year.

The Contractor shall also work with HDOT to develop a general monthly schedule, in an agreed upon format, which will include an outline of the order in which specific facilities will be covered.
- A.1.4. Project Status Meetings - Contractor shall coordinate with the HDOT project manager on the establishment of a schedule of project status and progress meetings. Project status meetings will be held no less than every month.

A.2. Weekly Project Schedule Development

The Contractor shall also submit a weekly work schedule for each operating crew in a Road Survey Data Log format acceptable to HDOT that can be correlated to the monthly invoices. The schedules shall be based on the list of roadways provided in the DV route request. All schedules shall be submitted to HDOT for acceptance prior to commencement of scheduled work. Data collection not performed at the proper location shall not be paid for and may be rescheduled by HDOT.

Within two working days of receipt of a weekly schedule HDOT will notify the Contractor, in writing, of its acceptance or reasons for non-acceptance. If the weekly schedule is not accepted the Contractor shall have two (2) working days after notification to make necessary corrections and resubmit the schedule. The Contractor shall submit a written request for any proposed change(s) to an accepted schedule. HDOT will notify the Contractor in writing of the acceptance of any proposed change(s) seven (7) days prior to the start of the schedule change. The Contractor shall interpret a lack of response as a rejection of the change(s).

In order to respond to minor daily or weekly changes in field, weather, personnel or equipment conditions the Contractor may make alterations to an accepted weekly schedule once weekly fieldwork has begun. Any alterations to an accepted schedule shall be reported immediately to the contract manager or his designated field supervisor when applicable. Re-surveys due to machine failures can be rescheduled within the same week if completion of previously scheduled work is not compromised. Scheduled surveys not able to be taken due to unique field conditions, re-surveys needing future scheduling can be removed from the approved weekly schedule with the proper notification of the HDOT project manager or their designated representative.

A.3. Field Crew Training

Prior to the start of the official regular work program, the Contractor will participate in a one-day training session conducted with HDOT. All Contractor field crew, field supervisors and project managers shall be required to attend. In order for the two parties to further familiarize themselves with the scope of work, safety issues, equipment, procedures, routes and locations, HDOT will assign its videolog personnel to accompany the Contractor's survey crews for such time as necessary to ensure the successful completion of the scope of work. Any employee from the groups listed above hired after the initial training session shall require training. HDOT reserves the right to require the Contractor to attend additional training sessions any time during the period of work. Other than new employee training, criteria for additional required training shall be based on non-compliance with this specification. Requests for additional training shall be justified in writing. In all cases, HDOT Project Manager will coordinate scheduled training sessions with the Contractor work schedule. Training session costs are not reimbursable to the Contractor.

B. DIGITAL VIDEOLOG IMAGES

B.1. The Contractor shall provide approximately 360-degree HD imagery of the roadway.

B.1.1. A minimum of three forward facing 4K cameras should provide high-resolution roadway and right-of-way digital images at every 10.56 feet or two thousandth (0.002) of a mile. Each camera should provide at least a 45-degree field of view giving a driver's perspective of at least 135-degrees field of view.

B.1.2. A minimum of three rear facing 4K cameras should provide high-resolution roadway and right-of-way digital images at every 10.56 feet or two thousandth

(0.002) of a mile. Each camera should provide at least a 45-degree field of view giving a driver's rear view mirror perspective of at least 135-degrees field of view.

B.2. Each camera shall possess an "automatic exposure control" (AEC) with the following features:

B.2.1. Capable of automatically adjusting the camera aperture by analyzing different zones of the image to determine the best possible exposure level for that image and predict the best possible exposure level for the next image. Specifically, the following situations shall be addressed.

B.2.1.1. Normal: Average the ideal exposure settings for different zones of the image to calculate an "average exposure setting"

B.2.1.2. The transition into and out of a tunnel or viaduct: The AEC shall be capable of analyzing the changes in lighting along the vertical dimension of the image frame, from image to image, for the purpose of detecting the transition into and out of tunnels. The Contractor may substitute a system that allows the operator to rapidly direct the AEC to change to a pre-determined exposure setting. The purpose of this is to rapidly and automatically change exposure settings, through the use of a button or trigger device, when the vehicle has arrived at a tunnel or viaduct transition without slowing or stopping the vehicle.

B.2.1.3. Priority: The AEC shall be capable of accepting operator commands to adjust the overall exposure level by giving priority to just one of the "exposure zones" mentioned above. The intent is to preserve as much of the image as possible in a situation where extreme differences in lighting occur within the same image frame.

B.2.2. Capable of rapidly adjusting the camera aperture to changing lighting conditions within three (3) images or 31.68 feet of vehicle travel to prevent overexposure or underexposure which would obscure critical image details.

B.2.3. Capable of operating independently of each other for the purpose of enabling the cameras to operate in situations where there is significant difference in illumination in the visual frames of the three cameras. Primarily, this will be for dealing with image sets shot under viaducts where one camera will be dealing with a low-lighting situation, while the second or third camera will be dealing with a heavily sunlit situation.

B.2.4. The AEC shall possess manual overrides to allow the operator to manually adjust the aperture of each videolog camera if it is determined that a sufficiently complex lighting situation reduces the AEC's effectiveness to an unacceptable degree.

B.3. The digital images shall clearly show the following physical details:

B.3.1. Location and condition of road signs (signs should be visible whether mounted overhead or on the shoulder) including:

- B.3.1.1. Street name
 - B.3.1.2. Speed limit
 - B.3.1.3. Exit and on-ramp signs
 - B.3.1.4. Milepost Markers
 - B.3.1.5. Route begin and end signs
- B.3.2. Number of through lanes, turn lanes and striping
- B.3.3. Guardrail, fire hydrants, streetlights, intersection geometry and traffic control devices
- B.3.4. Road and right-of-way view on one image and right shoulder view on the second image taken at the same intervals
- B.3.5. Pavement Conditions
- B.4. Images shall be delivered in the following format:
 - B.4.1. Progressive scan format (non-interlaced and without measurable degradation of resolution at frame edge)
 - B.4.2. **Minimum resolution** of 3296 x 2472 pixels in twenty-four (24) bit color.
 - B.4.3. Images shall be compressed in real time at highway speeds via the standardized Joint Photographic Experts Group (JPEG) compression method.
 - B.4.4. Exchangeable image file format (EXIF) information shall be provided.
 - B.4.4.1. Minimum standard tags for location information should be complete.
 - B.4.4.2. Minimum event tags for date and Hawaii Standard Time (HST) should be complete.
- B.5. A digital file log in a database shall relate the following information to each image:
 - B.5.1. Camera Position, Aperture and Lens Settings
 - B.5.2. Island Name, Owner, Facility Type and Route Number
 - B.5.3. Direction, Lane and Speed
 - B.5.4. Offset distances in miles from the beginning of the route subject to the following:
 - B.5.4.1. Offset accuracy shall be within +/- one thousandth (0.001) of a mile per mile.
 - B.5.4.2. Offset distance shall be to a minimum of three (3) decimal places.
- B.6. All progressive scan digital images shall be captured at intervals of:
 - B.6.1. Every two-thousandth (0.002) of a mile or every 10.56 feet.
 - B.6.2. At user defined intervals, without post processing (capturing from video).
- B.7. The collection speed of the DV system shall range up to the speed limit of the segments on which the data is being collected.
- B.8. It will be necessary for the digital image collection to be performed during traffic and weather conditions conducive to full visibility of road surface and roadside details (as noted under item 2.2 above).

- B.8.1. System integrity and clarity of the images shall not be compromised in the rugged environment of the host vehicle at speeds up to 65 miles per hour (mph).
- B.8.2. System integrity and clarity of the images shall be maintained and not be compromised by the variety of weather, light and other environment conditions as noted in the performance of work specifications.

C. COORDINATES, DISTANCES & GEOMETRY OF ROADWAY

- C.1. Coordinates of the roadway lane driven shall be collected with an integrated system consisting of six (6) degrees of freedom inertial measuring unit (IMU), Distance Measuring Instrument (DMI) and real-time Differential Global Positioning System (DGPS) providing a complete navigation and attitude solution with precise position and orientation measurement of the vehicle. HDOT shall have access to the real-time position and location of the vehicle. Documentation for all systems must include calibration procedures and submitted to the HDOT.
- C.2. DGPS and DMI coordinates of roadway lanes shall be captured at intervals of at least one-thousandth (0.001) mile. Vehicle must travel in center of lane and maintain constant bearing.
- C.3. Real-time DGPS coordinates shall have an accuracy within one to five (1 to 5) meters root mean square (RMS) horizontal and vertical. GPS coordinate files of the lanes driven each day shall be transmitted before midnight of the same day to HDOT as a Keyhole Markup Language (KML) or file format agreed upon. Error logs and raw data shall be retained and available for independent inspection, audit, and verification as agreed upon in the quality assurance plan.
- C.4. System must be able to receive DGPS correction signals in real-time from an HDOT approved Real-time Kinematic Positioning (RTK) base station and/or commercial subscription service, and data from an HDOT approved, University NAVSTAR Consortium (UNAVCO) or Continuously Operating Reference Stations (CORS) base station shall be used for any GPS post-processing. Documentation for all base stations and post processing procedures must be submitted to the HDOT.
- C.5. When a DGPS reference signal is unavailable in real time, post-processing, combined with an inertial system, is acceptable.
- C.6. Inertial system must incorporate a Distance Measuring Instrument (DMI) accurate to within 0.2% of a measured mile or 10.56 feet.
- C.7. All DGPS and inertial data used for developing roadway centerlines shall be further post-processed and delivered in the current HDOT standard NAD 83 HARN datum. Should the State change their standard during the contract period, the Contractor will be required to comply in any subsequent remaining contract years. Post processing will be done with either the nearest HDOT approved, UNAVCO or CORS base stations files with under five second sampling rates as described and agreed to in the project workplan. Vertical elevations will be further corrected to accurately reflect the height

of the road surface above mean sea level and documentation of these procedures shall be submitted to the HDOT.

- C.8. Roadway geometric data, including curve, grade, and cross slope shall be captured simultaneously at intervals of at least two-thousandth (0.002) of a mile. This geometric data shall be further processed and reported in accordance with the Federal Highway Administration (FHWA) Highway Performance Monitoring System (HPMS) Field Manual definitions. A summary geometrics report that includes all terrain types based on grades and all curves with any approaching zero banking flagged shall be included. A quality assurance plan documenting these procedures shall be submitted with the final data.
- C.9. Superelevation report including route number, travel direction, begin route mile, end route mile, measured superelevation rate or percent along horizontal curves compatible with the FHWA Model Inventory of Roadway Elements (MIRE), MIRE Data Collection Guidebook and the AASHTO Highway Safety Manual.

D. PAVEMENT SCAN IMAGES, IRI, RUTTING, FAULTING, AND PAVEMENT CONDITION DATABASE

The Contractor shall perform a pavement condition survey at highway speeds combining its 2D digital pavement scan images with a 3D laser based automated pavement crack detection system for mapping the length, width and depth of cracks and for classifying the distresses. Distress classification and severity should be done in conformance with the HPMS Field Manual and the Strategic Highway Research Program (SHRP) Long-term Pavement Performance (LTPP) program distress identification manual (Publication Number FHWA-RD-03-031). A 3D pavement texture map by pavement type with all areas of decreased skid resistance, slabs, potholes, patches and the distresses color coded as low, medium, and high severity shall be delineated and submitted as a final deliverable.

An HPMS acceptable report of all required pavement data for all roads by pavement type and a summary pavement report card following the HPMS guidelines for good, fair, poor condition ratings should be submitted as a final deliverable. The IRI, faulting, rutting, and pavement distress data from the pavement condition survey shall be summarized in at least four additional different pavement condition reports needed for the HDOT Transportation Asset Management Plan (TAMP) besides the HPMS reports. The first report shall be an overall pavement report card by pavement type with good, fair, poor ratings aggregated by routes on or off the National Highway System (NHS) and conforming to the TAMP. The second report shall be done for the State Highway System (SHS), which covers 92 routes, and to be compatible for use by the Department's Deighton Total Infrastructure Management System (dTIMS) Pavement Management System. The report should also be done by pavement type, in accordance with the ASTM D6433 – Standard Practice for Roads and Parking Lots Pavement Condition Index (PCI) Surveys and reported in a format suitable for use directly into the MicroPaver software for PCI calculations. The third report shall be done for the State Highway System and to be compatible for use by the HDOT Pavement Preservation Program as detailed in the HDOT Plan for Every Section of Every Road on Every Island (PFES). An Overall Condition Index (OCI) by pavement type using in equal

measure the Ride Condition, Rutting Condition, Faulting Condition, Fatigue Cracking Condition and Environmental Cracking Condition data for each of the currently 762 sections shall be reported for PFES. The fourth report shall extend the PFES interstate and freeway facilities sections reporting to the 270 ramps in 35 interchanges, which, combined with access and frontage roads make up approximately 100 miles on Oahu. All reports should be accessible from a cloud-based environment. A data dictionary, quality assurance and management plan documenting these procedures that conforms with 23 CFR 490.319(c) should be submitted with the final data and reports.

The IRI, faulting, and pavement rutting data shall be captured together with one laser sensor-based Road Surface Profiler (RSP), and the RSP shall be tightly linked to the vehicle's inertial and positional instrumentation. The data collection equipment shall meet all current applicable AASHTO and ASTM standards.

- D.1. All IRI, faulting, and rutting data shall be accurate, repeatable, and aggregated at intervals of:
 - D.1.1. Every one-hundredth (0.01) of a mile or every 52.8 feet (station interval).
 - D.1.2. At user defined intervals.
- D.2. The Road Surface Profiler (RSP) shall perform continuous, highway-speed measurements of the longitudinal and transverse profile, including real-time roughness (IRI), and real-time rut depth. The longitudinal profile measurement shall meet Class 1 precision and bias specifications, as defined by ASTM E-950. Average rut depth shall be collected in each wheel path and calculated to the nearest one-hundredth (0.01) of an inch at station or user defined intervals. Faulting data shall be collected and reported in accordance with the AASHTO R 36-13 or current protocol and reported in a table with all the slabs in the system delineated.
- D.3. IRI, faulting and rutting data shall be reported in accordance with the Federal Highway Administration (FHWA) Highway Performance Monitoring System (HPMS) Field Manual definitions. A quality assurance plan documenting these procedures shall be submitted with the final data.
- D.4. Pavement distress collection and reporting shall be from automated or semi-automated methods, as specified, utilizing a 3D laser-based pavement crack detection system and segregated by type of pavement and incorporate the following priority distresses with automated classification parameters, as appropriate.
 - D.4.1. Asphalt Pavements
 - D.4.1.1. Transverse Cracking. Automated rating method. None/Low, Medium and high severity levels, length and number of transverse cracks for each severity level should be identified in a process that is repeatable and auditable. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.
 - D.4.1.2. Longitudinal Fatigue and Alligator Cracking. Automated rating method. None/Low, Medium and High severity levels, length and percentage of each type of cracking assigned at each severity level. Cracking in each wheel path should be automatically identified and

rated. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.

- D.4.1.3. Block Cracking. Automated rating method. None/Low, Medium and High severity levels, length and area of pavement affected should be calculated. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.
- D.4.1.4. Potholes. Automated extraction method. The area and volume of every pothole shall be measured, and each assigned a small, medium, or large value. The number of potholes for each value in every one hundredth (0.01) of a mile sampled image should be provided.
- D.4.1.5. Joint Reflection Cracking. Semi-automated rating method. None/Low, Medium and high severity levels and number of transverse reflection cracks for each severity level in every one hundredth (0.01) of a mile sampled image.
- D.4.1.6. Weathering and Raveling. Semi-automated rating method utilizing a Raveling Index generated from the macrotexture values of the 3D laser-based pavement crack detection system. The area and volume of seals needed for treatment shall be measured and calculated for the identified polygon areas using the Sand Patch Method (MTD) (ASTM E965). Skid resistance values shall be calculated for all areas where present. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.1.7. Bleeding and Pumping. Semi-automated rating method utilizing a Raveling Index generated from the macrotexture values of the 3D laser-based pavement crack detection system. Decreased skid resistance values shall be calculated for all areas rated as high severity. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.1.8. Sealed Cracks Condition. Automated rating method utilizing the laser-based pavement crack detection system and macrotexture values. None/Low, Medium and High damage severity levels and length of each type of cracking assigned at each severity level. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.1.9. Patching and Utility Cut Patching Condition. Semi-automated extraction method. The area of every patch shall be measured, and each assigned a small, medium, or large value. None/Low, Medium and High severity levels and length of each type of patch failure assigned at each severity level. Report the number of potholes patched for each value in every one hundredth (0.01) of a mile sampled image.
- D.4.1.10. Depression. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.

- D.4.1.11. Edge Cracking. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.
- D.4.1.12. Shoving. Summarized values in every one hundredth (0.01) of a mile sampled image should be provided.
- D.4.2. Concrete Pavements
- D.4.2.1. Durability Cracking. Automated extraction. None/Low, Medium and high severity levels for each severity. Record the length and number of slabs cracked, if applicable. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.2. Linear Longitudinal Cracking. Automated extraction. None/Low, Medium and High severity levels and length of pavement affected. Cracking in each wheel path should be automatically identified and rated. Record the crack length and number of slabs cracked, if applicable. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.3. Transverse Cracking. Automated extraction. None/Low, Medium and High severity levels and length of pavement affected. Record the crack length and number of slabs cracked, if applicable. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.4. Corner Break. Semi-automated extraction. Record the number of breaks, area of break, and number of slabs cracked, if applicable. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.5. Scaling, Map Cracking and Crazing. Record the length with damage and area damaged. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.6. Divided and Shattered Slabs. Record the length with damage, area damaged, and number of pieces, if applicable. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.7. Pumping. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.8. Joint Spalling and Joint Seal Damage. Record the length with damage and number of joints damaged. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.9. Joint Faulting. Automated extraction. None/Low, Medium and High severity levels and length of pavement affected. Record differences in elevation, number of joints damaged and number of slabs, if applicable in accordance with the AASHTO R 36-13 Protocol. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.

- D.4.2.10. Popouts and Spalling. Record the length with damage and number of spalls or popouts. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.11. Blowups and Buckling. Record the length with damage and number of blowups or buckling. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.12. Polished Aggregate. Summarized values in every one hundredth (0.01) of a mile sampled image shall be provided.
- D.4.2.13. Patching and Utility Cut Patching Condition. Semi-automated extraction. The area of every patch shall be measured, and each assigned a small, medium, or large value. None/Low, Medium and High severity levels and length of each type of patch failure assigned at each severity level. The number of potholes patched for each value in every one hundredth (0.01) of a mile sampled image shall be provided.

E. LIDAR and LIDAR FEATURES INVENTORY DATABASES

E.1. LIDAR DATA

Contractor shall provide high-resolution 360-degree LIDAR data for complete feature extraction within at least 150 feet of right of way (ROW) from the roadway centerline with a minimum scan rate of one million points per second and with a positional accuracy within three centimeters. The LIDAR data shall be collected at highways speeds simultaneously with the digital videolog imagery, and the LIDAR sensor shall be tightly linked to the vehicle's inertial and positional instrumentation. Documentation of the complete system, including the measurements/position relative to the cameras and calibration, corrections and a comprehensive detailed data dictionary of all elements of the features inventory databases created from the LIDAR data shall be provided to the HDOT.

E.1.1. The LIDAR point cloud data shall incorporate as a minimum coordinate and intensity values and clearly be able to extract the following 3D physical feature details:

- E.1.1.1. Location, elevation, type and condition of regulatory and informational road signs (signs should be scanned/captured whether mounted overhead or on the shoulder) including, but not limited to:
 - E.1.1.1.1. Stop and yield signs
 - E.1.1.1.2. Speed limit
 - E.1.1.1.3. Exit and on-ramp signs
 - E.1.1.1.4. Milepost Markers
 - E.1.1.1.5. Pedestrian crossing and bikeway signs
- E.1.1.2. Number of through lanes, turn lanes and striping
- E.1.1.3. Pedestrian crossing and stop bar delineations
- E.1.1.4. Intersection geometry and traffic control devices
- E.1.1.5. Median, bike lane, parking lane and shoulders
- E.1.1.6. Guardrails and Jersey barriers

- E.1.1.7. Overhead structures including bridges, pedestrian overpasses and sign bridges.
- E.1.1.8. Other major roadside furniture structures and elements in the ROW such as sidewalks, fences, utility poles, streetlights, fire hydrants, and trees.
- E.1.2. LIDAR point cloud data shall be delivered in the ASPRS LASer (LAS) file format with the final delivery. The asset features extracted from the LIDAR data shall be delivered as polygons, polylines or points for direct incorporation into Oracle Spatial as described and agreed to in the following descriptions of databases and further refined in the data dictionary and project workplan documents.
- E.1.3. A digital log file in a database shall relate the following information to all LIDAR data:
 - E.1.3.1. Island Name, Owner, Facility Type and Route Number
 - E.1.3.2. Survey Date and Time (HST)
 - E.1.3.3. Direction, Lane, and Speed
 - E.1.3.4. Offset distances in miles from the beginning of the route, subject to the following:
 - E.1.3.4.1. Distance accuracy shall be within +/- one thousandth (0.001) mile per mile, and
 - E.1.3.4.2. Distance shall be to a minimum of three (3) decimal places.

E.2. HPMS FEATURES INVENTORY DATABASE

The HPMS features inventory database, shall be extracted from the LIDAR data, tied to the route number, travel direction, and route mile, and delivered with 3D Oracle Spatial geometry. This group of features on all routes shall include the following:

- E.2.1. Bridges and culverts (polygons) and tied to the existing culvert/bridge identification (ID) number, which will be provided by HDOT.
- E.2.2. Tunnels (polygons)
- E.2.3. Walls (polygons)
- E.2.4. MUTCD signs (points)
- E.2.5. Intersections and roundabouts (centerline points of about 7,000 total of which about 1,500 are signalized) - HDOT intersection ID, number of legs and control type (stop, yield, signal, uncontrolled)
- E.2.6. Lane (polygons) – type (through lane, parking lane, passing lane, left turn lane, right turn lane, bike lane, auxiliary lane, climbing lane, peak lane, counter peak lane, acceleration lane, etc.), width, number of through and number of turning lanes
- E.2.7. Paint striping and painted medians (polylines) – color, type, and width
- E.2.8. Pavement surface (polygons) - type and width
- E.2.9. Curbs (polylines) – type (mountable or barrier) and reveal height

- E.2.10. Guardrail and Jersey barriers (polylines) - with heights, side designation, and lateral offsets
- E.2.11. Median and shoulder (polygons) - surface type, barrier presence/type, width and side of road

E.3. SAFETY FEATURES INVENTORY DATABASE

The safety features inventory database shall be extracted from the LIDAR data, tied to the route number, travel direction, and route mile, and delivered with 3D Oracle Spatial geometry. This group of features collected on all routes shall include the following items, some of which may overlap with the HPMS Features Inventory Database, but with additional feature attribute data and with many requiring condition assessments that meet good, fair, poor condition ratings as noted.

- E.3.1. Guardrails and Jersey barriers (polygons) - types with side designation, post type, heights, widths, and lateral offsets with conditions
- E.3.2. Attenuators (points) - types, side designation, lateral offsets, conditions and tied to the guardrails/barriers.
- E.3.3. Curbs (polylines) – type (mountable or barrier), reveal height and conditions
- E.3.4. Overpasses (polygons) – HDOT bridge ID, vertical clearance, crossing street/overpass name and conditions
- E.3.5. Pedestrian overpasses (polygons) – HDOT bridge ID, vertical clearances, and crossing street/overpass name and conditions
- E.3.6. Sign bridges (polygons) – vertical clearances and conditions
- E.3.7. MUTCD sign faces (points) – types, direction of sign face, color, and conditions with additional retroreflectivity pass or fail rating
- E.3.8. MUTCD sign assemblies (points) – types and conditions
- E.3.9. Signal poles (points) – type, masts, heads with attributes including direction of signal facing, visors, and backplates, signs and conditions
- E.3.10. Signal cabinets (points) – with conditions
- E.3.11. Power pedestals (points) – with conditions
- E.3.12. Streetlights (points) – type, pole material, HDOT intersection ID (if at intersection corner) and conditions
- E.3.13. Paint striping, painted medians, painted shoulders, painted parking stalls/areas, and pedestrian crosswalks (polylines) – types, color, widths, and conditions with additional retroreflectivity pass or fail rating
- E.3.14. Pavement messages – types and conditions with additional retroreflectivity pass or fail rating (polygons)
- E.3.15. Rumble strips (polylines) – size, type, location (left shoulder, right shoulder, centerline)
- E.3.16. Raised pavement markers (RPMs) (polylines) – type and condition
- E.3.17. On-street parking (polyline) – presence and type

- E.3.18. Driveways (polygons) type, width, sidewalk and conditions
- E.3.19. Delineators (polylines) – size and type with conditions
- E.3.20. Edge Drop (polylines) – surface type and severity
- E.3.21. Median, shoulder and islands (polygons) – surface type, barrier presence/type, width, which side of road, conditions

E.4. INTERSECTION FEATURES INVENTORY DATABASE

The intersection features inventory database shall be extracted from the LIDAR data, tied to the route number, travel direction, and route mile, HDOT intersection ID, and delivered with 3D Oracle Spatial geometry, as specified. This group of features for all intersections, approximately 7,000, on the State of Hawaii highway system.

- E.4.1. Intersection leg (polylines, each approach collected)
 - E.4.1.1. Cross street name
 - E.4.1.2. approach directional flow (1-way or 2-way)
 - E.4.1.3. lane type (through lane, parking lane, passing lane, turning lane and direction (left or right turn), bike lane, peak lane, counter peak lane, etc.)
 - E.4.1.4. lane type counts
 - E.4.1.5. approach traffic control (stop sign, yield sign, uncontrolled, signalized)
- E.4.2. Intersection (point)
 - E.4.2.1. Control type - uncontrolled, stop sign (1-way stop, 2-way stop, multi-way stop, all-way stop), yield sign, signalized, uncontrolled, other
 - E.4.2.2. Streetlight (at corner, yes or no)
 - E.4.2.3. Number of legs

E.5. MAINTENANCE FEATURES INVENTORY DATABASE

The maintenance features inventory database shall be extracted from the LIDAR data, delivered with 3D Oracle Spatial geometry, and tied to the route number, travel direction, and route mile. This group of features collected only on the State Highway System shall include the following items, some of which may overlap with the HPMS Features Inventory Database, but with additional feature attribute data and with many requiring condition assessments that meet good, fair, poor condition ratings as noted:

- E.5.1. Ditches (polygons) – type and conditions
- E.5.2. Bridges and culverts (polygons) and tied to the existing culvert/bridge id, which will be provided - width, surface type and conditions
- E.5.3. Sidewalks (polygons) and conditions
- E.5.4. ADA Ramps (polygons) – type, detectable warning and conditions
- E.5.5. Pavement surface (polygons) – type, width, area and conditions
- E.5.6. Curbs and gutters (polylines) – type (mountable or barrier), reveal and conditions
- E.5.7. Catch basins (points) and conditions

- E.5.8. Grated inlets (points) and conditions
- E.5.9. ROW barriers (polylines) – type (fence, wall - retaining wall, slope stabilization measures, etc.), materials (chain link, concrete – precast or cast in place, concrete masonry, etc.) average height, side designation, and conditions
- E.5.10. Bus pads (polygons) – length and conditions
- E.5.11. Manholes (points) – type and conditions
- E.5.12. Monuments (points) – type and conditions
- E.5.13. Pull Boxes (polygons) – type and conditions

F. ROADSIDE RATING ASSESSMENT REPORT

The Contractor shall provide a roadside (hazard) rating assessment using the MIRE 2.0 Roadway Segment Element 68 – Roadside Rating defined criteria and the MIRE Data Collection Guidebook to subjectively determine a roadside (hazard) rating for all the routes. HDOT will work with the Contractor to initially assess a limited set of locations. This initial assessment will be used as a guide to complete the remaining routes. Applying the criteria for the different ratings should not result in a rating segment being shorter than ½ mile to 1 mile. Roadside ratings may be based on roadside characteristics including, but not limited to clear zones, sideslopes, guardrails and other roadside barriers or other rigid obstacles, and terrain.

G. BASE MAPS

The Contractor shall gather all necessary spatial data from HDOT needed for displaying reference features (streets, landmarks, intersections, county and jurisdictional boundaries, etc.). Contractor shall retrieve spatial coordinates for generating positionally accurate 3-D roadway centerlines by using a real-time DGPS receiver and post processing. The Contractor shall obtain the spatial data and do any processing required to generate the 3D roadway centerlines as a standard working file for HDOT's standard software. The Contractor shall use the location and referencing information collected in this project and do any processing required to add to and modify existing base maps. Contractor submitted base maps shall include:

- G.1. Roadway centerlines in 3-D generated from real-time DGPS coordinates at least every 52.8 feet to correspond with the digital roadway images. The HDOT will decide which of these coordinates, if any, will actually be tied to points on the base maps.
- G.2. Node points, tied to the route number and route mile, including:
 - G.2.1. Begin route and end route
 - G.2.2. Junctions and intersections
 - G.2.3. Bridges greater than twenty (20) feet in length
 - G.2.4. Reference (mile) markers
 - G.2.5. On-ramp and off-ramp points of entry to and departure from the main roadway roadbed. HDOT may request an additional reference be provided (exit identification (ID), for example).
- G.3. Base maps shall be accessible through the following programs:

- G.3.1. Bentley's MicroStation
- G.3.2. Intergraph's GeoMedia

H. DATA SUBMISSION FOR APPROVAL OF ROUTE SURVEYS

H.1. Submitting initial GPS and DV images

The Contractor shall submit digital images in JPEG format, along with their related DMI, and GPS data, to HDOT, for data verification purposes as described in subsection HDOT VERIFICATION OF DATA below. The images and raw data shall not be submitted later than specified, without prior HDOT permission. Submittals shall be via a cloud-based environment, whenever possible. External hard drives delivered shall be compatible with HDOT computer systems as documented in the agreed upon workplan. Smaller submittals may be made via the State's FTP system if the overall size of the submittal is small enough to be transferred via FTP, with the acceptance of the HDOT. The Contractor shall provide any hardware or software necessary for HDOT access to the hard drives at no additional cost to the State. Hard drives submitted for data verification purposes shall remain the property of the Contractor, and their return from HDOT shall be at no additional cost to the State. Failure to submit data shall be cause for HDOT to withhold processing, acceptance, and payment until all completed image surveys are submitted. Timely submittals of data are needed so that a re-survey of a route deemed non-acceptable by the HDOT (see HDOT Verification of Completed Surveys below) can be completed as soon as possible. Road survey data logs shall include the status of the route collection and reasons for non-collection. Submittals shall be by island and shall include complete routes (including all directions/lanes requested for each route).

H.1.1. First Submittal – GPS Data

Contractor shall submit GPS coordinate files of the lanes driven each day before midnight of the same day to HDOT as a KML or file format agreed upon. In the case where locations do not match approved schedule, a revised schedule should be submitted before submitting images. The initial submittal shall include the following:

- H.1.1.1. Road Survey Data Log
- H.1.1.2. Revised Schedule
- H.1.1.3. KML file with GPS on all lanes driven

H.1.2. Second Submittal – DV Image Data

Contractor shall have an additional week to process the DV image files and DMI for each lane driven. The images should have complete EXIF information and a digital log file with offset distances in miles from the beginning of the route, subject to the Section B.5 provisions. This second submittal for the surveys shall include the following:

- H.1.2.1. Road Survey Data Log
- H.1.2.2. Digital log file for each lane driven conforming to Section B.5.

H.1.2.3. First (start) and last (stop) digital images of the lane driven (at least three (3) per termini in the surveyed direction)

H.2. Submitting completed road inventory, geometric, pavement, LIDAR, real-time DGPS data and base map

The Contractor shall submit images, processed geometric and pavement data, real-time DGPS, DMI, data, and roadway feature inventory databases as they are completed for review and approval to HDOT in a cloud-based environment or as agreed upon in the workplan. The base maps shall be delivered in a Bentley Microstation InRoads and in Intergraph GeoMedia compatible format in the method agreed upon in the workplan. All submitted data shall be free of extraneous data. The presence of extraneous data in a submittal shall be cause for HDOT to reject the data for the route surveyed.

H.3. Year-End Final Delivery submittal

Contractor shall deliver a final submittal of the completed route surveys with all of the previously approved intermediate deliveries of final digital videolog, pavement, LIDAR, and inventory databases. A five (5) percent retainage will be withheld on all monies due, until the year-end final delivery is accepted, and software training is completed, as stated in Section L.2 below.

Final delivery of the completed route surveys shall be made via a cloud-based environment, including providing an application programming interface (API) to provide access to the data by the HDOT CDS/GIS or other related systems, or as agreed upon in the workplan. Smaller submittals may be made via the State's FTP system, if the overall size of the submittal is small enough to be transferred via FTP, with the permission of HDOT. Contractor shall notify the HDOT Project Manager or representative of an FTP upload by email to the address below. Additionally, final submittals shall be sent to the State office listed below on new USB flash drive or portable external hard drive with a USB 3.0 or other interface compatible with current HDOT hardware, with the acceptance of HDOT. Portable drives delivered shall be compatible with HDOT computer systems as documented in the agreed upon workplan. Contractor shall provide any hardware or software necessary for HDOT access to the hard drives at no additional cost to the State. Hard drives used for HDOT verification submittals as described above shall not be used for final delivery. A minimum of one (1) hard drive shall be provided per County for a minimum of four (4) units (Hawaii County, Kauai County, Maui County, and City and County of Honolulu) and shall possess sufficient storage capacity as such. Each hard drive shall be provided with the appropriate interface cables. Each hard drive shall become the property of the State and shall be incidental to the Contract. Completed route surveys may be submitted to the Engineer via mail to the following address:

Hawaii Department of Transportation
Highways Division
Planning Branch, Survey Section
Attn.: Dean Yanagisawa

869 Punchbowl Street, Room 301
Honolulu, Hawaii 96813
dean.k.yanagisawa@hawaii.gov

H.4. Data Submittal Schedule

Data shall be submitted in a timely manner. Timely submittals of data are needed so that a re-survey of a route survey deemed unacceptable by HDOT (see subsection HDOT VERIFICATION OF DATA below) can be completed as soon as possible. The data shall be received by HDOT within the timeframes specified above. Route survey data shall not be submitted later than specified without prior HDOT approval. Delays or inability to provide data caused by problems(s) beyond the Contractor's control may be considered for modifying the specified timeframes. Breakdown of Contractor's equipment and/or electronics is not a cause to modify the specified timeframes.

I. HDOT VERIFICATION OF DATA

I.1. Verification of raw survey data and digital images

Upon receipt of digital images and related real-time DGPS, DMI, LIDAR and IRI raw data, the data shall be evaluated by the HDOT for compliance with these Specifications. Within 4 days of receipt of completed surveys, HDOT will verify to the Contractor, in writing, of both acceptable and non-acceptable surveys. An acceptable survey is defined as a completed survey that HDOT finds to be in compliance with these specifications.

A non-acceptable completed survey is defined as a completed survey found to be faulty because of inadvertent Contractor error. Non-acceptable completed surveys may need to be rescheduled by the Contractor. Reasons for non-acceptance include, but are not limited to:

- I.1.1. Images defective or not clear, for example, images are too dark or blown out, and road details cannot be distinguished
- I.1.2. Missing data
- I.1.3. Anomalous data
- I.1.4. Survey was taken at the wrong location based on the HDOT provided route references
- I.1.5. Offsets from beginning of route drift more than three-hundredths (0.03) miles or 0.2% from the HDOT route mileage, whichever is smaller, over the entire route.
- I.1.6. Survey not performed in accordance with the requirements of this specification.

The HDOT may, at its discretion, request a re-survey of any particular survey that has missing data or exhibits other abnormalities. If the resurvey is in agreement with the original survey, it shall be counted as an additional valid survey and compensation duly rendered; if the second survey is deemed valid in place of the original by the HDOT, the Contractor shall not be compensated for the original, invalid survey.

I.2. Verification of completed road inventory, geometric, pavement, real-time data, base map, and LIDAR

Upon receipt of submitted data, the processed images and databases will be evaluated by the HDOT for compliance with these Specifications. Within 14 days of receipt of completed surveys, HDOT will inform the Contractor, in writing, of both acceptable and non-acceptable surveys. An acceptable survey is defined as a completed survey that HDOT finds to be in compliance with these specifications.

Non-acceptable completed surveys may need to be rescheduled by the Contractor. A non-acceptable completed survey is defined as a completed survey found to be faulty because of inadvertent Contractor error, or otherwise not in compliance with these specifications. Reasons for non-acceptance include, but are not limited to:

I.2.1. Missing data

I.2.2. Anomalous data

I.2.3. Survey was taken at the wrong location based on the HDOT provided route references

I.2.4. Offsets from beginning of route drift more than three-hundredths (0.03) miles or 0.2% from the HDOT route mileage, whichever is smaller, over the entire route.

I.2.5. Survey not performed in accordance with the requirements of this specification.

The HDOT may, at its discretion, request a re-survey of any survey that has missing data or exhibits other abnormalities. If the resurvey is in agreement with the original survey, it shall be counted as an additional valid survey and compensation duly rendered; if the second survey is deemed valid in place of the original by the HDOT, the Contractor shall not be compensated for the original, invalid survey.

J. DATA COLLECTION SYSTEMS CALIBRATION AND TESTING

All systems used for data collection, including the imaging apparatus, shall be documented that they are calibrated, tested, and accuracy verified, as follows:

J.1. General Requirements

J.1.1. All vehicle calibration and testing shall be conducted on a measured mile or at locations designated by HDOT.

J.1.2. Calibration and testing shall be conducted after installation of the DV equipment in the vehicle(s) in the State of Hawaii, or the shipment of the DV vehicle(s) with the completely installed DV equipment in the State. Calibration and testing conducted prior to shipment to Hawaii will not be accepted. All equipment/vehicle specifications and measurements should be documented and provided to HDOT prior to calibration and testing.

J.1.3. The vehicle suspension shall be aligned to the manufacturer's specifications. The Contractor shall submit an alignment certificate demonstrating that the vehicle has been aligned within a maximum of ninety (90) calendar days of the commencement of DV operations.

- J.1.4. Any repairs or maintenance to the DV vehicle(s) that affect the accuracy of the DMI, real-time DGPS, IMU, LIDAR, 3D laser based automated pavement crack detection system or Camera System shall be cause to repeat alignment, calibration, and testing of the vehicle(s) at no additional cost to the State. Any necessary revised calibration documentation shall be submitted to HDOT.
- J.1.5. If circumstances necessitate the reinstallation of the LIDAR, 3D laser based automated pavement crack detection system , or DV system in the DV vehicle(s), installation in a replacement vehicle, or the complete replacement of the vehicle and systems, the Contractor shall align, calibrate, and test the replacement vehicle to confirm the accuracy of all components of the DV data collection system by this section at no additional cost to the State.
- J.1.6. All calibration, testing, and adjustments made to the DV system and vehicle over the course of the calibration and testing shall be incidental to the Contract.

In addition, the Contractor shall conduct the following tests and submit a written report detailing the results for the acceptance of the Engineer.

J.2. Measured Mile Test

The Contractor shall perform a minimum of three (3) DV runs along an HDOT designated measured mile in the presence of the Engineer or a designated representative. In the course of each run, the following items shall be demonstrated:

- J.2.1. The Contractor shall demonstrate that the DMI, as installed in the vehicle, measures one mile to an accuracy of 0.2% by using the DMI to measure out the measured mile.
- J.2.2. The Contractor shall demonstrate that the real-time DGPS measures to accuracy of one to five (1 to 5) meters (+/-) by comparing real-time DGPS coordinates taken during the DV runs.
- J.2.3. The Contractor shall demonstrate that the real-time DGPS measures at intervals of one (1) measurement per two-thousandths (0.002) of a mile or every 10.56 feet by taking a series of measurements while the vehicle travels along a measured mile.
- J.2.4. The Contractor shall demonstrate that digital images are captured at intervals of two-thousandths (0.002) of a mile or every 10.56 feet. Accuracy will be demonstrated by capturing five hundred continuous, non-repeating, images per mile per camera to an accuracy of 0.2% or one image per mile. Dropped, incomplete, or distorted images shall not be counted towards the total.
- J.2.5. The Contractor shall demonstrate that digital images, real-time DGPS, DMI, LIDAR, 3D laser based automated pavement crack detection system and IRI readings are taken simultaneously and in synchronization with each other.
- J.2.6. The Contractor shall record and submit digital images and related real-time DGPS, DMI, 3D laser based automated pavement crack detection system and

IRI raw data from each run for the review of HDOT who shall evaluate it for image quality. In particular, the following criteria shall apply:

- J.2.6.1. Two (2) inch sign lettering shall be legible a minimum of one (1) frame prior to leaving the complete field of view of the DV system.
- J.2.6.2. HDOT selected images shall be compared to HDOT selected images from the 2022 digital videolog for a quality comparison.
- J.2.6.3. Images shall not be defective or not clear, for example, images are too dark and road details cannot be distinguished.
- J.2.6.4. Missing or anomalous data is not allowable.

J.3. Tunnel Test

The Contractor shall perform a minimum of (3) DV runs through an HDOT designated tunnel. Each run shall begin and end within a minimum distance of one-sixteenth of a mile or three hundred thirty feet of the tunnel entry and exit respectively. Runs shall be performed from 10:00 AM to 2:00 PM on a clear or lightly overcast day. In the course of each run, the following items shall be demonstrated:

- J.3.1. The Contractor shall demonstrate the transition from the real-time DGPS to the IMU and back during the entry to and exit from the tunnel.
- J.3.2. The Contractor shall demonstrate that the positional accuracy (by RMS) of the vehicle as determined by the IMU must be less than one and one half meters (< 1.5m) during a sixty (60) second real-time DGPS outage.
- J.3.3. The Contractor shall demonstrate that digital images are captured at every two-thousandth (0.002) of a mile or every 10.56 feet by capturing five hundred (500) continuous, non-repeating, images per mile per camera to an accuracy of 0.2% or one image per mile. Dropped, incomplete, or distorted images shall not be counted towards the total.
- J.3.4. The Contractor shall demonstrate the ability of each camera to adjust exposure level in response to the change in illumination as the vehicle enters and leaves the tunnel within three (3) frames or 31.68 feet.
- J.3.5. The Contractor shall demonstrate that digital images, real-time DGPS, IMU, DMI, and IRI readings are taken simultaneously and in synchronization with each other.
- J.3.6. The Contractor shall record and submit digital images and related real-time DGPS, DMI, 3D laser based automated pavement crack detection system and IRI raw data from each run for the review of HDOT who shall evaluate it for image quality and data consistency. In particular, the following criteria shall apply:
 - J.3.6.1. Two (2) inch sign lettering shall be legible a minimum of one (1) frame prior to leaving the complete field of view of the DV system.
 - J.3.6.2. HDOT selected DV images shall be compared to HDOT selected images from the 2022 digital videolog for a quality comparison.

- J.3.6.3. Images shall not be defective or not clear, for example, images are too dark and road details cannot be distinguished.
- J.3.6.4. Missing or anomalous data is not allowable.

J.4. Viaduct Test

The Contractor shall perform a minimum of (3) DV runs under an HDOT designated viaduct. Each run shall begin within a minimum distance of one-sixteenth (1/16) of a mile or 330 feet of the viaduct entry as designated by HDOT. Each run shall be for a minimum distance of one-half (0.5) mile. Runs shall be performed from 10:00 AM to 2:00 PM on a clear or lightly overcast day. In the course of each run, the following items shall be demonstrated:

- J.4.1. The Contractor shall demonstrate that the real-time DGPS measures to accuracy of one to five (1 to 5) meters (+/-) by comparing real-time DGPS coordinates taken during the DV runs.
- J.4.2. The Contractor shall demonstrate that the real-time DGPS measures at every two-thousandth (0.002) of a mile or every 10.56 feet by taking a series of measurements while the vehicle travels under the viaduct.
- J.4.3. In the event of real-time DGPS outage, the Contractor shall demonstrate that the positional accuracy (by RMS) of the vehicle as determined by the IMU must be less than one and one-half meters (< 1.5m) during a sixty (60) second real-time DGPS outage.
- J.4.4. The Contractor shall demonstrate that digital images are captured at every two-thousandth (0.002) of a mile or every 10.56 feet by capturing five hundred (500) continuous, non-repeating, images per mile per camera to an accuracy of 0.2% or one image per mile. Dropped, incomplete, or distorted images shall not be counted towards the total.
- J.4.5. The Contractor shall demonstrate the ability of each camera to adjust exposure level due the change in illumination as the vehicle enters the viaduct within three (3) frames or 31.68 feet.
- J.4.6. The Contractor shall demonstrate the ability of each camera to independently adjust exposure due to illumination differences between camera views.
- J.4.7. The Contractor shall demonstrate that digital images, real-time DGPS, IMU, DMI, and IRI readings are taken simultaneously and in synchronization with each other.
- J.4.8. The Contractor shall record and submit digital videolog from each run for the review of HDOT who shall evaluate it for image quality. In particular, the following criteria shall apply:
 - J.4.8.1. Two (2) inch sign lettering shall be legible a minimum of one (1) frame prior to leaving the complete field of view of the videolog system.

- J.4.8.2. HDOT selected digital videolog images shall be compared to HDOT selected images from the 2022 digital videolog for a quality comparison.
- J.4.8.3. Images shall not be defective or not clear, for example, images are too dark and road details cannot be distinguished.
- J.4.8.4. Missing or anomalous data is not allowable.

K. SOFTWARE AND LICENSES

Contractor shall provide the following software for viewing roadway and pavement images and measurement from LIDAR. HDOT also requests the Contractor's written recommendations for the access to and maintenance (upkeep) of captured information, base maps and photo images after the services provided by the Contractor have been completed.

K.1. Network accessible software and enterprise license/subscription (for 1,000 Department users and its consultants)

K.1.1. Image viewer with the following features:

- K.1.1.1. Images are accessible through a web-browser from a network server over the internet or intranet
- K.1.1.2. Ability to display synchronized perspective, shoulder, median and pavement view.
- K.1.1.3. Displays location data such as route number, travel direction, and route mile point for each image.
- K.1.1.4. Image playback by route or location along a route such as specific lane and/or direction.
- K.1.1.5. Displays location map and provides for location map navigation.
- K.1.1.6. Ability to display associated digital log file information (as noted under 2.5).
- K.1.1.7. Allow playback in the following modes: Forward, reverse, fast forward, fast reverse, pause, and stop.
- K.1.1.8. Allow for almost instantaneous "u turn" to playback in the opposite direction.
- K.1.1.9. Variable speed playback.
- K.1.1.10. Zoom in and out on images.
- K.1.1.11. Search and display all historical videolog and pavement images going back to and beyond 2001.

K.1.2. Measurement and viewing software for the LIDAR data with the following features:

- K.1.2.1. Ability to perform measurements in the x, y and z directions for all the LIDAR data
- K.1.2.2. Latitude, longitude coordinate referencing
- K.1.2.3. Linear referencing with offset capability

- K.1.2.4. GIS and CADD compatible data export capability
 - K.1.2.5. Ability to create and populate road feature inventory databases that are MS Access or Oracle Spatial compatible
- K.2. Standalone software with licenses (for 50 employees) to view the digital videolog and digital pavement images on individual desktops with the following features that will remain available after services provided by the Contractor have been completed:
 - K.2.1. Images are accessible through a web-browser or desktop software from a network server over the intranet.
 - K.2.2. Ability to display synchronized perspective, shoulder and median view and pavement view.
 - K.2.3. Displays location data such as route number, travel direction, and route mile point for each image.
 - K.2.4. Image playback by route or location along a route such as specific lane and/or direction.
 - K.2.5. Allow playback in the following modes: Forward, reverse, fast forward, fast reverse, pause, and stop.
 - K.2.6. Allow for almost instantaneous “u turn” to playback in the opposite direction.
 - K.2.7. Variable speed playback.
 - K.2.8. Zoom in and out on images.
 - K.2.9. Search and display all historical videolog and pavement images going back to and beyond 2001. Displays location map and provides for location map navigation.
 - K.2.10. Compatible with Oracle Spatial Enterprise
 - K.2.11. Ability to display associated road features inventory, pavement and road condition databases
 - K.2.12. Ability to download and package images and/or inventory data for requests from other Department branches or other State departments (i.e., the Hawaii Department of the Attorney General).

L. SOFTWARE TRAINING TO BE FURNISHED

- L.1. The Contractor shall provide a minimum of two (2) days of webinars open to at least one hundred (100) people and two (2) days of onsite training for four (4) classes of fifteen (15) persons, in the usage of the delivered products, including the digital images, roadway inventory databases, corrected base maps, and viewing and measurement software on one or more of the islands of Hawaii, Kauai, Maui, and Oahu. HDOT will provide the training sites.
- L.2. Completion of training shall be a requirement for final acceptance of the goods and services. A five (5) percent retainage will be taken on all goods until this requirement is satisfied.

- L.3. Scheduling of the Training – The Contractor shall plan with the HDOT project manager or designated representative at least two (2) weeks prior to the date of the training. The date(s) of training shall be agreeable to the State.

10.4 CONTRACT PERIOD – The period of the contract shall be three hundred sixty-five (365) calendar days from the date indicated in the “Notice to Proceed” from the Department. There is an option to extend three (3) additional three hundred sixty-five (365) calendar day periods without re-bidding, upon mutual agreement in writing prior to the Contract expiration date, and the Contractor will be paid the amount specified in the Proposal Schedule for the additional period.

10.5 AREA OF COVERAGE – The project covers all of the roads with a Federal functional classification of Arterial or Collector, and includes ramps, frontage roads, and other State owned roads in the State of Hawaii (approximately 5,000 lane miles) on the islands of Kauai, Oahu, Maui, Molokai, Lanai and Hawaii. All of these roads will require DV, LIDAR, and some basic features inventory data, with a subset of these roads – the State Highway System requiring additional features inventory and condition ratings for each annual cycle as agreed upon by the Contractor and HDOT.

The project covers both the positive and negative route mile directions on all routes in the State of Hawaii highway system. For divided facilities, the Contractor may need to take digital videolog images two or more times in each direction in order to capture the median, traveled way, and right shoulder in the images. As a general rule, every other lane in one direction should be taken. For example, a facility with three lanes in one direction will need two (2) passes in that direction: one in the shoulder lane and one in the center or median lane. HDOT will specify which lanes are to be collected. These procedures should be fully described in the workplan.

HDOT will coordinate with the Contractor and provide maps and information pertaining to the project roads, as needed by the Contractor to satisfactorily complete the scope of work. HDOT will provide the Contractor with lists and maps that include information that details the locations of the roadways to be surveyed and approximate length of the routes. HDOT reserves the right to alter the scope of services to be provided by up to 10 percent, if necessary, at the unit prices set in the Proposal Schedule. HDOT will provide the Contractor with an electronic copy of the HDOT functional classification route list in MS Excel or MS Access format showing the route numbers, street names, description of the begin and end points, and approximate route lengths. The Contractor shall also be provided with an electronic copy of HDOT’s base maps of the routes on the State highway system in either Intergraph GeoMedia or Oracle Spatial compatible format showing the approximate locations of the routes to be surveyed. HDOT will also provide the Contractor with electronic copies of Straight Line Diagrams (SLDs) of the state owned routes to be surveyed. The SLDs provide linearly referenced (+/- 0.03 miles) details of route begin and end points, cross streets, and other roadway inventory features along the routes. The Contractor shall perform the specified digital videolog survey services in this agreement in strict accordance with the route listings, SLDs, and maps issued by the HDOT.

10.6 PAYMENT – The Contractor’s bid price(s) shall be full compensation for furnishing all labor, materials, tools, equipment, vehicles, communication costs, taxes, insurance, overhead, travel, and incidental costs necessary to collect the digital videolog survey data as specified in this Contract.

In case of a non-acceptable route delivery, as defined in the HDOT Verification of Data section of these Specifications, HDOT may ask the Contractor to schedule a re-survey. Upon acceptance of the re-survey by HDOT, the Contractor shall be paid for the contract rate for that route. HDOT shall not pay for non-acceptable data, as defined in these Specifications.

Contractor shall submit invoices on a monthly basis for the previous month’s submittals. The monthly invoices shall include the Road Survey Data Log, filled in for all completed route surveys. HDOT will pay the full contract amount only for complete on-time submittals. Invoices shall follow specifications in Section 9.4 of the Special Provisions and Specifications.

Basis for payment shall be as follows:

- Item 1. Mobilization and management shall be paid for at the lump sum price as shown in the Proposal Schedule.
- Item 2. Digital videolog images shall be submitted in two (2) parts. Upon acceptance of the second submittal, the Contractor may invoice HDOT and the digital videolog images will be paid for at the unit price as shown in the Proposal Schedule.
- Item 3. Coordinate, distances and geometry of roadway shall be paid for at the unit price as shown in the Proposal Schedule.
- Item 4. Superelevation report shall be paid for at the unit price as shown in the Proposal Schedule.
- Item 5. Pavement scan images, IRI, rutting, faulting & pavement condition databases shall be paid for at the unit price as shown in the Proposal Schedule.
- Item 6. LIDAR and LIDAR features inventory databases shall be paid for at the unit price as shown in the Proposal Schedule.
- Item 7. Roadside rating report shall be paid for at the unit price as shown in the Proposal Schedule, as applicable.
- Item 8. Base maps shall be paid for at the unit price as shown in the Proposal Schedule.
- Item 9. Enterprise software and licenses shall be paid for at the Lump Sum price as shown in the Proposal Schedule for web-based image and pavement viewer and measurement software. Software and licensing shall be for enterprise-wide HDOT use.
- Item 10. Desktop software, licenses and annual maintenance shall be paid for at the unit bid price as shown in the Proposal Schedule.
- Item 11. Software training of HDOT staff shall be paid for under “Allowance” as shown in the Proposal Schedule. Contractor must submit and HDOT approve any use of the training allowance. Allowance is for business travel expenses.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

P R O P O S A L

PROPOSAL TO THE STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PROJECT: FURNISHING OF DIGITAL VIDEOLOG
GOODS AND SERVICES-STATEWIDE

PROJECT NO: SPR-0010(50) UNIT 1 DV

COMPLETION TIME: THREE HUNDRED SIXTY-FIVE (365) calendar days
from the date indicated in the Notice to Proceed from
the Department with an option to extend for THREE (3)
additional THREE HUNDRED SIXTY-FIVE (365)
calendar day period, as specified in Section 10.4

LIQUIDATED DAMAGES: NONE SPECIFIED

DBE PROJECT GOAL: NONE SPECIFIED

NOTE: BID, PERFORMANCE AND PAYMENT BONDS ARE NOT
REQUIRED FOR THIS PROJECT.

Director of Transportation
AliiAIMoku Hale
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.

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 103D-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. 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.

Receipt is hereby acknowledged and complete examination is hereby expressly guaranteed of the following listed items: the specifications, the notice to bidders, the special provisions, if any, the proposal, the plans, if any, and the contract form.

The undersigned acknowledges receipt of any addendum,
issued by recording in the space below the date of receipt.

Addendum No. 1 _____ Addendum No. 3 _____

Addendum No. 2 _____ Addendum No. 4 _____

The undersigned hereby certifies that the bid prices
contained in the attached proposal schedule have been carefully
checked and are submitted as correct, final and are net prices.

Bidder (Company Name)

By _____
Authorized Signature

Print Name and Title

Business Address

Business Telephone Email

Date

Contact Person (If different from above)

Phone: _____ Email: _____

NOTE:

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts on behalf of the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign on behalf of the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above with the signature(s) of the general partner(s) authorized to sign contracts on behalf of the partnership. Please attach to this page current (not more than six months old) evidence of the authority of the partner(s) to sign on behalf of the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed in the space provided therefore on page PF-4.

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 prior to the opening of bids or submitted with the bid; otherwise, the bid may be rejected as irregular and unauthorized.

PROPOSAL SCHEDULE

FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES - STATEWIDE
FEDERAL AID PROJECT NO. SPR-0010(050) UNIT 1 DV

YEAR 1

| Bid Item | Description | Estimated Quantity | Unit | Unit Price | Amount |
|-------------|--|-----------------------|---------------|---------------|-----------|
| 1.a. | Mobilization & management | L.S. | L.S. | L.S. | \$ _____ |
| 2.a. | Digital videolog images | 4,900 | Miles | \$ _____ | \$ _____ |
| 3.a. | Coordinates, distances and geometry of roadway | 4,900 | Miles | \$ _____ | \$ _____ |
| 4.a. | Superelevation report | 4,900 | Miles | \$ _____ | \$ _____ |
| 5.a. | Pavement scan images, IRI, rutting, faulting & pavement condition databases | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.a. | LIDAR and LIDAR features inventory databases | | | | |
| 6.a.1. | LIDAR data | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.a.2. | HPMS features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.a.3. | Safety features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.a.4. | Intersection features inventory database all routes | 7,000 | Intersections | \$ _____ | \$ _____ |
| 6.a.5. | Maintenance features inventory database state highway system | 2,800 | Miles | \$ _____ | \$ _____ |
| 7.a. | Roadside rating report | 4,900 | Miles | \$ _____ | \$ _____ |
| 8.a. | Base maps | 4,900 | Miles | \$ _____ | \$ _____ |
| 9.a. | Enterprise software and licenses | L.S. | L.S. | L.S. | \$ _____ |
| 10.a. | Desktop software, licenses and annual maintenance | 50 | Users | \$ _____ | \$ _____ |
| 11.a. | Software training | Allowance | | | \$ 50,000 |

TOTAL AMOUNT FOR YEAR 1
(ITEMS 1.a THRU 11.a)

\$ _____

PROPOSAL SCHEDULE

FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES - STATEWIDE
FEDERAL AID PROJECT NO. SPR-0010(050) UNIT 1 DV

YEAR 2

| Bid Item | Description | Estimated Quantity | Unit | Unit Price | Amount |
|-------------|--|-----------------------|---------------|---------------|-----------|
| 1.b. | Mobilization & management | L.S. | L.S. | L.S. | \$ _____ |
| 2.b. | Digital videolog images | 4,900 | Miles | \$ _____ | \$ _____ |
| 3.b. | Coordinates, distances and geometry of roadway | 4,900 | Miles | \$ _____ | \$ _____ |
| 4.b. | Superelevation report | 4,900 | Miles | \$ _____ | \$ _____ |
| 5.b. | Pavement scan images, IRI, rutting, faulting & pavement condition databases | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.b. | LIDAR and LIDAR features inventory databases | | | | |
| 6.b.1. | LIDAR data | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.b.2. | HPMS features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.b.3. | Safety features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.b.4. | Intersection features inventory database all routes | 7,000 | Intersections | \$ _____ | \$ _____ |
| 6.b.5. | Maintenance features inventory database state highway system | 2,800 | Miles | \$ _____ | \$ _____ |
| 8.b. | Base maps | 4,900 | Miles | \$ _____ | \$ _____ |
| 9.b. | Enterprise software and licenses | L.S. | L.S. | L.S. | \$ _____ |
| 10.b. | Desktop software annual maintenance | 50 | Users | \$ _____ | \$ _____ |
| 11.b. | Software training | Allowance | | | \$ 50,000 |

TOTAL AMOUNT FOR YEAR 2
(ITEMS 1.b THRU 11.b)

\$ _____

PROPOSAL SCHEDULE

FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES - STATEWIDE
FEDERAL AID PROJECT NO. SPR-0010(050) UNIT 1 DV

YEAR 3

| Bid Item | Description | Estimated Quantity | Unit | Unit Price | Amount |
|----------|---|--------------------|---------------|------------|-----------|
| 1.c. | Mobilization & management | L.S. | L.S. | L.S. | \$ _____ |
| 2.c. | Digital videolog images | 4,900 | Miles | \$ _____ | \$ _____ |
| 3.c. | Coordinates, distances and geometry of roadway | 4,900 | Miles | \$ _____ | \$ _____ |
| 4.c. | Superelevation report | 4,900 | Miles | \$ _____ | \$ _____ |
| 5.c. | Pavement scan images, IRI, rutting, faulting & pavement condition databases | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.c. | LIDAR and LIDAR features inventory databases | | | | |
| 6.c.1. | LIDAR data | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.c.2. | HPMS features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.c.3. | Safety features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.c.4. | Intersection features inventory database all routes | 7,000 | Intersections | \$ _____ | \$ _____ |
| 6.c.5. | Maintenance features inventory database state highway system | 2,800 | Miles | \$ _____ | \$ _____ |
| 8.c. | Base maps | 4,900 | Miles | \$ _____ | \$ _____ |
| 9.c. | Enterprise software and licenses | L.S. | L.S. | L.S. | \$ _____ |
| 10.c. | Desktop software annual maintenance | 50 | Users | \$ _____ | \$ _____ |
| 11.c. | Software training | Allowance | | | \$ 50,000 |

TOTAL AMOUNT FOR YEAR 3
(ITEMS 1.c THRU 11.c)

\$ _____

PROPOSAL SCHEDULE

FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES - STATEWIDE
FEDERAL AID PROJECT NO. SPR-0010(050) UNIT 1 DV

YEAR 4

| Bid Item | Description | Estimated Quantity | Unit | Unit Price | Amount |
|-------------|--|-----------------------|---------------|---------------|-----------|
| 1.d. | Mobilization & management | L.S. | L.S. | L.S. | \$ _____ |
| 2.d. | Digital videolog images | 4,900 | Miles | \$ _____ | \$ _____ |
| 3.d. | Coordinates, distances and geometry of roadway | 4,900 | Miles | \$ _____ | \$ _____ |
| 4.d. | Superelevation report | 4,900 | Miles | \$ _____ | \$ _____ |
| 5.d. | Pavement scan images, IRI, rutting, faulting & pavement condition databases | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.d. | LIDAR and LIDAR features inventory databases | | | | |
| 6.d.1. | LIDAR data | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.d.2. | HPMS features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.d.3. | Safety features inventory database all routes | 4,900 | Miles | \$ _____ | \$ _____ |
| 6.d.4. | Intersection features inventory database all routes | 7,000 | Intersections | \$ _____ | \$ _____ |
| 6.d.5. | Maintenance features inventory database state highway system | 2,800 | Miles | \$ _____ | \$ _____ |
| 8.d. | Base maps | 4,900 | Miles | \$ _____ | \$ _____ |
| 9.d. | Enterprise software and licenses | L.S. | L.S. | L.S. | \$ _____ |
| 10.d. | Desktop software annual maintenance | 50 | Users | \$ _____ | \$ _____ |
| 11.d. | Software training | Allowance | | | \$ 50,000 |

TOTAL AMOUNT FOR YEAR 4
(ITEMS 1.d THRU 11.d)

\$ _____

PROPOSAL SCHEDULE

FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES - STATEWIDE
FEDERAL AID PROJECT NO. SPR-0010(050) UNIT 1 DV

SUMMARY

| | |
|---|----|
| Total Amount for Year 1 (Items 1.a thru 11.a) | \$ |
| Total Amount for Year 2 (Items 1.b thru 11.b) | \$ |
| Total Amount for Year 3 (Items 1.c thru 11.c) | \$ |
| Total Amount for Year 4 (Items 1.d thru 11.d) | \$ |
| TOTAL AMOUNT FOR COMPARISON OF BIDS | \$ |

NOTE:

1. Bids shall include all Federal, State, County and other applicable taxes.
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS will be used to determine the lowest responsible bidder.
3. Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.
4. In case of a discrepancy between unit price and the total in said bid, the unit price shall prevail.
5. Bid, Performance, and Payment Bonds are not required for this Project.
6. Bidders attention is directed to Section 2.1 of the Special Provisions and Specifications.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

F O R M S

Contents:

Contract

Certificate for Performance of Services

Pre-Qualification Questionnaire

CONTRACT

KF-1

THIS AGREEMENT, made this day _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as “STATE”, and «CONTRACTOR», «STATE_OF_INCORPORATON» whose business/post office address is «ADDRESS», hereinafter referred to as “CONTRACTOR”;

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to furnish, perform and/or deliver and pay for all labor, supplies, materials, equipment and services called for in “«PROJECT_NAME_AND_NO»”, or such a part thereof as shall be required by the STATE, the total amount of which labor, supplies, materials, equipment and services shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»-----DOLLARS (\$«BASIC_NUMERIC») as follows:

Total Amount for Comparison of Bids.....\$«BASIC_NUMERIC»

which sum shall be provided from State funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans, if any, for «PROJECT_NO_ONLY», 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 furnish, perform and/or deliver all labor, supplies, materials, equipment and services as provided herein «WORKING_DAYS»

from the date indicated in the Notice to Proceed from the State, with an option to extend for TWO (2) additional TWELVE (12) MONTH periods subject to the terms specified in Section «SECTION_REFERENCING_OPTION_YEAR» of the Specifications. The total term of this contract shall not exceed THIRTY SIX (36) MONTHS.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS (\$«BASIC_NUMERIC») in lawful money, such payment to be made, subject to such additions hereto or deductions therefrom heretofore or hereafter made, in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC») is hereby provided for extra work and shall be provided from State funds.

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.

«CONTRACTOR»

Signature

Print name

Print Title

Date

STATE OF HAWAII

Director of Transportation

CERTIFICATE FOR PERFORMANCE OF SERVICES

The undersigned bidder does hereby certify that in performing the services required for «PROJECT NAME AND NO», it will fulfill the following conditions:

1. All applicable laws of the Federal and State governments relating to workers' compensation, unemployment compensation, payment of wages, and safety will be fully complied with; and
2. The services to be rendered shall be performed by employees paid at wages or salaries not less than the wages paid to public officers and employees for similar work, with the exception of professional, managerial, supervisory, and clerical personnel who are not covered by Section 103-55, HRS.

I understand that failure to comply with the above conditions during the period of the contract shall result in cancellation of the contract, unless such noncompliance is corrected within a reasonable period as determined by the Director of Transportation. Payment in the final settlement of the contract or the release of bonds, if applicable, or both shall not be made unless the Director of Transportation has determined that the noncompliance has been corrected; and

I further understand that all payments required by Federal and State laws to be made by employers for the benefit of their employees are to be paid in addition to the base wage required by Section 103-55, HRS.

DATED at Honolulu, Hawaii, this ____ day of _____, 20__.

«CONTRACTOR»
Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Notary Seal
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this
____ day of _____
Notary signature _____
Notary public, State of _____
My Commission Expires: _____

Notary Seal
NOTARY CERTIFICATION

Doc. Date: _____ #Pages: _____
Notary Name: _____ Circuit
Doc. Description: _____

Notary signature _____
Date _____

PRE-QUALIFICATION QUESTIONNAIRE

In order for a proposal for the FURNISHING OF DIGITAL VIDEOLOG GOODS AND SERVICES-STATEWIDE, FEDERAL-AID PROJECT NO. SPR-0010(50) UNIT 1 DV to be considered responsive and complete, all information requested in this questionnaire must be provided by the Contractor. Statements must be complete and accurate. Omissions, inaccuracies or misstatements will be cause for disqualification of a Contractor and the rejection of its bid.

Statements and answers relating to each question in this questionnaire must be answered on this form or on sheets attached to the questionnaire. All statements must reference the questionnaire page number and question number to which it applies. Photographs and other illustrative materials must be identified by the questionnaire page number and question number to which the supplemental material is applicable.

By submitting this questionnaire for the Furnishing of Digital Videolog Goods and Services – Statewide project, the Contractor acknowledges and agrees that the State and the State’s employees, agents and representatives have the right to make any inquiry or investigation the State deems appropriate to substantiate or supplement information contained herein, and authorizes the release of any and all information sought in such inquiry or investigation to the State and the State’s employees, agents and representatives.

The signatory of this questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

This questionnaire is being submitted on behalf of:

Name of Contractor:

Address:

Telephone No.: Business _____ Fax _____

The Bidder is a: ☐ Sole Proprietorship ☐ Partnership
 ☐ Corporation ☐ Joint-Venture
 ☐ Other. Please Explain. _____

If the bid is submitted by a joint venture, composed of two or more individual firms, then each member firm must submit all information listed on pages Q-2 through Q-5 of the Questionnaire for each member comprising the joint venture, and in addition answer the following:

- a) Member of Joint Venture _____
- b) Date of Joint Venture Agreement _____
- c) Is agreement between members comprising the joint venture joint and several liability? _____
If not, state terms of agreement in this respect.

1. How many years has your organization been in the business of videologging under your present business name?
2. How many years experience in the videologging business has your organization had:
 - (a) As a general Contractor,
 - (b) as a sub-contractor?
3. Contractor must have successfully completed ten (10) major videolog projects for government agencies within the past five (5) years. Specifically, show what videolog, roadway asset and roadway condition survey projects exceeding One-hundred Thousand Dollars (\$100,000.00) your organization has completed in the past five (5) years. Contractor must include the following in the answer: Names, phone number, and addresses of up to five (5) clients who may be contacted, including one (1) client whose videolog project is located in the State of Hawaii, and two (2) other state government agencies for whom videolog services were rendered during the preceding year. Include the contract amount, number of miles, nature of the work and date completed.

Name, Address, Phone No. of Client:

Contract Amount: _____ Number of Miles: _____

Date of Project: _____

Nature of Work:

Name, Address, Email Address, Phone No. of Client:

Contract Amount: _____ Number of Miles: _____

Date of Project: _____

Nature of Work:

Name, Address, Email Address, Phone No. of Client:

Contract Amount: _____ Number of Miles: _____

Date of Project: _____

Nature of Work:

Name, Address, Email Address, Phone No. of Client:

Contract Amount: _____ Number of Miles: _____

Date of Project: _____

Nature of Work:

Name, Address, Email Address, Phone No. of Client:

Contract Amount: _____ Number of Miles: _____

Date of Project: _____

Nature of Work:

4. Have you ever failed to complete any work awarded to you? ____ If yes, where and why?

5. What is the videolog experience of the principal individuals of your organization?
Include the following in your answer: Individual's name, present position or office, years of
videolog experience, magnitude and type of work.

EQUIPMENT QUESTIONNAIRE

Submitted by _____

Contractor is a: ☐ Corporation
 ☐ Partnership
 ☐ An individual.

Principal Office _____

1. In what manner have you inspected this proposed work? Explain in detail.
2. Explain your plan or layout for performing the proposed work.
3. The work, if awarded to you, will have the personal supervision of whom?
4. Do you intend to sublet any portions of the work? ____ If so, state amount of sub-contract, and, if known, the name and address of the sub-contractor, amount and type of his equipment and financial responsibility.
5. From which sub-contractors or agents do you expect to require a bond?
6. What equipment do you own that is available for the proposed work?
7. What equipment do you intend to purchase for use on the proposed work, should the contract be awarded to you?
8. How and when will you pay for the equipment to be purchased?
9. Do you propose to rent any equipment for this work? _____ If so, state type, quantity and reasons for renting.

The undersigned hereby declares: that the foregoing is a true statement of the individual, partnership or corporation herein first named, as of the above date herein first given; that this statement is for the express purpose of inducing the party to whom it is submitted to award the submittor a contract; and that any vendor or other agency herein named is hereby authorized to supply such party with any information necessary to verify this statement.

NOTE: A partnership must give firm name and signatures of all partners. A corporation must give full corporate name, signature of official and affix corporate seal.