

**General Conditions of Construction Contracts
Honolulu Authority for Rapid Transportation**

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Attachments

The following attachments are to the General Conditions:

- Attachment A – the FTA required clauses and certifications.
 - Attachment 1.6(a): DBE Participation Report
 - Attachment 1.6(b): Final Report DBE Participation –Instructions for Completion of the Final Report of DBE Participation
 - Attachment 1.7(a): Certification Regarding Ineligible Contractors
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 - Attachment 1.8(a): Buy America Certification;
 - Attachment 1.9(a): Lobbying Certification
- Attachment B – the Rapid Transit Stabilization Agreement, dated November 17, 2009;
See Page 43 Letter of Assent;
- Attachment C – the Transit Stabilization Agreement Hawaii Building and Construction Trades Council Affiliates; **See Page 41 Letter of Assent**
- Attachment D – the HHCTCP Section 106 Programmatic Agreement (PA)
- Attachment E – the HRTP Mitigation Monitoring Program (MMP)

Chapter 1 – Preamble

1.1 Procurement Code. The General Conditions of Construction Contracts of the Honolulu Authority for Rapid Transportation (HART), incorporated by reference in the solicitation document and the awarded contract, referred to as “General Conditions,” represent HART’s policy and requirements relating to contracts as authorized by Hawaii Revised Statutes (HRS), Chapter 103D, and its promulgated rules under Hawaii Administrative Rules (HAR), Title 3, Department of Accounting and General Services. References to HAR provisions in the General Conditions are included for convenience only.

1.2 Order of Precedence/Contract Documents. The separate parts of the solicitation document and resulting contract, including the plans and specifications, are intended to complement each other. Unless it is apparent that a different order of precedence is intended, the order of precedence of these documents in the event of conflicting terms is as follows:

- Coverleaf Agreement;
- Special Provisions;
- General Conditions for Construction Contracts;
- Technical Specifications;
- Plans;
- Solicitation Documents (most recent addenda governs over all other previously issued addenda and solicitations);
- Contractor’s final bid or proposal (including BAFO, if a competitive sealed proposal solicitation), provided, however, where the terms of the final proposal exceed the standards and expectations of the solicitation document, such terms of the final proposal shall be the new minimum specifications.

The listed documents hereinabove comprise the "Contract Documents," which is also referred to as the "Contract" or "Agreement."

Chapter 2 – General Provisions

2.1 Definitions. Terms as used in this solicitation document and the Contract, unless the context requires otherwise, shall have the following meaning:

"Addendum/Addenda" means a written document issued by the Contracting Officer during the solicitation period involving changes to the solicitation documents which shall be considered and made a part of the solicitation documents and resulting contract.

"Affiliate" means any Person that:

- (a) Directly or indirectly, through one or more intermediaries, control, is controlled by, or is under common control with the following:
 - (1) Contractor; or
 - (2) Any Principal Participant
- (b) Holds 10% or more of the equity interest, directly or indirectly, beneficially or of record, by the following:
 - (1) Contractor; or
 - (2) Any Principal Participant; or
 - (3) Any Affiliate of the Contractor under subsection (b)(1) of this definition.

For purposes of this definition, the term "control" means the possession, directly or indirectly, of the power to cause the direction of the management of a Person, whether through voting securities, by contract, by family relationships, or otherwise.

"Agreement" means the Contract.

"Amendment" shall have the same meaning as "contract modification" or "modification" as hereafter defined.

"As-Built Plans" means the final drawings and specifications furnished by the Contractor, documenting the details and dimensions of the completed Work.

"Baseline Project Schedule" means the time-scaled and resource-loaded Critical Path network, updated from time to time in accordance with the Contract and depicting the Price Items and subordinate activities and their respective prices (distributed over time), durations, sequences, and interrelationships and represent Contractor's Work plans, the Contractor's Work Breakdown Structure (WBS) for designing, constructing, and completing the Project and the Contract Price distributed over the period of the Contract.

"Best value" means the most advantageous offer determined by evaluating and comparing all relevant criteria in addition to price so that the offer meeting the overall combination that best serves HART is selected. These criteria may include, in addition to others, the total cost of ownership, performance history of the offeror, quality of goods, services, or construction, delivery, and proposed technical performance. [HAR 3-122-1]

"Bid" means the executed document submitted by a bidder in response to an invitation for bids, or a multi-step bidding procedure. [HAR 3-120-2]

"Bidder" means any individual, partnership, firm, corporation, joint venture, or other legal entity submitting, directly or through a duly authorized representative or agent, a bid for goods,

service, or construction contemplated. [HAR 3-120-2] Upon award of contract to the successful bidder, the term "bidder" shall mean the "contractor."

"Bid sample" means a sample to be furnished by a bidder to show the characteristics of the item offered in the bid. [HAR 3-122-1]

"Change order" means an amendment or modification of the Contract signed by the Chief Procurement Officer or his/her authorized designee, directing the Contractor to make changes with or without the consent of the Contractor. [HRS 103D-104] [HAR 3-125-2]

"Chief procurement officer" means the Honolulu Authority for Rapid Transportation Executive Director and CEO, as provided in HRS Section 103D-203, or the officer's designee. [HAR 3-120-2].

"City" means the City and County of Honolulu, State of Hawaii.

"Construction" means the process of building, altering, repairing, improving, or demolishing any public structure or building, or other public improvements of any kind to any public real property. The term includes the routine operation, routine repair, or routine maintenance of existing structures, buildings, or real property. [HRS 103D-104]

"Construction and Demolition Waste" includes solid wastes, such as building materials, packaging, rubbish, debris, and rubble resulting from construction, remodeling, repair and demolition operations.

"Construction Engineering and Inspection" or "CE&I" means the Project consultant who, on behalf of HART, will conduct the day-to-day oversight of this Agreement, and monitor and/or audit the Contractor's construction, schedule and quality. The Project CE&I shall be HART's point-of-contact with the Contractor. Where the Contract Documents reference "HART" for reporting and submissions, Contractor shall always communicate and make submittals through the Project CE&I.

"Contract" or "Contract Documents" means the fully executed agreement between HART and the Contractor for the goods, services, construction or professional services as procured, for which award was made to the Contractor, including the furnishing of labor, materials and equipment in connection therewith. See Section 1.2 for specific documents that comprise the Contract Documents.

"Contract modification" or "Modification" means any written alteration within the scope of the contract to specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of the Contract fully executed by all parties to the Contract. [HRS 103D-104] [HAR 3-125-3]

"Contract Management System" or "CMS" means the Oracle Primavera Contract Management System used and customized by HART.

"Contract Specifications" mean the General Conditions for Construction Contract, Special Provisions, and the Technical Specifications developed by the Engineer of Record based on the Standard Specifications for the Project, which collectively define and control the specific requirements, conditions, means and methods to be used for the Work under the Contract.

"Contracting Officer" means the Honolulu Authority Rapid Transportation Executive Director and CEO or his delegated designee.

"Contractor" means any individual, partnership, firm, corporation, joint venture, or other legal entity undertaking the execution of the Work under the terms of the Contract with HART, acting directly or through its agents or employees. [HAR 3-120-2]

"Cost analysis" means the evaluation of cost data for the purpose of arriving at costs actually incurred or estimates of costs to be incurred, prices to be paid, and costs to be reimbursed. [HAR 3-120-2]

"Cost data" means information concerning the actual or estimated cost of labor, material, overhead, and other cost elements which have been actually incurred or which are expected to be incurred by the Contractor in performing the Contract. [HAR 3-120-2]

"Critical Path" means each path shown on the Baseline Schedule that contains the longest path from NTP to Substantial Completion for which there is zero float. It also includes paths that, due to constrained dates, contain zero float.

"Days" means consecutive calendar days unless otherwise specified. [HAR 3-120-2]

"Designee" means a person appointed by the Director, the Contracting Officer, the Chief Procurement Officer, or the Officer-in-Charge or any other authorized person to act on its behalf with delegated authority.

"Designer of Record" means the Engineer of Record defined herein.

"Director" means the Honolulu Authority Rapid Transportation Executive Director and CEO or his delegated designee.

"Discussion" means an exchange of information to promote understanding of HART's requirements and offeror's proposal and to facilitate arriving at a contract that will be the best value to HART. Discussions are not permissible in competitive sealed bidding, except to the extent permissible in the first phase of multi-step sealed bidding to determine the acceptability of technical offers. [HAR 3-122-1]

"Engineer of Record" is the engineer or engineering firm, currently licensed in the State of Hawaii, who develops the criteria and concept for the Project, including the Technical Specifications and the Plans, and is in direct charge of the Project design.

"Erosion Control" means any action taken to minimize the destructive effects of wind and water on surface soil. The use and placement of berms and dams, fiber mats, grass, sod, mulch, slope drains, sediment basins, and drainage systems may be temporary, used during construction or permanent and installed for the anticipated useful life of the Honolulu Rail Transit Project.

"Final Proposal" means the final mutually-agreed terms of the proposal submitted by the awarded offeror in response to HART's request for proposals or the Best and Final Offer accepted by HART in accordance with HAR §§3-122-53 and 3-122-54.

"Goods" means all property, including but not limited to equipment, equipment leases, materials, supplies, printing, insurance, and processes, including computer systems and software, excluding land or a permanent interest in land, leases of real property, and office rentals. [HRS 103D-104]

"Guarantee" or "Warranty" means a written documentation of assurance of the quality of or the length of use to be expected, required by the Contract, or represented by the Contractor (or its suppliers and/or subcontractors) of equipment, material, device, or system offered, or work performed.

"Guarantor" means the Person assuming responsibility for the tangible net worth deficit or financing deficit obligations of the Offeror, as required by the Contract.

"HAR" means the Hawaii Administrative Rules of the State of Hawaii, as amended.

Hazardous Substance" means any substance designated or listed under subparagraphs (1)- (4) of this definition, exposure to which results or may result in adverse affects on the health or safety of employees:

- (1) Any substance defined under Section 101(14) of CERCLA;
- (2) Any substance listed by the United States Department of Transportation as hazardous materials under 49 CFR § 172.101 and appendices; and
- (3) Hazardous Waste as herein defined below;
- (4) Any and all radioactive materials, asbestos, organic compounds known as polychlorinated biphenyls, chemicals, any biological agent and other disease-causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person or organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring, and any and all other substances or materials defined as "hazardous materials," "extremely hazardous materials," "hazardous wastes" or "toxic substances" under or for the purposes of hazardous materials laws.

"Hazardous materials laws" mean and include all federal, state or local laws, ordinances, rules, regulations or codes, now or hereafter in effect, relating to environmental conditions, human health or industrial hygiene, including but not limited to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. section 9601 et seq., the Resource Conservation and Recovery Act, 42, U.S.C. section 6901 et seq., the Hazardous Materials Transportation Act, 42 U.S.C. section 1801 et seq., the Clean Water Act, 33 U.S.C. section 1251 et seq., the Clean Air Act, 42 U.S.C. 7401 et seq., the Toxic Substances Control Act, 15 U.S.C. section 2601 - 2629, the Safe Drinking Water Act, 42, U.S.C. sections 300f - 300j, HRS Chapter 128D, Environmental Response Law, HRS Chapter 342B, Air Pollution Control, HRS Chapter 342D, Water Pollution, HRS Chapter 342H, Solid Waste Pollution, HRS Chapter 342J, Hazardous Waste, HRS Chapter 342L, Underground Storage Tanks, Chapter 342P, Asbestos, and any similar state or local laws or ordinances and the regulations now in effect or hereafter adopted, published or promulgated thereto.

"Hazardous Waste" means a waste or combination of wastes as defined in 40 CFR § 171.8.

"HRS" means the Hawaii Revised Statutes of the State of Hawaii, as amended.

"HSS" means the State of Hawai'i Department of Transportation Standard Specifications.

"Incidental Utility Work" means the following Work necessary for the construction of the Project, including:

- (a) Relocations of Service Lines;
- (b) Protections in Place;
- (c) The adjustment of utility appurtenances (e.g., manholes, valve boxes, and vaults) for line and grade upon completion of roadway work;
- (d) All work necessary to remove any utilities (whether or not in use as of the proposal submittal date) in situations for which leaving the utilities in place is not feasible or not permitted, or for facilities which the Contractor proposes be removed to accommodate or permit construction of the Project, regardless of whether replacements for such utilities are being installed in other locations; and

(e) All work necessary to abandon in place any utility in accordance with proper procedures (e.g., flushing, capping, slurry backfill, etc.).

"Independent Assurance" means activities that are an unbiased and independent evaluation of all the sampling and testing procedures, equipment calibration, and qualifications of personnel used in acceptance, including the Contractor's Quality Control.

"Informal Bid" means a quotation made under small purchase procedures, pursuant to HRS section 103D-305 or a quotation made under emergency purchase procedures, pursuant to HRS section 103D-307.

"Inspector" means a Contractor representative hired by the Contractor to inspect methods and materials, equipment, and Work, both on and off the Site, of the Project.

"Invitation for bids" or "request for bids" means all documents, whether attached or incorporated by reference, utilized for soliciting bids under the competitive sealed bidding source selection method. [HAR 3-120-2]

"LEED" means the Leadership in Energy and Environmental Design green building rating systems developed and adopted by the U.S. Green Building Council (USGBC).

"Mobilization" means Contractor cost to mobilize and get set up on the project.

"Notice to Offerors" means the publication or the notice of a solicitation for offers.

"Notice to Proceed" or "NTP" means the document issued to the Contractor designating the official commencement date of the performance under the Contract.

"Offer" means the bid, proposal, or quotation. [HAR 3-120-2]

"Offeror" means any individual, partnership, firm, corporation, joint venture, or other legal entity submitting, directly or through a duly authorized representative or agent, an offer for the goods, service, or construction contemplated. [HAR 3-120-2]

"Officer-in-Charge" means the Executive Director or CEO of HART or his delegated designee.

"Opening" means the date set for opening of bids, receipt of unpriced technical offers in multi-step sealed bidding, or receipt of proposals in competitive sealed proposals. [HAR 3-122-1]

"Person" means any individual, firm, corporation, company, limited liability corporation (LLC), limited liability partnership (LLP), joint venture, voluntary association, partnership, trust or public or private organization, other legal entity, or combination thereof.

"Plans" or "Project Plans" means those portions of the Contract Documents prepared and stamped by the Engineer of Record, consisting of drawings, diagrams, illustrations, schedules, and other data which show the scope, extent, and character of the Work.

"Price analysis" means the evaluation of price data, without analysis of the separate cost components and profit as in cost analysis, which may assist in arriving at prices to be paid and costs to be reimbursed. [HAR 3-120-2]

"Price data" means factual information concerning prices, including profit, for goods, services, or construction substantially similar to those being procured. In this definition, "prices" refers to offered or proposed selling prices, historical selling prices, and current selling prices of such items. This definition refers to data relevant to both the general contractor and subcontract prices. [HAR-3-120-2]

"Price Item" means a component of the Baseline Project Schedule and Schedule of Prices for which the Contractor provides a Price Item Value for all Work included in that item. A Price Item may be a major contract item or series of interrelated items.

"Price Item Value" means that value allocated by the Contractor to a Price Item.

"Principal Participant" means any of the following entities:

- (a) Contractor (or Bidder);
- (b) An individual firm, all general partners, or joint venture members of the Contractor (or Bidder); and/or
- (c) All Persons and legal entities holding (directly or indirectly) a 15% or greater interest in Contractor (or Bidder).

"Procurement" means buying, purchasing, renting, leasing, or otherwise acquiring any good, service, or construction. The term also includes all functions that pertain to the obtaining of any good, service, or construction, including description of requirements, selection and solicitation of sources, preparation and award of contracts, and all phases of contract administration. [HRS 103D-104]

"Procurement officer" means the Honolulu Authority for Rapid Transportation Executive Director and CEO or his authorized representative acting within the limits of authority. [HRS 103D-104]

"Project" means the Work to be performed as set forth in the Contract, including furnishing all services, labor, goods, materials, supplies, equipment and other incidentals reasonably necessary for the successful completion of Work contemplated under the Contract.

"Proposal" means the executed document submitted by an Offeror in response to a Request for Proposals.

"Protect in Place" or "Protection in Place" means any activity undertaken to avoid damaging a Utility which does not involve removing or relocating that Utility, including staking the location of a utility, avoidance of a utility's location by construction equipment, installing steel plating or concrete slabs, encasement in concrete, temporarily de-energizing power lines, and installing physical barriers. For example, temporarily lifting power lines without cutting them would be considered a method in which to Protect in Place, whereas temporarily moving power lines to another location after cutting them would be considered a Temporary Relocation. The term includes both temporary measures and permanent installations meeting the foregoing definition.

"Punchlist" means the list of items to be completed by the Contractor to meet Final Acceptance.

"Quality Assurance" or "QA" means all planned and systematic actions by the Contractor necessary to provide assurances that the Contractor is effectively performing Quality Control (QC) in accordance with the Quality Plan, that all Work complies with the Contract and that all Materials incorporated in the Work, all equipment, and all elements of the Work will perform satisfactorily for the purpose intended. QA actions include, but are not limited to, monitoring, independent verification testing, auditing, spot-checking and training the Quality management professionals assigned to perform QC. All QA reviews, audits, and verification testing shall be documented and part of the Contractor's Quality Management Records and are available for HART review.

"Quality Control" or "QC" means the total of all activities performed by the Contractor, subcontractor, producer or manufacturer to ensure that the Work meets Contract requirements. This includes, but is not limited to, procedures for materials handling and construction quality Inspection, sampling and testing of materials, plants, production and construction, material certifications; calibration and maintenance of equipment; production process control, and monitoring of environmental compliance. Quality Control also includes documentation of all QC design and construction efforts.

"Quality Manager" means the individual employed by the Contractor, who is responsible for Contractor's overall quality program, including the quality of the management, design, and construction.

"Quality Plan" means the plan that sets out the Contractor's means of complying with its obligations in relations to QA/QC.

"Quotation" means a statement of price, terms of sale, and description of goods, services, or construction offered by a prospective seller to a prospective purchaser, usually for purchases pursuant to section 103D-305, HRS. [HAR 3-122-1]

"Qualified List Method" means the method of source selection for professional services under HRS 103D-304.

"Record Drawings" means the reconciliation of the Project As-Built "red-lined" drawings and documentation, including the design criteria and Contract Specifications, into electronic formats to be transmitted to HART at the end of the Contract.

"Reliability" means the probability of performing a specified function without failure and within design parameters for the period of time or the number of cycles specified under actual service conditions.

"Relocation" means each removal, relocation, abandonment, and/or Protection in Place (including provision of temporary services as necessary) of any and all Utilities that is necessary in order to complete the Work as required by the Contract.

"Request for Information" (RFI) means an instrument initiated by the Contractor to request information.

"Retainage" means a portion of Contract payment withheld by HART according to the terms of the Contract.

"Request for Proposals" or "RFP" means all documents, whether attached or incorporated by reference, utilized for soliciting proposals under the competitive sealed proposal source selection method.

"Responsible Offeror" means a person who has the capability in all respects to perform fully the Contract requirements, and the integrity and reliability which will assure good faith performance. [HRS103D-104]

"Responsive Bidder or Offeror" means a person who has submitted an offer which conforms in all material respects to the IFB or RFP. [HAR 3-120-2]

"Safety and Security Certification" means a series of processes that collectively verify the safety and security readiness of the Project for public use.

"Safety Plan" means the plan that sets out the Contractor's means of complying with its obligations in relation to project safety, which plan shall be provided and maintained in accordance with the Contract Documents.

"Samples" means representative quantities of materials taken in specified amounts and frequencies for subsequent testing in accordance with specified standard procedures, or physical examples of materials to be supplied or workmanship which shall establish standards by which the Work shall be judged provided such samples meet Contract requirements.

"Schedule of Prices" means the schedule of Price Items that sum to the Contract Price and is provided with the Contractor's Bid or Proposal. The Schedule of Prices becomes part of the Contract and is used to evaluate and compare the Periodic Payment Schedule (PPS). The Schedule of Prices includes Price Items, Price Item Description, Price Item Value.

“Schedule of Values” means Schedule of Prices.

“Service line” means a utility line, the function of which is to connect directly the improvements on an individual property (e.g., a single family residence or an industrial warehouse) to another utility line located off such property, which other utility line connects more than one such individual line to a larger system, as well as any cable or conduit that supplies an active feed from a utility owner’s facilities to activate or energize the government’s local lighting and electrical systems, traffic control systems, street lights, communication systems or irrigation systems.

“Site” means those areas utilized by the Contractor for the performance of Work under this Contract and includes any areas on which Relocation Work is performed and any location being temporarily used by the Contractor for storage of materials and equipment to be incorporated into the Work.

“Site Security Plan” means the plan that sets out the Contractor’s means of complying with its obligations in relation to Site security, which plan shall be provided and maintained in accordance with the Contract.

"Solicitation" means an invitation for bids, request for proposals, or a request for quotation issued by HART for the purpose of soliciting bids or proposals to perform under HART contract. [HAR 3-120-2]

“Special Provisions” means additions and revisions to the solicitation documents, including additions or revisions to the Contract Specifications covering conditions applicable to this individual Project.

"State" means the State of Hawaii.

"Standard commercial product" means a product or material, in the normal course of business, is customarily maintained in stock or readily available by a manufacturer, distributor, or dealer for the marketing of the product. [HAR 3-122-1]

“Standard Drawings” means detailed drawings that depict the dimensions and clearances of certain features of the Project and components, subassemblies, or systems of the Project for general application and repetitive use in connection with the Honolulu Rapid Transit Project.

“Standard Specifications” means the standard technical specifications for general application and repetitive use in connection with the Honolulu Rapid Transit Project.

“Subcontract” means any agreement entered into by the Contractor or its Subcontractor (at any tier) for a portion of the construction or any other part of the Work in connection with, and under the terms of, the Contract.

"Subcontractor" means any person who enters into an agreement with the Contractor to perform a portion of the work for the Contractor. [HAR 3-120-2]

“Substantial Completion” means the point at which the Project, or a HART-designated portion thereof, is sufficiently complete, in accordance with the Contract Documents, so that HART may use or occupy the Work or building project or designated portion thereof for the intended use for which it is originally designed and intended for. This would include the completion of all life safety systems, weather-tight envelope, and adequate protection of building occupants and/or equipment is ensured from hazards posed by additional or possible construction activities or other potential harmful conditions that may exist or become evident during the final work to complete the Project per the Contract Documents.

“Substantial Completion Date” means the date on which the Contractor is required to achieve Substantial Completion in accordance with the Contract Documents.

“System” means the 20-mile elevated rail line that will connect West Oahu with downtown Honolulu and Ala Moana Center. The System features electric, steel-wheel trains each capable of carrying passengers from East Kapolei to Ala Moana Center with 21 station stops including the Airport and Downtown. The System consists of, but is not limited to, fixed facilities that include the guideway structure, stations, and a Maintenance and Storage Facility (MSF), passenger vehicles, and transit core systems, including train control, communications, traction electrification and fare vending.

“Temporary Relocation” means any interim Relocation of a Utility (i.e., the installation, removal, and disposal of the interim facility) pending installation of the permanent facility in the same or a new location, and any removal and reinstallation of a Utility in the same place with or without an interim relocation.

“Traction Power Substation” (TPSS) means a fixed facility within the rail system where electrical equipment is located for the specified purpose of receiving and converting or transforming incoming electrical energy to usable electrical energy.

“Unit Price” means the price established by the Contract for a specified unit quantity of Work that is measured for payment.

“Utility” means a privately, publicly, or cooperatively owned facility (which term includes lines, systems and other facilities, and includes municipal and/or government facilities) for transmitting or distributing communications, cable television, power, electricity, gas, oil, crude products, water, steam, waste, or any other similar commodity, including any fire or police signal system as well as streetlights associated with roadways owned by local agencies. However, when used in the context of the Relocation of facilities to accommodate the Project, the term "Utility" or "utility" excludes traffic signals, flashing beacon systems, and lighting systems for the Project. The necessary appurtenances to each utility facility shall be considered part of the facility, including the utility source, guide poles, feeder service lines, supports, etc. Without limitation, any service lateral connecting directly to a utility shall be considered an appurtenance to that utility, regardless of the ownership of such service lateral.

“Utility Agreement” means the agreements with Utility Owners.

“Utility Owner” or “utility owner” means the owner or operator of any Utility (including governmental persons and privately held entities).

“Utility Relocation Plans” means the Design Plans for Relocation of a Utility impacted by the Project as designated in any applicable Utility Agreements.

“Utility Standards” means the standard specifications, standards of practice, and construction methods that are applicable to a Relocation pursuant to the terms and conditions of a Utility Agreement; provided that if a particular facility is not governed by a Utility Agreement or the applicable Utility Agreement does not specify applicable standards, the term “Utility Standards” shall mean the standard specifications, standards of practice, and construction methods that would be customarily applied by a similar utility owner to its facilities, in effect as of the Bid Date.

“Verification Sampling and Testing” means sampling and testing performed to validate the quality of the product. When necessary, HART, or a firm retained by HART, will perform Verification Sampling and Testing.

“Volatile Organic Compounds (VOCs)” means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. Compounds that have negligible photochemical reactivity, listed in EPA 40 CFR 51.100(s), are excluded from this regulatory definition.

"Warranty" shall have the same meaning as Guarantee.

"Work" means all of the administrative, Utility support services, legal, professional, manufacturing, supply, installation, construction, supervision, management, testing, verification, labor, material, equipment, maintenance, documentation, and other duties and services to be furnished and provided by the Contractor to fulfill all the requirements of the Contract, including all efforts necessary or appropriate to achieve Final Acceptance of the Project as set forth in the Contract. In certain cases, the term is also used to mean the products of the Work.

"Work Breakdown Structure" (WBS) means the breakdown of Project elements into definable units in a logical manner to be able to review cost, schedule, and other Project information.

2.2 References and Abbreviations

(a) When reference is made to known standards and specifications, the most recently adopted and published edition of such standards and specifications on the date of the notice to contractors is contemplated, unless otherwise specified.

(b) The Contract Documents contain references to various "standard" specifications, codes, practices, and requirements for materials, equipment, Work quality, installation, inspections, and tests, where references are published and issued by the organizations, societies, and associations listed herein by abbreviation and name. Such references are hereby made a part of the Contract Documents to the extent specified in the General Conditions.

(c) Whenever a referenced standard contains administrative requirements, including measurement and payment provisions, such as the standard specifications of various governmental entities, utility districts, and other agencies, such administrative requirements shall not apply to the Work of this Contract. References to such standards shall only be applicable to the pertinent Technical Provisions.

(d) Utility standards referenced in standard specifications shall apply only to material and workmanship with respect to Work, which upon completion is to be accepted by a municipality or a utility company. The commercial terms within these references (e.g., Control of Work, Prosecution and Progress, and Measurement and Payment) are not applicable to this Contract.

(e) **Abbreviations.** The following abbreviations shall refer to the technical society, organization, body, code, rules, or standards, listed opposite each abbreviation:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AAN	American Association of Nurserymen
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
AFBMA	Anti-Friction Bearing Manufacturer's Association
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AIMA	Acoustical and Insulating Materials Institute

AIS	Archaeological Inventory Survey
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association
ANSI	American National Standard Institute
AOAC	Association of Official Agricultural Chemists
APA	American Plywood Association
API	American Petroleum Institute
APO	Assistant Project Officers
APTA	American Public Transportation Association
ARA	American Railway Association
AREA	American Railway Engineering Association
AREMA	American Railway Engineering and Maintenance-of-Way Association, previously American Railway Engineering Association (AREA)
ARTBA	American Road and Transportation Builders Association
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc.
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ASQC	American Society of Quality Control
AWG	American Wire Gauge
AWPA	American Wood-Preservers Association
AWPI	American Wood Preserves Institute
AWWA	American Water Works Association
AWS	American Welding Society
BFS	Department of Budget and Fiscal Services, City and County
BHMA	Builders' Hardware Manufacturers Association
BIC	Ball-in-Court
BMP	Best Management Practices
BPS	Baseline Project Schedule
BSI	Building Stone Institute
BWS	Board of Water Supply, City and County
CADD	Computer Aided Design and Drafting
CCE	Construction Compliance Engineer
CCH	City and County of Honolulu
CCM	Construction Compliance Monitor
CCO	Contract Change Order

CD-ROM	Compact Disc – Read Only Memory
CDRL	Contract Data Requirements List
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFM	Configuration Manager
CFR	Code of Federal Regulations
CGL	Commercial General Liability
CHASP	Contractor Health and Safety Plan
CHST	Construction Health and Safety Technician
CIH	Certified Industrial Hygienist
CIM	Contractor Interface Manager
CLFMI	Chain Link Fence Manufacturers Institute
CMCO	Contract Master Change Order
CMPR	Contractor Monthly Progress Report
CMS	Contract Management System
CPC	Contractor Proposed Cost
CMS	Contract Management System
CMAA	Crane Manufacturer's Association of America
CO	Change Order
COR	Department of the Corporation Counsel
CPC	Contractor Proposal Cost
CPM	Critical Path Method
CPO	Chief Procurement Officer
CRSI	Concrete Reinforcing Steel Institute
CS	Core Systems
CSC	Core Systems Contractor
CSHT	Construction Safety and/or Health Technician
CSI	Construction Specifications Institute
CSL	Contract Submittal List
CSP	Certified Safety Professional
CSSO	Chief Safety and Security Officer
CSSP	Construction Safety and Security Plan
CWA	Clean Water Act
CWP	Construction Work Plans
C&D	Construction and Demolition
DB	Design-Build
DBA	Decibels, A-scale
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
DBOM	Design-Build-Operate-Maintain
DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii

DD	Data Date
DDC	Department of Design and Construction, City and County of Honolulu
DHI	Door and Hardware Institute
DOH	Department of Health, State of Hawaii
DOR	Designer-of-Record
DOT	United States Department of Transportation
DOTAX	Department of Taxation, State of Hawaii
DPP	Department of Planning and Permitting, City and County of Honolulu
DSI	Dimensional Stone Institute
DTS	Department of Transportation Services, City and County of Honolulu
ECM	Environmental Compliance Manager
ECMM	Environmental Compliance Monitoring Manual
ED	HART Executive Director
ECP	Environmental Compliance Plan
EEI	Electrical Engineering Institute
EEO	Equal Employment Opportunity
EIA	Electronic Industries Association
EIS	Environmental Impact Statement
EMT	Emergency Medical Technician
ENR	Engineering News Record (Trade Magazine)
ENV	Department of Environmental Services, City and County of Honolulu
EPA	United States Environmental Protection Agency
ETL	Electrical Testing Laboratories
FAR	Federal Acquisition Regulations
FEIS	Final Environmental Impact Statement
FGMA	Flat Glass Marketing Association
FHWA	Federal Highway Administration, U.S. Department of Transportation
FMS	Factory Mutual System
FONSI	Finding of No Significant Impact
FS	Federal Specifications
FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
FTA	Federal Transit Administration, U.S. Department of Transportation
G06	General Order No. 6 of the Public Utilities Commission, Rules for Overhead Electric Line Construction
GCCC	HART's General Conditions for Construction Contracts
GPS	Global Positioning System
GRJP	General Rules for Joint Use of Poles
HAR	Hawai'i Administrative Rules
HART	Honolulu Authority for Rapid Transportation
HBCTCA	Hawai'i Building and Construction Trades Council Affiliates

HDOT	State of Hawai'i Department of Transportation
HFD	Honolulu Fire Department
HHCTCP	Honolulu High-Capacity Transit Corridor Project, means Honolulu Rail Transit Project (H RTP)
HIOSH	Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii
HPD	Honolulu Police Department
HRS	Hawai'i Revised Statutes
H RTP	Honolulu Rail Transit Project
HST	Hawai'i Standard Time
HSS	State of Hawaii Standard Specifications for Road and Bridge Construction, 2005
IA	Independent Assurance
IBC	International Building Code
ICBO	International Conference of Building Officials
ICC-ES	International Code Council - Evaluation Service
ICD	Interface Control Document
ICEA	Insulated Cable Engineers Associations, previously Insulated Power Cable Engineers Association (IPCEA)
ICM	Interface Control Manual
IDM	Interface Definition Meeting
IEEE	Institute of Electrical and Electronics Engineers
IES	Illuminating Engineering Society
IM	Interface Manager
IMP	Interface Management Plan
IMSA	International Municipal Signal Association
IPCEA	Insulated Power Cable Engineers Association, now Insulated Cable Engineers Associations (ICEA)
IRS	Internal Revenue Service
ISO	International Standards Organization
ITE	Institute of Transportation Engineers
ITP	Inspection and Testing Plan
ITS	Intelligent Transportation System
JIC	Joint Industrial Council
JV	Joint Venture
KHG	Kamehameha Highway Guideway Design-Build Project
LAN	Local Area Network
LCC	Leeward Community College
LLC	Limited Liability Company
LLP	Limited Liability Partnership
LOI	Letter of Interest
LPG	Liquefied Petroleum Gas

MIA	Marble Institute of America
MIL	Military Specifications
MIL STA	Military Standards
MMP	Mitigation Monitoring Program
MOT	Maintenance of Traffic
MS4	Municipal Separate Storm Sewer Systems
MSDS	Material Safety Data Sheet
MSF	Maintenance and Storage Facility
MURK	Manual on Uniform Record Keeping
MUTCD	Manual on Uniform Traffic Control Devices
NAAMM	National Association of Architectural Metal Manufacturers
NBFU	National Board of Fire Underwriters
NCHRP	National Cooperative Highway Research Program
NCR	Non-Conformance Report
NEBB	National Environmental Balancing Bureau
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHS	National Highway System
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCA	National Roofing Contractors Association
NTMA	National Terrazzo and Mosaic Association
NTP	Notice to Proceed
O&M	Operation and Maintenance
OEM	Original Equipment Manufacturer
OHSMS	Occupational Health and Safety Management Systems
OIC	Officer-in-Charge
OJT	On-the-job Training
OSHA	Occupational Safety and Health Administration, United States Department of Labor
PA	HHCTCP Section 106 Programmatic Agreement
PA/CR	Public Awareness and Community Relations
PCA	Pre-Construction Assessment
PCI	Precast/Prestressed Concrete Institute
PCM	Public Controls Manager
PDI	Plumbing and Drainage Institute
PE	Preliminary Engineering
PICM	Project Interface Control Manual

PIM	Project Interface Manager
PIT	Public Involvement Team
PIV	Price Item Value
PM	Project Manager
PMP	Project Management Plan
PP	Project Principal
PPS	Periodic Payment Schedule
PS&E	Plans, Specification and Estimate
PTD	Public Transit Division, DTS, City and County of Honolulu
QA	Quality Assurance
QAP	Quality Assurance Plan
QC	Quality Control
QM	Quality Manager
QMP	Quality Management Plan
RFI	Request for Information
RFID	Request for Interface Data
RFB	Request for Bids
RFP	Request for Proposals
ROD	Record of Decision
ROH	Revised Ordinances of Honolulu
ROM	Rough Order of Magnitude
ROW	Right-of-Way
RTSA	Rapid Transit Stabilization Agreement
RUS	Rural Utilities Service
SAE	Society of Automotive Engineers
SBA	Small Business Administration
SEM	Section Environmental Monitor
SHPD	State Department of Land and Natural Resources, Historic Preservation Division
SI	International System of Units
SMANCA	Sheet Metal and Air Conditioning Contractors National Association, Inc.
SoP	Schedule of Prices
SoV	Schedule of Values
SP	Special Provision
SSBMP	Site-Specific Best Management Plan
SSCP	Safety and Security Certification Plan
SSI	Sensitive Security Information
SSMP	Safety and Security Management Plan
SSPC	Steel Structures Painting Council
SSSP	Site Safety and Security Plan
STAA	Surface Transportation Assistance Act of 1982
STURAA	Surface Transportation and Uniform Relocation Assistance Act of 1987

SV	Schedule Variance
SWI	Sealant and Waterproofers Institute
TCA	Tile Council of America
TEA-21	Transportation Equity Act for the 21st Century
TMP	Traffic Management Plan
TPSS	Traction Power Substation
UBC	Uniform Building Code
UFAS	Uniform Federal Accessibility Standards
UH	University of Hawai'i
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
UPS	Uninterruptable Power Supply
US	United States
USBPR	United States Bureau of Public Roads
USC	United States Code
US DOL	United States Department of Labor
US DOT	United States Department of Transportation
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VE	Value Engineering
VOC	Volatile Organic Compound
WBS	Work Breakdown Structure
WCLA	West Coast Lumberman's Association
WOFH	West O`ahu/ Farrington Highway
WTF	Wheel Truing Facility
XCU	Explosion, Collapse, and Underground (Commercial General Liability)

2.3 Certification of Funds

(a) No contract awarded shall be binding or of any force and effect, unless HART's Chief Financial Officer or designee ("Chief Financial Officer") has, in accordance with Section 103D-309, HRS, endorsed thereon a certificate that there is an appropriation or balance of an appropriation over and above all outstanding contracts, sufficient to cover the amount required by the contract.

(b) If a contract is a multi-term contract, under Section 3-122-149, HAR, HART's Chief Financial Officer shall only be required to certify that there is an appropriation or balance of an appropriation over and above all outstanding contracts that is sufficient to cover the amount required to be paid under the contract during the fiscal year or remaining portion of the fiscal year of the term of the multi-year contract; provided, however, this section shall not apply to any contract in which the total amount payable to the Contractor cannot be accurately estimated at the time the contract is to be awarded. Payment and performance obligations for succeeding fiscal periods shall be subject to availability and appropriation of funds.

(c) Certification of a portion of fund. Notwithstanding the requirement for endorsement in subsection (a) above, certification of a portion of the total funds required for a contract may be permitted when an immediate solicitation will result in significantly more favorable contract terms and conditions to HART than a solicitation made at a later date; provided that certification for partial funding shall be permitted only if HART's Chief Financial Officer states in the certificate that the availability of funds in excess of the amount certified as available shall be contingent upon future appropriations or special fund revenues. All contracts partially funded shall be enforceable only to the extent to which funds have been certified as available. [HAR § 3-122-104(c)]

(d) Contracts involving federal funds. In any contract involving not only HART, State or City funds, but supplemental funds from the federal government, HRS Section 103D-309 shall be applicable only to that portion of the contract obligation and payable out of HART, State or City funds. Unless otherwise specified, the Contractor, by submittal of a Proposal and acceptance of an award, agrees that payment of that portion of the Contract amount that is supplemented of funded entirely by federal funds shall be payable upon receipt of those federal funds.

(e) Every contract modification, change order, or contract price adjustment under a contract shall be subject to prior written certification by HART's Chief Financial Officer for funding the project or the contract, as to the effect of the contract modifications, change order, or price adjustment in contract price on the total project budget or the total contract budget. [HAR §3-122-241]

(f) In the event that any contract modification, change order, or adjustment results in an increase in the total budget or total contract budget, no contract modification, change order, or adjustment in contract price shall take effect, unless sufficient funds are made available therefor, or the scope of the project or contract is adjusted so as to permit the degree of completion that is feasible within the existing project budget or contract budget.

2.4 Execution of Contract

This Contract shall not be considered binding upon HART until the Contract has been fully and properly executed by all the parties thereto.

2.5 Independent Contractor

It is expressly understood and agreed that the Contractor is an independent contractor, with the authority to control and direct the performance and details of the work and services herein contemplated; however, HART retains the general right of inspection by a designated representative in order to judge, whether in the HART's opinion, such work is being performed by the Contractor in accordance with the terms of this Agreement. The Contractor shall not be deemed to be an agent, servant, or employee of HART. The Contract shall not be construed to create a partnership or joint venture between HART and the Contractor.

2.6 Compliance with Contract Terms

The Work shall be completed in conformity with the Contract, including the Contract Specifications, the General Conditions and other provisions forming a part of the Contract. In the event the Contractor fails to so perform, the Chief Procurement Officer, in addition to any other recourse, reserves the right to suspend the Contractor from bidding on any or all contracts of HART, the City, the State of Hawaii, or other counties of the State, pursuant to Chapter 3-126, HAR.

2.7 Statutory or Ordinance Requirements

The Contractor shall at all times observe, perform, and comply with all federal, state and local laws or ordinances, rules and regulations which in any manner affect and apply to those engaged or employed in the performance of the Work, the manufacture and sale of materials and equipment required under the Contract, and the conduct of the Work. The Contractor shall also comply with all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the Work. Any reference to such laws, ordinances, rules and regulations shall include any amendments thereto. If any discrepancy or inconsistency is discovered in the Contract for the Work in relation to any such laws, ordinances, rules and regulations, orders or decrees, the Contractor shall forthwith report the same to HART in writing.

2.8 Taxes

Unless otherwise specified in the Contract, the offeror or the Contractor shall include and be responsible for paying all taxes which shall be applicable to the goods, services or construction or the furnishing or sale thereof. Contractor shall not pass through any increases in taxes to HART.

2.9 Indemnity

The Contractor shall indemnify and hold harmless and defend HART and the City, their officers, employees, and agents from and against any liability, damage, loss, cost, and expense, including reasonable attorneys' fees, and all claims, suits, and demands therefor arising out of or resulting from the negligent, reckless, intentional, or wrongful acts, errors, or omissions of the Contractor, the Contractor's employees, officers, agents, or subcontractors in the performance of the Contract or the Contractor's professional services, provided, however, that the Contractor shall not be responsible for such portion of damages, if any, caused by the negligence or intentional misconduct of HART or the City. This provision shall remain in full force and effect notwithstanding the expiration or earlier termination of the Contract.

2.10 Infringement Indemnification

If the Contractor uses or licenses any design, device, material, process, technology or any other intellectual property ("Intellectual Property") covered by patent, copyright, trademark or other intellectual property protection, the right for such use shall be procured by the Contractor from the appropriate owner. The Contractor shall defend, indemnify and hold HART and the City, and all their officers, agents, servants and employees harmless against all claims arising from the use of any claims for infringement by reason of the use of any such Intellectual Property in connection with providing services under this Contract.

2.11 Liability - HART'S PAYMENT OBLIGATIONS UNDER THIS CONTRACT SHALL BE LIMITED ONLY TO THE PAYMENT FOR SERVICES UNDER THIS CONTRACT. IN NO EVENT SHALL HART BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, INCLUDING BUT NOT LIMITED TO, LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS CONTRACT.

2.12 Liquidated Damages

It is mutually understood and agreed by and between the parties to the Contract that time shall be of the essence and that in case of failure on the part of the Contractor to complete the Work by the Substantial Completion Date set forth in the Agreement, HART will be damaged thereby, and the amount of said damages, inclusive of expenses

for inspection, superintendence, and necessary traveling expenses, being difficult if not impossible of definite ascertainment and proof, it is hereby agreed that the amount of such damages shall be the amount set forth in the Contract as liquidated damages for each and every calendar day, including weekends and holidays, that the Contractor delays in finishing the Work beyond the Substantial Completion Date; and the Contractor hereby agrees to pay the said sum as liquidated damages, and not by way of penalty, to HART and further authorizes HART to deduct the amount of the damages from monies due the Contractor under the Contract. If the monies due the Contractor are insufficient or no monies are due the Contractor, the Contractor shall pay HART the difference or the entire amount, whichever may be the case, upon demand by the Contracting Officer.

2.13 Work Made for Hire/Ownership of Results

(a) **Work Made for Hire/Ownership of Results.** All work products developed or prepared by the Contractor under the Contract, including deliverables, materials, documents, design plans, or blueprint, are the property of HART, and all right, title, and interest therein shall vest exclusively in HART and shall be deemed to be a "Work Made for Hire" under United States Copyright Laws (17 U.S.C. § 101 et seq.). To the extent that title to any such works may not, by operation of law, vest in HART or such works may not be considered to be Work Made for Hire, Contractor hereby agrees that all right, title, and interest therein are irrevocably assigned to HART. All such work products shall belong exclusively to HART with HART having the right to obtain and to hold in its own name, copyrights, registrations or such other protection as may be appropriate to the subject matter, and extensions and renewals thereof. Contractor may make copies or reproduce the work products developed under this Contract for its file and reference. Contractor further agrees to execute and deliver to HART all lawful documents, including without limitation, petitions, oaths, declarations, assignments, disclaimers, and affidavits, in form and substance as may be requested by HART in connection with this provision; execute and record all documents necessary to evidence the chain of title in or to, and HART's ownership of, the Works Made for Hire described herein; and furnish to HART any and all documents in Contractor's possession or control, or in the possession or control of Contractor's agents, legal representatives, successors and assigns, which HART may deem useful for establishing the facts surrounding the creation, use or registration of the work product.

(b) **Contractor's Right to Copies.** While any interests of Contractor or its subcontractors, in drawings, plans, specifications, blueprints, studies, memoranda, computation sheets, computer files, and media or other documents prepared by the Contractor or its subcontractors in connection with services to be performed under this Contract, shall become the property of and will be transmitted to HART, Contractor may retain and use of copies for references and as documentation of its experience and capabilities.

2.14 Wages and Hours

(a) Contractors shall observe and comply with all the provisions of Chapter 104, HRS, relating to wages and hours of employees on public works. The Contractor shall pay all employees on any contract with HART, the minimum basic wage rate in conformance with applicable Federal and State laws.

(b) **Minimum Wages.** The minimum wage shall be periodically increased during the performance of the contract in an amount equal to the increase in the prevailing wages for those kinds of work as periodically determined by the State Director of Labor and Industrial Relations. Notwithstanding the provisions of the original contract entered into,

if the Director of Labor and Industrial Relations determines that the prevailing wage has increased, the rate of pay of laborers and mechanics on the contract shall be raised accordingly. No additional compensation shall be made to the Contractor for failing to consider increases of the minimum wage during the duration of the contract.

(c) **Overtime Work.** No laborer or mechanic employed on the job site shall be permitted or required to work on a Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day unless the laborer or mechanic receives overtime compensation for all hours worked on a Saturday, Sunday, and a legal holiday of the State or in excess of eight hours on any other day. For purposes of determining overtime compensation under this subsection, the basic hourly rate of any laborer or mechanic shall not be less than the basic hourly rate determined by the Director of Labor and Industrial Relations to be the prevailing basic hourly rate for corresponding classes of laborer and mechanics on projects of similar character in the State.

(d) **Certified Payrolls.** Two (2) certified copies of all payrolls and a certified copy of a fringe benefit reporting form supplied by the Department of Labor and Industrial Relations (DLIR) or any certified form that contains all of the required fringe benefit information shall be submitted weekly to HART or a HART-designated labor compliance web-based software, as directed by HART. The fringe benefit reporting form shall itemize the cost of fringe benefits paid by the general contractor or subcontractor for:

- (1) Health and welfare benefits;
- (2) Pension and annuity benefits;
- (3) Vacation benefits;
- (4) Continuing education and training benefits; and
- (5) Other fringe benefit costs paid by the general contractor or subcontractor.

A copy of the Certified Payroll with Reporting of Fringe Benefits form issued by DLIR can be found at: http://hawaii.gov/labor/wsd/pdf/forms/CertPayrollAff_rev020310.xls

The Contractor shall be responsible for the submission of two (2) certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates contained therein are not less than the applicable rates contained in the wage determination decision of the Director of Labor and Industrial Relations and the classifications set forth for each laborer or mechanic conform with the work the laborer or mechanic performed. The payrolls shall contain the name of each employee, the employee's correct classification, rate of pay, the itemized fringe benefit reporting form pursuant to above, daily and weekly numbers of hours worked on this project as well as hours performed on other projects, deductions made and actual wages paid.

(e) **Maintain Payroll Records.** Payroll records for all laborers and mechanics working at the site of the Work shall be maintained by the Contractor and its subcontractors, during the course of the work and preserved for a period of three years upon completion of the Contract. The records shall contain the name of each employee, the employee's correct classification, rate of pay, daily and weekly numbers of hours worked, deductions made and actual wages paid.

(f) **Availability of Payrolls.** The Contractor shall make payroll records available for examination within ten (10) days from the date of a written request by a governmental agency or any authorized representative thereof. Any Contractor who: (1) fails to make payroll records accessible within ten days; (2) fails to provide information requested for

the proper enforcement of this chapter within ten (10) days; or fails to keep or falsifies any record required under this chapter; shall be assessed a penalty as provided in Section 104-22(b), HRS.

(g) **Violations.** If HART finds that any laborer or mechanic employed on the job site by the Contractor or any subcontractor has been or is being paid wages at a rate less than the required rate, or has not received the laborer's or mechanic's full overtime compensation, the Officer-in-Charge may take appropriate action in accordance with HRS section 104-21, or the Officer-in-Charge may, by written notice to the Contractor, terminate the Contractor's right, or the right of any subcontractor, to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid and may complete such or part by contract or otherwise, and the Contractor and its sureties shall be liable to HART for any excess costs occasioned thereby.

(h) **Post Wage Schedule.** The Contractor is required to post the applicable wage schedule in a prominent and easily accessible place at the job site. The Contractor shall give to each laborer and mechanic employed under the contract a copy of the rates of wages required to be posted.

(i) **Federally Funded or Federally Assisted Projects.** On federally funded or federally assisted projects, the current federal wage rate determination in effect at the time of advertising the solicitation documents is incorporated as part of the Contract, and both Federal and State wage rates shall apply. Where rates for any class of laborers and mechanics differ, the higher rates shall prevail. The minimum federal wage rates shall be those in the U. S. Department of Labor Wage Determination Decision and Modifications in effect ten days prior to the bid opening date.

A copy of the wage rate determination, (including any additional classification and wage rate conformed under 29 CFR 5.5a (1)(ii)) and Davis-Bacon poster (WH-1321) shall be posted at all times at the site of work in a prominent and accessible place where it can be easily seen by the workers.

(j) **Employee Interviews.** HART and the State of Hawaii Department of Labor and Industrial Relations may interview employees during working hours on the job. Failure to allow employees to be interviewed may be assess penalties described under Section 104-22(b), HRS.

(k) **Failure to Comply.** Failure to comply with the requirements of this section may result in disqualification from bidding or submitting proposals on future projects.

(k) **Inclusion in Subcontract.** The Contractor shall include this section in every subcontract for work under this Contract.

(l) **Labor Stabilization Agreements.** Contractor shall comply with the Rapid Transit Stabilization Agreement, dated November 17, 2009, and the Transit Stabilization Agreement Hawaii Building and Construction Trades Council Affiliates that are in place, and Contractor shall sign the "Letter of Assent" attached to the stabilization agreements as required under the stabilization agreements. (See Attachments B and C to the Agreement.)

2.15 Reserved.

2.16 Apprenticeship Program Preference Contract Administration

(a) For the duration of a construction contract awarded utilizing the apprenticeship

preference, the contractor shall certify each month that work is being conducted on the project and that it continues to be a participant in the relevant apprenticeship program for each trade it employs.

(b) Monthly certification shall be made on Monthly Certification Form 2 prepared and made available by the Hawaii State Department of Labor, be a signed original by the respective apprenticeship program sponsor's authorized official, and submitted by the contractor with its monthly payment requests.

(c) Should the contractor refuse to submit its monthly certification forms of, at any time during the construction of the project, cease to be a party to a registered apprenticeship agreement for each apprentice able trades the contractor employs, or will employ, the contractor will be subject to the following sanctions:

- (1) Withholding of the requested payment until the required form(s) are submitted;
- (2) Temporary or permanent cessation of work on the project, without recourse to breach of contract claims by the contractor, provided the agency shall be entitled to restitution for nonperformance or liquidated damages claims; or
- (3) Proceed to debar or suspend pursuant to HRS section 103D-702.

(d) If events such as "acts of God," acts of a public enemy, acts of the State or any other government body in its sovereign or contractual capacity, fires, floods, epidemics, freight embargoes, unusually severe weather, strikes or other labor disputes prevent the contractor from submitting the certification forms, the contractor shall not be penalized as provided herein, provided the contractor completely and expeditiously complies with the certification process when the event is over. [HRS 103-55.6]

2.17 Sexual Harassment Policy Requirements

(a) Compliance with Revised Ordinances of Honolulu Section 1-18.4 (City Ordinance 93-84) on sexual harassment is required of all contractors. All contractors shall have and enforce a policy prohibiting sexual harassment. The contractor's sexual harassment policy must set forth the same or greater protection than those contained or required by the ordinance. The ordinance includes the following:

- (1) Prohibitions against an officer's or employee's sexual harassment of the following:
 - (A) Another officer or employee of the employer;
 - (B) An individual under consideration for employment with the employer; or
 - (C) An individual doing business with the employer;
- (2) A provision prohibiting a management or supervisory officer or employee from knowingly permitting a subordinate officer or employee to engage in the sexual harassment prohibited under subdivision (1);
- (3) A prohibition against retaliation towards an officer, employee, or individual who has complained of sexual harassment, conducted an investigation of a complaint, or acted as a witness during an investigation of a complaint;
- (4) A prohibition against a malicious false complaint of sexual harassment by an officer, employee, or individual;

(5) Provisions allowing an officer, employee, or individual to make a sexual harassment complaint to an appropriate management, supervisory, or personnel officer or employee;

(6) Procedures for investigating a sexual harassment complaint in an unbiased, fair, and discreet manner with appropriate safeguards to maintain confidentiality and protection from embarrassment;

(7) A provision requiring the use of the "reasonable person of the same gender standard," to determine if sexual harassment has occurred. Under the standard, sexual harassment shall be deemed to have occurred if the alleged offender's conduct would be considered sexual harassment from the perspective of a reasonable person of the same gender as the alleged victim. If the alleged victim is a woman, the "reasonable person of the same gender standard" shall be equivalent to and may be called the "reasonable woman standard;"

(8) Disciplinary actions which may be imposed on an officer or employee who committed a prohibited act; and

(9) For an employer with at least five (5) employees, a provision requiring the annual viewing of a video on the sexual harassment policy by each management or supervisory officer or employee.

(b) The policy required under this section shall be in effect for at least the duration of the contractor's contract with HART.

(c) The action of the bidder or proposer in submitting its bid, proposal or signing of the contract shall constitute its pledge and acceptance of the provisions for the sexual harassment policy as required by Revised Ordinances of Honolulu Section 1-18.4 (City Ordinance 93-84).

2.18 ENERGY STAR Products.

(a) Definitions.

"ENERGY STAR" is the joint program of the United States Environmental Protection Agency (EPA) and the United States Department of Energy designed to identify and promote energy efficient products.

"ENERGY STAR qualified product" means a product that has met strict energy efficient guidelines set by the EPA and Department of Energy and is identified by the ENERGY STAR label.

(b) Required Procurement of ENERGY STAR qualified products. The Contractor shall incorporate into its design and provide products that earn the ENERGY STAR and meet the ENERGY STAR specifications for energy efficiency, unless no comparable product is ENERGY STAR qualified or the life-cycle costs of all comparable ENERGY STAR qualified products are more than 105 per cent of the life cycle cost of a product that is not ENERGY STAR qualified.

2.19 Campaign Contributions by State and County Contractors Prohibited

If awarded a contract in response to this solicitation, offeror agrees to comply with HRS section 11-355, relating to prohibition of campaign contributions.

2.20 Confidential or Proprietary Information of HART.

Contractor understands and agrees that, in the performance of Work under this Agreement or in contemplation thereof, Contractor may have access to private or

confidential information which may be owned or controlled by HART and that such information may contain confidential or proprietary details, the disclosure of which to third parties may be damaging to HART, its personnel, consultants or other stakeholders. Contractor agrees that all information disclosed by HART to the Contractor shall be held in confidence and used only in the performance of this Agreement. Contractor shall exercise the same standard of care to protect such information as a reasonably prudent Contractor would use to protect its own confidential or proprietary data.

2.21 Personal Information Protection (HRS Chapter 487R)

(a) Definition. The terms as used in this Section have the following meaning:

“Personal information” means an individual’s first name or first initial and last name in combination with any one or more of the following data elements, when either name or data elements are not encrypted:

- (1) Social Security number;
- (2) Driver’s License number or Hawai’i Identification Card number; or
- (3) Account number, credit or debit card number, access code, or password that would permit access to an individual’s financial information.

“Personal information” does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records.

“Technological safeguards” mean the technology and the policy and procedures for use of the technology to protect and control access to personal information.

(b) Confidentiality of Material.

- (1) All material given to or made available to the Contractor by HART by virtue of this Contract, which consists of personal information, shall be safeguarded by the Contractor and shall not be disclosed without the prior written approval of HART.
- (2) Contractor agrees not to retain, use, or disclose personal information for any purpose other than as permitted or required by this Contract.
- (3) Contractor agrees to implement appropriate technological safeguards that are acceptable to HART to reduce the risk of unauthorized access to the personal information.
- (4) Contractor shall report to HART in a prompt and complete manner any security breaches involving personal information.
- (5) Contractor agrees to mitigate, to the extent practicable, any harmful effect that is known to Contractor because of a use or disclosure of personal information by Contractor in violation of the requirements of this paragraph.
- (6) Contractor shall complete and retain a log of all disclosures made of personal information received from HART, or personal information created or received by the Contractor on behalf of HART.

(c) Security Awareness Training and Confidential Agreements.

- (1) Contractor certifies that all of its employees who will have access to the personal information have completed training on security awareness topics relating to protecting personal information.

(2) Contractor certifies that confidentiality agreements have been signed by all of its employees who will have access to the personal information acknowledging that:

(A) The personal information collected, used, or maintained by the Contractor will be treated as confidential;

(B) Access to the personal information will be allowed only as necessary to perform the Contract; and

(C) Use of the personal information will be restricted to uses consistent with the services to this Contract.

(d) Termination for Cause. In addition to any other remedies provided for by this Contract, if HART learns of a material breach by the Contractor of this paragraph by the Contractor, HART may at its sole discretion:

(1) Provide an opportunity for the Contractor to cure the breach or end the violation; or

(2) Immediately terminate this Contract.

In either instance, the Contractor and HART shall follow Chapter 487N, HRS, with respect to notification of a security breach of personal information.

(e) Records Retention.

(1) Upon any termination of this Contract, the Contractor shall pursuant to Chapter 487R, HRS, destroy all copies (paper or electronic form) of personal information received from HART.

(2) The Contractor and any subcontractors shall maintain the files, books, and records that relate to the Contract, including any personal information created or received by the Contractor on behalf of HART, and any cost or pricing data, for three (3) years after the date of final payment under the Contract. The personal information shall continue to be confidential and shall not be disclosed without the prior written approval of HART. After the three (3) year retention period has ended, the files, books, and records that contain personal information shall be destroyed pursuant to Chapter 487R, HRS.

2.22 Audit and Inspection of Records

Contractor agrees to maintain and make available to HART, during regular business hours, accurate books and accounting records relating to its work under this Contract. Contractor will permit HART to audit, examine and make excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Contract. Contractor shall maintain such data and records in an accessible location and condition for a period of not less than three years after final payment under this Contract or until after final audit has been resolved, whichever is later. HART acknowledges that the documents and records presented for inspection may be Contractor's confidential information.

2.23 Confidentiality with the News Media and Public

When dealing with the news media or the public, the Contractor is expected to be circumspect and to treat all matters falling within the scope of the Contract with the utmost confidentiality. The Contractor shall consult with and/or obtain the consent of the

Officer-in-Charge prior to having conversations with or giving public interviews to the news media or any other members of the public.

2.24 Governing Law and Venue

The provisions of the Contract shall be interpreted in accordance with the laws of the State of Hawai'i as those laws are construed and amended from time to time. All disputes arising out of or relating to this contract shall be subject to the jurisdiction and venue of the state and federal courts in Honolulu, Hawai'i.

2.25 Severability

If any term, condition, provision, covenant, or agreement of the terms hereunder or under the Contract or the application thereof to any person or circumstance is rendered or held invalid, illegal, or unenforceable under the laws of the State of Hawaii or the United States, such part of the terms hereunder or under the Contract shall have been rendered or held to be invalid, illegal, or unenforceable shall not affect the validity of the terms hereunder or under the Contract as a whole or the remainder of the terms hereunder or under the Contract and the application of such part to other persons and circumstances, but shall be given effect and enforced without such part to the greatest extent permitted by applicable law.

Chapter 3 – Hawaii Administrative Rules Chapter 3-125 related provisions

3.1 General

The provisions contained herein this Chapter 3 of the General Conditions relate to HAR Chapter 3-125 provisions, however, as allowed under HAR, provide specific terms and conditions that govern this Contract as controlling provisions for each subject matter provided herein.

3.2 Change Orders / Adjustments in Price or Time for Change Orders

[HAR 3-125-4]

(a) **Change Order.** HART may at any time, without notice to any surety, in a signed writing designated or indicated to be a change order, may make changes in the Work within the scope of the Contract as may be found to be necessary or desirable. Such changes shall not invalidate the Contract or release the sureties, and the Contractor will perform the Work as changed, as though it had been part of the original Contract. Minor changes in the Work may be directed by HART with no change in contract price or time. The Contractor's cost of responding to requests for price or time adjustments is included in the Contract price and no additional compensation will be allowed.

(1) The term, "change order," as defined under HRS and HAR, and used herein this Contract, shall mean only those change requests made and directed by HART and not the Contractor. If the Contractor believes it is entitled to an equitable adjustment, then the Contractor may submit a request for equitable adjustment, but such request shall not be considered a "change order."

(2) Supplemental Plans and Specifications. HART may furnish by written order such supplemental plans and specifications, during the performance of the Contract, as may be necessary to clarify the Contract or define it in greater detail, but does not increase the cost of the Contract. The Contractor shall comply with such supplemental plans and specifications. Such supplemental plans and specifications shall not be construed as a change directive requiring a cost change proposal.

Rather, the said supplemental plans and specifications shall be a no-cost change order and become a part of the Contract upon execution of the no-cost change order.

(3) Omission, Errors or Discrepancies in Contract.

(A) Omissions. Work incidental to the Contract, although not specifically referred to in the Contract, shall be furnished and performed by the Contractor without change in the Contract price. Labor, materials and equipment directly or indirectly necessary to complete the construction of the Project, whether or not the same may have been expressly provided for in the Contract, shall be furnished and performed by the Contractor without change in the Contract price.

(B) Errors or Discrepancies. The Contractor shall notify HART in writing immediately upon discovery of any error, omission or discrepancy:

- (i) In points or instructions furnished by HART; or
- (ii) Within the Contract or any part thereof.

(4) Cost Change Proposal. Upon receipt of HART's change directive, Contractor shall submit a change cost proposal within **14 calendar days** of receipt of the written change directive, with detailed cost breakdowns for material, equipment and labor, including additional or reduction in time, for HART's approval. The substantiation shall include the Contractor's and subcontractor's cost breakdown of acceptable detail. **The requirement for the timely submission of a cost change proposal cannot be waived and shall be a condition precedent to any future assertion of a claim.**

(b) **Adjustments of Price or Time for Performance for Change Orders.** If any change order as directed by HART increases or decreases the Contractor's cost of, or the time required for performance of any part of the Work under this Contract, the parties agree that an adjustment in price and/or time will be made in accordance with this Section. Upon issuance of a change directive by HART, the Contractor shall be paid an adjustment in price and time, if any, based on HART's most current Independent Cost Estimate ("ICE") for the changed work, provided that the ICE value is not unreasonable. Contract shall proceed with the Work as changed. In entering into this Agreement, the Contractor agrees to this methodology for price and time adjustment as set forth herein this section. This is a mutually-agreed method of payment for price and time adjustments for change order. This, however, does not preclude the parties from entering into a subsequent agreement with further adjustment in price and time for the change directive.

(1) The right of the Contractor to dispute the Contract price or time required for performance or both shall not be waived by its performing the Work, provided however, that it follows the requirements and timelines for disputes and claims established in the Contract.

(c) **Claims Based on Oral Directives.**

(1) Oral directives. Any oral order, direction, instruction, interpretation or determination from HART which, in the opinion of the Contractor, causes any change, can be considered as a change only if the Contractor gives HART written notice of its intent to treat the oral order, direction, instruction, interpretation or determination as a change directive. The written notice must be delivered to HART before the Contractor acts in conformity with the oral order, direction, instruction, interpretation or determination, but **not more than five days after** delivery of the

oral order to the Contractor. The written notice shall state the date, circumstances, whether a time extension will be requested, and source of the order that the Contractor regards as a change. The written notice may not be waived and shall be a condition precedent to the filing of a claim by the Contractor. Unless the Contractor acts in accordance with this procedure, any oral order shall not be treated as a change, and the Contractor waives any claim for an increase in the Contract time or price related to the Work.

(2) Acknowledgment of oral directive. Upon receipt of the written notice from the Contractor, HART shall issue a change order for the subject Work if HART agrees that it constitutes a change. If no change order is issued within seven (7) days of receipt of Contractor's written notice, it shall be deemed a rejection of Contractor's claim for a change. If the Contractor objects to HART's refusal to issue a change order, it shall file a written protest with HART **within thirty days after** delivery to HART of the Contractor's written notice of its intention to treat the oral order as a change. In all cases, the Contractor shall proceed with the Work. The protest shall be determined in accordance with the disputes provisions under Chapter 6 of the General Conditions, "Disputes and Remedies."

(d) **Unilateral Change Order.** In the event an ICE is not available and the parties cannot come to an agreement, HART may issue a unilateral change order. In such an event, Contractor shall continue to provide timely services, provided, however, that HART makes provisional adjustments in payment and/or time for performance of the changed work as may be reasonable. Adjustments to price shall be in accordance with HRS Section 103D-501(b)(5).

(e) **Force Account.** In the event an ICE is not available and the parties cannot come to an agreement on the price adjustment for the changed work, HART at its sole discretion may direct the Work to be performed by the Contractor under force account as set forth in Chapter 5, "Force Account" of this Agreement.

(f) **Time Period for Claim.** Notwithstanding Section 3.6(f) below, if Contractor disputes the amounts paid to the Contractor for the changed work based on the independent cost estimate, Contractor shall file a claim for adjustment within **30 days of receipt** of the ICE for the changed work. **The requirement for filing a timely written claim cannot be waived.**

(g) **Other Claims not Barred.** In the absence of a change order, nothing in this clause shall restrict the Contractor's right to pursue a claim arising under the Contract or for breach of contract.

3.3 Suspension of Work

[HAR 3-125-7]

(a) **Suspension of Work.** The Officer-in-Charge may, by written order, suspend the work, either in whole or in part for periods as the Officer-in-Charge may deem necessary for any cause, including but not limited to:

- (1) Weather or soil conditions considered unsuitable for prosecution of the Work;
- (2) Failure on the part of the Contractor to:
 - (A) Correct conditions unsafe for the general public or for the workers;
 - (B) Carry out orders given by the Officer-in-Charge;
 - (C) Perform the work in strict compliance with the provisions of the Contract; or

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(D) Provide adequate supervision on the jobsite.

(3) Whenever a redesign that may affect the work is deemed necessary by the Officer-in-Charge;

(4) Unacceptable noise or dust arising from the construction even if it does not violate any law or regulation;

or

(5) The convenience of HART.

(b) **Partial and Total Suspension.** Suspension of work on some but not all items of work shall be considered a "partial suspension." Suspension of work on all items shall be considered "total suspension." The period of suspension shall be computed from the date set out in the written order for work to cease until the date of the order for work to resume.

(c) **Reimbursement to Contractor.** In the event that the Contractor is ordered by the Officer-in-Charge in writing as provided herein to suspend all or part of the work under the Contract in accordance with subsections (a)(1), (3)-(5) of the "suspension of work" paragraph, the Contractor may be reimbursed for actual money expended towards the Project during the period of suspension, provided that the Contractor mitigates its costs during the suspension period to allow for only those necessary costs. No allowance will be made for anticipated profits or damages.

(d) **Cost Adjustment.** If the performance of all or part of the Work is suspended for reasons beyond the control of the Contractor, an adjustment shall be made for any increase in the cost of performance of the Contract (excluding profit) necessarily caused by such suspension, and the Contract modified in writing accordingly. However, no adjustment under this section shall be made for any suspension in the following circumstance or event:

(1) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor; or

(2) For which an adjustment is provided for or excluded under any other provision of the Contract.

(e) **Claims for Adjustment.** Claims for compensation shall be filed in writing with the Officer-in-Charge within thirty days after the date of the order to resume work or the claims will not be considered. Together with the claim, the Contractor shall submit substantiating documents covering the entire amount shown on the claim. The Officer-in-Charge shall take the claim under consideration and may make such investigations as are deemed necessary and shall be the sole judge as to the equitability of the claim and the Officer-in-Charge's decision shall be final.

(f) **No Adjustment.** No provision of this section shall entitle the Contractor to any adjustments for delays due to failure of surety, for suspensions made at the request of the Contractor, for any delay required under the Contract, for suspensions, either partial or whole, made by HART under the provisions in Section 3.3(a)(2) herein.

(g) **Contractors Responsibilities Under Suspension of Work.** In case of suspension in the performance of the Work under the Contract from any cause whatsoever, the Contractor in addition to being responsible for performing the Work under the Contract shall:

- (1) Continue to indemnify and save HART and its officers and employees harmless from liability for any injury or damage occurring during the period that the performance of the contract is suspended;
- (2) Be responsible for all materials and equipment delivered to the site of the Project, including materials and equipment for which Contractor has received partial payment;
- (3) Properly store the materials and equipment which have been partially paid for by HART or which have been furnished by HART;
- (4) Remove immediately as directed by the Officer-in-Charge all surplus materials, equipment, and rubbish;
- (5) Neatly and compactly store all materials and equipment on the site of Project within public highways or streets so as not to impede traffic or interfere with the use of public utilities or facilities;
- (6) Provide suitable drainage and erect such temporary structures as are necessary to protect the Project or parts of the Project from damage;
- (7) Properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedlings, and sodding furnished under this contract; and
- (8) Continue to maintain required liability insurance coverages.

(h) **Standby Equipment Rates.** Contractor's cost adjustment for standby equipment during the suspension period shall not exceed 50 percent of the ownership rental rates provided in the Rental Rate Blue Book ("Blue Book"). Standby time should not exceed 8 hours per day, 40 hours per week, or the annual usage hours as established in the Blue Book.

3.4 Variations in Estimated Quantities

[HAR 3-125-10]

(a) **Variations Requiring Adjustments.** Where the quantity of a Pay Item in the Contract is an estimated quantity and where the actual quantity of such pay item varies more than fifteen per cent above or below the estimated quantity stated in the Contract, an adjustment in the Contract price shall be made upon demand of either party. The adjustment shall be based upon any increase or decrease in costs due solely to the variation above one hundred fifteen per cent or below eighty-five per cent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Officer-in-Charge shall, upon receipt of a timely written request for an extension of time, prior to final payment of the Contract, ascertain the facts and make such adjustment for extending the completion date as in the judgment of the Officer-in-Charge the findings justify.

(b) Any adjustment in the Contract price shall be in accordance with the price adjustment provisions of the Contract.

(c) **Eliminated Items.**

- (1) Should any Work required by the Contract be found unnecessary, HART may, upon written order to the Contractor, eliminate such items from the Contract.
- (2) When the Contractor is notified of the elimination of Work, Contractor will be paid for the actual Work done up through the date of notification.

3.5 Differing Site Conditions; Surface and Subsurface Conditions

[HAR 3-125-11]

(a) **Differing Site Conditions – Contractor’s responsibility.** Unless otherwise agreed and expressly provided for in the Contract, the Contractor accepts the risk of differing site conditions and the Contractor accepts the conditions at the construction site as they eventually may be found to exist and warrants and represents that the Contractor can and will be performed under such conditions, and that all materials, equipment, labor, and other facilities required because of any unforeseen surface or subsurface conditions (physical or otherwise) shall be wholly at the contractor’s own cost and expense, anything in this Contract to the contrary notwithstanding.

(b) **Surface and Subsurface Conditions.**

(1) Where investigation of subsurface conditions has been made by HART in respect to foundation or other design, the Contractor may inspect the records of HART as to such investigation and examine any sample that may be available. Where such information is shown in the plans, said information represents only the statement by HART as to the character of material which has been actually encountered by HART in its investigation and is included only for the convenience of Contractor.

(2) Any subsurface information or hydrographic survey data furnished are for the Contractor’s convenience only. The information and data furnished are the product of HART’s interpretation of the facts gathered in investigations made at the specific locations indicated to aid in the design of the Project, and HART assumes no responsibility whatever in respect to the sufficiency or accuracy of borings or of the log of test borings or other preliminary investigations, or of the interpretation thereof, and there is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the work. In addition, no assurance is given that conditions found at the time of the subsurface explorations, such as the presence or absence of water, will be the conditions that prevail at the time of construction. The Contractor shall be solely responsible for all assumptions, deductions, or conclusions the Contractor may make or derive from the subsurface information or data furnished.

(3) Making information concerning subsurface conditions available to Contractor and other offerors is not to be construed in any way as a waiver of the Contractor’s responsibility to examine the solicitation document and the site. Contractor must satisfy itself through its own investigation as to conditions to be encountered.

(4) The Contractor is alerted to its encountering obstacles whether shown on the plans or not, or which may differ in location from that shown on the plans which may interfere with the Contractor’s normal method of operations. The Contractor shall take into account any additional costs anticipated due to these conditions and shall have these costs included in its offer pricing, as appropriate. No separate additional compensation shall be made.

3.6 Price Adjustment

[HAR 3-125-13]

(a) **Price Adjustment Methods.** Any adjustment in Contract price pursuant to a clause in this Contract shall be made in one or more of the following ways:

(1) By agreement on a fixed price adjustment before commencement

of the pertinent performance;

(2) By unit prices specified in the Contract or subsequently agreed upon before commencement of the pertinent performance;

(3) By the costs attributable to the events or situations under such clauses with adjustment of profit or fee, all as specified in the Contract or subsequently agreed upon before commencement of the pertinent performance;

(4) In any other manner as the parties may mutually agree upon before commencement of the pertinent performance; or

(5) In the absence of agreement between the parties the provisions of Section 103D-501(b)(5), HRS, shall apply.

(b) **Submission of Cost or Pricing Data.** The Contractor shall be required to submit cost or pricing data if any adjustment in Contract price is subject to the provisions of HRS Section 103D-312. The submission of any cost or pricing data shall be subject to the provisions of Hawaii Administrative Rules, Chapter 3-122, Subchapter 15. Costs will be allowable only to the extent that costs incurred or cost estimates are consistent with Federal cost principles set forth in Federal Acquisition Regulations (FAR) Part 31 and Office of Management and Budget (OMB) Circular A-87. HART may impose more restrictive allowance criteria at HART's sole discretion.

(c) **Maximum Allowable Overhead and Profit in Price Adjustments.** In determining the adjustment in price to HART resulting from a change, the allowances for all overhead, extended overhead resulting from adjustments to contract time (including home office and branch office overhead), consistent with FAR Part 31 cost principles, and profit combined shall not exceed the percentages set forth below:

(1) For the Contractor, for any work performed by its own forces, twenty percent (20%) of the cost of the change;

(2) For each subcontractor involved, for any work performed by its own forces, twenty percent (20%) of the cost of the change;

(3) For the contractor or any subcontractor, for work performed by their subcontractors, ten percent (10%) of the amount due the performing subcontractor for the change.

Not more than three line item percentages for fee and overhead, not to exceed the maximum percentages shown above, will be allowed regardless of the number of tier subcontractors.

(d) **Request for Equitable Adjustment.** If the Contractor believes it is entitled to further equitable adjustment to payment made to Contractor for Work performed under the Contract, Contractor may submit a request for equitable adjustment, subject to the timely submissions relating to claims and provisions of this Section, including required cost or pricing data and maximum allowable overhead in price adjustment. By entering into this Agreement, Contractor certifies that the amount of equitable adjustment is made in good faith and that the supporting data provided with the request for adjustment are accurate and complete to the Contractor's knowledge.

(e) The Contractor's Escrowed Bid or Proposal Documents (See Section 7.4 of the General Conditions) shall support and provide the breakdown for the percentage overhead claimed by the Contractor for the change.

(f) **Claim Barred after Final Payment.** No claim for an adjustment under this Contract shall be allowed after final payment is made for this Contract.

3.7 Assignment of Monies; Successor-in-Interest; Novation or Change of Name

[HAR 3-125-14]

(a) **No assignment.** No contract entered into between HART and the Contractor is transferable, or otherwise assignable, without the written consent of the Chief Procurement Officer or his designee, provided that the Contractor may assign monies receivable under a contract after due notice to HART.

(b) **Recognition of a successor-in-interest; assignment.** When in the best interest of HART, a successor-in-interest may be recognized in an assignment agreement in which the transferor, the transferee and HART shall agree that:

- (1) The transferee assumes all of the transferor's obligations;
- (2) The transferor remains liable for all obligations under the Contract as against HART; and
- (3) The transferor shall continue to furnish, and the transferee shall also furnish, all required bonds.

(c) **Change of Name.** When a contractor requests to change the name in which it holds a contract with HART, the Contracting Officer responsible for the contract shall, upon receipt of a document indicating such change of name (for example, an amendment to the articles of incorporation of the corporation), enter into an agreement with the requesting contractor to effect such a change of name. The agreement changing the name shall specifically indicate that no other terms specifically indicate that no other terms and conditions of the contract are thereby changed. HART shall not be obligated to accept the change of name, should such a change affect any of the terms and conditions of the Contract.

3.8 Delays and Time Extensions: Force Majeure

[HAR 3-125-18]

(a) **Delays and Time Extensions.**

(1) Contractor shall not be in default for failure to meet the milestones set forth in the most current Project Schedule if such delay is caused by reason of increase in scope of work directed solely by HART *and* only if the changes are on the critical path and do not affect the final completion date of the Contract.

(A) If the Contractor feels that an extension of the time is justified, the Contractor must request it in writing when submitting the detailed cost proposal for the change directive within the timeframe set forth above for change cost proposal submission or within **fourteen (14) days** after the commencement of the delay. The Contractor must show how the Substantial Completion Date will be affected based on the progress of the Project and must also support the claim with schedules and statements from its subcontractors, suppliers, and/or manufacturers as to the extent of the delay, along with a time impact analysis evidencing the impact to the Substantial Completion Date.

(B) Compensable Delay. For compensable delay caused solely by HART action or omission, where there was no concurrent delay on the part of the Contractor, including mitigating further losses and damages, Contractor shall properly submit

to HART its written claim for compensable delay supported by detailed justification demonstrating the Contractor's entitlement to a compensable delay with its change cost proposal within the timeframe set forth herein for submission of change cost proposals or within **fourteen days** after commencement of the delay, which the Contractor deems to have been caused solely by HART's action or omission. If it is determined by the Officer-in-Charge that the compensable delay is warranted, Contractor shall be paid the daily rate of compensable delay as set forth in Contractor's pricing proposal.

(C) Contractor shall provide the period of delay and number of days requested of delay. The period of delay shall not exceed the difference between the originally scheduled delivery date at the job site versus the actual delivery date.

(b) Delay Due to Causes Beyond Contractor's Control/Force Majeure.

(1) The Contractor's right to proceed shall not be so terminated nor shall the Contractor be charged with resulting damage if the delay in the completion of the Work arises from reasons beyond the Contractor's control or *force majeure*. *Force majeure* is limited to the following events:

(A) Any floods (50-year or greater) within one mile of the Project; any windstorm (Cat-3 or more severe) within one mile of the Project; or any earthquake exceeding 3.5 on the Richter scale and epicentered within 25 miles of the specific location of damage on the Site, exceeding 5.0 on the Richter scale and epicentered within 50 miles from the specific location of damage on the Project site, or exceeding 6.5 on the Richter scale and epicentered within 75 miles from the specific location of damage on the Project site; in all cases based on the final determination regarding the location and magnitude of the earthquake published by the National Earthquake Information Center in Golden, Colorado;

(B) Any epidemic, rebellion, war, riot, act of terrorism or sabotage;

(C) Any spill or release of Hazardous Substance by a third party at, near, or on the Project site, which occurs after the Proposal due date and is required to be reported to the relevant governmental agencies;

(D) The discovery at, near, or on the Project site of any archaeological, paleontological, biological, or cultural resources, or any species presently or in the future listed as threatened or endangered under the federal or state endangered species act; provided that the existence of such resources was not identified in the Contract Documents;

(E) The suspension, termination, interruption, denial or failure to obtain, nonrenewal, or amendment of any environmental approval, except if such suspension, termination, interruption, denial or failure to obtain, renew or amend is due to an action or omission on the part of the Contractor or except as otherwise provided in the Contract;

(F) Any change in a Governmental Rule or change in the judicial or administrative interpretation of or adoption of any new Governmental Rules which is materially inconsistent with Governmental Rules in effect on the Proposal due date and materially affects the Contract; and

(G) Any court action seeking to restrain, enjoin, challenge, or delay construction of the Project or the granting or renewal of any

governmental approval for the Project, except to the extent that the court action is due to an act or omission of the Contractor or any of its subcontractors and could not have been prevented by due diligence and use of reasonable efforts by the Contractor.

(2) The term *force majeure* specifically excludes from its definition the following events which might otherwise be considered *force majeure*:

(A) Any climactic conditions, storms, floods (less than 50-year), droughts, fires, windstorms (less than Cat-3), earthquakes (3.5 or lower on the Richter scale), landslides, or other catastrophes as measured, recorded, or experienced within proximity to the Project;

(B) Strike, labor dispute, work shutdown, work stoppage, secondary boycott, walkout, or similar occurrences;

(C) The suspension, termination, interruption, denial or failure to obtain, or nonrenewal of any permit, license, consent, authorization, or approval (including all governmental approvals other than environmental approvals), which is necessary for the performance of the Work or the maintenance of the Project;

(D) Any change in a Governmental Rule (excluding material changes in Environmental laws) which was proposed or was otherwise reasonably foreseeable at the Proposal due date or does not materially affect the Contract;

(E) The work or presence on the Project site of any third party, including but not limited to other contractors, personnel employed by the State of Hawaii, other public entities, other transportation or utilities' entities, or by other private enterprises or any delay in progressing Work by any third party as indicated or disclosed in the Contract Specifications or ordinarily encountered or generally recognized as inherent in the Work;

(F) The existence of any facility or appurtenances owned, operated, or maintained by any third party, as indicated or disclosed in the Contract Specifications or ordinarily encountered or generally recognized as inherent in the Work;

(G) The act or failure to act of any public or governmental body, transportation company or corporation, or utility, including but not limited to approvals, permits, restrictions, regulations, or ordinances relevant to Contractor's Work under the Contract;

(H) Restraining orders, injunctions or judgments issued by a court which were caused by the Contractor's submissions, action or inaction, or means and method of construction;

(I) Any shortages or supplies or material required by the Contract Work;

(J) Variations in soil moisture content from that represented in reports, borings, or tests conducted by HART and included in the Contract Specifications;

(K) Any situation which was within the contemplation of the parties at the time of entering into the Contract; and

(L) All other matters not caused by HART or beyond HART's control.

(3) The Contractor, within ten days from the beginning of the delay caused by the *force majeure* event shall notify HART in writing specifically the reason or reasons for the delay and the effect of this delay to the specified completion date of the Project. The Contracting Officer shall ascertain the facts and the extent of the delay.

(4) Time extensions shall be the exclusive remedy granted to the Contractor for delay due to *force majeure* events, and no additional compensation will be paid the Contractor for such delays.

(c) Additional Rights and Remedies

(1) The rights and remedies of HART provided in this Contract are in addition to any other rights and remedies provided by law.

(2) HART will not be liable for any delays in Contract schedule and/or cost that are the fault of the Contractor. Should the H RTP Schedule be delayed due to the fault of the Contractor, the cost/or schedule impacts shall be borne by the Contractor, including liquidated damages.

(3) No additional compensation will be paid to the Contractor for any time period when the Project completion date is delayed as a result of concurrent delay. Delays are considered concurrent when the Contractor encounters an excusable delay but also has caused its own delay to the Project for the same period of time. In that situation, the Contractor is only entitled to an adjustment to time and/or compensation for the period of time that the excusable delay exceeds the concurrent delay. In the situation where the concurrent delay exceeds the excusable delay, the Contractor shall be responsible for and bear the costs of the delay, including paying liquidating damages.

(d) The Contractor shall never be entitled to anticipated profit or actual profit for change orders only involving an extension in Contract time.

3.9 Termination for default or nonperformance

[HAR 3-125-18]

(a) If a petition in bankruptcy should be filed by the Contractor, or if the Contractor should make a general assignment for the benefit of creditors, or if a receiver should be appointed due to the insolvency of the Contractor, or if the Contractor refuses or fails to perform the Work, or any separable part thereof, with such diligence as will assure its completion within the time specified in this Contract, or any extension thereof, fails to complete the Work within such time, fails to make prompt payment to subcontractor or payment for materials or labor, or disregard laws, ordinances or the instructions of HART, or if the Contractor should refuse or fail to abide by the Contract, the schedule requirements in the Contract Documents, or commits any other substantial breach of this Contract, including the events of default listed in subsection (b) below, and further fails within fifteen (15) days after receipt of written notice from the Officer-in-Charge or Director to commence and continue correction of the default with diligence and promptness, the Officer-in-Charge and/or Director may, by written notice to the Contractor, declare the Contractor in breach and terminate the Contractor's right to proceed with the Work or the part of the Work as to which there has been delay or other breach of contract. In that event, HART may take over the work and perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work, the materials, appliances, and plant

as may be on the site of the Work and necessary therefore. Whether or not the Contractor's right to proceed with the Work is terminated, the Contractor and the Contractor's sureties shall be liable for any damage to HART resulting from the Contractor's refusal or failure to complete the Work within the specified time.

(b) Default. Any of the following causes may be deemed by HART to be a default and result in Contractor's termination under the contract:

- (1) Failure to commence work within the time specified in the notice to proceed;
- (2) Failure to perform the work with sufficient workers and equipment or with sufficient materials to assure the prompt completion of said work;
- (3) Failure to comply with orders of the Officer-in-Charge;
- (4) Discontinuation of the prosecution of the work;
- (5) Failure to resume work which has been discontinued within a reasonable time after notice to resume;
- (6) Insolvency or is declared bankrupt, or commits any act of insolvency or bankruptcy;
- (7) Allows any final judgment to stand against the Contractor unsatisfied for a period of ten days;
- (8) Assignment for the benefit of creditors;
- (9) Unauthorized changes in the subcontractor listing submitted with the Contractor's proposal; or
- (10) Failure to correct deficiencies or to complete the contract.

(c) If the expense incurred by HART of finishing the Work exceeds the unpaid balance due to early termination of the Contract resulting from Contractor's default, the Contractor shall pay the difference to HART within a reasonable time not to exceed forty-five (45) days of receiving an invoice. The expenses incurred by HART herein and the damages incurred through the Contractor's default, shall be determined by HART, at its sole discretion, which determination shall be binding between the parties subject to the procedures stated in the Contract Documents and pursuant to applicable law regarding the resolution of disputes.

(d) Liquidated Damages Upon Termination. If fixed and agreed liquidated damages are provided in the Contract, and if HART so terminates the Contractor's right to proceed, the resulting damage will consist of the liquidated damages for the time as may be required for final completion of the work.

- (1) Liquidated Damages in Absence of Termination. If fixed and agreed liquidated damages are provided in the Contract, and if HART does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the Work is completed or accepted.

(e) Without waiving any other right or remedy, HART may serve written notice upon the Contractor and the Surety on its Performance Bond demanding satisfactory compliance with the Contract. Upon receipt of such demand, the Surety shall, with reasonable promptness, but in no event more than fifteen (15) days elect to either:

- (1) Assume the Contract; or
- (2) Deny liability in whole or in part and notify HART citing reasons therefor.

(f) If the Surety elects to assume the Contract, then it may do so, in consultation with and with HART's agreement, to:

- (1) Arrange for the Contractor to perform and complete the Contract; or
- (2) Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
- (3) Obtain bids or negotiated proposals from qualified contractors acceptable to HART for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by HART and said contractor (to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract) and pay to HART the amount of damages in excess of the balance of the Contract Price incurred by HART resulting from the Contractor's default; or
- (4) Waive its rights under (1), (2) and (3) above, and with reasonable promptness under the circumstances, determine the amount for which it may be liable to HART and, as soon as practicable after the amount is determined, tender payment therefore to HART, the acceptance of which shall not be deemed an acceptance by HART of the Surety's determination of the total amount due and payable by the Surety; or

(g) Should the Surety and HART agree that the Surety will assume the Contract, all money which may become due the Contractor shall be payable to the Surety as the Work progresses, subject to the terms of the Contract; and

(h) If the Surety does not assume the Contract within **fifteen (15) Days** after receiving HART's notice and demand, HART may then take possession of all Material and Equipment and complete the Work by use of its own forces, by letting the unfinished Work to another contractor, or by a combination of such methods. In any event, the cost of completing the Work shall be charged against the Contractor and its Surety and may be deducted from any money due or becoming due to the Contractor. If the amount unpaid under the Contract is insufficient for completion, the Contractor or Surety shall pay to HART within a reasonable time **not to exceed thirty (30) Days** after the completion and an itemized demand for payment from HART, all costs and damages incurred by HART in excess of the amount unpaid under the Contract.

(i) The Contractor, in having executed the Contract, shall be deemed to have waived any and all claims for damages because of Termination of Contract for any such reason, except to the extent that any termination has been found to be wrongful.

(j) In the event of a termination under the provisions of this Section, the Contractor shall transfer and assign to HART, in accordance with HART's instruction, all Work, all subcontracts, all construction records, reports, permits, data and information, other materials (including all HART-supplied materials), supplies, Work in progress and other goods for which the Contractor is entitled to receive reimbursement hereunder, and any and all plans, drawings, sketches, specifications, and information prepared by the Contractor or others in connection with the Work, and shall take such action as may be necessary to secure to HART, at HART's sole election, the rights of the Contractor under any or all orders and subcontracts made in connection with the Work. All subcontracts and supplier contracts of any tier shall contain language permitting HART to assume that contract in the case of Termination for Default.

(k) In the event that HART so directs or authorizes, the Contractor shall sell at a price approved by HART, or retain with approval of HART at a mutually agreeable price, any such materials, supplies, Work in progress, or other goods as referred to in the preceding paragraph. In any event, HART shall retain any and all records, plans, drawings, data, permits, specifications, sketches, reports or other information relating to the Work.

(l) In the event that a Termination for Default is determined in subsequent proceedings to be improper, then any such termination shall be deemed as a Termination for Convenience.

(m) HART may exercise any and all remedies available at law or in equity, including recovery of damages to the extent provided by law, subject to the limitations set forth herein, and the exercise or beginning of the exercise by HART of any one or more rights or remedies under this Section shall not preclude the simultaneous or later exercise by HART of any or all other rights or remedies, each of which shall be cumulative.

3.10 Termination for Convenience

[HAR 3-125-22]

(a) **Termination.** The Chief Procurement Officer may, when the interests of HART so require, terminate this Contract in whole or in part, for the convenience of HART. The Chief Procurement Officer shall give written notice of the termination to the Contractor specifying the part of the Contract terminated and when termination becomes effective.

(b) **Contractor's Obligations.** The Contractor shall incur no further obligations in connection with the terminated work, and on the date set in the notice of termination the Contractor 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 subject to HART's approval. The Contracting Officer may direct the Contractor to assign the Contractor's right, title, and interest under terminated orders or subcontracts to HART. The Contractor must still complete the work not terminated by the notice of termination and may incur obligations as necessary to do so.

(c) **Right to Construction and Goods.** The Contracting Officer may require the Contractor to transfer title and deliver to HART in the manner and to the extent directed by the Contracting Officer:

(1) Any completed constructions; and

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

(3) The Contractor shall protect and preserve property in the possession of the Contractor in which the State, City or HART has an interest.

(4) If the Contracting Officer does not exercise the rights set forth in this Section, the Contractor shall use the Contractor's best efforts to sell the construction, goods, and construction materials in accordance with the standards of HRS Section 490:2-706. This in no way implies that HART has breached the contract by exercise of the

termination for convenience clause.

(d) **Compensation.**

(1) The Contractor may submit a termination claim, but if submitted, shall specify the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by HAR Chapter 3-122, Subchapter 15, bearing on such claim. If the Contractor fails to file a termination claim within one year from the effective date of termination, the Chief Procurement Officer may pay the Contractor, if at all, an amount set in accordance with Section 3.10 (d)(3)(A) herein.

(2) The Chief Procurement Officer and the Contractor may agree to a settlement provided the Contractor has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total Contract price plus settlement costs reduced by payments previously made by HART, the proceeds of any sales of construction, goods, and construction materials under Section 3.10(d)(3)(C) and the Contract price of the work not terminated.

(3) Absent complete agreement under Section 3.10(d)(2) above, the Chief Procurement Officer shall pay the Contractor the following amounts, provided payments under Section 3.10(d)(2) shall not duplicate payments under this paragraph, for the total (without duplication of any items) of:

(A) The cost of all Contract work performed prior to the effective date of the notice of termination plus a five per cent markup on actual direct costs on the portion of the work (no anticipatory profit or consequential damages shall be included) less amounts paid or to be paid for completed portions of the Work; provided, however, that if it appears that the Contractor would have sustained a loss if the entire Contract would have been completed, no markup shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(B) Subject to the prior approval of the Chief Procurement Officer, the costs of settling and paying claims arising out of the termination of subcontracts or orders under this Contract shall be entitled to a markup of no more than ten per cent on direct costs incurred to the date of termination. These costs must not include costs paid in accordance with Section 3.10(d)(3)(A);

(C) The total sum to be paid the Contractor under this paragraph shall not exceed the total Contract price reduced by the amount of any sales of construction, goods, and construction materials under Section 3.10(c), and the Contract price of work not terminated.

(4) Cost claimed, agreed to, or established under Sections 3.10(d)(2) and 3.10(d)(3) shall be in accordance with chapter 3-123.

3.11 Prompt Payment by Contractors to Subcontractors

[HAR 3-125-23]

(a) **Generally.** Any money paid to the Contractor shall be disbursed to subcontractors within ten (10) days after receipt of the money in accordance with the terms of the subcontract; provided that the subcontractor has met all the terms and conditions of the

subcontract and there are no bona fide disputes on which the procurement agency has withheld payment.

(b) **Final payment.** Upon final payment to the Contractor, full payment to the subcontractor, including retainage, shall be made within ten (10) days after receipt of the money; provided that there are no bona fide disputes over the subcontractor's performance under the subcontract.

(c) **Penalty.** The Contractor or HART, as applicable, will be subject to a penalty of one and one-half per cent per month upon outstanding amounts due that were not timely paid by the responsible party under the conditions set forth in HAR Section 3-125-23.

(d) A properly documented final payment request from a subcontractor shall include:

- (1) Substantiation of the amounts requested;
- (2) A certification by the subcontractor, to the best of the subcontractor's knowledge and belief, that:
 - (A) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the subcontract;
 - (B) The subcontractor has made payments due to its subcontractors and suppliers from previous payments received under the subcontract and will make timely payments from the proceeds of the payment covered by the certification, in accordance with their subcontract agreements and the requirements of this section; and
 - (C) The payment request does not include any amounts that the subcontractor intends to or retain from a subcontractor or supplier in accordance with the terms and conditions of their subcontract; and
- (3) The submission of documentation confirming that all other terms and conditions required under the subcontract agreement have been fully satisfied.

The HART shall return any final payment request that is defective to the Contractor within seven days after receipt, with a statement identifying the defect.

(e) This section shall not be construed to impair the right of a contractor or a subcontractor at any tier to negotiate and to include in their respective subcontracts provisions that provide for additional terms and conditions that are requested to be met before the subcontractor shall be entitled to receive final payment; provided that any such payments withheld shall be withheld by HART:

Chapter 4 – Performance/Payment Bonds; Insurance

4.1 Performance and Payment Bonds.

(a) Performance and payment bonds are required under this Contract. For this construction Contract, each bond shall be in an amount equal to one hundred per cent of the amount of the Contract price. The performance and payment bonds shall be delivered by the Contractor to HART before or at the same time the Contract is executed. If the Contractor fails to deliver the required performance and payment bonds, the Contractor's award shall be canceled, the Contractor shall be subject to a claim for all resulting damages, its bid security enforced, and the Contracting Officer may award the Contract to the next lowest bidder. [HAR 3-122-224]

(b) Acceptable performance and payment bonds. Acceptable Contract performance and payment bonds shall be limited to:

- (1) Surety bond in the form attached to the solicitation documents underwritten by a company licensed to issue bonds in this State;
- (2) Legal tender; or
- (3) A certificate of deposit; credit union share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, and payable at sight or unconditionally assigned to HART. These instruments may be utilized only to a maximum of \$100,000. If the required security amount totals over \$100,000, more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be accepted. [HAR 3-122-222]

(c) **Direct costs only.** The reasonable, direct cost only of performance and payment bonds shall be paid to the Contractor, without markup.

(d) **Bond forms.** The Contractor shall execute the surety performance and payment bond forms provided with award of the Contract. Failure to utilize HART's surety bid bond form shall not relieve the bidder or Contractor from liability or responsibility if it is discovered that the form utilized is not in compliance with the HAR.

(e) **Contracts with Federal funds.** In addition to the requirements of this section, whenever a contract is partially or fully funded with Federal funds, the amount of the bonds shall be the amount required by the Federal agency, and the surety companies shall be those listed in the latest issue of the U. S. Treasury Circular 570.

(f) **Payment claims against the bond.** Every person who has furnished labor or material to the Contractor for the work provided in the contract for which a payment bond or a performance and payment bond is furnished herein, and who has not been paid amounts due before the expiration of a period of ninety days after the day on which the last of the labor was performed or material was furnished or supplied, for which a claim is made, may institute an action for the amount, or balance thereof, unpaid at the time of the institution of the action against the Contractor or Contractor and its sureties, on the payment bid and have their rights and claims adjudicated in the action, and judgment rendered thereon, subject to HART's priority on the bond.

4.2 Insurance Requirements

(a) **Project Specific (OCIP) Coverage Option:** HART may elect to furnish an Owner Controlled Insurance Program (OCIP) for those coverages outlined in (c)(1), (c)(2), (c)(4) and (c)(9) below, at HART's cost by appropriate Contract Modification. If HART elects to provide such insurance, HART shall inform Contractor in writing. If an OCIP is implemented by HART, then, all eligible Contractor(s) and Subcontractor(s) of any tier will be required to participate

(b) **CCIP Option:** Contractor may furnish project-specific workers' compensation/employer's liability coverage, as well as General Liability and Excess Liability for work performed onsite by Contractor and eligible subcontractors/sub-subcontractors via a Contractor Controlled Insurance Program (CCIP) as outlined in sections (c)(1), (c)(2), (c)(4), and (c)(9) below.

(c) **Non-OCIP Program Insurance Requirements:** In the event an OCIP is not in place at the time of Contract execution, Contractor shall furnish to HART satisfactory proof that Contractor has in force continuously for the entire period covered by the Contract the following classes of insurance in the form and with limits specified below”

1. **Commercial General Liability Insurance** covering claims for personal injury, bodily injury and property damage arising out of the Work and in a form providing coverage no less broad than that of the current ISO Commercial General Liability Insurance policy (Occurrence Form, number CG 00 01 12/07 or equivalent). Coverage shall include premises/operations, products liability, contractual liability, personal and advertising injury and completed operations for the applicable Statute of Repose, or 10 years (whichever is greater) after following completion of the Work. The limits of such insurance shall not be less than:

- a. \$2,000,000 each occurrence
- b. \$2,000,000 each occurrence for personal/advertising injury
- c. \$4,000,000 aggregate for products and completed operations, which shall be maintained for ten (10) years following completion of the Work
- d. \$4,000,000 general aggregate limit, which shall apply separately and be reinstated annually

The policy shall not contain any of the following exclusions:

- a. Cross Suits exclusion
- b. Subsidence or earth movement exclusion

Further the policy shall not contain any exclusions directed toward any types of projects, materials or processes involved in the Work. Coverage shall include but not be limited to the following and shall not include any endorsements restricting these coverages:

- a. Contractual Liability to cover liability assumed under the agreement;
- b. Products/Completed Operations Extension
- c. Broad Form Property Damage
- d. Explosion, collapse and underground hazards, if such exposure exists
- e. Independent Subcontractors
- f. Severability of interests
- g. Cross Liability
- h. Limited Pollution exclusion with Building Heating, Cooling and Hostile Fire exception
- i. Limited Professional Liability - contractor means and methods - CG 2279
- j. Redefinition of “occurrence” – affirming coverage under Hawaii statute for bodily injury/property damage resulting from construction defect during completed operations.

2. **Workers’ Compensation and Employer’s Liability Insurance** for all persons whom the Contractor may employ including subcontractors and sub-subcontractors of all tiers in carrying out Work contemplated under Contract Documents, in accordance with current Hawaii law. Coverages and limits shall include:

- a. Workers’ compensation – statutory limit
- b. Employer’s liability

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- i. \$1,000,000 bodily injury for each accident
- ii. \$1,000,000 bodily injury by disease for each employee.
- iii. \$1,000,000 bodily injury disease aggregate

3. **Business auto insurance** covering all owned, non-owned, and hired vehicles on and off-site, with limits not less than \$2,000,000 each accident, and \$2,000,000 each occurrence. If hazardous materials or waste are to be transported, the Commercial Automobile Liability insurance will be endorsed with the MCS-90 endorsement in accordance with the applicable legal requirements. Any statutorily required "No-Fault" benefits and uninsured/underinsured motorists coverage shall be included.

4. **Umbrella/Excess Liability Insurance**, following form, in limits of \$25,000,000 per occurrence, \$25,000,000 general aggregate, \$25,000,000 products/completed operations aggregate, excess of those stated above.

5. **Contractor's Pollution Liability Insurance** for losses covered by pollution conditions that arise from the operations of the contractor described under the scope of services of the contract. Contractor shall purchase and maintain in force for the duration of the contract insurance for pollution legal liability applicable to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured or destroyed; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims; all in connection with any loss arising from the project. Coverage shall be maintained in an amount of at least with limits of \$2,000,000 per occurrence and \$4,000,000 aggregate. The policy will include coverage for mold, and apply to both sudden & accidental, as well as pollution incidents. Coverage will also be evidenced for transportation.

If the any of the above insurance policy on a "**claims made**" basis, it or they shall be maintained for a period of **not less than three years** with the retroactive date to be held constant with the date of this contract.

6. **Contractor's Equipment:** Contractor will maintain All Risk Equipment Insurance covering all risk of physical damage to equipment provided for use at the Project site by the Contractor, whether owned, leased, rented, borrowed or used at the Project site. Contractor agrees to waive and does hereby waive its rights of recovery against HART and each of its officers, employees, consultants and agents including, but not limited to the Board and each HART representative, as to any damage or loss which may occur to its equipment to the extent covered by insurance. Contractor will have the insurance company specifically agree to this waiver. If uninsured, Contractor will hold harmless HART and each of its officers, employees, consultants and agents including, but not limited to the Board and each HART representative, for loss or damage to its tools and equipment.

7. If any aircraft is to be used in the performance of the Work, **Aircraft Liability** insurance (including owned and non-owned) with the following minimum limits:

- a. Bodily Injury: \$10,000,000 each occurrence / \$2,000,000 each person
- b. Property Damage: \$10,000,000 each occurrence

8. Professional Liability Insurance. All parties and their consultants whose scope of Work requires performing or providing professional engineering or architectural design services shall carry coverage for professional errors and omissions arising from the Work (including Services) with limits not less than \$2,000,000 per claim and \$4,000,000 annual aggregate. Such policy shall not contain any exclusions directed toward any types of projects, materials, services or processes involved in the Work. Coverage shall include, but not be limited to:

- a. Insured's interest in joint ventures, if applicable
- b. Construction Management must be listed as a Professional Service covered by the policy without being subject to limitation by a specific definition
- c. Technology Services must be listed as a covered service with respect to BIM hosting and management responsibilities
- d. Limited contractual liability
- e. The retroactive date for coverage will be no later than the commencement date of design and will state that in the event of cancellation or non-renewal the discovery period for insurance claims will be at least 5 years or otherwise as by agreement with HART
- f. Extended reporting (discovery) period of 5 years after completion of the Work.

9. Builders' Risk Insurance: Unless otherwise provided, Contractor shall provide builder's risk "all risk" property insurance in amount sufficient to insure the completed value of the Project during the construction phase and upon the entire Work at the Site. Such insurance shall include Contractor and Subcontractors of all tiers as additional insureds as their interests may appear.

HART and Contractor waive all rights against each other for loss or damage to any property used in connection with the Project and covered by any property insurance. The enrolled parties will require similar waivers from their Subcontractor(s)

(d) Conditions

1. All policies of insurance shall be placed with insurers acceptable to HART. The insurance underwriter(s) must be duly licensed to do business in the State of Hawaii and (other than for workers' compensation) must have a rating of A- VII or better in the most recent edition of Best's Insurance Reports or otherwise satisfactory to HART. Required minimum amounts of insurance may be increased should conditions of Work, in opinion of HART, warrant such increase. Contractor shall increase required insurance amounts upon written direction by HART.

2. Specimen copies of the insurance policies that make up the coverage outlined in (c)(1) and (c)(2) shall be made available to HART and its designated agent for review not less than fifteen (15) business days prior to the start of construction of the project.

(e) **Certificates of Insurance**

1. Contractor shall furnish HART with current certificates of insurance completed by a duly authorized representative of the insurer evidencing coverage required under paragraph A. The initial certificates shall be delivered to HART prior to Contract execution and annually thereafter not less than ten (10) business days prior to the then expiration date of all such policies to evidence the renewal of the existing policy or the replacement of such policy with a new policy providing the same coverages.
2. Failure of HART to demand such certificate or other evidence of full compliance with these insurance requirements or failure of HART to identify a deficiency from evidence provided will not be construed as a waiver of the contractor's obligation to maintain such insurance.
3. HART's acceptance of delivery of any certificate of insurance evidencing the required coverages and limits does not constitute approval or agreement by HART that the insurance requirements have been met or that the insurance policies shown in the certificates of insurance are in compliance with the requirements.
4. HART has the right, but not the obligation, of prohibiting Contractor or any Subcontractor from entering the Project Site until HART receives all certificates or other evidence that insurance has been placed in full and complete compliance with these requirements.
5. If any of the coverages are required to remain in force after completion of the Work, Contractor shall submit an additional certificate of insurance evidencing continuation of such coverage with its final billing and at each subsequent renewal of Contractor's insurance.

(f) **Required Endorsements.** Except as provided below, the policies required under paragraph A of this Addendum shall be endorsed, in a form and manner acceptable to HART, providing as follows:

1. Except with regard to Professional Liability, and Workers' Compensation and Employer's Liability insurance, HART subsidiary and affiliated companies, and their Boards of Directors, officers, employees, representatives, consultants, and agent, Construction Manager and Construction Manager's subcontractors shall be named as additional insureds, but only with respect to liability arising out of the activities of the named insured. Such additional insured endorsement for Commercial General Liability and Excess/Umbrella coverages shall be equivalent to ISO form CG 20 10 , together with ISO form CG 20 37. The additional insured requirement for Commercial General Liability and Excess/Umbrella coverages is for the duration of the Contract and through the applicable Statute of Repose, or for an additional ten (10) years following completion of the Work, whichever is greater.
2. **Insurance Primary.** Each policy and additional insured coverages as required above, shall be primary and no other insurance or self-insured retention carried or held by HART shall be called upon to contribute to a loss covered by insurance for the named insured.

3. The Contractor's insurance carriers shall waive their rights of subrogation against HART, and HART's contractors, vendors and suppliers of all tiers, as described in Paragraph G of this Addendum.
4. **Declarations Pages Required.** Contractor or its insurance broker shall submit a copy of the Declarations page for each policy ten (10) business days prior to the commencement of work. The page shall include the name of the carrier, the policy number, the types of coverage and limits, the effective dates of the policy, and the broker's name and license number.
- (g) Certificates of Insurance and endorsements shall have clearly typed thereon "Honolulu Authority for Rapid Transportation" and title of Contract Documents (and, for All-Risk Equipment Insurance if procured on a per-project basis, project name). Contractor shall maintain insurance in full force and effect during entire period of performance of Contract Documents, and such additional periods as required in this Addendum. At time of making application for extension of time, and during all periods exceeding the Contract Time resulting from any cause, Contractor shall submit evidence that insurance policies will be in effect during requested additional period of time. Upon HART's request, Contractor shall submit to HART, within 10 business days, copies of the actual insurance policies or renewals or replacements.
- (h) **Joint Ventures.** If the Contractor is a joint venture involving two or more entities, each independent entity will satisfy the limits and coverages specified in this Addendum or the joint venture will be named insured under each policy specified.
- (i) **Waiver of Right to Recovery including Subrogation.** Contractor hereby waives all its rights of recovery, under subrogation or otherwise, against HART, its officers, agents and employees, and all tiers of contractors, vendors and suppliers engaged directly by HART with respect to the Project, to the extent covered by insurance required to be provided by Contractor and its Subcontractors of whatever tier under Paragraph A of this Addendum and further waives all rights of recovery which are not covered by insurance because of deductible or self insurance obligations relating to such insurance. These waivers do not apply to Contractor's rights of recovery against its own Subcontractors, vendors and suppliers of whatever tier, nor against HART's architects, engineers or other design professionals. Contractor will require all tiers of its Subcontractors, vendors and suppliers, by appropriate written agreements, to provide similar waivers each in favor of all parties enumerated in this paragraph. Contractor will require all insurance policies in any way related to the Work secured and maintained by the Contractor to include clauses stating each insurer will waive all rights of recovery consistent with this paragraph. All waivers of subrogation provided in this paragraph G of this Addendum shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in any property damaged.
- (j) **Cooperation:** Contractor shall fully cooperate, participate, and comply with all reasonable requirements and recommendations of the insurers and insurance brokers issuing or arranging for issuance of the required policies, in all areas of safety, insurance program administration, claim reporting and investigating, and audit procedures.

(k) **Self Insured Retentions:** None of the insurance required of this Addendum shall be subject to any self insured retention greater than \$250,000 without HART's prior written approval.

(l) Nothing in this Addendum shall be construed as limiting in any way the extent to which Contractor or any Subcontractor may be held responsible for payment of damages resulting from their operations. Contractor's obligations to procure insurance are separate and independent of, and shall not limit Contractor's contractual indemnity and defense obligations. HART affirmatively disclaims any representation or inference that the coverages and limits required in this Contract will necessarily be adequate to fully protect Contractor.

(m) Contractor shall by appropriate written agreements flow down the requirements to all tiers of Subcontractors for insurance required of such Subcontractors by Contractor for the Work as follows:

(1) workers' compensation/employers liability; commercial general liability; business auto liability; and umbrella/excess liability, as described in Sections 1 above (except that umbrella/excess minimum limits shall be \$5,000,000 per occurrence/aggregate;

(2) waiver of subrogation for all required insurance;

(3) additional insured coverage for all required insurance except workers' compensation.

(n) Contractor shall pay all insurance premiums, including any charges for required waivers of subrogation or the endorsement of additional insureds. If Contractor fails to maintain any of the insurance required under this Contract, HART may (but shall be under no obligation to) take out comparable insurance, and deduct and retain the amount of any premiums so paid by HART from any sums due Contractor under the Contract Documents. If the Aggregate Limits on any Contractor's insurance policy are no longer available, Contractor must notify HART and immediately, at Contractor's expense, purchase replacement coverage to meet insurance requirements as specified in this Addendum, or as may otherwise be agreed by HART in HART's sole and absolute discretion. The Contractor's failure to maintain the required insurance constitutes a Default under this Contract, and may result in a termination for such Default.

CHAPTER 5 –PAYMENT; FORCE ACCOUNT

5.1 Payment

(a) Payment to the Contractor under this Contract shall not exceed the Total Contract Amount as set forth in the Agreement. The Total Contract Amount shall be inclusive payment for all Work, including materials, equipment, labor and all other incidental work required for the complete construction and installation of the Work, all in accordance with the Contract. The Contractor's application for payment shall not exceed the Priced Value set forth in the Schedule of Pricing as further described in Section 7.6, Construction Progress Documentation, for completed Work and, as such, shall only be for Work performed in accordance with the specifications, terms, and conditions of the Contract and for which there is sufficient and/or required documentation.

- (1) The Total Contract Amount shall be paid the Contractor as full compensation for the satisfactory performance of Work in accordance with the Contract Documents. If an error, omission or misstatement shall be discovered in the quantities or measurements stated in the Contract, the same shall not vitiate the Contract, or release the Contractor or the surety or sureties from performing the Contract, or affect the price agreed to under the Contract, or excuse the Contractor from any of the obligations or liabilities under the Contract, or entitle the Contractor to damages or compensation, except as provided herein.
- (b) Contractor may not make an application or request for payment more than once a month.
- (c) Requests for payment must be complete and accurate before HART is obligated to make any payment under this Contract and shall include all submittals as required under the Contract, including the following documents:
- (1) An itemization of the amounts requested, related to the various elements of Work required by the Contract covered by the payment requested;
 - (2) A copy of the most current HART-approved Baseline Project Schedule, schedule updates, and Schedule of Pricing;
 - (3) A certification by the Contractor that all Work and materials for which the contractor is requesting payment has been incorporated into the Project and that this request for periodic payment does not include any amounts which the Contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.
 - (4) A release of all liens and claims from the Contractor relative to the Work, which is the subject of the pay application; and
 - (5) An updated monthly critical path method (CPM) schedule for the Project that shows:
 - (A) Any Contractor claimed event of delay;
 - (B) The impact of the event of delay on the critical path of the Project;
 - (C) The current revised critical path based upon the event of delay; and
 - (D) The planned mitigation to eliminate or minimize the impact of the delay.
 - (6) All required submittals, including those set forth in Section 7.6.1(C) and 7.23.
 - (7) If applicable, the Monthly Report on Contractor's Participation in Approved Apprenticeship Program Under Act 17 (Form 2).
- (d) In the event Contractor's request for payment is returned as incomplete or inaccurate, Contractor shall remedy the deficiency and re-submit a revised request for payment. HART's obligation to pay on the payment request shall only commence upon HART's receipt of a complete and accurate request for payment. Contractor shall not include the days lapsed due to the rejection of its incomplete or inaccurate payment request as a part of its calculations for late payment. Interest for late payment shall only accrue upon and subsequent to HART's receipt of a complete and accurate payment request.
- (e) HART shall deduct from periodic payments to the Contract for:
- (1) Any incomplete Work;

- (2) Any Work that does not meet specifications, terms and conditions of the Contract;
- (3) Unprotected Work; and
- (4) Any contingencies for remedy of defects or damage to the Work or for the necessity of performing any part of the Work over again to cure defects or damage.

(f) HART may at any time withhold payment, in whole or in part, if the Contractor fails to progress with the Work in accordance with Project Schedule and to such extent to protect itself from:

- (1) Liquidated damages and costs incurred by HART for extended construction administration;
- (2) Failure of the Contractor to provide any and all documents required to be provided by HART by the Contract Documents;
- (3) For reasons stated in Section 5.6 hereafter;
- (3) Overpayment made by HART.

(g) Refund of unearned amounts. If the Contractor, after making a request for periodic payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this Contract ("unearned amount"), the Contractor shall:

- (1) Notify the Contracting Officer of such performance deficiency; and
- (2) Be obligated to pay HART an amount (computed by the Contracting Officer in the manner provided in subparagraph (3) below) equal to interest on unearned amount from the 8th day after the date of receipt of the unearned amount until (A) the date the Contractor notifies the Officer-in-Charge that the performance deficiency has been corrected; or (B) the date the Contractor reduces the amount of any subsequent certified request for periodic payment by an amount equal to the unearned amount.
- (3) The interest on unearned amounts shall be: (A) the rate equal to the prime rate for the calendar quarter plus 2%, commencing on the date of Contractor's receipt of the unearned amount and ending on the day Contractor notifies the Contracting Officer that the performance deficiency has been cured or the date the unearned amount is deducted from a subsequent payment to the Contractor; and (B) deducted from the next available payment to the Contractor.

(h) Retention.

- (1) HART will withhold from the Contractor, as retainage, five percent (5%) of the total amount due the Contractor during the first 50% completion of the Contract. Upon 50% completion, Contractor shall demonstrate to HART's satisfaction that the first 50% of the Contract has been satisfactorily completed and, thus, no additional sum should be withheld, as retainage, for the remainder of the Contract. However, if the demonstration shows that the first 50% of the Contract was not satisfactorily completed, the Contracting Officer shall continue to withhold, as retainage, 5% of the total amount due the Contractor for the remainder of the Contract. Any and all retainage shall not be released until final acceptance of the Project.

(2) The retainage shall not include sums deducted as liquidated damages from moneys due or that may become due the Contractor under the contract.

(3) Contractor shall include in its subcontracts provisions that permit:

(A) The Contractor or subcontractor to retain, without cause, a specified percentage of no more than ten percent (10%) of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract (subject to subparagraph (5) below), without incurring any obligation to pay a late payment interest penalty, in accordance with the terms and conditions agreed to by the parties to the subcontract; and

(B) The Contractor and subcontractor to make a determination that part of all of the subcontractor's payment request may be withheld by the Contracting Officer in accordance with the subcontract agreement (subject to subparagraph (5) below), without incurring any obligation to pay interest or a late payment penalty if a written notice of any withholding is issued to a subcontractor, with a copy to the Contracting Officer, specifying the following:

(i) The amount to be withheld;

(ii) The specific causes for the withholding under the terms of the subcontract; and

(iii) The remedial actions to be taken by the subcontractor to receive payment of the amounts withheld.

(4) The Contractor may not request payment from the Contracting Officer of any amount withheld or retained in accordance with subparagraph (3) above until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to payment of such amount.

(5) Where a subcontractor has provided evidence to the Contractor of a valid performance and payment bonds executed by a surety company authorized to do business in the State of Hawaii, any other bond acceptable to the Contractor, or any other form of collateral acceptable to the Contractor, the retention amount withheld by the Contractor from its subcontractor shall not be more than the same percentage of retainage as that of the Contractor.

(6) Any retainage provided for in this Section or requested to be withheld by the Contractor shall be held by HART.

(7) A dispute between the Contractor and a subcontractor of any tier shall not constitute a dispute to which HART is a party, and there is no right of action against HART. HART may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(i) Federal Cost Principles; OMB Circular A-87: Costs submitted for payment must conform to FAR part 31 Federal cost principles and OMB Circular A-87 for allowable costs. Costs must be necessary and reasonable, allocable to the Project, authorized and not prohibited by Federal law or regulation. HART may impose more restrictive allowable criteria at HART's sole discretion.

5.2 Payment for Delivered Materials or Equipment

No payment for any material or equipment that is affixed, movable or removable, delivered to the site of the Work under the Contract will be made until said material or equipment is incorporated into the parts of the Project required to be constructed under

the Contract. Payment for the delivered material or equipment shall be included in the monthly progress payment under the appropriate cost item.

5.3 Final Payment

(a) Final Payment. After final acceptance by the Officer-in-Charge, the Contractor will be paid the balance due in accordance with the Officer-in-Charge's final estimate of the construction actually performed and approved by the Contractor, provided that final payment will be made only with the approval of the Chief Procurement Officer and upon submittal of the following to HART:

- (1) Written consent of the surety or sureties on the Contractor's bonds;
- (2) Release of all claims against HART arising by virtue of this Contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. (Contractor may attach Exhibit K ("Acknowledgment of Outstanding Claims"; see also Section 7.32, "Closeout Procedures."). A release may also be required of the assignee if the Contractor's claim to amounts payable under this Contract has been assigned.
- (3) Evidence of continuing insurance as required.
- (4) Tax clearance certificate from the director of taxation from the HART and the Internal Revenue Service, not over two months old, with original green certified copy stamp.

(b) Failure to Comply. If the Contractor delays or fails to comply with the requirements of this Section, the Chief Procurement Officer, upon recommendation of the Officer-in-Charge and without further obligation to the Contractor, may take any or all of the following actions:

- (1) Upon notice from the State Department of Taxation or Internal Revenue Service, assign payment to the appropriate tax agency.
- (2) Unilaterally, use the final payment estimate of the Officer-in-Charge as the final payment to the Contractor.
- (3) Determine the Contractor to be nonresponsible which may jeopardize the Contractor's future status as a qualified offeror.

(c) Upon final payment to the Contractor, full payment to all subcontractors shall be made. Contractor shall be in compliance with HRS Section 103-10.5, Prompt payment, for final payment to its subcontractors.

5.4 Bond Release.

Contractor's bond, if required, will not be released by final acceptance and payment by HART unless all claims for materials, supplies, tools, labor and other just claims against the Contractor or any subcontractor in connection with this Contract are paid or released, or so much of the monies due or to become due the Contractor under the Contract as shall be considered necessary by the Contracting Officer may be retained by HART. Should any suit or claim be filed against the Contractor, HART may, upon consultation with its Corporation Counsel, retain from any monies due to the Contractor such amount or amounts as may be deemed necessary by HART until such suits or claims have been finally settled and determined and upon satisfactory evidence of such settlement of such suits or claims the money retained shall be paid to the Contractor.

5.5 Payment Does Not Imply Acceptance of Work

The granting of any payment by HART, or the receipt thereof by the Contractor, shall in no way imply acceptance of work. The unsatisfactory character of such work, equipment, components or workmanship that does not conform to the requirements of this Agreement may be rejected by HART and in such case must be replaced by the Contractor without delay.

5.6 Authority to Withhold Money Due or Payable

(a) HART may withhold such amounts from the money due or to become payable under the Contract to the Contractor or any assignee (pursuant to Contractor's assignment of money), as may be necessary to:

- (1) Protect HART from any liability resulting from the Work performed under the Contract;
- (2) Satisfy any obligation of the Contractor to HART, the City, State Department of Taxation, Internal Revenue Service, or any other obligations required by law;
- (3) Satisfy the obligation of the Contractor to the workers, subcontractors, and supplies who have performed labor or furnished material and equipment under the Contract as the Chief Procurement Officer deems necessary, but only with the concurrence of or instructions from the Contractor's surety; or
- (4) Repair, restore, or compensate for any real or personal property located within the Project site or in the vicinity thereof, which was damaged as a result of the fault or negligence of the Contractor while performing the Work under this Contract.

(b) HART may make such payments from such amounts withheld for reason specified in subsection (a) hereinabove; provided that, before making any payment for damages to property described in subsection (a)(4), HART shall request the Contractor in writing to undertake the repair or restoration of the damaged property or make compensation therefore. If the Contractor fails or refuses to make such repair, restoration, or compensation to the satisfaction of HART within seven (7) days after notification by HART, the Chief Procurement Officer upon recommendation of the Officer-in-Charge and upon the Chief Procurement Officer's own findings that such recommendation is justified, may make the necessary payments.

5.7 Force account

Upon issuance of a written directive by HART to proceed with Work under force account, Contractor will provide services under force account until such time that (i) the parties have come to an agreement on the price and time adjustment, memorialized in writing and executed by the parties or (ii) a unilateral change order is issued by HART. Payment for work under force account shall be as follows:

(a) **Allowable Costs.** In force account, cost shall be the sum of the costs of the following:

- (1) Labor. The Contractor shall receive the current wage rate including fringe benefits for actual work engaged by the hourly worker and supervisor in charge of the specific force account work. Fringe benefits are required amounts established by the State Department of Labor and Industrial Relations, any collective bargaining agreement and other employment contract generally applicable to the classes of labor employed. The Contractor shall submit the fringe benefits for each class in writing to the Officer-in-Charge for acceptance before the force account work begins. The wages for labor shall not exceed the rate of wages paid for similar labor

performed under the contract, as evidenced by the record of the Contractor's payroll on file with the Officer-in-Charge.

For salaried workers, the Officer-in-Charge will determine the hourly wage rate by dividing the monthly salary plus benefits by one hundred seventy-six hours. The Officer-in-Charge shall authorize salary workers to perform the work.

For overtime work, payment will be for one and a half times the hourly wage rate plus the actual hours of overtime for fringe benefits, and/or as required by any collective bargaining agreement. For authorized salaried workers, payment will be for the hourly wage rate times the actual hours of overtime.

(2) Materials. The Contractor will receive the actual cost of materials accepted by the Officer-in-Charge and entering permanently into the work under the contract including transportation charges as shown by the invoices submitted to the Officer-in-Charge.

For stock materials, used and incorporated into the work, the Contractor shall receive the actual cost as certified by the Contractor to the cost paid by the Contractor. The Officer-in-Charge will include transportation charges and taxes paid by the Contractor.

(3) Machinery and equipment, other than small tools and minor equipment, which may be necessary or desirable to perform the work. The Officer-in-Charge may reject any machinery or equipment which the Officer-in-Charge deems unnecessary, inefficient or inadequate for the work to be performed. The term "small tools and minor equipment" shall include individual equipment or tools having a replacement value five hundred dollars or less, whether or not they are consumed in the use thereof.

(A) The rate shall be the per-hour rental rate based on the monthly rate established for said machinery or equipment in the then-current edition of the Rental Blue Book for Construction Equipment including the estimated operating cost per hour, and regional correction provided therein.

The hourly rate will be determined by dividing the monthly rate by one hundred and seventy-six. The rate includes the estimated operating cost per hour and the regional correction factor.

If no rate is listed for a particular kind, type or size of machinery or equipment, then the monthly, hourly rate shall be as agreed upon in writing by the Contractor and the Officer-in-Charge prior to the use of said machinery or equipment. The Contractor shall provide proof of the rental rates charged.

(B) For trucks not owned by the Contractor, rental rates as those established under the Hawaii State Public Utilities Commission will be used to determine the cost and will be paid for as a material item under paragraph (3).

(C) For Contractor-owned trucks not listed in the Rental Rate Blue Book, the rates shall be as agreed upon in writing by the Contractor and the Officer-in-Charge prior to the use of said trucks.

(D) Rental rates which are higher than those specified in the Rental Rate Blue Book may be allowed where such higher rate can be justified by job conditions such as work in water, on lava, etc. Request for higher rate shall be submitted in

writing to the Officer-in-Charge for approval prior to the use of the machinery or equipment in question.

(E) All rental rates for machinery and equipment shall include the cost of fuel, oil, lubricants, supplies, small tools, necessary attachments, repairs, maintenance, tire wear, depreciation, storage, and all other incidentals.

(F) Transportation and/or Mobilization

(i) The location from which the equipment is to be moved or transported shall be approved by the Officer-in-Charge.

(ii) Payment will be made for mobilizing and transporting the equipment or machinery to the force account work site, including loading and unloading, and back to its original location or other site, whichever cost is less. The cost of transportation shall not exceed the rates established by the Hawaii State Public Utilities Commission. If rates are nonexistent, then the rates will be determined by the Officer-in-Charge based upon the prevailing rates charged by established haulers within the locale.

(iii) Payment for self-propelled equipment or machinery will be for the cost of moving the equipment by its own power to the force account work site and back to the original location or other site, whichever cost is less.

(iv) When transporting equipment or machinery by other than its own power, payment shall be made for the transporter, if owned by the Contractor, at the hourly rate including the estimated operational rate and the applicable regional correction factor. Payment for the transporter, if not owned by the Contractor, shall be by invoice cost and paid for as a material item. Payment for the equipment or machinery shall be at the rate of "idle time" under (G).

(v) Payment for mobilization and transportation will not be made if the equipment or machinery is used on the work in any other way than upon extra work paid for under force account.

(G) Rental Period

(i) Idle Time. Idle time herein means the period in which the machinery or equipment designated for the specific force account work is not in use for the work. The time period shall be for a working day (8 hours). Payment shall be fifty per cent of the hourly rate excluding the estimated operational cost per hour per working day.

(ii) Standby Time. Standby time herein means the period in which the machinery or equipment are standing by for the specific force account work day. A work day shall not exceed eight hours (standby time plus the operating time) unless the Officer-in-Charge authorizes the overtime. Payment shall be at the hourly rate including the estimated operational cost per hour per working day.

(iii) The rental period shall begin at the time equipment reaches the site of work, shall include each day that the machinery or equipment is at the site of the work and shall terminate at the end of the day on which the Officer-in-Charge directs the discontinuance of the use of the machinery or equipment.

(iv) Less than thirty minutes of operation will be considered a half hour of operation.

(v) Rental time will not be allowed or credited for any day on which machinery or equipment is inoperative due to its breakdown. On such days, the Contractor will be paid only for the actual hours that the machinery or equipment was in operation.

(vi) When force account work is completed within less than 8 hours, payment shall be for actual time worked.

(vii) For the purpose of determining the rental period, the continuous and consecutive days shall be the normal 8-hour shift work day, Monday through Friday excluding Saturday, Sunday, and legal holidays. Any work day to be paid less than 8 hours shall not be considered as continuous, except for equipment removed from rental for fuel and lubrication.

(viii) Overtime shall be paid for each hour in excess of the normal 8-hour shift work day at the corresponding hourly rate for daily, weekly, and monthly rates.

(4) Overhead. All overhead, including but not limited to, State excise and use tax, unemployment taxes, social security and Medicare taxes, property damage insurance, liability insurance, workers compensation insurance, unemployment contributions, and bond fees are included in the allowances for all overhead as provided below.

(5) Determining Adjustments in Price. Adjustments under force account will be in accordance with HRS Section 103D-501(b)(5)(A) and (B). In determining the adjustment in price to the government resulting from a change under force account, the allowances for all overhead, extended overhead resulting from adjustments to contract time (including home office and branch office overhead) and profit ("overhead and profit"), which only apply to "work performed" and does not apply to purchase or rental of equipment (as set forth in previous provisions), shall not exceed the percentages set forth below:

(A) For the Contractor, for any work performed directly by the Contractor, twenty per cent (20%) of the actual cost; and

(B) For subcontractor's billing to the contractor, ten per cent (10%) for Contractor's overhead and profit.

(6) Payment for the above shall be deemed payment in full for work done under force account including superintendence, overhead, use of tools, machinery and equipment for which no rental is allowed, profit, taxes, subcontracting and other costs in connection therewith which are not provided for herein. No payment will be made until itemized records along with receipted invoices and appropriate documents have been submitted and approved.

(b) **Records.** The Contractor shall submit records of the above to the Officer-in-Charge at the end of each day on the "Daily Force Account Report" sheets (Form DF-49), Exhibit G. Such records submitted shall be subject to the approval of the Officer-in-Charge as evidenced by the Officer-in-Charge's signature thereon. The Contractor shall submit a statement covering the cost of all of the above items not later than the tenth day of the month following the month in which the costs were incurred.

Chapter 6 - Disputes and Remedies.

6.1 Dispute Resolution

(a) **Decision of the Officer-in-Charge.** Any question or dispute concerning any provision of the Contract, which may arise during the Contractor's performance shall be decided by the Officer-in-Charge; provided, that decisions on questions or disputes relating to default or termination of the Contract and claims greater than \$50,000 shall be made only with the approval of the Chief Procurement Officer.

(b) All controversies between the Officer-in-Charge and the Contractor which arise under, or are by virtue of, the Contract and which are not resolved by mutual agreement between the Officer-in-Charge and the Contractor, shall be decided by the Chief Procurement Officer in writing, within the time limitations below, after receipt of a written request from the Contractor for a final decision:

(1) For controversies or for claims not exceeding fifty thousand dollars: **ninety calendar days** after receipt of the claim.

(2) For claims exceeding fifty thousand dollars: **ninety calendar days** after receipt of the claim; provided that if a decision is not issued within ninety calendar days, the Contracting officer shall notify the Contractor of the time within which the Contracting Officer will make the decision. The reasonableness of this time period will depend on the size and complexity of the claim and the adequacy of the Contractor's supporting data and other relevant factors.

(3) If a decision on a controversy or a claim not exceeding fifty thousand dollars is not made within ninety calendar days after receipt, or if a decision is not made within the time promised for a claim in excess of fifty thousand dollars, the Contractor may proceed as if an adverse decision has been received.

(4) The amount determined payable pursuant to the decision, less any portion already paid, normally should be paid without awaiting Contractor action concerning appeal. Such payments shall be without prejudice to the rights of either party and where such payments are required to be returned by a subsequent decision, interest on such payments shall be paid at the statutory rate from the date of payment. [HAR 3-126-28]

(c) **Controversies involving HART claims against the Contractor.** All controversies involving claims asserted by HART against a Contractor which cannot be resolved by mutual agreement shall be the subject of a decision by the Contracting Officer or the Officer-in-Charge as applicable. [HAR 3-126-29]

(d) **Cost of dispute.** The Contractor shall pay to HART the amount of the HART's costs to enforce the contract, including but not limited to amounts for attorneys' fees, consultants' fees and expenses.

(e) **Decision.** The Contracting Officer shall immediately furnish a copy of the decision to the Contractor, by certified mail, return receipt requested, or by any other method that provides evidence of receipt. Any such decision shall be final and conclusive, unless fraudulent, or unless the Contractor brings an action seeking judicial review of the decision in a circuit court of this State **within the six months** from the date of receipt of the decision.

(1) The Contractor shall comply with any decision of the Officer-in-Charge and Chief Procurement Officer and proceed diligently with performance of the contract pending final resolution by a circuit court of this State of any controversy arising under, or by virtue of, the contract, except where there has been a material breach of contract by HART; provided that in any event the Contractor shall proceed

diligently with the performance of the contract where the Contracting Officer has made a written determination that continuation of work under the contract is essential to the public health and safety. [Chapter 3-126, subchapter 3, HAR]

**Chapter 7 – Commencement and General Performance Requirements for Construction
(see attached)**

SECTION 7.1

GENERAL

7.1.1 Time is of the Essence

- A. Time is of the essence, and the Contractor shall diligently perform and complete the Work in accordance with and within the time specified in the Contract.

7.1.2 Commencement Requirements

- A. Notice to Proceed. Upon execution of the Contract by the Contracting Officer, the Officer-in-Charge may schedule a pre-work conference and/or issue a Notice to Proceed (NTP) to the Contractor designating the official commencement date for performance of the Contract. Unless otherwise specified in the solicitation document, the NTP shall be issued within 90 days after execution of the Contract by the parties, unless a later date is agreed to by mutual agreement.
- B. Commencement of Work. The Contractor shall not proceed with any part of the Contract at the project site and no performance on any work, including purchase of equipment or materials, will be allowed until: (1) the date stipulated in the NTP or (2) upon earlier written notice from HART.

7.1.3 Standard Equipment

- A. Whenever the word "standard" is used in the Contract to describe any item, piece of equipment, or parts assembly, it shall be construed to mean that the items or assemblies so described shall be the newest, regular, and current product of the manufacturer thereof. Such product shall be identified by a model or other designation without modification or omission of any of its usual parts, or the substitution of others, except as hereinafter specified, and the details, capacities and ratings must conform in every respect to the said manufacturer's catalog or other printed matter describing the items or assemblies. Standard sub-assemblies, accessories, fittings and finishes shall be construed to be those which are regularly furnished as a part of the principal unit or assembly and shall be included in the selling price thereof.

7.1.4 Quality of Goods

- A. Unless otherwise specified, any goods required by the bid solicitation or contract shall be new and the best quality of its kind, and shall be goods of recognized manufacturers, unless otherwise specified in the Special Provisions, Specifications, or other section of the contract.

7.1.6 Free on Board (F.O.B.) Destination

- A. Unless otherwise specified, offer and contract prices shall be based on delivery f.o.b. place of destination and shall include all freight, handling, delivery, and related charges.

7.1.7 Subcontracting; Specialty Work

- A. Subcontractual Relations. The Contractor shall be responsible under the contract for the acts and omissions of its subcontractors, suppliers, and persons either directly or indirectly employed by them, as fully as the Contractor is for acts and omissions of its own employees. Nothing in the contract shall create any contractual relation between any subcontractor or supplier and HART, or any obligation on the part of HART to pay any money to, or cause to be paid any money from any subcontractor or supplier.

- B. Changes. Except as provided for in the final Proposal or bid as accepted by HART, the Contractor shall not sublet or replace its subcontractors any of the Work to be performed without written permission from the Contracting Officer. The subcontracting shall not, under any circumstances, relieve the Contractor of the Contractor's obligation and liability under the Contract with HART. All persons engaged in performing the Work covered by the Contract shall be considered as agents of the Contractor, and shall be subject to the provisions thereof.
- C. Specialty Work. Joint contractors and subcontractors may perform only the specialty work for which they are listed.

7.1.8 Permits, Licenses

- A. The Contractor shall obtain all necessary permits and licenses, pay all charges, fees, and taxes, give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified. These may include, but not be limited to, demolition permit, building permit, dumping charges, grading permit, excavation permit, traffic permit, community noise permit, City park right-of-entry permit, National Pollutant Discharge Elimination System (NPDES) permit and compliance with Rodent Control Requirements on Demolition of Structures and Clearing of Sites and Vacant Lots. All City building and grading permit fees are waived for the contract. All cost and work under this subsection shall not be paid for directly but shall be considered incidental and included in the Offeror's Proposal prices for the various items of work.
- B. Contractor represents that the Contractor is a business entity which is experienced and skilled in the construction of projects of the type described in the Contract and that the Contractor is licensed by the State of Hawaii to engage in the type of construction required by the Contract and is in compliance with all applicable laws and regulations.

7.1.9 Access and Inspection

- A. Circumstances under which HART may perform inspections include but are not limited to, inspections of the Contractor's, its subcontractor's, or supplier's plant, or site of the project in order to determine: [HAR 3-122-166]
 1. whether the Contractor has or is maintaining the financial ability, resources, skills, capability, and business integrity necessary to perform the work;
 2. whether the Contract is being performed in accordance within its terms;
 3. whether the goods or services are acceptable by inspection of the goods or services;
 4. whether the cost or pricing data and the Escrowed Bid or Proposal Documents by audit of its books and records pursuant to section 3-122-175, HAR, is accurate;
 5. whether the **Best Management Practices Plan** is being followed;
 6. whether Contractor is in compliance with all applicable consent decrees; or
 7. whether or not to debar or suspend a person from consideration for award of contracts pursuant to sections 3-126-11 through 3-126-18, HAR.

Comment [NRC1]:

7.1.10 Value Engineering Incentive.

- A. The Contractor may develop and submit value engineering change proposals for drawings, designs, specifications, or other requirements of the contract in accordance with HAR 3-132-1 et seq.. If any proposal is accepted and approved, in whole or in part,

by the Officer-in-Charge, the contract shall be modified and shall include an equitable adjustment of the contract price in accordance with this section.

- B. This section shall not apply to any cost reduction proposal that is not identified as a value engineering change proposal by the contractor at the time of its submission to the Officer-in-Charge.

7.1.11 Guarantee.

- A. This guarantee shall be deemed supplemental to guarantee provisions provided in other sections of the specifications for the individual units and systems of units so specified.
- B. Performance. The Contractor guarantees that its performance and the performance of its subcontractors conforms to the specifications and standards of the Contract.
- C. Materials and Equipment. The Contractor also guarantees all materials and equipment furnished or installed under the contract against defects and poor workmanship and to be in operable condition upon final acceptance of the work or portions of the work, and that all such materials and equipment conform to the requirements of this contract and be fit for the use intended.
- D. Design. When the Contractor is providing design services under the contract, the Contractor guarantees the design to meet the criteria and operating requirements specified and against failure to perform in accordance with such criteria and operating requirements.
- E. Guarantee Period. Unless otherwise specifically stated elsewhere in the Contract Documents that a longer period is intended, the guarantee shall extend for a period of one year upon final acceptance of the work by the Officer-in-Charge and shall include all labor, materials, equipment and parts. This period shall be extended from the time of correction of any defect or failure, corrected under the terms of this guarantee, for a like period of one year. The Contractor shall provide a new certificate of guarantee for the extended one-year period. Establishment of the time period of one year as described relates only to the specific obligation of the Contractor to correct work, and has no relationship to the time within which the obligation to comply with the contract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct work.
- F. Correction. The Contractor shall correct all defects or failures discovered within the guarantee period. HART will give the Contractor prompt written notice of such defects or failures following their discovery. The Contractor shall commence corrective work within seven days following notification and shall diligently prosecute such work to completion. The Contractor shall bear all costs of corrective work, which shall include necessary disassembly, transportation, reassembly and retesting, as well as repair or replacement of the defective materials or equipment and any necessary disassembly and reassembly of adjacent work.
- G. Noncompliance. If the Contractor fails to perform corrective work in the manner and within the time stated, HART may proceed to have such work performed at the Contractor's expense, and the Contractor's sureties will be liable therefore. HART shall be entitled to reasonable attorneys' fees, consultants' fees and costs necessarily incurred by the Contractor's refusal to complete the contract and to pay such costs of corrective work.

- H. Performance Bond. Unless otherwise specifically stated elsewhere in the Contract Documents that a longer period is intended, the performance bond shall be in full force and effect for the duration of the contract and for a period of one year after final acceptance of the contract by the Officer-in-Charge.
- I. Rights and Remedies. The rights and remedies of HART under this provision do not preclude the exercise of any other rights or remedies provided by this contract or by law with respect to unsatisfactory work performed by the Contractor.

END OF SECTION

SECTION 7.2

INTERFACE CONTROL

7.2.1 DEFINITIONS

A. The terms used herein shall mean the following:

“Interface” – Performance, functional, and physical attributes required to exist at a common boundary.

“Interface Control” – Process of identifying, documenting, and controlling all performance, functional, and physical attributes relevant to the interfacing sites, products, or systems.

“Interface Control Manual (ICM)” – Interface control and tracking document prepared and maintained by the Contractor to describe and define responsibilities of interfaces with other H RTP contractors and external parties.

“Interface Control Document (ICD)” – The list of documents prepared by the Contractor relating to project interfaces and interfacing parties, which includes interface control drawings, specifications, shop drawings, design standards, tolerances, procedures, Request for Interface Data (RFID), or any other documentation that identify interfaces of related or co-functioning products signed by the interfacing parties when each party has agreed that interface details are acceptable to all parties involved. Proper revision numbers/letters and dates shall be shown.

“Interface Definition Meeting (IDM)” – A meeting between two or more interfacing contractors for the purpose of defining and agreeing to the scope of work for the interface.

“Request for Interface Data (RFID)” – A document within the CMS that enables an interfacing contractor to list and identify interfaces and share information with another interfacing contractor.

7.2.2 INTERFACE CONTROL MANUAL

A. Contractor shall submit its Interface Control Manual (ICM) as further described herein within 60 days after issuance of a Notice to Proceed (NTP). The ICM shall consist of five general sections:

1. General Information: Include a list of interfacing contractors and brief description of each of their roles. Show milestones on the Critical Path Method schedule that are tied to an interface.
2. Interface Matrix
3. Interface Control Documents (ICD)
4. Record of Action Items: Include documentation of all action items discussed during the Interface Definition Meetings (IDMs). The action item numbering format for an interface shall be as follows: Construction Phase, Interface Relationship, Meeting Number, Interface Number, and Action Item Number.
5. Include copies or links to each component of the ICD listed herein.

B. The ICM shall provide a detailed description of the interfaces and integration of work between the Contractor and other HART contractors as they pertain to procurement of equipment and materials, construction, and testing/turnover. The ICM shall confirm that

all facilities and systems interfaced with other interfacing contractors are constructed to comprise a fully integrated, automated rail system. The ICM shall contain the Interface Matrix. The ICM documentation will continue to the end of construction.

- C. The Interface Matrix shall list all interfaces identified in the Work. Contractor may request to review existing documents relating to interface, including the Project Interface Control Manual, which is the consolidation of ICM information provided by other HART contractors. However, Contractor must do its own investigation and the current nature of the interfaces. Contractor may also request to review previously generated Request for Interface Data (RFID) and ICDs. The Interface Matrix shall be updated when new interfaces are identified. The Interface Matrix shall include:
 - 1. The agreed interface arrangement (such as configuration, physical element, power supply, and other factors);
 - 2. The proposed method and schedule for verifying the interfaces;
 - 3. Current status of each interface (Open, Agreed, Resolved, Closed, Elevated – Under Review by HART);
 - 4. Open action items;
 - 5. Acting managers for actions they are accountable for completion.
- D. The ICDs shall be submitted as a part of the Project Record Documents (see Section 7.34 of the General Conditions). The listed documents shall represent the whole and complete integration for proper installation, form, and function of the interface.
- E. Contractor shall resolve all interface issues arising out of its Contract and provide documentation of the resolution.

7.2.3 INTERFACE MANAGEMENT AND COORDINATION PROCESS DURING CONSTRUCTION

- A. A Contractor Interface Manager (CIM) shall be assigned to manage and coordinate the interface process during construction. See Section 7.5, Character of Workers and Key Personnel for qualification requirements.
- B. Contractor shall participate in IDMs to identify and resolve interface issues and confirm the ICD details, including schedule, construction sequencing, site access, and safety-related items.
- C. Contractor shall provide IDM minutes and distribute to all invitees for comment within 24 hours after each meeting is held. Contractor shall post to the interface module of CMS within 72 hours after each meeting is held.
- D. If the Contractor encounters an interface conflict, Contractor shall notify HART immediately.
- E. If the Contractor fails to provide necessary interface information or coordination, or if such information provided by the Contractor is incorrect or subsequently changed by the Contractor and not coordinated, communicated, or interfaced accordingly, the Contractor shall be responsible for the cost of all facility and equipment redesign and rework, whether the impacted facility and equipment are the responsibility of the Contractor or others. The Contractor shall be responsible for the cost of any delay to others due to Contractor delay in furnishing or requesting interface information from other interfacing

contractors for which the Contractor is responsible. Contractor shall immediately notify HART if any interface information changes or is found to be incorrect.

END OF SECTION

SECTION 7.3

PROJECT UTILITY SOURCES; INCIDENTAL UTILITY WORK

7.3.1 CONTRACTOR'S DUTY TO LOCATE AND PROTECT UTILITY

- A. Before beginning any Work at the worksite, Contractor shall research, ascertain, and identify the exact horizontal location and depth of all utilities within the Project area where a conflict could occur with the proposed Work. The Contractor may probe for utilities at critical locations upon notifying HART prior to commencement of the probe. The Contractor may utilize the One-Call Center system, use electromagnetic locating systems, ground penetrating radar systems, or other utility locating systems, or research as-built information from the utility companies/agencies and other development/Project plans to obtain the utility information. The location of existing utilities shown on the plans is approximate and does not accurately reflect all the utilities. It is the responsibility of the Contractor to thoroughly research and obtain information regarding placement of utilities. All potential conflicting utilities shall be identified within one month of issuance of the Notice to Proceed (NTP).
- B. Contractor shall inform all personnel working near utilities with the type, size, location, and depth of the utilities, as well as the consequences that might result from disturbances. Contractor shall have Protection in Place to protect the utilities and prevent service disruption.
- C. The Contractor shall be responsible for the protection of existing surface and subsurface utilities within and abutting the Project site that the Contractor encounters during the progress of the Work, such as telephone system, electric system, water system, sewer system, drainage system, gas system, cable system, and irrigation system, whether or not shown on the plans. Such utilities shall not be disturbed or damaged, unless otherwise instructed in the Plans and Contract Specifications. Whenever the Contractor damages a utility or causes any interruption to any utility service, the Contractor shall promptly notify HART, the affected utility owner, and the appropriate governmental authorities. The Contractor shall be responsible for the safety and protection of the public and the utility. Contractor shall cooperate with the affected utility owner and the appropriate governmental authorities in the restoration of service. The Contractor shall be responsible for all costs associated with the repair and restoration of service at no increase in Contract price or Contract time. Compensation to the utility company/agency for any repair work shall be made directly between the Contractor and the utility company/agency. The Contractor shall save harmless HART from all suits, actions or claims of any character brought on the account of Contractor damage to the utilities.
- D. All incidental utility work shall be the responsibility of the Contractor and inclusive of the Work to be provided under the Contract.
- E. Damage to Sewer Facility. The Contractor shall notify the Officer-in-Charge and the Department of Environmental Services Collection System Maintenance Division immediately whenever a sewer facility is damaged. All costs incurred by HART caused by Contractor-related damages, such as sewer backups, spills, overflows, shall be billed to and paid by the Contractor. Any subsequent fines, imposed upon HART by the Environmental Protection Agency (EPA) and/or HART Department of Health will be billed to and paid by the Contractor.

7.3.2 CONTRACTOR'S DUTY TO COORDINATE UTILITY WORK

- A. Contractor shall contact and cooperate with each affected utility owner in order for the Work to progress on schedule and without unreasonable disruption of such utility services. If the Work calls for permanent utility service installations or corrections to, or modifications of existing utilities, Contractor shall schedule and coordinate such work with appropriate utility owners. If the Work required by the Contract Documents conflicts with the instructions, demands, or requirements of a utility owner, Contractor shall notify HART immediately. Contractor shall furnish HART with evidence that the Contractor has provided all relevant utility owners reasonable opportunity to review the drawings.
- B. When HART has a separate agreement with utility owners for work to be performed within the Site, Contractor shall coordinate the construction schedule and interfaces with the utility owners and make available all portions of the Work and the site necessary for the utility owners to do their work.
- C. The Contractor may relocate or adjust the utility lines or the service connections for its convenience with the permission of the owner of the utility and HART at no increase in Contract price or Contract time.

END OF SECTION

SECTION 7.4

ESCROWED BID or PROPOSAL DOCUMENTS

7.4.1 GENERAL

- A. Contractor shall have, in escrow, the Escrowed Proposal Documents (EPD) prior to or at the time of submission of its Price Proposal.
- B. Upon Award of the Contract, designated representatives of HART and the Contractor shall jointly retrieve the EPD from the designated escrow agent, and shall deliver to HART one copy of the EPD, which shall be held in a locked fireproof cabinet located in HART's offices, with the key held only by the Contractor. Concurrently with submission of quotations or revisions to quotations provided in connection with formally proposed amendments to this Contract and concurrently with approval of each Change Order, if appropriate, one copy of all documentary information used in preparation of the quotation or Change Order shall be added to the cabinet to be held with the original EPD. The EPD shall be held in such cabinet until all of the following have occurred:
 - 1. One hundred eighty days have elapsed from Final Acceptance or termination of the Work, as applicable;
 - 2. All disputes regarding this Contract have been settled; and
 - 3. Final payment on this Contract has been made by HART and accepted by the Contractor.

7.4.2 CONTENTS OF THE ESCROWED PROPOSAL DOCUMENTS

- A. The EPD shall be detailed and complete, including necessary information from its subcontractors and vendors, such that, in the event of a change order, requests for price adjustment, review of claims, or dispute resolution, the EPD shall be sufficient and complete to assess and justify the charges made on the change order, request for price adjustment and/or the claims. The cost basis for Contractor's Price Proposal shall be apparent when reviewing the EPD.
- B. The EPD shall clearly itemize the estimated costs of materials, equipment, and performing the Work required by the Contract Documents. All Work shall be separated into sub-items as required to present a complete and detailed estimate of all costs. Crew, equipment, quantities, and rates of production shall be detailed. Estimates of costs shall be further divided into the Contractor's usual cost categories, such as direct labor, repair labor, equipment ownership and operation, expendable material, permanent material, and subcontract costs, as appropriate. Plant and equipment and indirect costs shall also be detailed in the Contractor's usual format. The Contractor's allocation of plant and equipment, indirect costs, contingencies, markup, and other items to each direct cost item shall be clearly identified. The EPD shall include all assumptions, quantity takeoffs, rates of production and progress calculations, quotes from subcontractors and suppliers, memoranda, narratives, and all other information used by the Contractor to arrive at Bid or Proposal price or Change Order price, as applicable.
- C. In the event it is discovered upon review of the EPD that the EPD is not reasonably complete, this shall be deemed a breach of good faith performance of the Contract, resulting in great difficulty for HART to assess the change order, request for price adjustment, and claims. In such an event, HART's independent cost estimate shall prevail, and in entering this Agreement, Contractor has agreed to this arrangement, recognizing that the predicament has resulted from the Contractor's failure to provide the

necessary information required in the EPD. Should the Contractor dispute the use of HART's independent cost estimate, Contractor shall be responsible for all billable time expended in resolving the dispute, including time spent by HART staff, HART's consultants, and HART's attorney's fees and costs.

7.4.3 AVAILABILITY FOR REVIEW

- A. The EPD shall be available during business hours for joint review by the Contractor and HART, in connection with review changes in the Baseline Project Schedule, negotiations of price adjustments and Change Orders, and the resolution of disputes. HART shall be entitled to review all or any part of the EPD in order to satisfy itself regarding the applicability of the individual documents to the matter at issue. HART shall be entitled to make and retain copies of such documents as it deems appropriate in connection with any such matters, provided that HART has executed and delivered to the Contractor a confidentiality agreement specifying that the EPD will be kept confidential; that copies of such documents will not be distributed to any third parties other than HART's agents, attorneys, and experts, and other dispute resolvers hereunder; and that all copies of such documents (other than those delivered to the dispute resolvers) will be either destroyed or returned to the locked cabinet upon final resolution of the negotiations or disputes. The foregoing shall in no way be deemed a limitation on HART's discovery rights with respect to such documents.

7.4.4 PROPRIETARY INFORMATION

- A. The EPD shall be labeled "CONFIDENTIAL." The EPD is, and shall always remain, the property of the Contractor, subject to HART's right to review the EPD as provided herein. HART acknowledges that the Contractor may consider that the EPD constitutes trade secrets or proprietary information. This acknowledgment is based upon HART's understanding that the information contained in the EPD is not known outside the Contractor's business. The EPD will at all times be treated as proprietary and confidential information and will be used only for the purposes described herein.

7.4.5 REPRESENTATION

- A. The Contractor represents and warrants that the EPD provided with the Proposal constitutes all of the information used in the preparation of its Proposal and agrees that the information contained in the EPD shall be utilized in resolving disputes or claims. The Contractor also agrees that the EPD is not part of the Contract and that nothing in the EPD shall change or modify the Contract.
- B. The Contractor shall have no right to add documents to the EPD, except upon HART's request.

END OF SECTION

SECTION 7.5

CHARACTER OF WORKERS AND KEY PERSONNEL

7.5.1 USE OF QUALIFIED WORKERS

- A. **Skilled Workers:** Contractor shall employ only persons who possess sufficient skill and experience required to properly perform the Contract Work assigned to them. When required by HART, whose decision is final, Contractor shall replace any worker or employee who lacks the skill to perform the Work assigned to the worker or employee or is discourteous or disorderly while performing such Work. If acceptable to HART, a person who has been replaced may be assigned other Work on the Project. Any such acceptance by HART does not relieve the Contractor from performing the Work in accordance with the Contract and taking full responsibility of all actions by its workers or employees.
- B. **Specialized Workers:** All Workers engaged in special work or skilled work, such as bituminous courses or mixtures, concrete pavement or structures, electrical installation, plumbing installation, or in any trade, shall have sufficient experience in such work and in the operation of the equipment required to properly and satisfactorily perform all the Work. All Workers shall make due and proper effort to execute the Work in the manner prescribed in the Contract Documents.
- C. **Insufficient Workers:** Should HART find that the Work is not on schedule, the Contractor shall adjust its resources to bring the Work back on schedule at no additional cost to HART.

7.5.2 KEY PERSONNEL

- A. Contractor shall provide key personnel to fulfill the requirements of the Contract. Such personnel identified in the Contract Documents shall be dedicated to fulfill all Contract obligations.
- B. **Project Manager and Project Quality Manager:**
 - 1. The Project Manager shall serve as the Contractor's representative and single point of contact for the duration of the Project.
 - 2. The Project Quality Manager shall interface and coordinate with HART and provide independent Quality Assurance/Quality Control services as set forth in the Contract.
 - 3. Project Manager and Project Quality Manager shall be located on or near the Project site for the duration of the Project. In addition to the Project Manager and Project Quality Manager, HART may identify other persons as key personnel at no additional cost to the Contract.
 - 4. **Temporary Absence of Project Manager or Project Quality Manager:** If the Project Manager or the Project Quality Manager is to be absent from the Project site for more than 48 hours, HART shall be informed in writing in advance of the person temporarily substituting for either of these two key persons.
- C. **Personnel Directory:** Within 15 days after NTP, Contractor shall submit to HART a directory and organizational chart showing all key personnel. The directory shall be updated throughout the Contract as changes occur. The directory shall include the names, titles, areas of responsibility, office address, office telephone, fax numbers, and cellular and/or pager numbers of key personnel. Contractor must provide information

that will enable HART to contact any of the key personnel on a 24-hour basis during Contract duration. The directory shall be incorporated into the Quality Assurance Plan.

- D. **Substitution of Key Personnel:** Contractor shall not permanently substitute key personnel. Notwithstanding the procedures set out herein, HART will have no obligation to consider or approve a request to substitute, but may, at its sole discretion, do so.
1. Proposed Replacements: If Contractor must add, delete, or substitute any key personnel or a major subcontractor, Contractor shall submit to HART, for approval, a request at least 30 days in advance of any desired replacement.
 2. Contractor shall submit with any request for substitution:
 - a. Name and qualifications of the proposed replacement key personnel or major subcontractor;
 - b. The same selection evaluation information as was specified for in the solicitation; and
 - c. Reason for the proposed change.
 3. HART Written Consent Required: If HART elects to consider the request, HART, in its sole discretion, will determine whether the proposed substitute is appropriately qualified or otherwise acceptable. Any authorization will be in writing. A no-response by HART shall be deemed as HART's election not to consider the request.
 4. HART shall in no way be held responsible for non-acceptance of a substitution of key personnel. In the event of an authorized substitution, Contractor shall be liable for all cost increases to the project caused by the replacement of the key personnel.
- E. The key personnel positions are as follows:
1. Project Principal
 2. Project Manager
 3. Quality Manager: Shall be a Hawaii-registered professional engineer and have a minimum of five years or experience in Quality Assurance/Quality Control activities, including preparation and implementation of Quality Plans and procedures for construction. Should have demonstrated experience on construction projects of similar size, and complexity, and challenges as this Project.
 4. Construction Manager
 5. Safety and Security Specialist: The Contractor Safety and Security Specialist shall be a full-time professional who is at the Work site whenever Work or testing is being performed and who shall conduct and document daily safety inspections. The Safety and Security Specialist shall have no other duties than occupational safety, health and security management, inspections, and enforcement of the Contract. The Safety and Security Specialist is responsible, at minimum, to perform for occupational safety, health and security management, surveillance, safety inspections, and enforcement for the Contractor. The Contractor Safety and Security Specialist shall:
 - a. Report to corporate management or the senior management person on the Contract Project and not to subordinates or line supervisors;
 - b. Have a minimum of five years of construction safety experience;

- c. Have a minimum of five years of experience implementing OSHA programs for construction projects of similar size and scope and as a roadway (highway) safety technician or supervisor;
 - d. Make best efforts to obtain the following certifications, although not required: Certified Safety Professional (CSP), Construction Health and Safety Technician (CHST), Certified Industrial Hygienist (CIH);
 - e. Shall be a Work Zone Safety Supervisor as certified by the American Traffic Safety Service Association or any HART or firm certification program approved by the HART;
 - f. Provide documentation showing completion of the 30-hour OSHA Construction Outreach Course within the past three years of application as key personnel;
 - g. Have completed a 30-hour OSHA course on Construction Safety and Health;
 - h. Have attended Competent Person Level training in fall protection, excavation and trenching, confined space, rigging and hand signaling for cranes within the past five years of application as key personnel.
 - i. Provide documentation showing current certification in CPR and Standard First Aid;
 - j. Be familiar with the Work being performed and be competent to instruct others;
 - k. Be knowledgeable with the Contractor's CHASP and SSSP and be responsible for the management and implementation of the SSSP as required by the CSSP.
 - l. Shall manage and oversee Contractor's compliance with the Project Safety and Security Certification Program. Shall ensure the completion of the Contractor's activities for achieving safety and security certification for all identified certifiable elements and manage the required documentation management system.
 - m. Shall have a minimum of five years experience working with transit safety and security certification programs.
6. Environmental Compliance Manager: Shall have demonstrated experience related to environmental compliance monitoring and reporting during construction and post-construction activities and have experience preparing and reviewing pre-construction assessments. Should have experience with rail transit and aerial structure engineering drawings and concepts and experience working cooperatively and effectively with construction staff. Should have experience with Pacific Island environmental issues including experience in wetland and riparian restoration with plants native to Hawaii.
7. Contractor Interface Manager (CIM): The systems to fixed facilities interface are critical to the performance of the Work. As such, Contractor shall provide a Contractor Interface Manager (CIM) with a minimum of five years of experience on rail transit projects. In addition, the CIM for this Project shall collaborate and coordinate on a weekly basis in support of other on-going and future contracts, specifically the Core Systems system-wide contract. The CIM shall maintain communication, collaboration, and coordination with all other HRTTP contracts.
8. Public Involvement Manager: Shall have at least five years experience planning, organizing, developing, and implementing public/community outreach and information programs. In serving as liaison between the public and governmental

agencies, should have skills in listening and responding to community concerns and questions and using tact and diplomacy in dealing with sensitive situations and upset individuals is desirable. Should have knowledge, skills, and abilities in:

- a. Addressing issues of public concern and conflict;
 - b. Developing materials such as news releases, fact sheets, flyers for both community and media audiences;
 - c. Public notification and record keeping protocols; and
 - d. Technical knowledge of construction projects.
9. Project Controls Manager: Shall have demonstrated experience in project controls for projects with similar scope, and complexity, and challenges to as this project.
10. Scheduler: Shall have demonstrated experience in project scheduling and experience in Primavera or similar contracts management software for projects with similar scope, complexity and challenges.

END OF SECTION

SECTION 7.6

CONSTRUCTION PROGRESS DOCUMENTATION

7.6.1 BASELINE PROJECT SCHEDULE (BPS); CRITICAL METHOD PLAN SCHEDULE

- A. Baseline Project Schedule (BPS): Contractor shall develop and maintain a resource/cost-loaded Baseline Project Schedule (BPS) within 30 days after the Notice to Proceed to effectively manage and control the performance of the Work. The BPS shall represent the Contractor's plan to complete the Work within the Contract time. The Baseline Project Schedule shall logically incorporate all construction activities for the entire Project under this Contract. In addition to the logical construction activities, the Project Schedule shall also include the times for procuring materials and equipment, Contractor quality control and construction, acceptance testing and training. If any construction activity requires HART acceptance, that submittal review time shall be included in the Project Schedule. Other requirements of the BPS are as follows:
1. The cost-loaded BPS will provide the basis for periodic payments and will include:
 - a. Costs for material/equipment paid for after installation, labor and construction equipment assigned to their respective Construction Activities (see "Activity Categories/Construction Activities" below).
 - b. The value of inspection/testing activities shall not be less than 10% of the total costs for Procurement and Construction Activities (see "Activity Categories" below).
 - c. Contractor's overhead and profit to each activity shall be evenly dispersed over the duration of the Project.
 - d. Each cost loaded activity shall have a detailed quantity breakdown and unit of measure.
 2. The BPS shall include required milestones.
 3. HART's Work Breakdown Schedule (WBS) shall be incorporated into the BPS.
 4. The Critical Path Method (CPM) schedule shall be extracted and provided, identifying the BPS critical path and longest path.
 5. The Contractor shall provide a time-scaled logic diagram printed in color on ANSI D size sheets. The diagram shall clearly show activities on the critical path, including the following for each activity:
 - a. Activity ID;
 - b. Activity Description;
 - c. Original Duration in Work Days;
 - d. Remaining Duration;
 - e. Percent Complete;
 - f. Early Start Date;
 - g. Early Finish Date;
 - h. Total Float.

6. The following contract milestones, at minimum, shall be included:
 - a. Project Start Date Milestone: The first activity on the schedule is "Contract Execution," which shall have a mandatory start constraint equal to the Contract Execution Date; that is, it shall indicate the Contract Execution Date.
 - b. Projected Substantial Completion Milestone: The BPS shall include an unconstrained finish milestone entitled, "Projected Substantial Completion." Final Acceptance and Contract Completion Date milestone is the its only successor.
 - c. Final Acceptance and Contract Completion Date Milestone: The last activity on the BPS shall be entitled "Final Acceptance/Contract Completion," which shall have a mandatory finish constraint equal to the current Contract Completion Date. Calculation of schedule updates shall be such that if the finish of the "Substantial Completion Milestone" falls after the indicated Contract Completion Date, then negative float will be calculated on the longest path and if the finish of the Substantial Completion Milestone falls before the Contract Completion Date, the float calculation shall reflect positive float on the longest path.
7. The Activity Categories and Activity Codes as described below shall be included in the BPS.

B. Schedule Acceptance Prior to Start of Work:

1. Contractor shall schedule a preliminary meeting after contract execution to discuss the proposed schedule and requirements prior to Contractor preparing the BPS.
2. HART's review and comments to the Contractor's BPS shall not relieve the Contractor from compliance with requirements of the Contract. Submittal of an "early completion" schedule will not obligate HART for delay damages resulting from an event that delays the "early completion" but does not delay the Contract completion date.
3. Contractor's submittal of an acceptable BPS shall be a condition precedent to starting construction Work under the Contract and processing Contractor's pay request for activities of items of Work.
4. Submittal of the BPS and subsequent updated schedules shall be understood to be the Contractor's certification that the submitted schedule meets all of the requirements of the Contract, represents the Contractor's plan on how the Work shall be accomplished, and accurately reflects the Work that has been accomplished and how it was sequenced (as-built logic).

- C. Activity Categories/Activity Codes. The description of activities shall be of sufficient detail to describe the Project plan to complete the Work and provide justification for production rates used to determine the duration of activities. With the exception of the Contract Execution and Contract Completion Date milestone activities, no activity shall be open-ended. Each activity shall have predecessor and successor ties. Once an activity exists on the schedule it may not be deleted or renamed to change the scope of the activity and shall not be removed from the schedule logic without approval of the Officer-in-Charge. The ID number for a deleted activity shall not be re-used for another activity. No more than 20 percent of the activities shall be "critical" or "near critical". "Critical" is defined as having zero days of Total Float; "near critical" is defined as having Total Float of 1 to 14 days. The schedule shall reflect Saturdays, Sundays, Federal and State holidays, and all other non-work days.

1. **Activity Categories.** The following Activity Categories shall be included in the BPS:

- a. Contract execution.
- b. NTPs.
- c. Procurement Activities. The procurement activities shall also include critical items, long lead items, and items requiring HART approval. The Contractor shall show each delivery with relationship tie to the Construction Activity (see below) specifically for the delay.
- d. HART Activities: HART and other agency activities that could impact progress shall be clearly identified.
- e. Quality Management (QM) Activities: Contractor's QM Activities as provided in the Quality Assurance Plan (See Section 7.11) shall be included.
- f. Construction Activities: No on-site construction activity shall have a duration in excess of 20 working days. Separate construction activities shall be created for each Phase, Area, Floor Level (if applicable), and Location the activity is occurring. The activities shall reflect Saturdays, Sundays, Federal and State holidays, and other non-work days.
- g. Interface Event: Identify interfaces with other H RTP contracts that require integration and coordination with the Work.
- h. Substantial Completion.
- i. Turnover and Closeout Activities: Include a separate section with all items for closeout, including Section 7.32 Closeout Procedures. Contractor shall provide a checklist. At minimum, it will include all testing, specialized inspection activities, pre-final inspection, punch list completion, final inspection, and acceptance. A "Facility Turnover Planning Meeting" milestone shall be added to the Schedule to take place at approximately 75% completion or three months prior to Substantial Completion, whichever is sooner.

2. **Activity Codes.** At a minimum, the Contractor shall establish activity codes for each of items listed below. Once established, activity codes and values cannot be changed without approval of the Officer-in-Charge:

- a. Phase: All activities shall be assigned a 4-digit code value based on the phase of the Work it occurs in.
- b. Area Code: All activities shall be assigned an area code value identifying the area in which the activity occurs. Activities shall not belong to more than one area. "Area" is defined as a distinct space, function or activity category.
- c. Work Item: All activities in the Project schedule shall be assigned a 4-digit Work Item Code value.
- d. Location: Assign a 4-digit location code value to all activities to identify the location within the Area or Work Item that an activity is occurring.
- e. Responsibility Code: All activities in the Project Schedule shall be identified with the party responsible for completing the task. Activities shall not belong to more than one responsible party.

D. Scheduling Software; Software Settings and Restrictions:

1. **Software for Scheduling.** Project schedules shall be prepared and maintained using Primavera P6 or later version as directed by HART. Importing data into P6 using data conversion techniques or third party software will be cause for rejection of the submitted schedule.
2. **Software Settings and Restrictions.**
 - a. Activity constraints: date/time constraints, other than those required under the Contract, will not be allowed, unless accepted by the Officer-in-Charge.
 - b. Identify any constraints proposed and provide an explanation for the purpose of the constraint in the narrative report;
 - c. Default Progress Data Disallowed: Actual start and Actual finish dates on the Critical Method Plan schedule shall match the dates on the Contractor Quality Control and production reports.
 - d. Scheduling calculations and out-of-sequence progress, if applicable, shall be handled through "Retained Logic," not "Progress Override." All activity durations and float values will be shown in days. Activity progress will be shown using "Remaining Duration." Default activity type will be set to "Task Dependent."
3. **Baseline Project Schedule Settings and Parameters.** The following settings and parameters shall be included in preparing the BPS, however, may be changed or added by HART during the term of the Contract:
 - a. General: Calendars and Activity Codes should be defined or established at the "Project" level, not "Global" level;
 - b. The "Time Periods" tab under "Admin Preferences" should be set as follows:
 - i. Time periods for P6 should be set to 8.0 hours/day, 40.0 hours/week, 172.0 hours/month and 2000 hours/year;
 - ii. The "Allow users to specify the number of work hours for each time period" should be unchecked.
 - c. Under the "Project Level, Date" tab, set "Must Finish By" date to "Contract Completion Date."
 - d. Under "Project Level, Default" tab, set as follows:
 - i. Duration Type: Set to "Fixed Duration & Units";
 - ii. Percent Complete Type: Set to "Physical";
 - iii. Activity Type: Set to "Task Dependent."
 - iv. Calendar: Set to "Standard 5 Day Workweek." The calendar shall reflect Saturday, Sunday, Federal and State holidays, and all non-work days. Alternative calendars may only be used with the Officer-in-Charge's approval.
 - e. The "Project Level, Calculations" tab should be set as follows:
 - i. Price/Unit: Set to "\$1/h."
 - ii. "Activity percent complete based on activity steps": Should be checked.
 - iii. "Reset remaining duration and units to original": Should be checked.
 - iv. "Subtract actual from at completion": Should be checked.

- v. "Recalculate actual units and cost when duration % complete changes": Should be checked.
 - vi. "Update units when costs change on resource assignments": Should be checked.
 - vii. "Link actual and actual this period units and cost": Should be checked.
- f. The "Project Level, Settings" should be set as follows:
- i. "Define critical activities":
 - Check "Total float is less than or equal to";
 - Add "0d".
- g. The "Work Breakdown Schedule Level, Earned Value" tab should be set as follows:
- i. Under "Technique for computing performance percent complete," select "Activity percent complete."
 - ii. Under "Technique for computing estimate to complete (ETC)," select "PF=1."
- E. Required Tabular Reports. The following reports shall be included with the Baseline Project Schedule and Updated Schedules:
1. **Log Report:** Provide a log report that list all changes made between the previous schedule and current updated schedules.
 2. **Narrative Report:** Each entry in the narrative report will cite the respective Activity ID and Activity Description, the date and reason for the change, and the description of the change. Each narrative report shall identify and justify:
 - a. Progress made in each area of the Project;
 - b. Critical path;
 - c. Date/time constraint(s) other than those required by the Contract;
 - d. Changes in the following:
 - i. Added or deleted activities;
 - ii. Original and remaining durations for activities that have not started;
 - iii. Logic;
 - iv. Milestones;
 - v. Planned sequence of operations;
 - vi. Critical path;
 - vii. Cost loading;
 - e. Any decrease in previously reported activity earned amount;
 - f. Pending items and status thereof, including permits, change orders, and time extensions;
 - g. Status of Contract Completion Date and interim milestones;

- h. Current and anticipated delays (describe cause of delay and corrective actions);
and
 - i. Description of current and future schedule problem areas.
3. **Earned Value Report:** All listed activities shall be cost-loaded and have a budget amount. The earned value report shall include the compilation of total earnings on the Project from the Notice to Proceed to the current progress payment request. The report shall show the current budget, previous physical percent complete, to-date physical percent complete, previous earned value, to-date earned value and cost to complete on the report for each activity.
4. **Schedule Variance Control (SVC) Diagram:** With each schedule submission, Contractor shall provide a SVC diagram showing: (1) cash flow s-curves indicating planned project cost based on projected early and late activity finishing dates, and 2) earned value to date. The cash flow s-curves shall be revised when the Contract is modified or as directed by the Officer-in-Charge.
- F. **BPS Updates:** Contractor shall schedule and meet with HART bi-weekly (every other week) to discuss the BPS, progress of the Work, and any potential changes to the BPS. Contractor shall submit all changes to HART for acceptance before such changes are incorporated into the BPS. Contractor shall also bring to HART's attention the minor changes to the BPS that affect the sequences, or durations. The BPS shall be updated monthly with progress (actual start dates, actual finish dates, remaining duration, and percent complete). The end of the monthly period shall be the last Friday of each month. The submission of an acceptable, updated schedule to HART is a condition precedent to the processing of Contractor's pay request. An acceptable, updated schedule shall be submitted to HART regardless of whether a Contractor's pay request will be submitted for the given period. Contractor shall submit the updated BPS with the Request for Payment and shall include:
- 1. Time-scaled logic diagram; and
 - 2. Reports listed in the section above entitled, "Required Tabular Reports."

7.6.2 CONTRACT MODIFICATION DOCUMENTATION

- A. Contractor shall submit a Time Impact Analysis (TIA) with each cost and time proposal for each proposed change. The TIA shall illustrate the impact of each change or delay on the Contract Completion Date or milestones. In addition to the limitation of delay damages provided in the Contract, Contractor shall not be granted any time extensions or delay damages paid unless a delay occurs which consumes all available Project Float, extends the Projected Finish beyond the Contract Completion Date.
- 1. If the Contractor experiences or anticipates a delay greater than 30 days in a specific activity or group of activities from the BPS, the Contractor shall provide a recovery schedule for those activities before the next payment request.
 - 2. If the Contractor experiences or anticipates a delay greater than 60 days in a specific activity or group of activities from the BPS, and if the Contractor is not able to recover the delay, the Contractor shall re-baseline the BPS and provide a narrative of cause and corrective actions taken.

7.6.3 FLOAT

- A. Project Float is the length of time between the Contractor's projected contract completion date (i.e., Contractor's Early Finish Date) and the Contract Completion Date as established in the Contract. Project float available in the schedule, at any time during the course of the Work, shall not be for the exclusive use of either HART or the Contractor.

7.6.4 SCHEDULE OF PRICES; PERIODIC PAYMENT SCHEDULE

- A. Contractor shall extract from the BPS a Schedule of Pricing with projected monthly payment schedule for the life of the Project with a breakdown of the Price Items and Values of the Work to be provided under the Contract.
- B. The Contractor shall provide a projection of the monthly payment schedule for the life of the Project, referred to here as the Periodic Payment Schedule (PPS). The PPS should reflect the Project schedule and the estimated value of Work to be completed on a monthly or periodic basis. The PPS' cumulative value shall not exceed the Total Contract Amount. The Contractor shall update and revise the PPS prior to the next pay request. Failure to make corrections will delay processing of the pay request and the periodic payment, and HART shall not be liable for any interest resulting from the delay.
- C. Contractor shall include in each pay request a 4-week Look Ahead of anticipated Work to be completed.
- D. Contractor shall support and provide a special schedule as may be necessary for HART to report Contract status to the FTA.

7.6.5 LOOK AHEAD SCHEDULES

- A. Contractor shall prepare "Look Ahead" schedules for each bi-weekly progress meeting. Look Ahead reports or schedules shall be a detailed snapshot of the BPS covering the current 4-week Work Project period from the Data Date specified hereafter. The Look Ahead reports shall include efforts of subcontractors and suppliers during this current period. Additionally, the Look-Ahead work plan shall include upcoming outages, closures, preparatory meetings, initial meetings, and critical path activities. The detailed work plans shall be in bar chart type schedules, maintained separately from the Baseline Project Schedule on electronic spreadsheet program and printed on 8-1/2 by 11 sheets. Activities shall be in sufficient detail to assign crews, tools and equipment required to complete the Work. The preparatory and initial phases for each definable feature of Work identified in the Contractor's Quality Control Plan shall be added to each 4-Week Look Ahead Schedule and will also be included in each monthly update. The Look Ahead schedule shall be keyed to BPS activity numbers.

7.6.6 DATA DATE

- A. Contractor shall base all reports, pay requests, schedule updates on a specific date(s) in the life of the Contract upon which the defined system of reporting is to provide actual project status, and accomplishments to date. The Data Date (DD) for documents, including Contract status reports, progress measurements for payment, schedule updates, should be the last Friday of the month, quarter-end, and year-end according to the report frequency specified. The DD is also referred to as the "as-of-date" and "time now date."

END OF SECTION

SECTION 7.7

PHOTOGRAPHIC DOCUMENTATION

7.7.1 PRE-CONSTRUCTION

- A. Contractor shall provide pre-construction photographs that record specific details of the construction site, including details of historic properties and any other property specified by HART. Contractor shall include a minimum of 10 photographs per location. Contractor shall comply with the requirements of Honolulu High Capacity Transit Corridor Project Programmatic Agreement, Section 106.
- B. Prior to construction, Contractor shall perform a photographic survey of all existing conditions of buildings, structures, and pavements that are within 100 feet of the Contractor's Work areas. The Contractor shall document the survey, at minimum, with photographs of all existing damage and cracks, along with width measurements of any cracks wider than 1/16 inch. The photographs shall be dated and referenced to locations marked on applicable plans or elevations of the area and accompanied by narrative descriptions of the damage. The photographic survey shall be transmitted to HART prior to start of construction activities.

7.7.2 MILESTONES AND STAGES OF CONSTRUCTION

- A. Contractor shall take photographs at all construction milestones and at each of the following stages of construction:
 - 1. On initial access date of all sites;
 - 2. Before commencement of clearing and demolition;
 - 3. Immediately upon completion of clearing and demolition;
 - 4. Monthly during construction (take monthly progress photographs during the last five working days of the month);
 - 5. During and at the completion of major activities;
 - 6. Upon completion of the Work.
- B. Furnish at least three different views or vantage points of each major milestone feature and stages of construction each month. Furnish an average of 10 photographs per major milestone of construction or stage of construction each month until completion of the Work.

7.7.3 QUALITY, QUANTITY, AND FORMAT OF PHOTOGRAPHS

- A. Printed Photographs:
 - 1. All photographs shall be taken by a qualified photographer experienced in construction photography.
 - 2. All photographs shall be standard commercial quality, color prints, on single weight glossy paper.
 - 3. Photographs shall be a minimum of 5 by 7 inches in size.
 - 4. Furnish one print of each photograph within seven days after taking the photograph.
- B. Digital Photographs:

1. Provide digital images in a file format accepted by HART.
2. Provide the resolution quality for an 8x10-inch print at 300 pixels per inch (ppi) or a minimum resolution of 2400 by 3000 pixels.
- C. Convert photographs into pdfs and submit them into the CMS. Files uploaded shall have the filename "date.time. (Contractor's initials)." Additional pertinent information shall be included, such as the Contract number, location, date of activity, names of crew, on each photograph (pdf).

7.7.4 IDENTIFICATION OF PHOTOGRAPHS

- A. Affix to the back of each print photograph the following information:
 1. Contract title and contract number;
 2. Photograph identification number;
 3. Description of photographed subject and orientation of camera (if required for clarification);
 4. Time and date taken, Contractor's company name, and photographer's name;
 5. Appropriately mark and control photographs containing Sensitive Security Information (SSI).

7.7.5 DIGITAL VIDEO RECORDINGS

- A. Provide digital video recordings of the historical progress of the construction, including all construction milestones and the following events:
 1. Start of construction, including clearing and demolition operations, as applicable;
 2. Highlights of all formal inspections;
 3. Highlights of final inspection and acceptance by HART.
- B. Include a complete, clearly spoken narration of the events for each digital video recording. Also include an unobtrusive time and date indicator, accurately depicting the time and date of all recordings.
- C. Label digital video file names with the same identifying information required for photographs. Include the identifying information at the beginning of recordings.
- D. Appropriately mark and control digital video recordings containing SSI.

END OF SECTION

SECTION 7.8

SUBMITTAL PROCEDURES

7.8.1 GENERAL

- A. Description: This Section includes the general requirements and procedures for preparing and submitting construction information and data for information and review. Other requirements for submittals are specified under applicable sections of the H RTP Contract Specifications.

7.8.2 SOFTWARE REQUIREMENTS; CONTRACTOR RESPONSIBILITIES FOR HART-HOSTED SYSTEM

- A. Software and Computer Requirements. HART hosts a Collaborative Contract and Project Management System which consist of two software tools: 1) Oracle Primavera *Contract Management*, and 2) Oracle Primavera *P6 Project Management*. The Contractor is required to input daily, specified documents into the HART-hosted *Contract Management System*, accessible via the World Wide Web. Upon Contract execution, the Contractor shall provide to HART, Oracle Primavera Contract Management licenses for all its designated personnel. Once the licenses are received, the Contractor shall be given access to the HART-hosted *Contract Management System*.
 1. A web browser is used to access the system, the appropriate Java plug-in is automatically downloaded and installed, if it is not already on the computer. This process requires "Administrative" privileges to the computer, and the DBB contractor shall be responsible for this entire process. HART staff shall be available for technical advice but shall not operate, install, or troubleshoot any software or hardware of the Contractor's that does not function as intended, or adequately, for this application. All of the responsibilities for these activities are exclusively the Contractor's responsibilities. HART shall accept no liabilities arising from the Contractor's installation and use of this software.
 2. Detailed procedure, workflows and training lessons for using HART-hosted *Contract Management System* are available in the CMSHELP software system . Except where noted, the system shall eliminate the need to manage multiple hard copies, sepias, CDs, etc. for required contract documents. Instead, most documents will be submitted and routed electronically with physical copies required only when copying is impractical or not possible, such as with samples, catalogue cuts, or large drawings. Original documents may also be necessary when original signatures are required; otherwise, electronic transmittals and documentation shall be used.
- B. Contractor shall use the HART-hosted *Contract Management System* in accordance with HART's protocols to manage all documents submitted to HART, including but not limited to correspondence, transmittals, meeting minutes, requests, baselines, deliverables, daily logs, payments, and change management documents as follows:
 1. **Submittals** - DBB contractor is responsible for submitting, tracking and managing all contract submittals for its construction contract using HART-hosted *Contract Management System*. The responsibilities include creating and maintaining the submittal log, providing follow-up responses/actions to HART comments until satisfactorily resolved.

2. **Correspondence Logs** – HART hosted *Contract Management System's* Correspondence Received and Sent Logs shall serve as the repository for all correspondence generated during this project between the Contractor, the CEI contractor and HART and other project participants. All attached files shall automatically be stored in the content repository software located on the HART-hosted site which is the designated file repository. Incoming correspondence with attached electronic files from the construction contractor shall be emailed to designated CEI/HART representatives. All correspondence from HART to the construction contractor shall be logged into the Correspondence Sent Log.
3. **Requests** – The Contractor shall create and track all Requests for Information, Requests for Deviations or Requests for Changes in HART-hosted *Contract Management System*.
4. **Meeting Minutes** – The Contractor shall prepare and input meeting minutes for designated meetings into the Meeting Minutes log of HART hosted *Contract Management System*.
5. **Construction Field Reports** -The Contractor is responsible for logging construction field reports in HART- hosted *Contract Management System* on the next business day following the work performed. Project photographs shall be attached to the appropriate daily report as needed.
6. **Punchlists** – The Contractor shall use the Punchlist log from HART-hosted *Contract Management System* during the Project closeout to list all deficient work. The Contractor shall coordinate with HART to identify and rectify each item listed in the Punchlist log.
7. **Payment Request** – The Contractor shall enter its monthly payment requests using HART- hosted *Contract Management System*.

7.8.3 SUBMITTAL REQUIREMENTS

- A. Unless the submittal cannot be converted to an electronic format, all submittals shall be entered into HART's Oracle Primavera Contracts Management System (CMS). Submittal data shall be entered into the CMS submittal log using a sequential numbering system.
- B. Contractor shall submit a spreadsheet schedule of submittals within 30 days after the issuance of the Notice to Proceed (NTP) listing the submittals required by the Contract Documents. Submittals include, but are not limited to, shop drawings, working drawings, product data, samples, color samples, warranties, and other pertinent data required in the Contract Documents.
 1. The schedule of submittals should include:
 - a. The description of the submittal;
 - b. Specification reference;
 - c. Intended submission and resubmission date(s);
 - d. Order release date;
 - e. Lead time to delivery and anticipated delivery date(s);
 - f. Identifying items that require expedited review to meet Contract schedule.

2. Contractor shall not start Work on items until a complete schedule of submittals has been entered into the CMS.
- C. Hard Copy Delivery. For any supporting documentation not readily convertible to electronic format, Contractor shall provide hard copies on the same day as the electronic portion of submittal was due.
- D. Submittal Preparation and Requirements. Each submittal shall include a label or title block which contains the following information:
1. Contract name and number (and Project location, as applicable);
 2. Description of submittal and date submitted;
 3. Sheet number and number of sheets included (as applicable), with consecutively numbered drawings;
 4. Name of Contractor, subcontractor, fabricator, supplier, and manufacturer (as applicable);
 5. Name of drawing and scale (as applicable);
 6. Name and date of each revision;
 7. Indicate reference to the relevant Contract Drawings and Specification Section(s); and
 8. On each sheet, name each item submitted and indicate its location in the Work.
- E. Professional Seal Requirements.
1. Any submittals involving design services, when specified or required by governing codes and regulations, shall be sealed and signed by a professional engineer or architect currently licensed in the State of Hawaii for the specific discipline involved.
 2. Working drawing submittals involving engineering expertise, such as shoring, underpinning, support structures, falsework for concrete, and load and design calculations, shall be sealed and signed by a professional engineer currently licensed in the State of Hawaii for the specific discipline involved.
- F. Review Period:
1. Contractor shall submit submittals at least 30 days in advance to allow sufficient time for HART to review and accept before starting related Work, if prior acceptance is required under the Contract.
 2. Contractor shall determine if other governmental entities, utility districts, or other relevant agencies require longer review periods. When longer review periods are required, the Contractor shall schedule submittals accordingly, so that Work and schedules are not delayed.
- G. Include only one item or a group of related items in one submittal. Do not group multiple submittal items under one transmittal form.
- H. Changes in Accepted Submittals. Changes to accepted submittals will not be allowed unless changes have been resubmitted and accepted. The resubmittal process is the same as for the original submittal.

- I. Supplemental Submittals. Supplemental submittals for corrective procedures shall contain sufficient data. Supplemental submittals shall be submitted in the same manner as initial submittals.
- J. Incomplete submittal packages will not be reviewed.

7.8.4 CONTRACTOR'S RESPONSIBILITIES

- A. Contractor shall submit proof of acceptability prior to material leaving its source such that when it is tested and inspected as placed, it will meet Contract requirements.
- B. Approvals or acceptance of a submittal by another governmental agency or utility agency shall be obtained before a submittal is sent to HART. Contractor shall obtain non-HART approvals or acceptances in the clearest and most straightforward manner possible.
- C. Contractor's Review and Approval of Submittals.
 - 1. Contractor shall review, stamp, and sign as reviewed and approved before submission to HART.
 - 2. Contractor's review and approval shall:
 - a. Ensure submittal is complete and all relevant data required is provided;
 - b. Check and coordinate information in each submittal for accuracy, completeness, and compliance with Work and Contract Document requirements;
 - c. Verify materials, field measurements, field construction criteria, catalog numbers, and similar data;
 - d. Coordinate Work requirements to ensure submittal of one trade is compatible with other related Work submittals; and
 - e. Ensure products are available in quantities required for the Work.
 - f. Contractor shall indicate any deviations from Contract Documents within the submittal, requiring approval by HART as a Contract Change.
- D. Submittal Quantities. Refer to Contract Specifications Section 07 08 – Shop Drawings, Product Data, and Samples, for submittal quantities.
- E. In addition to the submission into the CMS, Contractor shall distribute accepted submittals to:
 - 1. Contractor/HART field office;
 - 2. Affected and concerned subcontractors, suppliers, and fabricators;
 - 3. Affected and concerned members of Contractor's workforce.
- F. Work Site Records. Contractor shall maintain at Work site a complete up-to-date, organized file of all past and current submittals, including a document control system that identifies the status of each submittal.

7.8.5 REVIEW PROTOCOL

- A. HART review and approval of any of Contractor's submittals, including requests for Contract Change, does not relieve the Contractor from responsibility for:

1. Errors and omissions in submittals, such as samples, mock-ups, sample panels, product data, shop drawings, calculations;
 2. Conformance with Contract requirements;
 3. Compatibility of described product with contiguous products and the rest of the system and furnishing materials of proper dimensions, quantity, and quality;
 4. Prosecution and completion of Work in accordance with Contract Documents.
- B. HART's review of a separate item will not constitute review of an assembly in which the item functions.
- C. The following are responses that the Contractor may receive from HART regarding its submittals:
1. ACCEPTED;
 2. ACCEPTED AS NOTED, which indicates that:
 - a. Submittal has been reviewed by the CE&I and exceptions are noted. Submittal appears to conform to Contract requirements after corrections are incorporated.
 - b. Contractor may proceed with fabrication, assembly, manufacturing, installation, application, and erection of the illustrated and described product after the corrections have been incorporated.
 - c. Submittals so marked need not be resubmitted unless the Contractor challenges the corrections.
 3. ACCEPTED AS NOTED – REVISE AND RESUBMIT, indicates that:
 - a. Submittal has been reviewed and the submittal is not acceptable for one or more of the following reasons:
 - i. Not enough information is provided to make a determination;
 - ii. Submittal contains too many errors or omissions to make a determination;
 - iii. Information provided does not conform to Contract requirements.
 - b. Contractor may not proceed with the Work represented in submittal until after the reviewer verifies that the reviewer's corrections have been incorporated.
 - c. Resubmission of submittal with corrections as noted is required.
 - d. Resubmission is also required if Contractor challenges reviewer's corrections.
 4. NOT ACCEPTED – RESUBMIT, indicates:
 - a. Submittal has been reviewed and the submittal is deficient. The reviewer cannot modify submittal with a reasonable degree of effort or cannot make a thorough review of submittal.
 - b. Submittal needs revision and shall be corrected and resubmitted.

END OF SECTION

SECTION 7.9

SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

7.9.1 GENERAL

- A. This Section provides the general requirements and procedures for preparing and submitting shop drawings, working drawings, product data and samples required under the Contract.

7.9.2 SUBMITTALS

- A. Submit shop drawings, working drawings, product data, samples and other submittals to the Project Construction Engineer and Inspector (CE&I)/HART.
- B. Submittal of shop drawings, working drawings, product data, and samples are submitted for HART's records and files only and not for review and approval, unless otherwise stated specifically in the Contract Documents.
- C. Submittals shall be through electronic format utilizing the CMS. In addition, hard copies of the submittals shall be provided for HART's records and files in the following quantities:
 - 1. Shop drawings: One original reproducible and six prints.
 - 2. Working drawings: One original reproducible and six prints.
 - 3. Product data: Seven copies of manufacturers' standard product data, including calculations.
 - 4. Samples: Three of each sample item.
 - 5. Other submittals: Seven copies of other submittals, such as inspection reports, test reports, and certificates of compliance.
 - 6. Submit one copy of permits and licenses and other documents obtained in HART's name.
- D. Final shop drawings and catalog cuts become HART's property. All pages of catalog cuts shall be clear, legible, and permanent.
- E. Indicate

"As Built" on final shop drawings and catalog cuts.

- F. Submittals are not a mechanism for changing the technical terms or conditions of the Contract. Contractor shall flag any items not in strict compliance with Contract requirements. Contractor shall be liable for all costs and damages associated or arising out of Contractor's changes in terms and conditions in the submittals. As previously noted, submittals under this Section is for HART's records and files only.

7.9.3 SHOP DRAWINGS

- A. Definition. Shop drawings are detailed construction and fabrication drawings that show proposed material, shape, size, and assembly data. Drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data are prepared by the Contractor, subcontractor, manufacturer, supplier, or distributor, to illustrate how specific portions of the Work are to be fabricated, installed, or both.

HART GENERAL CONDITIONS for CONSTRUCTION CONTRACTS (v.11/2013)
Section 7.9-Shop Drawings, Product Data, Samples

- B. Contractor's shop drawing submittals include fabrication, erection and installation, application, layout, and setting drawings, lists or schedules of materials and equipment, manufacturer's standard drawings, wiring and control diagrams, all other drawings as may be required to show that materials, equipment, and systems, and the positions thereof, comply with Contract requirements
 - C. Shop drawings shall be completed and submitted for HART's records not less than 60 days before Work involved in such drawings commences and indicate such date on the Contractor's Baseline Schedule (BPS).
 - D. Shop drawings shall include details for necessary procurement, installation, maintenance and repair of Contract components or facilities equipment provided.
 - E. Drawing Format. Typically, draw plan and section details at a scale of 1"=1'-0", details at a scale of 3"=1'-0" or larger. Cross reference to Contract sections, as appropriate.
 - F. Drawing Contents. Drawing contents shall include the following, as applicable:
 - 1. Size and thickness of members;
 - 2. Method of anchoring and securing parts;
 - 3. Quantity and location of each item;
 - 4. Materials and finishes;
 - 5. How an item fits to abutting work and requirements for related construction;
 - 6. Required connections;
 - 7. Overall size and weight;
 - 8. Clearances and tolerances;
 - 9. Verification of field conditions prior to fabrication;
 - 10. Other pertinent data necessary to show where and how Work is to be done;
 - 11. Coordination of shop drawings and data with requirements for related construction.
- This is not an exhaustive list; Contractor shall include any pertinent data as necessary in the shop drawings.
- G. Use drawing symbols from one standard reference source and provide a complete symbol list that includes non-standard symbols used on the drawing.
 - H. Shop drawings shall include illustrations and drawings.

7.9.4 WORKING DRAWINGS

- A. Definition. Working drawings are Contractor's plans for temporary equipment, structures or other work required for construction, but do not become part of permanent construction.
- B. Contractor's working drawings may include stress sheets, erection plans, falsework plans, framework plans, temporary bulkheads, cofferdam plans, or any other supplementary plans or similar data, including associated calculations as required, for temporary construction Work.
- C. Indicate in working drawings where the Work will be performed and provide information sufficient to completely explain the structure, machine or system described and its intended manner of use.

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Section 7.9-Shop Drawings, Product Data, Samples

7.9.5 PRODUCT DATA

- A. Definition. Product data is standard printed information describing materials, products, equipment and systems required for some portion of the Work.
- B. Contractor's product data may include manufacturer-prepared descriptive literature, catalog sheets, brochures, performance data, test data, diagrams, schedules, illustrations, and other information furnished by the Contractor. Project data also includes various product and materials information from suppliers to illustrate and describe a product, material, system, or assembly.
- C. Contractor shall modify manufacturers' product data standard diagrams, charts, illustrations, brochures, calculations, schematics, catalog cuts, and other descriptive data to delete information not applicable to the Contract. Contractor shall supplement standard product data, as necessary, to show conformance with Contract requirements.
- D. If the Contractor uses drawings prepared by others, such drawings may include standards and symbols that others use. However, to the greatest extent possible, Contractor should conform to the Project submittal standards.

7.9.6 SAMPLES

- A. Definition. Samples include physical examples of equipment, colors, textures, finishes, functions, configuration, and Work quality, and establish standards of quality and utility, such as:
 - 1. Partial sections of manufactured or fabricated work;
 - 2. Small cuts or containers of materials;
 - 3. Complete units of repetitively-used materials;
 - 4. Swatches showing full range of color, texture, and pattern;
 - 5. Color range sets;
 - 6. Units of Work to be used for independent inspection and testing;
 - 7. Units of Work to be used as a standard to judge materials and workmanship.
- B. Contractor shall provide samples for items where specified and for items requiring a choice of color, texture, or finish. Samples provided shall represent the materials and workmanship standards by which to judge the completed Work for acceptance.
- C. Samples shall be sent shipping charges pre-paid.
- D. Do not use materials for which samples are required until HART has made its selection in writing.
- E. Label. Each sample should be labeled and include the following data:
 - 1. Contract name, number, and location on Project;
 - 2. Name of Contractor;
 - 3. Material or equipment represented, and location in the Project;
 - 4. Name of producer, brand, trade name, if applicable, and place of origin;

5. Date of submittal.

- F. Selection or acceptance of a sample is only for the characteristics and use named in the submittal. Selection or acceptance of a sample does not change or modify Contract requirements. Before submitting samples, Contractor shall ensure that materials or equipment will be available in quantities required. No change or substitution is permitted after a sample has been accepted, unless such change or substitution is accepted by HART in writing.
- G. Submit to HART a list of Contractor's material sources in sufficient time to permit HART's inspection and testing of materials in advance of their use, if HART so chooses to do so.
- H. Samples of materials delivered to the Project or installed in place may be taken by HART for inspection and testing. The following standards shall apply for such sample testing:
 - 1. Samples taken without HART's presence will not be used for testing.
 - 2. Failure of samples to meet Contract requirements will annul previous acceptances of the item tested.
 - 3. Failure of any materials to pass the specified tests will be cause for refusal to consider any further samples of the same brand, make, or source of that material.
 - 4. HART reserves the right not to accept material which has previously proven unsatisfactory in service.
 - 5. Inspections and tests, if made at any point other than the point of incorporations into the Work, is not a guarantee of acceptance of material which may be delivered later for incorporation into the Work.
 - 6. Accepted samples not damaged in testing may be incorporated into the finished Work if marked for identification. Materials incorporated into the Work shall match accepted samples.

7.9.7 OTHER SUBMITTALS

- A. Provide other submittals as specified in the Contract to demonstrate compliance of equipment and materials with the Contract requirements.
- B. Certificate of Compliance
 - 1. HART may permit use of certain materials prior to sampling and testing if accompanied by a certificate of compliance stating that materials involved comply in all respects with Contract requirements. The certificate shall be signed by the manufacturer of the material. In such events, a certificate of compliance shall be furnished for each lot of material delivered to the Work. The lot so certified shall be clearly identified in the certificate.
 - 2. All materials used on the basis of a certificate of compliance may be sampled and tested by HART at any time. Acceptance of material based on certificate of compliance does not relieve the Contractor of responsibility for incorporating material into the Work that conforms to Contract requirements. Any material not conforming to Contract requirements will be subject to rejection whether in place or not.

3. HART reserves the right to refuse any use of material submitted for acceptance solely on the basis of a certificate of compliance.

7.9.8 CHANGES AND SUBSTITUTIONS

- A. Changes in products for which shop drawings, product data, or samples have been submitted will not be permitted, unless those changes have been accepted in writing by HART.
- B. Any substitution request shall be in writing and include justification, quantities, and prices involved, quotations and other documents deemed necessary to support the request. Any savings in cost will accrue to HART. The burden of proof as to the comparative quality and suitability of substitution shall be upon the Contractor.
- C. Substitutions will not be allowed, however, HART may allow the substitution under the following circumstances:
 1. A specified item or pre-qualified item is delayed by an unforeseeable event beyond the control the Contractor, which would impact the timely completion of the Project.
 2. A specified or pre-qualified item is no longer being manufactured or is no longer reasonably commercially available, and Contractor was in no way responsible for any delay in procuring the item.
 3. A specified or pre-qualified item is found to be unsuitable for reasons beyond the Contractor's control.
 4. When a manufacturer or supplier of a pre-qualified or specified item makes available at no increase in Contract price or Contract time a suitable item that is equal or better than the pre-qualified item or specified. The burden of proof as to the "equal or better" quality shall be the Contractor's.

END OF SECTION

SECTION 7.10

SAFETY AND SECURITY COMPLIANCE

7.10.1 GENERAL

- A. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or protection from damage, injury or loss.
- B. The Contractor shall comply with all applicable Federal, State and City laws on safety and security, including Hawaii Revised Statutes (HRS) Chapter 396, relating to standards of occupational safety and health, and HRS Section 396-18, relating to safety and health programs for contractors for construction projects where the proposal is in excess of \$100,000.

7.10.2 CONSTRUCTION SAFETY AND SECURITY PLAN (CSSP)

- A. HART has prepared a Construction Safety and Security Plan (CSSP) to provide risk management criteria to reduce the risk of occupational injuries, illnesses, property damage and fatalities during the construction operations. The CSSP, as amended, is incorporated by reference as a part of the Contract Documents.
- B. The CSSP establishes the minimum acceptable requirements and procedures for the Contractor and its subcontractors at all tiers. Under the CSSP, Contractor in part is required to develop a Contractor Health and Safety Plan (CHASP), which describes the contractor firm's program and policies' compliance with Hawaii Administrative Rules §12-110-2 or § 12-110-60 written safety and health program criteria. These documents shall be submitted to HART for informational purposes only.
- C. Contractor shall provide a Contractor Site and Safety Security Plan (SSSP) as provided for and in accordance with the CSSP. HART's acceptance of Contractor's SSSP shall not relieve the Contractor of its duties and responsibility to comply with the local, state and federal laws and standards.

7.10.3 SAFETY AND SECURITY CERTIFICATION PLAN (SSCP) AND PROCESS

- A. HART has prepared a Safety and Security Certification Plan (SSCP) based on the guidelines established by the FTA (Handbook for Transit Safety and Security Certification, Final Report, November 2002, DOT-VNTSC-FTA-02-01). The SSCP defines how safety and security certification will be managed for the Project. A copy of HART's SSCP will be provided to the Contractor upon Contractor's request.
- B. Contractor shall implement and successfully complete safety and security certification for all certifiable elements contained in the Contract in compliance with FTA's latest Handbook for Transit Safety and Security Certification. As a part of the certification process, Contractor's duties include, but are not limited to the following:
 - 1. Include in the Baseline Project schedule, the integration and completion of safety and security certification activities, including the development and completion of conformance checklists;
 - 2. Facilitate periodic safety and security certification progress and review meetings, including scheduling and providing meeting minutes;
 - 3. Develop safety and security analyses for safety- and security-certifiable elements;
 - 4. Resolve any identified safety hazards and security vulnerabilities;

5. Provide completed and signed conformance checklists to HART.
 6. Provide supporting verification documentation to demonstrate that the as-built facility, structure, or system has incorporated and complies with safety and security design criteria and requirements provided in the Technical Specifications and Contract Documents
- D. The safety- and security-certification process for each certifiable element is not complete until conformance checklists are completed, signed, and submitted by the Contractor and verified by HART. Additional requirements for the safety and security certification are detailed in the SSCP.

7.10.4 KEY PERSONNEL FOR SAFETY AND SECURITY

- A. Contractor shall identify on its organizational chart its Safety and Security Specialist assigned during the construction project to manage and facilitate the Contractor's implementation of its SSSP and safety and security implementation. See Section 7.5, Character of Workers and Key Personnel for qualification requirements.

END OF SECTION

SECTION 7.11

QUALITY ASSURANCE

7.11.1 GENERAL

- A. The Contractor is responsible for complying with the Quality Assurance (QA) requirements as set forth herein, its Quality Assurance Plan (QAP), and the Contract Documents. Requirements include implementing and maintaining a quality program that will define how Work is to be performed and controlled, and who is responsible to ensure that Contractor's Work meets Quality Assurance requirements.
- B. HART's Quality Management Plan:
 - 1. HART has in place a Quality Management Plan (QMP) for the Honolulu Rail Transit Project. The QMP is founded on accepted concepts and processes recognized by the American Public Transportation Association (APTA) and Federal Transit Administration Quality Assurance/Quality Control Guidelines (FTA-IT-90-5001-02.1 February 2002 Issue) (hereafter, "FTA QA/QC Guidelines"), which have been successfully applied on other public transit projects.
 - 2. The QMP objective is to ensure that the Project is procured and constructed according to established engineering, safety, security, and quality requirements. These requirements provide controls for procurement, construction, testing, and inspection that result in quality products necessary for a safe, secure, and reliable transit system operation.

7.11.2 CONTRACTOR'S QUALITY ASSURANCE PLAN REQUIREMENTS (QAP)

- A. Contractor shall complete its Quality Assurance Plan (QAP) within 30 days from the Notice to Proceed (NTP) and provide the same to HART for HART's files and records. Work shall not commence without a completed QAP, except where specific prior activities are required and the Contractor has provided a specific quality plan for such specific prior event and HART has approved the activity.
- B. Contractor shall be responsible for its own analysis of its quality program and that it meets the requirements of the FTA QA/QC Guidelines and HART's QMP.
- C. The QAP shall include a quality policy and a statement by the Contractor's duly authorized officer, committing the Contractor's support and responsibility, which would include, but is not limited to:
 - 1. Contractor's management commitment to quality and assignment of resources necessary to complete the Project's scope of Work to satisfy the Contract Specifications and requirements;
 - 2. Contractor naming the personnel who will specifically undertake QA and QC activities; and that
 - 3. Quality procedures will be implemented.
- D. Contractor's personnel directory and organizational chart showing all key personnel shall be included in the QAP. See Section 7.5, Character of Workers and Key Personnel.
- E. Quality elements that shall be included as a part of Contractor's QAP are:
 - 1. Management responsibility and support of the quality program:

- a. Establish an organization chart showing the interrelationships between Contractor and its subcontractors, other supporting organizations, and permitting review agencies. Clearly establish and delineate organization structure, levels of authority, and lines of communication for activities affecting quality.
 - b. Identify Quality personnel with the authority, independence, and responsibility to evaluate and ensure that the QAP is correctly and effectively executed. Where problems are identified, Quality personnel have authority and organizational freedom to initiate, recommend, and provide solutions.
 - c. Establish an organizational “checks and balances,” with production and operation components separate and independent from quality. The procedures should include requirement of close coordination and communication between the two sides for effective on-site operation.
2. Documented Quality Management System:
- a. Establish and maintain a documented quality management system to ensure that the Project quality objectives are satisfied.
 - b. Establish requirements, including procedures and work instructions for activities and work being performed that affect quality in construction, installation, and control of processes, including inspection, testing, disposition of nonconformances, corrective action, maintenance of quality records, quality audits, and training.
 - c. Regular management assessment on the adequacy of the QAP to ensure effective implementation and continuous improvement.
3. Design Input:
- a. Describe procedures for communication between Contractor and Designer of Record for input on the field design, including requests for information and field design changes. Contractor’s point of contact for design input communication is HART’s Project Construction Engineer and Inspector (CE&I), who will pass through the communication to the Designer of Record.
 - b. Describe procedures for submittal of shop drawings to the Designer of Record. Contractor’s point of contact for shop drawing submittals is HART’s Project CE&I, who will pass through the submittal to the Designer of Record. HART will retain a copy of the submittal for record keeping purposes only.
 - c. Describe procedures for preparation of as-built documents to be submitted at the end of the Project in accordance with the submittal procedures set forth in this Contract.
4. Document Control:
- a. Establish procedures for control of Project documents and data to ensure that all relevant documents are current and available to HART.
 - b. Include the procedures for issuance, approval, distribution, retention, and maintenance of drawings, specifications, reports, procedures, and other Project documents applicable to construction in accordance with submittal requirements under this Contract. Contractor’s procedures shall not conflict with the procedures required by HART.

- c. Include and identify control documents that specify quality requirements or prescribed activities affecting quality to ensure that correct documents are being employed.
 - d. Include procedures to identify, label, and store obsolete documents in such a manner that there is no confusion as to their use for the Project.
5. Purchasing:
- a. Ensure that subcontractors and suppliers are competent, reliable, and qualified.
 - b. Clearly specify the purchasing requirements, including relevant standards, drawings, specifications, process requirements, inspection instructions, and approval criteria for materials, processes, and products.
 - c. Ensure that the review and approval of purchasing documents are by authorized personnel for adequacy of specified requirements prior to release.
 - d. Include a procurement control process, procedure, or both to ensure that purchased materials, machinery, equipment, and services are handled, shipped, delivered, stored, cleaned, and preserved to prevent damage, deterioration, or loss.
 - e. Include a procurement control process to ensure construction, materials, machinery, and equipment are procured according to the Contract and quality requirements.
 - f. Define a process for Contract review, to ensure that Contract requirements are understood and disseminated to the appropriate Contractor's project management staff responsible for the Work.
 - g. Prepare and review procurement documents to include technical, quality, and commercial requirements.
 - h. Monitor and evaluate performance of subcontractors and suppliers performance to ensure compliance with Contract Documents. Maintain procurement records of Contractor, subcontractor, and suppliers.
6. Product Identification and Traceability:
- a. Establish procedures that ensure that materials, parts, and components are properly identified, traceable, and controlled.
 - b. The procedures must, at minimum, comport to the Contract requirements regarding product identification and traceability, including maintaining identification by part number, serial number, bar code, or other appropriate means either on the item or on records traceable to the item as required throughout fabrication or construction of the item.
 - c. The established procedures in place shall be utilized to prevent nonconforming work, materials, parts, or components from being incorporated into final products.
7. Processes Control:
- a. Contractor shall identify and plan the production and installation processes that directly affect quality, including but not limited to construction, manufacturing, installation, and testing, to ensure these processes are performed under controlled conditions.

- b. To achieve accuracy and consistency in production and installation processes, the quality control shall provide for:
 - i) Documented procedures and work instructions, where needed;
 - ii) A suitable work environment by qualified or authorized individuals.
 - iii) Contractor's procedures shall include continuous monitoring during production and installation to ensure conformity with documented procedures and Contract requirements/Specifications, in particular, during special processes, such as welding, heating treating, non-destructive testing, where the results will impact quality of the final product, but where inspection after the fact may not reveal the deficiencies.
 - c. Ensure that work is performed in proper sequence.
8. Inspection and Testing:
- a. Contractor shall have in place inspection and testing procedures to verify quality with emphasis in the following areas: Items or work affecting safety; items that affect systems reliability; items that affect service life; long lead time items or custom manufactured items, high visibility areas; and ADA compliance items. Such procedures shall be implemented and executed.
 - b. Inspections and testing shall be performed for the entire duration of the Contract in accordance with the documented procedures to ensure compliance with Contract requirements and product specifications. Contractor's inspection and testing procedures shall not conflict with inspection and testing requirements set forth in the Contract.
 - c. Records shall be maintained of the inspections and tests to provide evidence that the product has passed inspection and test and conform to the acceptance criteria.
9. Inspection, Measuring, and Test Equipment:
- a. Inspection, measuring, and test equipment, such as tools, gauges, instruments, and software, shall be identified, controlled, timely calibrated, properly maintained, and updated, in accordance with national, manufacturer, or certifying agency standards.
 - b. All testing equipment must be calibrated prior to its use on the Project.
 - c. Document records of calibration status. Identify and mark equipment to indicate calibration status.
10. Inspection and Test Status:
- a. Contractor shall establish a process to monitor the inspection and test status of work being conducted so as to ensure that only work that has passed the required inspections and tests is accepted. Examples of ways to monitor test and inspection status may be by markings, stamps, tags, labels, routing cards, inspection records, test software, physical location, or other suitable means. The status identification shall indicate the conformance or nonconformance with regard to inspections and tests performed.
 - b. At minimum, the status of completed, tested and inspected construction should be kept as an ongoing record in the daily inspection reports. Nonconforming

materials or construction should be recorded with location noted on inspection reports or nonconformance reports as applicable.

11. Nonconformance:

- a. Contractor shall establish procedures to maintain control of nonconforming work to ensure that nonconforming conditions, processes, parts, materials, and components are not incorporated into the final product.
- b. Identify, document, and evaluate nonconforming work or processes to determine appropriate disposition for the nonconforming items.
- c. Procedures shall include properly identifying and segregating nonconforming items from conforming items while awaiting disposition.
- d. All nonconforming items shall be reported for immediate disposition and corrective action.
- e. Disposition of nonconforming work shall be documented. Reworked or repaired work shall be re-inspected in accordance with documented procedures.

12. Corrective Action:

- a. Contractor shall establish corrective action procedures that include procedures for investigating the cause of nonconforming items; the corrective action needed to prevent recurrence; ensuring that conditions adverse to quality are promptly identified and corrected; initiating preventative actions to deal with problems on a level corresponding to the level of risk; ensuring that the corrective actions are taken and that they are effective; and implementing and recording changes in the procedures resulting from corrective action.

13. Quality Records:

- a. Contractor shall establish and use procedures to ensure that all quality-related documents and evidence are properly accumulated, maintained, organized, and protected.
- b. Properly identify, control, and store all documents in a well-defined location.
- c. Include supplier, and subcontractor quality records when pertinent.

14. Quality Audits:

- a. Contractor shall establish an internal audit to ensure that its quality program is being implemented as intended and in compliance with the QAP.
- b. The procedures shall include a plan and schedule of audits, with frequency of the audits based on the status and importance of the activity being audited.
- c. Contractor shall ensure that audits are performed by qualified personnel in accordance with a prepared checklist.
- d. Contractor shall ensure all audit results are documented and reviewed by management responsible for the area being audited.
- e. Contractor shall ensure that follow-up actions and verification, including re-audit of deficient areas, are performed.

15. Training:

- a. Contractor shall establish and maintain procedures for identifying the training needs and providing training for all personnel performing activities affecting quality to ensure that only qualified personnel perform activities affecting quality and their qualifications are maintained. The bases for qualifications are appropriate education, training, and/or experience.
- b. Contractor shall maintain records showing appropriate training and qualifications.

7.11.3 CONSTRUCTION QUALITY MANAGEMENT

- A. Contractor shall include procedures regarding construction activities in the Contractor's QAP to ensure that:
 1. Adequate resources are available (e.g., construction, manufacturing plants, equipment, fabricators, erectors, machinery, storage facilities, and approved materials) to perform the Work;
 2. Project organizational aspects are appropriate, and that the workers are proficient, trained, and qualified, especially where different organizations are involved (e.g., project management, subcontractors, vendors, and quality assurance, including inspection, testing, and quality control).
 3. Contract Specifications and requirements, all relevant statutory requirements, permits, and Working Plans are fully understood.
 4. Latest approved revision of the Contract Documents, procedures, and instructions are kept in areas where Work is being performed.
 5. Environmental conditions for accomplishing the Work are suitable and prerequisites for any given Work have been satisfied.
 6. Appropriate implementing process and control procedures and Work Plans are established to ensure quality of construction, including QC requirements for each construction activity.
- B. Project Construction Quality Management is the responsibility of the Contractor.
- C. Quality Plan Revisions and Updates:
 1. The Contractor shall revise and update the QAP as the Work progresses. For purposes of HART maintaining complete documentation, Contractor shall provide to HART's Project CE&I, the revised QAP, no later than 30 days prior to the Work that the revision applies to.
- D. Quality Team Organization (Key Personnel):
 1. Contractor shall identify the Quality Manager (QM), Environmental Compliance Manager (ECM), and the Project Principal (PP). See Section 7.5, Characters of Workers and Key Personnel.
 2. The Contractor's Executive Management shall review the QAP at defined intervals to ensure continuing suitability and effectiveness in satisfying requirements of the Contractor's QAP and the FTA QA/QC Guidelines and its stated quality policy and objectives. Records of the review meetings shall be maintained as Quality records.
 3. The Contractor's QM is responsible for managing and administering the accepted QAP, including the ITP.

4. The Contractor's QM is responsible for performing QC activities (see 7.13 – Quality Control) during construction in accordance with the established QA requirements and procedures.
- E. Inspection and Testing Plan: Contractor shall prepare an Inspection and Testing Plan that shall, at minimum, include the following:
1. List inspections and tests to be performed.
 2. Identify the Specification paragraph containing the inspection or test requirements.
 3. Identify who is responsible for each test: contractor, subcontractor, supplier, or manufacturer.
 4. Identify schedule of inspections and tests.
 5. Identify independent test laboratories.
 6. Identify the characteristics to be inspected, examined, and tested at each activity point.
 7. Specify inspection and test procedures and acceptance criteria to be used.
 8. Identify inspection checklists and test reports.
 9. Identify the Contractor's and HART's witness and hold points

END OF SECTION

SECTION 7.12

FIELD SAMPLES AND MOCK-UPS

7.12.1 FIELD SAMPLES AND MOCK-UPS

- A. Contractor shall prepare field samples and mock-ups at the Project site as specified in the various sections of the Contract Documents Specifications. Contractor shall:
 - 1. Construct and provide field samples and Project site mock-ups at designated Project site locations or on the structure as ordered by HART.
 - 2. Have product manufacturers inspect and approve field samples and mock-ups that involve their materials. Proper application or installation of the materials shall be according to their respective instructions and recommendations for the conditions or circumstances involved in the application or installation.
 - 3. Make arrangements with the respective product manufacturers to provide job or field service.
 - 4. A minimum sample size of 3 feet by 3 feet will be required. In major areas that are expansive, HART may require a larger footprint to help in the determination of appropriate colors and finishes.
- B. Contractors shall provide as many additional samples and mock-ups as may be required, as determined by HART, until desired features, textures, finishes, and colors are obtained. Accepted samples and mock-ups shall serve as the standards of quality for the various affected units of Work.
- C. Preserve accepted field samples and mock-ups for comparison purposes until the affected Work is completed and accepted by HART. Finished Work shall match the accepted field samples and mock-ups.

7.12.2 NONCONFORMANCE

- A. Adhere to nonconformance requirements and procedures as specified in the Quality Assurance Plan (QAP).
- B. Completed Work that does not exactly match accepted field samples and mock-ups will be rejected. HART will not pay for replacement of such Work that does not exactly match the accepted field samples and mock-ups.
- C. Work started before HART has accepted the field samples or mock-ups shall be at the Contractor's risk of having the Work rejected by HART without compensation.

7.12.3 REMOVAL AFTER COMPLETION

- A. Remove field samples and mock-ups from the Project site and structures after completion and acceptance of the affected Work, or as otherwise ordered by HART.

END OF SECTION

SECTION 7.13

QUALITY CONTROL

7.13.1 GENERAL

- A. Contractor is required to implement and maintain a quality program that defines how the Work is to be performed and controlled and is responsible to ensure that the Work meets Quality Control (QC) requirements for each construction activity and that the Work is performed in accordance with the accepted Quality Assurance Plan (QAP), which includes quality control procedures and process for control testing, and documentation of records.
- B. Contractor's Independent Testing Laboratory: Contractor shall submit within 30 days after the effective date of the Notice to Proceed, the name, qualifications, and experience of Contractor's Independent Testing Laboratory and all subcontracted Testing Laboratories.

7.13.2 CONTRACTOR'S CONSTRUCTION QC

- A. The Contractor's Construction QC requirements shall be prepared for each construction activity as a part of the QAP. The Construction QC includes, but is not limited to, the following elements:
 - 1. Requirements for the QC of all Work
 - 2. Training and requirements of QC personnel
 - 3. Subcontractor QC controls
 - 4. Installation, inspection, examination, and test control
 - 5. Control of measuring and testing equipment
 - 6. Materials control
 - 7. Supplier and vendor controls
 - 8. Control of nonconforming items
 - 9. QC documentation and records control
 - 10. Special process control
- B. Prior to Contractor's completion of its QAP, the Contractor may prepare and provide to HART for its files, specific Quality Plans for these early activities prior to their commencement. Such plans may be subsequently incorporated as a part of the overall QAP.
- C. Contractor 's QC activities during construction shall include:
 - 1. Inspection and Testing (see below)
 - 2. Field-Test Materials: Provide QC sampling and testing to confirm that furnished materials are of quality specified, and furnish quality level analysis during production when required by the QAP, Inspection Testing Plan (ITP), and/or Contract Specifications. Contractor shall provide written notification to HART of any deviation from sampling and testing methods and frequencies specified in the QAP, ITP, or the Contract Specifications.

3. Non Field-Tested Materials: Materials that are not field-tested materials shall conform to Contract Specifications and requirements. For non field-tested materials, Contractor shall provide Quality compliance documents, including the Certificate of Compliance. Quality compliance documents include test results, certifications, quality compliance certificates, and equipment list and drawings. Contractor shall accept non-field-tested materials for use according to the QAP, ITP, and Contract Specifications.
4. New Materials and Equipment: Install new materials and equipment for permanent construction. First class materials and equipment shall be used for the Contract. For any material for which no specification is provided, use the highest quality of its class or kind. For purposes of this subsection, "new" is defined as purchased specifically for this Project.
5. Handling, storage and shipping shall be conducted in a manner that prevents damage, deterioration or theft, such as, storing hardware and materials in designated controlled areas (for example, stock rooms, environmentally controlled rooms, and segregated areas) in a manner that facilitates accountability.

7.13.3 CONTRACTOR'S QC REPRESENTATIVE

- A. Contractor shall provide HART the name and contact details of Contractor's QC Representative, who will be monitoring the quality of construction activities. The Contractor's QC Representative shall be able to provide such oversight of the Work free from pressure of costs, construction scheduling and production. The Contractor's QC Representative's duties include performing quality verification and audits, which shall identify and record non-conforming items, processes, or conditions. The Contractor's QC Representative shall have the authority to initiate corrective action processes and verify that effective implementation of corrective action is in place. The Contractor's QC Representative duties also include training employees, so that their roles are performed effectively and initiating preventive actions to avoid potential nonconformance.
- B. Contractor shall submit within 10 days after the effective date of the Notice to Proceed (NTP), the name, qualifications and experience of the Contractor's proposed Construction QC Representative. HART has the right to reject the proffered QC Representative, and Contractor must resubmit another candidate within 2 calendar days of HART's rejection.

7.13.4 CONTRACTOR'S QC INSPECTION AND TESTING

- A. Contractor shall perform QC inspection or testing of materials prior to delivery from a manufacturer or during construction, as often as necessary to ensure compliance with Contract requirements. Tests include, but are not limited to, soils compaction test, load test, concrete tests during placement, concrete strength test, pipe leakage tests, and other tests as specified in the various sections of the Contract Specifications.
- B. In conducting Quality inspections and tests, Contractor's responsibilities and requirements include:
 1. Assuming full responsibility for quality control testing and giving HART sufficient notice to witness tests;
 2. Contractor inspectors inspecting all construction processes, procedures, and workmanship. Inspection includes observations and measurements specified in the QAP and the Contract Documents;

3. Contractor's inspectors shall be certified to a level and type of certification appropriate for Work being sampled and tested. Contractor shall submit copies of certifications, names, and contract number of all personnel performing field testing.
 4. Contractor shall define the testing requirements utilized in the QAP and ITP. Methods utilized for testing shall be supported by a recognized national organization and based on the most current testing standards. Contractor shall use the latest, most current Contract Specification in effect on the day a test is performed, unless otherwise directed. Self-certifications will not be accepted.
 5. The independent testing firm hired by the Contractor shall be a certified testing laboratory, which conducts field-tested materials using testing laboratories that is nationally recognized for applicable tests.
 6. Contractor shall submit the name, address, and qualifications of the proposed independent testing firm, together with the scope of proposed testing services, to HART at least 30 days prior to scheduled commencement of any Work involving such testing. Should the Contractor desire to use more than one firm for quality control testing, Contractor shall submit required information for each proposed firm.
 7. Throughout the term of the Contract, Contractor shall ensure that the certification of the laboratories is at all times valid and current.
- C. Test Reports: Contractor shall submit test results to HART within five (5) days after completion of testing performed by or for the Contractor. The following information shall be included as part of test reports:
1. Actual test results compared with Contract requirements and identification of all nonconforming items.
 2. Calibration certificate for measuring and testing equipment.
- D. Manufacturer's Certificates of Compliance: Contractor may use certificates of compliance for certain materials and products in lieu of specified sampling and testing procedures. However, HART reserves the right to refuse use of certain materials on the basis of certificate of compliance. HART will accept manufacturer's certification furnished by the Contractor on items of materials and equipment incorporated into the Work, but only to the extent that such items are in full compliance with Contract requirements. HART's acceptance of the manufacturer's certification of compliance does not relieve Contractor of its obligation to satisfy the Contract Specifications and requirements. A manufacturer's certificate of compliance must meet the following requirements:
1. Original certificates must be submitted. An authorized representative of the producer or manufacturer shall sign certificates and state that the material complies with the Contract requirements. The certificates shall include the Contractor's name and address, project name, and location.
 2. Certificates must identify materials or equipment being certified and include information that is specified for submittals in the General Conditions. Certificates must also identify:
 - a. Referenced standard as applicable;
 - b. Name and address of organization performing the tests;
 - c. Date of tests and quantity of material shipped; a d

- d. Date(s) of shipment or delivery to which certificates apply.
- 3. Along with the certificate of compliance, Contractor shall provide a certified copy of test results.
- 4. Materials used on the basis of a certificate of compliance may be sampled and tested by HART at any time. Use of a certificate of compliance does not relieve the Contractor of its responsibility for incorporating material in the Work that conforms to requirements of the Contract. Any material not conforming to requirements will be subject to rejection, whether in place or not.

7.13.5 HART INSPECTIONS AND TESTS

- A. HART will perform Independent Assurance (IA) or verification test of field-tested materials using independent testing laboratories in coordination with the Contractor's testing laboratories performing QC test of materials. Testing laboratories will be either HART's Testing Laboratory or HART-contracted independent testing laboratories.
- B. HART may perform inspections and tests as necessary to determine Contractor's compliance with Contract requirements. HART may perform additional inspections and tests as it deems necessary to verify compliance with Contract requirements.
- C. Surveillance Inspection: HART may review, observe, or inspect Contractor personnel, material, equipment, processes, and test results performed at random or at selected stages of construction operations.
 - 1. HART surveillance inspection does not take the place of Contractor's quality programs or assume any responsibility for such programs or quality of Work. The Contractor's quality program specifies requirements for inspections and necessary documentation to ensure that acceptable quality has been achieved, including quality of Work performed by subcontractors.
 - 2. Contractor shall provide access to the Work and furnish HART reasonable facilities for obtaining information as may be necessary to be fully informed of quality and progress for the Work.
 - 3. Materials Testing: HART may perform materials testing to examine, test, or analyze, sample products or workmanship including, when appropriate, raw materials, components, and intermediate assemblies.
- D. Contractor shall provide such facilities and assistance as the testing laboratory may require for obtaining necessary samples.
- E. HART may impose inspection witness and hold points to verify compliance to Contract Documents during all phases of Work. Do not proceed with Work until each witness and hold point has been released by HART. HART inspections do not relieve the Contractor from performing Contract-required inspections and internal in-process and final inspections and compliance with Contract requirements.
- F. Contractor shall be responsible for all re-testings if the inspection and testing show that the Work or materials are not compliant with Contract Specifications.
- G. Covered Work Areas:
 - 1. If a portion of the Work area is covered, contrary to the request of HART or to the requirements specifically expressed in the Contract, the area must be uncovered for

inspection and be replaced at the Contractor's expense without change in cost or Contract time.

2. If a portion of the Work has been covered which HART has not specifically requested to inspect prior to its being covered or is not expressly required by the Contract to remain uncovered for inspection, HART may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract, costs of uncovering and replacement shall, by appropriate change order, be charged to HART. If such Work is not in accordance with the Contract, the Contractor shall pay such costs, unless the condition was solely caused by HART.
- H. If Work is not in accordance with the Contract, the Contractor shall promptly correct the Work rejected by HART or failing to conform to the requirements of the Contract, whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected work, including additional testing and inspection and compensation for any consultant services and expenses incurred by HART.
- I. The Contractor shall remove from the site, portions of the Work, which are not in accordance with the requirements of the Contract Documents, and are neither corrected by the Contractor nor accepted by HART.
- J. The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of HART or other contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract.
- K. Nothing contained herein this Section shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract.

7.13.6 HART QC AUDITS

- A. HART may perform quality control audits of the Contractor's, subcontractors' or suppliers' quality records and performance. Contractor shall ensure that all quality control records and work locations are open and available to HART for inspection.
- B. The Contractor, subcontractor, or supplier who is being audited shall be available during the HART audit as requested.
- C. Any deficiencies or nonconforming items identified during the audit will be documented in a Non-conformance Report (NCR). Contractor shall remedy all items included in the NCR until written notification by HART that the NCR is closed. An open NCR shall preclude Substantial Completion, closeout of the Contract, and payment to the Contractor for milestones associated with the NCR items, including final payment.

END OF SECTION

SECTION 7.14

TEMPORARY UTILITIES

7.14.1 TEMPORARY UTILITIES

- A. Contractor shall determine temporary utility services needed to prosecute the Work, including HART and Contractor construction facilities, and make arrangements and connections with utility companies for such services.
- B. Temporary Electrical Service: Contractor shall ensure that temporary electrical power is provided for the Project to facilitate construction operations. Contractor's shall:
1. Provide terminations for each voltage supply complete with circuit breakers, disconnect switches, and other electrical devices, as required, to protect the power supply system.
 2. Furnish, install, and maintain a temporary lighting system as required by the building trades installed as specified in Occupational Safety and Health Administration (OSHA) requirements to comply with safety and security requirements. Provide temporary lighting system for illumination in all areas.
 3. Install all temporary equipment and wiring for power and lighting as specified in the applicable provisions of the governing codes.
 4. Provide power centers for electrically operated and controlled construction facilities, including tools, equipment, testing equipment, and interior construction lighting, and ventilation equipment. Locate power centers so that power is available at any desired point with no more than 100 feet extension.
 5. When the permanent electrical power and lighting systems are in operating condition, they may be used for temporary power and lighting for construction purposes if accepted by HART.
 6. Submit a plan of proposed falsework lighting installations.
- C. Temporary Water Service: Furnish water necessary for construction purposes and ensure continuous water supply to the Project site for emergencies. Contractor shall:
1. Make temporary connections to existing mains.
 2. Provide temporary meter and make all arrangements and pay charges for the temporary water service including cost of installation and maintenance thereof.
 3. When the permanent water supply and distribution system has been installed, it may be used as a source of water for construction purposes if accepted by HART. Provide all water necessary for construction purposes. Make all temporary connections to existing mains; provide temporary meter; and make arrangements and pay for the temporary water service, including cost of installation, maintenance thereof, and water used. Furnish drinking water with suitable containers and cups. Drinking water dispensers shall be conveniently located in the building where Work is in progress.
 4. When a permanent water supply and distribution system has been installed, it may be used as a source of water for construction purposes, provided that the Contractor (1) obtains the approval of the Engineer of Record, (2) assumes full responsibility of

the entire water distribution system, and (3) pays costs for operation, maintenance, and restoration of the system, including the cost of water used.

D. Temporary Sanitary Service:

1. Sanitation facilities for the use of employees on the work site shall be provided and maintained by the Contractor and their exclusive use strictly enforced. These facilities shall comply with the requirements and regulations of the State, Department of Health.
 2. The Contractor's sanitation facilities shall be located so that they are as inconspicuous as possible to passing motorists and the facility users.
 3. The facilities shall be adequately supplied with toilet paper, paper towels, and related supplies.
 4. In parks and other sites where there are comfort stations and/or public facilities, the Contractor will not be required to provide sanitation facilities, but only if the use of the facilities is for 15 employees or less. Contractor shall be responsible to keep the City facilities used by its employees clean and respectable.
 5. Use of sanitary facilities in adjacent commercial buildings, tenant areas, or other private facilities is not permitted, unless other arrangements are made by the Contractor.
 6. At completion of the Work, Contractor shall disinfect and remove sanitary facilities from the Project site.
- E. The costs incurred for obtaining permits and payment of any fees required for installation of temporary utility services described herein shall solely be the responsibility of the Contractor.
- F. At the completion of construction Work, Contractor shall remove all materials and equipment involved with temporary utility services as part of final cleanup, except as otherwise required by the Contract Documents. Contractor shall restore to existing conditions, or better.

END OF SECTION

SECTION 7.15

CONSTRUCTION FACILITIES

7.15.1 CONSTRUCTION FACILITIES

- A. Contractor shall maintain for the duration of the Contract, a permanent place of business within Oahu, where the Contractor may be served notice and legal process. Written notice may also be served with the Contractor on the Project site personally or via fax, email, or the local post office address or post office box.
- B. Contractor shall pay for all office and other building space, facilities, and equipment required to meet the requirements of the Contract, including providing an office space in Contractor's field office(s) for HART's use and construction parking.
 - 1. The presence or absence of an inspector for the field office shall not result in the waiver of any requirements of the Contractor; nor shall any act, statement, or omission by an inspector constitute or be deemed a change.
- C. In making arrangements, Contractor shall:
 - 1. Locate the Contractor's project management staff in close proximity to HART's project management staff.
 - 2. Provide facilities for key personnel to be present in the local office so that they may be available to HART and the Project, whenever required.
 - 3. Locate the field office for in close proximity to the Project.
- D. Facilities and Space Requirements: The field office(s), where HART will be provided office space, shall have in place all utility connections and supply, including water, electricity, telephone, and sewerage. It shall be the Contractor's responsibility to pay for all costs in providing and supplying temporary utility services until at least 30 days after Final Acceptance or after facilities are no longer needed by HART, whichever is earlier.
- E. The field office shall be in good repair and in a clean and sanitary condition and available for occupancy as specified.
- F. Contractor shall secure the sites, obtain all site permits, install, set up, provide utility services, and maintain the facilities as part of the Work. The facilities shall meet local code requirements for office space and comply with the requirements of the Land Use Ordinance of the City and County of Honolulu, relating to Special Permit Use, and ADAAG requirements.
- G. The field office for use by HART's field staff shall be provided no later than 15 days prior to the start of construction. The amount of space (square feet) required for HART's field offices is specified in the Contract Specifications.
- H. The field office shall be on a well-graded site with access road and parking area. The parking area shall be reasonably level. The parking area, including visitor parking, shall have an all-weather surface. The field offices shall be equipped with either a 24-hour security service or silent watchmen-type security system. Contractor shall install sufficient exterior security lighting that is automatically activated at low light levels to maintain two foot candles of lighting in the office site area, including parking.

- I. The field office shall have at least two exits from each building or trailer. Entrance to the offices shall be secured with a door lock plus a dead bolt lock.
- J. All interior spaces shall have overhead lighting that meets OSHA and code requirements for office space. Each office space shall have at least two duplex receptacles. There shall be a minimum circuit capacity of 20 amps.
- K. Each office space shall be wired for phone and computer local area network (LAN). Telephone service shall be provided with outside lines for each office space in the field office facility. At least one additional line will be dedicated for fax service and one additional line will be dedicated to high speed data service. The phone system shall be capable of providing voice mail service to each extension. Establish and maintain telephone and radio communications, as appropriate, to local and regional emergency response agencies, or entities and utility owners. Do not use police or other emergency services' radio frequencies.
- L. The office space shall include a conference room large enough for 20 people.
- M. The facilities shall have separate restrooms for male and female.
- N. Contractor shall provide daily janitorial service (except weekends and Holidays) and provide, service, and maintain trash containers and trash pickup service.
 - 1. Contractor shall be responsible for maintenance of the exterior area of the field office, including the parking areas.
- O. Desks, chairs, bookcases, and commercial grade vertical lockable file cabinets for Project files shall be provided in the field office.
- P. Equipment for copying, computer, printing and fax shall be provided.
- Q. The field office shall have ventilation and air conditioning/cooling systems capable of maintaining temperature between 70 and 75 degrees Fahrenheit in all spaces throughout the year and meet the required air quality requirements as required by under OSHA laws.
- R. Site identification signage shall be provided at all Project offices, and all sites of Work. See Section 7.25 – Project Identification.
- S. Provide daily courier service between Contractor's main site office and the field offices where HART maintains office space, at minimum the hours between 10:00 A.M. and 3:00 P.M., each working day.
- T. Computer Hardware and Software. Provide access to HART Project network via a direct network connection from HDT (Hawaii Dialogix Telecom) or VPN appliance. Minimum speed must be 20Mb synchronous. Provide two computer workstations, software and a printer for HART personnel in each of the offices.
 - 1. At a minimum, computer hardware and software must meet the following specifications:
 - a. For Desktop Computers;
 - 1) Intel Core i5 (3.2 Ghz) Processor) or greater, capable of running the most current version of Microsoft Windows
 - 2) 6 GB RAM;
 - 3) 500 GB 7200 RPM Hard Drive;

- 4) 16X DVD +/-RW drive and 16X DVD reader drive with recording software (example: Roxio Creator);
 - 5) USB Optical Mouse;
 - 6) USB Keyboard;
 - 7) Speakers;
 - 8) Two 24 inch Widescreen Flat Panel Monitor;
 - 9) HART Specified Operating System (example: Windows XP);
 - 10) Microsoft Office Professional (current version);
 - 11) Adobe Acrobat Professional (current version);
 - 12) On-Site Setup Services; and
 - 13) 3-Year On-Site Hardware Warranty/Technical Services, Including Hard Drive Support;
 - 14) Surge Protector
- b. For Multifunction Printer;
- 1) Color prints up to 11 X 17 inch;
 - 2) Scan ability with storage (individual and shared);
 - 3) OCR (Optical Character Recognition) Full Text Searchable Document Conversion to PDF
 - 4) Collate and Duplex;
 - 5) On-Site Setup Services; and
 - 6) 3 Year Technical Services;
- U. In the event that office spaces or appurtenant facilities are destroyed or damaged during the Contract period, except by fault of HART or its personnel, the Contractor, at its expense, shall repair or replace those items that the Contractor provided, to their original condition within 10 days.
- V. Contractor shall provide and maintain the field offices and HART office space(s) for at least 30 days after Final Acceptance of the Work or until facilities are no longer needed, whichever is earlier, unless otherwise agreed by HART in writing. Contractor shall be responsible for the disposal or removal of all Contractor-provided facilities and any site restoration Work required.
- W. Ownership of the field office, equipment, and telephone remains with the Contractor and shall be removed when instructed by HART.

17.15.2 CONSTRUCTION PARKING AND WORKER TRANSPORTATION

- A. Parking for Contractor Employees and its Subcontractors: HART will make no provisions for construction parking. It shall be the Contractor's responsibility to provide construction and employee/workers parking. Parking shall be ADAAG compliant.
- B. Restrictions:
1. Due to the limited amount of parking available to residents and businesses in and around the locations of the Work, do not park personal vehicles in the public right-of-way or in commercial areas where general parking has been prohibited for construction or safety purposes.
 2. Do not allow project personnel to park their personal vehicles in private business parking lots without prior approval from the business owner.

3. On-street parking by Contractor employees shall not be permitted within vicinity of the Work site. During actual hours of Work, park construction vehicles only as absolutely necessary.
4. Contractor shall provide specific off-site and off-street area(s) or portion(s) of lots for the use by Project employees during the working day in close proximity to the Project site to serve construction Work adequately and result in minimum interference with performance of Work.
5. Contractor shall ensure that Contractor and subcontractor employees are prohibited from parking anywhere other than Contractor- furnished parking area. Employees will not be allowed to utilize commercial parking facilities as that reduces/eliminates the available parking for the customers/employees of the local businesses.

END OF SECTION

SECTION 7.16

MAINTENANCE OF TRAFFIC

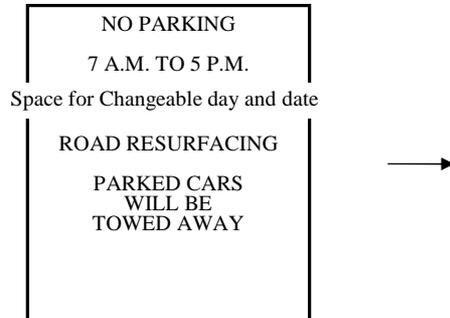
7.16.1 TRAFFIC CONTROL

- A. The Contractor shall:
1. Obtain the necessary permits from the City's Department of Transportation Services (DTS) prior to commencing operations. Locate and install warning signs of adequate size, regarding the Work and construction as directed by DTS. Comply with other DTS directives, which may be issued by DTS to eliminate other traffic problems and hazards.
 2. Comply with the latest requirements of the Department of Planning and Permitting (DPP) – Traffic Review Branch and DTS for Maintenance of Traffic (MOT) control plans. All traffic controls shall conform to the requirements of DTS, the current Traffic Code for Honolulu, the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways in the State of Hawaii," adopted by the Director of Transportation, the Federal Highway Administration's latest version of the "Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, Part VI – Traffic Controls for Street and Highway Construction and Maintenance Operations," and the provisions hereunder. Notify DTS at least seven working days prior to removal of any existing City traffic control sign or device. A roadway may be closed only with DTS' permission.
 3. Prepare site-specific MOT control plans and submit to HART for HART files. MOT plans are required to obtain a Street Usage Permit. Obtain a Street Usage Permit from the DTS before Work on any portion of a public street or highway may begin. Comply with the conditions of the MOT plans and Traffic Management Plan (TMP) to maintain acceptable levels of traffic service and safety during all Work activities on the roadway.
 4. Deviations from the MOT plans shall only be for emergencies affecting life and property. Immediately notify HART or HDOT, as applicable, of any such emergency changes. Provide copies of all approvals to HART.
 5. Prior to temporary closing of traffic of any street, sidewalk, or other access, or to changing traffic patterns from those indicated on the MOT control plans, obtain approval from DTS or HDOT, as applicable, and comply with imposed conditions, at least 14 days before such closures or changes are made. Consult DTS for any Work on any City streets or in any areas adjacent to a City street where traffic will be impeded.
 - a. Prior to starting Work on each phase requiring traffic control, demonstrate to the satisfaction of HART's satisfaction that necessary materials, equipment, and personnel are on site and that, once started, Work can be completed in an expeditious manner without interruptions. Schedule surface operations so that Work is not carried on, intermittently, throughout the area. Schedule excavation or construction activities and pursue to complete as required to permit opening of street areas to traffic without unnecessary delays.
 6. Notify Honolulu Police Department (HPD), Honolulu Fire Department (HFD), and Oahu Transit Services of Honolulu, Inc. (OTS), 14 days prior to any Work

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blocking any City street during construction. Arrange for and pay for all services required by HPD during construction operations on all roads.

7. Notify the Traffic Signals and Technology Division, DTS, 72 hours prior to any construction within any signalized intersection. Contractor is responsible for any and all damages to existing traffic signal conduits and loop detectors as a result of its Work. Contractor shall repair all damages.
8. Cooperate with HART and DTS, and other authorized persons in locating all warning signs, lights, walkways and detours required under this Section. If the Contractor fails to promptly provide adequate warning signs, lights, walkways, and detours, HART may provide them at the Contractor's expense. Contractor shall pay the cost of such work to HART, or HART may deduct the cost from any moneys due the Contractor from HART.
9. When material excavated for construction is placed adjacent to the trench or excavation, it shall be placed in such a manner as to economize space and minimize interference with traffic and shall conform to procedures or instructions given by the Department of Environmental Services, Stormwater Quality Division. If necessary, confine such material by suitable bulkheads or other devices. If the street is not of sufficient width to hold excavated material without using part of adjacent walkway, provide a passageway in compliance with the requirements of the ADAAG requirements and keep passageway open at all times.
10. When excavations cross street intersections, provide and maintain safe crossings for vehicles and pedestrians. Provide safe nonslip material for pedestrian crossings separate from vehicle crossings. Provide handrails except in areas opened for vehicular traffic.
11. Provide and post signs banning parking on streets to be worked on at least 24 hours prior to the Work. Cover all existing parking regulation signs and uncover them after the completion of resurfacing. Signs shall conform to the following requirements:
 - a. Mount signs on 4-foot high portable stands.
 - b. Size: — 18" x 24" x 0.063" with 1-1/2" radius corners.
 - c. Materials: —Aluminum conforming to ASTM Designation B 209-68.
 - d. Paint: shall be 3M Scotchlite Process Color or equal.
 - e. Color:— Red lettering on white reflectorized background except at the upper left corner where the Work "No" will be white lettering on red background.
 - f. Information on Signs: —Signs shall contain the information noted and conform to the layout as shown on the following schematic drawing.



12. While construction is in progress within any City street, provide and maintain traffic lanes in good condition in accordance with the following requirements:
 - a. Normal Working Hours: Perform work within the existing road pavement area during the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday, or as permitted by DTS. During normal working hours, provide two lanes of roadway open to traffic at all times. On streets too narrow to make this practicable, work in one-half the roadway, keeping the other half open to traffic. Take adequate measures to ensure that service by the buses of Oahu Transit Service of Honolulu, Inc. are not interrupted by the Project.
 - b. During non-working hours, cover all trenching located within the existing pavement area and open all lanes to traffic. Construct proper bridges and approach ramps (non-skid steel plates may be used) to provide for the smooth flow of traffic. Cover all trenches within the sidewalk areas with a safe, non-slip bridging material, providing safe passageways for pedestrians.
13. Maintain the safety of motorists, pedestrians, bicyclists, and workers in the vicinity of construction and maintenance areas at all times. When traffic conditions dictate, modify Work operations for such length of time as required to alleviate hazardous traffic conditions.
 - a. Safe Passage and Access to Site. The Contractor shall employ such methods in the performance of the contract and provide such barriers, guards, temporary bridges, detours, notices, lights, warnings, and other safeguards as may be necessary to prevent injury to persons and property, and to provide safe access to property. The Contractor shall define the line of safe passage with suitable lights, wherever the public may have access to the site of the Project. All passages and accesses shall be in conformance with the Americans with Disabilities Act and related regulations and guidelines.
14. Traffic Bridges. The Contractor shall provide proper traffic bridges where necessary so that all streets, roads, lanes, alleys, driveways, and garages will be accessible to traffic at all times. These bridges shall be constructed so that their decks are flush with the pavement, and maintained free from projecting nails, splinters, or rough edges. In lieu of the traffic bridges, the Contractor may use suitable steel plates. The bridges or steel plates shall be able to support all legal highway loads permitted by law and shall have a non-skid surface. Any steel

plate edges shall be in conformance with accessibility requirements pursuant to the Americans with Disabilities Act and related regulations and guidelines.

15. **Public and Private Right-of-Way.** The Contractor shall provide safe access to property abutting the site of the project when the usual means of access are obstructed by the performance of the contract. The Contractor shall provide free access to water meters, water valves, and abutting public and private property. No material or obstruction of any sort shall be placed within twenty-five feet of any fire hydrant. Fire hydrants must be readily accessible to the fire department at all times. Special attention is called to private and public rights-of-way. Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily. During the construction of driveways and driveway ramps, satisfactory access shall be provided by the Contractor for each driveway and driveway ramp. The accesses provided by Contractor shall conform with any and all accessibility requirements pursuant to the Americans with Disabilities Act and related regulations and guidelines.
16. **Vehicle load restriction** shall be in accordance with the DTS and HDOT requirements, unless the Contractor has obtained an over-legal load permit from the appropriate agency. Movement of any oversized Project construction equipment or material shall be in accordance with DTS and HDOT requirements. No such oversized load is to be moved over public streets without first obtaining approval of the DTS or HDOT, as applicable.
17. **Intelligent Transportation System (ITS):** As part of the TMP, Contractor shall procure, install, and maintain ITS equipment along State Highways that integrates information into the State's ITS system.
18. **Lane Closure Requirements:** Contractor shall close left-turn lane(s) by implementing detour routes as shown in the MOT plans. Do not close two consecutive signalized left turn lanes in the same direction.
19. **Control Devices and Facilities:** Traffic control and protective devices include temporary directional electrical warnings signs, detour signs, and danger signals; temporary barricades and guardrails; crash cushions; temporary lighting, overhead warning lights, and flashing lights; temporary pavement markings, and removal of permanent and temporary pavement markings; and the services of qualified flaggers.
20. **Temporary Walkways:** In areas where removal of existing sidewalks is necessary, maintain access to adjacent businesses, entrances, and properties by providing temporary walkways having a width of not less than four feet.
21. Remove all temporary signs, barricades, barrier curbs, crash cushions, drums, and cones used to safeguard traffic in connection with construction work at the close of the Work day, unless the Work is such that warning devices are still needed and are adapted for night work lane closures.

7.16.2 COORDINATION WITH HDOT

- A. Coordinate Work with HDOT, as applicable, throughout the Project on a daily basis. Use MOT plans as templates to develop traffic plans for specific construction operations in accordance with the following:

1. Submit MOT plans to HDOT Oahu District, as applicable, for review and approval, and obtain an HDOT permit when constructing within a State Highway.
2. Provide a 30-day advance notice to HDOT for any and all traffic restrictions on a State Highway lane or ramp.
3. Coordinate with HDOT on all details of access and egress to the Work from HDOT right-of-way, and all details of construction staging areas within HDOT right-of-way.
4. A copy of a Master Agreement between HART and HDOT will be furnished to the Contractor upon Contractor's request.
5. Obtain approval for all lane closures or restrictions on all HDOT State Highways, lanes, or ramps proposed by the Contractor.
6. "Lane rental fee" applies to violations of HDOT maintenance of traffic restrictions. Contractor shall be responsible to pay for late rental fees.
7. Obtain HDOT approval to close additional lanes, left-turn movements, and cross street movements not shown in the MOT plans. These closures may only be considered for non-peak traffic periods.

END OF SECTION

SECTION 7.17

DISCOVERY OF HAZARDOUS SUBSTANCE

7.17.1 CONTRACTOR RESPONSIBILITY

- A. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.
- B. Prompt Health and Safety Action in the Affected Area is Required. In the event the Contractor encounters on the site material, substances and/or waste reasonably believed to be hazardous to human health or the environment, which have not been rendered harmless, the Contractor shall immediately stop work in the affected area, properly secure or otherwise isolate such conditions, and notify HART. Contractor shall also submit a written notification of the condition. HART or its retained consultant will promptly determine the necessity of corrective action, if any. In all events, the work in the affected area and response to the discovery of hazardous materials, substances, and/or waste shall include all actions required by law and actions according to the Contractor's health and safety plan. The work in the affected area shall be resumed in the absence of any hazardous materials, substances, and/or waste or when it has been rendered harmless.
- C. Notice. The Contractor shall give any notices required by law and/or bearing on safety of persons or property or their protection from damage, injury or loss and any other required notices or reports and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities.
- D. Safeguards, Signs. The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards.

END OF SECTION

SECTION 7.18

HISTORICAL AND ARCHAEOLOGICAL FINDS

7.18.1 HISTORICAL AND ARCHAEOLOGICAL FINDS, INCLUDING BURIALS

- A. Contractor shall comply with the requirements and stipulations in HHCTCP Section 106 Programmatic Agreement (PA), Stipulation XII.B., regarding discoveries of historical or archaeological finds, including burials, during construction operations. In the event of any conflict between the PA and this Section, the requirements of the PA shall govern.
- B. In the event of the discovery of suspected human remains (burials) or other archaeological items, Contractor shall immediately stop Work within a 50- foot radius and secure the site. No photos shall be taken of human remains or suspected human remains. The Contractor's Environmental Compliance Manager or Project Manager shall contact the Project Archaeologist of Record, the Project Environmental Compliance Manager (CE&I), and HART. Upon confirmation of a find of human skeletal remains, the State Historic Preservation Division, Coroner's Office and Honolulu Police Department may also be notified, depending on the results of investigation.
- C. If the Archaeologist of Record cannot respond immediately, Contractor shall secure the location and, if possible, cover the excavation with a steel plate. In any case, Contractor shall ensure that the remains are covered, either by minimum backfill, tarp or cloth. Contractor shall contact the Project Environmental Compliance Manager (CE&I) immediately.

7.18.2 TRAINING

- A. Contractor shall provide, at minimum, on an annual basis, historic preservation and cultural awareness training to Contractor personnel and all other Project personnel that the Contractor is responsible for. Training shall include the following topics:
 - 1. Illegal collection and disturbance of historic and prehistoric cultural materials, including human remains;
 - 2. Scope of applicable laws and regulations;
 - 3. Initial identification and reporting of archaeological materials, human remains, and historic buildings or structures that may potentially be discovered during the course of Work.
- B. Contractor shall train equipment operators and laborers involved in excavation activities to identify and respond to inadvertent archaeological discovery.
- C. Contractor shall make available to HART on an annual basis, at a minimum, training materials, schedules, and lists of persons trained.

END OF SECTION

SECTION 7.19

PROTECTION OF WATER RESOURCES AND TEMPORARY DUST AND EROSION CONTROLS

7.19.1 GENERAL

- A. Protection of water resources and temporary dust and erosion controls, and installation, maintenance, monitoring, and removal of best management practices (BMPs) during construction shall be in accordance with Hawaii Standard Specifications (HSS) for Road and Bridge Construction, as cited herein.

7.19.2 SUBMITTALS

- A. The Contractor's submittals under this section include:
 1. Site specific BMP plan and other water pollution, dust, and erosion control submittals as specified in HSS Section 209.03(A) – Preconstruction Requirements.
 2. Plan outlining design and construction methods for project dust control as specified in HSS Section 620.03(A) – Preconstruction Requirements.
 3. Weekly copy of BMP inspection records. Submit amounts expended for initializing and maintaining BMP as specified in HSS Section 209.03(B) – Construction Requirements.
 4. Copy of the National Pollutant Discharge Elimination System (NPDES) Hydrotesting Waters Application and Permit as specified in HSS Section – 209.03(C) – Hydrotesting Activities.
 5. A work plan as required by permit, showing the method of diverting any surface water, temporary stream crossings, cofferdams, dewatering systems, or any other activity encroaching on surface waters and wetlands or affecting water quality. Work in surface waters and wetlands shall not commence until a plan that meets permit holder's requirements has been submitted.

7.19.3 PROTECTION OF WATER RESOURCES; DUST AND EROSION CONTROLS

- A. Provide temporary water pollution, dust, and erosion controls as specified in HSS Section 209 and Section 620.
- B. All Work shall be done in a way as to minimize or eliminate water pollution of surface water and wetlands and to minimize soil erosion caused by construction activities. Clearing of wetlands shall be limited to what is allowed by permit.
- C. Wetland areas shall not be used for storage, parking, waste disposal, or any other construction activity unless specified for use by permit.
- D. Pump effluent shall not be returned directly to any surface waters, but shall be confined in a settling pond for clarification prior to returning to any surface water, or sprayed onto a vegetated upland. Obtain a permit for any discharge into surface waters, including pump effluent, prior to commencing operations. On HDOT right of way, a permit from HDOT may also be required for diverting water by pumping or other means. Contractor shall be responsible for all governmental compliance.

- E. Keep vegetation clearing to a minimum. Cut stumps to near ground level or remove. Unless directed or approved otherwise, stumps serving as slope stabilization shall remain in place. Conduct timber felling with methods designed to minimize damage to such areas. Remove slash resulting from these operations where necessary to protect cover, soil, surface waters, and wetlands.
- F. Revegetation of disturbed areas shall be in the following priority: (1) surface waters and wetlands, (2) all other areas. Revegetation and restoration of disturbed surface waters, and wetlands shall return the areas to the predisturbed condition or as shown on the plans. These areas shall be protected and maintained from damage until Project Final Acceptance.
- G. Use dikes, berms, cofferdams, work platforms, bridges, culverts, or other acceptable methods to divert water from work areas in or near any surface water or wetlands. Forging or the operation of equipment in surface waters and wetlands shall be only as necessary to complete or remove the temporary surface water and wetland encroachment, or for short term work operations, to set girders or formwork, place culverts, accomplish surface water and wetland mitigation and restoration work shown on plans. All machinery and equipment working in or near surface waters and wetlands shall be rubber tired and free of leaking lubricants, coolants, fuel, or other contaminants. All temporary protective works shall be removed in a manner satisfactory to the Officer-in-Charge.
- H. Water Pollution. The Contractor shall comply with the provisions of Chapter 54, Water Quality Standards and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State of Hawaii Department of Health during all phases of work. The Contractor shall not pollute state waters or other water resources, including but not limited to, streams and drainage systems with any pollutant, including but not limited to fuel, oils, bituminous materials, calcium chloride, acids, construction wastes, wash waters, or other harmful materials. Surface drainage from cuts and fills, whether or not completed, and from borrow and waste disposal areas shall, if turbidity producing materials are present, be held in suitable sedimentation ponds or shall be graded to control erosion to meet legally acceptable limits. Objectionable construction discharges shall be processed, filtered, ponded or otherwise treated prior to discharge into a waterway or drainage system to ensure compliance with the Clean Water Act and applicable permits. Such oversight shall not relieve the Contractor from obtaining permits and meeting any requirements under applicable statutes, ordinances, rules, regulations or guidelines.
- I. Work associated with dewatering activities shall comply with the requirements in HSS 209.03(D) – Dewatering Activities. The Contractor shall be responsible for the water and its control and disposal during the construction of all Work covered by the Contract. Dewatering shall be accomplished by suitable means. The Contractor shall repair any and all damages to property including buildings, retaining walls, resulting from such dewatering operations to the satisfaction of the owners of such property. Dewatering shall be prohibited in areas subject to substantial damages to adjacent buildings and properties resulting from settlement due to dewatering. All concrete pours shall be dewatered in accordance with the applicable sections of the requirements in HSS.
- K. Work associated with hydrotesting activities shall comply with the requirements in HSS 209.03(C) – Hydrotesting Activities.

- L. Examine the Project site and make all necessary arrangements with affected property owners for removal of water from the site. Cost for such work, as necessary, will be considered incidental to the Work.
- M. Provide a bridge or other means to prevent water from flowing into adjacent streets, as a result of the Contractor's activities, and interfering with traffic. Cost for such work, as necessary, will be considered incidental to the Work.
- N. Contractor is responsible for all additional permits that may be required for removal of water from the site.
- O. Control fugitive dust and comply with applicable state and federal permit conditions.
- P. Dust Control. The Contractor shall maintain all excavation, embankment, stockpiling and all other Work within or adjoining the Project site and shall perform its Work such that it will be free from dust or the release of particulate matter that would cause a hazard or nuisance or could harm human health or the environment. Chemical treatment, bituminous treatment, or similar methods of dust control will only be permitted upon acceptance by HART. Water sprinkling must be repeated at such intervals as to keep all pavements and disturbed areas at least damp enough to prevent dust nuisance at all times, and the Contractor shall have sufficient sprinkling equipment on the job. Wet cutting shall be required for cement masonry blocks, concrete and asphaltic concrete pavements unless attachments are used with dry cutting equipment to capture the dust created thereby. All grinding work shall be wet. No dry powder brooming will be permitted in unconfined areas--vacuuming, wet mopping, wet sweeping, or wet power brooming may be used upon acceptance by HART.

END OF SECTION

SECTION 7.20

INVASIVE SPECIES AND NOXIOUS WEED MANAGEMENT

7.20.1 GENERAL

- A. Contractor shall use best management practices for the prevention, identification, and reporting of noxious and invasive species. During construction, Contractor shall employ both preventive and control measures to mitigate the spread of noxious weeds to and from the construction site. Contractor shall eradicate all discovered noxious weeds. Identified noxious weeds shall not be allowed to reach flowering or seed dispersal stage.

7.20.2 CONTRACTOR'S DUTIES

- A. Contractor's duties include educating construction workers about the importance of weed management and implementing preventive measures to control the spread of noxious weeds, since vehicles and construction equipment associated with construction activities can introduce seeds or rhizomes (horizontal stems) of noxious weeds to the Project site.
- B. Contractor shall prevent and completely eradicate all noxious weeds in the right-of-way (ROW) that are listed in the State of Hawaii Department of Agriculture Administrative Rules, "Noxious Weed Rules," (HAR Chapter 4-68) and the following high-priority noxious weeds:
 - 1. Fountain Grass (*Pennisetum setaceum*)
 - 2. Bush Beardgrass (*Schizachyrium condensatum*)
 - 3. Pampas grass (*Cortaderia selloana* and *Cortaderia jubata*)
 - 4. Fireweed (*Senecio madagascariensis*)
 - 5. Long Thorn Kiawe (*Prosopis juliflora*)
- C. Noxious weed signage shall be prominently posted at the Contractor's trailer at the construction site. Signage shall include one 8.5" x 11" laminated color sign for each of the above listed high-priority noxious weeds.
- D. Contractor shall obtain all necessary licenses and permits from applicable regulatory agencies for the specific methods proposed for clearing and removal of noxious invasive weeds species.
- E. When possible, Contractor shall use mechanical methods (e.g., mowing, removal) or commercially available herbicides specified to control the weed species identified. All chemicals used and applied for weed management shall meet Material Safety Data Sheet (MSDS) requirements. If restricted-use herbicides are proposed for use, Contractor shall ensure that they are applied by a licensed commercial applicator. For any herbicide use, restricted-use or otherwise, Contractor shall ensure that the herbicide label is in the applicator's possession, that the applicator has proper safety equipment, and the applicator is prepared to handle chemical spills before they occur. If an herbicide spill occurs, HART shall be notified. Contractor shall be responsible for properly and legally cleaning the spill and contacting any and all necessary governmental agencies. Herbicide mixing and application shall be done in accordance with instructions on the registered product label. Contractor shall furnish such label information to the HART Environmental Compliance Manager.

- F. When utilizing herbicide, the Contractor's responsibilities include:
 1. Notifying the HART Environmental Compliance Manager at least 24 hours prior to each herbicide application and indicate the starting time and location of each application.
 2. Herbicides shall not be applied when weather conditions, including wind conditions, are unsuitable for such work. Herbicides shall not be applied when soil is extremely dry.
 3. Herbicides shall not damage the plant growth outside the designated treatment areas. Contractor shall repair all damage caused by improper herbicide application at the Contractor's expense.
 4. For restricted-use herbicides, Contractor shall keep a record of herbicide application by the commercial applicator and submit a copy to HART for its records.
- G. All noxious weeds not contained within the inventory report conducted prior to construction and discovered on the Project site after the inventory conducted by the Contractor and the inventory list provided to HART shall be deemed to have been introduced by the Contractor. (See Section 7.20.3 below regarding inventory requirements.)

7.20.3 INVENTORY AND ERADICATION OF NOXIOUS WEEDS

- A. Before and after the completion of construction work, Contractor shall conduct a Right Of Way inventory of all existing noxious weeds and perform an inventory survey by a qualified independent botanist.
- B. Contractor shall submit an Inventory and Eradication Plan to include noxious weed species, flowering or immature, Global Positioning System (GPS) location (NAD 83), area covered, and number of plants. Demarcate species as appropriate and include information on map along with the GPS location data.
- C. Contractor shall spray noxious weeds located within the Project limits prior to starting earth disturbing activities and if they appear during construction, using pre-emergent, selective and non-selective herbicides, as appropriate.

7.20.4 EQUIPMENT CLEANING

- A. Contractor shall ensure that all equipment arrive at the project site clean and weed-free, using methods such as high-pressure water blasting or steam cleaning methods to clean all earth-moving construction equipment (scrapers, bulldozers, excavators, backhoes, trenchers) of dirt, mud, and seed residue prior to entering the project site. Contractor shall periodically inspect and verify that equipment arrives at the project site free of soil and debris, which are capable of transporting noxious weed seeds, roots, or rhizomes.
- B. Contractor shall thoroughly inspect seeding equipment prior to conducting seeding activities.

7.20.5 RECORD KEEPING OF DESTINATION OF MATERIALS REMOVED FROM SITE

- A. Contractor shall maintain records of the destination of all earth, fill, or debris removed from the project site during the entire Project duration and included in a monthly report, which shall include, at minimum, the following:

1. Type of material;
2. Approximate quantity; and
3. Address of delivery location.

- B. Data for monthly reports shall be compiled and the reports provided to HART for HART's files. Contractor shall provide a summary report to HART at final project acceptance or upon request anytime during construction.

7.20.6 CONTRACTOR TRAINING

- A. Prior to commencement of clearing and grubbing activities, Contractor shall ensure that all of its equipment operators shall attend training on the identification of weeds to be avoided and reporting procedures. Contractor shall coordinate with the Oahu Invasive Species Committee (OISC), 743 Ulukahiki Street, Kailua, HI 96734, 808-266-7994, Fax 808-266-7995, email: oiscc@hawaii.edu, regarding training.

END OF SECTION

SECTION 7.21

NOISE AND VIBRATION CONTROLS

7.21.1 COMPLIANCE WITH LAW AND THE MITIGATION MONITORING PROGRAM

- A. Contractor shall comply with the provisions of the Hawaii Administrative Rules for the State Department of Health, Chapter 46 (HAR Chapter 11-46), Community Noise Control for Oahu and the requirements of a noise permit, noise variance, or both, as applicable to the Project. When required, the Contractor shall obtain a community noise permit.
- B. Contractor shall comply with the requirements specified in the Environmental Compliance Plan and contract-specific construction mitigation plan for noise and vibration pursuant to the latest version of the H RTP Mitigation Monitoring Program.

END OF SECTION

SECTION 7.22

ENVIRONMENTAL COMPLIANCE

7.22.1 GENERAL

- A. Contractor shall comply with the HRTF Final Environmental Impact Statement (FEIS), Record of Decision (ROD), Programmatic Agreement (PA), and the HRTF Mitigation Monitoring Program (MMP). Contractor shall prepare an Environmental Compliance Plan (ECP) for the construction work to be done under the Contract that is consistent with the MMP included in the Contract Specifications. Prior to submission of Contractor's ECP, Contractor shall prepare a Pre-Construction Assessment (discussed below) and include the results in the draft ECP. The Baseline Project Schedule shall include the date of submission for the draft ECP, which must be finalized and verified by HART's Project Construction Engineer and Inspector (CE&I), prior to start of construction or supplemental investigatory work.
- B. Pre-Construction Assessment: Contractor's Environmental Compliance Manager and its environmental team shall carefully examine each Work location to gain an understanding of environmental conditions and constraints, including but not limited to, historical, archaeological, cultural, and sensitive natural features in preparing its Pre-Construction Assessment.
 1. The Pre-Construction Assessment should in part be based on:
 - a. Site inspection;
 - b. Additional studies on environmental resource or impact information;
 - c. Review of environmental permits, regulations; and
 - d. Relevant existing background reports and studies.
- C. HART will provide environmental constraint maps for inclusion in the Contractor's ECP, including location and extent of wetlands, waterways, floodplains, and habitats; historical, archaeological, and cultural resources; ordinary high water mark; and other sensitive environmental resources. Maps may provide limitations on construction operations.

7.22.2 ENVIRONMENTAL COMPLIANCE PLAN (ECP)

- A. Contractor's ECP, at minimum, shall include the following:
 1. Roles and Responsibilities: Identify environmental compliance team roles, responsibilities and authority, and communication protocol for environmental matters. Include an organization chart for flow of communication, including the following:
 - a. On-site staff (e.g., Project Manager, Quality Manager, Construction Manager, Environmental Compliance Manager, and Environmental Monitors; see also Section 7.5, Character of Workers and Key Personnel);
 - b. Procedures for environmental emergency response:
 - i. Names of contacts on Project team and regulatory authorities;
 - ii. Office, 24-hour, and mobile telephone numbers, e-mail address, and work address; and
 - iii. Actions to be taken during an environmental emergency situation.

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2. Permits:
 - a. Identify all necessary environmental permits and approvals, including:
 - i. List of all environmental permits and approvals obtained or to be obtained (including those obtained by HART), identifying the issuing regulatory authority contact information and anticipated schedule.
 - ii. Date and duration of approval, and any conditions stipulated, in each environmental permit or approval.
 - b. Include a provision to transmit all Contractor-obtained permits to HART via CMS.
 - c. Identify key restrictions or limitations (e.g., limit of wetland fill, mitigation requirements).
3. Resource Protection and Procedures:
 - a. Provide a detailed explanation of procedures for protection of resources and describe the process for unanticipated impacts or finds, including archaeological resources or human remains. Include the following:
 - i. Water quality and sediment/erosion control;
 - ii. Air quality and dust control;
 - iii. Noise and vibration control;
 - iv. Archaeological resources;
 - v. Historic properties;
 - vi. Hazardous substance and waste management, which includes lead paint and asbestos, if applicable;
 - vii. Water resources (including wetlands);
 - viii. Wildlife and fish protection; and
 - ix. Invasive species and noxious weeds.
4. Environmental Compliance Monitoring Program:
 - a. The following items from the Environmental Compliance Monitoring Program described in Section 7.22.3 will be included in the ECP:
 - i. All applicable mitigation measures from the MMP;
 - ii. Procedures for reporting and record-keeping;
 - iii. Identify frequency of monitoring per 7.20.3(C); and
 - iv. Meeting frequency and descriptions as described in 7.20.3(G).

7.22.3 ENVIRONMENTAL COMPLIANCE MONITORING PROGRAM

- A. Contractor's Environmental Compliance Manager, with support from the environmental team, shall monitor the Project throughout construction to confirm adherence to regulations, approvals, permits, and environmental performance standards.
- B. Contractor shall implement an environmental compliance monitoring program, which will include the following:

1. All applicable mitigation measures from the MMP;
 2. Environmental training program (Employee Awareness Training), including description of any special training needs;
 3. Identify personnel responsible for monitoring;
 4. Procedures for reporting and record-keeping;
 5. Procedures for reporting and handling noncompliance, including names of regulatory authority contact to be notified, the means by which notification is to be accomplished, and the timeframe for notification;
 6. Identify key personnel responsible for implementing corrective or preventive action;
 7. Follow-up procedures and documentation of implementation of corrective action.
- C. Contractor's Environmental Compliance Manager shall determine the frequency of monitoring depending upon the level of construction activity, proximity of activity to sensitive resources, and the environmental issues associated with the Work location. Monitoring shall occur at a frequency that will ensure there is ongoing compliance with the Contract requirements and ECP.
- D. Incidents of non-compliance noted by the Environmental Compliance Manager or a member of the environmental team shall be field-reviewed by the Construction Manager.
- E. During construction, the Environmental Compliance Manager shall maintain an environmental logbook and a photographic record of the Project. The environmental logbook shall be maintained at the Contractor's construction office at the Project site and shall contain copies of:
1. Monitoring reports;
 2. Photographs; and
 3. Applicable environmental permits, programmatic agreements, clearances, and authorizations.
- F. Construction Monitoring Report: As part of the Environmental Compliance Monitoring Program, Contractor shall submit to HART via CMS a bi-weekly Environmental Construction Monitoring Report. This report shall contain the following elements:
1. Project name and location;
 2. Date of site visit;
 3. Names and responsibilities of persons present during monitoring;
 4. Summary of general site conditions (describe general environmental condition and character of project site);
 5. Summary of current construction activities (e.g., describe location of work, type of work, equipment on site);
 6. Summary of permit condition compliance;
 7. Problem areas and deficiencies (e.g., active soil erosion, unauthorized filling of wetlands/streams, improper stockpiling of construction materials);

8. Corrective actions taken to resolve problems or deficiencies, including summarized discussions and decisions to resolve issues;
 9. Description of active restoration or mitigation operations that are occurring (if applicable);
 10. Photo documentation of sensitive site conditions within the Project area
- G. Meetings and Reporting: As part of the Environmental Compliance Monitoring Program, Contractor shall hold an initial compliance strategy meeting and ongoing environmental task force and compliance coordination meetings.
1. Compliance Strategy Meeting: Contractor shall schedule a meeting with HART to present Contractor's overall environmental compliance strategy. The following team members should participate in the initial meeting:
 - a. Project Manager
 - b. Construction Manager
 - c. Environmental Compliance Manager
 - d. Environmental Monitors
 - e. Quality Manager
 2. Environmental Task Force Meetings: Contractor shall be responsible for holding weekly or bi-weekly meetings, depending on the level of construction activity, with HART to discuss construction schedule, sensitive environmental resources, and environmental issues. Contractor shall prepare and distribute meetings minutes within seven (7) calendar days of the meeting.
 3. Compliance Coordination Meetings: Contractor shall meet with HART once a month, at a minimum, to review mitigation measures, compliance status, and potential ECP revisions.

7.22.4 ENVIRONMENTAL INCIDENT REPORT

- A. If there are any unanticipated impacts or events during construction, Contractor shall submit an Environmental Incident Report to HART within 24 hours. This is in addition to the notification processes outlined in the resource-specific section of the ECP.
 1. The Environmental Incident Report shall include the following:
 - a. Project name and locations;
 - b. Date and time of incident;
 - c. Details of incident --who, what, where, how, including names of people contacted and how the incident was handled; and
 - d. Further action to be taken by the Contractor.

7.22.5 NONCOMPLIANCE

- A. Contractor is responsible for any and all non-compliance of mitigation measures or permit conditions. In the event of noncompliance of mitigation measures or permit conditions, the Contractor Environmental Compliance Manager shall immediately bring the deficiency to the attention of its Project Manager, Construction Manager, and HART. The Environmental Compliance Manager shall propose corrective measures and

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establish the earliest feasible time frame for implementation of the corrective measures. Implementation of the corrective measures shall be documented during subsequent inspections. Monitoring reports shall be completed within 14 days of each monitoring inspection.

7.22.6 ENVIRONMENTAL POST-CONSTRUCTION MONITORING AND REPORTING

- A. At the end of construction, Contractor shall ensure that disturbed areas are restored to their preconstruction contours and revegetated as soon as possible following project completion. Contractor shall also ensure that no noxious weeds are introduced during the revegetation process.
- B. Contractor shall perform inspections required during the de-mobilization and final trimming and clean-up phases at each work location. Inspections shall also address the successes, failures, and remedial actions for site restoration and compensatory mitigation sites.
- C. Contractor's Environmental Compliance Manager is responsible to conduct final monitoring inspections to assess compliance with permit requirements.

7.22.7 EXPLOSIVES; HAZARDOUS SUBSTANCE; PROTECTION OF LAND RESOURCES; FISH AND WILDLIFE

- A. Explosives, Hazardous Substance. When use or storage of explosives or hazardous substance or equipment or unusual methods are necessary to perform work, the Contractor shall, prior to such usage, notify HART in writing of the nature of the explosive, hazardous substance or equipment, its intended use, its intended duration of use on the premises and method of maintenance on the premises. The Contractor shall exercise utmost care in maintaining and using the explosive or hazardous substance and carry on such activities under supervision of properly qualified personnel.
- B. Protection of Land Resources. Land resources within the project area and areas adjacent to and/or impacted by work performed under the contract shall be preserved in their present condition or be restored to a natural condition that will not detract from the appearance of the surrounding area. Except in areas marked on the drawings to be cleared, the Contractor shall maintain and water trees in the construction area. Except in areas marked on the drawings to be cleared, the Contractor shall not deface, injure or destroy trees or shrubs nor remove or cut them without approval. Any tree or other landscape features scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense.
- C. Protection of Fish and Wildlife. The Contractor shall at all times perform all work in such a manner as to prevent any interference or disturbance to fish and wildlife as required by law.

7.22.8 DAMAGES AND LOSS

- A. The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the contract) to property caused in whole or in part by the Contractor, a subcontractor at any tier, or anyone directly or indirectly employed by the Contractor or any subcontractor or by anyone for whose acts the Contractor or subcontractor may be liable and for which the Contractor is responsible

under this section, except damage or loss attributable to acts or omissions of HART and the damage or lost is not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to any other obligations of the Contractor under the contract.

- B. If the Contractor fails or refuses compliance with these requirements, HART may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. No extension of time or payment for excess costs or damages shall be made for the time lost due to such stop action; Contractor shall be liable for any costs incurred or damages accrued by HART as a result of this stop action. The cost of environmental pollution control shall not be paid for directly, but shall be considered incidental and included in the proposal prices for the various items of work.

7.22.9 ASBESTOS PROHIBITION

- A. No asbestos-containing materials or equipment shall be used for this Project. The Contractor shall ensure that all materials and equipment incorporated in the Project are asbestos-free and shall submit a written certification confirming this.

END OF SECTION

SECTION 7.23

SUSTAINABLE PRACTICES

7.23.1 GENERAL

- A. Contractor shall prepare a Sustainability Action Plan (SAP), which should include sustainable strategies for the Project with the goal of achieving sustainable principles of resource conservation, energy efficiency, and reduction of environmental impacts. The SAP should also include a construction waste management plan that includes a method of verification and means to track demolition waste reduction by volume or weight, construction waste disposal and diversion (salvaged and recycled) by volume and weight, post-consumer and post-industrial recycled materials, salvaged and reused materials, bio-based products, certified wood percentage, volatile organic compound (VOC) content and volume, office waste management, and other sustainable content to comply with the latest version of the LEED Reference Guide for Green Building Design and Construction.
- B. Contractor shall assign a qualified Sustainability Coordinator to facilitate the sustainable practices for the project. This person shall be a LEED-accredited professional with current certification.
- C. Contractor shall prepare and implement procedures and actions to reduce and recycle waste, salvaging, and reuse of materials during construction.
- D. Contractor shall submit Sustainability Progress Reports with each application for payment or at other interval as directed by HART. The reports should include the summary of progress toward achievement of sustainability goals.
- E. After the award of the Contract and prior to commencement of Work, Contractor shall schedule and conduct a meeting with HART and all subcontractors to discuss the Construction Waste Management Plan and all other sustainable practices. Sustainable practices specific to each trade shall be reviewed.
- F. Sustainability issues for each trade should be considered a part of each progress meeting agenda.

END OF SECTION

SECTION 7.24

PUBLIC AWARENESS AND COMMUNITY RELATIONS

7.24.1 SUBMITTALS

- A. Submittals by the Contractor under this Section include:
1. Contractor's Public Awareness and Community Relations (PA/CR) Plan (including Business and Residential Impact Mitigation Plan)
 2. Monthly reports of activities undertaken to implement the PA/CR Plan
 3. Construction schedule
 4. Weekly reports, including traffic updates and construction activities for HART public information and hotline staff
 5. Weekly report of public contacts and responses provided
 6. Changes to access along with up-to-date access maps
 7. Sample of project identification sign
 8. Public notices for scheduled disruptions
 9. Public notices for unscheduled disruptions
 10. Monthly public notices with project updates regarding disruptions to be posted on the project website, print outlets, and media outlets
 11. Project updates for website

7.24.2 GENERAL

- A. Maintaining good communications and community involvement while minimizing impacts to businesses, residents, and traffic are critical components of the successful development of the Honolulu Rail Transit Project (HRTTP). HART has developed a system-wide set of goals and objectives covering construction-related activities, including community relations (with specific outreach to impacted businesses), construction and traffic mitigation, public information, and responsiveness to public concerns.

7.24.3 PUBLIC AWARENESS AND COMMUNITY RELATIONS PROGRAM

- A. Based on HART's goals and objectives, Contractor shall develop a project-specific PA/CR program to be approved by HART for all construction-related activities. The program shall be designed to ensure effective community relations and successful mitigation of construction impacts businesses and residents near construction work sites. Those efforts shall include, at a minimum, an ongoing public information program, public meetings, construction advisories, newsletters, and/or e-blasts, and public notifications related to construction work and impacts using print, radio, and online ads. The PA/CR program shall include a detailed Business and Residential Impact Mitigation Plan. The Contractor, under HART's direction, shall also provide other City departments and State of Hawaii Department of Transportation with construction advisories and current construction-related traffic information.

- B. The Contractor shall develop and implement an effective PA/CR Plan to be approved by HART. The Contractor shall collaborate and coordinate with HART's Public Involvement team and with community stakeholders to develop and implement a PA/CR that:
1. Builds a positive image for the Honolulu Rail Transit Project;
 2. Provides regular reports on Contractor's progress;
 3. Provides acceptable mechanisms for community outreach, public input and responding to construction concerns;
 4. Mitigates construction impacts for area residents, business owners, and commuters in vicinity of the Project.
 5. The Contractor's communications team shall place a high priority on being responsive to the concerns of the public, neighborhoods, and business owners throughout the life of the Project. Concerns and contacts should be properly documented electronically for future reference and to provide ongoing reports and research and refining outreach and communications plans.
- C. HART's Role:
1. HART maintains oversight for public involvement and information for the HRTP in its entirety, from East Kapolei to Ala Moana and, specifically for this Contract, will monitor Contractor's performance for compliance with the approved PA/CR Program plan. As part of its oversight, HART will:
 - (A) Provide leadership in establishing the HRTP project communications policy and strategic direction;
 - (B) Provide the Contractor with communications goals and objectives;
 - (C) Ensure that the Contractor's communications programs and products are consistent system-wide and in line with HART's overall public information and outreach efforts; and
 - (D) Conduct HART-sponsored public relations activities targeted to the general public.
- D. Contractor's Role:
1. The Contractor shall be the focal point for the PA/CR effort to prepare affected neighborhoods for construction and to minimize the actual impact of construction.
 2. The Contractor shall perform the Project-specific PA/CR activities, manage the day-to-day PA/CR program and mitigate the impact of construction for businesses and residents in the Project area.
 3. Contractor shall support HART's public information and outreach efforts in the Project-specific areas, including providing timely reports, public information and personnel to ensure a successful program.
 4. Contractor's communications program and products shall be consistent system-wide and in accordance with the communications goals and objectives provided to the Contractor by HART.

7.24.4 CONTRACTOR'S RESPONSIBILITIES

- A. Contractor's PA/CR Plan: Within 30 days of the Notice to Proceed (NTP), Contractor shall complete and submit to HART for review, comment and approval a PA/CR Plan, which will include the Business and Residential Impact Mitigation Plan defined below as a subset of the PA/CR Plan. The PA/CR Plan shall be consistent with HART's communication goals and objectives and shall target PA/CR activities to those most affected by Project construction. The Contractor's PA/CR Plan shall include, at a minimum, the items described in the Project Specifications. The Contractor shall:
1. Use the official Honolulu Rail Transit Project (HRTP) logo on all communications products with HART's approval. The Contractor may also identify itself and use its logo, where appropriate. HART must approve all deliverables before final production.
 2. Update the PA/CR Plan at least semi-annually, soliciting input from the businesses and residents along the corridor and the stakeholders representatives and using the results of market research described later in this Section. Submit a copy of each update to HART for review, comment and approval.
 3. Provide monthly reports of activities undertaken to implement the PA/CR Plan. Submit the monthly report in a format acceptable to HART on or before the 10th day of the month for activities undertaken during the previous month.
 4. Assess the effectiveness of the PA/CR Plan: Working in conjunction with HART's public involvement team, use market research techniques semi-annually to provide information to HART. Information will be used to determine if any course corrections are needed in the delivery of information and interaction activities with Project area residents, businesses, and commuters.
 5. Coordinate all PA/CR issues directly with HART that arise within and adjacent to the Project's geographical limits during the time the Contract is in force. This includes PA/CR issues that may be attributed to other concurrent HRTP contracts.
- B. Staff Requirements:
1. Provide, at a minimum, a full-time Public Involvement Manager (PIM) responsible for managing Contractor's PA/CR Plan. Other Contractor staff must be provided, as needed, to accomplish specified tasks. The PIM is a key personnel on the Project list of Key Personnel.
 2. The PIM shall have and provide "real-time" access to all Project details that may be relevant to the public, public agencies, emergency service providers, businesses, and residents. The PIM shall have readily available and provide information, current and updated, to HART when requested by HART.
 3. The Contractor's PIM is the primary interface between the public and the Contractor's organization.
- C. Public Interaction:
- Contractor shall maintain day-to-day contact with the affected Project area residents, businesses, and commuters and provide information to all parties impacted by the Project on how to deal with any Project-related disruptions, impacts or issues. If a resident, business, commuter, or other member of the public has a question or comment related to construction or preparation for construction, the first and preferred point-of-contact should be the Contractor.

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D. Public Notifications:

1. Notify the public and community in general and specifically, affected businesses and residents along the Project area through personal contact of construction progress and upcoming events. Provide information to mitigate impacts that have immediate and long-term results.
2. Provide the specific notifications specified in Table 1 below.

Table 1: Table of Notifications

Notice	Requirement
30-day heavy construction notification	Provide written notification of heavy construction 30 days prior to construction. Provide access maps per the Maintenance of Traffic Plan (MOT).
3-day light construction notification	Provide written notification of light construction three days prior to construction. Provide access maps per the MOT.
Critical utility shut-off/	Provide written notice of at least 72 hours in advance of, but not more than 96 hours before, utility shut-off and diversions.
72-hour business/commercial utility shutdown	Provide written notification of utility shutdown for businesses and commercial property.
48-hour residential utility shutdown	Provide written notification of utility shutdown for residential property.
Weekly heavy construction updates	Provide a construction update to each business or resident fronting a heavy construction zone. The update shall be a personal visit from the PA/CR Team.
Emergency unforeseen utility disruptions, hazardous conditions, traffic signal emergencies, security and loss of access	See Section 7.24.4(K) below.
Road and driveway closures	Provide written notice and personal contact at least 72 hours in advance of, but no sooner than, seven days prior to closure.
Construction schedule	Submit one month prior to start of construction.
Removal of surface encroachment, such as privately owned plants and shrubbery, from the City's right-of-way	Provide notice to affected owners at least two weeks in advance of the commencement of the removal. Provide construction start date and the location of plants or other encroachments to be removed for each owner.

3. Utility shut-off/diversion announcements shall be made in the form of personal contact by the PIM or designated member of the Contractor's PA/CR staff. Contractor shall include written notices to the affected parties.
- E. 24-Hour Public Information Hotline:

HART has established a 24-hour public information hotline for the Project. The Contractor will assist by ensuring that a Project representative is available at all times to respond to inquiries and reports generated via the hotline and reported by HART. Contractor shall develop reports on an updated and regular basis for the hotline staff, accepted by HART, containing the necessary guidance needed to address any number of issues called into the hotline, including basic Project information, procedures for handling situations, a prioritized call-tree, the types of notification to use in specific incidences, emergency phone procedures, and any other applicable information. The information provided must always be current.
 - F. Submit a weekly written report to HART, identifying the nature of public contacts and Contractor responses for the preceding week. Contractor's PIM must be available at the request of HART to discuss the report.
 - G. Database: Contractor shall log all contacts it has made with the public into a database that is maintained by HART. All contact information shall be inputted into the database within three days of contact by Contractor.
 - a. Entries shall include the following:
 - i. Contact name, business name, address, phone number;
 - ii. When the contact was made;
 - iii. Who accepted/responded to the contact;
 - iv. How the contact was made (in person, phone, e-mail, facsimile);
 - v. A brief description of the nature of the contact;
 - vi. A brief description of handouts;
 - vii. A brief description of how any issues or concerns were resolved.
 - H. Develop a referencing system to track the distribution of handouts and mass mailings in order to minimize the amount of hard copy information filed.
 - I. Develop a standardized form to log contact information. This form shall become the hard copy record of all contacts. Attach this form to handouts. The contact information shall include the information provided for the database as well as a description of what was discussed. The database shall document all contact with the public and be capable of recreating the contacts made and issues discussed during the Project.
 - J. Complaint/Comment Forms: Provide complaint/comment forms to businesses and residents along the Project as a method for the public to express Project concerns. These forms shall provide all information needed for entry into the database. The forms shall indicate the business address, website address, and fax number where the forms can be sent and the forms shall include the 24-hour public information hotline number.
 1. Responses to the Hotline Calls and Complaint/Comment Forms:
 - a. Respond to complaints within five days of receipt for non-emergency issues and within 24 hours for emergency issues.

- b. Evaluate emergency calls relating to hazardous conditions, diminished security, or loss of access or utility services on a case-by-case basis. Verification calls shall be provided on all calls to inform the callers that their calls have been addressed.
- K. Emergency, Unforeseen Utility Disruptions, Hazardous Conditions, Traffic Signal Emergencies, Security, and Loss-of-Access Notifications:
 - 1. Initiate immediate response to emergencies by trained personnel from an incident response team within 30 minutes of receiving notification from HART, a utility owner, a HART official, or affected business(es) or resident(s).
 - 2. Explain all emergency or unforeseen disruptions to the public immediately by personal contact from the PIM or a designated member of the Contractor's public information staff. The person making the contact shall provide to the affected party(ies) information such as:
 - (A) Cause of disruption (i.e., whether it is construction-oriented or not);
 - (B) Actions being taken to alleviate the problem;
 - (C) Anticipated duration of the disruption.
- L. Construction Schedule/Maintenance of Traffic and Access:

Notify businesses and residents along the Project and publicize commencement of construction in accordance with Table 1 herein. The notices shall provide, at a minimum, information addressing public safety, business impact mitigation, and proposed alternative routes and detours. This notification shall indicate the projected dates for the construction by individual notices to stakeholders, community groups, businesses, and residents along the corridor as well as along alternative routes. Provide all relevant information concerning the construction schedule to HART which will then publicize such information to appropriate media outlets.

7.24.5 BUSINESS AND RESIDENTIAL IMPACT MITIGATION

- A. Business and Residential Impact Mitigation Plan: Complete, update, and submit a Business and Residential Impact Mitigation Plan, which includes but not limited to:
 - 1. Door Hangers: The Contractor may use door hangers to inform particular property owners/residents about day-to-day construction progress and disruption.
 - 2. Access Maps:

Develop access plans with businesses and residents on each block and provide maps showing existing and planned patron, delivery and residential access during any construction period. The map(s) shall identify times of business operation and deliveries. The Contractor may show the utilization of alleys or adjacent driveways upon receiving written permission from HART or owner having jurisdiction over such driveways or alleys. Individual business and residential access shall be recorded in the database. Contractor shall make the access maps available at least seven days prior to construction where a business or residence is impacted.
 - 3. Changes to Access:

Inform businesses and residents in writing and by personal contact of any changes to access that may impact them at least two weeks prior to start of

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construction. Changes in access, along with access maps, shall be submitted to HART for review and comment at least three weeks prior to start of construction.

4. Work within Private Property:

Notify each property owner affected by such work with the approximate start date and total duration of work within their property. Notification shall be made in writing, via a notification flier, at least two weeks prior to commencing work. Submit draft to HART for review and comment at least three weeks prior to start of construction.

5. Garbage and Recycling Removal:

Provide adequate access for all garbage and recycling removal. Negotiate with public and private garbage and recycling removal services and provide them access at agreed times.

6. Construction Mitigation Signage:

On blocks that are undergoing construction, maintain signage at each intersection on both sides of the street that lists all businesses that face on the block or use the block for access. This signage shall be maintained throughout the duration of construction in any area affected.

7. Public Notification

Provide public service announcements to promote safety and construction awareness including, but not limited to, radio and newspaper notices.

7.24.6 COMMUNITY UPDATES/NEIGHBORHOOD BOARDS

- A. Besides the daily contacts made, conduct community updates to give the public the opportunity to discuss the Project. All neighborhood meetings shall be advertised in neighborhood and community newsletters. At a minimum, community updates shall be hosted once per month starting one month prior to construction. The Contractor is responsible for selecting an appropriate, easily accessible venue and for convening the meetings at a convenient time for maximum attendance. The information displayed or discussed shall include schedule, staging, maintenance of traffic and access, and any other Project information. The stakeholders will be provided the opportunity to participate in all community updates, which are to be advertised no less than 14 days before the event.
- B. Accompany HART representatives to neighborhood board meetings in the affected areas to serve as a resource when HART representatives present Project updates.

7.24.7 CONSTRUCTION TOURS

- A. When HART schedules construction tours, the Contractor shall observe required safety program guidelines, such as the wearing of protective equipment and waiver of liabilities. Contractor shall participate in tours as requested to provide construction information.

7.24.8 PROJECT IDENTIFICATION SIGNS

- A. Install signs throughout the Project to be placed in prominent auto traffic zones where construction is occurring and at Contractor's main office and at all field offices. The signs shall identify the HRTTP and shall comply with Federal Transit Administration (FTA) requirements. The signs shall identify name of the Contractor, the Project

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24-hour public information hotline number, and pertinent information as requested by HART and participating agencies. Contractor shall submit a sample of the Project identification sign to HART for acceptance. Signs and lettering shall be sized appropriately for the speed limit in the area using the Manual on Uniform Traffic Control Devices (MUTCD) size guidelines and be consistent with applicable City sign ordinance(s).

7.24.9 INCIDENT NOTIFICATION

- A. Establish and manage an emergency response telephone tree. All appropriate stakeholder personnel shall be included on this telephone tree for immediate response in the event of an emergency. Divide the telephone tree into areas of expertise so that the proper people are called for specific emergency situations.

7.24.10 MEDIA RELATIONS

- A. An ongoing media relations program will be implemented and managed by HART. The Contractor shall not meet with the media without HART's authorization and shall direct all questions from the media to HART. The Contractor shall provide timely information to HART regarding construction activities for use in media events.
- B. Contractor shall develop press releases for HART as needed to keep the public informed of the Project. All press releases shall receive prior approval from HART before distribution to media outlets. The Contractor shall work with HART to develop a process to ensure that official stakeholders and elected officials will receive press releases before or at the same time as the media.
- C. Radio and television traffic reporters shall receive appropriate and timely updates on construction activity and traffic management information. Public service announcements shall be developed as part of the Contractor's traffic management information.
- D. Neither the Contractor nor any of its subcontractors nor their employees shall conduct or participate in media interviews or events, radio or television broadcasts relating to the Project, without the written consent of HART, except in emergencies. In emergency situations, immediately notify HART of any situation that may involve the media.

7.24.11 PUBLIC NOTICES

- A. Contractor shall prepare public notices and information for radio, television, and cable television and for the Honolulutransit.org website to notify the public of inconveniences caused by the project works, including traffic and utility disruptions. Contractor will submit public notices for scheduled disruptions to HART 15 days in advance of the event. Inconveniences caused by unpredictable events (e.g., damage to utility lines, extended street closures) shall be communicated to the public as expeditiously as possible. Costs associated with production and publication/airing of these updates will be borne by the Contractor as a part of this Contract.
- B. Submit a monthly project update for posting on the H RTP website, publication in print outlets, and broadcast on radio, television, and cable television. Required media outlets are major daily newspapers, four major television stations, and the top five rated radio stations. Costs associated with production and publication/airing of these updates will be borne by the Contractor as a part of this Contract.

7.24.12 SPECIAL EVENTS

- A. Contractor shall assist HART as needed with the planning and implementation of special events that recognize significant Project milestone achievements, such as groundbreaking.

7.24.13 WEBSITE

- A. Contractor will recommend and provide Project updates (weekly, monthly, or quarterly) for the existing Honolulutransit.org website. Website information to be submitted by the Contractor includes information to prepare Project area residents and business owners for construction and to mitigate the impact of construction, public notifications, neighborhood meetings, the dates and location of scheduled construction, detours and alternative routes. HART has final approval on the content of these updates. Contractor shall submit information to HART within two working days prior to scheduled updates in electronic formats that facilitate website posting.

END OF SECTION

SECTION 7.25

PROJECT IDENTIFICATION

7.25.1 GENERAL

- A. Contractor shall provide temporary project identification signs and general construction signs as specified herein. The Contractor will install signs throughout the project to be placed in prominent auto traffic zones where construction is occurring and at the Contractor's main office and at all field offices. The signs will identify the rail transit project and will comply with Federal Transit Administration (FTA) requirements. The signs will also identify the Contractor's name, the project 24-hour public information hotline number and the participating agencies. A sample of the Project Identification Board shall be submitted to HART, and shall be subject to HART's review and comment. Signs and lettering shall be sized appropriate for the speed limit in the area using MUTCD size guidelines and be consistent with applicable City sign ordinance(s).

7.25.2 PROJECT IDENTIFICATION SIGN

- A. Contract shall provide temporary project identification signs at locations specified in the Contract Documents or as designated by HART. Contractor may place additional identical signs paid for by the Contractor; provided, however, they do not violate any anti-billboard/advertising laws, and it is acceptable to HART. Contractor shall not place any other project identification signs on the right-of-way or within the limits of the project.

7.25.3 FIELD OFFICE SIGNS

- A. Contractor shall provide temporary general construction and field office identification signs as indicated or required. Contractor shall provide field office identification signs for HART's field office and the Contractor's field office.
- B. The Design, Layout, and Size: Design, layout, style of lettering, and colors shall be as follows:
 1. General construction signs shall be constructed from a sheet of plywood 4 feet by 8 feet (4'x 8') or 3 feet by 6 feet (3'x 6') in size, as appropriate for the location, mounted on two posts set in the ground.
 2. Field office identification signs shall be constructed from a sheet of plywood 3 feet by 6 feet (3'x 6') in size, for wall or post mounting, as appropriate for the location.
 3. General Construction and field office identification signs shall be located as designated in the Contract Specifications or as designated by HART.

7.25.4 CONSTRUCTION SIGNS AND INSTALLATION

- A. Construction and installation of the signs shall follow the following specifications:
 1. Materials: Construct sign faces with 3/4 -inch thick, 5-ply, exterior grade, A-B faced, Douglas-fir plywood, APA-grade-stamped. The frame shall be nominal 2-by- 2 or 2-by-4 stock, either construction-grade Douglas fir or A-grade redwood. Posts shall be 4-by-6 construction-grade Douglas fir, pressure-preservative-treated, 8 to 12 feet long as required for the location.

2. Construction: Set plywood signs into the frames. Miter and screw together frame corners. Screw sign to two 2-by-6 Douglas-fir cleats and bolt to posts with at least two ¼-inch bolts per post.
3. Installation: Install sign posts in the ground a minimum of 3 feet deep to ensure stability, with the top of the sign horizontal, level, and even with the top of the posts, 7 feet minimum above the ground.
4. Painting: Paint signs with one coat of primer sealer and two base coats of exterior semi-gloss enamel. Paint letters and logos in black on a white background. Use Helvetica font style for letters, unless otherwise indicated by HART.
5. Maintenance: Keep signs clean and in good repair until completion of the Contract.

7.25.5 CLOSEOUT

- A. Upon completion of the Work, Contractor shall remove and dispose the signs off the Project site or leave the signs in place if requested by HART.

END OF SECTION

SECTION 7.26

PRODUCT REQUIREMENTS

7.26.1 PRODUCT QUALITY

- A. Materials, equipment, appliances, fixtures, and fabricated assemblies to be incorporated in the Work shall be new, except as may be indicated in the Contract Documents.
- B. Furnished/Installed Products
 - 1. Furnished products shall be incorporated in the Work as complete assemblies or systems with all appurtenances and installation of anchors, fasteners, and accessories as required to provide a complete and finished product installation.
 - 2. Installed products with moving parts shall be fully operable at proper settings and levels according to manufacturers' instructions and recommendations.
 - 3. Transportation and Delivery
 - a. Contract shall arrange deliveries of materials and equipment according to the Baseline Project Schedule and coordinate to avoid conflict with Work and conditions at the site.
 - b. Materials shall be delivered in undamaged condition, in manufacturers' original containers or packaging (where applicable), with identifying labels intact and legible. Packaged materials shall be in their original unbroken packages or containers.
 - c. Cement, prepared dry mortar mixes, grouting material, plaster, and coloring material shall be delivered in original, unopened and sealed containers, bearing the brand and manufacturer's name.
- C. Storage and Protection
 - 1. Receiving, storage, quality, and inventory control of equipment and materials required for Contract Work is the responsibility of the Contractor. Contractor shall store materials in such a manner as to ensure preservation of their quality and fitness for the Work and protect materials and equipment from damage and corrosion during storage. Storage shall be arranged to provide easy access for inspection and identification of each shipment. On each container of parts, there shall be affixed an itemized list and description of contents.
 - 2. Contractor shall perform periodic inspections of stored materials to ensure that materials are maintained under specified conditions and are free from damage or deterioration.
- D. Material Safety Data Sheets (MSDS)
 - 1. Contractor shall furnish Material Safety Data Sheets (MSDS) for all materials to be incorporated in the Work.
 - a. Contractor shall provide a file drawer or drawers in the Contractor's field office or other acceptable location for filing of all MSDSs. MSDSs shall be filed according to the Contract Specifications Section numbers and readily available for review

by HART, jurisdictional inspection authorities, and all personnel engaged in the Work.

2. Contractor shall post MSDSs for material that is flammable or otherwise hazardous on a bulletin board for this specific purpose. The bulletin board shall be located at the project site, sheltered from rain and wind, and readily accessible to all personnel engaged in the Work.

END OF SECTION

SECTION 7.27

HART-FURNISHED PRODUCTS

7.27.1 GENERAL.

- A. Contractor shall be responsible for inspecting and accepting all HART-furnished products, including materials and equipment. Once HART-furnished products have been accepted by the Contractor, the products shall be the responsibility of the Contractor's.

7.27.2 CONTRACTOR'S RESPONSIBILITIES

- A. Upon Contractor's inspection and acceptance of HART-furnished products, Contractor shall assume custody and full responsibility of such products. Contractor shall timely inspect and accept the products to meet the Project Schedule requirements. Contractor shall replace lost or damaged materials and equipment at no additional cost to HART. In such an event, any requested time extensions shall be an unexcused delay.
 - 1. Contractor shall inspect HART-furnished materials and equipment at time of pick up by the Contractor at the storage site or, in the event of delivery of such materials and equipment, at the time of delivery by the respective suppliers to the delivery sites. Contractor shall submit certification to HART showing the quantity of accepted materials and equipment. Contractor shall set aside all damaged materials and equipment and immediately notify HART and the delivery carrier in writing of the damage and circumstance of discovery.
 - 2. Should there be any discrepancies between the packing list and delivered materials Contractor shall notify HART immediately.
 - 3. Contractor shall provide an overall schedule of its requirements of HART-furnished products for its Work under the Contract. Any updates to the schedule must be made on a regular basis:
 - a. The schedule must show the installation sequence of the HART-furnished products and the date on which Contractor will pick up the products at the designated storage site or, in cases where HART has indicated the materials and equipment will be delivered, then the required dates of such deliveries, and approximate date of construction placement.
 - b. Excess Materials: Upon Substantial Completion of the Work, Contractor shall transport, unload, and stockpile all excess HART-furnished materials and equipment to a delivery location on Oahu, as determined by HART.
 - c. Installation: Contractor shall install HART-furnished materials and equipment accurately and, if applicable, pursuant to manufacturer's instructions.

END OF SECTION

SECTION 7.28

MOBILIZATION

7.28.1 GENERAL

- A. Upon written instructions from HART, Contractor shall proceed with preparation work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies and incidentals to the Project site; for the acquisition of all Work materials; for the establishment of all offices, buildings, and other facilities, excluding field office and Project site laboratories, necessary for the Work on the Project; and for all other work and operations which must be performed, or costs incurred, prior to beginning Work on the various items on the Project site.

7.28.2 MAXIMUM ALLOWED AMOUNT FOR MOBILIZATION

- A. The maximum Contractor is allowed to offer for mobilization is six percent (6%) of the total sum of all items within the group of items in which the mobilization item is included, excluding the price of the mobilization item. If the proposal submitted by the offeror indicates an amount in excess of the allowable maximum, the amount of amount submitted by the offeror shall be reduced to the allowable maximum, and the total sum offer shall be adjusted to reflect any such reduction.
- B. Payment: Partial payments will be made as follows:
 - 1. When five percent of the total sum offer is earned, fifty percent of the amount proposed for mobilization will be paid;
 - 2. When ten percent of the total sum offer is earned, seventy-five percent of the amount proposed for mobilization will be paid; and
 - 3. When twenty percent of the total sum offer is earned, one hundred percent of the amount proposed for mobilization will be paid.

7.28.3 DEMOBILIZATION

- A. The cost of demobilization shall be considered incidental to the mobilization and no further allowances will be made for such.

END OF SECTION

SECTION 7.29

FIELD ENGINEERING

7.29.1 GENERAL

- A. This Section includes the requirements for field engineering, including:
 - 1. Qualified Services
 - 2. Lines and Grades
 - 3. Survey for Layout and Performance
 - 4. Surveying Accuracy and Tolerances in Setting Survey Stakes
 - 5. Drilled Shaft Survey

7.29.2 SUBMITTALS

- A. Contractor shall complete survey notes, drawings, and calculations as the Work progresses and submit one copy of each survey document to HART for record purposes.
- B. Contractor shall submit maps showing all final centerline, station, and other Contractor-installed monuments, properly prepared and submitted to HART for its records.

7.29.3 QUALIFIED SERVICES

- A. Contractor shall perform surveying services and field engineering services under direct supervision of a professional land surveyor or civil engineer currently licensed in the State of Hawai'i. A civil engineer providing field surveying shall have been registered prior to 1982 or have a current professional land surveyors license in the State of Hawai'i. Contractor shall furnish a certificate that the completed lines, levels, and elevations are in conformity with the Contract.

7.29.4 LINES AND GRADES

- A. Primary control lines, monuments, and bench marks shall be set for completion of Work. In general, these will consist of the primary horizontal and vertical control points indicated in the Contract Documents. Contractor shall establish work points for major structures, track alignments, and roadway alignments. Contractor shall set survey monuments at each end of station platforms to establish platform finish elevations.
- B. Contractor shall preserve primary control monuments set by HART. HART will replace or restore, at its earliest convenience, monuments that are destroyed or damaged.
- C. Contractor shall temporarily suspend work and for such reasonable times as HART may require for resetting monuments destroyed or damaged by Contractor's operations. Contractor will not be entitled to additional compensation or extension of time from such activity by HART. Contractor shall be responsible for all other stakes or markers required to establish the lines and grades for the Work.

7.29.5 SURVEYS FOR LAYOUT AND PERFORMANCE

- A. Surveying Requirements: Contractor shall perform all surveys for layout and performance of the Work, reduce field notes, and make all calculations and drawings necessary to carry out such work. Contractor shall check relative positions of all monuments and bench marks to be used and report any damage or out-of-position

monuments to HART at once. The Contractor shall check such relative positions each time the Contractor uses such monument or benchmark.

- B. Datum: Contractor shall verify all lines, levels, and elevations indicated in the Contract before any excavation or construction begins. Any discrepancy shall be immediately brought to the attention of HART and any change shall be made in accordance with this instruction. The Contractor shall not be entitled to any additional payment if it fails to report the discrepancies before proceeding with work within the area affected by the discrepancies. Correctly locate all lines and grades and perform all measuring as required for the construction and completion of Work from established reference points and information shown in the Contract Documents.
- C. Equipment and Personnel: Contractor shall ensure that instruments and other survey equipment are accurate and suitable for surveys required in accordance with recognized professional standards. Surveys shall be performed under the direct supervision of a professional land surveyor or civil engineer currently licensed in the State of Hawaii.
- D. Field Notes and Records: Contractor shall provide original pages of all survey records to HART at intervals required by HART. Each field notebook shall be furnished to HART when filled or completed.
- E. Use by HART: HART may at any time use line and grade points and markers established by the Contractor. Contractor's surveys are a part of the Work and may be checked by HART at any time. Contractor is responsible for any lines, grades, or measurements which do not comply with specified or proper tolerances, or which are defective, and for any resultant defects. Contractor shall conduct resurveys or check surveys to correct errors indicated by review of the field notebooks or by survey checks by HART. HART is in no way obligated to conduct survey checks.

7.29.6 SURVEYING ACCURACY AND TOLERANCES IN SETTING SURVEY STAKES

- A. Surveying Accuracy: Contractor shall control traverse field surveys and computations, including surveys of main control lines, to determine horizontal and vertical alignment of major structure components that meet accuracy requirements for Second Order, Class II, as defined by the Federal Geodetic Control Committee, and the accuracy requirements for Second Order, Class II Surveys as specified by the National Oceanic and Atmospheric Administration (NOAA), "Surveying Standards," for construction staking or equipment installation.
- B. Tolerances: Contractor shall meet tolerances generally applicable in setting survey stakes as set forth herein, unless stricter tolerances are required by the Contract Documents or Specifications.

7.29.7 DRILLED SHAFT SURVEY

A. Regarding drilled shaft surveys, Contractor shall:

1. Re-survey each control point daily to ensure that movement of a drilled shaft has not occurred which affects the vertical or horizontal position of each of the survey control points therein. Immediately verify apparent changes in location.
2. Adjust published horizontal and vertical coordinates of drilled shaft survey points as necessary and provide revised coordinates to HART as soon as possible after verification of the location information.
3. Establish convergence pins and other controls as necessary.
4. Contractor may submit a request to HART to reduce the frequency of re-survey to verify survey control points that are infrequently used and have not shown movement.

END OF SECTION

SECTION 7.30

CLEANING

7.30.1 CLEANING AND CLEANUP DURING CONSTRUCTION

- A. Contractor shall keep the Project site, including the Contractor's Work and storage areas, in a neat, clean, and orderly condition at all times during the course of this Contract. HART may, at any time during construction, order a general cleanup of the Project site as part of the Work, and there shall be no additional cost to HART. Contractor shall provide general daily clean-up and disposal service for removal of waste, rubbish, trash, and debris away from the Project site.
- B. Contractor shall perform cleaning of all facilities and ancillary buildings as required during construction to prevent accumulations of dust, dirt, soil, trash, and debris, so that a clean and safe working environment shall be present at all times.
- C. Contractor shall keep walkways or designated pathways for authorized visitors neat and free of pebbles and other obstacles to walking comfortably, equivalent to broom clean of paved surfaces.
- D. Contractor shall provide daily litter pickup within 1/2 block of the Project site in all directions and provide trash receptacles for workers' lunches, cigarette butts, and other miscellaneous garbage.

7.30.2 DUST CONTROL

- A. Contractor shall clean interior spaces prior to the start of finish painting and the application of other finishes, and continue cleaning as required until such Work is completed.
- B. Contractor shall schedule operations to prevent dust and other contaminants to prevent dust and contaminants from adhering to newly finished surfaces.

7.30.3 DISPOSAL OF DEBRIS

- A. Waste, trash, and debris shall be disposed in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Waste material and debris shall not be buried. Burning of trash and debris on the site shall not be permitted.

7.30.4 FINAL SITE CLEAN UP

- A. Upon completion and prior to Final Acceptance, thoroughly clean the entire Project site. Site shall be in a clean and neat, acceptable condition. Contractor shall remove from the site all construction waste and unused materials, dunnage, loose rock and stones, excess earth, and debris of any description resulting from the Work.
- B. All pavement and paved walkways shall be hosed down and scrubbed clean.
- C. Mortar droppings from concrete slabs and pavement shall be thoroughly removed where they occur, and all concrete flatwork and exposed vertical surfaces of concrete and masonry shall be hosed down and scrubbed clean.
- D. All new and existing drainage systems shall be free and clear.
- E. All conduit openings shall be cleaned and protected.

7.30.5 SUSTAINABLE CLEANING PRODUCTS

- A. Contractor shall utilize cleaning products that meet Green Seal GS 37 or comply with the maximum VOC limits of Title 17.

7.30.6 RESTORATION AND PRECAUTIONS

- A. The Contractor shall protect property adjacent to the site of the project from damage and shall immediately restore property damaged by the Contractor to the condition it was in prior to the damage. Unless otherwise advised in writing by HART, the requirements in this section shall be considered incidental to the Contractor's performance of the contract.
- B. Buildings and other structures. If the site of the project passes close to or under buildings and other structures, the Contractor shall protect all such buildings and structures by suitable means from any and all damages.
- C. Pavement, Curb and Gutter. The Contractor shall replace, restore and repair pavements, gutters, and curbs damaged or removed by the Contractor.
- D. Fences. The Contractor shall replace fences removed by the Contractor. Precautions shall be taken to prevent livestock from escaping when fences enclosing them are removed.
- E. Grass. When lawns are disturbed by trenching, the area over the trench shall be carefully graded and replanted with similar grass spaced over the trench substantially similar to the condition it was in prior to the excavation.
- F. Trees and Shrubbery. Trees and shrubbery which must be disturbed shall be transplanted under the direction of the owner or lessee of the property to some other site and, upon completion of the backfill, shall be replanted on the original site, to the satisfaction of the said owner or lessee.
- G. Property Marks. The Contractor shall reference and replace marks, stakes, pipes, monuments of the property line, and similar objects which may be disturbed by the Contractor while performing the contract. Any such replacements shall be certified by a surveyor licensed by the HART of Hawaii.
- H. Sidewalks, Patios, Driveways and Other like Concrete Construction. When trenches are to be made across concrete sidewalks, patios, driveways, and other like concrete construction, the Contractor shall make neat cuts in the concrete with pavement saws, or other means acceptable to the Officer-in-Charge, and shall thoroughly compact the backfill and reconstruct such construction with concrete similar to the existing construction.
- I. Topsoil. Where private land under cultivation is disturbed, the Contractor shall place the upper twelve inches of topsoil to one side, which shall not be mixed with the general excavated material. After backfill has been made to within twelve inches of the surface, the topsoil shall be replaced.
- J. Excavated Material. Unless other specified, all excavated material shall become the property of the Contractor and shall be hauled from the jobsite to a disposal site acceptable to the Officer-in-Charge. Hauling of wet, dripping material over public streets is not permitted.
- K. Walls, Rock, and Masonry. The Contractor shall replace rock and masonry walls removed by the Contractor.

- L. After the construction, the Contractor shall restore the premises used for its operations to its original condition.

END OF SECTION

SECTION 7.31

CONSTRUCTION WASTE MANAGEMENT

7.31.1 GENERAL

- A. This Section includes administrative and procedural requirements for the salvaging of non-hazardous demolition and construction waste, recycling non-hazardous demolition and construction waste, and disposing of non-hazardous demolition and construction waste and includes:
1. Performance Requirements;
 2. Waste Management Meetings;
 3. Construction Waste Management Plan; and
 4. Construction Waste Management Resources

7.31.2 SUBMITTALS

- A. Construction Waste Management Plan (CWMP): It is the intent of this specification to maximize the diversion of demolition and construction waste from landfill disposal. Accordingly, within 30 days after receipt of Notice to Proceed and prior to the generation of any waste, prepare and submit a draft Construction Waste Management Plan as described herein.
- B. Contractor shall submit a 3-ring binder with calculations on end-of-project recycling rates, salvaged rates, and landfill rates itemized by waste material, demonstrating that a minimum of 75 percent of construction wastes were recycled or salvaged and diverted from landfill. Include documentation of recovery rate (if commingled), waste hauling certificates of receipts, and a brief narrative explaining how and to where each waste type has been diverted. Include:
1. Waste reduction progress reports (submit monthly);
 2. Waste reduction calculations;
 3. Records of donations;
 4. Records of sales;
 5. Recycling and processing facility records; and
 6. Landfill and incinerator disposal records.

7.31.3 PERFORMANCE REQUIREMENTS

- A. HART has established that this Project shall generate the least amount of waste possible. As such, Contractor shall use processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- B. Contractor shall reuse, salvage, or recycle as much of the waste materials as is economically feasible to minimize waste disposal in landfills or incinerators, thereby reducing disposal costs.
- C. Contractor shall develop a construction waste management plan (CWMP) that results in end-of-project rates for salvage/recycling of 50 percent (by weight) of construction and demolition waste.

- D. Salvage/Recycle Requirements: Contractor shall salvage and recycle as much non-hazardous demolition and construction waste as possible.

7.31.4 WASTE MANAGEMENT MEETINGS

- A. Waste Management Meetings: Contractor shall conduct an initial pre-construction conference with HART to discuss compliance requirements regarding construction waste management.
- B. Project Meetings: Construction waste management requirements shall be discussed in the regular job meetings conducted during the course of the Project. At these meetings, methods and procedures related to construction waste management shall be reviewed.

7.31.5 CONSTRUCTION WASTE MANAGEMENT PLAN

- A. Contractor shall develop and implement a CWMP consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Separate sections in the CWMP shall be included for demolition and construction waste. Quantities by weight or volume shall be indicated, using the same units of measure throughout the CWMP. CWMP shall include:
 - 1. Waste identification;
 - 2. Landfill options;
 - 3. Waste reduction work plan; and
 - 4. The following materials:
 - a. Cardboard
 - b. Clean dimensional wood
 - c. Beverage and food containers
 - d. Paper
 - e. Concrete
 - f. Concrete masonry units (CMUs)
 - g. Asphalt
 - h. Ferrous and non-ferrous metals
 - i. Stretch and shrink wrap
 - j. Gypsum wallboard
 - k. Paint containers
 - 5. Meetings
 - 6. Materials handling procedures
 - 7. Transportation
- B. Regulatory Requirements: Contractor shall comply with all applicable local ordinances and regulations.

7.31.6 CONSTRUCTION WASTE MANAGEMENT RESOURCES

- A. General information contacts regarding construction and demolition waste:

1. EPA Construction and Demolition (C&D) debris website:
<http://www.epa.gov/hw/debris-new/bytype.htm>
2. Directory of Wood-Framed Building Deconstruction and Reused Building Materials
Companies: http://www.fpl.fs.fed.us/documents/fplqtr/fpl_qtr150.pdf
3. Develop additional resources with assistance from HART, as requested.

END OF SECTION

SECTION 7.32

CLOSEOUT PROCEDURES

7.32.1 GENERAL

- A. This Section includes requirements for closeout procedures to ensure that the Contract is officially closed out upon its scheduled completion and that all required deliverables and documentation are received by HART from the Contractor.

7.32.2 PARTIAL ACCEPTANCE

- A. The Officer-in-Charge may accept and place parts of the Project in service as completed and the Contractor shall give proper access to such portions for this purpose. However, use by the public without permission of the Officer-in-Charge shall not in any way be construed as an acceptance of the work under the Contract and shall not in any way relieve the Contractor from the Contractor's obligation under the Contract.
- B. Occupancy Prior to Acceptance. HART may occupy or use any completed or partially completed portion of the Work at any stage prior to acceptance when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the Contractor's insurer. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided that HART and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, air conditioning, utilities, damage to the Project and insurance, and have agreed in writing concerning the period for correction of work and commencement of the guarantee required by the Contract. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld.
- C. Inspection. Immediately prior to such partial occupancy or use, the Officer-in-Charge and Contractor shall jointly inspect the area to be occupied or used in order to determine and record the condition of the area.
- D. No Acceptance of Non-Complying Work. Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the project shall not constitute acceptance of work not complying with the requirements of the contract.

7.32.3 PRIOR TO SUBSTANTIAL COMPLETION

- A. Prior to notifying HART that the Contract is substantially complete, including compliance with maintenance of site and final cleanup requirements, the Contractor shall inspect the Project and test all equipment with all of its subcontractors. Contractor shall proceed to obtain required documents, including, but not limited to:
 - 1. All written guarantees, warranties, maintenance agreements, final certifications required by the Contract;
 - 2. All "as-built" drawings;
 - 3. All record documents;
 - 3. All certified payroll affidavits if not submitted earlier;
 - 4. Certificate of plumbing and electrical inspection;
 - 5. Certificate of building occupancy;
 - 6. Certificate of soil and wood treatments;

7. Certificate of water system chlorination;
 8. Maintenance service contract;
 9. A list of all equipment installed, tools, spare parts, instructions, and all operating and maintenance manuals required to operate and maintain the Work.
- B. Contractor shall perform the following prior to requesting final inspection to determine substantial completion:
1. Arrange to deliver tools, spare parts, extra materials, and similar items to a location designated by HART. Label with manufacturer's name and model number, where applicable.
 2. Complete startup testing of systems.
 3. Submit test, adjust and balance records.
 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 5. Advise HART of changeover of other utilities.
 6. Ensure that all utilities are connected and in working order.
 7. Ensure that all air conditioning and other major equipment are in acceptable working condition.
 8. Ensure that the building, structure, improvement, or site can be used for its intended purpose.
 9. Ensure that the completed Work conforms to the Contract Documents.
 10. Repair, reconstruct, restore, and replace the Work or any part thereof which is injured, damaged or vandalized.
 11. Complete final cleaning requirements.
- C. Contractor shall request HART in writing that the Contract is substantially complete and ready for inspection after finding that everything is in order.

7.32.4 SUBSTANTIAL COMPLETION

- A. "Substantially Complete" means the date at which the Work or building project, or designated portion of the Work or building project thereof is sufficiently complete, in accordance with the Contract Documents, including all utilities connected and in working condition, so that HART may use or occupy the Work or building project or designated portion thereof for the intended use for which it is original designed and intended. The would include the completion of all life safety systems, weather-tight envelope, and adequate protection of building occupants and/or equipment is ensured from hazards posed by additional or possible construction activities or other potential harmful conditions that may exist or become evident during the final work effort to complete the Project per the construction Contract Documents.
1. The date of issuance certifying substantial completion by HART to the Contractor triggers certain Contract provisions, such as warranties, guarantees, and liabilities.
- B. The Contractor shall provide written notification to HART that the Project is substantially complete and ready for inspection. HART shall then make a determination as to whether or not the Project is ready for inspection. If HART is not satisfied, the

Contractor will be notified in writing of the items that require completion prior to inspection. After the Contractor complies with HART's instructions, the Contractor will again submit, in writing, a request for inspection.

- C. A pre-final inspection will be conducted by HART upon written request for inspection. HART will inspect the Work with Contractor. Contractor's principal superintendent, subcontractors and suppliers shall be in attendance to answer the questions of HART's inspection team. HART will examine the Work and all required deliverables and documentation will be reviewed.
- D. If the pre-final inspection discloses only minor discrepancies, HART shall accept the Project as substantially complete and issue in writing, a list of the discrepancies that need to be corrected, including all documents required by the Contract, hereinafter referred to as the "punch list," and the time in which the Contractor must complete the punch list.
- E. The Contractor shall, within seven days after receipt of the punch list, proceed to complete the items on the punch list. Upon completion, the Contractor shall submit a written request for a final inspection, after which, if HART finds that all discrepancies are satisfactorily corrected, HART will accept the Project as completed, hereinafter referred to as "final acceptance."
- F. If the Contractor fails to proceed or complete the punch list within the specified times, the Officer-in-Charge may proceed to have such work performed at the Contractor's expense, and the Contractor's sureties will be liable therefore. HART shall be entitled to reasonable attorneys' fees, consultants' fees and costs necessarily incurred by the Contractor's refusal to complete the contract and to pay such costs of corrective work.

7.32.5 FINAL ACCEPTANCE

- A. Contractor shall complete any specified training for HART personnel prior to Final Acceptance notification for the entire Contract.
- B. If there are no outstanding items to be completed or corrected, the Contractor shall:
 - 1. Deliver tools, spare parts, instructions, and similar items required to operate and maintain the Work.
 - 2. Make changeover of locks and all equipment and facilities and deliver keys and provide lock combinations to HART.
 - 3. Upon final acceptance, the Contractor shall be relieved of its responsibility in maintaining and protecting the work and site and for injury to persons or property.
 - 4. Prior to release of final payment, the Contractor shall submit, within thirty days after final acceptance, or within such time as the Officer-in-Charge may allow, all remaining documents required by the Contract, including special guarantees, operation and maintenance manuals, including, warranties, maintenance agreements, final certifications, and similar documents as required by the Contract.

7.32.6 CONTRACTOR'S DEMOBILIZATION

Upon satisfactory inspection of the Work by HART, HART will authorize the demobilization of the Contractor from the Project site and those areas along the right-of-way that have been occupied by the Contractor and the associated subcontractors. All temporary facilities and equipment, including but not limited to all materials, utility hookups, rubbish, and any other and all such items leaving the area neat and clean.

7.32.7 CONTRACT CLOSEOUT CHECKLIST

HART will complete the Contract Closeout Checklist (Sec.7.32- Exhibit 1). If HART's review indicates that the Contractor has not met all requirements ,HART will notify the Contractor of the deficiencies in writing.

7.32.8 FINAL PAYMENT

Upon acceptance of the Work by HART, HART will transmit a Release of and Certificate of Final Payment (Sec.7.32-Exhibit 2) to the Contractor for execution. After receipt of the executed Release of Certificate of Final Payment from the Contractor, HART will pay the approved invoice for final payment.

Exhibits Attached

PROJECT CLOSEOUT CHECKLIST

Project name: _____

Owner: _____ Project number: _____

No.	Description	RESPONSIBILITY	Date complete
1	Punchlist completion		
2	Remove all temporary site facilities, trailers, etc.		
3	Collect all final invoices/billings: complete and deliver final billing		
4	Complete and collect all final lien waivers		
5	Final inspections/secure certificate of occupancy from code body		
6	Contact insurance carrier(s) – policy end		
7	Final cleaning – interior		
8	Final cleaning/rubbish removal – site		
9	Secure as-built drawings (from subcontractors)		
10	Secure operations & maintenance (O & M) manuals		
11	Secure all product warranties (*may be part of O & M)		
12	Systems start-up and customer employee training programs		
13	Supply customer with additional material and spare parts per spec		
14	Collect and transfer keys to owner prior to final keying		
15	Change over utility connections/fees (gas, electric, telephone, etc.)		
16	Reconcile change orders and retainages		
17	Request letter of recommendation from owner		
18	Prepare final owner's manual(s) per specification		
19	Complete final A/E affidavits and closeout documents		
20	Notice of completion/closeout documents from A/E		
21			
22			
23			

Release and Certificate of Final Payment

With reference to Contract/P.O. No. _____ dated _____,
 (Name of Contractor) _____ and

the HONOLULU AUTHORITY FOR RAPID TRANSPORTATION ("HART"),

the Undersigned hereby certifies and represents that it has made full payment of all costs, charges and expenses incurred by it or on its behalf for work, labor, services, materials and equipment provided or used by the Contractor in connection with the Work under the said Contract/P.O.

The Undersigned further certifies that to its best knowledge and belief, each of its subcontractors and materials has made full payment of costs, charges, and expenses incurred by them or on their behalf for work, labor, services, materials, and equipment provided or used by them in connection with the Undersigned's work under said subcontract and has obtained releases to that effect.

In consideration of the final payment under the Contract, the Undersigned hereby unconditionally releases and forever discharges HART and the City and County of Honolulu ("City") from all claims, liens, and obligations of every nature arising out of or in connection with the performance of the said Contract and all amendments thereto, except as set forth below (or attached):

[Note: If none, write "None" in space above any claims excepted must be described and the specific amount claimed must be set forth.]

As additional consideration for this payment, the Contractor agrees to the fullest extent of the law to indemnify and hold harmless HART and the City from and against all costs, losses, damages, claims, causes of action, judgments and expenses, including attorney's fees, arising out of or in connection with claims against HART or the City, which claims arise out of the performance of the Work under the Contract and which may be asserted by the Contractor or any of its suppliers, subcontractors of any tier or any of their representatives, officers, agents or employees except for those claims listed above (or attached), and except for claims arising out of the sole negligence or willful misconduct of the City or HART.

The foregoing shall not relieve the Undersigned of its obligations under the provisions of said Contract, as amended, which by their nature survive completion of the Work including, without limitation, warranties, guarantees, and indemnitees.

Executed this _____ day of _____, 20

 (Name of Contractor)

SIGNED (AUTHORITY SIGNATORY FOR CONTRACTOR)

TITLE

SECTION 7.33

OPERATION AND MAINTENANCE DATA

7.33.1 CONTRACTOR RESPONSIBILITIES

- A. Contractor shall provide and install, where specified or directed, a printed sheet under framed clear acrylic plastic, giving brief, concise operating and maintenance instructions for all items of mechanical and electrical equipment and similar equipment and specialty items, as applicable, at their respective locations.
- B. Before the Work will be considered for final acceptance and final payment, Contractor shall submit to HART via CMS, the manufacturer's certificates, warranty slips, parts lists, descriptive brochures, and maintenance and operating instructions for all equipment and systems installed, properly tabbed and identified for easy reference.
 - 1. The maintenance and operating instructions shall include a front page with a recognizable illustration of the equipment described, the name and function of the equipment, manufacturer's identification number, and the Contract Specifications number and title.
 - 2. The maintenance and operating instructions shall also include information covering description, installation (including pre-installation inspection), operation (step-by-step procedures for starting, restarting, operating, shutdown, emergency requirements, and trouble-shooting), preventive maintenance, corrective maintenance, overhaul, calibration, list of recommended spare parts, and parts list with all necessary information, including part numbers and catalog item numbers, if applicable, for identifying parts, and whether such parts were obtained by another manufacturer and names of such manufacturers. Include information on performance specifications and operating limitations and safety precautions.
 - 3. Within 30 days after receipt from HART notifying the Contractor that the maintenance and operating instructions do not conform or are properly drafted, Contractor shall revise and resubmit via CMS the revised instructions for review.
 - 4. Before final acceptance, Contractor shall provide instructions to designated HART personnel in the operation, adjustment, and maintenance of all installed equipment and systems.

END OF SECTION

SECTION 7.34

PROJECT RECORD DOCUMENTS

7.34.1 MAINTENANCE OF RECORD DOCUMENTS

- A. Contractor shall maintain at the Project site relevant contractual documents for record purposes ("Record Documents"), including, but not limited to:
 - 1. Conformed Contract Documents, including Contract Drawings and Contract
 - 2. Specifications
 - 3. Change Orders
 - 4. Submittals provided to HART
 - 5. Clarifications or explanatory details
 - 6. Inspection reports
 - 7. Laboratory test records
 - 8. Field test reports and records
 - 9. Factory test reports and records
- B. Do not use Record Documents for construction or fabrication purposes. Record Documents shall be used for record purposes only and stored in the Contractor's field office or other accepted location, apart from the documents used for construction.
- C. Do not permanently conceal Work until the required information has been recorded.
- D. Contractor shall maintain electronic files for shop drawings and other documents which are required to be submitted electronically. Contractor shall ensure that backups of electronic files are made regularly after Record Documents are updated.
- E. Contractor shall provide files and racks for storage of documents at the field office for easy access.
- F. The Record Documents shall be filed in accordance with the Section number and title of the Contract Specifications.
- G. The Record Documents shall be maintained in a clean, dry, legible condition.
- H. Contractor shall make documents available at all times for inspection by HART and make copies of electronic documents available upon HART's request.

7.34.2 RECORD DOCUMENTS- AS-BUILT DRAWINGS

- A. Maintain one set of full size As-Built Drawings of all Work and subcontractors' work continuously as the job progresses. Keep a separate set of prints, for this purpose only, at the Contractor's field office at all times.
- B. Mark As-Built Drawings in red ink or in red pencil, if sharp, neat and clearly legible, to show all variations between actual construction(s) and that are indicated or specified in the Contract Drawings. Show deviations from the Contract Drawings in detail. Deviations from the Contract Drawings include utilities and services, mechanical and electrical lines, details, and other Work installed in walls or otherwise concealed. Show location of main runs, whether wiring, piping, conduit, ductwork, or drain lines, by dimension and

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Section 7.34-Project Record Documents

elevation. Shop drawings may be used to reflect record conditions, in which case, mark the appropriate Contract Documents to refer to such shop drawings as part of the record configuration.

- C. HART may withhold progress payments if As-Built Drawings are not kept current.
- D. Where a choice of material or method is permitted herein or where variations in scope or character of Work from that of the original Contract Documents are authorized, mark the As-Built Drawings to define the construction actually provided. For equipment installation, show the size, manufacturer's name, model number, and power input or output characteristic applicable.
- E. Contractor-furnished drawings shall be of sufficient size, scale, and detail.
- F. Prior to final inspection, deliver via the CMS the marked-up record drawings and a letter of certification stating that construction is in accordance with the requirements of the Contract Documents and as represented in the attached As- Built drawings. The following information shall be included, at minimum, in the letter of certification:
 - 1. Date of submission
 - 2. Project title and number
 - 3. Contractor's name and address
 - 4. Title and number of each record drawing, group in categories or divisions of work or as specified by HART
 - 5. Certification that each document as submitted is complete and accurate
 - 6. Signature of Contractor's authorized representative

7.34.3 RECORD DOCUMENTS -CHANGE ORDERS

- A. Changes, as provided in Change Orders, shall be incorporated into the record Contract Drawings. Contractor shall identify the changes by Change Order number and the effective date.
- B. When revised Contract Drawings are issued as the basis of or along with Change Orders, Contractor shall incorporate the revised drawings into the As-Built Drawings and annotate as a Change Order.

7.34.4 RECORD DOCUMENTS –SPECIFICATIONS

- A. Contract Specifications:
 - 1. File Contract Specifications for record purposes in one or more large-ring, 3-ring binder or binders.
 - 2. Contractor shall maintain the most current and updated specifications.
 - 3. All information, changes, and notes shall be legibly recorded.
 - 4. In applicable Contract Specification sections, record the manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually furnished and installed, including manufacturer and supplier's address and telephone number.
 - 5. The record specifications shall be complete and shall include all applicable Contract Documents other than drawings.

6. Change Order:

- a. Contractor shall incorporate Change Orders into the front of the record Contract Specifications in chronological order starting from the most recent Change Order. Appropriate page dividers shall be used to identify Change Orders and to separate Change Orders from the original Contract Specifications.
- b. Contract shall legibly annotate changes to the Contract Specifications as a result of Change Order on the affected page or pages of the Contract Specifications or adjacent thereto.

END OF SECTION

SECTION 7.35

SPARE PARTS

7.35.1 SPARE PARTS

- A. Provide specific spare parts in quantities as specified in the individual sections of the Contract Specifications.
- B. Spare parts shall be identical to the parts installed in the Work.
- C. Wear: Provide spare parts for components which may be expected to require regular replacement under normal maintenance schedules, such as mechanical parts subject to continuous operation.
- D. Consumability: Provide spare parts for components with a life-expectancy of less than five years.
- E. One-Time Limited Service: Provide spare parts that normally require replacement after performing their function one time, such as fuses.
- F. Long Lead Time: Provide spare parts for components that are not readily available from distributors, such as for custom-fabricated components.
- G. Exchange Assemblies: Provide assemblies which will be exchanged with malfunctioning units for installed equipment and which shall be inventoried as complete assemblies.

END OF SECTION

SECTION 7.36

DEMONSTRATION AND TRAINING

- 7.36.1** As a part of its duties and responsibilities under the Contract, the Contractor shall:
- A. Provide training sessions, training manuals, and training aids for HART and its authorized entities.
 - B. Prior to final inspection and acceptance, provide instruction and training to HART's designated personnel in the operation, start-up and shut-down, adjustment, troubleshooting, servicing, and preventive maintenance of all installed equipment and systems.
 - C. Provide training manuals and other instructional materials and teaching aids required to perform the instruction and training. All such instructional materials and teaching aids shall become the property of HART. HART reserves the right to copy all training manual and teaching aids for use in HART-conducted training courses.
 - D. Provide classroom and/or on-site instruction, as appropriate, if requested by HART for the particular installed equipment or system.
 - E. Provide the services of manufacturers' representatives for instruction and training when special equipment and systems require the knowledge and expertise of various manufacturers for proper operation and servicing of such equipment and systems and/or requested by HART.
- 7.36.2** HART has the right to videotape any and all training sessions presented by the Contractor. HART also has the right to use these videotapes for future HART-conducted training courses.

END OF SECTION