

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT FOR PROFESSIONAL SERVICES dated JUL 30 2012 (this "Agreement"), is entered into by and between the HONOLULU AUTHORITY FOR RAPID TRANSPORTATION, a semi-autonomous agency of the City and County of Honolulu, whose principal place of business and mailing address is 1099 Alakea Street, Suite 1700, Honolulu, Hawai'i 96813, hereinafter referred to as "HART," and AECOM TECHNICAL SERVICES, INC., a California corporation, whose principal place of business and mailing address is 1001 Bishop Street, Suite 1600, Honolulu, Hawai'i 96813, hereinafter referred to as the "CONSULTANT." HART and the CONSULTANT collectively, are the "Parties," and individually a "Party," all as governed by the context in which such words are used.

WITNESSETH THAT:

WHEREAS, HART desires to engage the CONSULTANT for architectural and engineering services necessary for the design and preparation of final construction plans, detailed specifications and other contract documents for the anticipated City Center Section Utilities and Guideway construction contract for the Honolulu Rail Transit Project ("HRTTP");

WHEREAS, the services entered hereunder are technical and professional in nature and HART personnel are not able to provide these services;

WHEREAS, the CONSULTANT was selected pursuant to Section 103D-304 of the Hawai'i Revised Statutes, as amended, and related Hawai'i Administrative Rules ("HAR"), relating to the procurement of professional services; and

WHEREAS, the CONSULTANT shall provide the required technical and professional services as set forth in this Agreement;

NOW, THEREFORE, HART and the CONSULTANT, in consideration of the foregoing and of the mutual promises hereinafter set forth, the sufficiency and adequacy of which are hereby acknowledged, and intending to be legally bound, hereby mutually agree as follows:

1. The CONSULTANT shall perform and complete in a professional manner all of the services required for the PROJECT in accordance with and as set forth in the Contract Documents as hereinafter described, shall furnish all services, labor, goods, materials, supplies, equipment and other incidentals reasonably necessary for the successful completion of the PROJECT and Work contemplated under the Contract Documents (the "Work"), and the CONSULTANT shall receive and accept as full compensation for all of the Work the price for the various items of the Work as hereinafter set forth.

2. The CONSULTANT shall complete and perform the Work in accordance with:

a. Part 1 - This Agreement;

- b. Part 2 - The Special Provisions and any exhibits and attachments thereto;
- c. Part 3 - The General Terms and Conditions for Contracts for Professional Services for the City and County of Honolulu, dated 08/2000 (General Terms and Conditions); and
- d. Part 4 – Statement of Qualifications submitted by the CONSULTANT under RFQ-HRT-468902;

all of which are collectively referred to as the “Contract Documents,” “Agreement,” or “Contract,” are attached hereto and incorporated herein, and are listed in order of controlling preference should there be any conflict in the terms of the Contract Documents, and any modifications, changes or amendments in connection therewith being specifically referred to and incorporated herein by reference and made a part hereof as though fully set forth herein. Provided, those portions of Part 4, whereby Contractor has provided that Contractor will exceed the specification requirements of the other Contract Documents, will become the new minimum Contract requirements.

3. The CONSULTANT shall complete the Work required under the Contract Documents.

There will be several separate and distinct written Notices to Proceed (“NTPs”) issued under the Agreement. Work shall not begin until HART has issued the respective NTP. Any Work undertaken by the CONSULTANT prior to issuance of a NTP will be the sole responsibility of and will be undertaken at the sole risk of the CONSULTANT without any obligation on the part of HART.

The first NTP will be NTP #1a. The CONSULTANT shall submit a Draft Baseline Design Schedule and a Schedule of Milestones (“SM”) within forty-five (45) calendar days after receipt of NTP #1a. The SM shall be completed as described in the Contract Documents. HART’s approved SM shall be added to the Agreement by contract amendment and become part of the Agreement by amending Exhibit 2B-1 to the Special Provisions.

NTP #1b will be limited to Work activities related to the revision of preliminary engineering (“PE”) drawings and preliminary design drawings, as defined by HART, to incorporate approved value engineering recommendations and other HART preferences, and to bring schematic designs in compliance with all applicable codes, regulations and design standards.

NTP #2 will be to commence interim design (“ID”) drawings, detailed working drawings and other PE phase activities, as defined by HART.

NTP #3 will be to commence final design (“FD”) and preparation of construction contract documents, cost estimating and other services in support of construction activities.

NTP #4 will be for design support during the Bidding Phase, as defined and directed by HART.

NTP #5 will be for design support during the Construction Phase of the stations, as defined and directed by HART.

4. This is a firm-fixed price contract and subject to the provisions of this paragraph and in accordance with Section VI, Compensation and Invoicing, of the Special Provisions and Section 8 of the General Terms and Conditions, as amended by the Special Provisions, HART agrees to pay the CONSULTANT, for the satisfactory performance and completion of the Work, the payments in accordance with the Approved Schedule of Milestones, Exhibit 2B-1, all as set forth in the Special Provisions. The maximum lump sum payments shall not exceed FORTY-TWO MILLION THREE HUNDRED FORTY-EIGHT THOUSAND TWO HUNDRED TWENTY AND 00/100 DOLLARS (\$42,348,220.00) (the "Total Contract Amount"). The lump sum payments for services and the Work performed under this Agreement are all inclusive of direct labor, overhead, general and administrative expenses, other direct costs, subcontractor costs, fixed fees, and all applicable taxes, including State general excise and use tax ("GET"), and county one-half percent (0.5%) GET surcharge.

Only in the event extra work is required and approved by HART, a maximum allowance of ONE MILLION SIX HUNDRED THOUSAND AND 00/100 DOLLARS (\$1,600,000.00) has been encumbered. Payment for extra work will be negotiated on a fixed-price basis and shall only be in effect upon a mutually-agreed and executed contract amendment. Extra work requested by HART shall be authorized as set forth in Section 5 of the General Terms and Conditions, as amended by the Special Provisions. Any funds remaining at the end of the Agreement will revert back to HART.

In accordance with the paragraphs above, the total aggregate amount of this Agreement shall not exceed FORTY-THREE MILLION NINE HUNDRED FORTY-EIGHT THOUSAND TWO HUNDRED TWENTY AND 00/100 DOLLARS (\$43,948,220.00) (the "Total Aggregate Amount"), subject to the terms of the Agreement.

5. By signing below, the CONSULTANT hereby represents that, to the best of its knowledge and belief, cost or pricing data, as defined in HAR § 3-122-122 and submitted pursuant to HAR § 3-122-125, either actually or by specific identification in writing to the Officer-in-Charge in support of this Agreement, is accurate, complete, and current as of the date of this Agreement.

6. When notice is to be given to HART, it shall be mailed or delivered to:

Daniel A. Grabauskas
Executive Director and CEO
Honolulu Authority for Rapid Transportation
1099 Alakea Street, Suite 1700
Honolulu, Hawai'i 96813

HART-12 (11/11)

Certificate

The attached contract for architectural and engineering services necessary for the design and preparation of final construction plans, detailed specifications and other contract documents for the anticipated City Center Section Utilities and Guideway contract for the Honolulu Rail Transit Project

is hereby approved as to availability and designation of funds, and certification is hereby made that there is a valid appropriation from which expenditures to be made under said contract may be made and that sufficient unencumbered funds are available in the Treasury of the City and County of Honolulu to the credit of such appropriation to pay the amounts of such expenditures when the same become due and payable.

CONTRACT NO.	SC-HRT-1200149
FUND	Transit Fund (690 & 695)
ACCOUNT NO.	690/7790-12 = \$2,846,251.00 (4064)
	695/7790-12 = \$41,101,969.00 (4064)
	Total = \$43,948,220.00

HONOLULU, HAWAII

Date:

7/30/12



Executive Director and CEO

Honolulu Authority for Rapid Transportation

John 7/30/12
[Signature]

7. When notice is to be given to the CONSULTANT, it shall be mailed or delivered to:

Mr. Rudy Mina
District Manager
AECOM Technical Services, Inc.
1001 Bishop Street, Suite 1600
Honolulu, Hawai'i 96813

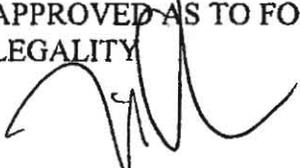
8. This Agreement, its integrated attachments, and the Contract Documents constitute the entire agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed to be consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement or the Contract Documents, no modification or amendment to this Agreement or the Contract Documents shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto.

IN WITNESS WHEREOF, HART and the CONSULTANT have executed this Agreement by their duly authorized officers or agents on the day and year first above written.

HONOLULU AUTHORITY FOR RAPID
TRANSPORTATION


By: Daniel A. Grabauskas JUL 30 2012
Executive Director and CEO

APPROVED AS TO FORM AND
LEGALITY


Deputy Corporation Counsel

AECOM TECHNICAL SERVICES, INC.


By: Rudolph Mina
Its: District Manager

Address:
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attach Notary Page



AECOM Technical Services, Inc.
1501 Quail Street
Newport Beach, CA 92660
T 949.476.3300 F 949.721.7141 www.aecom.com

AECOM TECHNICAL SERVICES, INC.
CERTIFICATE OF ASSISTANT SECRETARY

The undersigned, David W. Huchel, hereby certifies that he is now and at all times relevant hereto has been the duly elected and acting Assistant Secretary of AECOM Technical Services, Inc., a California corporation, and that the Board of Directors, by resolution dated January 1, 2010, has authorized Rudolph Mina, District Manager, to execute various written agreements and instruments, including the Contract with the City and County of Honolulu, for the City Center Section Utilities and Guideway Design Contract for the Honolulu Rail Transit Project, Contract No. SC-HRT-1200149, on behalf of the corporation or its divisions.

The undersigned does further certify that the foregoing resolution has not been revoked, amended or modified, and is in full force and effect as of the date hereof.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Assistant Secretary and has affixed the corporate seal of this corporation this 16th day of July, 2012.

AECOM TECHNICAL SERVICES, INC.

By: 
David W. Huchel, Assistant Secretary

(CORPORATE SEAL)

STATE OF HAWAII)
) ss.
CITY AND COUNTY OF HONOLULU)

On this 13th day of July, 2012 before me appeared, Rudolph Mina personally known to me, who, being by me duly sworn, did say that he/she is the District Manager of AECOM Technical Services, Inc., and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said Rudolph Mina acknowledged said instrument to be the free act and deed of said corporation.



Jan-Marie K. Agua
Notary Public, First Judicial Circuit
State of Hawaii

My Commission Expires: May 13, 2016

NOTARY CERTIFICATE (Hawaii Administrative Rules §5-11-8)		
Document Identification or Description: <u>Honolulu Rail Transit</u>		
<u>Project – Contract No. SC-HRT-1200149 City Center Section</u>		
<u>Utilities and Guideway Design Contract</u>		
Doc. Date: <u>no date at time of notary</u>	No. of Pages: <u>255</u>	Jurisdiction: <u>First Circuit</u>
<u>Jan-Marie K. Agua</u> Signature of Notary	<u>July 13, 2012</u> Date of Certificate	
<u>Jan-Marie K. Agua</u> Printed Name of Notary		(Official Stamp or Seal)



SPECIAL PROVISIONS

HONOLULU RAIL TRANSIT PROJECT

CITY CENTER SECTION UTILITIES AND GUIDEWAY DESIGN CONTRACT

SPECIAL PROVISIONS TABLE OF CONTENTS

- I. PROJECT
- II. SERVICES
- III. TIME
- IV. LIQUIDATED DAMAGES
- V. INSURANCE REQUIREMENTS
- VI. COMPENSATION AND INVOICING
- VII. MODIFICATIONS TO THE GENERAL TERMS AND CONDITIONS FOR CONTRACTS FOR PROFESSIONAL SERVICES FOR THE CITY AND COUNTY OF HONOLULU (08/2000)
- VIII. FEDERAL CLAUSES
- IX. ASSIGNMENT
- X. HEADINGS; GENDER; NUMBER
- XI. REFERENCES TO THE CITY AND COUNTY OF HONOLULU

LIST OF SPECIAL PROVISIONS EXHIBITS

- EXHIBIT 1 - SCOPE OF WORK
- EXHIBIT 2 - A. CONTRACT COST
 - B. COMPENSATION AND INVOICING
 - B-1 PROJECT PAYMENT SCHEDULE
- EXHIBIT 3 - CERTIFICATION REGARDING CONFLICT OF INTEREST
- EXHIBIT 4 - LETTER OF SUBCONTRACT INTENT
- EXHIBIT 5 - CERTIFICATE REGARDING INELIGIBLE CONTRACTORS
- EXHIBIT 6 - CERTIFICATE REGARDING INELIGIBLE SUBCONTRACTORS
- EXHIBIT 7 - CERTIFICATION REGARDING LOBBYING
- EXHIBIT 8 - FEDERAL REQUIREMENTS
 - 1. Attachment 1.6a) - DBE Participation Report
 - 2. Attachment 1.6b) - Final Report of DBE Participation and Instructions for completion of the Final Report of DBE Participation

These Special Provisions and the General Terms and Conditions for Contracts for Professional Services for the City and County of Honolulu dated 08/2000 ("General Terms and Conditions") shall apply to, and are incorporated by reference into the Agreement, except as modified by reference herein. All defined terms in the Agreement shall have the same meaning as in these Special Provisions.

I. PROJECT

The Honolulu Rail Transit Project ("H RTP") is described in the Final Environmental Impact Statement as a twenty (20) mile grade separated fixed guideway transit system between East Kapolei and Ala Moana. The CONSULTANT will provide architectural and engineering services necessary for the design and preparation of final construction plans, detailed specifications and other contract documents for the anticipated City Center Section Utilities and Guideway construction contract for the Honolulu Rail Transit Project ("H RTP"), herein referred to as the "PROJECT".

II. SERVICES

CONSULTANT's responsibilities under this Agreement include providing services set forth in the Scope of Work attached hereto and incorporated herein as Exhibit 1.

III. TIME

Work under this Agreement shall be completed under multiple and overlapping Notices to Proceed ("NTPs"). Work under NTP #1a, NTP #1b, NTP #2 and NTP #3 shall be completed within five hundred ninety-five (595) calendar days from issuance of NTP #1a. The duration for performance of Work under issuance of NTP #4 and NTP #5 shall be determined at the discretion of HART.

IV. LIQUIDATED DAMAGES

Liquidated damages are not applicable to this Agreement.

V. INSURANCE REQUIREMENTS

See Paragraph 4.3., Insurance, of the General Terms and Conditions as modified by Section VII (D) below.

VI. COMPENSATION AND INVOICING

A. Subject to the General Terms and Conditions, the compensation of the CONSULTANT shall be the amount stated in the Agreement and upon completion and acceptance by HART of the mutually-agreed upon Schedule of Milestones, payment shall be made in accordance with Exhibits 2B and 2B-1, attached hereto and incorporated herein, inclusive of all taxes.

B. Final acceptance of the Work contracted for herein and payment therefore shall not excuse the CONSULTANT from any liability for defects in performance of the Work which may subsequently appear.

VII. MODIFICATIONS TO THE GENERAL TERMS AND CONDITIONS FOR CONTRACTS FOR PROFESSIONAL SERVICES FOR THE CITY AND COUNTY OF HONOLULU (08/2000)

The General Terms and Conditions for Contracts for Professional Services for the City and County of Honolulu (08/2000) shall apply to, and are incorporated by reference into this Agreement, except as modified herein.

A. DEFINITIONS

The following definitions are added to the General Terms and Conditions:

“AIRPORT ALIGNMENT” means the approximately twenty (20)-mile minimum operable segment of the Locally Preferred Alternative identified by Honolulu City Council Resolution No. 08-261.

“BASELINE DESIGN SCHEDULE” means the time-scaled and cost-loaded critical path network, updated monthly in accordance with the Agreement and depicting the Price Items and subordinate activities and their respective prices (distributed over time), durations, sequences, and interrelationships that represent the CONSULTANT’s Work plans, work breakdown structure (“WBS”) for designing and completing the PROJECT and the cost of all Work to be performed under the Agreement, distributed over the duration of the Agreement.

“C.F.R.” means the Code of Federal Regulations.

“CHIEF PROCUREMENT OFFICER” shall mean and refer to the HART Executive Director and CEO or designee.

“CONFORMANCE CHECKLIST” is the formal checklist used by the Project team to verify design criteria and construction specification conformance for each certifiable element in accordance with the H RTP Safety and Security Management Plan dated, June 1, 2011.

“FEDERAL GOVERNMENT” means the United States of America and any executive department or agency thereof.

“FTA” means the Federal Transit Administration, United States Department of Transportation. The Federal Transit Administration is the current designation for the former Urban Mass Transportation Administration. Any reference in any law, map, regulation, document, paper, or other record of the United States to the Urban Mass Transportation Administration or its acronym UMTA is deemed a reference to the Federal Transit Administration.

“FULL FUNDING GRANT AGREEMENT (“FFGA”) means the designated means for the FTA to provide New Starts funds to projects with a Federal share of \$25 million or more. An FFGA establishes the terms and conditions for Federal

financial participation in a New Starts project; defines the project; sets the maximum amount of Federal New Starts funding for a project; covers the period of time for completion of the project; and facilitates efficient management of the project in accordance with applicable Federal statutes, regulations, and policy.

“HART” means the Honolulu Authority for Rapid Transportation. The acronym **“HART”** shall be substituted for the **“City and County of Honolulu”**, **“CITY”**, **“Rapid Transit Division”**, and **“RTD”** wherever those terms appear in the General Terms and Conditions, unless the context clearly indicates otherwise.

“MILESTONE” means a defined step toward the completion of Work in the Schedule of Milestones. The Schedule of Milestones, once achieved, shall serve as the basis of payments.

“PAY ITEM” means a component of the Schedule of Milestones for which the CONSULTANT provides a Pay Item Value for all Work included in a schedule milestone. A Pay Item may be activities, deliverables or a series of interrelated items as identified in the Schedule of Milestones and corresponding with activities from the CONSULTANT’s Baseline Design Schedule.

“PAY ITEM VALUE” means that value allocated by the CONSULTANT to a Pay Item that represents the dollar value to be achieved or achieved upon the completion of a schedule milestone as indicated in the Schedule of Milestones and the CONSULTANT’s Baseline Design Schedule.

“PMOC” means the FTA’s Project Management Oversight Contractor.

“PMSC” means InfraConsult LLC, the HART Project Management Services Consultant or any successor entity.

“PROJECT” means Work performed as set forth in the Agreement, including furnishing all services, labor, materials, supplies, equipment and other incidentals reasonably necessary for the successful completion of the Work contemplated under the Agreement.

“SCHEDULE OF MILESTONES” means a table of scheduled milestones, organized by NTP, which specifies Pay Items, Pay Item descriptions, Pay Item Values, planned or actual achievement dates and serves as a basis for payment.

“SCHEDULE OF MILESTONES PAY ITEM” means a series of activities contained in a Pay Item that depicts the associated Work leading to the payment milestone and shall contain unique coding to facilitate progress reporting of the Schedule of Milestones.

“STANDARD” or “REQUIREMENT” means any provision of any Federal, State, or City law, code, rule, regulation, guideline, directive, order, circular, agreement, practice, policy, notice, plan, statement, or other standard or requirement, and any amendment or revision thereto made in the future, including any mandatory provision, term, condition, clause, representation, certification, assurance or other statement required thereunder.

“SUBCONSULTANT” means any subcontractor or subconsultant who enters

into an agreement with the CONSULTANT or Consultant's subcontractors at any tier to perform a portion of the Work for the CONSULTANT.

"U.S.C." means the United States Code.

"U.S. DOT" means the United States Department of Transportation, including its operating administrations.

"WORK" in addition to the definition described in the Agreement for Professional Services, paragraph 1, means all of the design, engineering, administration, testing, inspection and other duties and services; the furnishing of all labor, deliverables, materials, supplies, and equipment, as required by the Agreement, including all efforts and design services required during the construction phase of the PROJECT stations to successfully complete the scope of work covered under this Agreement. In certain cases, the term is also used to mean the products of the Work.

"WORK BREAKDOWN STRUCTURE" ("WBS") means a hierarchal breakdown of the Scope of Work into components. HART shall provide the WBS that reflects its breakdown of the scope and associated code structure at NTP #1a.

The following definitions in the General Terms and Conditions are modified as follows:

"CITY AND COUNTY OF HONOLULU", "CITY", shall be replaced by HART whenever those terms appear unless the context specifically indicates otherwise.

"CONSULTANT" OR "CONTRACTOR" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or other private legal entity engaged by HART to perform the Work under this Agreement. For the purposes of this Agreement, "Contractor" shall mean "CONSULTANT".

"DIRECTOR" or "DIRECTOR OF BUDGET AND FISCAL SERVICES" shall be replaced by HART's Executive Director and CEO or the Director's duly authorized representative or assignee, unless the context specifically indicates otherwise.

"OFFICER-IN-CHARGE" means the HART Executive Director and CEO or designee.

B. DESIGNATION OF PROJECT MANAGERS

The Officer-in-Charge shall designate, in writing, a key representative to coordinate the Work under this Agreement, to coordinate work under other HART contracts with the Work under this Agreement, and to act as the liaison between HART and the CONSULTANT in order to assist in expediting the resolution of questions or controversies, the making of HART decisions, and the review and approval by HART of documents, progress reports, requests, and other matters as required.

The CONSULTANT shall, subject to written approval from HART, designate a key representative, who shall maintain close and frequent communications with HART's

key representative and be authorized to act on behalf of the CONSULTANT. Any change in the CONSULTANT's key representative will be made by request, in writing, to be approved by HART. The CONSULTANT's key representative shall be experienced and qualified in the type of work involved and shall be directly responsible for the prosecution of the Work under this Agreement.

The Parties to this Agreement will make all reasonable efforts to retain the same key representative in order to maintain continuity of effort and control.

C. RESERVED

D. INSURANCE

Section 4.3.2, paragraph 5 of the General Terms and Conditions is hereby deleted in its entirety and replaced with the following:

“5. Be provided by insurers authorized to provide insurance in the State of Hawaii, and with a current Best’s rating of not less than A- or otherwise as approved by HART;”

Section 4.3.3, paragraph 3 of the General Terms and Conditions is hereby deleted in its entirety and replaced with the following:

“3. Certificates shall show the Certificate Holder as the Honolulu Authority for Rapid Transportation, and be delivered to the Executive Director and CEO, 1099 Alakea Street, Suite 1700, Honolulu, Hawai‘i 96813. Certificates shall name the Honolulu Authority for Rapid Transportation and the City and County of Honolulu as additional insureds.”

E. MODIFICATIONS

Section 5.1.1 (c) of the General Terms and Conditions is hereby deleted in its entirety and replaced with the following:

“(c) *Within thirty (30) days* after receipt of a written change order, unless the period is extended by the Officer-in-Charge in writing, the CONSULTANT shall respond with a claim for an adjustment. The requirement for a timely written response cannot be waived and shall be a condition precedent to the assertion of a claim.”

Section 5.2 of the General Terms and Conditions is hereby deleted in its entirety and replaced with the following:

“5.2 PRICE ADJUSTMENT.

(a) Any adjustment in contract price pursuant to a clause in the 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 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 costs or pricing data. The CONSULTANT shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of section 103D-312, HRS. The submission of any cost or pricing data shall be made subject to the provisions of subchapter 15, chapter 3-122. A fully executed change order or other document permitting billing for the adjustment in price under any method listed in paragraph (a)(1) through (a)(4) above shall be issued within ten days after agreement on the method of adjustment.

F. DELAY

Section 6.2 of the General Terms and Conditions is hereby deleted in its entirety and replaced with the following:

“**6.2 DELAY.** If any excusable delay occurs, it shall be dealt with in accordance with subsection 9.2.3, Excuse for nonperformance or delayed performance. No extension of time however, shall be granted unless the written application therefore stating in detail the cause or causes of delay is filed by the CONSULTANT with the Officer-in-Charge *within thirty (30) days* after the commencement of the delay. No such extension shall be deemed a waiver of the right of the Officer-in-Charge to require the completion of services under the contract within the time required herein as so extended by the specific terms of such extension or extensions, nor a waiver of right to terminate the contract for any other or additional delay not covered by the specific terms of such extension or extensions. The number of days of each extension of time shall be determined by the Chief Procurement Officer upon the recommendation of the Project Manager.”

G. LIQUIDATED DAMAGES

Section 6.6 of the General Terms and Conditions, entitled "LIQUIDATED DAMAGES", is hereby deleted in its entirety.

H. SAFETY AND SECURITY CERTIFICATION

A new Section 6.8 of the General Terms and Conditions, entitled "SAFETY AND SECURITY CERTIFICATION ", is hereby inserted.

“6.8 SAFETY AND SECURITY CERTIFICATION.

- (a) The purpose of the safety and security certification is to ensure that:
 - 1. The design, construction, fabrication, installation, testing, and commissioning of all safety- and security-certifiable elements (civil, structural, and systems) have been evaluated for conformance with the safety and security design criteria and specifications requirements and to verify their readiness for operational use; and
 - 2. The rail system is operationally safe and secure for customers, employees, emergency responders, and the general public.
- (b) The objective is to achieve an acceptable level of risk through a systematic approach to safety hazard and security vulnerability management, design criteria adherence, specification and construction compliance, and testing and commissioning verification.
- (c) The CONSULTANT shall implement and successfully complete safety and security certification for all certifiable elements contained in the Agreement. Safety and security certification shall be conducted in accordance with the latest version of the Federal Transit Administration (FTA) Handbook for Transit Safety and Security Certification as tailored to the CONSULTANT's scope of work. HART has developed a Project Safety and Security Certification Plan (SSCP) based on FTA guidelines to describe how these activities will be implemented for the HRTP. The CONSULTANT's activities include, but are not limited to, the following:
 - 1. Participate on safety and security committees and working groups established by HART to perform safety and security certification activities as requested.
 - 2. Demonstrate within its schedule the integration

and completion of safety and security certification activities, including the development and completion of Conformance Checklists.

3. Develop and support the development of safety and security analyses for safety and security certifiable elements as needed.
 4. Support the resolution of identified safety hazards and security vulnerabilities identified through safety and security analyses.
 5. Submit completed and signed Conformance Checklists to HART for review and acceptance.
 6. Submit supporting verification documentation to demonstrate that the design has incorporated and complies with safety and security design criteria and requirements provided in the contract documents.
 7. Submit required documents using HART's document management system for safety and security certification.
 8. Identify on its organization chart the representative assigned to manage and facilitate the CONSULTANT's implementation of the safety and security certification process.
- (d) The safety and security certification process for each certifiable element is not complete until Conformance Checklists that are completed, signed, and submitted by the CONSULTANT have been reviewed and accepted by HART. Additional requirements for safety and security certification are detailed in the Project SSCP. The CONSULTANT shall refer to Engineering Data for a copy of the Project SSCP."

I. FIELD SAFETY AND SECURITY

A new Section 6.9 of the General Terms and Conditions, entitled "FIELD SAFETY AND SECURITY", is hereby inserted.

"6.9 FIELD SAFETY AND SECURITY

- (a) The CONSULTANT is responsible for initiating and maintaining a safety and health program that complies with applicable local, state and federal occupational safety and health regulations, including but not limited to the Hawaii Administrative Rules, Title 12, Department of Labor and Industrial Relations Subtitle 8, Division

of Occupational Safety and Health Part 3, Construction Standards.

- (b) The CONSULTANT shall be familiar with the Honolulu Rail Transit Project Construction Safety and Security Plan (CSSP) current revision and comply with applicable sections, such as, but not limited to visitor control, public access, first aid/emergency response, safe work practices, personal protective equipment and safety and security reporting requirements. All personnel who have a need to access field locations must attend the HART Safety and Environmental Orientation.
- (c) The CONSULTANT shall designate at least one person as the Safety and Security Representative (this may be a collateral duty position and/or prime sub-consultant designee) to be on-site any time field activities are taking place and is responsible to ensure the proper implementation of the Site-Specific Safety and Security Plan (SSSP). The Safety and Security Representative shall have completed the OSHA 10 Hour Construction Safety Outreach Program or equivalent and be a competent person for applicable subject matter, including but not limited to fall protection, excavation and trenching, the control of hazardous energy (Lock Out Tag Out (LOTO) Procedure), scaffolding and confined spaces.
- (d) The CONSULTANT shall ensure employees, subconsultants and/or subcontractors comply with applicable regulations and the SSSP submitted by CONSULTANT for this project.
- (e) The CONSULTANT shall submit an SSSP, which shall address field work-related hazards and mitigation measures. This plan shall take into account all work, including any activities subcontracted. This plan must be compatible with the CONSULTANT's overall safety and health program and be submitted to the HART Safety and Security Manager for review and acceptance 30 days prior to field work taking place. The SSSP shall at minimum contain the following information:
 - 1. Title, signature and phone number of the Plan Preparer (this person must be a qualified person), Company Officer and Safety and Security Representative (SSR).
 - 2. Background information: CONSULTANT name, Contract name and number, Description of work to be performed (with attention to field related work).
 - 3. Responsibilities and Lines of Authority. Include a statement of the Prime CONSULTANT's ultimate responsibility for the implementation of the SSSP. Identification and accountability of subconsultants, subcontractors and personnel responsible for safety at all levels. Provide the

SSR qualifications and letter of designation assigning the authority to carry out safety and security responsibilities. HART will review the qualifications for acceptance.

4. Safety Policy Statement detailing the CONSULTANT'S commitment to providing a safe and healthful workplace for all employees.
5. Training. Provide a statement requiring completion of the HART Safety and Environmental Orientation for all personnel prior to accessing field work locations. List end user, competent or qualified person training requirements, as applicable.
6. List procedures for field site inspections and documentation. Include the assignment of this responsibility, frequency and documentation method.
7. List procedures for complying with applicable portions of the CSSP.
8. Emergency Planning. Describe emergency plan and means to ensure employees are not permitted to work alone and to ensure an effective means of emergency communication is provided, readily available and in working condition.
9. Describe method of providing drinking water, toilet and washing facilities.
10. First Aid and CPR training. Describe methods to ensure and provide copies of at least two employees on site who are qualified/certified to administer first aid and CPR and provision of first aid kit (type/size).
11. Personal Protective Equipment. At minimum, but not be limited to all personnel, including visitors, on work site locations associated with the PROJECT shall wear the following minimum PPE:
 - i) Head protection complying with ANSI Z89.1-2009 and ANSI Z89.2-2009 shall be worn at all times when on the work site.
 - ii) High visibility, retro-reflective clothing (class 2 or 3) complying with ANSI/ISEA 107, 23 CFR Part 634, MUTCD 6E-3, and 29 CFR 1926.201(a) shall be worn at all times within the traffic work zone.
 - iii) Eye protection complying with ANSI Z87.1-2003 shall be worn at all times on when on

- the work site.
- iv) Foot protection complying with ASTM F2413-05 or ANZI Z41-1999 shall be worn at all times when on the work site. Work boots are the preferred type of protective footwear. No tennis-type shoes are permitted.
 - v) Hearing protection with a Noise Reduction Rating (NRR) appropriate for the exposure shall be worn by personnel exposed to noise levels in excess of the 29 CFR 1926.101 Table D-2 Permissible Exposure Limit (PEL). When in the field, personnel must have hearing protection readily available for use.
12. Hazardous substances. Describe when any hazardous substances are to be procured, used, stored or disposed. Provide a hazard communication program and describe how Material Safety Data Sheets (MSDSs) will be made readily available for review. Employees shall have received training in hazardous substances being used and emergency equipment (such as eye wash) shall be readily available at the work area.
13. Describe how traffic control will be accomplished in accordance with the Department of Transportation Manual for Uniform Traffic Control Devices (current edition).
14. Control of Hazardous Energy (Lockout/Tagout). Describe procedures to ensure adequate control of energy before an employee performs any inspection, servicing or maintenance on any equipment where the unexpected energizing or startup of the equipment could occur.”

J. PAYMENT

Section 8.2 of the General Terms and Conditions, entitled “PROGRESS PAYMENT”, is hereby deleted in its entirety and replaced with the following:

“8.2 PAYMENT

- (a) Payments to the CONSULTANT for Work satisfactorily performed will be made according to the mutually-agreed Schedule of Milestones:
 - 1. Scope of Payment. The CONSULTANT shall receive and accept compensation provided for in the Agreement as full payment for performing all Work under the Agreement in a

complete and acceptable manner and for all risk, loss, damage, or expense of whatever character arising out of the nature of the Work or the prosecution thereof.

2. Payment Concept. Payment will be calculated using the Schedule of Milestones ("SM") Pay Item table.
3. Payment does not imply acceptance of the Work. The granting of any payment by HART, or the receipt thereof by CONSULTANT, shall in no way imply acceptance of the Work. Such Work, equipment, components or workmanship that do not conform to the requirements of this Agreement may be rejected by HART and in such case must be replaced by CONSULTANT without delay.

(b) Payment will be based on the SM.

Within ten (10) days upon receipt of NTP #1a, the CONSULTANT is required to breakdown the Work into milestones and submit the SM for approval and acceptance by HART. The SM is intended to provide linkage between the Baseline Design Schedule and the PROJECT Work Breakdown Structure ("WBS") provided by HART. The SM is to be organized by NTP and itemized by Pay Items. The CONSULTANT is to be paid upon satisfactory completion of SM Pay Item(s).

1. Pay Item measurement and payment shall be based on lump sum values assigned to all SM Pay Items. Completion of Milestones is the basis for payment.
2. Request for Monthly Payment. The CONSULTANT shall submit monthly pay requests using Contract Management System procedures for HART to review. The request shall consist of the SM Pay Items for the current month and cumulative to date. An updated SM, Baseline Design Schedule, and a progress narrative addressing, at a minimum, areas of concern shall be included with each pay request.

(c) HART's obligation to make timely payment and the statutory interest that accrues to any late unpaid balance shall be according to HRS § 103-10."

K. RETAINAGE

Section 8.5 of the General Terms and Conditions, entitled "RETAINAGE", is hereby deleted in its entirety.

L. PROMPT PAYMENT BY CONTACTORS TO SUBCONTRACTORS

Section 8.6 of the General Terms and Conditions, entitled "PROMPT PAYMENT

TO SUBCONTRACTORS," is hereby deleted in its entirety and replaced with the following:

"8.6 PROMPT PAYMENT BY CONTRACTORS TO SUBCONTRACTORS

- (a) Generally. Any money paid to a 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. The final payment request shall be properly documented as required under HAR § 3-125-23 (4).
- (c) Penalties. The contractor may be subject to a penalty of one and one-half (1 ½) percent per month on the outstanding amounts due that were not timely paid to the subcontractor and if subcontractor satisfied the conditions set forth in HAR § 3-125-23

VIII. FEDERAL CLAUSES

FEDERAL FUNDING, INCORPORATION OF FTA TERMS, AND CHANGES TO FEDERAL REQUIREMENTS

This Agreement includes, in part, certain standard terms and conditions required by the FTA, whether or not expressly set forth in the Agreement provisions. All provisions required by the FTA, as set forth in FTA Circular 4220.1F, as amended, will be incorporated by reference. Anything to the contrary notwithstanding, all FTA mandated terms and conditions will be deemed to control in the event of a conflict with other provisions contained in the Agreement. The CONSULTANT shall not perform any act, fail to perform any act, or refuse to comply with any HART requests which would cause HART to be in violation of FTA terms and conditions. This Agreement will be subject to any financial assistance agreement between HART/City and the FTA and all laws, regulations, guidelines, and provisions of the financial assistance agreement will apply to the Agreement and will be incorporated by reference as if fully set forth therein.

The CONSULTANT shall at all times comply with all applicable Federal Government laws and regulations, including without limitation FTA regulations, policies, procedures and directives, including those listed directly or by reference in Applicable Grant Agreements

between HART/City and FTA relating to HRTP, as they may be amended or promulgated from time to time during the term of the Agreement (collectively, "Federal Requirements"). These Federal Requirements may change and the changed Federal Requirements will apply to this Agreement as required unless the Federal Government determines otherwise. The CONSULTANT's failure to comply with the Federal Requirements shall constitute a material breach of the Agreement.

The Federal Requirements are contained in Exhibit 8, attached hereto and incorporated by reference.

IX. ASSIGNMENT

CONSULTANT agrees that CONSULTANT shall not transfer or assign this Agreement in whole or in part, except by an instrument, in writing, approved by HART.

X. HEADINGS; GENDER; NUMBER

The titles of headings of Sections, Subsection and Paragraphs are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

All words used in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. All words used in any gender shall extend to and include all genders.

XI. REFERENCES TO THE CITY AND COUNTY OF HONOLULU

The acronym "HART" shall be substituted for "City and County of Honolulu", "CITY", "Rapid Transit Division", and "RTD" wherever those terms appear in the Request for Qualifications and Contract Documents inclusive of all Addendums, unless the context clearly indicates otherwise.

**SPECIAL PROVISIONS
EXHIBIT 1**

**HONOLULU RAIL TRANSIT PROJECT
CITY CENTER SECTION UTILITIES AND GUIDEWAY DESIGN CONTRACT**

SCOPE OF WORK

Table of Contents

HONOLULU RAIL TRANSIT PROJECT	i
CITY CENTER SECTION UTILITIES AND GUIDEWAY DESIGN CONTRACT	i
Project Purpose and Description	- 1 -
Design Packages and Duration of Contract	- 2 -
NTP #1a – Workshop, Design Schedule and Schedule of Milestones (“SM”)	- 3 -
NTP #1b – Revisions to Preliminary Engineering (“PE”)	- 3 -
NTP #2 – Interim Design (“ID”)	- 4 -
NTP #3 – Final Design (“FD”)	- 4 -
NTP #4 – Design Support During Bidding	- 5 -
NTP #5 – Design Support During Construction	- 5 -
Project Team	- 5 -
Scope of Work – Detailed Description by Task	- 9 -
Description of Design Submittals	- 11 -
APPENDIX A	- 16 -
APPENDIX B	- 22 -
TASK 0100 - Project Management and Administration	- 23 -
1.1 General Management	- 24 -
1.2 Design Management	- 26 -
c) Design Manager will coordinate and communicate with HART regarding technical issues.	- 26 -
1.3 Constructability Reviews	- 28 -
1.4 Quality Assurance and Management	- 29 -
1.5 Development of Design Schedule (Primavera P6)	- 30 -
1.6 Development of Schedule of Milestones (SM)	- 31 -
1.7 Development of Project Work Plan	- 32 -
1.8 Development of Project Management Plan	- 33 -
1.9 Development of Basis of Design Report	- 34 -
1.10 Development of Quality Assurance Plan	- 35 -
1.11 Development of Interface Management Plan	- 37 -
1.12 Development of Site Safety and Security Plan	- 38 -
1.13 Safety and Security Certification	- 41 -
TASK 0200 - Design Workshop	- 43 -

City Center Section Utilities and Guideway Design Contract

2.1 Conduct Stakeholder Kickoff Meeting.....	- 44 -
2.2 Conduct Internal Design Workshop	- 45 -
TASK 0300 - Interface and Coordination with Others	- 46 -
3.1 Design Teams and Stakeholders.....	- 47 -
3.2 Repackage Coordination with Airport Section	- 50 -
TASK 0400 – Survey	- 51 -
4.1 Topographic Survey	- 52 -
4.2 ROW Mapping and Plans.....	- 54 -
4.3 Construction Easements.....	- 55 -
TASK 0500 - Civil Design	- 56 -
5.1 Track Alignment Design Refinements	- 57 -
5.2 Development of Guideway Track Design	- 58 -
5.3 Site and Roadway –Construction Plans and Details (Geometric).....	- 60 -
5.4 Site and Roadway Pavement Markings and Roadway Signs	- 61 -
5.5 Drainage Report	- 62 -
5.6 Development of Guideway and Surface Drainage Design	- 63 -
5.7 Stream “No Rise” Mitigative Measures – Design	- 65 -
5.8 Erosion Control Plans – Design.....	- 66 -
5.9 Site Design – TPSS.....	- 67 -
5.10 Landscape	- 68 -
5.11 Demolition Plans	- 69 -
5.12 QC Review - Discipline and Inter-Discipline Review of Documents	- 70 -
TASK 0600 - Structural Design	- 71 -
6.1 Finalize Project Footprint	- 72 -
6.2 Alternate Structure Type Study.....	- 73 -
6.3 Double Track Box Girder Superstructure Design / Details	- 74 -
6.4 Single Track Box Girder Superstructure Design / Details	- 75 -
6.5 Double Track Substructure Design/Detailing	- 76 -
6.6 Single Track Substructure Design/Detailing	- 78 -
6.7 Kapalama Stream Bridge Widening Design/Detailing	- 80 -
6.8 Structural Seismic Analysis.....	- 81 -
6.9 Site Structures	- 82 -

City Center Section Utilities and Guideway Design Contract

6.11 QC Review - Discipline and Inter-Discipline Review of Documents	- 83 -
6.12 Independent Design Check.....	- 84 -
TASK 0700 - Geotechnical Exploration and Design	- 85 -
7.1 Development of Boring Plan	- 86 -
7.2 Obtain Necessary Permits	- 88 -
7.3 Geotechnical Investigation and Soils Testing	- 90 -
7.4 Development of Reports and Design Technical Memoranda	- 93 -
7.5 Quality/Peer Review.....	- 95 -
TASK 0800 - Architectural Design.....	- 97 -
8.1 Station, Piers and TPSS Aesthetics	- 98 -
8.2 Sustainability Report	- 99 -
8.3 Discipline and Inter-Discipline Review of Documents.....	- 100 -
TASK 0900 - Utility Design	- 101 -
9.1 Development of Composite Utility Plans	- 102 -
9.2 Sub-Surface Investigation (GPR & Potholing).....	- 103 -
9.3 Design and Plan Development for Utilities (Non-Electrical)	- 104 -
9.4 Design and Plan Development for Electrical and Communication Utilities	- 105 -
9.5 QC Review - Discipline and Inter-Discipline Review of Documents	- 108 -
TASK 1000 - Traffic Signal Design	- 109 -
10.1 Development of Temporary Traffic Signal Plans.....	- 110 -
10.2 Development of Permanent Traffic Signal Plans.....	- 112 -
10.3 QC Review - Discipline and Inter-Discipline Review of Documents	- 113 -
TASK 1100 - Electrical Design	- 114 -
11.1 Illumination and Traffic Signal Design.....	- 115 -
11.2 Guideway Alignment Station Connections.....	- 117 -
11.3 Systems Site Design.....	- 119 -
11.4 QC Review - Discipline and Inter-Discipline Review of Documents	- 120 -
TASK 1200 - Intelligent Transportation Systems ("ITS") Design.....	- 121 -
12.1 Development of Intelligent Transportation System Design.....	- 122 -
12.2 QC Review - Discipline and Inter-Discipline Review of Documents	- 125 -
TASK 1300 – Environmental	- 126 -
13.1 Investigate and Provide Remedial Design for Hazardous Waste and Materials.....	- 127 -

City Center Section Utilities and Guideway Design Contract

13.2 Prepare and Update the Environmental Compliance Plan (ECP).....	- 128 -
13.3 Conduct Environmental Compliance Reviews During the Design Phase	- 130 -
13.4 Prepare Permits and Clearances	- 131 -
13.6 QC Review - Discipline and Inter-Discipline Review of Documents	- 134 -
TASK 1400 - Maintenance of Traffic (MOT) Plans	- 135 -
14.1 Development of MOT Plans Phase 1	- 136 -
14.2 Development of MOT Plans Phase 2	- 138 -
14.3 TMP / MOT Reports TMP Work Plan Schedule Coordination	- 139 -
14.4 TMP/MOT Reports TMP Analysis and Coordination and Plan	- 140 -
14.5 QC Review - Discipline and Inter-Discipline Review of Documents	- 142 -
TASK 1500 - Public Involvement.....	- 143 -
15.1 Meetings and Development of Material in Support of Meetings	- 144 -
15.2 Coordinate/Provide Public Involvement to Support HART	- 146 -
TASK 1600 - Cost Estimating.....	- 147 -
16.1 Quantity Take-off Summary	- 148 -
16.2 Cost Estimate Development.....	- 149 -
16.3 QC Review	- 150 -
TASK 1700 – Specifications.....	- 151 -
17.1 Review and Development	- 152 -
17.2 QC Review - Discipline and Inter-Discipline Review of Documents	- 153 -
TASK 1800 - Design Support during Bidding (NTP #4).....	- 154 -
18.1 Guideway and Utility Packages	- 155 -
TASK 1900 - Design Support during Construction (NTP #5)	- 156 -
19.1 Management and Administration	- 157 -
19.2 Shop Drawing Review.....	- 158 -
19.3 As-Built Drawings	- 160 -
19.4 Request For Information and Additional Support Activities	- 161 -

EXHIBIT 1
SCOPE OF WORK

All defined terms in the Agreement and the Special Provisions shall have the same meaning in this Exhibit 1.

Project Purpose and Description

The CONSULTANT will provide architectural and engineering services necessary for the design and preparation of final construction plans, detailed specifications and other contract documents for the City Center Section Utilities and Guideway Contract (the "City Center Section") for the Honolulu Rail Transit Project ("H RTP").

A description of the Scope of Work ("SOW") to be performed under this Agreement and deliverables is set forth in this Exhibit 1.

This Scope of Work and accompanying budget/fee estimate assumes that the City Center Section Design Schedule will not require significant revisions due to the schedules of interfacing contracts such as the Airport Section Guideway and Utilities Contract ("Airport Section"), the Maintenance and Storage Facility Design-Build Contract, the Station Group ("SG") contracts, and the Core Systems Design-Build-Operate-Maintain ("DBOM") Contract. If changes to the durations or sequencing of the design work due to interfaces with other contracts are required, HART will consider adjustment to the City Center Section duration stated herein.

The City Center Section of the H RTP Project is a 3.9 mile, grade-separated fixed guideway transit system through the urban core of Honolulu. The City Center Section begins just past the Middle Street Transit Center follows Dillingham Boulevard to the vicinity of Ka`a`ahi Street and then turns east to connect to Nimitz Highway near Iwilei Road. The guideway will follow Nimitz Highway east to Halekauwila Street, then proceed along Halekauwila Street past Ward Avenue, where it will transition to Queen Street. The guideway will cross from Waimanu Street to Kona Street in the vicinity of Pensacola Street and continue above Kona Street to the Ala Moana Center.

The City Center Section alignment traverses a sensitive archeological area. An Archeological Inventory Survey ("AIS") is being conducted by HART to identify these areas in advance of Final Design.

Additionally, as evidenced by the total number of "Sites of Interest" identified in the Hazardous Materials Inventory Technical Report (Jan. 2008) the alignment extends through areas where contaminant material may be encountered.

Design of the guideway substructure will need to provide for integration of the eight Stations that will be incorporated as separate work, including final design: Kalihi Station, Kapalama Station, Iwilei Station, Chinatown Station, Downtown Station, Civic Center Station, Kaka`ako Station and Ala Moana Station. The design of the eight (8) Stations will be part of the multiple SG contracts and are not part of the scope of work for this contract. Also, the design will require the widening of the streets along the route to accommodate the guideway columns, provide bus stops, improve sidewalks and medians, revise traffic signals and other related improvements. The project will also include the installation of sound barrier walls, running rails and insulated third rail (contact rail). The design will accommodate

miscellaneous electrical/mechanical wayside equipment, switch machines and include the applicable sleeves and underground ductbanks/conduits to support this equipment.

Numerous utilities along the proposed alignment require relocation to allow for the Guideway construction. There are both public and private utilities including, but not limited to, power, sewer, water, cable, etc.

Two (2) bid documents will be developed for the City Center Section: a Utilities design package and a Guideway design package. The two (2) design packages will afford HART the flexibility to release two (2) separate construction contracts, thereby expediting the project. The Utilities design package will include all drawings and specifications necessary for utility protection, construction and relocation (e.g. storm drain, water, sewer, gas, fuel, power, communication, etc.), along with pertinent Civil drawings (e.g. roadway, pavement marking, MOT, etc.) to widen the roadway and prepare the site for construction of the Guideway design package. The Guideway design package will include all remaining City Center Section construction documents including guideway superstructure, foundation, and civil documents directly associated with guideway construction.

Design Packages and Duration of Contract

NTP #1a (45 days)	NTP #1b (130 days)	Review (30 days)	NTP #2 (utilities = 120 days)	Review (30 days)	NTP #3 (30 days)	Review (30 days)	RFC (30 days)			
			NTP #2 (guideway = 210 days)				Review (30 days)	NTP #3 (90 days)	Review (30 days)	RFC (30 days)

The work in this City Center Segment Utilities and Guideway Contract will be phased to allow development of the design to occur in accordance with Federal Transit Administration (“FTA”) procedural requirements. The design phases will be initiated by a Notice to Proceed (“NTP”) issued by HART. A total of six (6) NTPs are anticipated, as follow:

- NTP #1a – Workshop, Design Schedule and Schedule of Milestones (“SM”)
- NTP #1b – Revisions to Preliminary Engineering (“PE”)
- NTP #2 – Interim Design (“ID”)
- NTP #3 – Final Design (“FD”)
- NTP #4 – Design Support During Bidding
- NTP #5 – Design Support During Construction

Note that CONSULTANT will proceed with due diligence to meet the Design Schedule/Durations described below. However, CONSULTANT is not responsible for delays caused by Outside Agencies (e.g. Utility Companies).

NTP #1a – Workshop, Design Schedule and Schedule of Milestones (“SM”)

- Provide HART with a Draft Baseline Design Schedule and an SM that includes all work for which CONSULTANT expects to be compensated. The SM is to be organized by NTP and will serve as the basis for payment. CONSULTANT’s Baseline Design Schedule Revision A must be conformed to the SM. HART and CONSULTANT shall reach agreement on the proposed SM within twenty (20) calendar days, at which time HART will approve the SM and issue NTP #1b. The SM format shall follow the sample SM provided to the CONSULTANT.
- A Design/Stakeholder Workshop is included in this phase, as well as the initiation of the Right of Entry permitting request process for field investigations such as geotechnical work and topographic surveying.
- CONSULTANT shall conduct a City Center Section kickoff meeting during NTP #1a, including HART and stakeholders.
- Duration of NTP #1a is forty-five (45) days.

NTP #1b – Revisions to Preliminary Engineering (“PE”)

- Commencing with agreement on NTP #1a, CONSULTANT will review the approved Guideway Value Engineering (“VE”) recommendations and other HART preferences, and incorporate into the current PE design, if appropriate.
- CONSULTANT shall establish and submit a City Center Section Quality Assurance Plan (“QAP”) for review and approval prior to use and submittal of any Design Documents and Reports. The QAP shall meet the requirements of FTA QA/QC Guidelines (FTA-IT-90-5001-02.1 February 2002 Issues) and HART Quality Management Plan (“QMP”) Revisions 1.
- CONSULTANT will prepare a study to evaluate potential changes to the guideway superstructure shape to improve the visual appearance through downtown and Kaka’ako. This standalone study will not be reflected in the Revisions to the PE Drawings. Study will need to be sensitive to concerns in the Section 106 PA, its consulting parties, and the Visual analysis in the FEIS.
- Ensure compliance of PE design with applicable codes, regulations and design standards.
- Review site constraints and identify additional alignment changes/pier placement changes which improve the design consistent with the approved Environmental Documents; incorporate changes approved by HART.
- Within thirty (30) days from the start of NTP #1b, CONSULTANT shall provide HART with a Final Baseline Design Schedule.
- Duration for Guideway and Utilities design: one hundred thirty (130) days.
- HART and outside Agency Review: thirty (30) days. Note that the CONSULTANT will continue to advance design concurrent with this review.

- Comment Resolution Meeting with HART: to occur within two (2) weeks of receiving HART/Other Agency review comments.
- Conduct field reconnaissance for ground surveys, utility potholing, and geotechnical investigations.
- Prepare, submit and resolve all plans and submittals required before field work can physically begin.

NTP #2 –Interim Design (“ID”)

- Commence ID drawings and detailed working drawings and specifications and incorporate revisions resolved from NTP #1b HART/Agency review.
- Incorporate HART standard details provided by HART and develop City Center Section-specific details as required; provide consistent material selection that considers pedestrian safety, durability, maintenance, sustainability, and aesthetics relating to the transit environment.
- Duration for Utilities design: one hundred twenty (120) days.
- Duration for the Guideway design: two hundred ten (210) days.
- HART and outside Agency Review: thirty (30) days. Note that the CONSULTANT will continue to advance design concurrent with this review.
- Comment Resolution Meeting with HART: to occur within two (2) weeks of receiving HART/Other Agency review comments.

NTP #3 – Final Design (“FD”)

- Commence FD and preparation of construction contract documents, incorporating revisions resolved from NTP #2 HART/Agency review.
- Provide detailed construction contract documents to permit accurate cost estimating and expedite construction activities.
- The duration of NTP #3, prior to submittal of draft camera-ready final documents to HART assumes the following:
 - Duration for Utilities design: thirty (30) days.
 - Duration for Guideway design: ninety (90) days.
 - Thirty (30) days/each for HART review; and thirty (30) days for the CONSULTANT to incorporate review comments and prepare final advertisement-ready (“ad-ready”) construction documents.
- Prepare presentation materials, including plans, rendering elevations, PowerPoint slides, and other appropriate information indicating the features of the FD for community presentation(s) up to a maximum of three (3).

NTP #4 – Design Support During Bidding

- As requested, assist HART in the construction solicitation process.
- As requested, assist HART during the solicitation of the construction contract including provision of technical design support for questions or RFIs posed by potential bidders.
- Duration is based on HART's advertisement and bidding schedule.

NTP #5 – Design Support During Construction

- As requested, assist HART in resolving design issues during construction.
- Duration is based on HART's approved construction schedule.

Project Team

The CONSULTANT will be organized to provide a structure that will seamlessly integrate with HART. The team is populated with personnel with direct relevant experience in transit system design, with a particular emphasis on the unique requirements of this project: segmental bridge design, local geotechnical and civil expertise, as well as community outreach and coordination and design system integration.

CONSULTANT has a dedicated transit project office located at 1003 Bishop Street, in downtown Honolulu. In addition the CONSULTANT's Honolulu Corporate office is located at 1001 Bishop Street. Both offices are conveniently located across the street from HART office and have the facilities to house all project coordination meetings with HART and other program staff. The project office will be the work location for the following Key Personnel:

1. Project Manager – Brian Dodson
2. Deputy Project Manager – Gavin Wong
3. Design Manager – Neil Harris
4. Deputy Design Manager – David Minister
5. Civil Manager – Barry Muranaka
6. Design Interface Manager – James Statser
7. Structural Manager – John (Wally) W. Jordan

Project Director, Rudy Mina will be located at AECOM's Honolulu Corporate office at 1001 Bishop Street, adjacent to the dedicated project office. Deputy Civil Manager, Barry Toyota will be located at Wilson Okamoto's Honolulu office.

Also located at the dedicated project office will be a majority of the project's AECOM on-island design staff. Other project design staff will be located at specific subconsultant offices located in Hawaii, while others will be located on the Mainland (estimated to be thirty percent (30%)). Work performed on the Mainland will be limited to specialty items, such as structural design, track design, constructability

review and Intelligent Transportation Systems ("ITS"). As necessary, task designers will travel to or temporarily relocate to Hawaii to ensure coordination and communication.

All subconsultants' offices are located in Oahu, Hawaii, within close proximity of both the CONSULTANT project office, as well as HART's office.

The attached (Chart 1) is an updated organization chart identifying the location of all Project Team Leaders.

Brian Dodson, the Project Manager, will be the single point of contact for the AECOM team and will represent the team for all technical and contractual matters. Brian will be located full time in Honolulu in the dedicated project office, for the duration of the design.

Gavin Wong, the Deputy Project Manager, will share management activities of the City Center Section with the Project Manager. The Deputy Project Manager will focus on management and coordination with AECOM discipline managers and subconsultants allowing the Project Manager to focus on interaction and coordination with HART and the GEC. The Deputy Project Manager will be located full time in Honolulu, in the dedicated project office, for the duration of the City Center Section when the City Center Section design activities overlap the design activities of the Airport Section.

Neil Harris, the Design Manager, will oversee the technical aspects of the project. Neil will be located in Honolulu in the dedicated project office. However, his responsibilities will require extensive travel to coordinate with activities on the Island and on the Mainland.

David Minister, the Deputy Design Manager, will assist the Design Manager in advancing the City Center design and will work with AECOM's subconsultants. The Deputy Design Manager will be located in the Honolulu, in the dedicated project office, for the duration of the City Center Section when the City Center Section design activities overlap the design activities of the Airport Section.

Courtney Gonzalez, the Quality Assurance Manager, will be responsible for the development of the Quality Assurance Plan and conducting quality audits (AECOM and subconsultants). During the execution of the project, Courtney will be stationed out of the AECOM Oakland office, and will travel to Hawaii as necessary to ensure Quality Assurance. Supporting Courtney will be the Honolulu office's QA Manager and Glenn Kunze (AECOM's Texas QA Manager), who will primarily be responsible for reviewing deliverables for QA compliance prior to submittal. Courtney will report directly to **Rudy Mina**, the Project Director.

Barry Muranaka, the Civil Task Manager, will oversee the various civil disciplines including track, utilities, MOT, roadway, drainage, survey, electrical, environmental, landscape and ITS. Barry is currently assigned to the AECOM Honolulu office. The majority of this design effort will be performed out of the project office, with support from Wilson Okamoto Corp.'s **Pete Pascua**, **Lance Oyama** and **Michael Fujita**. Their office is located within three (3) miles of the project office. Electrical design support will be performed by Ronald N.S. Ho & Associates, led by **Steven Sakai**. Their office is located within three (3) miles of the project office. Landscape design support will be performed by PBR Hawaii and led by **Stan Duncan**. Their office is located in the same building as the project office. The ITS design function will be headed by Daniel Corey from the AECOM Philadelphia office.

Barry Toyota, the Deputy Civil Manager, will assist the Civil Manager in advancing the City Center design. The Deputy Civil Manager will be located in Wilson Okamoto's Honolulu office. Barry Toyota

will also serve as the Utility Lead. As such, Barry will be committed full time to the City Center Section, for the duration of the design.

James Statser, the Design Interface Manager, will be responsible for the coordination of the various design teams and stakeholders. On island presence is critical for this activity. James will be located full time in Honolulu in the project office.

John (Wally) Jordan, the Structural Manager, will be responsible for the coordination of the structural design teams. Wally will be assigned to the dedicated project office. However, as much of the structural design activity (about seventy percent (70%)) will be performed on the Mainland, we anticipate that his time will be split between the Mainland and Hawaii. The structural production areas on the Mainland are located primarily in California.

Outreach will be performed by Bright Light Marketing Group's **Lynette Lo Tom** and Ku'iwalu's **Dawn Chang**. Both of these firms are located in Honolulu across the street from the HART office and in the same building complex as the project office. Both have a deep knowledge of local issues key to the success of the project.

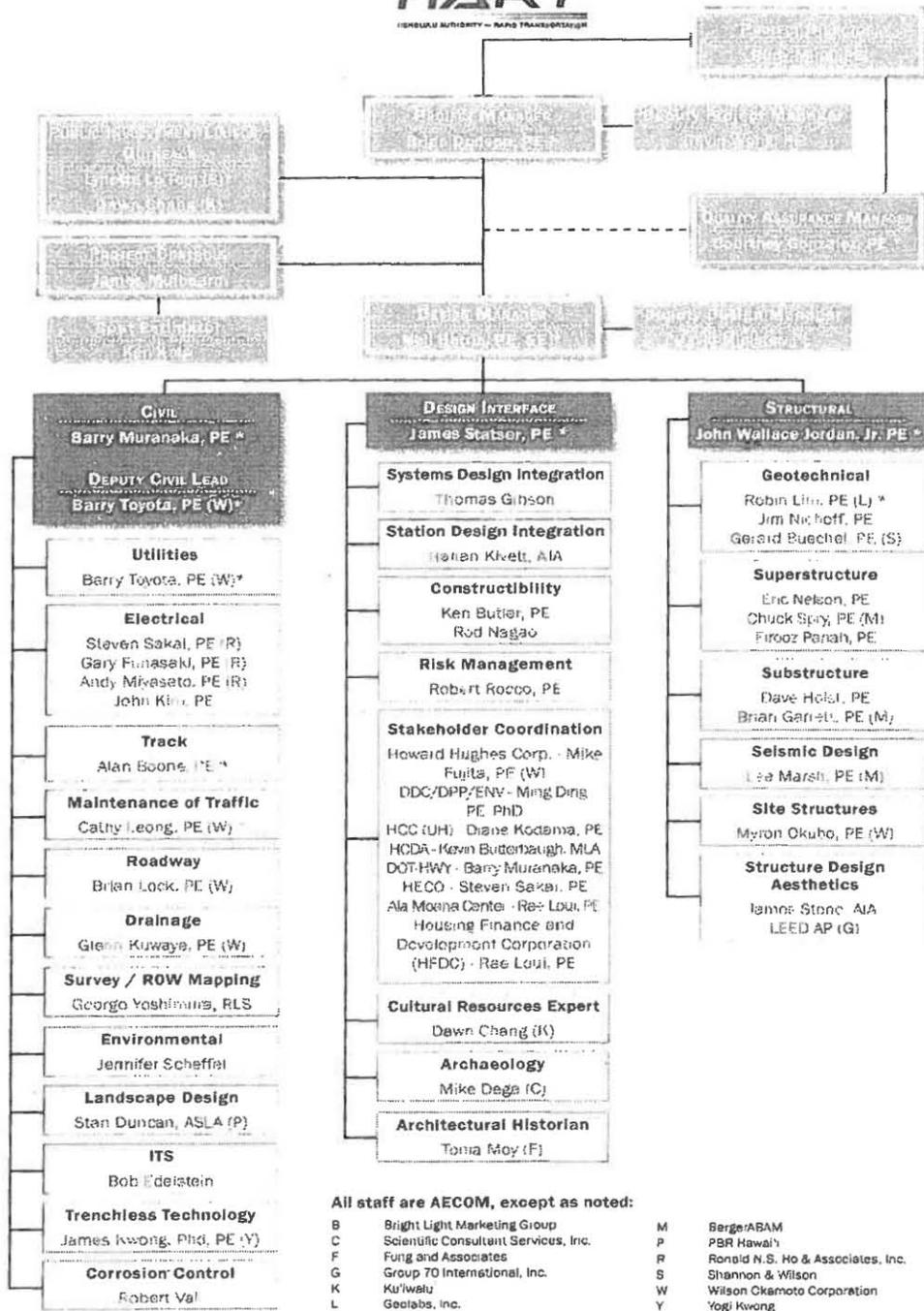


Chart 1

Scope of Work – Detailed Description by Task

The activity description sheets on the following pages describe the work to be performed by the CONSULTANT team under the proposed design assignment.

The City Center Section Utilities and Guideway scope of work includes the design and preparation of final construction plans, detailed specifications and Cost Estimates for the City Center Section as described. Separate bid documents will be prepared for the Final Submittal, one for the Guideway and one for the Utilities. The design work will be based upon the existing PE Design documents and HART's Standard Documents. All plans will be prepared in accordance with the project-specific Plans Standards and CADD procedures. All work will be performed under the supervision of professional engineers licensed by the State of Hawai'i Department of Commerce and Consumer Affairs.

The following documents (provided by HART on DVD) will be utilized in preparation of the design:

- PE/Architectural Drawings
 - City Center Section Guideway and Utilities
 - Kalihi Station Modular Design
 - Kapalama Station Modular Design
 - Iwilei Station Modular Design
 - Chinatown Station Modular Design
 - Downtown Station Modular Design
 - Civic Center Station Modular Design
 - Kaka`ako Station Modular Design
 - Ala Moana Station Modular Design
- RTD Standard and Directive Drawings
 - Standard and Directive Drawings
 - Compendium of Design Criteria
 - Plans Standards and Project CADD Procedures
 - Standard Specifications
- HHCTCP - Systemwide Sustainability Report
- HHCTCP - Design Language Pattern Book
- HHCTCP - City Center Preliminary Drainage Report

- City Center Section Drainage Report
- Geotechnical Data Report - City Center Segment; February 26, 2010
- Fixed Guideway Foundation Technical Memorandum - City Center Segment; February 26, 2010
- HART Interface Control Manual
- HART Quality Management Plan
- HART Safety and Security Management and Certification Plans
- Contract Management System (CMS) Requirements
- Final Environmental Impact Statement
- Record of Decision with the attached Section 106 of the National Historic Preservation Act (hereinafter, Section 106) Programmatic Agreement (PA)
- Utilities Agreements (examples from other projects provided)
- VE Report - Stations and Guideway
- Basis of Preliminary Design Report – City Center Guideway and Utilities
- Preliminary Hydraulic Assessment of 18 HHCTCP Stream Crossing Sites and a Coastal Flood Zone
- Hazardous Materials Inventory Technical Report (Jan. 2008)

Specific Tasks Performed by the CONSULTANT Include:

The tasks performed by the CONSULTANT have been broken down into nineteen (19) different activities. A listing of the nineteen (19) activities is found below. These activities have been broken down further into specific task items, Work Breakdown Structure (“WBS”). A listing of the task WBS items is found in Appendix A. For each task item, a task description has been developed and can be found in Appendix B.

Specific activities include:

- 0100 Project Management and Administration
- 0200 Design/Stakeholder Workshop
- 0300 Interface and Coordination with Others
- 0400 Topographic Survey
- 0500 Civil Design
- 0600 Structural Design
- 0700 Geotechnical Exploration and Design

- 0800 Architectural Design
- 0900 Utility Design
- 1000 Traffic Signal Design
- 1100 Electrical Design
- 1200 Intelligent Transportation Systems (ITS) Design
- 1300 Environmental
- 1400 Maintenance of Traffic (MOT) Plans
- 1500 Public Involvement
- 1600 Cost Estimating
- 1700 Specifications
- 1800 Design Support during Bidding (NTP #4)
- 1900 Design Support during Construction (NTP #5)

Key to the successful on-time competition of this project, the CONSULTANT recommends the following activities:

- The preliminary design update is a critical step in the design development and is the opportunity to resolve outstanding design issues with the community and project stakeholders:
 - The CONSULTANT will review the approved Station VE recommendations.
 - The CONSULTANT will review the approved Guideway VE recommendations, previously completed Structures Workshop information and the track layout for opportunities to optimize and refine the PE design. Optimization studies produced for the Airport Section will be utilized as appropriate for the City Center Section. This work in addition to utility research and HART's AIS studies will be utilized to determine each span length and pier location. The goal is to obtain clarification on optimum span length and pier placement as early as possible so that the geotechnical and utility field investigation locations can be finalized.

Description of Design Submittals

PE Submittal

The PE Submittal consists of the updated PE Documents. These documents will be updated showing incorporation of HART-approved revisions from various VE reports, conclusions reached at the Design Workshop and results of alignment and pier placements. Basis of Design reports will be updated to reflect decisions reached and any changes in codes/standards/regulations and/or direction from HART.

City Center Section Utilities and Guideway Design Contract

The submittal will incorporate updated topographic background/utility information based on field surveys completed to date and include updated:

- Structural Drawings – Advanced to show proposed pier placement and configuration; typical sections; update of Structural Plans and Profiles; basic typical post-tensioning layout and construction sequence; pier configuration.
- Track Alignment Drawings – Updated based on Alignment studies conducted, that may improve geometry and cost, and verification that design meets the Basis of Design
- Drawings for all other disciplines included in the PE — Updated to be compatible with the changes to the structural and track alignment sheets and consistent with the updated Basis of Design. Accepted VE recommendations impacting the various disciplines will be incorporated as appropriate.
- Cost Estimate – A new “bottoms-up” Preliminary Cost Estimate will be developed.
- Specification Index – Developed based on the anticipated Specification sections to be provided.

ID Submittal

Drawings produced for the Interim Design Submittal will be approximately ninety percent (90%) complete and will incorporate revisions identified in the HART/outside agency review of the PE Update and all available design/details from the SG and Core Systems Contractor (CSC) designers. New topographic survey and utility information will be incorporated. Calculation packages will be indexed and completed for all disciplines, except that the structures Independent Design Check will not be finalized until the Final Design Submittal. Baseline specification sections will be edited to address the requirements of the design. Cost Estimate will be updated as required. All environmental constraints will be incorporated into ID drawings, and the submittal will include documentation of CONSULTANT’s environmental review and QA process.

Draft FD Submittal

The Draft FD documents shall consist of complete design drawings, specifications and updated Cost Estimate. All environmental constraints will be incorporated into FD drawings, and the submittal will include documentation of CONSULTANT’s environmental review and QA process.

Drawings will be updated to resolve comments by HART and other outside agencies. Changes to the structure calculations/drawings resulting from the Independent Design Check will be implemented.

FD Submittal

The CONSULTANT will resolve and incorporate all HART comments and submit the FD Documents. The FD documents are advertisement-ready (“ad-ready”) construction documents. Submittal of the FD document represents conclusion of NTP #3.

Scope of Work Key Assumptions and Exclusions

In developing the WBS, detailed element Scope of Work statements and cost proposal, CONSULTANT has made the following assumptions:

- HART will provide CONSULTANT with new base PE Track Alignment compatible with modular station, tail track requirements and future line interoperability at Ala Moana Station.
- Station designs will proceed as information becomes available as follows:
 - Design of the station/guideway support columns will be based on the concepts shown in the Station Module Concept Drawings.
 - Station Loads [and masses] to be carried by Guideway structural members will be provided by HART before the start of NTP #2.
 - Loads and final locations of supplementary station support columns (3) at Downtown Station will be provided by HART at the start of NTP #2. No pedestrian bridges/station superstructure design is included in this scope of work.
 - Any aesthetic features beyond column imprints (form liner details) to be incorporated into the Guideway structural members in the vicinity of each Station will be provided by HART before the start of NTP #3.
 - Support requirements for Station structural elements (details of members to be supported) will be provided by HART or Station Designers at the start of NTP #3.
 - Implementation of Guideway VE recommendations is limited to drilled shaft details, specifications and load testing and relaxation of the horizontal/vertical alignment criteria.
- With the exception of the "low-profile" superstructure study, the scope of work and fee assume that one double track trapezoidal box girder section (modified as necessary for crossovers and stations) and one single track trapezoidal box girder section will be used throughout the City Center Section. The double track trapezoidal box girder section will be identical to that used on the Airport Section
- While a task is included to study and evaluate additional "low-profile" superstructure types, no additional span optimization studies for the trapezoidal double track box girder are included in the Scope of Work.
- CONSULTANT's work is envisioned to be an evolution of the PE design, rather than development of a completely new design. While PE elements incorporated into the design and basis of design will be verified, CONSULTANT assumes that all disciplines of PE work have been coordinated and that the design is in basic conformance with the approved Environmental Document.
- CONSULTANT will incorporate revisions to address HART/Agency comments into the following milestone's deliverables rather than resubmit interim deliverables.
- CONSULTANT will develop details compatible with the contact rail system developed and reference those plans within the deliverables. Note that the CONSULTANT does not perform the load analysis to determine the contact rail and cable sizes/type; this will be completed by
City Center Section Utilities and Guideway Design Contract

others. Design for the layout and support/mounting will be the CONSULTANT's responsibility. Connections from the cables to the contact rail will be done by the CSC in coordination with the CONSULTANT. Sleeves for connections of contact rails will be designed by the CONSULTANT.

- Existing overhead utility facilities that need to be relocated for the guideway will be engineered by the respective utility company and coordinated by the CONSULTANT.
- The design of any modifications to the underground facilities will be engineered by the CONSULTANT and reviewed by the respective utility company. The replacement cable facilities themselves will be designed by the respective utility companies, except that relocation of Network Enterprise Center (aka Signal Corps) and NCTAMS (Naval Communications) facilities will be engineered by the CONSULTANT as applicable.
- Utility agreements will be in place such that all relocation requirements will be known prior to the start of NTP #2.
- Communication/agreement with adjacent property owners will begin in NTP #1b such that final determination of access, utility reconnection, reconstruction and renovation requirements will be made by the start of NTP #2.
- Drainage
 - The PE indicates that additional runoff quantities due to the project are minimal with respect to the overall drainage basin. The CONSULTANT assumes that design of drainage improvements will be limited to elements within or adjacent to the project area, and that downstream improvements to the overall drainage system will not be required.
 - The CONSULTANT will prepare the NPDES permit for runoff associated with construction activities. The CONSULTANT will provide engineering data required for the permit.

The following items are not included in the CONSULTANT's Scope of Work and are specifically excluded:

- Redesign of work already completed in an effort to meet project budget. (However, CONSULTANT will evaluate updated cost estimates at each milestone submittal and compare them to project construction budget. If these estimates identify that project costs are trending to exceed budget, CONSULTANT will recommend changes to project elements to bring costs back in line with the budget.)
- Station Design and Contract Documents except for structural design of pier caps supporting both Guideway and Station platforms.
- Traction Power Sub Stations' ("TPSS")/Gap Breaker Station's ("GBS") electrical design except for coordinating power drops, and providing duct bank, vault or slab and foundation to support TPSS/GBS, manholes/handholes, Grounding Grid and stub ups for bonding to pre-fabricated structure grounding bus bar, concrete /conduit duct bank between Guideway column and TPSS/GBS site.
- Traction power load analysis (train power demands) will be performed by the CSC.
- Core Systems design and contract documents for communications and control, traction electrification, train control and signaling, passenger vehicle and fare vending systems are by others except conduit duct banks for Communication, Fiber Optics, SCADA, Train Control from

City Center Section Utilities and Guideway Design Contract

the Guideway to a manhole at passenger Station from both ends of the Station and then to TCCR room.

- Systemwide Wayfinding and Transit-related Signage design and contract documents, including specifications and quantities, will be prepared by others, but will be included in the City Center Section Utilities and Guideway Contract.
- System Sites, except for #21 and #23.

APPENDIX A

LISTING OF WBS NUMBERS

HART WBS NUMBER									
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5	
			#1a	#1b	#2	#3			
100	Project Management and Administration								
	0110	Project Management and Administration							
	.0010	General Management	X	X	X	X			
	.0020	Design Management	X	X	X	X			
	.0030	Constructability Reviews		X	X				
	.0040	Quality Assurance and Management		X	X	X			
	0120	Management Documents							
	.0010	Development of Design Schedule (Primavera P6)	X						
	.0020	Development of Schedule of Milestones (SM)	X						
	.0030	Development of Project Work Plan		X					
	.0040	Development of Project Management Plan		X					
	.0050	Development of Basis of Design Report		X					
	.0060	Development of Quality Assurance Plan		X					
	.0070	Development of Interface Management Plan		X					
	.0080	Development of Site Safety and Security Manual		X					
	.0090	Safety and Security Certification	X	X	X	X			
200	Design Workshop								
	0200	Design Workshop							
	.0010	Conduct Stakeholder Kickoff Meeting	X						
	.0020	Conduct Internal Design Workshop		X					
300	Interface and Coordination with Others								
	0300	Interface and Coordination with Others							
	.0010	Design Teams and Stakeholders	X	X	X	X			
	.0020	Package Coordination with Airport Section		X	X	X			
400	Survey								
	0400	Survey							
	.0010	Topographic Survey		X					
	.0020	ROW Mapping and Plans		X	X	X			
	.0030	Construction Easements			X	X			

HART WBS NUMBER								
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5
			#1a	#1b	#2	#3		

500 Civil Design										
0510		Track Design								
	.0010	Track Alignment Design Refinements		X						
	.0020	Development of Guideway Track Design		X	X	X				
0520		Roadway Design								
	.0010	Site and Roadway – Construction Plans and Details (Geometric)		X	X	X				
	.0020	Site and Roadway Pavement Markings and Roadway Signs		X	X	X				
0530		Drainage Design								
	.0010	Drainage Report		X	X	X				
	.0020	Development of Guideway and Surface Drainage Design		X	X	X				
	.0030	Stream "No Rise" Mitigative Measure – Design		X	X	X				
	.0040	Erosion Control Plans - Design		X	X	X				
0540		Site Design								
	.0010	Site Design - TPSS		X	X	X				
0550		Landscape Design								
	.0010	Landscape		X	X	X				
0560		Demolition Plans								
	.0010	Demolition Plans		X	X	X				
0570		QC/QA								
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X				

600 Structural Design										
0610		Preliminary Studies								
	.0010	Finalize Project Footprint		X						
	.0020	Alternative Structure Type Study		X	X					
0620		Superstructure								
	.0010	Double Track Box Girder Superstructure Design/Details		X	X	X				
	.0020	Single Track Box Girder Superstructure Design/Details		X	X	X				
0630		Substructure Design/Detailing								
	.0010	Double Track Substructure Design/Details		X	X	X				
	.0020	Single Track Substructure Design/Details		X	X	X				
	.0030	Kapalma Stream Bridge Widening Design/Detailing		X	X	X				
0640		Structural Seismic Analysis								

City Center Section Utilities and Guideway Design Contract

HART WBS NUMBER								
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5
			#1a	#1b	#2	#3		
	.0010	Structural Seismic Analysis		X	X	X		
	0650	Site Structures						
	.0010	Site Structures		X	X	X		
	0660	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		
	.0020	Independent Design Check			X	X		

700 Geotechnical Exploration and Design								
0710 Geotechnical Exploration and Design								
	.0010	Development of Boring Plan		X				
	.0020	Obtain Necessary Permits		X				
	.0030	Geotechnical Investigation and Soils Testing		X	X			
	.0040	Development of Reports and Design Technical Memoranda		X	X	X		
	.0050	Quality/Peer Review		X	X			

800 Architectural Design								
0810 Architectural Design								
	.0010	Station, Piers, and TPSS Aesthetics		X	X	X		
	.0020	Sustainability Report Compilation and Preparation of Report		X	X	X		
	0820	Discipline and Inter-Discipline Review of Documents						
	.0010	Discipline and Inter-Discipline Review of Documents		X	X	X		

900 Utility Design								
0910 As-Built Research & Sub-Surface Investigation								
	.0010	Development of Composite Utility Plans		X	X			
	.0020	Sub-surface investigation (GPR & Potholing)		X	X			
	0920	Utility Design						
	.0010	Design and Plan Development for Utilities (Non-electrical)		X	X	X		
	.0020	Design and Plan Development for Electrical and Communications Utilities		X	X	X		
	0930	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1000 Traffic Signal Design							
1010 Traffic Signal Design							

City Center Section Utilities and Guideway Design Contract

HART WBS NUMBER								
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5
			#1a	#1b	#2	#3		
	.0010	Development of Temporary Traffic Signal Plans		X	X	X		
	.0020	Development of Permanent Traffic Signal Plans		X	X	X		
	1020	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1100 Electrical Design								
	1110	Guideway Alignment						
	.0010	Guideway Alignment Illumination and Traffic Signal Design		X	X	X		
	1120	Station Connections						
	.0010	Guideway Alignment Station Connections		X	X	X		
	1130	System Site						
	.0010	Systems Site Design		X	X	X		
	1140	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1200 Intelligent Transportation Systems (ITS) Design								
	1210	Intelligent Transportation Systems (ITS) Design						
	.0010	Development of Intelligent Transportation System Design		X	X	X		
	1220	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1300 Environmental								
	1310	Hazardous Waste and Materials						
	.0010	Investigate and Provide Remedial Design for Hazardous Waste and Materials		X	X			
	.0020	Prepare and Update Environmental Compliance Plan (ECP)		X	X	X		
	.0030	Conduct Environmental Compliance Reviews During the Design Phase		X	X	X		
	.0040	Prepare Permits and Clearances		X	X	X		
	1320	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1400 Maintenance of Traffic (MOT) Plans								
	1410	Development of MOT Plans						
	.0010	Phase 1		X	X	X		

City Center Section Utilities and Guideway Design Contract

HART WBS NUMBER								
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5
			#1a	#1b	#2	#3		
	.0020	Phase 2		X	X	X		
	1420	TMP / MOT Reports						
	.0010	TMP Work Plan Schedule Coordination		X	X	X		
	.0020	TMP Analysis and Coordination and Plan		X	X	X		
	1430	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1500 Public Involvement								
	1510	Public Involvement						
	.0010	Meetings and Development of Material in Support of Meetings	X	X	X	X		
	.0020	Coordinate/Provide Public Involvement Support to HART		X	X	X		

1600 Cost Estimating								
	1610	Development of Quantities and Cost Estimate						
	.0010	Quantity Take-Off Summary		X	X	X		
	.0020	Review and Development		X	X	X		
	1620	QA/QC						
	.0010	QC Review		X	X	X		

1700 Specifications								
	1710	Specifications - Review and Development						
	.0010	Review and Development		X	X	X		
	1720	QA/QC						
	.0010	QC Review - Discipline and Inter-Discipline Review of Documents		X	X	X		

1800 Design Support During Bidding (NTP #4)								
	1810	Design Support During Bidding						
	.0010	Guideway and Utility Package					X	

1900 Design Support During Construction (NTP #5)								
	1910	Management						
	.0010	Management and Administration						X
	.0020	Shop Drawing Review						X
	.0030	As-Built Drawings						X

City Center Section Utilities and Guideway Design Contract

HART WBS NUMBER								
Task No.	Sub Task No.	Description	NTP				NTP #4	NTP #5
			#1a	#1b	#2	#3		
	.0040	Request For Information and Additional Support Activities						X

APPENDIX B

WBS LISTING AND TASK DESCRIPTION

TASK 0100 - Project Management and Administration

Provide management and administration resources for day-to-day oversight of the design of the City Center Section Utilities and Guideway Contract including preparation of a Project Management Plan ("PMP"), hosting and recording coordination meetings, design cost monitoring and control, design schedule monitoring and control, subconsultant management and coordination, document control, monthly progress reporting and invoicing, and quality management and assurance. Regular interfacing and coordination with both HART and the General Engineering Consultant ("GEC") will be required.

CONSULTANT will conform to the HART Quality Management Plan ("QMP") and establish a Quality Assurance Plan ("QAP") for the City Center Section Utilities and Guideway Contract. CONSULTANT'S plan will meet the requirements of the FTA Quality Assurance/Quality Control ("QA/QC") Guidelines and be reviewed and approved by HART prior to its use.

Prepare design schedule and provide updates to HART using Primavera P6. Non-CADD project correspondence and other documentation shall be controlled using Primavera Contract Management System ("CMS"). The HART's web-based file collaboration tool SharePoint shall be used for CADD drawings.

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration 1.1 General Management	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0110.0010	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Project Management and Administration support during the design phase of the Project NTP #1a, #1b, #2, and #3. General Management for NTP #4 and NTP #5 are under a separate WBS number. 2) Attendance and participation as required in meetings with HART for design and management. 3) Management activities associated with coordination and communication with HART, including development of progress reports and invoices. 4) Design progress and cost monitoring. 5) CONSULTANT management activities, including internal design team coordination and management. 6) Coordinate and communicate with HART via CMS. 7) Document Control. 8) Management of subconsultants. 9) Review and tracking of Design Schedule and SM utilizing Primavera P6 Attendance and recording of various meetings with HART. 10) Preparation for, attendance and production of minutes at coordination meetings with HART (NTP #1b, #2, and #3). Meetings are assumed to occur at least biweekly as described in the assumptions below. The meetings will focus on technical issues including: <ol style="list-style-type: none"> a) Update HART regarding Design assumptions and approach b) Seek HART's input regarding design issues c) Identify technical issues which are on the critical path 11) Preparation for, attendance and production of minutes for monthly Project Review Meetings with HART (NTP #1b, #2, and #3). The meetings will focus on management issues, including: <ol style="list-style-type: none"> a) Provide updates regarding status of design and billing b) Submittal of Status Set of Drawings c) Identify quality issues d) Identify items impacting the schedule 12) Administration of the ProjectWise system for control of design documents and CADD files for the City Center Section Utilities and Guideway Contract. Task includes: <ol style="list-style-type: none"> a) Establishment and maintenance of directories and access restrictions b) Establishment and maintenance of ProjectWise users 		
B) Assumptions: <ol style="list-style-type: none"> 1) Management and administration activities will vary based on NTP. 2) No deliverable or milestones are associated with General Management activities; rather the 		

effort is distributed over a duration of time.

- 3) Design Team Review Meetings are anticipated to occur at least biweekly.
- 4) Meeting agendas and meeting minutes will be prepared by the CONSULTANT.
- 5) Agendas to be submitted before meeting and minutes distributed through CMS within three (3) business days after the meeting.
- 6) NTP #1a – SM – No HART Team Meetings
 - a) Duration thirty (30) days
- 7) NTP #1b – Preliminary Design:
 - a) Weekly design team review meetings
 - b) Duration one hundred thirty (130) days
- 8) NTP #2– Interim Design:
 - a) Biweekly design team review meetings
 - b) Duration one hundred twenty (120) days (utilities design)
 - c) Duration two hundred ten (210) days (guideway design)
- 9) NTP #3– Final Design:
 - a) Biweekly design team review meetings
 - b) Duration thirty (30) days (utilities design)
 - c) Duration ninety (90) days (guideway design)
- 10) For Project Controls:
 - a) The Design Schedule and SM will be developed under a separate task item.
 - b) Tracking will be based on the Project Work Plan.
 - c) Monthly reports will be issued to HART.
 - d) Monthly Deliverable (Status Set of Drawings) will be utilized for tracking purposes.
 - e) Reports will be issued starting with the conclusion of NTP #1a.

C) Inputs:

- 1) Management activities are based off the Project Work Plan (Plan is developed under separate task item).
- 2) Project Controls activities are based off the Project Work Plan (Plan is developed under separate task item).

D) Deliverables:

- 1) N/A

NTP #

ACTIVITY DESCRIPTION

Form SOW 01

Activity: Project Management And Administration 1.2 Design Management	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0110.0020	Revision No: Conformed

A) Activity Description:

This task is associated with Design Management, CADD Management and ProjectWise Administration during the design phase of the project NTP #1a, #1b, #2, and #3. Design Management for NTP #4 and NTP #5 are under a separate WBS number.

- 1) Design Manager:
 - a) Design Manager will provide overall technical management of the Project.
 - b) Design Manager will coordinate/communicate between design disciplines and monitor progress of the technical work.
 - c) Design Manager will coordinate and communicate with HART regarding technical issues.
 - d) The efforts of the Design Manager will be supported by the Deputy Design Manager.
- 2) Discipline Managers:
 - a) Discipline Managers will manage specific discipline designs, including:
 - i). Civil Design Manager/Deputy Civil Design Manager
 - ii). Design Interface Manager
 - iii). Structure Design Manager
 - iv). Other discipline leads (efforts are included within each task)
 - b) Each discipline lead will be responsible to ensure their discipline submittals undergo the proper QA reviews.
- 3) CADD Management:
 - a) CADD Management will provide overall management of CONSULTANT and subconsultant plans preparation and compliance with CADD Manual and standards.
 - b) Coordinate and communicate with HART regarding CADD standards.
- 4) ProjectWise Administration:
 - a) Administration of the ProjectWise system for control of design documents and CADD files for the City Center Section Utilities and Guideway Contract.
 - b) Establishment and maintenance of directories and access restrictions.
 - c) Establishment and maintenance of ProjectWise users.

B) Assumptions:

- 1) No deliverable or milestones are associated with Design Management; rather the effort is distributed over a duration of time.

C) Inputs:	
<ol style="list-style-type: none"> 1) Basis of Design Report. 2) PE Design. 3) QAP. 4) Honolulu High-Capacity Transit Corridor Project – CADD Procedures dated October 16th, 2009 and future updates. 5) Honolulu High-Capacity Transit Corridor Project – Plans Standards; dated October 16th, 2009 and future updates. 	
D) Deliverables:	NTP #
1) N/A	

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration 1.3 Constructability Reviews	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS- 0110.0030	Revision No: Conformed
A) Activity Description: Activity includes the coordination of Constructability Review for submittals for major submittals. Review will focus on, but not limited to: <ol style="list-style-type: none"> 1) Structural constructability and staging review. 2) Civil, traffic, systems, geotechnical and other disciplines. 3) Constructability Reviews will be performed during the PE and ID phases and documented as part of the Quality Control Reviews. 		
B) Assumptions: <ol style="list-style-type: none"> 1) One (1) constructability review will be performed during PE; one (1) review is anticipated during ID, though additional partial reviews may be performed after substantial development of specific design concepts. These reviews will take place prior to the completion of QC reviews to provide adequate time for implementation of design considerations. 		
C) Inputs: <ol style="list-style-type: none"> 1) Basis of Design Report. 2) PE Drawings. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Constructability Review – PE 2) Constructability Review – ID 		NTP # 1b 2

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration 1.4 Quality Assurance and Management	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0110.0040	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Quality Assurance and Management support during the design phase of the Project NTP #1a, #1b, #2, and #3. Quality Assurance and Management for NTP #4 and NTP #5 are under a separate WBS number. 2) This task item is associated with the enforcement of the QAP. 3) All submittals must undergo a Quality Control procedure or review. This review will be documented as described in the QAP. As part of the Plan, all submittals will be reviewed by Quality Assurance Personnel to ensure the proper Quality Control procedures have been followed. 4) Task includes Management (scheduling and assignment) of the Quality Control Personnel. 		
B) Assumptions: <ol style="list-style-type: none"> 1) All submittals will be reviewed by Quality Assurance Personnel. 2) Quality Assurance Personnel will be independent of the design process. 3) No deliverable or milestones are associated with Quality Assurance and Management; rather the effort is distributed over a duration of time. 		
C) Inputs: <ol style="list-style-type: none"> 1) QAP. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Quality Assurance Review – PE 2) Quality Assurance Review – ID 3) Quality Assurance Review – FD 		NTP # 1b 2 3

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.5 Development of Design Schedule (Primavera P6)	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0010	Revision No: Conformed
A) Activity Description: 1) Development of a Primavera P6 CPM schedule for the design activities and interface points of the City Center Section Utilities and Guideway Contract.		
B) Assumptions: 1) The schedule will be broken down based on the Task activities developed in the Scope of Work. 2) Six (6) basic NTPs will be issued by HART: a) NTP #1a – Schedule of Milestones (forty-five (45) calendar days) b) NTP #1b – PE (one hundred thirty (130) calendar days) c) NTP #2 – Utility ID (one hundred twenty (120) calendar days) d) NTP #2 – Guideway ID (two hundred ten (210) calendar days) e) NTP #3 – Utility FD (thirty (30) calendar days) f) NTP #3 – Guideway FD (ninety (90) calendar days) 3) The schedule will not include NTP #4. 4) The schedule will not include NTP #5. 5) The FD Schedule will be issued within thirty (30) days after the start of NTP #1b.		
C) Inputs: 1) Schedule found in the HART Project City Center Section Utilities and Guideway Professional Service Contract Request for Qualifications. 2) WBS Codes and activities found in the Scope of Work.		
D) Deliverables: 1) Draft Design Schedule 2) FD Schedule		NTP # 1a 1b

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.6 Development of Schedule of Milestones (SM)	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0020	Revision No: Conformed
A) Activity Description: 1) Development of the SM will be based off the design schedule.		
B) Assumptions: 1) The schedule will be broken down based on the Task activities developed in the Scope of Work. 2) Six (6) basic NTPs will be issued by HART: a) NTP #1a – SM (forty-five (45) calendar days) b) NTP #1b – PE (one hundred thirty (130) calendar days) c) NTP #2 – Utility ID (one hundred twenty (120) calendar days) d) NTP #2 – Guideway ID (two hundred ten (210) calendar days) e) NTP #3 – Utility FD (thirty (30) calendar days) f) NTP #3 – Guideway FD (ninety (90) calendar days) 3) The schedule will not include NTP #4 or NTP #5. 4) The Final SM will be issued within thirty (30) days after the start of NTP #1a.		
C) Inputs: 1) Schedule found in the HART Project City Center Section Utilities and Guideway Professional Service Contract Request for Qualifications		
D) Deliverables: 1) Draft Design SM 2) FD SM		NTP # 1a 1a

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.7 Development of Project Work Plan	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0030	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Development of a Project Work Plan. 2) Plan will: <ol style="list-style-type: none"> a) Provide HART and project basic information b) Define project organization and contact c) Define communication and meeting d) Overview of project goals e) Define HART goals and objects f) Outline scope of work g) List project deliverables h) List key milestones i) Project Schedule (developed under separate task item) j) Define project budget and cost schedule k) Define file index and filing procedures l) Contain the QAP (the QAP will be developed under a separate task item) m) Contain the Project Basis of Design Report (developed under a separate task item) n) Project Safety and Health Plan (developed under a separate task item) 		
B) Assumptions: <ol style="list-style-type: none"> 1) Format will follow AECOM typical Project Work Plan. 2) The Draft Project Work Plan will be issued early within NTP #1b. 		
C) Inputs: <ol style="list-style-type: none"> 1) Airport Section approved Project Work Plan. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Draft Project Work Plan 2) Final Project Work Plan 		NTP # 1b 1b

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.8 Development of Project Management Plan	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0040	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Development of a Management Plan. 2) Plan will include: <ol style="list-style-type: none"> a) Project Management Overview b) Management organization, approach and responsibilities c) Contracting approach d) Basis of Design e) Design Management f) Financial Management g) Cost and Schedule Control h) Change Management i) Document Management System j) Management forms and procedures k) Establishment of lines of communication 		
B) Assumptions: <ol style="list-style-type: none"> 1) The Draft Management Plan will be issued early within NTP #1b. 		
C) Inputs: <ol style="list-style-type: none"> 1) Airport Section approved Management Plan. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Draft Management Plan 2) Final Management Plan 		NTP # 1b 1b

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.9 Development of Basis of Design Report	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0050	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Development of Basis of Design Report. 2) The updated Basis of Design Report summarizes the key assumptions and explains the rationale for elements of the Preliminary, Interim and Final design. 3) The Basis of Design Report will be reviewed, updated and resubmitted with the plans for each design submittal. 		
B) Assumptions: <ol style="list-style-type: none"> 1) Development of Initial Basis of Design Report. This document will be based on the Honolulu High-Capacity Transit Corridor Project, Compendium of Design Criteria, dated February 22nd 2010, documents provided by HART and input received during the Design Work Shop. 		
C) Inputs: <ol style="list-style-type: none"> 1) Honolulu High-Capacity Transit Corridor Project, Compendium of Design Criteria, dated February 22nd 2010. 2) Architectural Outline Specifications. 3) Directive Drawings. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Basis of Design Report 2) Basis of Design Report 3) Basis of Design Report 		NTP # 1b 2 3

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.10 Development of Quality Assurance Plan	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0060	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Development of the City Center Section QAP. 2) This plan will be utilized throughout all phases of the project. 3) The Plan will outline the procedures for both QA and QC. 4) The QAP establishes the applicable top-level quality control and quality assurance program requirements, identifies or references detailed implementing procedures, practices, and plans for the project activities to be performed by the CONSULTANT. 5) The quality system is based on the four fundamental principles adhered to by the Project: <ol style="list-style-type: none"> a) The achievement of quality is of the highest priority where each designer and supervisor is accountable for the quality of the work assigned to them. This applies to all persons performing work on this Project. b) The quality organization maintains a strong overview of the work in order to give additional assurance that specified requirements are met. This is done by performing reviews and approvals of documents; by conducting quality inspections, surveillances and audits. c) The degree of the application of the established quality criteria is dependent on the importance of the system or structure to the overall project, i.e., criticality, of the structure, system, or component to the safety and mission of the project. d) The review and approval of quality documents is at a management level commensurate with the importance of the item under consideration. 		
B) Assumptions: <ol style="list-style-type: none"> 1) A project specific QAP will be developed. 2) All submittals will undergo the following reviews: <ol style="list-style-type: none"> a) Discipline review – Performed by a qualified engineer not associated with the development of the design. b) Inter-Discipline review – All submittals will be reviewed by each discipline to ensure inter- coordination of design. c) All Final Guideway structural submittals will have an independent design check. This check will be performed by qualified engineers not associated with the development of the specific design element. 3) The QAP will outline specific form required for the review process. 4) The QAP will outline the QA review procedure to ensure all submittals have been properly reviewed. The task of QA review will be performed under a separate task item. 5) The QAP will be utilized by the CONSULTANT and all subconsultants. 		

6) The Draft QAP will be issued early within NTP #1b.	
C) Inputs:	
1) AECOM QA/QC Manual. 2) Based off the HART QMP Revision 1, latest version. 3) Airport Section approved QAP.	
D) Deliverables:	NTP #
1) Draft QAP	1b
2) Final QAP	1b

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.11 Development of Interface Management Plan	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0070	Revision No: Conformed
A) Activity Description: <ol style="list-style-type: none"> 1) Development of an Interface Management Plan. 2) The purpose of this document is to establish protocols for interface and design coordination with other Contracts. 3) Plan will: <ol style="list-style-type: none"> a) Define interface organization b) Identify points of contact for other contract teams, HART and GEC Interface Managers c) Define communication and meetings d) Define interface matrices and coordination of such with interfacing partners e) Define use of Requests for Interface Data (“RFIDs”) as HART’s tool in defining the scope and confirmation of interfaces. f) Define use of Interface Control Document (“ICDs”) as a final design submittal and HART’s tool in confirming interfaces. g) Define the CONSULTANT’s understanding of HART’s FTA approved interface program. h) Define the CONSULTANT’s responsibility for interface coordination with interfacing partners. i) Define the CONSULTANT’s understanding of HART/GEC’s role as facilitator and oversight of the interface process. 		
B) Assumptions: <ol style="list-style-type: none"> 1) It is anticipated this will be a “living document” with frequent updates throughout work on the City Center Section. 		
C) Inputs: <ol style="list-style-type: none"> 1) Airport Section approved Interface Management Plan. 2) HART Interface Control Manual. 		
D) Deliverables: <ol style="list-style-type: none"> 1) Draft Interface Management Plan 2) Final Interface Management Plan 		NTP # 1b 1b

ACTIVITY DESCRIPTION		Form SOW 01
Activity: Project Management And Administration Management Documents 1.12 Development of Site Safety and Security Plan	Activity Responsibility: AECOM	Issue Date: 06/15/2012
	Task No. / Sub Task No. WBS – 0120.0080	Revision No: Conformed

A) Activity Description:

- 1) Development of the Project Development Plan, implement and maintain a safety and health program that complies with applicable local, state and federal occupational safety and health regulations, including but not limited to the Hawaii Administrative Rules, Title 12, Department of Labor and Industrial Relations, Subtitle 8, Division of Occupational Safety and Health Part 3, Construction Standards.
- 2) The CONSULTANT shall designate at least one person as the Safety and Security Representative ("SSR") (this may be a collateral duty position and/or prime subconsultant designee) to be on-site any time field activities are taking place and is responsible to ensure the proper implementation of the Site Safety and Security Plan ("SSSP"). The Safety and Security Representative shall have completed the OSHA ten (10) Hour Construction Safety Outreach Program or equivalent and be a competent person for applicable subject matter, including but not limited to fall protection, excavation and trenching, the control of hazardous energy ("LOTO"), scaffolding and confined spaces.
- 3) Submit a SSSP which shall address field work-related hazards and mitigation measures for all field work (including sub-consultants) related hazards and mitigation measures. This plan shall take into account all work, including any activities subcontracted. This plan must interface with the CONSULTANT's overall safety and health program and be submitted to the HART Safety and Security Manager for review and acceptance thirty (30) days prior to field work taking place. The plan shall include the following criteria:
 - a) Title, Signature and phone number of the Plan Preparer (this person must be a qualified person), Company Officer and Safety and SSR.
 - b) Background Information: Consultant name, contract name and number, description of work to be performed (with attention to field related work).
 - c) Responsibilities and Lines of Authority. Include a statement of the Prime Consultant's ultimate responsibility for the implementation of the SSSP. Identification and accountability of sub-consultants, subcontractors and personnel responsible for safety at all levels. Provide the SSR qualifications and letter of designation assigning the authority to carry out safety and security responsibilities. HART will review the qualifications for acceptance.
 - d) Safety Policy Statement detailing the CONSULTANT's commitment to providing a safe and healthful workplace for all employees and the general public.
 - e) Training. Provide a statement requiring completion of the City Safety and Environmental Orientation for all personnel prior to accessing field work locations. List end user, competent or qualified person training requirements, as applicable.
 - f) List procedures for job site inspections and documentation. Include the assignment of this responsibility, frequency and documentation method.

- g) List procedures for complying with applicable portions of the CSSP.
- h) Emergency Planning. Describe emergency plan and means to ensure employees are not permitted to work alone and to ensure an effective means of emergency communication is provided, readily available and in working condition.
- i) Describe method of providing drinking water, toilet and washing facilities.
- j) First Aid and CPR training. Describe methods to ensure and provide copies of at least two employees on site who are qualified/certified to administer first aid and CPR and provisions of first aid kit (type/size).
- k) Personal Protective Equipment ("PPE"). At minimum, but not be limited to all personnel, including visitors, on work site locations associated with the Project shall wear the following minimum PPE:
 - i) Head protection complying with ANSI Z89.1-2009 and ANSI Z89.2-2009 shall be worn at all times when on the work site.
 - ii) High visibility retro-reflective clothing (class 2 or 3) complying with ANSI/SEA 107, 23 CFR Part 634, MUTCD 6E-3, and 29 CFR 1926.201(a) shall be worn at all times within the traffic work zone.
 - iii) Eye protection complying with ANSI Z87.1-2003 shall be worn at all times when on the work site.
 - iv) Foot protection complying with ASTM F2413-05 or ANSI Z41-1999 shall be worn at all times when on the work site. Work boots are the preferred type of protective footwear. No tennis-type shoes are permitted.
 - v) Hearing protection with a Noise Reduction Rating ("NRR") appropriate for the exposure shall be worn by personnel exposed to noise levels in excess of the 29 CFR 1926.101 Table D-2 Permissible Exposure Limit ("PEL"). When in the field, personnel must have hearing protection readily available for use.
- l) Hazardous substances. Describe when any hazardous substances are to be procured, used, stored or disposed. Provide a hazard communication program and describe how material safety data sheets ("MSDS") will be made readily available for review. Employees shall have received training in hazardous substances being used and emergency equipment (such as eye wash) shall be readily available at the work area.
- m) Describe how traffic control will be accomplished in accordance with the State of Hawaii Department of Transportation Standard Specifications and/or Manual for Uniform Traffic Control Devices (current edition).
- n) Control of Hazardous Energy (Lockout/Tagout). Describe procedures to ensure adequate control of energy before an employee performs any inspection, servicing or maintenance on any equipment where the unexpected energizing or startup of the equipment could occur.

B) Assumptions:

- 1) SSSP to be compliant with regulatory, CSSP and with CONSULTANT policies.
- 2) The SSSP will be issued with the start of NTP #1b.
- 3) The CONSULTANT is responsible for employee and sub-consultant compliance with applicable regulations and the SSSP.
- 4) Transmittal of Safety and Security observations and incidents between the CONSULTANT and

HART is to be carried out through the Integrated Safety Management System (iSMS). HART to provide access to this internet based system.	
C) Inputs: <ol style="list-style-type: none"> 1) CONSULTANT Company Safety and Health Manual. 2) CSSP. 3) Various State and Federal occupational safety and health regulations. 4) Hawaii Administrative Rules, Title 12, Department of Labor and Industrial Relations Subtitle 8, Division of Occupational Safety and Health Part 3. 	
D) Deliverables: <ol style="list-style-type: none"> 1) Draft SSSP 2) Final SSSP 	NTP # 1b 1b