

SECTION C  
GENERAL TERMS & CONDITIONS

THE STATE OF TEXAS

BID # S28-L22084

COUNTY OF HARRIS

ORDINANCE # 07-0523  
CONTRACT # 4600007705

I. PARTIES

A. Address

THIS AGREEMENT FOR MAINTENANCE AND REPAIR OF SLUDGE DEWATERING AND DRYING EQUIPMENT SERVICES ("Agreement") is made on the Countersignature Date between the CITY OF HOUSTON, TEXAS ("City"), a municipal corporation and INDUSTRIAL TX CORP. ("Contractor or Vendor"), a corporation doing business in Texas.

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

City

City Purchasing Agent for Director  
of Public Works & Engineering Department  
City of Houston  
P.O. Box 1562  
Houston, Texas 77251

Contractor

Industrial TX Corp.  
11322 Windfern  
Houston, Texas 77064  
Contact: David Haynes  
Phone: 281 890 0152  
Fax: 281 890 2801  
E-mail: ghaynes@industrialtx.com

The Parties agree as follows:

B. Table of Contents

This Agreement consists of the following sections:

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- A. DEFINITIONS
- B. SCOPE OF SERVICES
- C. EQUAL EMPLOYMENT OPPORTUNITY
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- H. FEES AND COSTS
- I. PERFORMANCE BOND
- J. MAINTENANCE BOND

**C. Parts Incorporated**

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

**D. Controlling Parts**

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

**E. Definitions**

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

F. Signatures

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

ATTEST/SEAL (if a corporation):

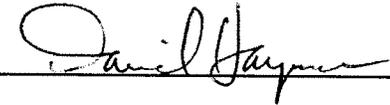
Industrial TX Corp.

WITNESS (if not a corporation):

By: 

Name: **Colleen Hamilton**

Title: **Corporate Secretary**

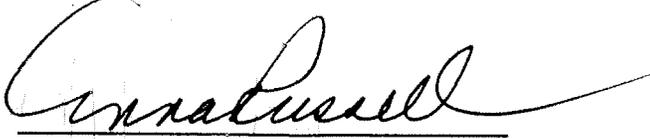
By: 

Name: **David Haynes**

Title: **President**

Federal Tax ID Number: 76-0367785

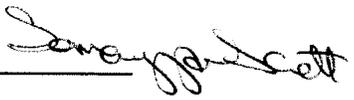
ATTEST/SEAL:



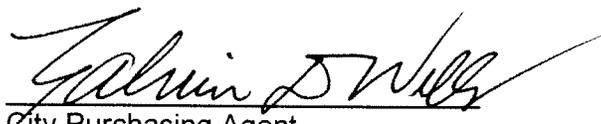
City Secretary

CITY OF HOUSTON, TEXAS

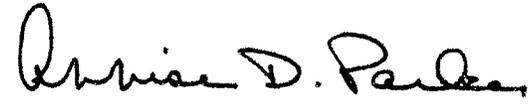
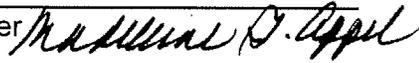
Signed by:

   
Mayor

APPROVED:

  
City Purchasing Agent

COUNTERSIGNED BY:

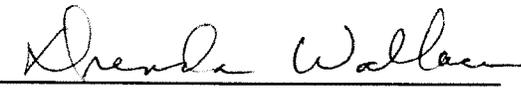
  
City Controller 

DATE COUNTERSIGNED:

5-17-07

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.

3-26-07  
Date

  
Legal Assistant

## II. DUTIES OF CONTRACTOR

### A. Scope of Services

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In consideration of the payments specified in this Agreement, Contractor shall provide all labor, material, and supervision necessary to perform the services described in Exhibit "B."

### B. RELEASE

CONTRACTOR 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.

### C. INDEMNIFICATION

CONTRACTOR 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 INCIDENTA TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

- (1) CONTRACTOR'S AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 1-3, "CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;
- (2) THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT; AND
- (3) THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.

CONTRACTOR 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.

**D. INDEMNIFICATION PROCEDURES**

- (1) Notice of Claims. If the City or Contractor 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:
- (a) a description of the indemnification event in reasonable detail,
  - (b) the basis on which indemnification may be due, and the anticipated amount of the indemnified loss.

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 Contractor is prejudiced, suffers loss, or incurs expense because of the delay.

(2) Defense of Claims

- (a) Assumption of Defense. Contractor may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Contractor shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Contractor must advise the City as to whether or not it will defend the claim. If Contractor does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.
- (b) Continued Participation. If Contractor 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. Contractor 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 Contractor 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.

**E. Insurance**

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 coverages in the following amounts:

- (1) Commercial General Liability insurance including Contractual Liability insurance:  
\$500,000 per occurrence; \$1,000,000 aggregate
- (2) Workers' Compensation including Broad Form All States endorsement:  
Statutory amount
- (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.
- (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)

All insurance policies must require on their face, or by endorsement, that the insurance carrier waives any rights of subrogation against the City, and that it shall give 30 days written notice to the City before they may be canceled. 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:

- (1) ~~immediately suspend Contractor from any further performance under this Agreement and begin~~ procedures to terminate for default, or
- (2) purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this Agreement.

**F. Warranties**

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.

With respect to any parts and goods furnished by it, Contractor warrants:

- (1) that all items are free of defects in title, material, and workmanship,
- (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,
- (3) that each replacement item is new in accordance with original equipment manufacturer's 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
- (4) that no item or its use infringes any patent, copyright, or proprietary right.

**G. Licenses and Permits**

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

**H. Compliance with Equal Opportunity Ordinance**

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

**I. MWBE Compliance**

Contractor shall comply with the City's Minority and Women Business Enterprise ("MWBE") 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 7 % of the value of this Agreement to MWBEs.

Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with

the City's Affirmative Action Division and will comply with them.

~~Contractor shall require written subcontracts with all MWBE subcontractors and shall submit all disputes with~~  
MWBEs to binding arbitration in Houston, Texas if directed to do so by the Affirmative Action Division Director. MWBE subcontracts must contain the terms set out in Exhibit "D." If Contractor is an individual person (as distinguished from a corporation, partnership, or other legal entity), and the amount of the subcontract is \$50,000 or less, the subcontract must also be signed by the attorneys of the respective parties.

**J. Drug Abuse Detection and Deterrence**

(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.

(2) Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):

- (a) a copy of its drug-free workplace policy,
- (b) 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,
- (c) if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "F".

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.

(3) Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee work force.

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

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**K. Environmental Laws**

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.

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.

**L. Performance Bond and Maintenance Bond**

The Contractor shall furnish and maintain a performance bond in the amount of **100% of the yearly total contract cost, renewable annually**, during the initial three year contract term. If the City exercises its option to extend the agreement beyond the initial term of three years the Contractor shall furnish a performance bond for each renewal year. However, the surety providing the performance bond for the initial term of the agreement shall be under no obligation to provide the performance bond for any renewal year. The bond shall be conditioned upon the Contractor's full and timely performance of this agreement and must be issued by a corporate surety authorized to write surety bonds in the State of Texas and in the form set out in Exhibit "I" and "J".

If the City exercises any option years, Contractor shall maintain a Performance Bond in the amount equal to 100% of the contract amount for the option year, as determined by the City Purchasing Agent or Director. The bond must be in substantially the form attached as Exhibit "I" and "J" and issued by a corporate surety authorized and admitted to write surety bonds in Texas. If the amount of the bond exceeds \$100,000, the surety must be listed on the current list of accepted sureties on federal bonds published by the United States Treasury Department or reinsured for any liability in excess of \$100,000 by a reinsurer listed on the U.S. Treasury list.

**M. Contractor's Performance**

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.

**N. Payment of Employees and Subcontractors**

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.

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.

Contractor shall defend and indemnify the City from any claims or liability arising out of Contractor's failure to pay its subcontractors as required by law. Contractor shall submit disputes relating to payment of M/WBE subcontractors to arbitration in the same manner as any other disputes under the M/WBE subcontract.

**III. DUTIES OF CITY**

**A. Payment Terms**

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

Any quantities of services or Deliverables shown in any part of this contract or its exhibits are estimated only and are not any guarantee that the City will not purchase more or less of those services or Deliverables. The City will pay only for the services or Deliverables actually ordered and only at the unit prices set out.

**B. Taxes**

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.

**C. Method of Payment**

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 of receipt of an approved invoice.

**D. Method of Payment - Disputed Payments**

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.

**E. Limit of Appropriation**

- (1) The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.
  
- (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 \$220,000.00 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:
  
- (3) The City makes a supplemental allocation by sending a notice signed by the Director and the City Controller to Contractor and where appropriated, approved by motion, or ordinance of City Council in substantially the following form:

"NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS"

TO: [Name of Contractor]

FROM: City of Houston, Texas (the "City")

DATE: [Date of notice]

SUBJECT: Supplemental allocation of funds for the purpose of the "[title of this Agreement]" between the City and (name of Contractor) countersigned by the City Controller on (Date of Countersignature) (the "Agreement").

I, (name of City Controller), City Controller of the City of Houston, certify that the supplemental sum of \$\_\_\_\_\_, upon the request of the below-signed Director, 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.

The aggregate of all sums allocated for the purpose of such Agreement, including the Original Allocation, and all supplemental allocations (including this one), as of the date of this notice, is \$\_\_\_\_\_.

SIGNED:

(Signature of the City Controller)

City Controller of the City

REQUESTED:

(Signature of the Director)

Director

- (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.

**F. Changes**

- (1) At any time during the Agreement Term, the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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.

- (2) ~~The City Purchasing Agent or Director upon written authorization by the City Purchasing Agent~~  
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 upon written notice to the City Purchasing Agent]

- (3) The City Purchasing Agent or Director upon written authorization by the City Purchasing Agent may issue more than one Change Order, subject to the following limitations:
- (a) Council expressly authorizes the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent, to approve a Change Order of up to \$25,000. A Change Order of more than \$25,000 over the approved contract amount must be approved by the City Council.
  - (b) 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.
  - (c) The Total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.
- (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.

- (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) Change Orders are subject to the Allocated Funds provisions of this Agreement.

#### IV. TERM AND TERMINATION

##### A. Contract Term

This Agreement is effective on the Countersignature Date and expires one (1) year after the date specified in the Notice to Proceed unless sooner terminated according to the terms of this Agreement.

##### B. Notice to Proceed

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

##### C. Renewals

If sufficient funds are allocated, the City Purchasing Agent, at his or her sole discretion, may make a request to Contractor to renew this Agreement for up to two additional 1-year option periods, upon at least 30 days' written notice before expiration of the initial term, or first option period, as applicable. Any renewal, pursuant to this Section, shall be upon the same terms and conditions of the Agreement.

##### D. Time Extensions

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).

##### E. Termination for Convenience by the City

The City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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.

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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.

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.

**F. Termination for Cause by City**

If Contractor defaults under this Agreement, the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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:

- (1) Contractor fails to perform any of its duties under this Agreement;
- (2) Contractor becomes insolvent;
- (3) all or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
- (4) a receiver or trustee is appointed for Contractor.

If a default occurs, the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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 upon written authorization by the City Purchasing Agent, at his or her sole option, may extend the termination date to a later date. If the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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 upon written notice to the City Purchasing Agent may terminate this Agreement on the termination date, at no further obligation of the City.~~

To effect final termination, the City Purchasing Agent or Director upon written notice to the City Purchasing Agent 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.

**G. Termination for Cause by Contractor**

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.

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.

**H. Removal of Contractor Owned Equipment and Materials**

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

### A. Independent Contractor

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

### B. Force Majeure

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. This relief is not applicable unless the affected party does the following:
  - (a) uses due diligence to remove the Force Majeure as quickly as possible; and
  - (b) provides the other party with prompt written notice of the cause and its anticipated effect.
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.
4. If the Force Majeure continues for more than 30 days, the City Purchasing Agent or Director upon written authorization by the City Purchasing Agent 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.

### C. Severability

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.

**D. Entire Agreement**

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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.

**E. Written Amendment**

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.

**F. Applicable Laws**

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.

Venue for any litigation relating to this Agreement is Harris County, Texas.

**G. Notices**

All notices required or permitted by this Agreement must be in writing and are deemed delivered on the earlier of the date actually received or the third day following: (1) deposit in a United States Postal Service post office or receptacle; (2) with proper postage (certified mail, return receipt requested); and (3) addressed to the other party at the address set out in the preamble of this Agreement or at such other address as the receiving party designates by proper notice to the sending party.

**H. Non-Waiver**

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.

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.

**I. Inspections and Audits**

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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 3 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

**J. Enforcement**

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.

**K. Ambiguities**

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.

**L. Survival**

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.

**M. Parties In Interest**

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

**N. Successors and Assigns**

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.

**O. Business Structure and Assignments**

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 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.

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

**P. Remedies Cumulative**

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.

**Q. Contractor Debt**

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 therefor.

**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.

"Contractor Administrator" means the representative of the Department who is responsible for the administration for the Contract.

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

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

"Contract Term" is defined in Article IV.

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

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

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

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

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

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

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

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

"City of Houston Normal Business Hours" shall mean 7:30 a.m. to 4:30 p.m., Monday to Friday, except on days which are considered City holidays.

"Contract Technical Representative" (CTR) shall mean the representative of the Director of Public Works and Engineering Department assigned to verify services invoiced, maintain a record of available funds, comply with the terms of the contract, review the contract at the time of renewal, and administer the day-to-day activities of the Contract.

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

"Contractor's/subcontractor's Facility" shall mean place of business of the Contractor or its subs where the Contractor performs repairs of equipment and machinery for other entities, specifically where the Contractor plans to repair City of Houston equipment 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 do the necessary repair/replacement work for the specific equipment in each group. The facility shall be clean, free from dirt and dust, to prevent contamination and damage during assembly of the submersible pumps and installation of bearings and gears.

"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.

"Established Contractor/Supplier" is defined as any contractor who engages in any practice or trade, or method of dealing regularly in a place, vocation or trade as to justify an expectation that the contractor can be expected to perform in a satisfactory manner with respect to this contract.

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"Emergency Labor Rate "(ELR) shall mean the contractor's charge for labor for unscheduled, immediate, and continuous repair work, which shall be carried out until the repair of the unit is completed. CTR must authorize all emergency works.

"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.

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

"Maintenance Management System" (MMS) shall mean a computerized database to manage work order process, and maintains historical data about performance and repair of equipment at the Water Production and Wastewater Operations branches of the Utilities Division, City of Houston.

"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 CTR determines that the submersible pump is not to be repaired (Non-Repairable).

"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 Bid Form. These "other repair methods" must be authorized in writing by the equipment manufacturer and be approved by the Director.

"Overtime Labor Rate" (OLR) shall mean the contractor's charge for labor for work performed after contractor's Standard Business Hours. CTR must authorize all overtime works.

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

"PLC" shall mean Programmable Logic Controller.

"Repair" shall mean that the contractor, upon receipt of the unit, shall inspect and clean all components; wash, and dry the unit; check casing, impeller, seals, and other components, if applicable; check components fit and tolerances; bring all clearances to OEM standards; dynamically balance rotating parts assembly, re-assemble, perform all tests; check vibration at full rated voltage and frequency; and paint.

"RTD" shall mean Resistive Thermal Device.

"Standard Labor Rate "(SLR) shall mean the contractor's charge for labor during contractor's Standard Business Hours.

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

## EXHIBIT "B"

- 1.0 Reserved
- 2.0 Introduction
- 2.1 The purpose of this contract is to provide an array of specialty repair services particular to the Alstom Power Flash Drying systems and supporting equipment in use at the City's 69th Street Sludge Plant, 2323 S/Sgt. Macario Garcia (Key Map 494-R) and Almeda Sims Sludge Plant, 12319-1/2 Almeda Road (Key Map 572-S). The intent is to allow for more timely specialized repairs to both plants systems and thus improve our ability to maintain regulatory permit compliance.
- 2.2 The 69th Street facility has seven (7) dryer trains. Each dryer train has three (3) centrifuges and one (1) complete dryer system. The Almeda Sims facility has two (2) dryers and four (4) belt presses. Each Dryer system consists of these components: (1) Firebox; (1) Cyclone; (1) Mixer; (1) Cage Mill; (1) Double Flap Valve; (1) Dry Divider; (1) Pay-off Screw conveyor with variable speed drive; (1) Return Product Screw conveyor; (1) Vapor Fan; (1) Induced Draft (I.D.) Fan with damper; (1) System Vent Fan with Damper; (1) Combustion Air Fan with Damper; (1) Tempering Gas Duct Damper; (2) Dual Feed Burners; (2 each) Gas Regulators, Control Valves, Flow Meters, Gas Safety Shut-Off Valves; (3) Scrubber Water control valves; (12) Pneumatic Actuators; (12) Temperature Indicators; Deodorizer Tubes and (11) I/P Transducers.
- The 69<sup>th</sup> Street facility has the following equipment not present at the Almeda facility: (1) Shaker Screen; (1) Scrubber Fan with Damper; (3) Tube/Shell type Heat Exchangers identified as Combustion Air Pre-heater box, Core Pack; a proportional feed system on #3 only and (5) (water) flow meters.
- NOTE: The belt presses are not included as a part of the services of this contract.
- 2.3 The Contractor shall furnish all supervision, labor, parts, tools, materials, equipment, supplies, and facilities necessary to provide precision repair services for the sludge dewatering and drying facilities of Wastewater Operations, City of Houston. This shall include on-site repairs at City facilities as well as shop repairs at Contractor's facility. If requested by CTR, the Contractor shall demonstrate by means of adequate testing and documentation that the repaired unit has retained its operating efficiency. The cost for this operating efficiency test will be paid by City of Houston.
- 2.4 The contractor shall coordinate work activities as directed by CTR so as to avoid interference with ongoing operations and maintain regulatory permit compliance. Any tools or materials left at the plant site remain the responsibility of the contractor. Utilities including 115v power, plant air, water, and restrooms etc. are available from the city. Materials removed from the Dryers may be placed in the city's dumpsters as directed by CTR.
- 2.5 The equipment to be repaired has been grouped by item number to indicate the manufacturer, size, and type of the units.
- 2.6 The Contractor shall provide a PM with thorough understanding of dryer operations and with PE or at least shown as PE recommended.
- 2.7 **THE CITY OF HOUSTON SHALL HAVE FINAL APPROVAL OF ALL SUB-CONTRACTOR(S) TO BE UTILIZED TO PERFORM SERVICES UNDER THIS CONTRACT.**
- 3.0 Equipment Groups:
- 3.1 Centrifuge Repairs Group #1 Frequency as requested.

- 3.1.1 Repair and rehabilitate Sharples Model PM 75000 Solid bowl centrifuges in accordance to the OEM requirement and specifications. Work includes removal from frame, loading, transport to repair facility, inspection, repair, transport back to site, off loading, installing the equipment in place and testing.
- 3.1.2 Centrifuges shall be removed, overhauled, assembled, erected, and placed in proper operating condition in full conformity with original design drawing and specifications. Minimum performance shall be to original equipment manufacturer's specification and standards, including vibration and alignment performance requirements.
- 3.1.3 Refurbishment of centrifuges will be executed as follows:
- A. Inspect centrifuges on the site to determine if the repair can be accomplished on site.
  - B. Units identified as needing repair (rotating or conveyor assembly) will be removed from its foundation and transported to contractor's repair facility. At repair facility the unit will be disassembled and inspected documenting wear clearances and deviation from original manufacturers dimensions and tolerances.
  - C. Submit inspection report and itemized list of parts recommended for replacement.
  - D. Upon receiving authorization from City, proceed with rehabilitation of the centrifuges.
  - E. Transport centrifuges and rotating assemblies/conveyors back to the plant.
  - F. Install, calibrate, and align centrifuges and rotating assemblies as directed by manufacturer's representative.
- 3.1.4 The city reserves the right to decline to repair any unit. If the repair is rejected, the unit shall be re-assembled and returned to the plant.
- 3.1.5 If requested by the City, the contractor shall provide a turnkey service including disconnection and re-connection of power, lube oil, process lines and instruments to the unit and transporting units from and to the site.
- 3.1.6 Upon return of the unit to the city, the unit shall be demonstrated to perform to OEM and approved by the City. A four (4) hour test shall be performed on the refurbished centrifuge unit before leaving the service center. The results of this test shall be submitted to the City. Test results shall include assembled tolerances, operating noise levels, operating temperatures, and vibration.
- 3.1.7 All parts used in repair shall be OEM parts.
- 3.1.8 Each centrifuge consists of a bowl and frame with 150 HP electric drive motor, a scroll with a 20 HP D.C. back drive, lube oil pump, lube oil pump electric drive motor and planetary gear. Also required for proper operation are feed distribution piping and valves; (1) sludge flow meter and control valve; (1) polymer flow meter and control valve; temperature and vibration indicators.
- 3.1.9 Any unforeseen shop or field repairs, such as electrical work on the drives or gears, will be paid under "Additional Services".
- 3.2 Instrumentation and Control System: Group #2 Frequency as requested.
- 3.2.1 General Information:
- A. The 69<sup>th</sup> Street and Alameda Sims Drying Facilities process wastewater sludge into a dry granular fertilizer. It is a highly automated facility with an advanced control system. The systems specified here for maintenance and support are located on the west end of the 69<sup>th</sup> Street facility in and near the dryer building, the railcar building and silo storage building. The subsystems include dewatering, polymer distribution, drying, storage and conveying and miscellaneous supporting subsystems. The equipment to be supported and

maintained include workstations, servers, PLCs, actuators, sensors and all ancillary equipment. The technology employed at the facility includes electric and pneumatic controls, analog and digital sensors, Siemens 505 PLC systems; Microsoft PC based workstations, Wonderware Intouch Software, Microsoft SQL server. Sensors include flow meters, pressure transmitters, thermocouples, RTD's, motion and position transmitters. Actuators include valves, dampers, motor control and solenoids.

- B. There are over 4000 I/O points, 17 PLCs, 17 operator control stations and a SQL Data Server at 69<sup>th</sup> Street.

3.2.2 Processes to be supported:

Wastewater dewatering, polymer distribution; drying, conveying and storage.

3.2.3. Instrumentation technologies to be supported and maintained:

Pneumatic and electromechanical actuators; Pneumatic and electric transducers and transmitters; Variable frequency drives; Thermocouple and RTD temperature sensors and transmitters; Flow, motion, level, speed, position and pressure sensors and transmitters; Flame control and safety circuits.

3.2.4 Computing technology to be maintained and supported:

Siemens PLC PROFI-BUS and Ethernet networks. Siemens OP-37 and OP-17 operator interface devices. PC based operator interface devices.

3.2.5 Software technology to be maintained and supported only as needed. (No routine monthly maintenance is included in these services.)

Wonderware operator interface development software. Siemens Protocol operator interface development software. Softshop Siemens PLC application development software. Wonderware InSQL database management software.

3.2.6 Specific Control System Support Activities:

- A. Implement calibration schedule for the specified control systems.
- B. Calibrate, repair and or replace defective control equipment.
- C. Procure replacement control system components.
- D. Assess process data, faults and variances to determine corrective action.
- E. Coordinate efforts with COH and mechanical maintenance contractors.
- F. Document and communicate instrument and control opportunities, problems and accomplishments per COH instruction.
- G. Develop and maintain software, to enhance process control and maintenance of the processes and systems.
- H. Maintain and support the InSql server. Maintain server performance and storage. Verify correct operations of backup procedures. Refine historical reports per input from City. Install City approved and City provided system software upgrades as required by the City. Maintain associated software version control and license.
- I. Maintain and support the Application Server. Maintain server performance and storage. Verify correct operations of backup procedures. Install City approved and City provided system software upgrades as required by the City. Maintain associated software version control and license.
- J. Maintain and support the Wonderware Application: Install City approved and City provided system software upgrades as required by the City. Refine the Wonderware Intouch Operator Interface and related applications per City requirements to accommodate required changes. Maintain associated software version control and license. Provide telephone and onsite technical support for system troubleshooting as required.
- K. Maintain and support the PLC software. Refine PLC software for the new dryer system and related PLC applications per City requirements to accommodate

required changes based on operational experiences with the new dryer system. Maintain associated software version control and license. Provide telephone and onsite technical support for system troubleshooting.

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- 3.2.7. Includes the calibration, repair, and/or replacement of the instruments identified as elements of the Dryer Trains, the Fire suppression system and the polymer system.
- 3.2.8. The City shall direct actions as necessary to support plant operation.
- 3.3. General Equipment: Group #3 Frequency as requested .
  - 3.3.1. Examples of this group include fans, dampers, transmissions, sheaves, belts, valves, diffusers, pipe fittings, pumps, blowers, etc.
  - 3.3.2. The city will direct repairs as necessary.
  - 3.3.3. Fan Bearing Change Out:
    - A. There are thirty-five (35) Robinson fans of varying capacity with each dryer having one (1) each vapor, Induced draft, scrubber, system vent and combustion air fans.
    - B. It is estimated that an average of seven (7) inboard and outboard bearing sets per year are changed. This task involves the replacement of the link belt bearings, inspection and repair as necessary of any soft feet to remove any piping strains, and dynamic balancing of the fan
  - 3.3.4. Vapor Fan Cleaning and Inspection:
    - A. This task involves the removal of the upper fan housing section and removal of ash from the fan blades and housing.
    - B. Clearances shall be checked and adjusted as per the OEM specifications.
    - C. Upon completion, the fan shall be dynamically balanced.
- 3.4. Furnace: Group #4 Frequency as requested.
  - 3.4.1. Firebox:
    - A. This work shall include the installation of scaffolding and removal of all loose ash deposits on the inside of a firebox so as to allow the detailed examination of all refractory interior surfaces. Interior surfaces shall be scraped and brushed to remove the loose deposits. Ash removed from the firebox and ducts may be disposed of in the city's dumpster as directed.
    - B. Upon completion of the inspection, a written narrative report shall be provided detailing the type of damage, the linear feet or surface area of the repair and the contractor's recommended repair.
    - C. Depending on the conditions, the scaffolding shall remain up until further repairs are completed, or removed at the completion of the inspection.
  - 3.4.2. Burner Ring Refractory Tile Replacement:
    - A. Work shall Include all needed refractory and steel repairs to each Peabody M-12 burner on a fire box, removal of damaged refractory and replacement of the Peabody M-12 burner tiles (26 tiles / burner), 3/16" stainless steel tile retainer rings, "Bulls Eye" refractory ring, reinstallation of burner registers, and restoration of proper burner alignment. Work shall include all cutting, seal welding and masonry work to restore the burners to "OEM" alignment/operation.
  - 3.4.3. Firebox Interior Seam Sealing with pumpable ceramic fiber material:
    - A. Remove all loose ash and replace all missing ceramic fiber in all interior vertical and horizontal seams of a firebox.
    - B. Replace with pumpable/moldable ceramic fiber. Pumpable ceramic fiber shall

be Fibratec Ceramic Fiber Moldable or approved equal. The fiber shall be applied to interior and exterior seams as necessary to fill the voids and seal the unit from thermal losses through the seams.

C. Work shall include all scaffolding, equipment necessary to perform the work.

3.4.4 Miscellaneous Steel Repairs:

- A. Repairs to the steel shell and to interior sections of the units are sometimes necessary.
- B. Repairs to the burner boxes shall be 3/8" carbon steel plate seal welded around the entire perimeter.
- C. Repairs to the shell shall be 3/16" carbon steel plate seal welded around the perimeter as well.
- D. All repairs to exposed surfaces shall have the welds cleaned and one coat of industrial grade red primer paint applied to all exposed surfaces followed by one coat of "High Heat Aluminum" paint.

3.4.5 Refractory Repairs to Firebox and Ducts:

- A. The Dryers occasionally require refractory repairs in order to restore the necessary draft and correct heat losses. Repairs include both firebrick removal/re-installation/replacement and castable refractory repair/replacement.
- B. The contractor shall investigate the problem and recommend a scope of repairs.
- C. City staff shall direct repairs based on OEM standards and good work practice.

3.5. Scrubber System and Core-pak Heat Exchangers: Group #5 Frequency as requested.

3.5.1. Core-Pak Heat Exchanger Tube Cleaning:

- A. This task is for the hydraulic, pneumatic or mechanical cleaning of the "Shell" side of these 2" diameter tubes. Access is by square hatches upstream and downstream of the heat exchanger. Materials washed off of the tubes fall to the twin venturi scrubber sprays located on the 4th floor just below the roof. The contractor shall ensure these materials are removed from the venturis or washed through the attached drains.

3.5.2. Scrubber System Cleaning:

- A. This task is for the inspection, cleaning and adjustment (if needed) of the spray nozzles in the twin venturi washers, the twin separators, and the subcooler (3-tray impingement scrubber). The attendant water control valves shall also be inspected and adjusted (if needed).
- B. Note: This operation needs to be performed after the cleaning of the Core-Pak heat exchanger to avoid washing ash on the previously cleaned twin venturi washers.

3.5.3. Heat Exchanger Tube Replacement:

- A. This task shall include any scaffolding and/or rigging necessary to access the heat exchangers, inspection, evaluation and replacement of tubes as directed.
- B. Any ash accumulations shall be removed as part of this repair.
- C. The tubes shall be fitted into the tube sheets and flare rolled as per the original installation.
- D. Damaged structural members such as tube sheets shall be repaired or replaced as directed.

3.6. Mixer and Cage Mill Repairs: Group #6 Frequency as requested.

3.6.1. Mixers and cage mill:

- A. Both of these units experience routine wear with the worn parts changed annually on average. Worn mixer parts usually include the paddles and tips. Non-routine work would include changing of the liner sections, shaft / seals/bearing

replacement and mixer gear motor and drive chain repairs. Cage Mills usually have heavy wall pipe and flat plates changed on the "Spider". Other non-routine work includes repair/replacement of liner sections and refractory repair.

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- 3.6.2 Miscellaneous Steel Repairs:
  - A. Repairs to the steel shell and to interior sections of the units are sometimes necessary.
  - B. Repairs to the burner boxes shall be 3/8" carbon steel plate seal welded around the entire perimeter.
  - C. Repairs to the shell shall be 3/16" carbon steel plate seal welded around the perimeter as well.
  - D. All repairs to exposed surfaces shall have the welds cleaned and one coat of industrial grade red primer paint applied to all exposed surfaces followed by one coat of "High Heat Aluminum" paint.
- 3.7. Cyclone Gas Duct: Group #7 Frequency as requested.
  - 3.7.1. Cyclone Castable Refractory Lining Repair:
    - A. Repair the gunite lining in the Dryer cyclone.
    - B. Work shall include all scaffolding removal of affected materials, installation/replacement of the 5/16" 304 stainless steel anchors on 8-inch centers with Ledger stainless steel V-Type anchors at 6-inch centers on the ceiling and 9-inch centers on all other surfaces, and application of 3-inches of new, compatible refractory on all surfaces inside the cyclone. The material shall be cut back and feathered into the surrounding refractory as necessary.
    - C. The amount of area to be repaired will be determined by the City.
    - D. Removed refractory materials may be placed in the City's dumpster as directed.
- 3.8. Combustion Air Pre-Heater, Deodorizer, and Core-Pak Tubes: Group#8 Frequency as requested.
  - 3.8.1 Combustion Air Pre-Heater Tube cleaning:
    - A. This task is for the pneumatic, hydraulic, or mechanical cleaning as necessary of the inside of these 2-inch diameter x 14 foot length tubes.
    - B. Work shall include dislodging of all ash and other deposits from the tube and shell sides of the tubes, removal from the unit and disposal as directed.
  - 3.8.2. Deodorizer Tube Cleaning:
    - A. This task is for the pneumatic, hydraulic, or mechanical cleaning as necessary of the inside of these 2-inch diameter x 18 foot length tubes.
    - B. Work shall include dislodging of all ash and other deposits from the tube and shell sides of the tubes, removal from the unit and disposal as directed.
- 3.9. Fire Suppression System: Group #9 Frequency as requested.
  - 3.9.1. This task includes the calibration, repair, and / or replacement of the instruments identified as elements of the Dryer Trains as well as the support systems, including the Dryer and Centrifuge control systems, the Fire Suppression System and the Polymer System.
  - 3.9.2. The control systems include Siemens Simatic PLC's, supporting cards, their fiber-optic highways and all supporting software and hardware included in Item #2. The City shall direct actions as necessary to support plant operation.
- 3.10. Drag Chain Conveyors and Product Transport System: Group #10 Frequency as requested.
  - 3.10.1. This work involves the repair/replacement of all moving and stationary parts of the Dry Product transport system to include the following:

14 drag chain type conveyors; 19 bag houses; 2 bucket elevators; 1 aspirator; 1 rotary separator screen; 5 vent fans; 2 gravity spouts; 2 metal storage bins; and 3 variable length dust controlled loading chutes.

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3.10.2. Components of these systems include, but are not limited to, motors, sheaves, belts, variable speed drives, chains, sprockets, flights, flight scrapers, shafts, bearings, fabric boots, fabric socks for bag houses, lubricators, metal and non metal wear parts, etc.

3.10.3. Work shall include all welding, fabrication, modification, alignment and repair of this system.

3.11 Proportional Feed System: Group #11 Frequency as requested.

3.11.1 The 69<sup>th</sup> St. Dryer #3 is separately equipped with a proportional feed system. This equipment includes; (1) wet tank, (1) dry tank, (1) wet hopper, (1) roll mill crusher, (5) 14-3/8" screw conveyors, the dry feed; wet feed, leveling, and a horizontal and vertical feed conveyor. Note: at this time the construction of the unit has not been completed and turned over to the city.

#### 4.0 Maintenance Requirements

4.1 This specification covers the general requirements for the reconditioning, repairing, and testing of the equipment located at the City of Houston 69th St. and Almeda Sims sludge facilities. This includes, but is not limited to, centrifuges, furnaces, fans, pumps, motors, control system, conveyer system, dewatering equipment, PLC's, bearings, seals, cables, cable supports, guide cable, guide rails, chains, support brackets, and general electrical/mechanical work.

4.2 This specification defines minimum acceptable requirements for the repair of the units.

4.3 Unless otherwise specified, fabrications, processes, parameters, and test methods for the equipment shall conform to the latest revision of the following ELECTRICAL APPARATUS SERVICE ASSOCIATION (EASA) documents:

- EASA AR100-1998 - RECOMMENDED PRACTICE FOR REPAIR OF ROTATING APPARATUS (hereafter abbreviated as EASA AR100-1998);
- EASA Technical Note No. 16 – GUIDELINES FOR MAINTAINING MOTOR EFFICIENCY DURING REBUILDING, September 1999 (hereafter abbreviated as EASA Tech Note No. 16);
- EASA Technical Note No. 17 – STATOR CORE TESTING, updated March 1997 (hereafter abbreviated as EASA Tech Note No. 17); and
- EASA Bearing Fit Tolerance Chart updated 1997.

4.4. 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 AR100-1998 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.

4.5 The equipment at City facilities are purchased and installed under Original manufacturer specifications latest edition requiring compliance with the applicable sections of the following standards and codes:

- American National Standard Institute (ANSI)
- American Society for Testing and Materials (ASTM)
- Anti-Friction Bearing Manufacturing Association (AFBMA)
- Hydraulic Institute
- Institute of Electrical and Electronic Engineers (IEEE)
- National Electric Code (NEC)
- National Electrical Manufacturers Association (NEMA)
- Steel Structures Painting Council (SSPC)

- City of Houston Electrical Code

4.6 Wherever this document refers to the following codes and standards, then that specific sections of the code/standard shall apply to the repairs being carried out by the Contractor:

- Steel Structures Painting Council (SSPC)
- Anti-Friction Bearing Manufacturing Association (AFBMA)
- American Society for Non-Destructive Testing

4.7 At City facilities the installed equipment are units produced by the following manufacturers (but not limited to):

1. Alstorm Power, Raymond Division
2. Alfa Laval Sharples
3. Robinson Fans
4. Peadody burners
5. AP Green
6. Honeywell actuators and gas control valves
7. Rosemont transducers
8. ABB flow meters.
9. Bird Units
10. Alfa Luna Sharples

4.8 The CTR will provide copies of the following O&M manuals. Manuals not listing below must be obtained, and ONE (1) copy provided to the CTR, for equipment repaired and/or replaced under this contract.

<b>Equipment</b>	<b>Manual Description</b>
<b>Centrifuges</b>	None Available
<b>Instrumentation and Control</b>	Flash Drying System Manual
	Fisher Gas Regulator, Type S201 and S202
	Polymer Control
	TI 545 CPM
	Simatic 505
	505 Analog CTI 2573-MOD
	Operator Panel
	Model 1151 Transmitter
<b>General Equipment</b>	Flash Drying System Manual
	Fans, Robinson Industries, Inc., Models 64P8W, 64RB-1216, 49RB-1216, 50-RB-1216, 25FRD
	Guillotine Damper Assemblies
	Gear Motors and Reducers
<b>Furnace Equipment</b>	Flash Drying System Manual
	Burners, Peabody Engineering Corp., Model M12
<b>Scrubber System and Core-Pak Heat Exchanger</b>	Flash Drying System Manual
	Cor-Pak Heat Exchangers
<b>Mixer and Cage Mill</b>	Flash Drying System Manual
<b>Cyclones Gas Duct</b>	Flash Drying System Manual
<b>Combustion Air Pre-heater, Deodorizer, and Core-Pak tubes</b>	Flash Drying System Manual
<b>Fire Suppression System</b>	None Available
<b>Drag Chain Conveyors and Product Transport system</b>	Sweco Vibro-Energy Separator, Model US 48, 1200 RPM

	Falk Corporation Fluid Power Drive, Model A-FPG7.58 and Falk Screw Conveyor Drive, Model 2203.JSC25
	Shaftless Screw Conveyor
<b>Proportional Feed System</b>	Proportional Feed System Manual

- 4.9 Contractor shall furnish, if requested by CTR, copies of current environmental permits and demonstrate compliance with current environmental regulations.
- 4.10 Subcontractors to the Contractor for the performance of work are subject to the same standards as the contractor.
- 4.11 At a City location, all machinery and equipment that are undergoing maintenance and repair shall be locked-out/tagged-out (LOTO) to protect against accidental or inadvertent operation when such operation could cause injury to personnel or damage to equipment. LOTO shall carry out by "City of Houston Authorized Personnel" only. "City of Houston Authorized Personnel" may include qualified electricians, mechanics, and operators.

5.0 Work Orders

- 5.1 The CTR will request a proposal and cost estimate from the Contractor for the designated project.
- 5.2 The Contractor must respond with their proposal and cost quotation within three (3) working days after receiving the request from the CTR. The quotation must include a breakdown by the applicable contract Fee Schedule Line Item of each service to be provided, the quantity, the total cost for that Line Item and all necessary drawings and specifications.
  - 5.2.1 The Contractor will submit a completed **Hazard Communications Program / Contractor Compliance Form** (Form E) with each cost quotation if work is to be completed on City property.
- 5.3 If the Contractor's Proposal is acceptable, the CTR will issue a "Work Order" authorizing the Contractor to perform work.
  - 5.3.1 The schedule of work will be coordinated with the CTR so as not to interfere with plant operations.
  - 5.3.2 The Contractor will not commence work until the CTR has approved the submitted schedule of work. The Contractor must also obtain approval of the schedule of work prior to start of work.
- 5.4 The Contractor must start the approved work within three (3) working days after the Work Order is issued. The Contractor agrees to start a specified work order within twenty-four (24) hours or less if an emergency condition exists.

6.0 Repair and Replacement Parts

- 6.1 The Contractor shall use only NEW and ORIGINAL EQUIPMENT MANUFACTURER (OEM) parts in the repair of the City's equipment.
- 6.2 At Contractor's repair facility, the Contractor shall disassemble the unit, inspect it and prepare a scope of work to repair and replace parts with *new* OEM parts.
- 6.3 If the Contractor plans to use any part other than an OEM specified part, the Contractor shall obtain written permission from CTR before using such parts.
- 6.4 At the City's option a City representative will pick up all non-repairable units. Non-repairable units do not need to be reassembled.

6.5 Contractor shall ensure the Equipment Inventory number (EI) tag remains attached to the equipment. Contractor shall notify the CTR if the (EI) tag is damaged or missing.

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6.6 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. New nameplates shall be permanently attached with mechanical fasteners. The cost of a new nameplate shall be paid on the reimbursable cost-plus basis. Timing for installation shall be mutually agreed upon in writing between the CTR and the Contractor.

6.7 Attach a tag to each equipment housing to include the Repair Date as well as Contractor's name and Job Number. The tag shall be secured with stainless drive pins. The cost of the identification tag shall be paid on the reimbursable cost-plus basis. Timing for installation shall be mutually agreed upon in writing between the CTR and the Contractor.

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

6.9 If requested by the CTR, Contractor shall furnish parts needed for maintenance activities of equipment by City Personnel. Contractor shall charge the same price for these parts as scheduled in the Fee Schedule under "Parts and Material."

6.10 The City reserves the right to pick up any and all parts that are quoted by the Contractor to be replaced. This includes (but is not limited to) seals, bearings, and other items of any equipment undergoing repair work.

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

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

6.13 All painted equipment with peeling paint or rust shall be sandblasted. The cost of sandblasting shall be included as a part of the base cost of any repair.

6.14 Assembled repaired equipment shall be tested for vibration. The vibration level shall not exceed manufacturer recommendation. The vibration measurements shall be recorded on the Final Test Sheet. (Final Test Sheet Forms are to be provided by the Contractor with CTR having final approval of the format.) All costs associated with the vibration test shall be included as a part of the base cost of any repair work.

6.15 The Contractor shall be responsible for storage of the equipment in need of repair and all parts. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at Contractor's expense.

6.16 Paint booth shall not be used for Sandblasting.

6.17 Steam clean area shall be so designed with all the run-offs captured into an approved oil/grease recovery system.

## 7.0 Required Documentation

7.1 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 of Houston Ordinance Number, Contract number, signature of receiving employee, printed name, employee number and the authorization release number.

7.2 All markups shall be based on part vendor's or sub-contractor's ACTUAL ORIGINAL Invoiced Documents. The contractor shall submit these actual original invoices, as attachments, with the final invoice for payment by City for the work performed by the Contractor.

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7.3 Where hourly work is performed on behalf of the City, the Contractor (and Sub-Contractors of the Contractor) shall fully document the start of the work, the time spent on the job, and completion of each job. The documentation shall be punch card/time-clock or shop record or any other mutually agreed method. The field TIME SHEETS should be signed DAILY by a City of Houston Supervisor at the facility location, if a City supervisor is available. ALL TIME SHEETS shall be approved by the CTR on the last working day of each week.

7.4 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.

7.5 The City shall be billed only for the hours the contractor works on City equipment whether at City facility or at Contractor's facility. No itemized travel time is allowed or reimbursable.

7.6 The Contractor shall provide minutes from the monthly meetings.

#### 8.0 Reporting and Documentation

8.1 Any equipment removed from City property shall be documented on an "Equipment Release Authorization Form" (Form C). The Public Works and Engineering Department may use a log in conjunction with the Equipment Release Authorization form. The department requesting services shall provide the Equipment Release Authorization Form. The user department shall adjust the Form to reflect the Contract Number and Ordinance Numbers pertaining to this Contract.

8.2 The Contractor shall submit photos depicting the proposed equipment for repairs or replacement. These photos shall clearly show the existing conditions of the equipment. Each image should be labeled with; the date the photo was taken, location, and proposed work i.e. cleaning, repairs, replacement, etc. Additionally the contractor shall submit a similar photo depicting the same piece of equipment showing the condition of the equipment following the completion of repairs/refurbishment work for a record of before and after repair/refurbishment work.

8.3 CTR and the Contractor's manager shall meet once a month to review the records of the completed works, works in progress, and any other matter related to this contract. The Contractor shall provide a current status of all Work Orders utilizing the "Progress and Status Report Form" (Form D) to the CTR at each meeting. Any discrepancies shall be resolved at that time and all backlogs shall be completed by the tenth of the following month.

8.4 Upon completion of any repair work the Contractor shall provide to the City, a full set of completed "Equipment Teardown and Recommended Repair Report(s)" (Form A), work performed on the unit, test and data sheets including Electrical, Machinist and Mechanical Report. (Electrical, Machinist and Mechanical Report Forms are to be provided by the Contractor with CTR having final approval of the format.) 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 AR100-1998 1.3.2).

8.5 Additional form(s) may be required during the term of this contract at the direction of the CTR.

#### 9.0 Explosion-Proof Rated Equipment

- Repair of Underwriters Laboratory (UL) approved explosion-proof equipment
- Repair of Factory Mutual (FM) approved explosion-proof equipment.

- 9.1 The repair of Underwriters Laboratory (UL) explosion-proof equipment shall be performed in a UL approved shop by skilled mechanics that are familiar with repair practices typical to explosion-proof equipment.

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- 9.2 The repair of Factory Mutual (FM) explosion-proof equipment shall be performed in a "Factory" approved shop by skilled mechanics that are familiar with repair practices typical to explosion-proof equipment.
- 9.3 Only OEM parts are allowed in the repair of UL approved units, except for bearings and seals. NO OTHER EXCEPTIONS.
- 9.4 Only shafts and seals can be reworked for a repair of UL approved units.
- 9.5 The repaired "UL" unit shall be re-certified by an UL inspector.
- 9.6 The shop shall provide the City with a copy of the "UL Certification Sheet" (Form B). The certificate shall bear the UL file number.
- 10.0 Repair and Replacement
  - 10.1 The Contractor shall inspect, repair, and/or troubleshoot assemblies and subassemblies of the equipment in lieu of replacement unless the repair cost of the equipment 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 economic evaluation and various operational considerations.
  - 10.2 The CTR must approve, in writing, the purchase of a new unit in lieu of repair.
  - 10.3 Replacement unit shall have the same characteristic as the one being replaced and shall have a "Premium" or best available "Efficiency" motor unless otherwise authorized, in writing, by CTR.
- 11.0 Specific Tasks and Scope of Work
  - 11.1 Upon request for estimate from the CTR and within THREE (3) working days the contractor shall inspect the equipment at the Wastewater facility. If repairs can be performed at City facility at the time of inspection, the Contractor shall do the needed repair and release/return the unit to Operation.
  - 11.2 If the unit can be repaired at City location but additional parts and services are needed, the Contractor shall notify the CTR and prepare a scope of the work within seventy-two (72) hours and submit it to the CTR for approval and issue of a work order. The scope of work shall include the estimated time for delivery of parts and expected completion date of the work. The Contractor, upon receipt of work order, shall complete the repair of the unit within allocated time and release/return the unit to Operation.
  - 11.3 After issuance of the Work Order, if the unit cannot be repaired at City location, the Contractor shall notify the CTR. Within forty-eight (48) hours, the Contractor shall pull the unit from its foundation or pit, and load the unit on Contractor's vehicle, and transport/deliver the unit to Contractor's/ sub-contractor's repair facility.
  - 11.4 The Contractor or its sub shall furnish hoist, crane, etc. for loading and unloading of the unit at City facilities and at Contractor's facility.
  - 11.5 Before disassembly of the unit at Contractor's shop, the Contractor/ sub contractor shall inspect the unit and document the existing conditions, damaged and missing parts. In addition, the Contractor shall photograph the unit and sub-assemblies, as received. These photographs and any subsequent photographs of the unit and its parts shall be parts of the repair record.

- 11.6 The Contractor shall chemically and mechanically clean all external surfaces, as required.
- 11.7 ~~The Contractor shall perform the necessary tests, with measurement recorded in the Equipment Teardown and Recommended Repair Report (Form A).~~
- 11.8 The Contractor shall disassemble the units and clean all internal parts.
- 11.9 The Contractor shall inspect all components of the units and all critical areas to determine if clearances are within OEM tolerances, and the parts meet manufacturer's specifications.
- 11.10 The Contractor is responsible for obtaining the OEM data from the manufacturers.
- 11.11 The Contractor shall inspect the unit and its shaft for corrosion, erosion, chipping, scoring, and other damages and shall record this observation on the Teardown Report.
- 11.12 The Contractor shall inspect the rotor shaft for "roundness/runout" and determine if it is within OEM tolerance.
- 11.13 The Contractor shall inspect the shaft extensions and keyseats (keyways), if applicable. Shaft extensions must be smooth, polished, and concentric with shaft center. Shaft extension dimension shall be checked.
- 11.14 Contractor shall inspect each bolt for damaged threads.
- 11.15 Repair shall include sandblasting, welding and machining as required. Other services required of Contractor shall include Non-Destructive Testing (NDT), chroming and metallizing if and when required.
- 11.16 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).
- 11.17 Contractor shall determine what 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.
- 11.18 The CTR will inspect the disassembled unit, review the Contractor's proposed work scope and cost estimate, and revise/approve the work scope/cost estimate.
- 11.19 Upon acceptance of cost estimate by the CTR, the CTR will issue a work order. Upon the receipt of the work order the 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:
- 11.20 The Contractor shall notify the CTR immediately if the Contractor cannot complete the job within the contractually agreed time period detailed in the authorizing Work Order. The Contractor shall submit to CTR a detailed explanation for the delay with a new schedule to complete the job.
- 11.21 At all times during the repair process, Contractor shall maintain City's equipment in a clean and weather protected storage area.
- 11.22 Shaft seal surface, bearing journals, shall be micrometer checked and recorded on the information sheet.
- 11.23 End bells and bearing housing critical dimensions shall be micrometer checked and recorded on

the mechanical inspection sheet.

- 11.24 ~~The above measurements shall be submitted to CTR, along with the Electrical, Machinist and Mechanical Report Form(s), during the teardown inspection.~~
- 11.25 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.
- 11.26 After parts have been repaired, Contractor shall put together the rotating assembly and balance it.
- 11.27 The Contractor shall reassemble the unit, test, seal and paint, as required.
- 11.28 Surface of all REPAIRED units shall be prepared for painting to white metal finish by blast cleaning to SSPC-SP5. Changes to paint specifications shall be approved in writing by CTR prior to application of paint.
- 11.29 Surface of all REPAIRED units requiring a paint job shall be primed and finished, in an approved paint booth, using the unit manufacturer's standard epoxy painting system:
- The minimum Prime coat thickness shall be 3 mils DFT, dry film thickness (DFT).
  - The minimum finish coat thickness shall be 6 mils DFT, dry film thickness (DFT).
- Changes to paint specifications shall be approved in writing by CTR prior to application of paint.
- 11.31 If manufacturer's "standard epoxy painting" information is not available, the following industrial coating specification for surface of pumps and equipment shall be followed:
- The primer and finish coats shall be two-component, rust-inhibitive, polyamide-cured epoxy coating with a recoatable finish,
  - The prime coat shall be Ameron 38P, Tnemec 69, or equal.
  - The finish coat shall be Ameron 38S, Tnemec 69, or equal.
- Changes to paint specifications shall be approved in writing by CTR prior to application of paint.
- 11.32 The user department will specify the paint color.
- 11.33 Whenever needed, only OEM specified lube/cooling oils, or equal, shall be used in the oil chamber. The lube/cooling oils shall be biodegradable, nontoxic, and FDA approved.
- 11.34 Only OEM specified greases, or equal, shall be used on the bearings.
- 11.35 The Contractor shall return the repaired unit to a City facility, check all associated equipment, install the unit into pit/foundation, and reconnect cables and piping.
- 11.36 The Contractor shall ensure that all electrical control for alarms-shutdown of the systems are operational and are set as specified by OEM before the field test run.
- 11.37 The Contractor shall have the OEM's information on the unit performance, electrical data, and temperature data of the unit at hand before the start of the unit.
- 11.38 Before start of the unit, the Contractor shall check the system for any abnormal conditions and record it accordingly. All deficiencies shall be corrected before start of the unit.
- 11.39 The Contractor shall measure/record the voltage and current readings of the system at NO LOAD and at FULL LOAD and shall compare these readings with the OEM values. Any deviations or unusual conditions shall be evaluated and corrected, if needed.
- 11.40 The vibration levels, if measured, shall be as specified by the OEM. If needed, the City will

assist the Contractor to obtain the OEM data from the manufacturers.

11.41 ~~The final check of the system shall be made at the end of the test run when the units and the system have reached their operating conditions. All adjustments and/or modifications needed shall be made before placing the unit into permanent service.~~

11.42 At the request of the CTR, the Contractor shall seek an expert for trouble shooting and operational enhancements. These services may or may not include engineering services to enhance the various system component performances and/or to reduce operating costs.

## 12.0 Equipment Inspection and Repair

12.1 The Contractor shall provide an "Equipment Teardown and Recommended Repair Report" (Form A) showing the condition of the unit upon receipt, the repair work done, and the final test results. The actual format shall be mutually agreed upon.

**12.2 During disassembly, the unit shall be visually inspected to determine cause of failure, including electrical and/or mechanical failure.**

## 13.0 Standard Response Times

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

13.2 Contractor shall be available and accessible to the City via telephone to work overtime if requested by the CTR.

13.3 Contractor shall be available and accessible to the City via telephone to work emergency if requested by the CTR.

13.4 Contractor shall start an emergency job immediately, without scheduling delays, and will not be restricted to normal working hours. CTR shall coordinate the emergency and overtime work.

## 14.0 Acceptance of Repair

### 14.1 Shop "Final Test"

14.1.1 The CTR shall inspect the repaired unit before the performance test can begin. It is the Contractor's responsibility to ensure communication has been established with the CTR for witnessing of the performance test.

14.1.2 All control sensing devices shall be checked to ensure they meet the OEM specifications. The control sensing devices shall include (but not be limited to) thermal sensors, moisture sensors, and thermistors.

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

14.1.4 Vibration level measurements shall be taken on the completely assembled unit at the bearing housings (horizontal, axial and vertical positions) adjacent to the shaft. The vibration level limits set in O & M shall not be exceeded.

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

14.1.6 After corrective actions are made, the unit shall go through a new Shop test run before the unit is dispatched to be installed and undergo Field Test Run.

### 14.2 Field "Run Test"

14.2.1 The CTR shall inspect the repaired unit before the Field Run Test can begin. It is the Contractor's responsibility to ensure communication has been established with the CTR for witnessing of the performance test.

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14.2.2 After the unit is run continuously under site's FULL LOAD condition for at least twenty-four hours, the Contractor shall measure/record data of start and run. Acceptable values of all readings are as specified by the OEM.

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

14.2.4 After corrective actions are made, the unit shall go through a new Field Run Test before the unit is accepted.

14.2.5 The repair record and report covering teardown report, photographs of the condition of the unit, specific measurements, and tests such as balancing of rotating elements, vibration measurements, mechanical measurements, start current, run current, insulation level, and others shall be kept for three years by the Contractor, and shall be furnished to the City if requested by CTR.

14.2.6 A typed copy of Repair Data Sheets covering results of specific tests such as balance, vibration measurement, electrical testing results, mechanical measurements, rewinding data, and final Shop Final Test as well as Field Run Test sheets shall be included with the shipment of all repaired units, if requested by CTR.

14.2.7 The City shall not make any payment to the Contractor until ALL corrective actions are made and the equipment repair is accepted.

#### 15.0 Silence of Specifications

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

#### 16.0 Additional Services

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

16.2 Contractor shall perform Additional Services using the unit rates in the Contract 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 upon in writing between the CTR and the Contractor.

#### 17.0 Warranties

17.1 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.

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

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

the repaired unit.

17.4 ~~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.~~

17.5 During the warranty period ALL failed units shall be re-repaired or replaced at Contractor's expense if failure occurs under normal operating conditions or if the failure is due to faulty parts or negligence of the Contractor.

17.6 If the number of days a unit is out of service for warranty repair exceeds ten (10) business days, the warranty shall be extended by the number of calendar days the unit has been out of service.

#### 18.0 Invoices

18.1 Contractor shall submit invoices for payment in triplicate (one original and two copies) that are on Contractor's company stationary with the original signed by an authorized agent of the company. The invoice number shall not be duplicated during the term of the contract periods. Each invoice shall detail the following information:

- The Contractor shall submit invoices with a summary statement. All invoices will be correlated with billings, numbered, and referenced on the summary statement to facilitate an orderly review.
- City Contract number and Contractor's Job Number.
- Contractor's Job Number shall appear clearly on all time sheets, invoices, and suppliers' invoices.
- Contractor's name and address and where the service was performed.
- City equipment EI Number, and City Work Order Number.
- City Facility Number and address where equipment had been prior to service.
- Detailed description of services rendered.
- Description of Parts or components repaired or replaced. Provide Part Numbers, listing before and after discount. If parts are reconditioned, the costs to recondition parts must be listed.
- Subcontractors' invoices with detail description of work performed, hours, photos, and cost.
- Labor hours and rates.
- City delivery and pickup tickets
- UL re-certification for explosion-proof units
- Subtotal costs for parts and labor separately.
- Total invoice costs.
- The frequency of invoices shall be once per month at an agreeable date established by the CTR.

18.2 Partial billing will not be accepted with the exception that the City reserves the right to grant a partial payment at it's discretion. The CTR shall grant an exception if it is in the best interest of the City to grant a partial payment for work not 100% complete.

#### 19.0 **Additions & Deletions:**

The City, by written notice from the City Purchasing Agent to the Contractor, at any time during the term of this contract, may add or delete like or similar equipment, supplies, locations and/or services to the list of equipment, supplies, locations, and/or services to be provided. Any such written notice shall take effect on the date stated in the notice from the City. Similar equipment, supplies, services, or locations added to the contract shall be in accordance with the contract specification/scope of services, and the charges or rates for items added shall be the same as specified in the fee schedule. In the event that the additional equipment, supplies, locations and/or services are not identical to the item(s) already under contract, the charges therefore will then be the Contractor's normal and customary charges or rates for the equipment, supplies, locations and/or services classified in the fee schedule.

## 20.0 ESTIMATED QUANTITIES NOT GUARANTEED

The estimated quantities specified herein are not a guarantee of actual quantities, as the City does not guarantee any particular quantity of maintenance and repair of ~~sludge dewatering and drying equipment~~ services during the term of this contract. The quantities may 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.

## 21.0 WARRANTY OF SERVICES

a) *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.

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

- b) Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The City shall give written notice of any defect or nonconformance to the Contractor within a one-year period from the date of acceptance by the City. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming services at no additional cost to the City, or (2) that the City does not require correction or re-performance.
- c) If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the City thereby, or make an equitable adjustment in the contract price.
- d) If the City does not require correction or re-performance, the City shall make an equitable adjustment in the contract price.

**Form A: Sample Equipment Teardown and Recommended Report  
Sludge Facility Equipment Repair Report  
Public Works and Engineering Department**

Contractor: \_\_\_\_\_

City Contract Number: \_\_\_\_\_

Contractor Job Number: \_\_\_\_\_

EI #: \_\_\_\_\_ Equipment Location: \_\_\_\_\_ City Facility Number: \_\_\_\_\_

**Nameplate Information:**

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

**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		
Other		

**Runouts:**

Shaft DE	
Shaft ODE	
Face of Rotor	

List all tests performed on this unit:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Form A: Sample Equipment Teardown and Recommended Report**  
**Sludge Facility Equipment Repair Report**  
**Public Works and Engineering Department**

---

Recommendation: Repair: \_\_\_\_\_ Replace: \_\_\_\_\_

Other Repairs Needed:

Parts Description:

Job Title: \_\_\_\_\_

Date: \_\_\_\_\_

Prepared By: \_\_\_\_\_

Form B: Sample U.L Certification Sheet  
Sludge Facility Equipment Repair Report  
Public Works and Engineering Department

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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Equipment MFGR: \_\_\_\_\_ FRAME: \_\_\_\_\_

Equipment SERIAL #: \_\_\_\_\_

HP: \_\_\_\_\_ VOLTS: \_\_\_\_\_ AMPS: \_\_\_\_\_ CODE: \_\_\_\_\_

INSULATING CLASS: \_\_\_\_\_ THERMOSTAT MOUNTING  
CODE: \_\_\_\_\_

U.L. INSPECTOR NAME: \_\_\_\_\_

U.L. INSPECTOR EMPLOYEE #: \_\_\_\_\_

**Form C: Sample Equipment Release Authorization Form**  
**Release No. : \_\_\_\_\_**  
**Sludge Facility Equipment Repair Report**  
**Public Works and Engineering Department**

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 EQUIPMENT:

\_\_\_\_\_  
 \_\_\_\_\_

NAME OF THE SHOP THE EQUIPMENT IS BEING TAKEN TO:

\_\_\_\_\_

IS THERE A PICTURE OF THE EQUIPMENT ATTACHED?

YES: \_\_\_\_\_ No: \_\_\_\_\_

**CONTRACTOR REPRESENTATIVE**

**CITY OF HOUSTON REPRESENTATIVE**

NAME: \_\_\_\_\_

NAME: \_\_\_\_\_

EMPLOYEE #: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

EMPLOYEE NUMBER: \_\_\_\_\_

EMPLOYEE NUMBER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

**Form D: Sample Progress and Status Report Form**  
**Date: \_\_\_\_\_**

**Sludge Facility Equipment Repair Report**  
**Public Works and Engineering Department**

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 \$

**Form E:**  
 City of Houston  
 Hazard Communications Program  
**SAMPLE CONTRACTOR COMPLIANCE FORM**

DEPT: Public Works and Engineering  
 LOCATION(S): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

COMPLIANCE STEPS	<u>CHECK,</u> if Yes	<u>DATE</u>
1. Will contractor bring chemicals on City property?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have the chemicals been assessed for hazards? (Attach HCP-1)	<input type="checkbox"/>	<input type="checkbox"/>
3. Has Safety/Risk Management approved usage?	<input type="checkbox"/>	<input type="checkbox"/>
4. Has MSDS/HazCom Program information been exchanged?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have City employees been trained on hazards posed by the contractor's chemicals brought onto City property?	<input type="checkbox"/>	<input type="checkbox"/>

**RECEIPT OF INFORMATION**

**Exchange of HazCom Packets:**

CITY REP (Name/Title): \_\_\_\_\_ Date: \_\_\_\_\_  
 CONTRACTOR REP: \_\_\_\_\_ Date: \_\_\_\_\_

Has the CONTRACTOR documented HazCom training of their employees? If YES, sign below.

CITY REP (Name/Title): \_\_\_\_\_ Date: \_\_\_\_\_

**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"

### MWBE 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. Automation Nation, Inc. (MWBE 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. Automation Nation, Inc. (MWBE 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 nor the applicable statute of limitations.
  3. Within five 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 signature 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 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 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 American Arbitration Association on file in the Office of the City's Affirmative Action Division.
- Upon submittal of the matter to arbitration 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.
- 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.
- e. All arbitrations shall be conducted in Houston, Texas, unless the parties agree to a different location.

## EXHIBIT "D"

### MWBE 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. Escalante Construction Inc. (MWBE 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. Escalante Construction, Inc. (MWBE 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 nor the applicable statute of limitations.

3. Within five 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 signature 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 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 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 American Arbitration Association on file in the Office of the City's Affirmative Action Division.

Upon submittal of the matter to arbitration 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.

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.

e. All arbitrations shall be conducted in Houston, Texas, unless the parties agree to a different location.

## EXHIBIT "D"

### MWBE 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. Medcalf Fabrication, Inc. (MWBE 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. Medcalf Fabrication, Inc. (MWBE 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 nor the applicable statute of limitations.

3. Within five 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 signature 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 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 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 American Arbitration Association on file in the Office of the City's Affirmative Action Division.

Upon submittal of the matter to arbitration 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.

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.

e. All arbitrations shall be conducted in Houston, Texas, unless the parties agree to a different location.

**EXHIBIT "E"**  
**DRUG POLICY COMPLIANCE AGREEMENT**

I, David Haynes, President as an owner or officer of  
(Name) (Print/Type) (Title)

Industrial TX Corp. (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.

Date 12/22/06

Contractor Name Industrial TX Corp.

Signature   
David Haynes

Title President

**EXHIBIT "F"**  
**Contractor's Certification Of No Safety Impact Positions**  
**In Performance Of A City Contract**

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

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

\_\_\_\_\_  
Date

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

N/A  
*DA*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

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

I, \_\_\_\_\_ as an  
(NAME) (PRINT/TYPE)

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

N/A  
*DA*

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

**EXHIBIT "G"**  
**DRUG POLICY COMPLIANCE DECLARATION**

I, David Haynes, President as an owner or officer of  
 (Name) (Print/Type) (Title)  
Industrial TX Corp. (Contractor or Vendor)  
 (Name of Company)

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

This reporting period covers the preceding 6 months from 7/01/06 to 12/22, 2006.

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

DH  
Initials Written drug testing procedures have been implemented in conformity with the Mayor's Drug Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31. Employees have been notified of such procedures.

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

DH  
Initials Appropriate safety impact positions have been designated for employee positions performing on the City of Houston contract. The number of employees in safety impact positions during this reporting period is 34.

DH  
Initials From 7/01 to 12/22/06 the following test has occurred  
 (Start date) (End date)

	Random	Reasonable Suspicion	Post Accident	Total
Number Employees Tested	14	0	0	14
Number Employees Positive	2	0	0	2
Percent Employees Positive	14%	0	0	14%

DH  
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.

DH  
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.

12/22/06  
(Date)

David Haynes  
(Typed or Printed Name)  
*David Haynes*  
(Signature)  
President  
(Title)

## EXHIBIT "H"

### FEES AND COSTS

#### Year One Services

Item #	Description	Unit of Measure	Unit Price
1	Centrifuges Disconnect rotating assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2000.00
2	Centrifuges Transport rotating assembly to Contractors Facility	Each	\$240.00
3	Centrifuges Disconnect conveyor assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2200.00
4	Centrifuges Transport conveyor assembly to Contractors Facility	Each	\$175.00
5	Centrifuges Transport/Return rotating assembly unit to City facility	Each	\$240.00
6	Centrifuges Transport/Return conveyor assembly unit to City facility	Each	\$175.00
7	Centrifuges Install rotating assembly unit connect its cable and associated piping etc and perform the test run	Each	\$2500.00
8	Centrifuges Install conveyor unit connect its cable and associated piping etc and perform the test run	Each	\$2200.00
9	Centrifuges Field STANDARD LABOR RATE ( factory technician)	Per Hour	\$112.00
10	Centrifuges Shop STANDARD LABOR RATE	Per Hour	\$112.00
11	Centrifuges Disassembly inspection and report cost for rotating assembly	Each	\$4200.00
12	Centrifuges Disassembly inspection and report cost for conveyor	Each	\$2600.00
13	Instrumentation and Control System Instrument Technician STANDARD LABOR RATE	Per Hour	\$112.00
14	Instrumentation and Control System Control system/PLC programming STANDARD LABOR RATE	Per Hour	\$112.00
15	Instrumentation and Control System Overtime/ Emergency Repair ( Instrument Technician)	Per Hour	\$112.00
16	Instrumentation and Control System Overtime/ EMERGENCY Repair (PLC Programming)	Per Hour	\$112.00
17	Instrumentation and Control System Field Coordinator	Per Hour	\$112.00

Item #	Description	Unit of Measure	Unit Price
18	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (69 St labor only)	Each	\$2800.00
19	General Equipment Inboard and outboard bearing sets Change Out for ID Fans (69 St labor only)	Each	\$2800.00
20	General Equipment Inboard and outboard bearing sets Change Out for Scrubber Fans (69 St labor only)	Each	\$2300.00
21	General Equipment Inboard and outboard bearing sets Change Out for System Fans (69 St labor only)	Each	\$2600.00
22	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (69 St labor only)	Each	\$2300.00
23	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (Almeda Sims labor only)	Each	\$2800.00
24	General Equipment Inboard and outboard bearing sets Change Out for ID Fans ( Almeda Sims labor only)	Each	\$2800.00
25	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (Almeda Sims labor only)	Each	\$2400.00
26	General Equipment 69 St Vapor Fans Balancing	Each	\$1700.00
27	General Equipment 69 St ID Fans Balancing	Each	\$1700.00
28	General Equipment 69 St System Fans Balancing	Each	\$1700.00
29	General Equipment 69 St Combustion Air Fans Balancing	Each	\$1700.00
30	General Equipment Almeda Sims Vapor Fans Balancing	Each	\$1700.00
31	General Equipment Almeda Sims ID Fans Balancing	Each	\$1700.00
32	General Equipment Almeda Sims Combustion Air Fans Balancing	Each	\$1700.00
33	General Equipment 69 St Vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
34	General Equipment Almeda Sims vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
35	General Equipment Field STANDARD LABOR RATE for factory technicians	Per Hour	\$125.00
36	General Equipment Shop STANDARD LABOR RATE for Electrical	Per Hour	\$70.00
37	General Equipment	Per Hour	\$75.00

Item #	Description	Unit of Measure	Unit Price
	Shop STANDARD LABOR RATE for Mechanical		
38	General Equipment Shop STANDARD LABOR RATE for Machining	Per Hour	\$75.00
39	General Equipment Overtime /EMERGENCY Repair	Per Hour	\$65.00
40	General Equipment Field Coordinator	Per Hour	\$85.00
41	Furnace Equipment Installation of scaffolding for firebox inspection & Work (per O&M manual) Provide a written inspection report (69 St)	Each	\$9100.00
42	Furnace Equipment Installation of scaffolding for burner inspection & work (Per O&M manual) and provide inspection report (69th St)	Each	\$6100.00
43	Furnace Equipment Cleaning of the firebox	Per Hour	\$39.00
44	Furnace Equipment Installation of scaffolding (per O&M manual) Provide a written inspection report (Almeda Sims)	Each	\$2500.00
45	Furnace Equipment Burner ring refractory tile replacement (69th St)	Each	\$10900.00
46	Furnace Equipment Burner ring refractory tile replacement (Almeda Sims)	Each	\$10900.00
47	Furnace Equipment Insulation Material : Fibratex pumpable ceramic fiber material	Each	\$6.00
48	Furnace Equipment Steel repair to the shell and interior sections	Per Square Foot	\$105.00
49	Furnace Equipment Field Refractory STANDARD LABOR RATE	Per Hour	\$40.00
50	Furnace Equipment Field Welding STANDARD LABOR RATE	Per Hour	\$45.00
51	Furnace Equipment Overtime /EMERGENCY Repair	Per Hour	\$75.00
52	Furnace Equipment Field Coordinator	Per Hour	\$85.00
53	Scrubber System and Core-Pak Heat Exchanger Cleaning of core-Pak Heat Exchanger Tubs inspection per O&M manual	Each	\$4900.00
54	Scrubber System and Core-Pak Heat Exchanger Cleaning of the Scrubber System per O&M manual	Each	\$3800.00
55	Scrubber System and Core-Pak Heat Exchanger Core-Pak tubes replacement at factory (620 tubes/unit)	Each	\$83000.00
56	Scrubber System and Core-Pak Heat Exchanger Field STANDARD LABOR RATE	Per Hour	\$40.00
57	Scrubber System and Core-Pak Heat Exchanger Overtime /EMERGENCY Repair	Per Hour	\$75.00
58	Scrubber System and Core-Pak Heat Exchanger	Per Hour	\$85.00

Item #	Description	Unit of Measure	Unit Price
	Field Coordinator		
59	Scrubber System and Core-Pak Heat Exchanger Standard Labor Rate Welder	Per Hour	\$45.00
60	Mixer and Cage Mill STANDARD LABOR for welding	Per Hour	\$45.00
61	Mixer and Cage Mill STANDARD LABOR RATE for Mechanical	Per Hour	\$42.00
62	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (69 St)	Each	\$1090.00
63	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (Almeda Sims)	Each	\$1090.00
64	Mixer and Cage Mill Castable Refractory Lining Repair	Each	\$110.00
65	Mixer and Cage Mill Overtime / EMERGENCY Repair	Per Hour	\$75.00
66	Mixer and Cage Mill Field Coordinator	Per Hour	\$85.00
67	Cyclones Gas Duct maintenance, repair/replacement as requested Scaffolding Services to perform inspection or Repair Services (Cyclone 69 St)	Each	\$17200.00
68	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning	Per Hour	\$39.00
69	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning and Scaffolding Services to perform inspection or Repair Services (Cyclone Almeda Sims)	Each	\$17200.00
70	Cyclones Gas Duct maintenance, repair/replacement as requested Castable Refractory Lining Repair	Each	\$140.00
71	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
72	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE for Welding	Per Hour	\$45.00
73	Cyclones Gas Duct maintenance, repair/replacement as requested Overtime /EMERGENCY Repair	Per Hour	\$75.00
74	Cyclones Gas maintenance, Duct repair/replacement as requested Field Coordinator	Per Hour	\$85.00
75	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (69 St)	Each	\$7500.00
76	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (Almeda Sims)	Each	\$3500.00
77	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other deposits from tubes and disposal (69 St)	Each	\$5700.00
78	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other	Each	\$3700.00

Item #	Description	Unit of Measure	Unit Price
	deposits from tubes and disposal (Almeda Sims)		
79	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre-Heater tubes and preparation of inspection report (69 St)	Each	\$5000.00
80	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre-Heater tubes and preparation of inspection report (Almeda Sims)	Each	\$3000.00
81	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (69 St)	Each	\$3800.00
82	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (Almeda Sims)	Each	\$2300.00
83	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Plugging of deodorizer tubes	Each	\$85.00
84	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Replacement (69 St)	Each	\$175.00
85	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Replacement (Almeda Sims)	Each	\$150.00
86	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (69 St)exclusive of preparation and scaffolding.	Each	\$175.00
87	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (Almeda Sims)exclusive of preparation and scaffolding.	Each	\$150.00
88	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Preheater Deodorizer and Core-Pak Tube Field STANDARD LABOR RATE	Per Hour	\$42.00
89	Combustion Air Preheater Deodorizer and Core-Pak Tube Overtime/EMERGENCY Repair	Per Hour	\$75.00
90	Combustion Air Preheater Deodorizer and Core-Pak Tube Field Coordinator	Per Hour	\$85.00
91	Combustion Air Preheater Deodorizer and Core-Pak Tube Standard Labor rate Welder	Per Hour	\$45.00
92	Fire Suppression System repair/replacement as requested Inspection / testing and certification of fire fog system per O&M manual requirement (69 St)	Each	\$2100.00
93	Fire Suppression System repair/replacement as requested Inspection / testing and certification of fire fog system per O&M manual requirement (Almeda Sims)	Each	\$2100.00
94	Fire Suppression System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
95	Fire Suppression System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$75.00
96	Fire Suppression System repair/replacement as requested	Per Hour	\$115.00

Item #	Description	Unit of Measure	Unit Price
	Field Coordinator		
97	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
98	Drag Chair Conveyors and Product Transport System repair/replacement as requested Welder STANDARD LABOR RATE	Per Hour	\$45.00
99	Drag Chair Conveyors and Product Transport System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$55.00
100	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field Coordinator	Per Hour	\$85.00
101	Administrative Overhead Cost of Performance & Maintenance Bonds	Annual	\$24500.00
102	Administrative Overhead Clerical Administrative Costs(Fee to include all clerical overhead related to contract maintenance insurance payroll and other administrative functions)	Per Month	\$5000.00

Item #	Description	Percent Markup
103	Crane and Rigging (Markup of subcontractors invoice)	12%
104	Parts & Material	12%
105	Additional Services Subcontractors invoice	12%
106	Scaffolding Rental (Original Invoice)	12%

**Year Two (Option Year One) Services**

Item #	Description	Unit of Measure	Unit Price
1	Centrifuges Disconnect rotating assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2000.00
2	Centrifuges Transport rotating assembly to Contractors Facility	Each	\$240.00
3	Centrifuges Disconnect conveyor assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2200.00
4	Centrifuges Transport conveyor assembly to Contractors Facility	Each	\$175.00
5	Centrifuges Transport/Return rotating assembly unit to City facility	Each	\$240.00

Item #	Description	Unit of Measure	Unit Price
6	Centrifuges Transport/Return conveyor assembly unit to City facility	Each	\$175.00
7	Centrifuges Install rotating assembly unit connect its cable and associated piping etc and perform the test run	Each	\$2500.00
8	Centrifuges Install conveyor unit connect its cable and associated piping etc and perform the test run	Each	\$2200.00
9	Centrifuges Field STANDARD LABOR RATE ( factory technician)	Per Hour	\$117.00
10	Centrifuges Shop STANDARD LABOR RATE	Per Hour	\$117.60
11	Centrifuges Disassembly inspection and report cost for rotating assembly	Each	\$4200.00
12	Centrifuges Disassembly inspection and report cost for conveyor	Each	\$2600.00
13	Instrumentation and Control System Instrument Technician STANDARD LABOR RATE	Per Hour	\$112.00
14	Instrumentation and Control System Control system/PLC programming STANDARD LABOR RATE	Per Hour	\$112.00
15	Instrumentation and Control System Overtime/ Emergency Repair ( Instrument Technician)	Per Hour	\$112.00
16	Instrumentation and Control System Overtime/ EMERGENCY Repair (PLC Programming)	Per Hour	\$112.00
17	Instrumentation and Control System Field Coordinator	Per Hour	\$112.00
18	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (69 St labor only)	Each	\$2800.00
19	General Equipment Inboard and outboard bearing sets Change Out for ID Fans (69 St labor only)	Each	\$2800.00
20	General Equipment Inboard and outboard bearing sets Change Out for Scrubber Fans (69 St labor only)	Each	\$2300.00
21	General Equipment Inboard and outboard bearing sets Change Out for System Fans (69 St labor only)	Each	\$2600.00
22	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (69 St labor only)	Each	\$2300.00
23	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (Almeda Sims labor only)	Each	\$2800.00
24	General Equipment Inboard and outboard bearing sets Change Out for ID Fans ( Almeda Sims labor only)	Each	\$2800.00

Item #	Description	Unit of Measure	Unit Price
25	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (Almeda Sims labor only)	Each	\$2400.00
26	General Equipment 69 St Vapor Fans Balancing	Each	\$1700.00
27	General Equipment 69 St ID Fans Balancing	Each	\$1700.00
28	General Equipment 69 St System Fans Balancing	Each	\$1700.00
29	General Equipment 69 St Combustion Air Fans Balancing	Each	\$1700.00
30	General Equipment Almeda Sims Vapor Fans Balancing	Each	\$1700.00
31	General Equipment Almeda Sims ID Fans Balancing	Each	\$1700.00
32	General Equipment Almeda Sims Combustion Air Fans Balancing	Each	\$1700.00
33	General Equipment 69 St Vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
34	General Equipment Almeda Sims vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
35	General Equipment Field STANDARD LABOR RATE for factory technicians	Per Hour	\$125.00
36	General Equipment Shop STANDARD LABOR RATE for Electrical	Per Hour	\$70.00
37	General Equipment Shop STANDARD LABOR RATE for Mechanical	Per Hour	\$75.00
38	General Equipment Shop STANDARD LABOR RATE for Machining	Per Hour	\$75.00
39	General Equipment Overtime /EMERGENCY Repair	Per Hour	\$65.00
40	General Equipment Field Coordinator	Per Hour	\$85.00
41	Furnace Equipment Installation of scaffolding for firebox inspection & Work (per O&M manual) Provide a written inspection report (69 St)	Each	\$9100.00
42	Furnace Equipment Installation of scaffolding for burner inspection & work (Per O&M manual) and provide inspection report (69th St)	Each	\$6100.00
43	Furnace Equipment Cleaning of the firebox	Per Hour	\$39.00
44	Furnace Equipment Installation of scaffolding (per O&M manual) Provide a written inspection report (Almeda Sims)	Each	\$2500.00
45	Furnace Equipment	Each	\$10900.00

Item #	Description	Unit of Measure	Unit Price
	Burner ring refractory tile replacement (69th St)		
46	Furnace Equipment Burner ring refractory tile replacement (Almeda Sims)	Each	\$10900.00
47	Furnace Equipment Insulation Material : Fibratec pumpable ceramic fiber material	Each	\$6.00
48	Furnace Equipment Steel repair to the shell and interior sections	Per Square Foot	\$105.00
49	Furnace Equipment Field Refractory STANDARD LABOR RATE	Per Hour	\$40.00
50	Furnace Equipment Field Welding STANDARD LABOR RATE	Per Hour	\$45.00
51	Furnace Equipment Overtime /EMERGENCY Repair	Per Hour	\$75.00
52	Furnace Equipment Field Coordinator	Per Hour	\$85.00
53	Scrubber System and Core-Pak Heat Exchanger Cleaning of core-Pak Heat Exchanger Tubs inspection per O&M manual	Each	\$5000.00
54	Scrubber System and Core-Pak Heat Exchanger Cleaning of the Scrubber System per O&M manual	Each	\$3800.00
55	Scrubber System and Core-Pak Heat Exchanger Core-Pak tubes replacement at factory (620 tubes/unit)	Each	\$83000.00
56	Scrubber System and Core-Pak Heat Exchanger Field STANDARD LABOR RATE	Per Hour	\$40.00
57	Scrubber System and Core-Pak Heat Exchanger Overtime /EMERGENCY Repair	Per Hour	\$75.00
58	Scrubber System and Core-Pak Heat Exchanger Field Coordinator	Per Hour	\$85.00
59	Scrubber System and Core-Pak Heat Exchanger Standard Labor Rate Welder	Per Hour	\$45.00
60	Mixer and Cage Mill STANDARD LABOR for welding	Per Hour	\$45.00
61	Mixer and Cage Mill STANDARD LABOR RATE for Mechanical	Per Hour	\$42.00
62	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (69 St)	Each	\$1090.00
63	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (Almeda Sims)	Each	\$1090.00
64	Mixer and Cage Mill Castable Refractory Lining Repair	Each	\$110.00
65	Mixer and Cage Mill Overtime / EMERGENCY Repair	Per Hour	\$75.00
66	Mixer and Cage Mill Field Coordinator	Per Hour	\$85.00
67	Cyclones Gas Duct maintenance, repair/replacement as requested	Each	\$17200.00

Item #	Description	Unit of Measure	Unit Price
	Scaffolding Services to perform inspection or Repair Services (Cyclone 69 St)		
68	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning	Per Hour	\$39.00
69	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning and Scaffolding Services to perform inspection or Repair Services (Cyclone Almeda Sims)	Each	\$17200.00
70	Cyclones Gas Duct maintenance, repair/replacement as requested Castable Refractory Lining Repair	Each	\$140.00
71	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
72	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE for Welding	Per Hour	\$45.00
73	Cyclones Gas Duct maintenance, repair/replacement as requested Overtime /EMERGENCY Repair	Per Hour	\$75.00
74	Cyclones Gas maintenance, Duct repair/replacement as requested Field Coordinator	Per Hour	\$85.00
75	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (69 St)	Each	\$7500.00
76	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (Almeda Sims)	Each	\$3500.00
77	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other deposits from tubes and disposal (69 St)	Each	\$5700.00
78	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other deposits from tubes and disposal (Almeda Sims)	Each	\$3700.00
79	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre-Heater tubes and preparation of inspection report (69 St)	Each	\$5000.00
80	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre- Heater tubes and preparation of inspection report (Almeda Sims)	Each	\$3000.00
81	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (69 St)	Each	\$3800.00
82	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (Almeda Sims)	Each	\$2300.00
83	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Plugging of deodorizer tubes	Each	\$85.00
84	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Replacement (69 St)	Each	\$175.00
85	Combustion Air Preheater, Deoderizer, and Core-Pak Tube:	Each	\$150.00

Item #	Description	Unit of Measure	Unit Price
	Deodorizer Tube Replacement (Almeda Sims)		
86	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (69 St)exclusive of preparation and scaffolding.	Each	\$175.00
87	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (Almeda Sims)exclusive of preparation and scaffolding.	Each	\$150.00
88	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Preheater Deodorizer and Core-Pak Tube Field STANDARD LABOR RATE	Per Hour	\$42.00
89	Combustion Air Preheater Deodorizer and Core-Pak Tube Overtime/EMERGENCY Repair	Per Hour	\$75.00
90	Combustion Air Preheater Deodorizer and Core-Pak Tube Field Coordinator	Per Hour	\$85.00
91	Combustion Air Preheater Deodorizer and Core-Pak Tube Standard Labor rate Welder	Per Hour	\$45.00
92	Fire Suppression System repair/replacement as requested Inspection / testing and certification of fire fog system per O&M manual requirement (69 St)	Each	\$2100.00
93	Fire Suppression System repair/replacement as requested Inspection / testing and certification of fire fog system per O&M manual requirement (Almeda Sims)	Each	\$2100.00
94	Fire Suppression System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
95	Fire Suppression System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$75.00
96	Fire Suppression System repair/replacement as requested Field Coordinator	Per Hour	\$115.00
97	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
98	Drag Chair Conveyors and Product Transport System repair/replacement as requested Welder STANDARD LABOR RATE	Per Hour	\$45.00
99	Drag Chair Conveyors and Product Transport System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$55.00
100	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field Coordinator	Per Hour	\$85.00
101	Administrative Overhead Cost of Performance & Maintenance Bonds	Annual	\$24500.00
102	Administrative Overhead Clerical Administrative Costs(Fee to include all clerical overhead related to contract maintenance insurance payroll and other administrative functions)	Per Month	\$5200.00

**Year Two (Option Year One) Additional Services**

<b>Item #</b>	<b>Description</b>	<b>Percent Markup</b>
103	Crane and Rigging (Markup of subcontractors invoice)	12%
104	Parts & Material	12%
105	Additional Services Subcontractors invoice	12%
106	Scaffolding Rental (Original Invoice)	12%

**Year Three (Option Year Two) Services**

<b>Item #</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Unit Price</b>
1	Centrifuges Disconnect rotating assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2000.00
2	Centrifuges Transport rotating assembly to Contractors Facility	Each	\$240.00
3	Centrifuges Disconnect conveyor assembly unit cable and associated piping etc remove unit from its foundation	Each	\$2200.00
4	Centrifuges Transport conveyor assembly to Contractors Facility	Each	\$175.00
5	Centrifuges Transport/Return rotating assembly unit to City facility	Each	\$240.00
6	Centrifuges Transport/Return conveyor assembly unit to City facility	Each	\$175.00
7	Centrifuges Install rotating assembly unit connect its cable and associated piping etc and perform the test run	Each	\$2500.00
8	Centrifuges Install conveyor unit connect its cable and associated piping etc and perform the test run	Each	\$2200.00
9	Centrifuges Field STANDARD LABOR RATE ( factory technician)	Per Hour	\$117.00
10	Centrifuges Shop STANDARD LABOR RATE	Per Hour	\$117.60
11	Centrifuges Disassembly inspection and report cost for rotating assembly	Each	\$4200.00
12	Centrifuges Disassembly inspection and report cost for conveyor	Each	\$2600.00

Item #	Description	Unit of Measure	Unit Price
13	Instrumentation and Control System Instrument Technician STANDARD LABOR RATE	Per Hour	\$112.00
14	Instrumentation and Control System Control system/PLC programming STANDARD LABOR RATE	Per Hour	\$112.00
15	Instrumentation and Control System Overtime/ Emergency Repair ( Instrument Technician)	Per Hour	\$112.00
16	Instrumentation and Control System Overtime/ EMERGENCY Repair (PLC Programming)	Per Hour	\$112.00
17	Instrumentation and Control System Field Coordinator	Per Hour	\$112.00
18	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (69 St labor only)	Each	\$2800.00
19	General Equipment Inboard and outboard bearing sets Change Out for ID Fans (69 St labor only)	Each	\$2800.00
20	General Equipment Inboard and outboard bearing sets Change Out for Scrubber Fans (69 St labor only)	Each	\$2300.00
21	General Equipment Inboard and outboard bearing sets Change Out for System Fans (69 St labor only)	Each	\$2600.00
22	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (69 St labor only)	Each	\$2300.00
23	General Equipment Inboard and outboard bearing sets Change Out for Vapor Fans (Almeda Sims labor only)	Each	\$2800.00
24	General Equipment Inboard and outboard bearing sets Change Out for ID Fans ( Almeda Sims labor only)	Each	\$2800.00
25	General Equipment Inboard and outboard bearing sets Change Out for Combustion Air Fans (Almeda Sims labor only)	Each	\$2400.00
26	General Equipment 69 St Vapor Fans Balancing	Each	\$1700.00
27	General Equipment 69 St ID Fans Balancing	Each	\$1700.00
28	General Equipment 69 St System Fans Balancing	Each	\$1700.00
29	General Equipment 69 St Combustion Air Fans Balancing	Each	\$1700.00
30	General Equipment Almeda Sims Vapor Fans Balancing	Each	\$1700.00
31	General Equipment Almeda Sims ID Fans Balancing	Each	\$1700.00
32	General Equipment	Each	\$1700.00

Item #	Description	Unit of Measure	Unit Price
	Almeda Sims Combustion Air Fans Balancing		
33	General Equipment 69 St Vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
34	General Equipment Almeda Sims vapor fan cleaning and inspection per O&M manual	Each	\$2600.00
35	General Equipment Field STANDARD LABOR RATE for factory technicians	Per Hour	\$125.00
36	General Equipment Shop STANDARD LABOR RATE for Electrical	Per Hour	\$70.00
37	General Equipment Shop STANDARD LABOR RATE for Mechanical	Per Hour	\$75.00
38	General Equipment Shop STANDARD LABOR RATE for Machining	Per Hour	\$75.00
39	General Equipment Overtime /EMERGENCY Repair	Per Hour	\$65.00
40	General Equipment Field Coordinator	Per Hour	\$85.00
41	Furnace Equipment Installation of scaffolding for firebox inspection & Work (per O&M manual) Provide a written inspection report (69 St)	Each	\$9100.00
42	Furnace Equipment Installation of scaffolding for burner inspection & work (Per O&M manual) and provide inspection report (69th St)	Each	\$6100.00
43	Furnace Equipment Cleaning of the firebox	Per Hour	\$39.00
44	Furnace Equipment Installation of scaffolding (per O&M manual) Provide a written inspection report (Almeda Sims)	Each	\$2500.00
45	Furnace Equipment Burner ring refractory tile replacement (69th St)	Each	\$10900.00
46	Furnace Equipment Burner ring refractory tile replacement (Almeda Sims)	Each	\$10900.00
47	Furnace Equipment Insulation Material : Fibratex pumpable ceramic fiber material	Each	\$6.00
48	Furnace Equipment Steel repair to the shell and interior sections	Per Square Foot	\$105.00
49	Furnace Equipment Field Refractory STANDARD LABOR RATE	Per Hour	\$40.00
50	Furnace Equipment Field Welding STANDARD LABOR RATE	Per Hour	\$45.00
51	Furnace Equipment Overtime /EMERGENCY Repair	Per Hour	\$75.00
52	Furnace Equipment Field Coordinator	Per Hour	\$85.00
53	Scrubber System and Core-Pak Heat Exchanger	Each	\$5000.00

Item #	Description	Unit of Measure	Unit Price
	Cleaning of core-Pak Heat Exchanger Tubs inspection per O&M manual		
54	Scrubber System and Core-Pak Heat Exchanger Cleaning of the Scrubber System per O&M manual	Each	\$3900.00
55	Scrubber System and Core-Pak Heat Exchanger Core-Pak tubes replacement at factory (620 tubes/unit)	Each	\$85000.00
56	Scrubber System and Core-Pak Heat Exchanger Field STANDARD LABOR RATE	Per Hour	\$40.00
57	Scrubber System and Core-Pak Heat Exchanger Overtime /EMERGENCY Repair	Per Hour	\$75.00
58	Scrubber System and Core-Pak Heat Exchanger Field Coordinator	Per Hour	\$85.00
59	Scrubber System and Core-Pak Heat Exchanger Standard Labor Rate Welder	Per Hour	\$45.00
60	Mixer and Cage Mill STANDARD LABOR for welding	Per Hour	\$45.00
61	Mixer and Cage Mill STANDARD LABOR RATE for Mechanical	Per Hour	\$42.00
62	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (69 St)	Each	\$1090.00
63	Mixer and Cage Mill Disassembly inspection and report Cost for the Cage Mill (Almeda Sims)	Each	\$1090.00
64	Mixer and Cage Mill Castable Refractory Lining Repair	Each	\$110.00
65	Mixer and Cage Mill Overtime / EMERGENCY Repair	Per Hour	\$75.00
66	Mixer and Cage Mill Field Coordinator	Per Hour	\$85.00
67	Cyclones Gas Duct maintenance, repair/replacement as requested Scaffolding Services to perform inspection or Repair Services (Cyclone 69 St)	Each	\$17200.00
68	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning	Per Hour	\$39.00
69	Cyclones Gas Duct maintenance, repair/replacement as requested Cleaning and Scaffolding Services to perform inspection or Repair Services (Cyclone Almeda Sims)	Each	\$17200.00
70	Cyclones Gas Duct maintenance, repair/replacement as requested Castable Refractory Lining Repair	Each	\$140.00
71	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
72	Cyclones Gas Duct maintenance, repair/replacement as requested Field STANDARD LABOR RATE for Welding	Per Hour	\$45.00
73	Cyclones Gas Duct maintenance, repair/replacement as requested Overtime /EMERGENCY Repair	Per Hour	\$75.00
74	Cyclones Gas maintenance, Duct repair/replacement as requested Field Coordinator	Per Hour	\$85.00

Item #	Description	Unit of Measure	Unit Price
75	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (69 St)	Each	\$7500.00
76	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube Cleaning (per O&M manual) Removal of ash and other deposits disposal of the deposits in City dumpsters (Almeda Sims)	Each	\$3500.00
77	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other deposits from tubes and disposal (69 St)	Each	\$5800.00
78	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Cleaning (per O&M manual) Include removal of ash and other deposits from tubes and disposal (Almeda Sims)	Each	\$3800.00
79	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre-Heater tubes and preparation of inspection report (69 St)	Each	\$5000.00
80	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of combustion Air Pre-Heater tubes and preparation of inspection report (Almeda Sims)	Each	\$3000.00
81	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (69 St)	Each	\$3800.00
82	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Inspection/testing of Deodorizer tubes and preparation of inspection report (Almeda Sims)	Each	\$2300.00
83	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Plugging of deodorizer tubes	Each	\$85.00
84	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Replacement (69 St)	Each	\$175.00
85	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Deodorizer Tube Replacement (Almeda Sims)	Each	\$150.00
86	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (69 St)exclusive of preparation and scaffolding.	Each	\$175.00
87	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Pre-Heater Tube replacement (Almeda Sims)exclusive of preparation and scaffolding.	Each	\$150.00
88	Combustion Air Preheater, Deoderizer, and Core-Pak Tube: Combustion Air Preheater Deodorizer and Core-Pak Tube Field STANDARD LABOR RATE	Per Hour	\$42.00
89	Combustion Air Preheater Deodorizer and Core-Pak Tube Overtime/EMERGENCY Repair	Per Hour	\$75.00
90	Combustion Air Preheater Deodorizer and Core-Pak Tube Field Coordinator	Per Hour	\$85.00
91	Combustion Air Preheater Deodorizer and Core-Pak Tube Standard Labor rate Welder	Per Hour	\$45.00
92	Fire Suppression System repair/replacement as requested	Each	\$2100.00

Item #	Description	Unit of Measure	Unit Price
	Inspection / testing and certification of fire fog system per O&M manual requirement (69 St)		
93	Fire Suppression System repair/replacement as requested Inspection / testing and certification of fire fog system per O&M manual requirement (Almeda Sims)	Each	\$2100.00
94	Fire Suppression System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
95	Fire Suppression System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$75.00
96	Fire Suppression System repair/replacement as requested Field Coordinator	Per Hour	\$115.00
97	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field STANDARD LABOR RATE	Per Hour	\$40.00
98	Drag Chair Conveyors and Product Transport System repair/replacement as requested Welder STANDARD LABOR RATE	Per Hour	\$45.00
99	Drag Chair Conveyors and Product Transport System repair/replacement as requested Overtime / EMERGENCY Repair	Per Hour	\$55.00
100	Drag Chair Conveyors and Product Transport System repair/replacement as requested Field Coordinator	Per Hour	\$85.00
101	Administrative Overhead Cost of Performance & Maintenance Bonds	Annual	\$24500.00
102	Administrative Overhead Clerical Administrative Costs(Fee to include all clerical overhead related to contract maintenance insurance payroll and other administrative functions)	Per Month	\$5400.00

### Year Three (Option Year Two) Additional Services

Item #	Description	Percent Markup
103	Crane and Rigging (Markup of subcontractors invoice)	12%
104	Parts & Material	12%
105	Additional Services Subcontractors invoice	12%
106	Scaffolding Rental (Original Invoice)	12%

**EXHIBIT "I"**

**PERFORMANCE BOND**

**THE STATE OF TEXAS** ,

**COUNTY OF HARRIS** ,

Industrial TX Corp. , ("Principal") and Independence Casualty and Surety Company ("Surety"), shall pay to the City of Houston, Texas ("City"), the sum of \$ See Below\* in accordance with the terms and conditions stated below:

On or about this date, the Principal executed a Contract Agreement in writing with the City for Maintenance & Repair of Sludge Dewatering & Drying Equipment Services ("Agreement"), which is incorporated into this Bond.

The conditions of this obligation are that if the Principal performs its obligations under the terms of the Agreement and this Bond in all respects, then this obligation is void and has no further force and effect; otherwise this obligation remains in effect.

The Surety relieves the City and its representatives from the exercise of any diligence whatever in securing the Principal's compliance with the terms of the Agreement, and the Surety waives any notice to it of the Principal's default or delay in the performance of the Agreement. The Surety shall take notice of and is held to have knowledge of all acts or omissions of the Principal, its agents, and representatives in all matters pertaining to the Agreement.

The City and its representatives may at any time, without notice to the Surety, make any changes in the terms and conditions of the Agreement, or extend it, and may add to or deduct from the Principal's obligations under the Agreement. Such changes, if made, do not in any way relieve, release, condition, or limit the obligation in this Bond and undertaking or release the Surety therefrom.

SURETY AND PRINCIPAL AGREE TO AND SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS AGENTS, AND REPRESENTATIVES FROM ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, DAMAGES, FINES, AND EXPENSES ARISING OUT OF OR RESULTING FROM ANY FAILURE ON THE PART OF THE PRINCIPAL, ITS AGENTS, AND REPRESENTATIVES, TO FULLY PERFORM UNDER THE AGREEMENT, INCLUDING ANY CHANGES OR EXTENSIONS TO IT.

If the City brings any suit or other proceeding at law on the Agreement or this Bond, or both, the Principal and the Surety shall pay to the City the additional sum of 10 percent of whatever amount the City recovers, which sum of 10 percent is agreed by all parties to be indemnity to the City for the expense of and time consumed by its City Attorney, his or her

\*(\$1,978,105.00) One Million Nine Hundred Seventy Eight Thousand One Hundred Five Dollars and No/100

assistants, and office staff, and other costs and damages to the City. The amount of 10 percent is fixed and liquidated by the parties because the exact damage to the City would be difficult to ascertain.

This Bond and all obligations created under it shall be performable in Harris County, Texas, and all are non-cancelable. This Bond must be automatically renewed annually on the anniversary of the effective date of the Bond for the term of the Agreement and any extensions, unless the Surety gives the Principal and the City 30 days written notice before the renewal date that the Surety will not renew this Bond, in which case the Principal shall provide the City with a replacement bond (in the same form as this Bond) before the renewal date. The provisions of V.T.C.A., Government Code Section 2253, as amended, control even though the Statute may not be applicable.

All notices required or permitted by this Bond must be in writing and are deemed delivered on the earlier of the date actually received or the third day following: (1) deposit in a United States Postal Service post office or receptacle; (2) with proper postage (certified mail, return receipt requested); and (3) addressed to the other party at the address set out on the signature page of this Bond or at such other address as the receiving party designates by proper notice to the sending party.

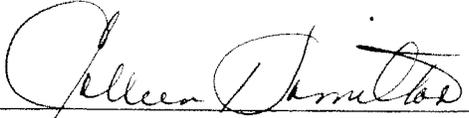
This Bond is effective on 2/20/07 and is binding on the Principal and the Surety, their heirs, executors, administrators, successors and assigns, jointly and severally.

EXECUTED in multiple originals this 20th day of February, 2007.

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

Industrial TX Corp.  
(Name of Principal)

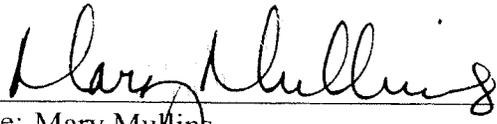
P.O. Box 40336, Houston, Texas 77240  
(Address of Principal)

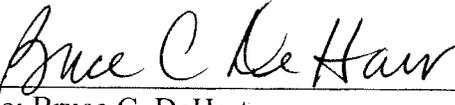
By:   
Name: Colleen Hamilton  
Title: Corporate Secretary  
Date: February 20, 2007

By:   
Name: David Haynes  
Title: President  
Date: February 20, 2007

ATTEST/SEAL  
SURETY WITNESS:

Independence Casualty and Surety Company  
(Name of Surety)  
6575 W. Loop South, Suite 230  
Bellaire, Texas 77401  
(Address of Surety)

By:   
Name: Mary Mullins  
Title: Surety Assistant  
Date: February 20, 2007

By:   
Name: Bruce C. DeHart  
Title: Attorney-in-Fact  
Date: February 20, 2007

REVIEWED:

This Bond has been reviewed as to form by the undersigned Paralegal and has been found to meet established Legal Department criteria.

3-26-07  
Date

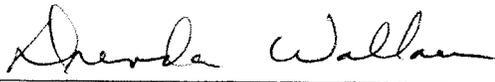
  
Paralegal

EXHIBIT "J"

ONE-YEAR MAINTENANCE BOND

THE STATE OF TEXAS

§

§

KNOW ALL MEN BY THESE PRESENTS:

THE COUNTY OF HARRIS

§

THAT WE, Industrial TX Corp., as Principal, hereinafter called "Contractor" and the other subscriber hereto Independence Casualty and Surety Company, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston, a municipal corporation, in the sum of One Million Nine Hundred Seventy Eight Thousand One Hundred Five and No/100 Dollars (\$1,978,105.00) for the payment of which sum well and truly to be made to the City of Houston and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors and assigns jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a Contract in writing with the City of Houston for Maintenance and Repair of Sludge Dewatering and Drying Equipment Services

all of such work to be done as set out in full in said Contract Documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein.

NOW THEREFORE, if the said Contractor shall comply with the provisions of Subparagraph 12.2.2 of the General Conditions, and correct Work not in accordance with the Contract Documents discovered within the established one-year period, then this obligation shall become null and void, and shall be of no further force and effect; otherwise, the same is to remain in full force and effect.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other party at the address prescribed in the Contract Documents, or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

~~IN WITNESS THEREOF~~, the said Contractor and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

ATTEST, SEAL: (if a corporation)

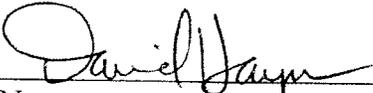
WITNESS: (if not a corporation)

By: 

Name: Colleen Hamilton  
Title: Corporate Secretary

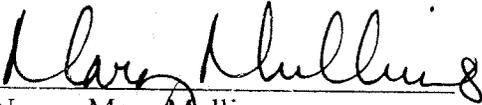
Industrial TX Corp.

(Name of Contractor)

By: 

Name: David Haynes  
Title: President  
Date: February 20, 2007

ATTEST/WITNESS: (SEAL)

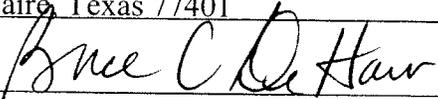
By: 

Name: Mary Mullins  
Title: Surety Assistant  
Date: February 20, 2007

Independence Casualty and Surety Company  
(Full Name of Surety)

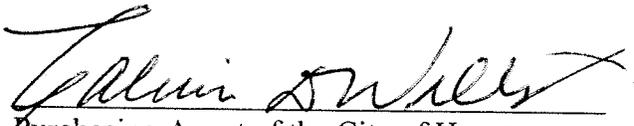
6575 W. Loop South, Suite 230  
(Address of Surety for Notice)

Bellaire, Texas 77401

By: 

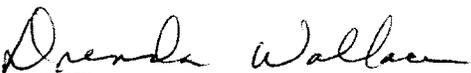
Name: Bruce C. DeHart  
Title: Attorney-in-Fact  
Date: February 20, 2007

Address of the Purchasing Agent  
901 Bagby  
Houston, TX 77002

  
Purchasing Agent of the City of Houston

*This Ordinance and/or Contract have 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.*

. 3-26-07  
Date

  
Legal Assistant

ICW GROUP  
Power of Attorney  
Insurance Company of the West

Explorer Insurance Company Independence Casualty and Surety Company

KNOW ALL MEN BY THESE PRESENTS: That Insurance Company of the West, a Corporation duly organized under the laws of the State of California, Explorer Insurance Company, a Corporation duly organized under the laws of the State of California, and Independence Casualty and Surety Company, a Corporation duly organized under the laws of the State of Texas, (collectively referred to as the "Companies"), do hereby appoint

ROXANNE G. HEBERT, BRUCE C. DEHART, DAVID R. GROPELL,  
EDWARD L. MOORE, LORI ELLIS, MARY E. MULLINS, BEVERLY A. IRELAND

their true and lawful Attorney(s)-in-Fact with authority to date, execute, sign, seal, and deliver on behalf of the Companies, fidelity and surety bonds, undertakings, and other similar contracts of suretyship, and any related documents.

In witness whereof, the Companies have caused these presents to be executed by its duly authorized officers this 1st day of November, 2005.



*Jeffrey D. Sweeney*

Jeffrey D. Sweeney, Assistant Secretary

INSURANCE COMPANY OF THE WEST  
EXPLORER INSURANCE COMPANY  
INDEPENDENCE CASUALTY AND SURETY COMPANY

*John L. Hannum*

John L. Hannum, Executive Vice President

State of California }  
County of San Diego } ss.

On June 5, 2006 before me, Mary Cobb, Notary Public, personally appeared John L. Hannum and Jeffrey D. Sweeney, personally known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument, the entity upon behalf of which the persons acted, executed the instrument.

Witness my hand and official seal.



*Mary Cobb*

Mary Cobb, Notary Public

RESOLUTIONS

This Power of Attorney is granted and is signed, sealed and notarized with facsimile signatures and seals under authority of the following resolutions adopted by the respective Boards of Directors of each of the Companies:

"RESOLVED: That the President, an Executive or Senior Vice President of the Company, together with the Secretary or any Assistant Secretary, are hereby authorized to execute Powers of Attorney appointing the person(s) named as Attorney(s)-in-Fact to date, execute, sign, seal, and deliver on behalf of the Company, fidelity and surety bonds, undertakings, and other similar contracts of suretyship, and any related documents.

RESOLVED FURTHER: That the signatures of the officers making the appointment, and the signature of any officer certifying the validity and current status of the appointment, may be facsimile representations of those signatures; and the signature and seal of any notary, and the seal of the Company, may be facsimile representations of those signatures and seals, and such facsimile representations shall have the same force and effect as if manually affixed. The facsimile representations referred to herein may be affixed by stamping, printing, typing, or photocopying."

CERTIFICATE

I, the undersigned, Assistant Secretary of Insurance Company of the West, Explorer Insurance Company, and Independence Casualty and Surety Company, do hereby certify that the foregoing Power of Attorney is in full force and effect, and has not been revoked, and that the above resolutions were duly adopted by the respective Boards of Directors of the Companies, and are now in full force.

IN WITNESS WHEREOF, I have set my hand this 20th day of February, 2007.

*Jeffrey D. Sweeney*

Jeffrey D. Sweeney, Assistant Secretary

To verify the authenticity of this Power of Attorney you may call 1-800-877-1111 and ask for the Surety Division. Please refer to the Power of Attorney Number, the above named individual(s) and details of the bond to which the power is attached. For information or filing claims, please contact Surety Claims, ICW Group, 11455 El Camino Real, San Diego, CA 92130-2045 or call (858) 350-2400.

**I M P O R T A N T   N O T I C E**

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**TO OBTAIN INFORMATION OR MAKE A COMPLAINT;  
YOU MAY CONTACT THE TEXAS DEPARTMENT OF  
INSURANCE TO OBTAIN INFORMATION ON COMPANIES;  
COVERAGES, RIGHTS OR COMPLAINTS AT:**

**1-800-252-3439**

**YOU MAY WRITE THE TEXAS DEPARTMENT OF INSURANCE:**

**P.O. BOX 149104  
AUSTIN, TEXAS 78714-9104  
FAX # (512) 475-1771**

**PREMIUM OR CLAIM DISPUTES:**

**SHOULD YOU HAVE A DISPUTE CONCERNING YOUR PREMIUM  
OR ABOUT A  
CLAIM YOU SHOULD CONTACT THE AGENT OR COMPANY  
FIRST. IF THE DISPUTE IS NOT RESOLVED, YOU MAY CONTACT  
THE TEXAS DEPARTMENT OF INSURANCE.**

**ATTACH THIS NOTICE TO YOUR POLICY**

**THIS NOTICE IS FOR INFORMATION ONLY AND DOES NOT  
BECOME A PART OR CONDITION OF THE ATTACHED  
DOCUMENT.**