



# CITY OF HOUSTON INVITATION TO BID

Issued: October 18, 2013

## **BID OPENING**

Sealed bids, in duplicate, and one (1) additional electronic CD copy of the bids will be received by the City Secretary of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, until **10:30 a.m., Thursday, November 7, 2013** and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 AM on that date for the purchase of:

**ON-CALL PREVENTIVE MAINTENANCE AND REPAIR SERVICES OF ELECTRIC 138KV SUBSTATIONS  
FOR PUBLIC WORKS AND ENGINEERING DEPARTMENT  
BID INVITATION NO.: S30-L24769  
NIGP CODE: 910-82**

## **BUYER**

Questions regarding this solicitation document should be addressed to Richard Morris at **832.393.8736**, or e-mail to [rcharld.morris@houstontx.gov](mailto:rcharld.morris@houstontx.gov).

## **ELECTRONIC BIDDING**

In order to submit a bid for the items associated with this procurement, vendor must fill in the pricing information on the “**PLACE BID**” page.

## **PRE-BID CONFERENCE**

**A Pre-Bid Conference will be held for all Prospective Bidders at 901 Bagby Houston, Texas 77002 City Hall Tunnel Level (Basement) SPD Conference Room - #2 at 9:00 a .m. on October 23, 2013.**

All Prospective Bidders are urged to be present. It is the Bidder's responsibility to ensure that they have secured and thoroughly reviewed the solicitation documents prior to the Pre-Bid Conference. Any revisions to be incorporated into this solicitation document arising from discussions before, during and subsequent to the Pre-Bid Conference will be confirmed in writing by Letter(s) of Clarification prior to the bid due date. Verbal responses will not otherwise alter the specifications, and terms and conditions as stated herein.

Bidding forms, specifications, and all necessary information should be downloaded from the Internet at <https://purchasing.houstontx.gov/>. By registering and downloading this solicitation document, all updates to this solicitation document will be automatically forwarded via e-mail to all registered Bidders. This information may also be obtained from the Supplier Assistance Desk, Strategic Purchasing Division, 901 Bagby (Concourse Level), Houston, Texas 77002.

The place of the bid opening may be transferred in accordance with Paragraph (b), (5) of Section 15-3 of The Code of Ordinances, Houston, Texas. The bid opening meeting may be rescheduled in accordance with Paragraph (b), (6) of said Section 15-3.

The City reserves the right to reject any or all bids or to accept any bid or combination of bids deemed advantageous to it.

City Employees are prohibited from bidding on this solicitation in accordance with the Code of Ordinances, Section 15-1.

### **\*CONTENTS:**

SECTION A: OFFER  
SECTION B: SCOPE OF WORK/SPECIFICATIONS  
SECTION C: GENERAL TERMS & CONDITIONS

**\*NOTE 1:** Actual page numbers for each Section may change when the solicitation document is downloaded from the Internet or because of Letters of Clarification. Therefore, Bidders must read the bid document in its entirety and comply with all the requirements set forth therein.

**\*NOTE 2:** To be considered for award, please submit the electronic bid form and the forms listed in Section A, **including the Official Signature Page**, which must be signed by a company official authorized to bind the company.

## SECTION A



**ON-CALL PREVENTIVE MAINTENANCE AND REPAIR SERVICES OF ELECTRIC 138KV SUBSTATIONS  
FOR PUBLIC WORKS AND ENGINEERING DEPARTMENT  
BID INVITATION NO.: S30-L24769  
NIGP CODE: 910-82**

To The Honorable Mayor  
and Members of the City Council  
of the City of Houston (the "City"), Texas:

The undersigned Bidder hereby offers to contract with the City upon the terms and conditions stated in that certain "**Contract for electrical maintenance services on 138KV substations for a three-year period with two (2) one-year option periods to extend for the Public Works and Engineering Department,**" which was distributed by the City together with the "Notice to Bidders" and is hereby incorporated herein by this reference (the "contract"). This offer is made at the prices stated on the electronic bid form. When issued by the City of Houston, Letters of Clarification shall automatically become part of this bid document and shall supersede any previous specifications or provisions in conflict with the Letters of Clarification. It is the responsibility of the Bidder to ensure that it has obtained all such letters. By submitting a bid on this project, Bidder shall be deemed to have received all Letters of Clarification and to have incorporated them into its bid.

The City may accept this bid offer by issuance of a contract covering award of said bid to this Bidder at any time on or before the 180<sup>th</sup> day following the day this Official Bid Form is opened by the City. This offer shall be irrevocable for 180 days, but shall expire on the 181<sup>st</sup> day unless the parties mutually agree to an extension of time in writing.

The City of Houston reserves the option, after bids are opened, to increase or decrease the quantities listed, subject to the availability of funds, and/or make award by line item.

If the City accepts the foregoing offer, this Bidder promises to deliver to the City Purchasing Agent of the City, five (5) original counterparts of said contract duly executed by this Bidder (as "Contractor") in accordance with this paragraph, proof of insurance as outlined in Article II of the contract, all on or before the tenth (10<sup>th</sup>) day following the day this Bidder receives from the City the unsigned counterparts shall be executed so as to make it binding upon the Bidder, and all of the applicable requirements stated in the document entitled "Instructions for Execution of Contract Documents," (which was distributed by the City) shall be complied with.

The City reserves the right to cancel this ITB, accept or reject, in whole or in part, any or all bids received and to make award on the basis of individual items or combination of items, as it is deemed in the best interest of the City.

If the City accepts the foregoing offer, this Bidder shall furnish all labor, supervision, materials, supplies, equipment and tools necessary to provide electrical maintenance on 138KV Substations for the City in accordance with attached specifications.

**Documents/forms must be downloaded from the City's Website at <http://purchasing.houstontx.gov/forms.shtml>**

**Additional Required Forms to be included with this Bid:**

In addition to the Electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 **must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due.** When submitting bids via UPS/FedEx, etc. please label it with the name: Office of the City Secretary, City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, along with the bid/proposal number:

<b>TABLE 1 - REQUIRED FORMS</b>
Affidavit of Ownership.doc
Fair Campaign Ordinance.doc
Statement of Residency.doc
Conflict of Interest Questionnaire.doc
Pay or Play Program Acknowledgement Form
Pay or Play Certification of Agreement to Comply w' the Program
Contractor's Questionnaire
Hire Houston First Application and Affidavit

Table 2 lists other documents and forms that should be viewed/downloaded from the City's website, but are not required to be submitted with the bid. The City will request these forms, as applicable, to be completed and submitted to the City by the recommended/successful bidder:

<b>TABLE 2 - DOCUMENTS &amp; FORMS</b>
Drug Forms.doc
EEOC.doc
Formal Instructions for Bid Terms.doc
M/WBE.doc
Sample Insurance Over \$50,000.pdf
Insurance Endorsements
Pay or Play Office of Business Opportunity & Contract Compliance Q & A
Pay or Play Office of Business Opportunity & Contract Compliance Requirements
Pay or Play Contractor/Subcontractor Payment Reporting Form
Pay or Play Contractor/Subcontractor Waiver Request
Pay or Play List of Participating Subcontractors
Criminal Justice Information Services (CJIS) Compliance Addendum (Applicable to Houston Police Department (HPD) Occupied Facilities)

Questions concerning the bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Room B-500, Houston, TX 77002, Attn: Richard Morris (or) by fax: 832.393.8759 or by e-mail (preferred method) to [richard.morris@houstontx.gov](mailto:richard.morris@houstontx.gov). no later than 5:00 p.m., October 25, 2013.

## **SITE INSPECTION**

The City of Houston reserves the right to inspect the Bidder's current place of business to evaluate equipment condition and capabilities, staff experience, training and capabilities, and storage capabilities as they relate to the performance of this contract.

## **QUALITY AND WORKMANSHIP**

The Bidder must be able to demonstrate upon request that it has satisfactorily performed services similar to the services specified herein. The Bidder will provide records of warranty and repair services upon request by City. The City of Houston shall be the sole judge as to whether the services performed are similar to the scope of services contained herein and whether the Bidder is capable of performing such services.

## **PROTEST:**

A protest shall comply with and be resolved, according to the City of Houston Procurement Manual [http://purchasing.houstontx.gov/docs/Procurement\\_Manual.pdf](http://purchasing.houstontx.gov/docs/Procurement_Manual.pdf) and rules adopted thereunder. Protests shall be submitted in writing and filed with both, the City Attorney and the Solicitation contact person. A pre-award protest of the ITB shall be received five (5) days prior to the solicitation due date and a post-award protest shall be filed within five (5) days after City Council approval of the contract award.

A protest shall include the following:

- The name, address, e-mail, and telephone number of the protester;
- The signature of the protester or its representative who has the delegated authority to legally bind its company;
- Identification of the ITB description and the ITB or contract number;
- A detailed written statement of the legal and factual grounds of the protest, including copies of relevant documents, etc.; and
- The desired form of relief or outcome, which the protester is seeking

## **NO CONTACT PERIOD:**

Neither bidder(s) nor any person acting on bidder(s)'s behalf shall attempt to influence the outcome of the award by the offer, presentation or promise gratuities, favors, or anything of value to any appointed or elected official or employee of the City of Houston, their families or staff members. All inquiries regarding the solicitation are to be directed to the designated City Representative identified on the first page of the solicitation. Upon issuance of the solicitation through the pre-award phase and up to the award, aside from bidder's formal response to the solicitation, communications publicly made during the official prebid conference, written requests for clarification during the period officially designated for such purpose by the City Representative, neither bidder(s) nor persons acting on their behalf shall communicate with any appointed or elected official or employee of the City of Houston, their families or staff through written or oral means in an attempt to persuade or influence the outcome of the award or to obtain or deliver information intended to or which could reasonably result in an advantage to any bidder. However, nothing in this paragraph shall prevent a bidder from making public statements to the City Council convened for a regularly scheduled session after the official selection has been made and placed on the City Council agenda for action.

## **HIRE HOUSTON FIRST**

### **Designation as a City Business or Local Business**

To be designated as a City or Local Business for the purposes of the Hire Houston First Program, as set out in Article XI of Chapter 15 of the Houston City Code, a bidder or proposer must submit the **Hire Houston First Application and Affidavit (“HHF Affidavit”)** to the Director of the Mayor’s Office of Business Opportunities and receive notice that the submission has been approved prior to award of a contract. Bidders are encouraged to secure a designation prior to submission of a bid or proposal if at all possible. **Download the HHF Affidavit** from the Office of Business Opportunities Webpage at the City of Houston e-Government Website at the following location:

<http://www.houstontx.gov/hbsc/hirehoustonfirstaffidavit.pdf>

**Award of a Procurement of \$100,000 or More for Purchase of Goods:**

THE CITY WILL AWARD THIS PROCUREMENT TO A “CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

**Award of Procurement under \$100,000 for Purchase of Goods:**

THE CITY WILL AWARD THIS PROCUREMENT TO A ” CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

**Award of Procurement that may be More or Less than \$100,000 for Purchase of Goods:**

THE CITY WILL AWARD THIS PROCUREMENT TO A ” CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE CITY BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

**Award of Procurement of \$100,000 or More for Purchase of Non-Professional Services , Including Construction Services:**

THE CITY WILL AWARD THIS PROCUREMENT TO A ” CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE LOCAL BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

**Award of Procurement under \$100,000 Purchase of Non-Professional Services Including Construction Services:**

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED N SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

**Award of Procurement that may be More or Less than \$100,000 for Purchase of Non-Professional Services, Including Construction Services:**

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE LOCAL BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE LOCAL BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

**SECTION B**  
**SCOPE OF WORK/SPECIFICATIONS**

- 1.0 Scope of Services:  
The Contractor shall furnish all supervision, labor, parts, tools, materials, transportation, equipment, supplies, and facilities necessary to provide on-call electrical preventive maintenance and inspection services as well as un-scheduled repair services for 138 KV Substations and other High/Medium Voltage electrical equipment at various Drinking Water Operations and Wastewater Operations facilities of City of Houston. Contractor will be responsible to provide interim equipment necessary to maintain operations during the repair. The nominal system voltages are as listed in IEEE Std 141-1993 (IEEE Red Book), Table 3-3.
- 1.1 The contractor shall perform Scheduling of Switching with Center Point RTO (Real Time Operator), Receive All Required Switching Instructions from RTO, Perform All Required Switching, and Make All Required Confirmation upon Switching Competition to RTO. The contractor will perform an Arc-Flash study on all equipment listed within this contract and install signage indicating the Cal-Rating, Approach Boundaries and Required PPE for each piece of equipment, according to NFPA 70E . The contractor will make changes to substation relays setting provided by the city as requested.
- 1.2 The contractor shall provide the following information on all service tickets: Name of the technician and technician's current skill level. Verification of technical skill level may be requested of the vendor on an as needed basis, and will be included on the service ticket. The contractor shall perform preventive maintenance work upon written request and on a schedule defined by the UDR. There shall be no verbal scheduling with the exception of emergencies and all emergency requests shall be confirmed by the vendor by the UDR via e-mail within 24-hours of the request.
- 2.0 Contractor Requirements and Responsibilities:
- 2.1 The Contractor shall be an independent, third party entity that can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers, and installers of equipment or systems being evaluated. The Contractor shall have been regularly engaged in the testing of High, Medium, and Low voltage electrical equipment devices and systems for the last ten (10) years.
- 2.2 The meaning of some specific terms as used in this contract /specification are given in Exhibit A, Definitions. This specification defines minimum acceptable requirements for the repair of the units. This specification covers the general requirements for the maintenance and repair services for Four 138 KV Substations and Other High or Medium Voltage Equipment located at City of Houston facilities. This includes, but is not limited to, power transformers, oil circuit breakers, protective relays (mechanical and electronic types), motor control centers, batteries/battery chargers, UPS, air switches, bus ducts and enclosures, capacitor banks, air circuit breakers, power factor capacitors and lightning arrestors/capacitors. .
- 2.3 The work shall include monthly, quarterly, annual, and bi-annual scheduled electrical preventive maintenance and inspections, relay testing and calibrations, infrared inspections, load flow evaluation, protective relay evaluation and coordination, electrical grounding evaluation and correction, power quality analysis, un-scheduled corrective maintenance, and general electrical/mechanical work of the equipment at substations. Customers must be informed when contractors enter and exit the plant at all times. The Supplier will provide the City of Houston with a roster of these employees, and the roster must include the employee's full name, picture, and driver license number. Roster will be sent by electronic mail to PWE Security (Attn: Carlos Martinez) at [carlos.martinez@houstontx.gov](mailto:carlos.martinez@houstontx.gov). Any changes to the roster must be forwarded to the City of Houston immediately upon change.

- 2.4 Unless otherwise specified, repair, preventive maintenance, parameters, and test methods for the service of 138 KV Substations and other High or Medium Voltage Equipment shall conform to the latest revision of the following *CODES, STANDARDS, AND SPECIFICATIONS*
- 2.4.1 American National Standard Institute (ANSI)
  - 2.4.2 American Society for Testing and Materials (ASTM)
  - 2.4.3 Insulated Cable Engineers Association (ICEA)
  - 2.4.4 International Electrical Testing Association (NETA)
  - 2.4.5 National Institute for Certification of Engineering Technologies (NICET)
  - 2.4.6 Institute of Electrical and Electronic Engineers (IEEE)
  - 2.4.7 IEEE Std 902 (Yellow Book), IEEE Guide for Maintenance' Operation, and Safety of Industrial and Commercial Power Systems
  - 2.4.8 IEEE Std 242 (Buff Book)/ANSI, IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems
  - 2.4.9 National Electrical Safety Code C2-2002, IEEE
  - 2.4.10 IEEE Std 902-1998 (Brown Book)/ANSI, IEEE Recommended Practice for Industrial and Commercial Power Systems Analysis
  - 2.4.11 IEEE Std 141 (Red Book), IEEE Recommended Practice for Electric Power Distribution for Industrial Plants
  - 2.4.12 IEEE National Electrical Safety Code/ANSI, C2-2002
  - 2.4.13 National Electric Code (NEC), NFPA 70-1999
  - 2.4.14 Recommended Practice for Electrical equipment Maintenance, NFPA 70B-1998
  - 2.4.15 Standard for Electrical Safety Requirements for Employee Workplace, NFPA 70-E-1995
  - 2.4.16 Occupational Safety and Health Administration (OSHA)
  - 2.4.17 State and Local codes and Ordinances
  - 2.4.18 City of Houston Electrical Code
  - 2.4.19 Electrical Apparatus Service Association (EASA)
  - 2.4.20 Underwriter Laboratories, Inc. (UL)
  - 2.4.21 National Electrical Manufacturer's Association (NEMA)
  - 2.4.22 National Institute for Certification of Engineering Technologies (NICET)
- 2.5 ALL repair and services shall be performed in a manner to comply with the applicable sections of the above standards and codes.
- 2.6 All test instruments shall be calibrated at least annually or as frequently as required by NETA (MTS-2001-5.3). The accuracy shall be directly traceable to the National Institute of Standards and Technology (NIST) or equivalent standards. The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product to specified requirements. The contractor may be requested by the City representative to provide calibration records for testing and measuring equipment.
- 2.7 The Contractor shall furnish, if requested by a City Representative, copies of current environmental permits, license, insurance, and/or certifications and demonstrate compliance with safety and environmental regulations.
- 2.8 Subcontractors to the Contractor for the performance of work are subject to the same standards as the contractor.
- 2.9 The price of parts and material and cost of a replacement unit supplied for this contract shall be the total original invoiced cost to the contractor plus contractor's quoted percentage (%) markup for the item. The Contractor shall submit to Accounts Payable these actual original invoices, as attachments, with the final invoice for payment by the City of Houston for the work performed by the Contractor. The Contractor shall submit the supporting documentations with the final invoice.

- 2.10 All markups shall be based on part vendor's or sub-contractor's actual original invoiced documents-
- 2.11 At Contractor's repair facility, the Contractor shall disassemble the unit, inspect it and prepare a scope of work to repair and replace parts with *new* OEM parts. The cost of inspection and preparation of work scope shall be a part of the base cost of any repair job.
- 2.12 If the Contractor plans to use any part other than an OEM specified part, the Contractor shall obtain written permission from the Contract Technical Representative (CTR) before using such parts. Upon request by the City and at the expense of contractor, testing may be required by an independent third party chosen by the City. The onus shall be upon the contractor to prove that non-OEM parts are equal or of better material and craftsmanship and will not require modification to other parts. Testing data and supplemental qualitative data provided to the CTR must show if parts exceed or are equivalent to OEM requirements. The contractor shall furnish the documentation with the work scope for the repair job.
- Only OEM parts will be allowed in the repair of explosion-proof units with no exceptions.
- 2.13 A City representative shall pick up all non-repairable units within 30 days after decision has been made by the UDR that the equipment is non-repairable. Non-repairable units do not need to be reassembled.
- 2.14 Where hourly work is performed on behalf of the City, the Contractor (and Sub-Contractors of the Contractor) shall fully document the start of the work, the time spent on the job, and completion of each job. The documentation shall be punch card/time-clock or shop record or any other mutually agreed method.
- 2.15 Contractor shall ensure the Equipment Inventory number (EI) tag remains attached to the equipment. Contractor shall notify the UDR if the (EI) tag is damaged or missing and for replacing any missing tags per UDR instructions.
- 2.16 Wherever torque values are known, the Contractor shall use a torque wrench and adhere to the OEM torque values.
- 2.17 If requested by the UDR, Contractor shall furnish parts needed for maintenance activities of by City Personnel. Contractor shall charge the same price for these parts as scheduled in Bid Forms under "Parts and Material."
- 2.18 Paint booth shall not be used for Sandblasting.
- 2.19 Upon receipt of the unit the Contractor shall verify and document all information about the condition of the units including nameplate data. Contractor shall inspect the unit and document the damaged and missing parts on the teardown report.
- 2.20 Digital photographs of each unit, as received, and the damaged components shall be made part of the teardown report upon request from the UDR/CTR.
- 2.21 The City reserves the rights to pick up any and all parts that are quoted by the Contractor to be replaced.
- 2.22 Any equipment removed from City property shall be documented on a City Return Authorization Form (7530-0559951-00). The Public Works and Engineering Department may use a Log in conjunction with the Return Authorization form. The department requesting services shall provide the Return Authorization Form. The user department shall adjust the Form to reflect the Contract Number pertaining to this Contract.
- 2.23 The Contractor shall provide a list to the City of the name(s) and location(s) of shop(s) that

shall be used for specified repair work and obtain written approval before start of the contract. If the Contractor plans to use any sub-contractor not on the list, the contractor shall obtain written approval from the CTR before subcontracting the work.

- 2.24 All metal parts shall be checked for structural integrity and cracks. Vendor must notify UDR/CTR if any parts need to be repaired or replaced as needed. UDR will approve any necessary repairs.
- 2.25 Terminal boxes and auxiliary equipment enclosures shall be made to meet OEM's specifications.
- 2.26 The repair shop must be able to verify all hours charged for work performed on behalf of the City. This shall apply to work done by sub-contractors or the contractor. In-house work shall be supported with copies of service ticket. This verification shall be submitted with the invoice.
- 2.27 The City reserves the right to review all payments made to the Contractor by auditing any and all documents associated with this contract at a later date. Subject to such audit, any overpayments shall be recovered from the Contractor.
- 2.28 The Contractor shall be responsible for storage of the units and all parts. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at Contractor's expense.
- 2.29 The price of parts supplied for this contract is the total cost of the item to the Contractor supported by documentation. Support documentation must be provided to the UDR/CTR upon request.
- 2.30 The contractor shall submit two sets of **Monthly Preventive Maintenance and Inspection reports by electronic mail to the designated Point of Contract per branch (cc UDR/CTR)**, . One set shall cover the work done on the equipment of Drinking Water Operations Branch and the second set shall cover the work done on the equipment of Wastewater Operations Branch. The typed detailed reports shall include job location, equipment location, equipment identification or description, equipment data, type of inspection, date of inspection, condition of equipment, existing settings, new settings if applicable, name of the Technician. A cover sheet shall summarize deficiencies, corrections, with recommendations to bring the equipment to standard.
- 2.31 Upon completion of any repair work the Contractor shall provide to the UDR/CTR, a full set of completed report of the repair performed on the unit, list of the parts replaced, the tests performed, and any other relevant data as requested by the UDR/CTR.
- 2.32 The Contractor shall establish and maintain records for at least three (3) years after contract expiration that the product has passed inspection and/or test with defined acceptance criteria.
- 2.33 The price shown on the Contract Fee Schedule for Scheduled Preventive Maintenance and Unscheduled Repair Services shall include all cost of supervision, labor, tools, equipment, supplies, and parts to complete the work as specified herein. This base fee on line items cost does not include the cost of broken or damaged parts (which are reimbursable) if authorized by the UDR.
- 2.34 The Contractor shall perform the maintenance services diligently and without unnecessary interruptions or delays during the time periods prescribed.
- 2.35 At City locations, all equipment which are undergoing maintenance and repair shall be **lockout/tagout (LOTO)** to protect against accidental or inadvertent operation when such

operation could cause injury to personnel or damage to equipment {see Hazardous energy Control (lockout/tagout Program), IEEE Std 902-1998, Section 10.4.2}. **LOTO** shall be carried out by authorized personnel who may be a qualified electrician, a qualified mechanic, or a qualified operator. Contractor is responsible for providing their own LOTO and on enforcing any safety guidelines needed for their personnel to follow.

2.36 No travel time charges are permitted under this contract. The Contractor shall include the associated costs for transportation under labor rate and/or the rate cost to perform scheduled and un-scheduled maintenance activities.

2.37 The Contractor shall perform electrical preventive maintenance of other substituted electrical equipment at no additional cost, if requested in writing by UDR, in lieu of equipment already included in this document.

### 3.0 REPAIR AND REPLACEMENT

3.1 The Contractor shall inspect, repair, and/or troubleshoot assemblies and subassemblies of the unit and provide a cost estimate for repair and replacement. The UDR/CTR reserves the right to purchase or repair units based on economic evaluation and various operational considerations.

3.2 The CTR must approve, in writing, the purchase of a new unit in lieu of repair.

3.3 Replacement unit shall have the same Original Equipment with the same characteristic as the one being replaced unless otherwise authorized, in writing, by CTR.

3.4 Contractor shall use Contract Fee Schedule line item under "Cost to Replace a Unit" to invoice the replacement cost.

### 4.0 SPECIFIC TASKS AND SCOPE OF WORK

4.1 Upon contract award, the Contractor may request the UDR and receive available single-line diagrams (one-line diagrams) of electrical power distribution of the facilities covered by this document. The Contractor shall review and update the single-line diagrams and the associated documentation to ensure that the diagrams provide all items listed in IEEE Std 141-1993-2.4.7 Single-line Diagram. One copy of each updated single line diagram and associated documentation shall be submitted to the UDR at the end of the first 12 month period under this contract.

4.2 The UDR shall submit a schedule to the Contractor of all needed monthly, quarterly, annual, and bi-annual electrical preventive maintenance services for each 12-month period cycle. Once approved, the Contractor will be advised on any changes on the schedule upon site availability and with the approval of the UDR. Any changes to the schedule and cancellations will be notified at least 24 hours prior to scheduled work.

4.3 The Contractor's electrical preventive maintenance services bill shall be based on work performed as requested by the UDR and invoiced monthly. This shall be the cost shown on the Contract Fee Schedule.

4.4 Electrical preventive maintenance services involving shut down of equipment shall be approved by UDR and coordinated with Operations supervisor of the facility and the vendor. Granting of a shutdown is subject to Operations conditions at the time.

4.5 The Contractor shall complete any scheduled Preventive Maintenance and Inspection service of any equipment and return such unit to operations notwithstanding the expiration of the business hours and/or other conditions unless authorized, in writing, by UDR.

4.6 The Contractor shall have access to the facilities named in this document and to storage

areas designated by the Director within the facilities. Access to the facilities shall be limited to 7:30 a.m. to 3:30 p.m. Monday to Friday, except as required or allowed by the UDR.

- 4.7 The Contractor shall perform un-scheduled corrective, repair, and maintenance services when requested by the UDR.
- 4.8 The Contractor shall immediately respond and investigate within 2 hours of the UDR's request for emergencies services and within 4 hours of the UDR's request on non-emergencies request. For emergency work, the Contractor will be required to provide a 24/7 emergency contact to respond for any requests on emergency services. Contractor will provide a preliminary cost estimate and the UDR will approve the request by phone if required. For non-emergencies request, the Contractor shall prepare and submit to the UDR a scope of the repair work to be carried out on the unit within two (2) working days, which shall include a good faith and detailed cost estimate. This cost estimate shall include a brief description of the work to be performed; cost for new replacement OEM parts, estimated additional labor hours required for the repair of the unit not covered under base cost, and shall include the estimated time for delivery time of parts and expected completion date of the work.
- 4.9 The UDR shall review the Contractor's proposed work scope and cost estimate and revise/approve the work scope/cost estimate.
- 4.10 Upon written acceptance of cost estimate by the UDR, the Contractor shall proceed with repairs. The Contractor shall commence to work on the unit immediately and complete the repair within the allocated time for delivery of such item.
- 4.11 The Contractor shall notify the UDR immediately if the Contractor cannot complete the job within the contractually agreed time period. The Contractor shall submit to UDR a detailed explanation for the delay with a revised schedule to complete the job.
- 4.12 At all times during the repair process, Contractor shall maintain City's equipment in a clean and weather protected storage area.
- 4.13 SAFETY PRACTICES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING REQUIREMENTS:

A safety lead person shall be identified prior to commencement of work.

A safety briefing shall be conducted prior to the commencement of work.

All tests shall be performed with the apparatus de-energized and grounded (locked and tagged) except where otherwise specifically required in certain tests to be ungrounded or energized.

The testing organization shall have a designated safety representative on the project to supervise operations with respect to safety. This individual may be the same person described in Section 5.1 of MTS-2001.

#### 5.0 SUITABILITY OF TEST EQUIPMENT

5.1 All test equipment shall meet the requirements in Section 5.3 of MTS-2001 and be in good mechanical and electrical condition.

5.2 Field test metering used to check power system meter calibration must be more accurate than the instrument being tested.

a. Accuracy of metering in test equipment shall be appropriate for the test being performed.

b. Waveshape and frequency of test equipment output waveforms shall be

appropriate  
for the test and the tested equipment.

- 5.5 The Contractor shall perform a test on the oil in Oil Circuit Breakers (OCB) and the fluid in the Liquid-Filled Transformers (LFT) to detect and correct the conditions that affect and lower the quality of the oil or liquid. The Contractor shall follow the appropriate ASTMs for taking samples, tests, and criteria for acceptable limits as listed in MTS-2001, and MTS-2001, Table 10.4. Contractor shall follow manufacturer specifications for testing of SF-6 equipment.
- 5.6 The Contractor shall perform the tests listed in MTS-2001 and/or Chapter 18 of NFPA 70B-1998 ordinarily used in the field to determine the condition of various elements of an electrical power-distribution system.
- 5.7 After completion of the work, the Contractor shall submit a monthly written record of all tests with details as required by Section 5.4 Test Report of MTS-2001, unless otherwise specified in this document.

## 6.0 ELECTRICAL PREVENTIVE MAINTENANCE

6.1 The preventive maintenance and inspection services shall consist of the following categories.

### 7.0 Wastewater Operations Monthly Services at 69<sup>th</sup> Substation

#### 7.1 General Inspection

- A. Check station battery condition, water, voltage, and charging item.
- B. Check station battery cell voltage, specific gravity, and if necessary, clean with soda water (quarterly only).
- C. Record meter readings.
- D. Check building conditions.
- E. Check ventilators and filters in building.
- F. Check heaters in building.
- G. Check lights in building and yard.
- H. Check yard conditions.
- I. Visually inspect switches and switch-rack.
- J. Visually inspect insulators and bushings.
- K. Visually inspect fences, gates, and signs.
- L. Uproot/remove all grass, vegetation, plants, debris, etc. inside of substation fence.

#### 7.2 Visual Inspection, Power Transformers

- 7.2.1 Check and record oil level gauge readings.
- 7.2.2 Check and record oil and winding temperatures.
- 7.2.3 Check and record gas pressure gauge readings.
- 7.2.4 Check cooling system operation of fans and pumps.
- 7.2.5 General inspection of busing, lighting, lightning arresters, and transformer.
- 7.2.6 Read and record percentage of combustibles in gas blanket, with Fault Gas Detector.
- 7.2.7 Change nitrogen bottles as needed (500# bottle pressure minimum).

#### 7.3 Visual Inspection, Oil Circuit Breakers

- 7.3.1 Record number of operations.
- 7.3.2 Check oil level indicators.

- 7.3.3 Check for leaks.
- 7.3.4 Check Hydraulic Mechanism.
  - 7.3.4.1 Visual inspections.
  - 7.3.4.2 Check oil pressure.
  - 7.3.4.3 Operate hydraulic pump.
  - 7.3.4.4 Check heater.
  - 7.3.4.5 Record operation of the pump.
  - 7.3.4.6 Check for oil leaks.
- 7.3.5 Check Pneumatic mechanism.
  - 7.3.5.1 Visual inspection.
  - 7.3.5.2 Check air pressure gauge and check for air leaks.
  - 7.3.5.3 Open condensate drain valve to drain and start compressor motor for operation check.
  - 7.3.5.4. Check compressor belts. (tighten if needed).
  - 7.3.5.4 Check heaters.
  - 7.3.5.5 Record compressor operations.
  - 7.3.5.6 General inspection of bushing and breaker.
- 7.3.6. Clean enclosures and compartment of OCBs.

7.4 Visual Inspection, Switchgear Feeder Breakers

- 7.4.1 Record number of operations.
- 7.4.2 Check compartment heaters.
- 7.4.3 General inspection of breaker compartments.

7.5 Wastewater Operations Annual Services

- 7.6 Power Transformers
  - 7.6.1 Clean bushings.
  - 7.6.2 Doble power factor test of lightning arresters.
  - 7.6.3 Doble power factor test of bushing and windings.
  - 7.6.4 Acidity, interfacial tension, water in oil, dielectric breakdown, DGA and color test of oil.
  - 7.6.5 Sudden pressure relay operation test.
  - 7.6.6 Megger insulation test of bushing current transformer windings to ground.

7.7 Oil Circuit Breakers

- 7.7.1 Clean bushings.
- 7.7.2 Bushing insulation evaluation: Doble power factor test of capacitor type bushing.
- 7.7.3 Tank internal insulation evaluation: Doble power factor test of breaker.
- 7.7.4 Acidity, interfacial tension, water in oil, dielectric breakdown, and color test of oil.
- 7.7.5 Contact time travel curve record with the motion analyzer.
- 7.7.6 Main contract resistance test with Doctor Set.
- 7.7.7 Find minimum trip, close and operating voltage of control coils and relays.
- 7.7.8 Megger insulation test secondary control circuits.
- 7.7.9 Check operating mechanism per manufacturer's instructions.

- 7.8 15 KV Switchgear Feeder Breakers
  - 7.8.1 Visual contract inspection.
  - 7.8.2 Contact pressure check.
  - 7.8.3 Closing and trip operations check.
  - 7.8.4 Operation timing test.
  - 7.8.5 Trip coil minimum operating voltage test.
  - 7.8.6 Primary insulation high pot test.
  - 7.8.7 Megger insulation test secondary control circuits.
  - 7.8.8 Test auxiliary circuit operations.
  
- 7.9 2.4 KV and 4.16 KV Switchgear, Motor Controller and Motor Control Centers
  - 7.9.1 Isolate and remove starter from cubicle.
  - 7.9.2 Cubicle Inspection/maintenance.
  - 7.9.3 Perform voltage test on exposed wire terminals and stabs for presence of voltage.
  - 7.9.4 Vacuum and/ or wipe dirt and dust from enclosure.
  - 7.9.5 Inspect bus stabs, cubicle latches, interlocks, rollers and racking mechanism.
  - 7.9.6 Clean thoroughly all buses, accessories, equipment, terminals, tighten loose bolts in the  
low voltage compartment.
  - 7.9.7 Lubricate as required.
  - 7.9.8 Perform thorough visual inspection of the starters.
  - 7.9.9 Check phase barriers, arc chutes and contacts of the starters.
    - 7.9.10 Check fuses and fuses clips.
    - 7.9.11 Clean starter frame and mechanism.
    - 7.9.12 Measure contact resistance.
    - 7.9.13 Test starter operation.
  
- 7.10 Out Door Transformers Oil Type 4.16 KV-277/480 V 3 Phase, 12.47 KV-277/480 V 3 Phase and 12.47 KV-2400 V
  - 7.10.1 Clean transformer, accessories, bushing, cable compartment, switches compartment,  
Remove rust and spot paint with the same color.
  - 7.10.2 Double test transformer bushings and winding.
  - 7.10.3 Power factor, moisture content, interfacial tension dielectric breakdown, color, di-electric, DGA and acid test of oil.
  
- 7.11 Protective Relays
  - 7.11.1 Clean, test, and calibrate, see Item BB.9.0 for a list.
  
- 7.12 Miscellaneous
  - 7.12.1 Clean and Doble Power Factor test of: line arresters, potential transformers and coupling capacitors. (Exclude potential transformer tests at 69th ST. Treatment Plant).
  - 7.12.2 Infrared survey of main substation yard. All equipment associated with the Power Factor Correction Capacitors shall be maintained according to the manufacturer's specifications.

"Doble" - is a surge comparison test.

7.13

Air Switches

- 7.13.1 Clean all associated contacts and insulators.
- 7.13.2 Inspect and lubricate all pivot points, bearings and gearboxes.
- 7.13.3 Check and adjust alignment.
- 7.13.4 Perform contact resistance test and record readings.
- 7.13.5 Exercise each switch a minimum of five (5) times to assure free, unbounded, reliable operation.

8.0

**Drinking Water Operations' Monthly Services**

(Equipment located at 2500 Federal Road, 3100 Genoa Red Bluff Road and to include the Northeast Water Purification Plant at 12121 North Sam Houston Pkwy East.

8.1

General Inspection at Substation

- 8.1.1 Clean/check station battery condition, water, voltage and charging rate, positive to ground, negative to ground.
- 8.1.2 Record meter readings
- 8.1.3 Check lights in building and yard.
- 8.1.4 Clean yard and remove all trash debris, etc.
- 8.1.5..Visually inspect switches and switch rack.
- 8.1.6. Visually inspect insulators and bushings.
- 8.1.7. Visually inspect fences, gates, and signs.
- 8.1.8. Uproot/remove all grass, vegetation, plants, debris, etc. inside of substation fence.

8.2

Visual Inspection of 138 KV Power Transformers

- 8.2.1 Check and record oil level gauge readings.
- 8.2.2 Check and record oil and winding temperatures.
- 8.2.3 Check and record gas pressure gauge readings.
- 8.2.4 Visually Inspect bushings, lighting, arresters, and transformers.
- 8.2.5 Read and record percentage of combustibles in gas blanket, with fault gas detector.
- 8.2.6 Change nitrogen bottle, replace as needed (500 # bottle pressure minimum).

8.3

Visual Inspection of 138 KV Oil Circuit Breakers

- 8.3.1 Record number of operations.
- 8.3.2 Check oil level indicators.
- 8.3.3 Check for oil leaks.
- 8.3.4 Pneumatic mechanism
  - 8.3.4.1 Visual inspection
  - 8.3.4.2 Check air pressure gauge and check for air leak.
  - 8.3.4.3 Open condense drain valve to drain and start compressor motor and check its operation.
  - 8.3.4.4 Check compressor belts.
  - 8.3.4.5 Check heaters. Take current reading and record.
  - 8.3.4.6 Record compressor operations.
- 8.3.5 Hydraulic mechanism
  - 8.3.5.1 Visual inspection
  - 8.3.5.2 Check system pressure gauge and record pressure reading.
  - 8.3.5.3 Check reservoir for proper fluid level.
  - 8.3.5.4 Check for fluid leaks and tighten as needed.

8.3.5.5 After tighten fittings wipe down tubing/fitting /equipment in area where leak accrued.

8.3.5.6 Check heaters. Take current reading and record.

8.3.5.7

8.3.6 General inspection of bushing and breakers.

8.3.7 Clean OCB's enclosures and compartment.

#### 8.4 Visual Inspection, Switchgears Feeder Breakers

8.4.1 Clean enclosure, remove rust and spot paint.

8.4.2 Record number of operations.

8.4.3 General inspection of breaker compartments.

#### 8.5 Visual Inspection, 5KV Motor Control Centers

8.5.1 Clean enclosure and remove rust and spot paint.

8.5.2 Record number of operations.

#### 8.6 Visual Inspection, Protective Relays

8.6.1 Inspect for physical damage.

8.6.2 Replace broken glass and gasket if necessary.

#### 8.7 Visual Inspection, Disconnect Switches, fusible Switches, and Transfer Switches

8.7.1 Inspect for physical and mechanical condition.

8.7.2 Check for proper anchorage and required area clearances.

8.7.3 Inspect all indicating devices for proper operation.

8.7.4 Clean enclosure (exterior), remove rust, apply anti rust, and spot paint with the same color.

### 9.0 Drinking Water Operations' Quarterly Services

9.0.1 (Batteries at 2500 Federal Road, 3100 Genoa Red Bluff Road, 4414 Westpark Road and 12121 North Sam Houston PWY East

#### 9.1 Battery Banks (Eight locations – Plant 1 & 2, & Plant 3 Distributions Bldg., two at the Southwest Plant, two at the Southeast Plant and two at the Northeast Plant.

9.1.1 Perform thorough visual inspection of each cell.

9.1.2 Clean battery cases with rags and distilled water.

9.1.3 Clean old grease and corrosion from links and battery posts.

9.1.4 Apply new grease to links and posts.

9.1.5 Torque connections.

9.1.6 Perform cell voltage, bank voltage, positive-to-ground, negative-to-ground, and specific gravity tests.

9.1.7 Add distilled water to cells as required.

9.1.8 Tabulate all test data and provide overall analysis of the data obtained from tests.

#### 9.2 Battery charger/Rectifier

9.2.1 Perform visual and mechanical inspection.

9.2.2 Inspect for damage and moisture contamination.

9.2.3 Clean, wipe dirt and dust, remove rust, apply anti rust and spot paint, interior and exterior of enclosure.

9.2.4 Verify float voltage and equalized voltage settings.

9.2.5 Verify operation of ammeter and voltmeter.

- 9.2.6 Verify operation of alarms.
- 9.2.7 Float and equalize voltage settings shall be in accordance with manufacturer's published data.

10.0 **Drinking Water Operations' Bi-Annual Services**

These bi-annual Electrical Preventive Maintenance services shall be performed immediately after award of the contract and they shall be repeated every two years thereafter upon approval of the UDR and Operations.

10.1 **Outdoor Substation Area**

- 10.1.1 Check yard lighting, clean light fixtures and replace ballast/bulb if necessary.
- 10.1.2 Clean/remove rust on steel structures, bus enclosure, ground grid enclosure and spot paint with the same color.
- 10.1.3 Check and tighten loose bolts connection on substation structures, grounding grid and lightning protection systems.

10.2 **Outdoor 138 KV Air Switches**

- 10.2.1 Visual inspection and correct accordingly, to verify blade is centered on contacts, contact are not pitted, blade is firm against the stop, full open position is satisfactory, tightness of bolts and operating handle works freely.
- 10.2.2 Clean entire switch using approved methods and materials.
- 10.2.3 Lubricate moving parts.

10.3 **Substation Power Transformers**

- 10.3.1 Perform visual inspection of transformer, gauges, indicators, fans and auxiliary devices.
- 10.3.2 Clean transformer, accessories, remove rust, and spot paint.
- 10.3.3 Doble test of primary lightning arresters.
- 10.3.4 Doble test transformer bushings and winding.
- 10.3.5 Power factor, moisture content, interfacial tension dielectric breakdown, color, dielectric, DGA and acid test of oil.
- 10.3.6 Excitation current test.
- 10.3.7 Replace drying agent (silica gel desiccant).
- 10.3.8 Change nitrogen bottles as needed. (500 # bottle pressure minimum).
- 10.3.9 Megger insulation test of bushing current transformer winding to ground.
- 10.3.10 Turn-to-turn winding ratio test.
- 10.3.11 Check operation of tap changer.

10.4 **Oil Circuit Breakers**

- 10.4.1 Clean bushing, compartment, remove rust, apply anti rust, and spot paint with the same color.
- 10.4.2 Doble power factor test of capacitor type bushing.
- 10.4.3 Doble power factor test of breaker insulation.
- 10.4.4 Power factor acidity, interfacial tension, dielectric breakdown, and color test of oil.
- 10.4.5 Contact time travel curve recorded with motion analyzer.
- 10.4.6 Main contact resistance test with DLRO.
- 10.4.7 Sudden pressure relay operation test.
- 10.4.8 Megger insulation test secondary control circuits.
- 10.4.9 Doble test of operating coils and bushing CT's by AC voltage saturation.
- 10.4.10 Check operating mechanism per manufacturer's instruction.
- 10.4.11 Check the accumulators' pre-charge pressure with zero hydraulic pressure on system.

10.4.12 Record as found pressure and charge accumulator to manufactures specifications if needed.

10.4.13 Find minimum voltage to trip control coil.

10.5 SF6 Breakers (Northeast Water Purification Plant)

10.5.1 Clean bushing, compartment, remove rust, apply anti rust, and spot paint with the same

color.

10.5.2 Doble power factor test bushing.

10.5.3 Doble power factor test insulation.

10.5.4 Main contact resistance test with DLRO.

10.5.5 Megger insulation test secondary control circuits.

10.5.6 Doble test of operating coils and bushing CT's by AC voltage saturation.

10.5.7 Check operating mechanism per manufacturer's instruction.

10.5.8 Check control/alarm pressure switches.

10.5.9 Find minimum voltage to trip control coil.

10.5.10 Pull gas sample for moisture analysis.

10.6 Main Bus Duct and Enclosure

10.6.1 Clean Enclosure (interior & exterior), remove rust, and apply anti rust and spot paint with same color.

10.6.2 Check for water leaks and seal.

10.6.3 Check and clean bus.

10.7 138 KV Lightning Arrestor and Surge Capacitors

10.7.1 Clean, Check and Doble Test

10.8 138 KV Coupling Capacitors

10.8.1 Clean, Check and Doble Test.

10.9 4160 Volts Lightning Arrestor and Surge Capacitors

10.9.1 Clean, Check and Doble Test.

10.10 Air Circuit Breakers

10.10.1 Visual inspection of operating mechanism, bushings, loose connections, lubrication, insulation inspection and defects in contact.

10.10.2 Check breaker operation (open/close).

10.10.3 Measure contact resistance and stub connection resistance (DLRO test).

10.10.4 Clean, sweep and vacuum internal and external of cubicles.

10.10.5 Check cubicle shutters for proper operation.

10.10.6 Lubricate door hinges.

10.10.7 Inspect cubicle for sign of binding, wear or damage.

10.10.8 Perform minimum trip voltage test.

10.10.9 Operate breaker mechanically and electrically to verify proper operation.

10.10.10 Clean bus stubs and apply contact grease.

10.10.11 Record number of operations and compare against manufacturer's replacement schedule.

10.10.12 Visual inspection of bus insulation, bushing, water leaks and heater operation.

10.10.13 Clean bus, insulating members and structural components.

10.10.14 Torque bus joints and connections.

10.10.15 Check rusting both internal and external of cubicles, remove rust, and apply anti-rust and spot paint.

C10.10.16 Clean thoroughly all accessories equipment, terminals; tighten loose bolts in the low voltage compartment. Lubricate as required.

#### 10.11 Power Factor Correction Capacitors

10.11.1 Check, clean, wipe dirt and dust, remove rust, apply anti rust and spot paint, interior and exterior of enclosure.

10.10.2 Doble test ground insulation.

#### 10.12 Multilin 269 Plus, Multilin PQM, and other electronic Relays

10.12.1 Inspect for mechanical damage, weak, tighten loose connection, clean dirt and dust, clean corroded contacts apply approved lubricant.

10.12.3 Check correct operation of protective system.

10.12.3 Change relay set points to values which shall initiate trips and alarms during normal operation.

10.12.4 Changed set points should be returned to their proper values when tests have been completed.

#### 10.13 Protective Relays

10.13.1 Inspect the cover for broken glass and a tight gasket seal.

10.13.2 Replace broken glass and gasket if necessary. Glass must be tight and should be cleaned.

10.13.3 Inspect the relay case for dirt, foreign material, filings and other contamination. Blow out relay case with low-pressure dry air or a bulb syringe. Check all accessible hardware for tightness and stripped threads. Also check the connection inside the case for continuity.

10.13.4 Remove any rust or filings from the disc and magnet poles with a magnet cleaner or brush.

10.13.5 Inspect the relay for friction; its disc should not be warped or bent.

10.13.6 Inspect for evidence of moisture or rust on iron parts and corrosion or discoloration on brass or aluminum.

10.13.7 Check all connection in the relay for tightness; especially taps. Also, check the hardware holding the relay element in its frame.

10.13.8 Bearings should be cleaned and inspected Pivots should be straight and clean. Replace cracked jewels and bent pivots.

10.13.9 Relay contacts must be clean and tight.

10.13.10 Burned or pitted contacts should be cleaned with a burnishing tool or a contact file.

10.13.11 Electrically test relays for pick-up and timed operation to verify settings correspond to coordination study curves.

#### 10.14 5 KV Switches and Air/Load Break

10.14.1 Visual inspection to verify blade is centered on contacts, contacts are not pitted, blade is firm against the stop, full open position is satisfactory, tightness of bolts and operating handle works freely.

10.14.2 Clean entire switch using approved methods and materials.

10.14.3 Lubricate moving parts.

10.14.4 Test all electrical and mechanical interlock system for proper operation and sequencing.

10.14.5 Check tightness of bolted connections and/or cable connection by calibrated torque wrench method in accordance with manufacturer's published data.

10.14.6 Clean thoroughly all accessories equipment, terminals; tighten loose bolts in the low voltage compartment. Lubricate as required.

10.15 Battery charger/Rectifier

10.15.1 Inspect for damage and moisture contamination.

10.15.2 Clean, wipe dirt and dust, remove rust, apply anti rust and spot paint, interior and exterior of enclosure.

10.15.3 Inspect all bolted electrical connections for high resistance using low resistance ohmmeter.

10.15.4 Verify float voltage and equalized voltage settings.

10.15.5 Verify operation of ammeter and voltmeter.

10.15.6 Verify operation of alarms.

10.15.7 Compare bolted connection resistances to values of similar connections.

10.15.8 Float and equalize voltage settings shall be in accordance with manufacturer's published data.

10.16 2.4 KV and 4.16 KV Switchgear, Motor Controller and Motor Control Centers

10.16.1 Isolate and remove starter from cubicle.

10.16.2 Cubicle Inspection/maintenance.

10.16.3 Perform voltage test on exposed wire terminals and stabs for presence of voltage.

10.16.4 Vacuum and/ or wipe dirt and dust from enclosure.

10.16.5 Inspect bus stabs, cubicle latches, interlocks, rollers and racking mechanism.

10.16.6 Clean thoroughly all buses, accessories, equipment, terminals, tighten loose bolts in the low voltage compartment.

10.16.7 Lubricate as required.

10.16.8 Perform thorough visual inspection of the starters.

10.16.9 Check phase barriers, arc chutes and contacts of the starters.

10.16.10 Check fuses and fuse clips.

10.16.11 Clean starter frame and mechanism.

10.16.12 Measure contact resistance.

10.16.13 Test starter operation.

10.16.14 Perform minimum volts to trip control coil test and record.

10.17 Metal Enclosed Busways

10.17.1 Clean and inspect busways for physical damage and evidence of corona.

10.17.2 Inspect for appropriate bracing, suspension, alignment and enclosure ground.

10.17.3 Inspect all bolted electrical connection for high resistance using low-resistance ohmmeter.

10.17.4 Inspect and clean all ventilating openings.

10.17.5 Clean, wipe dirt and dust, remove rust, apply anti rust and spot paint, interior and exterior of enclosure.

10.17.6 Measure insulation resistance of each busway, phase to phase, and phase to ground for one minute in accordance with NETA table 10.1.

10.17.7 Verify operation of busway heaters.

10.18 Out Door Transformers Oil Type 4.16 KV-277/480 V 3 Phase and 12.47 KV-2400 V

10.18.1 Clean transformer, accessories, bushing, cable compartment, switches compartment, remove rust and spot paint with the same color.

10.18.2 Doble test transformer bushings and winding.

10.18.3 Power factor, moisture content, interfacial tension dielectric breakdown, color, dielectric, DGA and acid test of oil.

10.19 Metering and Instrumentation

- 10.19.1 Examine devices for mechanical or electrical damage and wire connection tightness.
- 10.19.2 Check condition of meter face and face gaskets, replace if necessary.
- 10.19.3 Check calibration of all meter at five points using full-scale test instruments.
- 10.19.4 Calibrate watt-hour meters to one-half percent (.5%).
- 10.19.5 Verify all instrument multipliers.
- 10.19.6 Inspect meter selector switches for proper operation and tighten connections.
- 10.19.7 Clean, remove dirt and dust, and lubricate as required.

10.20 4160 Volts Feeder Termination (G & W Potheads 3-conductors) And Enclosures

- 1. Check, clean, remove rust, apply anti rust and spot paint interior & exterior of enclosure.
- 2. Perform Hot-Collar Tests.

10.21 Main breaker Switches, Auto-Manual Transfer Switches, Lock Out Relay 86 Start/Stop/Emergency Switches, Stop/Start Switches, HOA Switches and Shunt Trip

- 10.22 Clean, wipe dirt and dust, lubricate if necessary.
- 10.23 Inspect switches for proper operation.
- 10.24 Tighten loose termination.

11.0 Infrared Inspection (applicable for DWO and WWO locations)

11.1 The Contractor shall immediately perform infrared inspection of all current carrying equipment of the Drinking Water Production and Wastewater Operations for all facilities listed on this contract and as needed and required by the CTR. Using a radiometric infrared camera, the equipment shall include low voltage, DC voltage, medium and high voltage. Thereafter, the Contractor shall perform the infrared inspection of the above equipment as requested by the UDR.

11.2 The Contractor shall, upon written request from UDR, perform additional infrared inspection of the equipment at Drinking Water Production Operations and/or Wastewater Operations, using a radiometric infrared camera.

11.3 The Technician shall be certified Level II, or higher, SNT-TC-1A of the American Society for Non-destructive Testing (ASNT).

11.4 The Contractor shall submit a report of the survey to the UDR within fifteen (15) days after completion of the survey. This report shall be submitted as a printed copy plus an electronic copy.

11.5 The report shall include copies of the pictures of the equipment and /or components as well as diagnostic commentaries and recommendations and shall include:

- 11.5.1 Date and time of inspections.
- 11.5.2 Areas inspected.
- 11.5.3 Load and ambient conditions at time of inspection.
- 11.5.4 Temperature difference between the area of concern and the reference area.
- 11.5.5 Cause of temperature difference.
- 11.5.6 Copies of inspection results of the areas that require corrective actions and/or further investigation.
- 11.5.7 Identify and report the areas and/or equipment that were inaccessible and/or unobservable.
- 11.5.8 Recommendations similar to the temperature benchmarks of MTS-2001 (see page 177, Table 10.18).

- 11.6 The imaging equipment shall be capable of detecting a minimum temperature difference of 1 deg C at 30 deg C.
- 11.7 Infrared inspections shall be performed during periods of maximum possible loading but not less than 40 percent of rated load of the electrical equipment being inspected. Refer to ANSI/NFPA 70B, Section 18-16 (Infrared Inspection).
- 12.0 **Protection and Coordination and Other Studies of Power Systems**
- 12.1 The Contractor shall, upon written request from UDR, perform Protection and Coordination and other studies of power system at a facility. The analysis and study shall be in accordance with the latest edition of the electrical codes applicable to the work performed.
- 12.2 The Contractor and/or the Sub-contractor's State licensed engineer shall perform the work and seal the final report. The engineer shall lead and may use other qualified persons to complete the work.
- 12.3 The studies may include part or all of the following:  
12.3.1 Plant electrical power system survey and documentation.  
12.3.2 Load flow and power factor correction.  
12.3.3 Harmonic analysis, harmonic filtering, and filter design.  
12.3.4 Grounding evaluation and measurements.  
12.3.5 Motor starting evaluation.  
12.3.6 Short circuit and device evaluation.  
12.3.7 Protections from overload and short circuit.  
12.3.8 Protective relay coordination.
- 12.4 The Contractor shall use Power Tools for Windows software version 3.8.10 or higher by SKM System Analysis for computer modeling of the power system for short circuit study and system coordination.
- 12.5 The Contractor shall furnish the City a written report of the work performed which shall include all relevant information about the system, phase currents as well as sequence currents, and recommendations. Also, the report shall include all settings for any metering devices that are included in the switchgear, motor, control centers, soft-starters, transformers, etc.
- 12.6 The Contractor shall furnish the City an electronic copy of the computer generated system one-line diagram clearly identifying individual equipment buses, the bus numbers, the device numbers, and the maximum available short-circuit current at each bus which shall include short-circuit current motor current contribution.
- 12.7 The Contractor shall furnish City six (6) bound copies of the completed protective device time-current coordination analysis. No more than two devices upstream or downstream of the point of interest shall be shown on a single log-log plot.
- 12.8 The Contractor shall call to the attention of the UDR any inadequacies and shall include recommendations for improvements.
- 12.9 The Contractor shall upon written request from the UDR provide and install energy monitoring (watt-hour meter) to monitor power consumption on Main Service Feeders, Switchgear or Motor Control Centers. These meters shall be calibrated to one-half percent (.5%).
- 13.0 **STANDARD RESPONSE TIMES**

- 13.1 Contractor shall be accessible to the City via telephone during normal business hours. The Contractor shall be ready to start work on any unit within twenty-four (24) hours of receiving the call for the service.
- 13.2 Contractor shall be available and accessible to the City via telephone to work overtime if requested by the UDR.
- 13.3 Contractor shall be available and accessible to the City via telephone to work emergency if requested by the UDR.
- 13.4 Contractor shall start an emergency job immediately, without scheduling delays, and shall not be restricted to normal working hours. UDR shall coordinate the emergency and overtime work.
- 14.0 Service and REPAIR TECHNICIANS
- 14.1 The technicians performing these electrical tests, inspections, and repairs shall be by education, training, and experience, be well-rounded in all aspects of electrical maintenance. They shall be trained and experienced concerning the apparatus and systems being evaluated. These individuals shall be capable of conducting the tests in a safe manner and with complete knowledge of the hazards involved.
- 14.2 The technicians shall be certified in accordance with ANSI/NETA, ETT-2000, *Standard for Certification of Electrical Testing Personnel*.
- 14.3 The qualified persons (i.e. electrical safety qualified) shall meet the requirements of NFPA 70E-1995, Part II, Chapter 2.
- 14.4 Each on-site crew leader, Senior Technician, shall hold a current Level IV certification (in accordance with ANSI/NETA, ETT-2000, *Standard for Certification of Electrical Testing Personnel*) in electrical testing.
- 14.5 The Protection and Coordination of Power Systems and Arc Flash Studies work shall be carried out by and under supervision of a State of Texas Professional Engineer.
- 14.6 The technicians of the Contractor shall have a minimum of three (3) years of work experience with the equipment specified in this contract
- 14.7 The Contractor shall furnish the resume of the technicians to the City Inspection Team during the Team's visit of the Contractor's facility.
- 14.8 These requirements shall apply to all of the sub-contractors who work for the Contractor.
- 14.9 Proof of qualifications and certifications may be required by the UDR/CTR as needed.
- 15.0 ACCEPTANCE OF ELECTRICAL PREVENTIVE MAINTENANCE AND/OR REPAIR WORK
- 15.1 The Contractor shall ensure that test of equipment that have undergone Maintenance and/or Repair work meet the acceptance standards set by MTS-2001 and NFPA 70-B-1998.
- 15.2 The Contractor shall ensure communication has been established with the UDR when witnessing of any performance test is required.
- 15.3 If deficiencies are detected, the repair work shall be rejected and the contractor shall make the necessary repairs, adjustments or replacements.
- 15.4 A typed copy of Shop's Final Test Sheets covering the results of any specific test shall be

included with the shipment of all repaired testing and inspection of any and all repaired units. All units must be run at their highest rated voltage.

15.5 A typed copy of Repair Data Sheets covering results of specific tests and measurements shall be included with the shipment of all repaired equipment, if requested by UDR.

15.6 The City shall not make payment to the Contractor until ALL corrective actions are made and the equipment maintenance and/or repair are accepted.

16.0 SILENCE OF SPECIFICATIONS

The apparent silence of these specifications as to any detail, or apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of these specifications shall be made on the basis of this statement.

17.0 LABOR RATE

The labor rate shall cover ALL costs for a qualified person to perform any of the functions in this document and shall include wages, all company benefits, and company profits. The function is, but not limited to, preventive maintenance, repair, infrared inspection, arc flash studies, power quality, protection and coordination work of the City equipment.

18.0 ADDITIONAL SERVICES

18.1 WITHIN THE GENERAL SCOPE OF THIS CONTRACT, ADDITIONAL WORK/REPAIR SERVICES MAY BE REQUIRED TO REPAIR OR REPLACE EQUIPMENT NOT OTHERWISE COVERED IN THE BASIC SERVICES OF THIS CONTRACT IN ORDER TO BRING EQUIPMENT TO ACCEPTABLE CODE AND WORKING CONDITIONS.

18.2 Prior to commencement of any Additional Services," Contractor shall submit a written proposal for approval by UDR describing the work to be done and include a good faith estimate of the cost. The proposal shall include as a minimum a list of repairs, sub-contractor(s), and a schedule of the repairs.

18.2 Contractor shall perform Additional Services using the unit rates in the "Bid Forms" as specified for the type of service provided. If the "Bid Forms" do not cover the work the Contractor shall be paid on a cost reimbursable basis, based on actual time, materials, parts and subcontractor labor required to complete the work. Timing of any Additional Services shall be mutually agreed upon in writing between the UDR and the Contractor. If during the execution of the Additional Work/Services the Contractor determines that the good faith estimate will be exceeded, the Contractor must immediately stop work and discuss and receive written approval for additional costs from the Director or Designee.

19.0 WARRANTIES

19.1 Contractor shall observe the highest standards of diligence and care in the performance of repair services and shall meticulously follow the standards and procedures required by the equipment manufacturer.

19.2 The Contractor further warrants that all service and replacement parts it provides shall be in strict compliance with all applicable regulations.

19.3 A minimum full warranty of 12 months is required upon completion of repair services. The warranty period shall begin after satisfactory test run and the day the City officially accepts the repaired unit.

19.4 During the warranty period ALL related work shall be started by Contractor within twenty-four

(24) hours after notification and shall be completed within ten (10) days.

19.5 During the warranty period ALL failed units shall be re-repaired or replaced at Contractor's expense if failure occurs under normal operating conditions or if the failure is due to faulty parts or negligence of the Contractor. A new one-year warranty shall become effective upon completion and after acceptance of the warranty repair.

20.0 INVOICES

Contractor shall submit one original invoice for payment that are on Contractor's company stationary with the original signed by an authorized agent of the company. The invoice number shall not be duplicated during the term of the contract periods. Each invoice submitted by the contractor shall detail the following information:

20.1 City Contract number and Contractor's Job Number.

20.2 Contractor's Job Number shall appear clearly on all time sheets, invoices, and suppliers' invoices.

20.3 Contractor's name and address and where the service was performed.

20.4 City equipment EI Number, and City Work Order Number.

20.5 City Facility Number and address where equipment had been prior to service.

20.6 Detailed description of services rendered.

20.7 Description of Parts or components repaired or replaced. Provide Part Numbers, listing before and after discount. If parts are reconditioned, the costs to recondition parts must be listed.

20.8 Subcontractors' invoices with detail description of work performed, hours, and cost.

20.9 Labor hours and rates, technician's name and technical level.

20.10 City delivery and pickup tickets

20.11 UL re-certification for explosion-proof units

20.12 Subtotal costs for parts and labor separately.

20.13 Total invoice costs.

20.14 All unit prices for labor and parts shall be easily identified against the quoted contract pricing.

20.15 Mail invoices to Accounts Payable: City of Houston,  
Department of Public Works and Engineering  
Accounts Payable  
P.O. Box 61449  
Houston, Texas 77208-1449.

**21.00 ADDITIONS & DELETIONS:**

21.1 The City, by written notice from the City Purchasing Agent to the Contractor, at any time during the term of this contract, may add or delete like or similar equipment, supplies, locations and/or services to the list of equipment, supplies, locations, and/or services to be provided. Any such written notice shall take effect on the date stated in the notice from the City. Similar equipment, supplies, services, or locations added to the contract shall be in accordance with the contract specification/scope of services, and the charges or rates for items added shall be the same as specified in the fee

schedule. In the event that the additional equipment, supplies, locations and/or services are not identical to the item(s) already under contract, the charges therefore will then be the Contractor's normal and customary charges or rates for the equipment, supplies, locations and/or services classified in the fee schedule.

**22.0 ESTIMATED QUANTITIES NOT GUARANTEED:**

22.1 The estimated quantities specified herein are not a guarantee of actual quantities, as the City does not guarantee any particular quantity of services during the term of this Contract. The quantities may vary depending upon the actual needs of the Department. The quantities specified herein are good faith estimates of usage during the term of this Contract. Therefore, the City shall not be liable for any contractual agreements/obligations the Contractor enters into based on the City purchasing all the quantities specified herein.

**23.0 INTERLOCAL AGREEMENT:**

23.1.1 Under the same terms and conditions hereunder, the Contract may be expanded to other government entities through inter-local agreements between the City of Houston and the respective government entity that encompass all or part of the products/services provided under this contract. Separate contracts will be drawn to reflect the needs of each participating entity.

**24.0 WARRANTY OF SERVICES:**

24.1 *Definitions:* "Acceptance" as used in this clause, means the act of an authorized representative of the City by which the City assumes for itself, approval of specific services, as partial or complete performance of the Contract.

24.2 "Correction" as used in this clause, means the elimination of a defect.

24.3 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this Contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this Contract. The City shall give written notice of any defect or nonconformance to the Contractor within a one-year period from the date of acceptance by the City. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming services at no additional cost to the City, or (2) that the City does not require correction or re-performance.

24.4 If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City may, by contract or otherwise correct or replace with similar services and charge to the Contractor the cost occasioned to the City thereby, or make an equitable adjustment in the Contract price.

**SECTION C  
GENERAL TERMS & CONDITIONS**

**THE STATE OF TEXAS**

**BID #** \_\_\_\_\_

**COUNTY OF HARRIS**

**ORDINANCE #** \_\_\_\_\_

**CONTRACT #** \_\_\_\_\_

**I. PARTIES**

**1.0 ADDRESS**

THIS AGREEMENT for **DESCRIPTION OF SERVICES** ("Agreement") is made on the Countersignature Date between the **CITY OF HOUSTON, TEXAS** ("City"), a Texas home-rule city and \_\_\_\_\_ ("Contractor or Vendor"), a **corporation doing business in Texas????**.

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

**City**

City Purchasing Agent for Director  
of the **????????? Department**  
City of Houston  
P.O. Box 1562  
Houston, Texas 77251

**Contractor**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

The Parties agree as follows:

**2.0 TABLE OF CONTENTS**

2.1 This Agreement consists of the following sections:

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EXHIBITS

- \* A. DEFINITIONS
- \* B. SCOPE OF SERVICES
- \* C. EQUAL EMPLOYMENT OPPORTUNITY
- \* D. MWBE SUBCONTRACT TERMS
- \* E. DRUG POLICY COMPLIANCE AGREEMENT
- \* F. CERTIFICATION OF NO SAFETY IMPACT POSITIONS
- \* G. DRUG POLICY COMPLIANCE DECLARATION
- \* H. FEES AND COSTS
- \* I. CITY’S CONTRACTORS PAY OR PLAY PROGRAM

\* Note: These Exhibits shall be inserted into the contract Agreement at the time of contract execution.

**3.0 PARTS INCORPORATED**

3.1 The above described sections and exhibits are incorporated into this Agreement.

**4.0 CONTROLLING PARTS**

4.1 If a conflict among the sections or exhibits arises, the Exhibits control over the Sections.

**5.0 DEFINITIONS**

5.1 Certain terms used in this Agreement are defined in Exhibit "A."

**6.0 SIGNATURES**

6.1 The Parties have executed this Agreement in multiple copies, each of which is an original.

ATTEST/SEAL: (if a corporation)  
WITNESS: (if not corporation)

\_\_\_\_\_

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:  
Federal Tax ID Number: \_\_\_\_\_

ATTEST/SEAL:

CITY OF HOUSTON, TEXAS  
Signed by:

\_\_\_\_\_  
City Secretary

\_\_\_\_\_  
Mayor

APPROVED:

COUNTERSIGNED BY:

\_\_\_\_\_  
City Purchasing Agent

\_\_\_\_\_  
City Controller

DATE COUNTERSIGNED:

\_\_\_\_\_

This contract has been reviewed as to form by the undersigned legal assistant and has been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Legal Assistant

## II. DUTIES OF CONTRACTOR

### 1.0 SCOPE OF SERVICES

- 1.1 In consideration of the payments specified in this Agreement, Contractor shall provide all supervision, labor, tools, equipment, permits, parts, expendable items, material, and supplies necessary to perform the services described in Exhibit "B."

### 2.0 RELEASE

- 2.1 PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE CITY) FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

### 3.0 INDEMNIFICATION

- 3.1 PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY "THE CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:
- 3.1.1 PRIME CONTRACTOR/SUPPLIER AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 2.1-3.2, "CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;
  - 3.1.2 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT; AND
  - 3.1.3 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.
  - 3.1.4 PRIME CONTRACTOR/SUPPLIER SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS CONTRACT AND FOR FOUR YEARS AFTER THE CONTRACT TERMINATES. CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$500,000.00 PER OCCURRENCE. CONTRACTOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.
- 3.2 CONTRACTOR SHALL REQUIRE ALL OF ITS SUBCONTRACTORS (AND THEIR SUBCONTRACTORS) TO RELEASE AND INDEMNIFY THE CITY TO THE SAME EXTENT AND IN SUBSTANTIALLY THE SAME FORM AS ITS RELEASE AND INDEMNITY TO THE CITY.

### 4.0 INDEMNIFICATION PROCEDURES

- 4.1 Notice of Claims. If the City or Prime Contractor/Supplier receives notice of any claim or circumstances, which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 10 days. The notice must include the following:
- 4.1.1 a description of the indemnification event in reasonable detail, and
  - 4.1.2 the basis on which indemnification may be due, and
  - 4.1.3 the anticipated amount of the indemnified loss.
- 4.2 This notice does not stop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 10-day period, it does not waive any right to indemnification except to the extent that Prime Contractor/Supplier is prejudiced, suffers loss, or incurs expense because of the delay.
- 4.3 Defense of Claims
- 4.3.1 Assumption of Defense. Prime Contractor/Supplier may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Prime Contractor/Supplier shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Prime Contractor/Supplier must advise the City as to whether or not it will defend the claim. If Prime Contractor/Supplier does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.
  - 4.3.2 Continued Participation. If Prime Contractor/Supplier elects to defend the claim, the City may retain separate counsel to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. Prime Contractor/Supplier may settle the claim without the consent or Agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Prime Contractor/Supplier does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

## 5.0 INSURANCE

- 5.1 Contractor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement. All policies except Professional Liability and Workers' Compensation must name the City as an additional insured. The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial Size Category of Class VI or better, according to the most current edition Best's Key Rating Guide. Contractor shall maintain the following insurance coverage in the following amounts:
- 5.1.1 Commercial General Liability insurance including Contractual Liability insurance:  
\$500,000 per occurrence; \$1,000,000 aggregate
  - 5.1.2 Workers' Compensation including Broad Form All States endorsement:  
Statutory amount
  - 5.1.3 Automobile Liability insurance  
\$1,000,000 combined single limit per occurrence  
Defense costs are excluded from the face amount of the policy  
Aggregate Limits are per 12-month policy period unless otherwise indicated

- 5.1.4 Employer's Liability
  - Bodily injury by accident \$100,000 (each accident)
  - Bodily injury by disease \$100,000 (policy limit)
  - Bodily injury by disease \$100,000 (each employee)

5.2 All insurance policies must require by endorsement, that the insurance carrier waives any rights of subrogation against the City, Contractor shall give 30 days written notice to the Director if any of its insurance policies are cancelled, materially changed or non-renewed. Within the 30 day period, Contractor shall provide other suitable policies in lieu of those about to be canceled, materially changed, or non-renewed so as to maintain in effect the required coverage. If Contractor does not comply with this requirement, the Director, at his or sole discretion, may:

- 5.2.1 immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default, or
- 5.2.2 purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this Agreement.
- 5.2.3 All certificates of insurance submitted by Contractor shall be accompanied by endorsements for additional insured coverage in favor of the City for Commercial General Liability and Automobile Liability policies; and waivers of subrogation in favor of the City for Commercial General Liability, Automobile Liability, and Worker's Compensation/Employers' Liability policies. For a list of pre-approved endorsement forms see <http://purchasing.houstontx.gov/forms.shtml>. The Director will consider all other forms on a case-by-case basis.

## 6.0 WARRANTIES

- 6.1 Contractor represents and warrants that it shall perform all work in a good and workmanlike manner, meeting the standards of quality prevailing in Harris County, Texas for work of this kind. Contractor shall perform all work using trained and skilled persons having substantial experience performing the work required under this Agreement.
- 6.2 With respect to any parts and goods furnished by it, Contractor warrants:
  - 6.2.1 that all items are free of defects in title, material, and workmanship,
  - 6.2.2 that each item meets or exceeds the manufacturer's specifications and requirements for the equipment, structure, or other improvement in which the item is installed,
  - 6.2.3 that each replacement item is new in accordance with original equipment manufacturers specifications, and of a quality at least as good as the quality of the item which it replaces (when the replaced item was new), and
  - 6.2.4 that no item or its use infringes any patent, copyright, or proprietary right.

## **7.0 LICENSES AND PERMITS**

- 7.1 Contractor shall obtain and pay for all licenses, permits, and certificates required by any statute, ordinance, rule, or regulation.

## **8.0 COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE**

- 8.1 Contractor shall comply with the City's Equal Employment Opportunity Ordinance as set out in Exhibit "C."

## **9.0 M/WBE COMPLIANCE**

- 9.1 Contractor shall comply with the City's Minority and Women Business Enterprise ("M/WBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply Agreements in at least 4% of the value of this Agreement to M/WBEs. Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with the Mayor's Office of Business Opportunity (MOBO) and will comply with them.
- 9.2 Contractor shall require written subcontracts with all M/WBE subcontractors and shall submit all disputes with M/WBEs to binding arbitration to be conducted in Houston, Texas if directed to do so by the OBO Director. M/WBE subcontracts must contain the terms set out in Exhibit "D."

## **10.0 DRUG ABUSE DETECTION AND DETERRENCE**

- 10.1 It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by Contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- 10.2 Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
- 10.2.1 a copy of its drug-free workplace policy,
  - 10.2.2 the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "E," together with a written designation of all safety impact positions, and
  - 10.2.3 if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "F."
- 10.3 If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "G." Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance, and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed, or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.
- 10.4 Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee workforce.

- 10.5 Contractor shall require that its subcontractors comply with the Executive Order, and Contractor shall secure and maintain the required documents for City inspection.

## **11.0 ENVIRONMENTAL LAWS**

- 11.1 Contractor shall comply with all rules, regulations, statutes, or orders of the Environmental Protection Agency ("EPA"), the Texas Commission on Environmental Quality ("TCEQ"), and any other governmental agency with the authority to promulgate environmental rules and regulations ("Environmental Laws"). Contractor shall promptly reimburse the City for any fines or penalties levied against the City because of Contractor's failure to comply.
- 11.2 Contractor shall not possess, use, generate, release, discharge, store, dispose of, or transport any Hazardous Materials on, under, in, above, to, or from the site except in strict compliance with the Environmental Regulations. "Hazardous Materials" means any substances, materials, or wastes that are or become regulated as hazardous or toxic substances under any applicable federal, state, or local laws, regulations, ordinances, or orders. Contractor shall not deposit oil, gasoline, grease, lubricants or any ignitable or hazardous liquids, materials, or substances in the City's storm sewer system or sanitary sewer system or elsewhere on City Property in violation of the Environmental Laws.

## **12.0 CITY'S CONTRACTOR PAY OR PLAY PROGRAM**

- 12.1 The requirement and terms of the City of Houston Pay or Play Policy, as set out in Executive Order 1-7, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order 1-7 and shall comply with its terms and conditions as they are set out at the time of City Council approval of this Agreement.
- 12.2 The Pay or Play Program for various departments will be administered by the City of Houston Office of Business Opportunity designee and for a Department specific contract; the Department's designated contract administrator will administer the Pay or Play Program.

## **13.0 CONTRACTOR'S PERFORMANCE**

- 13.1 Contractor shall make citizen satisfaction a priority in providing services under this Agreement. Contractor shall train its employees to be customer service-oriented and to positively and politely interact with citizens when performing contract services. Contractor's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of service to the public. If, in the Director's opinion, Contractor is not interacting in a positive and polite manner with citizens, he or she shall direct Contractor to take all remedial steps to conform to these standards.

## **14.0 PAYMENT OF EMPLOYEES AND SUBCONTRACTORS**

- 14.1 Contractor shall make timely payments in accordance with applicable state and federal law to all persons and entities supplying labor, materials or equipment for the performance of this Agreement including Contractor's employees.
- 14.2 Failure of Contractor to pay its employees as required by law shall constitute a default under this contract for which the Contractor and its surety shall be liable on Contractor's performance bond if Contractor fails to cure the default as provided under this Agreement.
- 14.3 Contractor shall defend and indemnify the City from any claims or liability arising out of Contractor's failure to pay its subcontractors as required by law. Contractor shall submit disputes relating to payment of M/WBE subcontractors to arbitration in the same manner as any other disputes under the M/WBE subcontract.

### III. DUTIES OF CITY

#### 1.0 PAYMENT TERMS

- 1.1 The City shall pay and Contractor shall accept fees provided in Exhibit "H" for all services rendered and the Deliverables furnished by Contractor. The fees must only be paid from Allocated Funds, as provided below.

#### 2.0 TAXES

- 2.1 The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Contractor's invoices to the City must not contain assessments of any of these taxes. The Director will furnish the City's exemption certificate and federal tax identification number to Contractor if requested.

#### 3.0 METHOD OF PAYMENT

- 3.1 The City shall pay Contractor on the basis of invoices submitted by Contractor and approved by the Director, showing the specific tasks completed in the preceding month and the corresponding prices. The City shall make payments to Contractor at its address for notices within 30 days upon receipt of an approved invoice.

#### 4.0 METHOD OF PAYMENT - DISPUTED PAYMENTS

- 4.1 If the City disputes any items in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

#### 5.0 LIMIT OF APPROPRIATION:

- 5.1 The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.
- 5.2 In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of \$\_\_\_\_\_ to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the parties have agreed to the following procedures and remedies:
- 5.3 The City makes a Supplemental Allocation by issuing to Contractor a Service Release Order, or similar form approved by the City Controller, containing the language set out below. When necessary, the Supplemental Allocation shall be approved by motion or ordinance of City Council.

#### "NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS"

"By the signature below, the City Controller certifies that, upon the request of the responsible Director, the supplemental sum set out below has been allocated for the purposes of the Agreement out of funds appropriated for this purpose by the City Council of the City of Houston. This supplemental allocation has been charged to such appropriation."

- 5.4 The Original Allocation plus all supplemental allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for services it provides. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement and it has no other remedy in law or in equity against the City and no right to damages of any kind.

## **6.0 CHANGES**

- 6.1 At any time during the Agreement Term, the City Purchasing Agent or Director may issue a Change Order to increase or decrease the scope of services or change plans and specifications, as he or she may find necessary to accomplish the general purposes of this Agreement. Contractor shall furnish the services or deliverables in the Change Order in accordance with the requirements of this Agreement plus any special provisions, specifications, or special instructions issued to execute the extra work.
- 6.2 The City Purchasing Agent or Director will issue the Change Order in substantially the following form:

### **CHANGE ORDER**

TO: [Name of Contractor]  
FROM: City of Houston, Texas (the "City")  
DATE: [Date of Notice]  
SUBJECT: Change Order under the Agreement between the City and [Name of Contractor] countersigned by the City Controller on [Date of countersignature of the Agreement]

Subject to all terms and conditions of the Agreement, the City requests that Contractor provide the following:

[Here describe the additions to or changes to the equipment or services and the Change Order Charges applicable to each.]

Signed:  
[Signature of City Purchasing Agent or Director]

- 6.3 The City Purchasing Agent or Director may issue more than one Change Order, subject to the following limitations:
- 6.3.1 Council expressly authorizes the City Purchasing Agent or Director to approve a Change Order of up to \$50,000. A Change Order of more than \$50,000 over the approved contract amount must be approved by the City Council.
- 6.3.2 If a Change Order describes items that Contractor is otherwise required to provide under this Agreement, the City is not obligated to pay any additional money to Contractor.
- 6.3.3 The total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.
- 6.4 Whenever Contractor receives a Change Order, Contractor shall furnish all material, equipment, and personnel necessary to perform the work described in the Change Order. Contractor shall complete the work within the time prescribed. If no time for completion is prescribed, Contractor shall complete the work within a reasonable time. If the work described in any Change Order causes an unavoidable delay in any other work Contractor is

required to perform under this Agreement, Contractor may request a time extension for the completion of the work. The City Purchasing Agent's or Director's decision regarding a time extension is final.

- 6.5 A product or service provided under a Change Order is subject to inspection, acceptance, or rejection in the same manner as the work described in the Original Agreement, and is subject to the terms and conditions of the Original Agreement as if it had originally been a part of the Agreement.
- 6.6 Change Orders are subject to the Allocated Funds provisions of this Agreement.

#### **IV. TERM AND TERMINATION**

##### **1.0 CONTRACT TERM**

- 1.1 This Agreement is effective on the Countersignature Date and expires three (3) years after the starting date specified in the Notice to Proceed unless sooner terminated according to the terms of this Agreement.

##### **2.0 NOTICE TO PROCEED**

- 2.1 Contractor shall begin performance under this Agreement on the date specified in a Notice to Proceed from the City Purchasing Agent.

##### **3.0 RENEWALS**

- 3.1 Upon expiration of the Initial Term, and so long as the City makes sufficient supplemental allocations, this Agreement will be automatically renewed for two successive one-year terms on the same terms and conditions. If the Director/Chief of the City Department elects not to renew this Agreement, the City Purchasing Agent shall notify Contractor in writing of non-renewal at least 30 days before the expiration of the then current term.

##### **4.0 TIME EXTENSIONS**

- 4.1 If Department requests an extension of time to complete its performance, then the City Purchasing Agent may, in his or her sole discretion, extend the time so long as the extension does not exceed 180 days. The extension must be in writing but does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

##### **5.0 TERMINATION FOR CONVENIENCE BY THE CITY**

- 5.1 The City Purchasing Agent or Director may terminate this Agreement at any time by giving 30 days written notice to Contractor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies, which exist now or in the future.
- 5.2 On receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Contractor for services actually performed, but not already paid for, in the same manner as prescribed in Section III unless the fees exceed the allocated funds remaining under this Agreement.

- 5.3 TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

## **6.0 TERMINATION FOR CAUSE BY CITY**

- 6.1 If Contractor defaults under this Agreement, the City Purchasing Agent or Director may either terminate this Agreement or allow Contractor to cure the default as provided below. The City's right to terminate this Agreement for Contractor's default is cumulative of all rights and remedies, which exist now or in the future. Default by Contractor occurs if:
- 6.1.1 Contractor fails to perform any of its duties under this Agreement;
  - 6.1.2 Contractor becomes insolvent;
  - 6.1.3 All or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
  - 6.1.4 A receiver or trustee is appointed for Contractor.
- 6.2 If a default occurs, the City Purchasing Agent or Director may, but is not obligated to, deliver a written notice to Contractor describing the default and the termination date. The City Purchasing Agent or Director, at his or her sole option, may extend the termination date to a later date. If the City Purchasing Agent or Director allows Contractor to cure the default and Contractor does so to the City Purchasing Agent's or Director's satisfaction before the termination date, then the termination is ineffective. If Contractor does not cure the default before the termination date, then the City Purchasing Agent or Director may terminate this Agreement on the termination date, at no further obligation of the City.
- 6.3 To effect final termination, the City Purchasing Agent or Director must notify Contractor in writing. After receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

## **7.0 TERMINATION FOR CAUSE BY CONTRACTOR**

- 7.1 Contractor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Contractor wishes to terminate the Agreement, then Contractor must deliver a written notice to the Director describing the default and the proposed termination date.
- 7.2 The date must be at least 30 days after the Director receives notice. Contractor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date, then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Contractor may terminate its performance under this Agreement on the termination date.

## **8.0 REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS**

- 8.1 Upon expiration, or termination of this Agreement, Contractor is permitted ten (10) days within which to remove contractor-owned material and equipment from the City's premises. The City shall make such material and equipment readily available to Contractor. The time

period may be extended upon approval by the Director. The City reserves the right to deny any extension of time.

## **V. MISCELLANEOUS**

### **1.0 INDEPENDENT CONTRACTOR**

- 1.1 Contractor shall perform its obligations under this Agreement as an independent Contractor and not as an employee of the City.

### **2.0 FORCE MAJEURE**

- 2.1 Timely performance by both parties is essential to this Agreement. However, neither party is liable for delays or other failures to perform its obligations under this Agreement to the extent the delay or failure is caused by Force Majeure. Force Majeure means fires, floods, explosions, and other acts of God, war, terrorist acts, riots, court orders, and the acts of superior governmental or military authority.
- 2.2 This relief is not applicable unless the affected party does the following:
  - 2.2.1 uses due diligence to remove the Force Majeure as quickly as possible, and
  - 2.2.2 provides the other party with prompt written notice of the cause and its anticipated effect.
- 2.3 The City may perform contract functions itself or contract them out during periods of Force Majeure. Such performance does not constitute a default or breach of this Agreement by the City.
- 2.4 If the Force Majeure continues for more than 30 days, the City Purchasing Agent or Director may terminate this Agreement by giving 30 days written notice to Contractor. This termination is not a default or breach of this Agreement. CONTRACTOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE TERMINATION EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT AT THE TIME OF THE TERMINATION.

### **3.0 SEVERABILITY**

- 3.1 If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

### **4.0 ENTIRE AGREEMENT**

- 4.1 This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind exist between the Parties regarding this Agreement.

### **5.0 WRITTEN AMENDMENT**

- 5.1 Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance duly adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

## **6.0 APPLICABLE LAWS**

- 6.1 This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.
- 6.2 Venue for any litigation relating to this Agreement is Harris County, Texas.

## **7.0 NOTICES**

- 7.1 All notices to either party to the Agreement must be in writing and must be delivered by hand, facsimile, United States registered or certified mail, return receipt requested, United States Express Mail, Federal Express, Airborne Express, UPS or any other national overnight express delivery service. The notice must be addressed to the party to whom the notice is given at its address set out in Section I of this Agreement or other address the receiving party has designated previously by proper notice to the sending party. Postage or delivery charges must be paid by the party giving the notice.

## **8.0 NON-WAIVER**

- 8.1 If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.
- 8.2 An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

## **9.0 INSPECTIONS AND AUDITS**

- 9.1 City representatives may perform, or have performed, (1) audits of Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. Contractor shall keep its books and records available for this purpose for at least 4 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

## **10.0 ENFORCEMENT**

- 10.1 The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

## **11.0 AMBIGUITIES**

- 11.1 If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

## **12.0 SURVIVAL**

12.1 Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

## **13.0 PARTIES IN INTEREST**

13.1 This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

## **14.0 SUCCESSORS AND ASSIGNS**

14.1 This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

## **15.0 BUSINESS STRUCTURE AND ASSIGNMENTS**

15.1 Contractor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the City Purchasing Agent's or Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest under Section 9.406(c) of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.

15.2 Contractor shall not delegate any portion of its performance under this Agreement without the City Purchasing Agent's or Director's prior written consent.

## **16.0 REMEDIES CUMULATIVE**

16.1 Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

## **17.0 CONTRACTOR DEBT**

17.1 If Contractor, at any time during the term of this Agreement, incurs a debt, as the word is defined in Section 15-122 of the Houston City Code of Ordinances, it shall immediately notify the City Controller in writing. If the City Controller becomes aware that Contractor has incurred a debt, she shall immediately notify Contractor in writing. If Contractor does not pay the debt within 30 days of either such notification, the City Controller may deduct funds in an amount equal to the debt from any payments owed to Contractor under this Agreement, and Contractor waives any recourse therefore.

## **EXHIBIT A [DEFINITIONS]**

As used in this Agreement, the following terms have the meanings set out below:

"Agreement" means this contract between the Parties, including all exhibits, change orders, and any written amendments authorized by City Council and Contractor.

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"City Purchasing Agent" is defined as the person or duly authorized successor, authorized in writing to act for the City. The term includes, except as otherwise provided in this Contract, the authorized representative of the City Purchasing Agent acting within the limits of delegated authority.

"Contract Award Notice" means the official notification substantiated by the Notice to Proceed issued by the City Purchasing Agent to the Contractor.

"Contract Charges" means charges that accrue during a given month as defined in Article III.

"Contract Term" is defined in Article IV.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Countersignature Date" means the date this agreement is countersigned by the City Controller.

Contract Technical Representative (CTR) – generally responsible for the verification of services invoiced, maintenance of record of available funds, compliance with terms of the contract and review of contract at time of renewal. The CTR acts as the contact person for day to day contract administration.

User Department Representative (UDR) – generally responsible for administering day to day activities of specific contracts, maintaining a record and ensuring availability of funds, ensuring warranty requirements of contracts are protected and adhered by contractor.

Contracting Officer Representative (COR) – is authorized to start and request termination of the contract, approves payment of invoices, and provides guidance to CTR and/or UDR.

"Director" mean the Directors/Chiefs of each of the Departments or the City Purchasing Agent for the City, or the person he or she designates.

"Effective Date" is defined as date contract is countersigned by the City Controller.

"Governing Body" means the Mayor and City Council of the City of Houston.

"Hazardous Materials" is defined in Article II (Environmental Laws).

"Notice to Proceed" means a written communication from the City Purchasing Agent to Contractor instructing Contractor to begin performance.

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

RTO – is defined as Centerpoint Energy Real Time Operator

NFPA - is defined as National Fire Protection Association

City Representative – an employee with responsibility and authority to administer contract (Contract Technical Representative, User Department Representative or Contracting Officer Representative)

**EXHIBIT B  
SCOPE OF SERVICES**

(To be inserted by the City at the time of contract execution)

**EXHIBIT C**  
**[EQUAL EMPLOYMENT OPPORTUNITY]**

1. The contractor, subcontractor, vendor, supplier, or lessee will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The contractor, subcontractor, vendor, supplier, or lessee will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The contractor, subcontractor, vendor, supplier or lessee agrees to post in conspicuous places available to employees, and applicants for employment, notices to be provided by the City setting forth the provisions of this Equal Employment Opportunity Clause.

2. The contractor, subcontractor, vendor, supplier, or lessee states that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin or age.

3. The contractor, subcontractor, vendor, supplier, or lessee will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the said labor union or worker's representative of the contractor's and subcontractor's commitments under Section 202 of Executive Order No. 11246, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor, subcontractor, vendor, supplier, or lessee will comply with all provisions of Executive Order No. 11246 and the rules, regulations, and relevant orders of the Secretary of Labor or other Federal Agency responsible for enforcement of the equal employment opportunity and affirmative action provisions applicable and will likewise furnish all information and reports required by the Mayor and/or Contractor Compliance Officer(s) for purposes of investigation to ascertain and effect compliance with this program.

5. The contractor, subcontractor, vendor, supplier, or lessee will furnish all information and reports required by Executive Order No. 11246, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to all books, records, and accounts by the appropriate City and Federal Officials for purposes of investigations to ascertain compliance with such rules, regulations, and orders. Compliance reports filed at such times as directed shall contain information as to the employment practice policies, program, and work force statistics of the contractor, subcontractor, vendor, supplier, or lessee.

6. In the event of the contractor's, subcontractor's, vendor's, supplier's, or lessee's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor, subcontractor, vendor, supplier, or lessee may be declared ineligible for further City contracts in accordance with procedures provided in Executive Order No. 11246, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as may otherwise be provided by law.

7. The contractor shall include the provisions of paragraphs 1-8 of this Equal Employment Opportunity Clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

8. The contractor shall file and shall cause his or her subcontractors, if any, to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor. Compliance reports filed at such times as directed shall contain information as to the practices, policies, programs, and employment policies and employment statistics of the contractor and each subcontractor.

**EXHIBIT D**  
**[M/WBE SUBCONTRACT TERMS]**

(To be inserted by the City at the time of contract execution)

**EXHIBIT E**  
**[DRUG POLICY COMPLIANCE AGREEMENT]**

(To be inserted by the City at the time of contract execution)

**EXHIBIT F  
[CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS  
IN PERFORMANCE OF A CITY CONTRACT]**

I, \_\_\_\_\_  
**(Name - Print/Type)** **(Title)**

as an owner or officer of \_\_\_\_\_ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Contractor agrees and covenants that it shall immediately notify the City's Director of Personnel if any safety impact positions are established to provide services in performing this City Contract.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

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**CONTRACTOR'S CERTIFICATION OF NON-APPLICATION OF  
CITY OF HOUSTON DRUG DETECTION AND DETERRENCE PROCEDURES  
FOR CONTRACTORS**

I, \_\_\_\_\_  
**(Name - Print/Type)**

as an owner or officer of \_\_\_\_\_ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has fewer than fifteen (15) employees during any 20-week period during a calendar year and also certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Safety impact position means a Contractor's employment position involving job duties that if performed with inattentiveness, errors in judgment, or diminished coordination, dexterity, or composure may result in mistakes that could present a real and/or imminent threat to the personal health or safety of the employee, co-workers, and/or the public.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**EXHIBIT G**  
**[DRUG POLICY COMPLIANCE DECLARATION]**

(To be inserted by the City at the time of contract execution)

**EXHIBIT H  
[FEES AND COSTS]**

(To be inserted by the City at the time of contract execution)

**EXHIBIT I  
[PAY OR PLAY]**

(To be inserted by the City at the time of contract execution)