GENERAL TERMS & CONDITIONS

THE STATE OF TEXAS

COUNTY OF HARRIS

BID NO. S10-L23978
ORDINANCE NO. 2012-0305
CONTRACT NO. 4600011191

I. PARTIES

1.0 ADDRESS

THIS AGREEMENT for **LOW VOLTAGE ELECTRIC REPAIR MOTOR SERVICES** ("Agreement") is made on the Countersignature Date between the **CITY OF HOUSTON, TEXAS** ("City"), a municipal corporation and Houma Armature Works Houston, LLC ("Contractor or Vendor"), a Texas Home-Rule City 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 Public Works & Engineering Department
City of Houston
P.O. Box 1562
Houston, Texas 77251

Contractor

Houma Armature Works Houston, LLC
8100 FM-2234
Houston, Texas 77053
Phone: 713.748.0702
Fax: 713.749.9620

The Parties agree as follows:

2.0 TABLE OF CONTENTS

2.1 This Agreement consists of the following sections:

TABLE OF CONTENTS

Page No.

I. PARTIES 1

1.0 ADDRESS 1
2.0 TABLE OF CONTENTS 1
3.0 PARTS INCORPORATED 3
4.0 CONTROLLING PARTS 3
5.0 DEFINITIONS 3
6.0 SIGNATURES 4

II. DUTIES OF CONTRACTOR 5

1.0 SCOPE OF SERVICES 5
2.0 RELEASE 5
3.0 INDEMNIFICATION 5
4.0 INDEMNIFICATION PROCEDURES 6
5.0 INSURANCE 6
6.0 WARRANTIES 7
7.0 LICENSES AND PERMITS 7
8.0 COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE 7
9.0 MWBE COMPLIANCE 7
10.0 DRUG ABUSE DETECTION AND DETERRENCE 8
11.0 ENVIRONMENTAL LAWS 8
12.0 CITY'S CONTRACTOR PAY OR PLAY PROGRAM 9
13.0 CONTRACTOR'S PERFORMANCE 9
14.0 PAYMENT OF EMPLOYEES AND SUBCONTRACTORS 9

III. DUTIES OF CITY 9

1.0 PAYMENT TERMS 9
2.0 TAXES 10
3.0 METHOD OF PAYMENT 10
4.0 METHOD OF PAYMENT - DISPUTED PAYMENTS 10
5.0 LIMIT OF APPROPRIATION: 10
6.0 CHANGES 11

IV. TERM AND TERMINATION 12

1.0 CONTRACT TERM 12
2.0 NOTICE TO PROCEED 12
3.0 RENEWALS 12
4.0 TIME EXTENSIONS 12
5.0 TERMINATION FOR CONVENIENCE BY THE CITY 13
6.0 TERMINATION FOR CAUSE BY CITY 13
7.0 TERMINATION FOR CAUSE BY CONTRACTOR 13
8.0 REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS 13

V. MISCELLANEOUS 14

1.0 INDEPENDENT CONTRACTOR 14
2.0 FORCE MAJEURE 14
3.0 SEVERABILITY 14
4.0 ENTIRE AGREEMENT 14
5.0 WRITTEN AMENDMENT 14
6.0 APPLICABLE LAWS 15
7.0 NOTICES 15

8.0 NON-WAIVER 15
9.0 INSPECTIONS AND AUDITS 15
10.0 ENFORCEMENT 15
11.0 AMBIGUITIES 15
12.0 SURVIVAL 16
13.0 PARTIES IN INTEREST 16
14.0 SUCCESSORS AND ASSIGNS 16
15.0 BUSINESS STRUCTURE AND ASSIGNMENTS 16
16.0 REMEDIES CUMULATIVE 16
17.0 CONTRACTOR DEBT 16

EXHIBITS

A. DEFINITIONS
B. SCOPE OF SERVICES
B-1 TEARDOWN AND RECOMMENDED REPAIR REPORT
B-2 U.L. CERTIFICATION FORM
B-3 EQUIPMENT RELEASE AUTHORIZATION FORM
B-4 RECOMMENDED REPAIR ESTIMATE FORM
B-5 SHOP ACCEPTANCE TESTS FORM
B-6 TIME SHEET REPORT FORM
B-7 PROGRESS AND STATUS REPORT FORM
B-8 INVOICE CHECKLIST REPORT FORM
B-9 FITS AND INDICATED RUNOUT FORM—HORIZONTAL ROTOR
B-10 FITS AND INDICATED RUNOUT FORM—VERTICAL ROTOR
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. CITY'S CONTRACTORS PAY OR PLAY PROGRAM
I. FEES AND COSTS

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:

Houma Armature Works Houston LLC

By: Mark Welch
Name: Mark Welch
Title: President
Federal Tax ID Number: 02-0723728

ATTEST/SEAL:

City Secretary

CITY OF HOUSTON, TEXAS
Signed by:

Mayor

APPROVED:

City Purchasing Agent

COUNTERSIGNED BY:

City Controller

DATE COUNTERSIGNED:

4-19-12

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.

4-4-12
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" and Exhibits "B-1" through "B-10."

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 on their face, or 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.

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 **6%** 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 City's Office of Business Opportunity ("OBO"), 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 Contractors 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 "I" 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 $245,000.00 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 90 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.

"Contract Technical Representative" (CTR) shall mean the representative of the Director of the City's Public Works Department who shall verify service, invoices, maintain a record of available funds, and ensure compliance with the terms of the contract. The CTR shall mean to review the contract, coordinate renewal, and manage and ensure that they administer the day-to-day activities of the contract.

"User Department Representative" (UDR) shall mean the City representative of the Director of the Department assigned to administer the day-to-day activities of the contract.

"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.

"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.

"EI Tag" shall mean a metallic strip, embossed with the Equipment Inventory (EI) number, and attached to each piece of equipment.

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

"Equipment Inventory (EI) Number" shall mean the unique, cradle-to-grave number called Equipment Inventory (EI) number used by MMS to identify each piece of equipment.

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

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

"Maintenance Management System (MMS)" shall mean Wastewater Operations Division's Computerized Maintenance Management System (MMS) or other division's maintenance system which provides a database to manage work order processes, and who maintains historical data about performance and repair of equipment.

"NON-REPAIRABLE SHOP COST" shall mean the cost amount that the Contractor can bill the City for the teardown, inspection, testing, and work scope/estimate preparation when the UDR determines that the motor is not to be repaired (Non-Repairable).

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

"OEM" shall mean Original Equipment Manufacturer.

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

"ADDITIONAL SERVICES" shall mean other services to repair systems associated with the motor (not otherwise described in this specification), and bringing the equipment to the working conditions agreeable to the Director and Contractor.

"RECONDITION AND REPAIR (RECONDITION-REPAIR)" shall mean that the Contractor, upon receipt of the unit, shall inspect and clean all components, wash, dry, varnish, and bake stator, and to clean excess varnish from stator fits. Contractor shall bring all motor clearances to OEM standards, dynamically balance rotating parts assembly, re-assemble, perform all tests, and check vibration at full-rated voltage and frequency, and then paint.

"REWIND AND REPAIR (REWIND-REPAIR)" shall mean that the contractor, upon receipt of the unit, shall inspect and clean all components, burn stator, strip, and take data. Contractor shall core-test stator, rewind, connect, test, varnish dip/VPI stator, and clean resin from stator fits. Contractor shall bring all motor clearances to OEM standards, dynamically balance rotating parts assembly, re-assemble, perform all tests, and check vibration at full-rated voltage and frequency, and then paint.

"CITY OF HOUSTON NORMAL BUSINESS HOUR" shall mean 8:00 a.m. to 5:00 p.m., Monday to Friday, except on days which are considered City holidays.

"CONTRACTOR'S STANDARD BUSINESS HOURS" shall mean the daily eight (8) hour period (Monday through Friday) which the Contractor has established as their normal business day.

"STANDARD LABOR RATE (SLR)" shall mean the Contractor's charge for labor during Contractor's standard business hours.

"OVERTIME LABOR RATE (OLR)" shall mean the Contractor's charge for labor for work performed after Contractor's standard business hours.

"EMERGENCY LABOR RATE (ELR)" shall mean the Contractor's charge for labor for unscheduled work and immediate repair of equipment, and shall be carried out continuously until the repair is completed.

"NON-DESTRUCTIVE TESTING (NDT)" shall mean inspection to detect cracks and discontinuities by Magnetic Particle Methods, Penetrant Methods or any other Methods as needed, and shall be performed by an NDT Level-III Certified Technician. The Certification shall be in accordance to the latest "Recommended Practices of the American Society for Non-Destructive Testing."

"OTHER REPAIR METHODS" shall mean any method of repair other than those prescribed in the "Fee Schedule." These "Other Repair Methods" shall be authorized in writing by the equipment manufacturer, and be approved by the Director.

"CONTRACTOR'S FACILITY" shall mean place of business of the Contractor where the Contractor performs repairs of equipment and machinery for other entities, specifically where the Contractor plans to repair City of Houston motors--of the model and size described in these specifications. The facility shall be equipped with the needed overhead/jib crane(s), lathe(s), drill(s), ovens, pressure-washing machine, meggers, coil testers, balancing machine, paint booth, hydraulic press(es), and testing equipment to perform the necessary repair/replacement work for the largest motor within the group(s). The facility shall be clean, free from dirt and dust, necessary to prevent contamination and damage during assembly of the motors and installation of bearings and gears.

"ELECTRIC MOTORS GROUPS" -- The electric motors for the purpose of this contract are grouped such as to represent the operating voltage and the size of the units:

Group-I of Electric Motors
Fractional Hp to < or = 10 HP
120 Volts, 1-phase; 230 Volts, 1-phase
230 Volts, 3-phase; 460 Volts, 3-phase

Group-II of Electric Motors
>10HPand <or=100HP
230 Volts, 3-phase; 460 Volts, 3-phase

Group-III of Electric Motors
> 100 HP and < or = 500 HP
3-phase; 460 Volts, 3-phase

EXHIBIT B
SCOPE OF SERVICES

1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES

1.1 The Contractor shall furnish all supervision, labor, parts, tools, materials, equipment, supplies, and facilities necessary to provide precision repair services for vertical, horizontal squirrel-cage induction, wound-rotor induction, AC, DC or synchronous motors for the Public Works and Engineering Department of the City of Houston. The City will monitor all repair or replacement of motors on a daily basis.

1.2 The rated voltages of the units are single-phase (low voltage) 120, 230, and three-phase 230, 460 volts alternating current (AC) with sizes from fractional horsepower (HP) to 500 HP. They are grouped as Group-I, Group-II, and Group-III to indicate the size of the units—(per the Bid Form).

1.3 This specification shall cover the general requirements for the reconditioning, rewinding, repairing, replacing and testing of the motors. This includes, but is not limited to, assembled motors, stator coils, stator iron, bearings, and general mechanical work. These specifications defines minimum acceptable requirements for motor repair, replacement, and required documentation.

1.4 Unless otherwise specified, fabrications, processes, parameters, and test methods shall conform to the latest revision of the following *Electrical Apparatus Service Association (EASA)* documents:

1.4.1 EASA AR100-2010: Recommended Practice for Repair of Rotating Apparatus (hereafter abbreviated as EASA AR100-2010);
1.4.2 EASA Technical Note No. 16: Guidelines for Maintaining Motor Efficiency During Rebuilding, September 1999 (hereafter abbreviated as EASA Tech Note No. 16);
1.4.3 EASA Technical Note No. 17: Stator Core Testing, updated March 1997 (hereafter abbreviated as EASA Tech Note No. 17);
1.4.4 EASA Technical Note No. 23: Testing of Squirrel Cage Rotors, updated October 2003;
1.4.5 EASA Bearing Fit Tolerance Chart, updated 1997;
1.4.6 ASTM E-1934-99a: 2005e1--Standard Guide for Examining Electrical and Mechanical Equipment with Infrared Thermography (herein abbreviated as ASTM E-1934); and
1.4.7 All test equipment required for test results shall be calibrated at least annually against standards traceable to the National Institute of Standards and Technology (NIST), or equivalent standards laboratories (EASA AR100-2010 Section 4). The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product--to specified requirements.

1.5 The Contractor shall furnish copies of current environmental permits and demonstrate compliance with current environmental regulations per the Contract Technical Representative (CTR) request.

1.6 The Contractor facility shall be subject to site inspection before award to verify that the equipment deemed necessary is present.

1.7 Subcontractors to the Contractor for the performance of work are subject to the same standards as the Contractor.

1.8 The electric motors at City facilities are purchased and installed under the City's Master Specifications, Section 15170, Low Voltage Motors, GHWP, dated 3/4/96 or latest edition, and requires compliance with the applicable sections of the following standards and codes:

1.8.1 American National Standard Institute (ANSI);
1.8.2 Anti-Friction Bearing Manufacturing Association (AFBMA);
1.8.3 Institute of Electrical and Electronic Engineers (IEEE);
1.8.4 Forty-three Recommended Practices for Testing Insulation Resistance of Rotating Machinery;
1.8.5 National Electrical Code (NEC);
1.8.6 National Electrical Manufacturers Association (NEMA); and
1.8.7 MG 1: Motors and Generators.

1.9 In addition, the following codes and standards shall apply to these repairs:

1.9.1 Steel Structures Painting Council (SSPC);
1.9.2 City of Houston Electrical Code;
1.9.3 American Society for Testing and Materials (ASTM); and
1.9.4 American Society for Non-Destructive Testing.

1.10 ALL repairs and services shall be performed to comply with the applicable sections of the above standards and codes.

1.11 At the City facilities, the installed electric motors to be purchased in the future shall be manufactured by, but not limited to, the following companies:

1.11.1 General Electric
1.11.2 Reliance Electric
1.11.3 Siemens
1.11.4 Fairbanks-Morse
1.11.5 Toshiba
1.11.6 U.S. Motors
1.11.7 Westinghouse
1.11.8 Gould
1.11.9 Marathon
1.11.10 Baldor

1.12 The Contractor shall use new and Original Equipment Manufacturer (OEM) parts (or) approved equal in the repair of its electric motors.

1.13 At the 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, or approved equal. The cost of inspection and preparation of the "work scope" shall be a part of the base cost of any Recondition/Repair or Rewind/Repair job.

1.14 If the Contractor plans to use any part other than an OEM-specified part, the Contractor shall obtain written permission from the City's User Department Representative (UDR).

1.15 Where hourly work is performed on behalf of the City, the Contractor (and subcontractors of the Contractor) shall fully document the start of the work, the time spent on the job, and the completion of each job. The documentation shall be by a punch card/time clock, a shop record or any other mutually-agreed method. (See "Exhibit B-6" time sheet.)

1.16 Wherever torque values are known, the Contractor shall use a torque wrench and adhere to the OEM torque values.

1.17 If requested by the City's UDR, Contractor shall furnish parts needed for maintenance activities of electric motors by City personnel. Contractor shall charge the same price for these parts as scheduled in the contract Fee Schedule. (See "Exhibit I.")

1.18 The paint booth shall not be used for sandblasting.

1.19 Upon receipt of the electric motors, the Contractor shall document all information about the condition of the units, to include photographs.

1.20 In the case of dual horsepower units, charges shall be based only on the higher horsepower rating--never on both.

1.21 Before disassembly, nameplate data shall be verified. All missing or damaged parts shall be identified in writing, recorded, and special items (conduit box, location, brakes, gears, etc.) shall be noted on the inspection form.

1.22 The Contractor shall advise the City's UDR/CTR of the name(s) and location(s) of shop(s) that will be used for subcontracted work, and shall obtain written approval from the City's UDR/CTR before subcontracting the work

1.23 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced, as needed.

1.24 Terminal boxes and auxiliary equipment enclosures shall be made to meet OEM's specifications.

1.25 The City's UDR and the Contractor's manager shall meet once a month to review the records of the completed work, works in progress, and any other matter related to this contract. Any discrepancies shall be resolved at that time, and all backlogs shall be completed by the 10th of the following month ("Exhibit B-7").

1.26 Contractor shall install a stainless steel or aluminum identification tag stamped with the Contractor's name, job number, and repair date on each motor housing. The tag shall be secured with stainless drive pins. The cost of the identification tag shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repairs work.

1.27 All motors with peeling paint or rust shall be sandblasted. The cost of sandblasting shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repair work.

1.28 Assembled motor units shall be tested for vibration. The vibration level shall not exceed 0.1" per second, unfiltered. The vibration measurements shall be recorded on the "Final Test Sheet." All costs associated with the test shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repair work.

1.29 The enclosed City of Houston forms included within this contract shall be used on each Recondition/Repair or Rewind/Repair work, and new motor purchases.

1.30 Steam-cleaned area(s) shall be so designed with all the run-offs captured into an approved oil/grease recovery system.

1.31 Delivery tickets and packing slips will contain quantity, part number, description of commodity delivered, name of Department or Section, and facility name to which the merchandise was delivered, the City's ordinance number, contract number, signature of receiving employee, printed name, employee number, and the authorization release number.

1.32 The repair shop must be able to verify all hours charged for machine work. This will apply to work done by the Contractor and its subcontractors. In-house work will be supported with copies of timecards, and this verification shall be submitted with the invoice.

1.33 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.

1.34 The Contractor shall be responsible for storing electric motors units and all its parts. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at the Contractor's expense.

1.35 The price of parts supplied for this contract is the total cost of the item to the Contractor, supported by documentation.

1.36 The Contractor shall provide to the City a full set of completed test and data sheets, to include the "Electrical, Machinist and Mechanical Report" and "Winding Data Report," upon completion of work. The Contractor shall establish and maintain records for at least three (3) years that the product has passed inspection and/or test with defined acceptance criteria (EASA AR100-2010 1.3.2).

1.37 All inspection, cleaning, balancing, disassembly, reassembly, winding, dipping, baking, blasting, painting, testing, and documentation shall be included as part of the base rewind/reconditioning cost.

2.0 EXPLOSION-PROOF UNITS (MOTOR SUITABLE FOR NEC CLASS I, DIVISION I, GROUP D)

2.1 Repair of Underwriters Laboratory (UL) approved explosion-proof motor.

2.1.1 The repair shall be performed in a UL-approved shop by skilled motor mechanics that are familiar with repair practices typical to explosion-proof motors.

2.1.2 Only OEM parts shall be allowed in the repair of UL-approved units, except for bearings. **(There shall be no other exceptions.)**

2.1.3 Shafts, flanges, end bells, flame paths and/or other applicable parts as approved by the UDR shall be reworked for repair of UL-approved units.

2.1.4 Any casted component of the motor unit that is damaged shall be replaced.

2.1.5 The repaired unit shall be recertified by an UL inspector.

2.1.6 The shop shall provide the City with a copy of the re-certification document. The certificate shall bear the UL file number.

2.1.7 All UL motors will be recertified by the Contractor and the City of Houston. A UL-recertification sheet shall be completed and become part of the invoice package

3.0 ELECTRIC MOTOR INSPECTION, REPAIR, AND REPLACEMENT

3.1 The Contractor shall inspect, repair, and/or troubleshoot assemblies and subassemblies of the electric motors in lieu of replacement, unless the repair cost of the electric motors exceeds seventy (70) percent of the cost for replacing it with a new item. Generally the seventy (70) percent rule applies, but the City reserves the right to purchase or repair units based on motor economic evaluation and various operational considerations.

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

3.3 Replacement motor shall be a "NEMA Premium Motor" type, unless otherwise authorized by the CTR in writing.

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

3.5 The price of the parts and material and cost of the replacement unit supplied by the Contractor shall be the original invoice cost to the Contractor, plus percent markup or percent discount per item. All original documentation shall be provided upon the submittal of the invoice to the City.

3.6 All motors that are deemed non-repairable shall be picked up by the City.

3.7 These non-repairable motors shall not be reassembled.

3.8 The City of Houston reserves the right to pick up any parts that are to be replaced.

3.9 Cleaning and Reconditioning–General

3.9.1 Repair shall consist of cleaning, analyzing, repairing and/or replacing parts, if needed, and final inspection and testing. Anti-friction bearings shall be replaced by per-motor manufacturer's specifications, or approved equivalent. Sleeve bearings shall be inspected and rebabbitted or replaced, per the City's UDR's instructions.

3.9.2 Motor Exterior Cleaning

3.9.2.1 Motor exteriors shall be cleaned by sandblasting or by steam cleaning. Motors that have peeling paint or rust scale shall be sandblasted. During sandblasting, nameplate and other identification plates shall be protected. The bearing housing shall have all openings tightly sealed against the entrance of sand.

3.9.3 Metal Parts Cleaning

3.9.3.1 All metal parts, including laminations shall be cleaned by sandblasting, steam cleaning, or solvent. If Oakite or similar treatment is used, it shall be removed immediately after cleaning is completed. Remove plastic fan before sandblasting. Protect all machined fits against damage by blasting. (It is preferable that the shaft not be blasted.) Contractor shall fully protect the end portions of the shaft, including the bearing journal, oil seal, labyrinth seal, and coupling fit areas.

3.9.4 Insulation Cleaning

3.9.4.1 Motor insulation shall be washed with hot soapy water 200 degrees Fahrenheit at 30 PSI, and then with fresh water. After cleaning, unit must be baked between 250 and 275 degrees Fahrenheit until an acceptable insulation level is obtained.

3.9.4.2 Repair shall consist of cleaning, analyzing, repairing and/or replacing parts, if needed, and final inspection and testing. Anti-friction bearings shall be replaced by per-motor manufacturer's specifications, or approved equivalent. Sleeve bearings shall be inspected and rebabbitted or replaced, per the City's UDR's instructions.

3.9.5 Complete Rebuilding

3.9.5.1 Repair shall consist of stripping, cleaning, rewinding, insulating, repairing and/or replacing damaged parts, final inspection and testing, and anti-friction bearings shall be replaced, per manufacture's specifications (or) approved equivalent. Sleeve bearings shall be inspected and rebabbitted (or) replaced, per the City's UDR's instructions.

4.0 SPECIFIC TASKS

4.1 The City's UDR shall deliver (or pick up) electric motors units from the Contractor's facility. Contractor shall furnish the hoist, crane, etc., for loading and unloading of the unit.

4.2 Before disassembly, the Contractor shall inspect the unit and document the damaged and missing parts. A digital photograph of each motor as received shall be made part of the repair record.

4.3 The Contractor shall chemically and mechanically clean all external surfaces, as required.

4.4 The Contractor shall perform electrical tests, with measurements recorded, "as found" in the Electrical Report, to include:

4.4.1 Insulation resistance to ground, in megohms, windings, and accessories; and
4.4.2 Surge-comparison of winding.

4.5 The Contractor shall measure insulation resistance to the ground of windings and accessories with a 500 volts megohmmeter (EASA AR100-2010 4.2.2).

4.6 In the event that insulation resistance of the windings is below the recommended minimum value, the motor shall be disassembled, and the windings shall be cleaned and dried before surge-comparison testing.

4.7 The Contractor shall disassemble electric motors and clean all internal parts.

4.8 The Contractor shall inspect all components of the electric motors and all critical areas to determine if clearances are within OEM tolerances, and that the parts meet manufacturer's specifications. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in EASA AR100-2010, to assure its conformance.

4.9 The Contractor shall inspect the motors and its shaft for corrosion, erosion, chipping, and other damages, and shall record this observation on the Electrical Report and/or Mechanical and Machinist Report.

4.10 The Contractor shall inspect the rotor shaft for roundness/run-out and determine if it is within OEM tolerance. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in EASA AR100-2010, to assure its conformance.

4.11 The Contractor shall inspect the shaft extensions and keyseats (keyways). Shaft extensions must be smooth, polished, and concentric with shaft center. Shaft extension dimension shall be checked. Permissible diameter tolerances are given in EASA AR100-2010 (Tables 2-1 and 2-2). Permissible shaft run-out tolerances are stated in EASA AR100-2010 (Tables 2-3 and 2-4). Permissible shaft extension keyseat (keyway) width tolerances are stated in EASA AR100-2010 (Tables 2-5 and 2-6).

4.12 Contractor shall inspect each bolt for damaged threads.

4.13 *Repairs shall include sandblasting, welding and machining, as required. Other services* required by Contractor shall include Non-Destructive Testing (NDT), and chroming and metalizing, when required.

4.14 The core iron, if needed, may be grit-blasted with glass beads, walnut shells, corncobs, or similar materials. It shall not be blasted with silica, garnet, or other grits, which may cause shorts between laminations (EASA Tech Note 16).

4.15 Contractor shall determine which parts are to be machined or replaced with new parts. As a minimum, the Contractor shall replace all bearings and seals when the original unit was furnished with such items.

4.16 Within five (5) working days, the Contractor shall prepare and submit to the City's UDR a scope of the repair work to be carried out on the unit, which shall include a detailed good faith cost estimate. This cost estimate shall include: a) a brief description of the work to be performed; b) cost for new replacement OEM parts; c) estimated additional labor hours required for the repair of the unit not covered under the Base Cost; d) the estimated delivery time for parts; and e) expected completion date of the work.

4.17 The City's UDR shall inspect the tear-down unit, and a detailed disassembly and inspection (D & I) Report (Attachment A) shall be issued prior the signing of the Contractor's proposed work scope and cost estimate.

4.18 Upon written acceptance of the cost estimate by the City's UDR, Contractor shall proceed with repairs. The Contractor shall commence to work on the unit and complete the repair within the allocated time for delivery of such item:

4.18.1 Motors 100 HP and smaller: 4 weeks
4.18.2 Motors larger than 100 HP: 6 weeks

4.19 The Contractor shall immediately notify the City's UDR, if the Contractor cannot complete the job within the contractually agreed time period listed in Article 4.18. The Contractor shall submit a detailed explanation to the City's UDR for the delay, and submit a new schedule for job completion.

4.20 At all times during the repair process, Contractor shall maintain City's equipment in a clean and weather-protected storage area.

4.21 The rotor assembly shall be checked for total "indicated run-out," and be recorded on the rotor information sheet. This test shall be carried out in V-Blocks.

4.22 Shaft seal surface, bearing journals, and coupling fit shall be micrometer-checked and recorded on the rotor information sheet.

4.23 End bells and bearing (housing critical dimensions) shall be micrometer-checked and recorded on the mechanical inspection sheet.

4.24 The above measurements shall be submitted to the City's UDR, along with the electrical and mechanical data sheets during the teardown inspection.

4.25 Replacement bearings shall have an L10 rating life in accordance with ANSI/AFBMA of at least 40,000 hours. If the L10 rating life of the existing bearing is larger than 40,000 hours, the Contractor shall replace the bearing with the same L10 rating life bearing, as the existing one.

4.26 The Contractor shall ensure the quality of varnish in the Dip Tank and the VPI system by sampling and testing the varnish every three (3) months. The Contractor shall have the varnish quality reports available for review by the City Inspection Team and the City's UDR.

4.27 After parts have been repaired, Contractor shall put together the rotating assembly and then balance it. The Contractor shall reassemble the electric motors, test, seal, and paint, as required.

4.28 Surface of all RECONDITION/REPAIR and REWIND/REPAIR units shall be prepared for painting (to white metal finish) by blast-cleaning them to SSPC-SP5.

4.29 Surface of all RECONDITION/REPAIR and REWIND/REPAIR units shall be primed and finished in an approved paint booth, using the motor manufacturer's standard epoxy painting system:

4.29.1 The minimum prime coat thickness shall be 3 mils (DFT), and a dry film thickness (DFT).
4.29.2 The minimum finish coat thickness shall be 6 mils (DFT), and a dry film thickness (DFT).

4.30 If manufacturer's information is not available, the following industrial coating specification for surface of motors and equipment shall be followed:

4.30.1 The primer and finish coats shall be two-component, rust-inhibitive, polyamide-cured epoxy coating with a recoatable finish;
4.30.2 The prime coat shall be Ameron 38P, Tnemec 69, or equal; and
4.30.3 The finish coat shall be Ameron 38S, Tnemec 69, or equal.

4.31 Changes to paint specifications of Articles 4.28 to 4.30 shall be approved by the City's UDR.

4.32 The City's UDR/CTR shall specify the paint color.

4.33 All electrical work for RECONDITION/REPAIR and REWIND/REPAIR of the units shall be in accordance with Article 3.0 (ELECTRIC MOTOR INSPECTION, REPAIR, AND REPLACEMENT), unless otherwise specified in these specifications.

4.34 Contractor shall provide all equipment, tools, materials, parts and labor required to repair vertical and horizontal induction or synchronous motors, ranging from 100 to 2750 in horsepower size.

4.35 The enclosed rotor shaft run out/shaft diameter sheet shall be used in this contract.

5.0 ELECTRIC MOTOR INSPECTION AND REPAIR

5.1 Electric Motor Inspection and Repair—General:

5.1.1 The Contractor shall provide a detailed "Disassembly and Inspection Report Sheet" showing the condition of the motor upon receipt, the repair work done, and the final test results.

5.1.2 During disassembly, the electric motor shall be visually inspected to determine cause of failure, including electrical and/or mechanical failure.

5.1.3 Stator winding phase-to-ground insulation shall be checked with a 500 volt megger and the results noted on the inspection form.

5.1.4 Stator winding shall be checked for shorts using surge-comparison tests and all values to be recorded.

5.1.5 The rotor assembly shall be inspected for wear, scoring, cracks, and that the check for open rotor bars shall be performed with a growler and magnetic paper. The rotor assembly shall be inspected.

5.1.6 All stators that are to be rewound shall be tested **after** "burnout and removal" of the winding with a core-loss tester, and a printout of the test shall be submitted to the City's UDR.

5.1.7 Shaft seal surface, bearing journals, and coupling fit shall be checked with a micrometer, and shall be recorded on the rotor information sheet.

5.1.8 The insulating material in the rewinding of the unit shall have a "Class F" rating, or better.

5.2 Electric Motor Inspection and Repair–RECONDITION/REPAIR.

5.2.1 Motors which have been designated for winding reconditioning and have been thoroughly cleaned free from dirt, grit, grease, oil, and properly dried shall be inspected for winding damage, and repairs made to damaged areas.

5.2.2 Motor insulation shall be washed with hot, soapy water of 200 degrees Fahrenheit at 30PSI, and then with fresh water. After cleaning, the unit must be baked between 250 and 275 degrees Fahrenheit until an acceptable insulation level is obtained.

5.2.3 Reconditioned motors shall receive a minimum of two (2) dips, and shall be baked in insulating resin. Stator shall be baked at the insulation resin manufacture's recommended temperature, and with time to assure full curing.

5.2.4 The Base Cost for RECONDITION/REPAIR shall include all cost of supervision, labor, tools, equipment, supplies and parts to complete the work, as specified herein for RECONDITION/REPAIR. This "Base Cost" does not include the cost of any bearings, seals, heaters, or broken parts (which are reimbursable), if authorized by the City's UDR.

5.3 Electric Motor Inspection and Repair—REWIND/REPAIR.

5.3.1 The stator core shall be vertically set in the burnout oven. After burnout and winding removal, the core and frame shall be allowed to cool by a natural convection without forced air, as to avoid overstress or warping. Maximum burnout temperature shall be 650 degrees Fahrenheit to avoid damage to laminations.

5.3.2 Torch heating shall NOT be used for stator cleanup.

5.3.3 The stator core shall be blasted to a bare metal finish. Refer to Article 4.14 of these specifications for the type of grit permitted for blasting.

5.3.4 The core shall be thoroughly cleaned, and the stator core shall be examined for lamination damage, such as fusing or metal loss due to arcs.

5.3.5 Fused laminations shall be separated either by grinding or filing. Bent laminations shall be realigned, and all protrusions into the slot area shall be filed or ground smooth. Stator cores shall not be re-stacked without the City's UDR approval.

5.3.6 Before a new winding is installed in a stator, the winding data shall be verified to assure that an OEM-equal winding is being installed. If the manufacturer's data is not available, the winding data shall be verified to assure it conforms to the relevant EASA data.

5.3.7 Coils shall be formed with the same number of turns as the original winding. Resistance of the rewound stator shall be the same as the original winding.

5.3.8 Coils shall be machine-wound with sufficient wire tension to obtain freedom from crossovers and uniform cross-section coils.

5.3.9 Stator winding extensions shall be shaped to ensure adequate winding clearance on

motor reassemble.

5.3.10 Phase insulation shall be installed between phase coils prior to coil lacing, to minimize phase-to-phase contact. Separators shall be installed between the top and bottom coil in the core slots.

5.3.11 Pre-formed slot wedges shall be used to secure the winding in the stator slot, with shim material as necessary to assure tightness.

5.3.12 After the winding is completed, a check shall be made to ensure the slot insulation overhangs the core slot edges, and that it is not broken or torn at the core slot edges.

5.3.13 All winding and lead connections shall be brazed with a "silver content" rod and insulated with "Class F" insulation, or better.

5.3.14 The winding, connections and leads shall be securely laced to form an integral assembly with adequate physical clearance--to ground.

5.3.15 All leads brought into the connection box shall be numbered and equipped with a compression lug, with a NEMA standard bolt-hole.

5.3.16 The finished stator winding insulation-to-ground shall be checked with a 500 volt megger. The minimum acceptable insulation resistance reading shall be 10 megohms.

5.3.17 The completed stator shall be preheated in a temperature-controlled oven to the varnish of manufacturer's recommendation, not to exceed "Class "F" operating temperature Fahrenheit, and shall be held at that temperature for one (1) hour.

5.3.18 Stator shall be allowed to cool by natural convection to the temperature required by insulation resin manufacturer, prior to being dipped in insulating varnish.

5.3.19 Stator shall be dipped three (3) times in insulating varnish, followed by repeating the processes of Articles 5.3.17 and 5.3.18.

5.3.20 Form-wound rewound stators shall go through VPI.

5.3.21 Baking shall be done in a temperature-controlled and force-ventilated oven to affect a complete and uniform cure, per manufacturer's instructions.

5.3.22 Resin shall be completely removed from the stator frame mechanical fit, outer paint surfaces, and the inner bore of the stator.

5.3.23 The contract base cost for <u>REWIND/REPAIR</u> shall include all cost of supervision, labor, tools, equipment, supplies and parts to complete the work as specified herein for <u>REWIND/REPAIR</u>. This base cost does not include the cost of any bearings, seals, heaters, or broken parts (which are reimbursable), if authorized by the City's UDR.

5.4 <u>Disassembly</u>

5.4.1 Before disassembly, nameplate data shall be verified, missing or damaged parts shall be identified in writing and recorded, and special items (conduit box, location, brakes, gears, etc.) shall be noted on the inspection form. Stator winding phase to ground insulation shall be checked with a 500 volt megger, and the results noted on the inspection form. Stator winding shall be checked for shorts, using a PJ surge comparison test, and all values shall be recorded.

5.4.2 During disassembly, the motor shall be visually inspected to determine cause of failure (including electrical and/or mechanical failure). Cooling coils shall be pressure tested, and the oil standpipe shall be removed in a manner that does not compromise the integrity of, or cause damage to the standpipe--if the motor is so equipped. After the bearing housing has been checked with a micrometer and after necessary repairs have been made, the oil standpipe shall be reinstalled in a leak-free manner.

5.4.3 Upon completion of the motor disassembly and inspection, a repair form, an itemized cost quotation form and a time schedule for the final repair of each motor shall be completed and given to the City's UDR for approval. Upon request, the disassembled parts shall be made available for inspection by one of the designated City's UDR.

5.4.4 After completion of disassembly and inspection and the completion of the "Inspection and Repair Form," the Contractor shall be responsible for storage of motors and all parts. Any parts lost or damaged in the Contractor's shop shall be repaired or replaced by the Contractor, at no cost to the City.

5.4.5 **Dated repair quotes are due within five (5) working days of the date a motor is delivered to the repair shop.** Picture(s) of the motor shall be taken by the Contractor prior to disassembly, which will document the overall condition and any removable parts. Delivery of a motor to the repair shop shall be Contractor authorization to disassemble, inspect, and prepare quotes. **The repaired motor shall be ready for City's final witness test within a designated time frame of the quote approved by the City's UDR/CTR (See Section 14.8).** In the event that a long lead time for repair parts are required, the City's UDR and/or CTR shall grant an appropriate time extension to the repair deadline. Request for time extensions shall be included in the repair quote.

6.0 STANDARD RESPONSE TIMES

6.1 Contractor shall be accessible to the City by telephone during normal business hours. The Contractor shall be ready to start work on any unit within twenty-four (24) hours upon receiving the call for service.

6.2 Contractor shall be available and accessible to the City by telephone to work overtime, if requested by the City's UDR.

6.3 Contractor shall be available and accessible to the City by telephone to work emergency, if requested by the City's UDR.

6.4 Contractor shall start an emergency job "immediately" without scheduling delays, and shall not be restricted to normal working hours. The City's UDR shall coordinate the emergency and overtime work.

7.0 REPAIR TECHNICIANS

7.1 The repair technicians of the Contractor shall be qualified, properly trained in Repair-Recondition and Repair–Rewind of electric motors, of the type and sizes specified under this contract.

7.2 The repair technicians of the Contractor shall have a minimum of three (3) years experience in Repair/Recondition and Repair/Rewind of electric motors, of the sizes (voltage and horsepower) specified in the contract.

7.3 The Contractor shall furnish the resume of the technicians to the City's Inspection Team during the Team's site visitation of the Contractor's facility before contract award.

7.4 The Contractor shall provide the UDR and/or CTR with an updated resume for any additional motor technicians added to the team for the duration of the contract period.

7.5 These requirements shall apply to all of the subcontractors working for the Contractor.

8.0 SHOP ACCEPTANCE OF REPAIR

8.1 The City's UDR shall inspect the repaired unit before the run-test can begin. It is the Contractor's responsibility to ensure communication has been established with the City's UDR for witnessing the performance test.

8.2 Contractor shall perform insulation-resistance tests before conducting high-potential tests using a 500 volt megohmmeter.

8.3 Contractor shall perform high-potential tests of windings (new or reconditioned), as stated in EASA AR100-2010 (Article 4.4, High-Potential Tests) of these specifications.

8.4 A "NO-LOAD" test run of the motor shall be performed at its highest rated voltage and frequency.

8.5 The electric motors unit shall be securely mounted to a leveled metal base plate, or be set on standard rubber isolation pads while vibration readings are taken.

8.6 Vibration measurements shall be taken on the completely-assembled unit at the DE and ODE, horizontal, and be vertical on the bearing-housing adjacent to the shaft.

8.7 Vibration measurements shall be expressed as velocity, unfiltered, and recorded on the Repair Data and Final Test Sheets. Acceptable maximum vibration level is 0.1" per second.

8.8 If deficiencies are detected, the repair work shall be rejected, and the Contractor shall make the necessary repairs, adjustments, or replacements.

8.9 After corrective actions are made, the unit shall go through a new test run before the electric motor is accepted.

8.10 A typed copy of shop's "Final Test Sheets" (Attachment I) covering the results of any specific test shall be included with the shipment of all repaired electric motors units. The City's UDR reserves the right to witness final shop testing and inspection of any and all repaired units. All units shall be run at their highest-rated voltage.

8.11 A typed copy of Repair Data Sheets covering results of specific tests such as rotor balance, vibration measurement, electrical testing results, mechanical measurements, and rewinding data shall be included with the shipment of all repaired electric motors units, if requested by the City's UDR.

8.12 The City shall not make payment to the Contractor until "ALL" corrective actions are made, and when the equipment repair is accepted.

9.0 LABOR RATE

9.1 The labor rate offered shall cover all labor required to repair the equipment.

9.2 <u>Additional Services:</u>

9.2.1 Prior to commencement of any "Additional Services," Contractor shall submit a written proposal for approval to the CTR's describing the work to be completed,

including a "Not-to-Exceed" cost estimate. The proposal shall include at a minimum, a list of repairs, subcontractor(s), and a schedule of repairs.

9.2.2 Contractor shall perform additional services using the unit rates within the Fee Schedule, as specified for the type of service provided. If the Fee Schedule does not cover the work, the Contractor shall be paid on the reimbursable cost-plus basis. Timing of any additional services shall be mutually agreed in writing between the City's UDR/CTR and the Contractor.

9.2.3 The fees charged for work performed by any subcontractor, including the Contractor markup shall not exceed the vendor's fee schedule within the upcoming contract.

9.2.4 The additional services referenced under Article 9.0 shall include but are not limited to services that might be required to facilitate the operation of these motors. Some examples would include onsite concrete repair work, motor pads, control panels and onsite field technicians.

10.0 INVOICES

10.1 Contractor shall submit invoices for payment no later than 60 days after the City of Houston has accepted and received the motor(s). In addition, all invoices in triplicate (one original and two copies) from the Contractor's company shall be on letterhead with the original signed by an authorized agent of the company. ALL SUPPORT DOCUMENTS SHALL BE ORIGINAL. The invoice number shall not be duplicated during the term of the contract period. Each invoice shall detail the following information:

10.1.1 City contract number, City ordinance number and Contractor's job number.
10.1.2 Contractor's job number and contract year shall appear clearly on all time sheets, invoices, and suppliers' invoices.
10.1.3 Contractor's name and address, and where the service was performed.
10.1.4 City equipment EI number, and the City work order number.
10.1.5 City facility number and address where equipment had been prior to service.
10.1.6 Detailed description of services rendered.
10.1.7 Description of parts or of components repaired or replaced. Provide part numbers listed before and after discount. If parts are OEM reconditioned, the costs to recondition parts shall be listed, as well as the cost of new OEM replacement parts.
10.1.8 Subcontractors' invoices with detail description of work performed, hours, and cost.
10.1.9 Detail labor hours and rates as stated in the "Fee Schedule" for in-house work.
10.1.10 City delivery and pickup tickets.
10.1.11 UL recertification for explosion-proof units.
10.1.12 Separate subtotal costs for parts and labor.
10.1.13 Shop Acceptance Form, Teardown and Recommended Repair Form, UL Certification Form, Equipment Release Authorization Form, Recommended Repair Estimate Form, Fits and Indicated Run-out Form, and the Progress and Status Report Form shall be used.
10.1.14 Total invoice costs.
10.1.15 A clear indication of repair costs of the unit in a percentage, compared to the cost of a new unit.
10.1.16 The charts for bake and burn, and all documentation of the records of every preheating and dipping of insulation varnish shall be submitted.
10.1.17 The Contractor's Invoice Checklist Report Form (Exhibit B-8) shall be included with each invoice.

10.2 Invoice Attachment

10.2.1 All invoices must be submitted in triplicate, itemized as to quantity, part number,

description, and applicable discount, if any. In addition, invoices must show the name of the Department, Division or Section, facility name (to which the merchandise was delivered), the City of Houston ordinance number, contract number, the receiving employee identification number and date, and the pick-up date of the motor. The City Department shall be supplied with duplicate copies of all invoices for material, labor, machine work that has been added to the base cost, and copies of daily timecards. Timecards must reflect time equipment that is stamped in and out. Timecards not stamped may result in a delay in invoice payments.

10.3 At the end of each month, the City's UDR and a repair shop representative shall compare records for a balance. Any discrepancies shall be resolved at that time. This balance shall be completed by the 10th of each month.

10.4 Delivery tickets and packing slips shall contain quantities, part numbers, description of commodity delivered, name of Department or section, and facility name to which the merchandise was delivered, the City's ordnance number, contract number, signature of receiving employee, printed name, employee number, and the authorization release number. Mail invoices to the Public Works and Engineering Department, P.O. Box 61449, Houston, Texas 77208.

10.5 All unit prices for labor and parts shall be easily identified against the quoted contract pricing. Mail invoices to Accounts Payable.

10.5.1 Addresses will be given at the post-award meeting:
Appropriate Department, P.O. Box, Houston, Texas

11.0 ADDITIONS AND DELETIONS

11.1 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 within the Fee Schedule.

12.0 ESTIMATED QUANTITIES NOT GUARANTEED

12.1 The estimated quantities specified herein shall not guarantee actual quantities, as the City shall not guarantee any particular quantity of motor repair services during the term of this contract. The quantities shall vary depending upon the actual needs of the user 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/requiring all the quantities specified herein.

13.0 WARRANTY OF SERVICES

13.1 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.

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

13.3 A minimum full warranty of twelve (12) months is required upon completion of repair services. The warranty period shall begin after "Shop Acceptance" and the day the City officially accepts pickup of the repaired unit.

13.3.1 The specific repair work performed and the replacement parts furnished shall be warranted for a period of one (1) year from date of completed work. The guarantee (warranty) period shall begin the date the City's UDR officially accepts the repaired motor.

13.4 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.

13.5 "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 shall be due to faulty parts or negligence of the Contractor. **The initial warranty shall not be extended beyond the twelve (12) month period, as a result of any warranty work.**

13.6 *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.

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

13.8 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract shall, 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 (1) 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.

13.9 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 shall, 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.

13.10 If the City shall not require correction or re-performance, the City shall make an equitable adjustment in the contract price.

13.11 Any expenses incurred during warranty work as related to the motor shall be the burden of the Contractor and/or the motor manufacturer.

14.0 SITE VISIT

14.1 When deemed necessary, an inspection shall be made by the Public Works and Engineering Department to determine whether a Contractor has a facility at the location listed in the Contractor's bid document.

15.0 POST-AWARD MEETING

15.1 Once the contract has been approved by City Council, the Public Works and Engineering Department shall schedule a post-award meeting with the Contractor and the City's CTR. This meeting shall include procurement, City contact lists, Contractor pricing, payment procedures, and all other matters related to contract administration.

16.0 CONTRACT COMPLIANCE

16.1 The Public Works and Engineering Department reserves the right to monitor this contract for compliance to ensure legal obligations are fulfilled, and that acceptable level of services are provided.

16.2 Monitoring may take the form of, but not necessarily limited to:

16.2.1 Site visits;
16.2.2 Review of deliveries received for accuracy and timeliness; and
16.2.3 Review of Contractor's invoices for accuracy.

16.3 The responsibility for monitoring compliance rests with the Contract Compliance Section of Management Support Branch of the Office of the Director, Public Works and Engineering Department.

17.0 LOCAL PRESENCE/SOURCE

17.1 With respect to the low voltage electric motor repair services, Contractor shall have a local authorized facility located within the Greater Houston Metropolitan Area.

18.0 LOCAL WAREHOUSE AND SHOP FACILITY REQUIREMENTS

18.1 The Contractor must satisfy the City's UDR by having a local authorized facility located within the Greater Houston Metropolitan Area. <u>This shall apply to any subcontractors used under this contract.</u>

18.2 Contractor(s) shall have adequate staff with qualified personnel. (Resumes may be required.)

18.3 Contractor(s) store or branch building shall be in condition of good repair, maintain safe walkways and off-street parking. Facilities shall meet the National Electrical Code (NEC) and National Fire Protection Association (NFPA). Facilities shall be subject to occupancy inspection.

18.4 Contractor(s) shall have a paint booth, which meets the code of Federal Regulations (CFR) "Section 1907.107." Parts cleaning tanks and areas including dip tanks shall meet the Code of Federal Regulations (CFR) "Section 1907.168."

18.5 Contractor(s) repair facility shall provide adequate accessibility for City of Houston delivery vehicles to safely enter and exit without exposing the operator or vehicle to unnecessary dangers, such as crossing medians or backing in to traffic lanes.

18.6 Motors equipped with lifting eyes or similar factory lifting points shall be handled throughout the repair process with an overhead crane, for loading and unloading. The Contractor shall maintain adequate indoor, clean, and dry storage space for storing motors or motor components under repair.

18.7 Facilities shall provide a climate-controlled winding room, isolated from the teardown, sandblasting, and similar contaminants that could possibly shorten the life expectancy of a winding.

18.8 Testing equipment shall be safe and built to test motors at their highest rated voltage, in accordance with the National Electrical Code, City of Houston Electrical Code, and other applicable codes and ordinances.

18.8.1 All test equipment required for test results shall be calibrated at least annually against standards traceable to the National Institute of Standards and Technology (NIST), or equivalent standards laboratories (EASA AR100-2010 4.7). The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product--to specified requirements.

18.9 Contractor(s) shall have a written safe work practice procedure in effect, which is acceptable to the City.

18.10 Steam clean area shall be so designed that all run-off can be captured and an approved oil/grease recovery system shall be in place.

19.0 SPECIAL NOTE

19.1 The City reserves the right to review all payments made to Contractors by auditing at a later date. Subject to such audit, any overpayments may be recovered from the Contractor.

20.0 REMOVAL OF EQUIPMENT

20.1 Any and all equipment removed from City property shall be accompanied by a City of Houston's "Return Authorization Form" (RAF). The Public Works and Engineering Department may use a motor log in conjunction with the RAF. The City's RAF shall be provided by the Department requesting services. The form shall be adjusted by the City's UDR to reflect the contract and ordinance numbers pertaining to this contract.

21.0 EQUIPMENT TRACKING

21.1 Contractor shall ensure that EI tags remain attached to the equipment. Contractor shall notify the City's UDR if the EI tag is damaged or missing.

21.2 All illegible or defective nameplates shall be replaced on completion of repair. All original nameplate information, except where changed, shall be stamped on new nameplates. New nameplates shall be permanently attached with mechanical fasteners. The cost of a new nameplate shall be included as a part of the base cost of any recondition/repairs, or rewind/repairs.

21.3 The City's UDR/CTR shall ensure that the Maintenance Management System (MMS) procedures for tracking the Division's equipment are strictly followed.

21.4 The City's UDR/CTR shall ensure that contracted repair expenses (labor, material, equipment, and warranty) are to be inserted into the MMS, and shall update the MMS history.

22.0 MECHANICAL INSPECTION

22.1 The rotor assembly shall be inspected for wear, scoring, cracks, and the check for open rotor bars shall be done with a core-loss tester.

22.2 The rotor assembly shall be checked for total indicated run-out and recorded on the rotor information sheet.

22.3 Shaft seal surface, bearing journals and coupling fit shall be micrometer-checked and recorded on the rotor information sheet.

22.4 End bells and bearing (housing critical dimensions) shall be micrometer-checked and recorded on the mechanical inspection sheet.

22.5 The above recorded measurements shall be submitted to the City's UDR/CTR, along with the electrical and mechanical data sheets before the tear-down inspection.

23.0 FAILURES

23.1 Any failure covered by warranty shall be repaired or replaced by the successful Contractor(s) at the Contractor's expense.

24.0 ELECTRIC MOTOR INSPECTION

24.1 The City's UDR/CTR reserves the right to inspect any warranty failure repair after notification to the Contractor. The above recorded measurements shall be submitted to the City's UDR/CTR, along with the electrical and mechanical data sheets before the tear-down inspection.

25.0 SHOP INSPECTION AND TESTS

25.1 The City's UDR/CTR reserves the right to inspect any work in progress, and/or witness any and all tests specified within these specifications. When witness tests are specified, the Contractor shall be responsible for notifying the City's UDR/CTR a minimum of twenty-four (24) hours in advance of the scheduled date and time of the tests.

26.0 MOTOR REPAIR DATA SHEET

26.1 A motor repair data sheet shall be provided by the Contractor showing the condition of motors upon receipt, repair work completed, and final test results.

27.0 MATERIALS

27.1 All materials used to replace damaged and missing parts shall be new and equal in quality as the OEM. Any substitutions shall be approved by the City's UDR/CTR.

28.0 WORK BY OTHERS

28.1 The Contractor shall advise the user Department of the name(s) and location(s) of shop(s) that shall be used for specific repair work, and obtain approval from the City's UDR/CTR before subcontracting the work.

29.0 ACCESSORIES

29.1 Space heaters shall be installed on motors which are not so equipped when requested by the City's UDR/CTR. Heaters shall be arranged to provide optimum uniform heating of stator winding. Heater wattage and voltage shall be decided by the City's UDR/CTR. Defective space heaters shall be replaced.

29.2 Unless otherwise specified, space heaters shall be replaced "like-for-like," and as positioned and wired in the original winding.

29.3 All illegible or defective nameplates shall be replaced on completion of repair. All original nameplate information, except where changed shall be stamped on new nameplate. This shall be part of the Recondition/Rewind price. New nameplates shall be permanently

attached with mechanical fasteners.

30.0 RECONDITIONING WINDING

30.1 Insulation and Winding Support Repair

30.1.1 Motors which have been designated for winding reconditioning and have been thoroughly cleaned free from dirt, grit, grease, oil, and properly dried shall be inspected for winding damage and repairs made to damaged areas.

30.2 Sealing Treatment

30.2.1 Reconditioned motors shall receive a minimum of two (2) dips and baked in insulating resin. Stator shall be baked at manufacturer's recommended temperature and time to assure full curing.

31.0 STATOR REWIND (RANDOM AND FORM WOUND)

31.1 Winding Removal

31.1.1 The stator core shall be vertically set in the "burn-out" oven. After "burn-out" and winding removal, the core and frame shall be allowed to cool by natural convection without forced air, to avoid over stress or warping. Maximum "burn-out" temperatures shall be 650 degrees Fahrenheit as to avoid damage to laminations. Torch heating shall NOT be used for stator cleanup.

31.2 Stator Core Preparation

31.2.1 The stator core shall be sandblasted to a bare metal finish. The core shall be thoroughly cleaned, and the stator core shall be examined for laminations damage--due to arcs such as fusing or metal loss. Fused laminations shall be separated either by grinding or filing. Bent laminations shall be realigned, and all protrusions into the slot area shall be filed or ground smooth. Stator cores shall not be re-stacked without the City's UDR's approval. Core-loss testing shall be performed to identify those that are inefficient. All stators that are rewound shall be core-loss tested with a modern core-loss tester, and the City's UDR shall receive a printout of test results.

31.3 Rewind Materials

31.3.1 All insulating material used in the rewind shall have a "Class F" rating.

32.0 MECHANICAL WORK

32.1 Metal Parts

32.1.1 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced, as approved by the City's UDR.

32.2 Equipment Enclosure

32.2.1 Terminal boxes and auxiliary equipment enclosures shall be made to meet manufacturer's specifications.

32.3 Replacement Hardware

32.3.1 All motors equipped with cooling coils shall be hydrostatically tested. All fittings, connections, tubes and/or coils shall be inspected for leaks and other damages.

Defective items shall be repaired and/or replaced, per motor manufacturer's specifications, and as approved by the City's UDR.

32.4 Shaft

32.4.1 Shafts shall be checked for damaged threads, fretted or galled areas, and rubs. Check shaft straightness between centers and against the manufacturer's drawings, if possible. Keyways shall be checked for stress cracks; this check shall be made in a lathe, as the use of "V Blocks" shall not be accepted.

32.5 Air Intake and Exhaust Systems

32.5.1 Screens and filters shall be replaced, where found defective. Screens shall be stainless steel, if required, and filters shall be of the permanent type.

32.6 Rotor Balance

32.6.1 All motor rotors shall be two-plane, dynamically-balanced with complete rotating assembly. Where keyway is provided, the rotor shall be balanced with a half-key, and without any other item on the shaft. Then, if there is a pulley, coupling half, impeller, external fan, or any other item, these items shall be installed one at a time, and balanced. Balance weights, when required, shall be added to a permanent and stable portion of the rotor--to balance rotor only. If balancing weights are added to the rotor, they shall be permanently secured by an approved method. Grinding on the rotor is **not** acceptable.

32.7 Ratchet Assembly

32.7.1 Ratchet assemblies shall be checked for structural integrity or defects, and shall be repaired or replaced, as approved by the City's UDR, and the trim balanced on final assembly.

32.8 Reassembly

32.8.1 The repaired motor components shall be reassembled and shall replace any suspect hardware. The assembled motor shall be checked for free rotation and proper fit of all components.

32.8.2 All machined surfaces and bolt threads shall be coated with a rust-resistant lubricant.

32.8.3 Only properly marked leads necessary for connection of the motor supply shall be brought out to the junction box. The lead entrance to the junction box on all "T.E.F.C." motors shall be sealed. Leads and connectors shall be sized at 125% of full-load amperage, at a minimum.

32.8.4 After assembly, the motor exterior shall be cleaned while removing all grease, loose paint and other foreign material. The motor shall be spray-painted in the paint booth with epoxy and/or equivalent paint. The paint color shall be designated by the proper color designation, according to specifications.

32.9 Bearing Temperature

32.9.1 The repaired motor shall run at its highest-rated voltage at no load until bearing temperatures cease to rise as measured at the hot spot, 180-degree Fahrenheit maximum in each bearing housing. The temperature shall be recorded on the final test sheet as well.

32.10 Vibration Measurement

32.10.1 The motor shall be securely mounted to a leveled metal "base plate," or set on standard rubber isolation pads while vibration readings are recorded.

32.10.2 After the bearing temperature run, vibration measurements shall be taken on the completely-assembled motor at the DE and ODE, and to the horizontal and vertical on the bearing-housing adjacent to the shaft.

32.10.3 Vibration measurement shall be expressed as velocity, unfiltered, and recorded on the motor repair data sheet. Acceptable maximum is 0.1" per second.

33.0 REPAIR RECORD

33.1 Shop data sheets covering results of specific tests such as rotor balance, vibration measurement, electrical testing results, mechanical measurements and rewinding data shall be returned when the motor is shipped or returned, if requested.

33.2 All shop records of each motor shall be stored and/or maintained up until two (2) years after delivery per motor.

34.0 FINAL TESTING AND INSPECTION

34.1 A typed copy of shop testing and inspection data covering the results of any specific test, shall be included with the shipment of all repaired motors. The City's UDR reserves the right to witness final shop testing and inspection of any and all repaired motors. All motors shall be run at their highest-rated voltage.

35.0 MOTOR ECONOMIC EVALUATION

35.1 Service Contractor, upon request of the user Department must provide to the City's UDR the nominal efficiency of the motor proposed to be reconditioned or rewound, per manufacture data, and the nominal premium efficiency of a new replacement motor. The Contractor shall also provide a cost estimate for the repair, and the cost of a new motor with premium nominal efficiency. After the economic evaluation by the City's UDR, the City shall inform the service Contractor on how to proceed.

36.0 SILENCE OF SPECIFICATIONS

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

EXHIBIT "B-1"

TEARDOWN AND RECOMMENDED REPAIR REPORT

City of Houston
Public Works & Engineering Department
Motors Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after award of Contract)

Contractor: _____ **Contractor Job Number:** _____

City Contract #: _____ **City Release #:** _____ **City Ordinance #:** _____

Motor Location: _____ **City Facility Number:** _____ EI #: _____

Nameplate Information:

Make:	Volt:	HP:	RPM:
Model:	Amp:	Hz:	SF:
Serial:	Impeller Code:		

Cable Information:

Power Cable	Size	Length	Condition	
Control Cable	Size	Length	Condition	

Bearings	DE Size		Condition
Bearings	ODE Size		Condition
Volute			
Wear Rings			
Slide Rail Bracket			
Discharge Face			

Runouts:

Shaft DE	
Shaft ODE	
Face of Rotor	

Stator Megger Test: _____ Cable Megger Test: _____

SurgeTest: _____

Core Loss Test: _____

Recommendation: Recondition-Repair: _____ **Rewind-Repair:** _____

Other Repairs Needed: _____

_____

_____

Parts Description: _____

_____

Prepared By: _____ **Job Title:** _____ **Date:** _____

EXHIBIT "B-2"

U. L. CERTIFICATION FORM

City of Houston
Public Works & Engineering Department
Motor Repair Service

NAME OF REPAIR SHOP: _____

FACILITY NAME_____ JOB #_____ EI # _____

OLD U.L. SERIAL #_____NEW SERIAL #_____

ORIGINAL CLASS_____ ORIGINAL GROUP_____

REBUILT CLASS_____ REBUILT GROUP_____

DATE NEW SERIAL # ISSUED_____

WORK DONE_____

_____

_____

Motor MFGR:_____ FRAME_____

Motor SERIAL #_____

HP_____VOLTS_____AMPS_____CODE_____

INSULATING CLASS_____ THERMOSTAT MOUNTING CODE_____

U.L. INSPECTOR NAME: _____

U.L. INSPECTOR EMPLOYEE #:_____

EXHIBIT "B-3"

EQUIPMENT RELEASE AUTHORIZATION FORM

City of Houston
Public Works & Engineering Department
Motors Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after award of Contract)

RELEASE #: _____

DATE: _____ CITY WORK ORDER #: _____

CITY FACILITY NAME: _____ _____CITY FACILITY #: _____EI #: _____

CONTRACTOR: _____CONTRACTOR JOB #: _____

CONTRACTOR ADDRESS: _____

CONTRACT #: _____ ORDINANCE #: _____

NAMEPLATE INFORMATION:

MAKE:	VOLT:	HP:	RPM:
MODEL:	AMP:	HZ:	SF:
SERIAL:	IMPELLER CODE:		

REASON FOR THE PULLING OF THE MOTOR: _____

NAME OF THE SHOP THE EQUIPMENT IS BEING TAKEN TO: _____

IS THERE A PICTURE OF THE MOTOR ATTACHED? YES: _____ NO: _____

CONTRACTOR REPRESENTATIVE

NAME: _____

EMPLOYEE #: _____

SIGNATURE: _____

DATE: _____

CITY OF HOUSTON REPRESENTATIVE

NAME: _____

EMPLOYEE #: _____

SIGNATURE: _____

DATE: _____

COMMENTS: _____

EXHIBIT "B-4"

Recommended Repair Estimate Form
Motor Repair Service Contract

City of Houston, Public Works & Engineering Department, Waste Water Operations

City Release #: City Work Order #: Contractor's Job #:

Contractor's Name: Contract Year:

City Contract #: City Ordinance #:

City Facility Name: City Facility #: City EI #:

Nameplate Information:

Make:	Volt:	HP:	RPM:
Model:	Amp:	Hz:	SF:
Serial:	ID#		FRAME:
Motor #:	TYPE:		ENCL:

UNIT PRICE ITEMS	Unit Price	Extended Price
Disconnect Unit, Etc., Remove Unit from Pit		
Transport to Unit to Contractor's Facility		
Transport/ Return Unit to City Facility		
Install Unit, Etc., and Perform Test Run		
Recondition-Repair		
Rewind-Repair		$.00
Sub-Total of Unit Price items		

COST PLUS ITEMS	Cost	Mark Up	Extended Price
SEE DETAILED PARTS LIST		XX%	
Sub-Total Cost Plus items			

Sub-Total of Additional Labor Costs (attach detail)	
Sub-Total of Additional Services (attach detail)	
Non – Repairable Cost	
TOTAL Estimated Cost of Motor Repair	
REPLACEMENT Cost of Unit, TEFC & NEMA PREM.EFF.	
TOTAL Replacement Cost of New Motor	
Repair Approved by UDR: Signature	Date:
	Print UDR's Name:
DO NOT Repair by UDR: Signature/Date	
	Date:
Replacement Approved by CTR: Signature	Print CTR's Name:

EXHIBIT "B-5"

SHOP ACCEPTANCE TESTS FORM
City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

Contractor: _____ Contractor Job #: _____

Contract #: _____ Ordinance #: _____ City Work Order #: _____

City Facility Name: _____ _____ City Facility #: _____ EI #: _____

Nameplate Information:

Make:	Volt:	HP:	RPM:
Model:	Amp:	Hz:	SF:
Serial:	Impeller Code:		

Visual Inspection:

Stator Megger Test: _____
Cable Megger Test: _____
Hi-Potential Test: _____

Source Voltages	V_1 =	V_2 =	V_3 =
No-Load Currents	I_1 =	I_2 =	I_3 =
Vibration	Axial =	Radial =	Vertical =

Comments and Deficiencies:

Tests Performed By: _____ Job Title: _____ Date: _____

Witnessed By UDR: _____ _____ Date: _____

EXHIBIT "B-6"

TIMESHEET REPORT FORM

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

SERVICE DEPARTMENT
City of Houston Time Sheet

CUSTOMER	City of Houston	CUSTOMER ORDER #	
JOB LOCATION		RELEASE #	
UDR		MODEL - SERIAL #	

WEEK BEGGINNING		DESCRIPTION OF WORK	HOURS WORKED PER PERSON					
1/5/2010		EMPLOYEE NO.	1	2	3	4	5	6
SUNDAY	5-Jan							
MONDAY	6-Jan							
TUESDAY	7-Jan							
WEDNESDAY	8-Jan							
THURSDAY	9-Jan							
FRIDAY	10-Jan							

JOB COMPLETE? ☐ YES ☐ NO

SIGNATURE FOR FIELD SERVICE OR SHOP MANAGER		SHOP PERSONNEL	#
			1
			2
CUSTOMERS COMMENTS:			3
			4
		FIELD PERSONNEL	
			5
			6

EXHIBIT "B-7"

PROGRESS AND STATUS REPORT FORM

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

Release Number	Work Order #	Work Order Date	E.I. #	Fac. #	Fac. Name	Manufac.	Model #	Serial #	H.P.	Problem	Date In Shop	Shop Job #	Inspect Date	Test Date	Person Called Date	Allocated Amount	Cost Of Repair	Expend. To Date
																$	$	$

EXHIBIT "B-8"

INVOICE CHECKLIST REPORT FORM

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)
ATTACHMENT "I"

INVOICE CHECKLIST		
"Company Name" / (Motor) / Contract # 460000XXXX		
a) Facility Name:		Facility #
b) Date:		
c) UDR Review Date:		
Comments:		
Instructions 1) Check mark "X" selected items listed below. 2) Sign and date at the bottom of form		

Item Number	Contract Requirements Description	Contractor Review	UDR Review
1	City Contract Number, and Ordinance Number		
2	Contractor Job Number		
3	Contractor's name and address		
4	Contractor's representative name, signature and date		
5	City facility name, number and address where service was provided		
6	Detailed description of services rendered		
7	Equipment Identification Number		
8	City Equipment Release Number		
9	City Work Order Number		
10	Subcontractor's invoices with description of work performed, hours and parts cost		
11	Detailed labor hours and rates as stated in the "Fee Schedule" (when applicable)		
12	City delivery and pickup tickets		
13	UL Re-certification for explosion-proof units (when applicable)		
14	Subtotal cost for parts and labor separately		
15	Shop Test/Acceptance Form, Teardown and Recommended Repair form, Equipment Release authorization form, Recommended Repair Estimate Form & Final Repair Cost Form		
16	All unit prices for labor and Parts are easily identified against the quoted contract pricing		
17	Invoice charged to correct job #		
		Total Amount ($)	

Contractor Signature Date

EXHIBIT "B-9"

FITS AND INDICATED RUNOUT

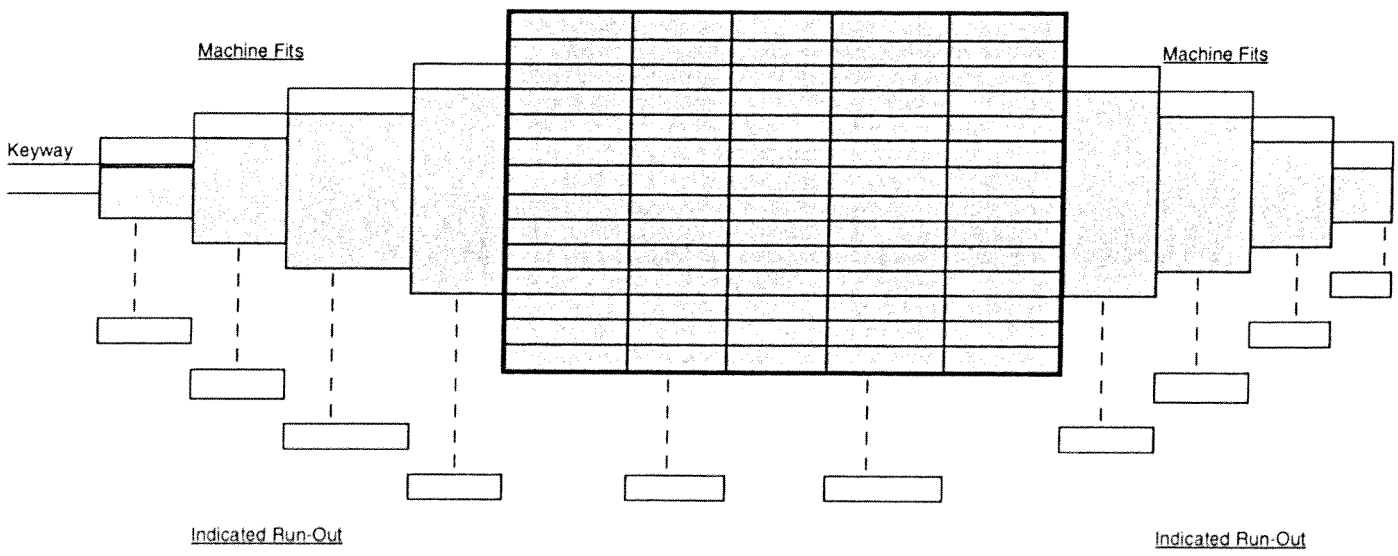
City of Houston
Public Works & Engineering Department
Electric Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

(Horizontal Motor)
EI #_____

Horizonal Ball Bearing Rotor

Fits and Indicated Runout

Job # 0



Iron Length: _____
Iron Diam.: _____
Slot Depth: _____
Back Iron: _____
Vent Holes _____
Vent Hole Diam: _____

Make: _____ H.P. _____ Volts: _____
Model: _____ Amps. _____ Cyc. _____
R.P.M. _____ Frame: _____ SN: _____

EXHIBIT "B-10"

FITS AND INDICATED RUNOUT

City of Houston
Public Works & Engineering Department
Electric Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of the Contract)

(Vertical Motor)
EI #_____

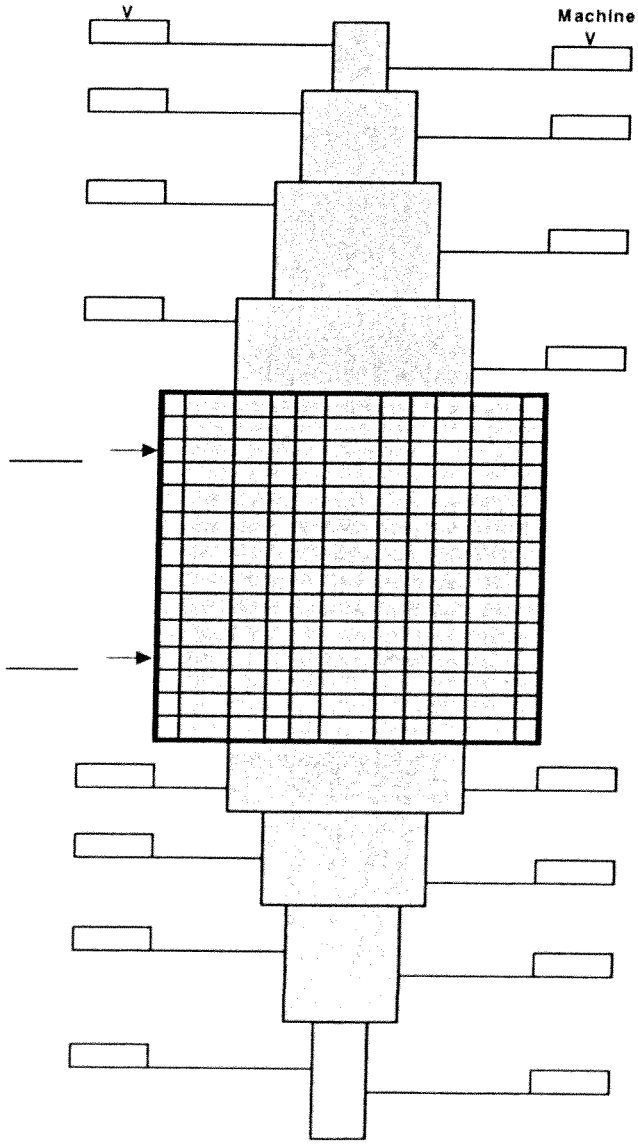
~~Vertical Rotor~~ ~~Fits and Indicated Runout~~

E.M.I. Job # 0

Run Outs:
V

Machine Fits:
V

Name Plate Information
Make: 0
H.P. 0
Volts: 0
Model: 0
R.P.M. 0
Frame: 0
Cyc. 0
Amps: 0
SN: 0



Iron Length: _____
Iron Diam.: _____
Slot Depth: _____
Back Iron: _____
Vent Holes: _____
Vent Hole Diam: _____

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]

CITY OF HOUSTON CERTIFIED M/WBE SUBCONTRACT TERMS

Contractor shall ensure that all subcontracts with MWBE subcontractors and suppliers are clearly labeled **"THIS CONTRACT IS SUBJECT TO BINDING ARBITRATION ACCORDING TO THE TEXAS GENERAL ARBITRATION ACT"** and contain the following terms:

1. J & M Machine Works (M/WBE subcontractor) shall not delegate or subcontract more than 50% of the work under this subcontract to any other subcontractor or supplier without the express written consent of the City of Houston's Affirmative Action Director ("the Director").

2. J & M Machine Works (M/WBE subcontractor) shall permit representatives of the City of Houston, at all reasonable times, to perform (1) audits of the books and records of the subcontractor, and (2) inspections of all places where work is to be undertaken in connection with this subcontract. Subcontractor shall keep such books and records available for such purpose for at least four (4) years after the end of its performance under this subcontract. Nothing in this provision shall affect the time for bringing a cause of action or the applicable statute of limitations.

3. Within five (5) business days of execution of this subcontract, Contractor (prime contractor) and Subcontractor shall designate in writing to the Director an agent for receiving any notice required or permitted to be given pursuant to Chapter 15 of the Houston City Code of Ordinances, along with the street and mailing address and phone number of such agent.

4. As concluded by the parties to this subcontract, and as evidenced by their signatures hereto, any controversy between the parties involving the construction or application of any of the terms, covenants or conditions of this subcontract shall, on the written request of one party served upon the other or upon notice by the Director served on both parties, be submitted to binding arbitration, under the Texas General Arbitration Act (Tex. Civ. Prac. & Rem. Code Ann., Ch. 171 - "The Act"). Arbitration shall be conducted according to the following procedures:

   a. Upon the decision of the Director or upon written notice to the HR Director from either party that a dispute has arisen, the Director shall notify all parties that they must resolve the dispute within thirty (30) days or the matter may be referred to arbitration.

   b. If the dispute is not resolved within the time specified, any party or the Director may submit the matter to arbitration conducted by the American Arbitration Association under the rules of the American Arbitration Association, except as otherwise required by the City's contract with the American Arbitration Association on file in the Office of the City's Affirmative Action Division.

   c. Each party shall pay all fees required by the American Arbitration Association and sign a form releasing the American Arbitration Association and its arbitrators from liability for decisions reached in the arbitration.

   d. In the event the American Arbitration Association no longer administers Affirmative Action arbitration for the City, the Director shall prescribe alternate procedures as necessary to provide arbitration by neutrals in accordance with the requirements of Chapter 15 of the Houston City Code of Ordinances.

These provisions apply to goal oriented contracts. A goal oriented contract means any contract for the supply of goods or non-professional services in excess of $100,000.00 for which competitive proposals are required by law; not within the scope of the MBE/WBE program of the United States Environmental Protection Agency or the United States Department of Transportation; and which the City Purchasing Agent has determined to have significant MWBE subcontracting potential in fields which there are an adequate number of known MBEs and/or WBEs to compete for City contracts.

The MWBE policy of the City of Houston will be discussed during the pre-proposal conference. For information, assistance, and/or to receive a copy of the City's Affirmative Action Policy and/or Ordinance, contact the Affirmative Action Division at (713) 837-9000, 611 Walker Street, 7th Floor, Houston, Texas 77002.

City of Houston
Affirmative Action and Contract Compliance
Schedule of MWDBE Participation

PROJECT NAME & NUMBER: Low Voltage Electric Motor Repair Services, S10-L23978

PRIME CONTRACTOR: Houma Armature Works Houston

LIAISON/PHONE: Andi Wiltse, 713-748-0702

NAME OF MINORITY/WOMEN DISADVANTAGED FIRM	CERTIFICATION NO.	DESCRIPTION OF WORK TO BE PERFORMED	SUBCONTRACT AMOUNT	% OF TOTAL CONTRACT
J & M Machine Works	Unavailable	Machine Work	$225,276.81	6%
TOTALS				

$3,754,613.50	6%	$225,276.81	6%
Total Contract Amount	MWDBE Goal	MWBE Subcontract Amount	MWBE % of Total Contract Amount

The undersigned will enter into a formal contract with MWDBE firms for work listed in this schedule contingent upon being awarded the contract for the above referenced project. Signed Letters of Intent for each firm listed above may be submitted prior to contract award.

Signature: Mark Welch Name: 12/13/11 Title: Managing Partner

NOTE: All firms must be certified by the City of Houston Affirmative Action and Contract Compliance Office to count toward the MWDBE participation goal. 07/08

52c

EXHIBIT E
[DRUG POLICY COMPLIANCE AGREEMENT]

I, MARK WELCH MANAGING PARTNER as an owner or officer of
Name) (Print/Type) (Title)

HOUMA ARMATURE WORKS HOUSTON (Contractor)
(Name of Company)

have authority to bind Contractor with respect to its bid, offer or performance of any and all contracts it may enter into with the City of Houston; and that by making this Agreement, I affirm that the Contractor is aware of and by the time the contract is awarded will be bound by and agree to designate appropriate safety impact positions for company employee positions, and to comply with the following requirements before the City issues a notice to proceed.

1. Develop and implement a written Drug Free Workplace Policy and related drug testing procedures for the Contractor that meet the criteria and requirements established by the Mayor's Amended Policy on Drug Detection and Deterrence (Mayor's Drug Policy) and the Mayor's Drug Detection and Deterrence Procedures for Contractors (Executive Order No. 1-31).

2. Obtain a facility to collect urine samples consistent with Health and Human Services (HHS) guidelines and a HHS certified drug testing laboratory to perform the drug tests.

3. Monitor and keep records of drug tests given and the results; and upon request from the City of Houston, provide confirmation of such testing and results.

4. Submit semi-annual Drug Policy Compliance Declarations.

I affirm on behalf of the Contractor that full compliance with the Mayor's Drug Policy and Executive Order No. 1-31 is a material condition of the contract with the City of Houston.

I further acknowledge that falsification, failure to comply with or failure to timely submit declarations and/or documentation in compliance with the Mayor's Drug Policy and/or Executive Order No. 1-31 will be considered a breach of the contract with the City and may result in non-award or termination of the contract by the City of Houston.

12/21/2011
Date

Contractor Name MARK WELCH

Signature Mark Welch

Title MANAGING PARTNER

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

I, Mark Welch President
(Name - Print/Type) **(Title)**

as an owner or officer of Houma Armature Works Houston, LLC (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.

3/22/2012
Date

HOuma Armature Works Houston LLC
Contractor Name

Mark Welch
Signature Mark Welch

President
Title

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

I, N/A
(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]

I. MARK WELCH MANAGING PARTNER as an owner or officer of
(Name) (Print/Type) (Title)

HOUMA ARMATURE WORKS HOUSTON (Contractor)
(Name of Company)

have personal knowledge and full authority to make the following declarations:

This reporting period covers the preceding six months from JAN 01, 2011 to NOV 10 20 11

MW Initials A written Drug Free Workplace Policy has been implemented and employees notified. The policy meets the the criteria established by the Mayor's Amended Policy on Drug Detection and Deterrence (Mayor's Policy).

MW Initials Written drug testing procedures have been implemented in conformity with the Mayor's Drug Detection and Deterrence Procedures for Contractors, Executive Order 1-31. Employees have been notified of such procedures.

MW Initials Collection/testing has been conducted in compliance with federal Health and Human Services (HHS) guidelines.

MW Initials Appropriate safety impact positions have been designated for employee positions performing on the City of Houston contract. The number of total employees on safety impact positions during this reporting period is 18

MW Initial From JAN 01, 2011 (start date) to NOV 10, 2011 (end date) the following testing has occurred:

	Random	Reasonable Suspicion	Post Accident	Total
Number of Employees Tested	6	0	4	10
Number of Employees Positive	0	0	1	1
Percent Employees Positive	0	0	25 %	10 %

MW Initials Any employee who tested positive was immediately removed from the City worksite consistent with the Mayor's Policy and Executive Order No. 1-31.

MW Initials I affirm that falsification or failure to submit this declaration timely in accordance with established guidelines will be considered a breach of contract.

I declare under penalty of perjury that the affirmations made herein and all information contained in this declaration are within my personal knowledge and are true and correct.

12-20-2011
Date

Contractor Name MARK WELCH

Signature MWelch

Title MANAGING PARTNER

EXHIBIT H
[PAY OR PLAY]

Document 00460
(Form POP-1A)

City of Houston

Pay or Play Program
Acknowledgement Form

What this form does. This form acknowledges your awareness of the Pay or Play program. Your signature affirms that you will comply with the requirements of the program if you are the successful bidder/proposer, and ensure the same on behalf of subcontracts subject to the Pay or Play Program.

For more information, contact the Contract Administrator.

Routing. Return this form with your bid or proposal.

I declare under penalty of perjury under the laws of the State of Texas that if awarded a contract, I will comply with the requirements of the Pay or Play Program.

Mark Welch
Signature

8/23/11
Date

MARK WELCH
Print Name

122707
City Vendor ID

HOUMA ARMATURE WORKS HOUSTON, LLC
Company Name

713-748-0702
Phone Number

MWELCH@HOUMAARMATURE.COM
Email Address

Revised 07-22-2008

CITY OF HOUSTON
STANDARD SPECIFICATION
FORM POP 2 (DOCUMENT 00630)

OFFICE OF BUSINESS OPPORTUNITY
CERTIFICATION BY BIDDER
EFFECTIVE 7.1.07

CERTIFICATION OF AGREEMENT TO COMPLY WITH PAY OR PLAY PROGRAM

Contractor Name: HOUHA ARMATURE WORKS HOUSTON LLC (Contractor/Subcontractor) $ 3,293,716.00 (Amount of Contract)

Contractor Address: 8100 F.M. 2234, HOUSTON TX 77053

Project No.: [GFS/CIP/AIP/File No.] S10-L23978

Project Name: [Legal Project Name] LOW VOLTAGE ELECTRIC MOTOR REPAIR SERVICES

In accordance with the City of Houston Pay or Play Program authorized by Ordinance 2007-534, Contractor agrees to abide by the terms of this Program. This certification is required of all contractors for contracts subject to the program. You must agree EITHER to PAY or to PLAY for each covered employee, including those of subcontractors subject to the program.

[ ] Yes [X] No Contractor agrees to Pay $1.00 per hour for work performed by covered employees under the contract with the City and to ensure compliance by covered subcontractors and contract labor to the terms of the Pay or Play Program.

[X] Yes [ ] No Contractor agrees to provide health benefits to each covered employee and ensure compliance by the covered subcontractors. The health benefits must meet the following criteria:
(1) the employer will contribute no less than $150 per employee per month toward the total premium cost; and
(2) the employee contribution, if any amount, will be no greater than 50% of the total premium cost and no more than $150 per month.

[ ] Yes [X] No Contractor agrees to pay on behalf of some covered employees and contract labor and play on behalf of other covered employees, in accordance with program requirements, including subcontractors' employees, if applicable. **(NOTE: IF YOU SELECT YES ON THIS OPTION PLEASE CHECK YES ON THE ABOVE TWO OPTIONS "AGREES TO PAY AND AGREES TO PROVIDE HEALTH BENEFITS")**

[ ] Yes [X] No If contract labor is utilized the Contractor agrees to report hours worked by the contract laborer and Pay $1.00 per hour for work performed.

[X] Yes [ ] No Contractor will comply with all provisions of the Pay or Play Program and will furnish all information and reports requested to determine compliance with program provisions.

[X] Yes [ ] No For Prime Contractors Only: Contractor will file compliance reports with the City, which will include activity for subcontractors subject to the program, in the form and to the extent requested by the administering department or the Office of Business Opportunity. Compliance reports shall contain information including, but not limited to, documentation showing employee health coverage and employee work records.

*Estimated Number of:	Prime Contractor	Sub-Contractor
Total Employees on City Job	7	—
Covered Employees	7	—
Non-Covered Employees	—	—
Exempt Employees	—	—

*Required

I hereby certify that the above information is true and correct.

Mark Welch
CONTRACTOR (Signature)

11/16/11
DATE

MARK WELCH MANAGING PARTNER
NAME AND TITLE (Print or type)