City of Tulsa Finance Department

Request for

Competitive Sealed Proposal

CSP20-714 Air Force Plant 3 Property Renovation – Phase I Addendum 2

NIGP Commodity Code(s): 910-38 Asbestos Removal Services

Submit proposals (sealed) to:

Deputy City Clerk
City of Tulsa
175 E. 2ND St.
Suite 260
Tulsa, OK 74103



Addendum #2

Please note the following changes which have been made for clarification to this Invitation for Sealed Bid. **This addendum must be listed as Addendum #2 on Form #6** of the bid package as verification that you have received and are aware of the information contained herein.

CHANGES/QUESTIONS/CLARIFICATION:

CHANGE:

The requirement in section IV. SCOPE OF WORK: item G. was changed to remove "The Respondent shall document in the bid how they intend to meet the fair share objectives in the Price Sheet Summary. The fair share objectives for this Agreement are as shown below." The Table of minimum participation values by service type was removed.

QUESTIONS/CLARIFICATION:

- Question: Is the insulated ducting scrap? If so, that work can be classified as Laborer.
 - Response: Yes, it can be considered scrap.
- Question: What work hours are permissible to perform the work?
 Response: Normal work hours are preferred (8:00 am-5:00 pm); City of Tulsa
 Asset Management Representative may make available additional or alternate
 hours on request.
- 3. Question: What location is available for use as staging area for the project? Response: The area from the building entrance southwest to the access road is suitable for staging. Care should be taken to maintain access to dumpsters already placed in this area.
- 4. Question: Does the project have a completion date? Response: The desired completion date for this project is April 30, 2020 contingent upon the selection and contracting process being completed by 3/15/20.
- 5. Question: Is air monitoring within the scope of work? Response: The Contractor is responsible for their OSHA personnel monitoring. They can arrange with a third party for this if desired and this may be a good opportunity to utilized MBE/WBE contractors.
- 6. Question: Will the Seller need to schedule air monitoring? Response: The City will provide DOL 3rd party environmental air monitoring.
- 7. Question: Will the service elevator be operational by the date which work can commence on this project?
 Response: Timing for repair of service elevator is uncertain. Alternate means of transportation should be considered.

- 8. Question: Will demolition be allowed to safely perform the project related work?

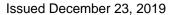
 Response: Demolition of obstacles to asbestos removal may be allowed but must be approved in writing by City of Tulsa Asset Management Representative
- 9. Question: For the base bid, is the intent to completely remove the insulated ductwork? Or is it the intent to remove the insulation and leave the duct in place? Response: The intent is to remove the insulated ductwork.
- 10. Question: On the second floor, there are several mechanical rooms with pipe insulation to be abated. Does the base bid include removing the units as well? Or leave them in place?

Response: Units are intended to remain in place.

- 11. Question: Does the base bid include removal of the cable trays? Response: No
- **12.** Question: Is it possible to conduct an additional site visit? Response: No
- 13. Question: Is there a report available for the previous lead-based paint remediation throughout the space? Response: The City does not have a report of previous LBP remediation.
- 14. Question: Have the interior perimeter walls been tested for lead based paint? Response: The City does not have information regarding LBP testing of interior perimeter walls.
- **15.** Question: For the base bid, is the intent to cut and wrap all piping? Or remove the insulation only?

 Response: The intent of the base bid is to cut and wrap piping.
- 16. Question: Is the demolition of the piping and HVAC units part of the abatement scope or can we just remove the asbestos and leave it for others to demolish? Response: Piping is intended to be cut and wrap. The HVAC unit is intended to be left in place.
- 17. Question: In areas where live electric is within arm's reach of items to be abated will the city be responsible to have it shut off?
 Response: The Respondent must furnish project as part of proposal a written 'Lock-out Tag-out' process to make safe line voltages near the work area. Higher voltages will be removed on request to City of Tulsa Asset Management Representative.

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Addendum #1

Please note the following changes which have been made for clarification to this Invitation for Sealed Bid. **This addendum must be listed as Addendum #1 on Form #6** of the bid package as verification that you have received and are aware of the information contained herein.

CHANGES/QUESTIONS/CLARIFICATION:

CHANGE:

The last day for submitting a response has been extended to January 22, 2020

QUESTIONS/CLARIFICATION:

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I. STATEMENT OF PURPOSE:

With this Competitive Sealed Proposal (CSP) request, we are searching to secure services to remove, transport, and properly dispose of regulated asbestos containing materials (RACM) from the City of Tulsa (City) owned Air Force Plant No. 3 (AFP3), Building 6, property located at 3300 North Mingo Road, Tulsa, OK 74116.

We enthusiastically look forward to receiving your proposal.

II. INSTRUCTIONS FOR SUBMITTING A PROPOSAL:

A. General Requirements

- The proposal must be received by 5:00 p.m. on Wednesday, January 22, 2020, Central Standard Time. Proposals must be sealed in an envelope or box clearly labeled "CSP20-714 Air Force Plant 3 Property Renovation – Phase I".
 Proposals arriving late will be returned unopened.
- **2.** Proposals must be delivered sealed to:

Deputy City Clerk City of Tulsa 175 E. 2nd St. Suite 260 Tulsa, OK 74103

- **3.** All interested Respondents (Sellers) are required to register with the Buyer, in order to receive updates, addenda or any additional information required. The City is not responsible for any failure to register.
- 4. Inquiries to the Buyer requesting clarification regarding this CSP request or the content herein must be made via e-mail and must be received prior to the end of the business day on **December 23, 2019**.

Terry Thomas, Senior Buyer tthomas@cityoftulsa.org

Any questions regarding this CSP request will be handled as promptly and as directly as possible. If a question requires only clarification of CSP request instructions or specifications, it will be handled via e-mail, or verbally. If any question results in material changes or additions to the CSP request, those changes or additions will be forwarded to all registered Respondents as quickly as possible by addendum.

5. Respondents shall designate a contact person, with appropriate contact information, to address any questions concerning a proposal. Respondents shall also state the name and title of individuals who will make final decisions regarding contractual commitments and have legal authority to execute a contract on the Respondent's behalf.

6. Proposals will be opened on the morning after the due date, at 8:30am, at the:

Standards, Specifications, and Awards Committee Meeting 175 East 2nd Street, 2nd Floor City Council Chamber

 Mandatory Pre-proposal Meeting: Attending one of the two preproposal meetings is required for a response to be considered for award.

The meetings will be held at Air Force Plant No. 3 (AFP3), Building 6, 3300 North Mingo Road, Tulsa, OK and include a tour of the work area.

The meetings are scheduled for:

Tuesday, December 17, 2019, at 10:30 AM Central Standard Time and.

Friday, December 20, 2019, at 2:30 PM Central Standard Time. We will meet at the south end of Building 6 and begin our tour at the scheduled time. Please arrive early.

B. General Notifications

- **1.** With this Competitive Sealed Proposal request, the City reserves the right to do the following:
 - a. To conduct oral or written discussions with Respondents, after proposals are received, concerning technical and Price aspects of the proposals and/or to allow Respondents to revise their proposals, including Price;
 - b. To evaluate, after proposals are received, the relative abilities of Respondents to perform, including their technical or professional experience and/or expertise;
 - c. To conduct a comparative evaluation, after proposals are received, of the differing Price, service, quality, contractual factors, technical content and/or technical and performance capability of the proposals;
 - d. To negotiate mutually agreeable terms in a contract;
- 2. The City of Tulsa notifies all possible Respondents that no person shall be excluded from participation in, denied any benefits of, or otherwise discriminated against in connection with the award and performance of any contract on the basis of race, religious creed, color, national origin, ancestry, physical disability, sex, age, ethnicity, or on any other basis prohibited by law.
- 3. All Respondents shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination.
- **4.** All Respondents shall comply with the Americans with Disabilities Act (ADA) and all proposals and any subsequent contract shall include the following statement:

"Contractor shall take the necessary actions to ensure its operations in performance of this contract and its employment practices are in compliance with the requirements of the Americans with Disabilities Act."

It is understood that the program of the Respondent is not a program or activity of the City of Tulsa. The Respondent agrees that its program or activity will comply with the requirements of the ADA. Any costs of such compliance will be the responsibility of the Respondent. Under no circumstances will the Respondent conduct any activity which it deems to not be in compliance with the ADA.

- **5.** Although it is the City's intent to choose only the most qualified Respondents to interview, the City reserves the right to choose any number of qualified finalists for interview and/or final selection.
- **6.** This Competitive Sealed Proposal request does not commit the City of Tulsa to pay any costs incurred in the submission of a proposal or the costs incurred in making necessary studies and designs for preparation thereof, or contract for service or supplies.

III. CONTEXT:

AFP3 is a one-mile long building complex comprising 2.89 million square feet that was originally developed as a bomber manufacturing plant. Building 6 is a 56,266 sf building which makes up part of AFP3 and is located in the central-west section of the facility. The AFP3 facility was constructed in early 1942 for the production and repair of aircraft during World War II and remained in use until 1994 when aircraft production and repair operations ceased. During the late 1990's, McDonnell Douglas – Tulsa (The Boeing Company) occupied some of the buildings, but the majority remained vacant. The facility was eventually deeded to the City of Tulsa. McDonnell Douglas retained A & M Engineering and Environmental Services to conduct asbestos surveys of the facility. The surveys were initiated in late 1998 and a report finalized in March 1999. Today, the City of Tulsa has tenants in many of the buildings, but much of the asbestos remains. The City of Tulsa is looking to abate Building 6 of the asbestos containing materials (ACM) to allow more space to be modernized and restored to useful production.

IV. SCOPE OF WORK:

- **A.** All sampling and laboratory analytical work shall be performed in accordance with the attached Quality Assurance Project Plan (QAPP).
- **B.** The Respondent shall provide labor, material, supplies and equipment to abate asbestos in AFP3 Building 6 in accordance with the Project Design, which is included as Appendix B of the QAPP.

- **C.** The Respondent shall obtain all necessary federal, state, and local permits and licenses prior to commencing work. There are no local City of Tulsa permits.
- **D.** The Respondent shall conduct the work in accordance with its Site-Specific Health & Safety Plan (HASP).
- **E.** ACM to be abated includes:
 - 1. 2,800 LF Pipe Insulation
 - **2.** 550 Pipe fittings
 - 3. 11.000 sf Fan and HVAC insulation
 - 4. 2 Fire Doors
- **F.** Work shall be conducted in compliance with Davis-Bacon regulations. Reporting will be required documenting compliance.
- **G.** Work shall be conducted in compliance with federal objectives for Minority Business Enterprise/ Women Business Enterprise (MBE/WBE) contracting. Reporting will be required for compliance.
- **H.** The Respondent shall make the following good faith efforts whenever procuring construction, equipment, services and supplies. Records documenting compliance with the good faith efforts shall be retained:
 - 1. Ensure Disadvantaged Business Enterprises (DBE)s are made aware of contracting opportunities to the fullest extent practicable through direct outreach. This will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
 - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for Agreements and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process.
 - 3. Consider breaking activities into small subtasks suitable for subcontracting with DBEs. DBEs may be used for indirect project expenses, such as on-site sanitary services or food service.
 - **4.** Form an Agreement with a consortium of DBEs when work is too large for one of these firms to handle individually.
 - Use the services and assistance of the Small Business Administration (SBA) and the Minority Business Development Agency of the Department of Commerce.
- I. Before equipment and personnel are demobilized from the site, a pre-final site inspection will be performed with City of Tulsa representatives. A punch item list will be generated identifying tasks to be completed. Any identified punch list items will be immediately corrected and/or completed to the satisfaction of City of Tulsa. Assuming formal acceptance of work is granted, personnel of the Respondent will remove equipment, materials, and temporary facilities from the site. Equipment will be properly cleaned prior to demobilization from the site. Staging areas will be disassembled once no longer needed. Areas where construction activities occurred will be left in a clean and stable condition prior to fully demobilizing from the site. All required record documents and other pertinent submittals including final applications

for payment/lien releases will be issued in a timely fashion after demobilization

V. DELIVERABLES:

The products, reports, and plans to be delivered to the City will include:

- 1) Health & Safety Plan
- 2) Respiratory Protection Program
- 3) Proof of US Department of Labor (DOL) contractor's license and supervisor's license
- 4) Any Oklahoma Department of Labor (ODOL) or Oklahoma Department of Environmental Quality (ODEQ) violations in the last 3 years.

The products, reports, and plans to be delivered to the City as final documents shall include:

- 1) Worker air monitoring records and calibration reports
- 2) Disposal waste manifests
- 3) Worker and supervisor licenses and proof of respirator clearances for all
- 4) DOL and other agency inspection reports
- 5) Area monitoring lab reports
- 6) Daily field logs
- 7) Davis-Bacon compliance reporting
- 8) MBE/WBE/DBE contracting reporting

VI. RESPONDENT AND PROPOSAL REQUIREMENTS:

To be considered, interested Respondents should submit or address the following:

- **A.** One (1) unbound original and one (1) bound copy of the proposal plus one electronic (1) copy on CD, DVD, or USB flash drive.
- **B.** A description of the Respondent's qualifications and experience and that of key personnel assigned to this project (and that of each firm proposed as part of the Respondent's team). It is noted that equipment, material and staff shall be provided by the Respondent.
- **C.** A description of three (3) previous projects that Respondent's firm has conducted for organizations of similar size and complexity. Provide:
 - contact names and telephone numbers of references from these organizations
 - 2. a narrative describing in detail the duration, extent, and quality of the Respondent's business experience with special emphasis on the experience and qualifications related to the subject operation. Be specific with respect to:
 - a. the type and dates of experience,
 - b. the Respondent's role in the management and specific duties, type and size of operation,
 - c. quality of operation including proposed and actual performance costs,
 - d. any health and safety incidents and how they were addressed,
 - e. public agency involvement,

- f. contractual relationships and other factors that demonstrate an ability to successfully operate the proposed facility.
- g. MBE/WBE/DBE team members, tasks, and volume of work by each in dollars

Attach additional information as needed

- **D.** Provide a project schedule, identifying beginning and ending dates of work, as well as project target dates.
- **E.** At the discretion of the City, one or more Respondents may be invited to be interviewed for purposes of clarification or discussion of the proposal.
- F. Any expenses incurred by the Respondent(s) in appearing for an interview or in any way providing additional information as part of the response to this Competitive Sealed Proposal request are solely the responsibility of the Respondent. The City of Tulsa is not liable for any costs incurred by Respondents in the preparation of proposals or any work performed by the Respondent prior to the approval of an executed contract by the City of Tulsa. The City assumes no responsibility or liability for any costs you may incur in responding to this CSP request, including attending meetings or contract negotiations.
- **G.** Provide history of incidences of accident, non-compliance and litigation
 - 1. During the last five (5) years, has the Respondent had a contract for services terminated for any reason, or has the Respondent received a notice of breach, notice of default, or similar notice?
 If so, provide full details related to the termination or notice.
 - 2. During the last five (5) years, describe any damages or penalties or settlements pertaining to contract disputes under any of the Respondent's existing or past contracts as it relates to services performed that are similar to the services contemplated by this CSP. If so, indicate the reason for the penalty, damages or exchange of property, goods, or services and the estimated amount of the cost of that incident to the Respondent.
 - 3. During the last five (5) years, describe any order, judgment or decree of any Federal or State authority barring, suspending or otherwise limiting the right of the Respondent to engage in any business, practice or activity.
 - 4. During the last five (5) years, list and summarize of all litigation, threatened litigation, administrative or regulatory proceedings, or similar matters to which the Respondent or its officers have been a party. The Respondent must also state whether it or any owners (other than general public stockholders), officers, or primary partners have ever been convicted of a felony. Failure to disclose these matters may result in rejection of the Bid Proposal or in termination of any subsequent Agreement. This is a continuing disclosure requirement. Any such matter commencing after submission of a Bid Proposal, and with respect to the successful Respondent after the

- execution of an Agreement, must be disclosed in a timely manner in a written statement to the Lead Agency.
- **5.** During the last five (5) years, have any irregularities been discovered in any of the accounts maintained by the Respondent on behalf of others?

If so, describe the circumstances of irregularities or variances and disposition of resolving the irregularities or variances.

VII. EVALUATION OF PROPOSALS:

Selection shall be determined to be in the best interest of the City as evaluated by the City of Tulsa. The approval of the selected Respondent will be subject to the final determination of the City and will be contingent on the successful completion of a contract between the City and the successful Respondent.

VIII. TIME FRAME FOR REVIEW:

The committee expects the evaluation and selection process to be completed in approximately three (3) to five (5) weeks. However, this period depends on the number of participants and the complexity of the proposals

IX. AWARD OF PROPOSALS:

The City evaluates proposals based on the general criteria identified in Tulsa Revised Ordinance (TRO) Title 6, Chapter 4, and listed below:

- 1. The ability, capacity and skill of the Respondent to perform the contract or provide the service required,
- 2. Whether the Respondent can perform the contract or provide the service promptly or within the time specified, without delay or interference,
- 3. The character, integrity, reputation, judgment, experience and efficiency of the Respondent,
- 4. The quality of performance by Respondent of previous contracts or services,
- 5. The previous and existing compliance by the Respondent with laws and ordinances relating to the contract or service,
- 6. The sufficiency of the financial resources and ability of the Respondent to perform the contract or provide the service,
- 7. The quality, availability and adaptability of the Services offered by Respondent to the particular use required,
- 8. The ability of the Respondent to provide future maintenance, support and service related to Respondent's offer,
- 9. Where an earlier delivery date would be of great benefit to the Using Department, the date and terms of delivery may be considered in the Proposal award,
- 10. The degree to which the Proposal submitted is complete, clear, and addresses the requirements in the CSP request specifications,

- 11. If a point system has been utilized in the CSP request specifications, the number of points earned by the Respondent.
- 12. The total cost of ownership, including the costs of supplies, materials, maintenance, and support necessary to perform the item's intended function.
- 13. If an evaluation committee performs the evaluation, the recommendation of such committee.

X. MISCELLANEOUS:

- **A.** Your response to this CSP request will be considered part of the contract, if one is awarded to you.
- **B.** All data included in this CSP request, as well as any attachments, are proprietary to the City of Tulsa.
- **C.** The use of the City of Tulsa's name in any way as a potential customer is strictly prohibited except as authorized in writing by the City of Tulsa.
- D. Your proposal must clearly indicate the name of the responding organization, including the Respondent's e-mail address and web site information, if applicable, as well as the name, address, telephone number and e-mail address of the organization's primary contact for this proposal. Your proposal must include the name, address, telephone number and e-mail address of the Respondent and/or team of Respondents assigned to the City account.
- **E.** The City is bound to comply with Oklahoma's Open Records Act, and information submitted with your proposal, with few exceptions, is a matter of public record. For specifics on the Oklahoma Open Records Act, see the link below:

https://libraries.ok.gov/law-legislative-reference/library-laws/statutes-open-records/

The City shall not be under any obligation to return any materials submitted in response to this CSP request.

- **F.** The City expects to enter into a written Agreement with the chosen Respondent that will incorporate this CSP request and your proposal. In addition to any terms and conditions included in this CSP request, the City may include in the Agreement other terms and conditions as deemed necessary.
- **G.** The Respondent to whom a contract is awarded will be required to furnish bonds as follows:
 - 1. <u>Performance Bond</u> A Performance Bond to the City in an amount equal to one hundred percent (100%) of the Contract price
 - 2. <u>Statutory Bond</u> A Statutory Bond to the State of Oklahoma in the amount equal to one hundred percent (100%) of the contract price
 - **Maintenance Bond** A Maintenance Bond to the City in an amount equal to one hundred percent (100%) of the contract price.

The bonds shall be executed on the forms included in the contract documents by a surety company authorized to do business in the State of Oklahoma and acceptable as Surety to the City of Tulsa.

- A "Power-of-Attorney" authorizing the attorney-in-fact to bind the Surety Company and certified to include the dates of the bonds shall accompany the bonds.
- H. Seller and its subcontractors must obtain at Seller's expense and keep in effect during the term of the Purchase Agreement, including any renewal periods, policies of General Liability insurance in the minimum amounts set forth below and Workers' Compensation insurance in the statutory limits required by law.

Personal injury, each person	\$ 175,000.00
Property damage, each person	\$ 25,000.00
Auto Liability, each occurrence	\$ 1,000,000.00
Personal injury and property damage, each occurrence	\$ 1,000,000.00
Workers' Compensation	(Statutory limits)

SELLER'S INSURER MUST BE AUTHORIZED TO TRANSACT BUSINESS IN THE STATE OF OKLAHOMA.

You will have 10 days after notification that your Bid was selected for contract award by City to provide proof of such coverage by providing the assigned Project Buyer, shown in the "INSTRUCTIONS FOR SUBMITTING A PROPOSAL" section of this document, with a Certificate of Insurance. The Certificate of Insurance must be completed with the following information:

- A. Your name
- B. Insurer's name and address
- C. Policy number
- D. Liability coverage and amounts
- E. Commencement and expiration dates
- F. Signature of authorized agent of insurer
- G. Invitation for Bid number

The Seller shall not cause any required insurance policy to be cancelled or to permit it to lapse. It is the responsibility of Seller to notify City of any change in coverage or insurer by providing City with an updated Certificate of Liability Insurance. Failure of Seller to comply with the insurance requirements herein may be deemed a breach of the Purchase Agreement. Further, a Seller who fails to keep required insurance policies in effect may be deemed to be ineligible to bid on future projects, ineligible to respond to invitations for bid, and/or ineligible to engage in any new purchase agreements.

INTEREST AFFIDAVIT

STATE OF)		
) ss.		
COUNTY OF			
I,			
agent authorized by Seller to submit the employee of the City of Tulsa either direct			
Respondent's business or such a percentage	ge that constitutes a	a controlling interest. Affiant furth	er states that
the following officers, including any Trus Respondent's business which is less than			iterest in the
		st, ettier direct of indirect.	
	D.,		
	ъу	Signature	
	Title		
	Title		
Subscribed and sworn to before me this _	day of	, 20	
Notary Public			
My Commission Expires:		<u></u>	
-			
Notary Commission Number:		<u> </u>	
County & State Where Notarized:			

NON-COLLUSION AFFIDAVIT

(Required by Oklahoma law, 74 O.S. §85.22-85.25)

STATE OF)
) ss.
COUNTY OF)
	, of lawful age, being first duly
sworn, state the	at: r's Authorized Agent)
1.	I am the authorized agent of Seller herein for the purposes of certifying facts pertaining to the existence of collusion between and among Respondents and municipal officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the Proposal to which this statement is attached.
2.	I am fully aware of the facts and circumstances surrounding the making of Seller's Proposal to which this statement is attached, and I have been personally and directly involved in the proceedings leading to the submission of such Proposal; and
3.	 Neither the Seller nor anyone subject to the Seller's direction or control has been a party: a. to any collusion among Respondents in restraint of freedom of competition by agreement to Propose at a fixed price or to refrain from responding, b. to any collusion with any municipal official or employee as to quantity, quality, or price in the prospective contract, or as to any other terms of such prospective contract, nor c. in any discussions between Respondents and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.
	By: Signature
	Title:
Subscribed and	d sworn to before me thisday of, 20
Notary Public	
My Commissio	on Expires:
Notary Commi	ission Number:
County & State	e Where Notarized:

AFFIDAVIT OF CLAIMANT

STATE OF ______)

) s	s.	
COUNTY OF)		
The undersigned, of lawful age, being first of correct. Affiant further states that the work in accordance with the contract, plans, speaffiant further states that (s)he has made nothing of value to any elected official, officer which the City is a beneficiary to obtain or process.	c, services or materials will be compecifications, orders or requests furn o payment directly or indirectly of mor employee of the City of Tulsa or	oleted or supplied hished the affiant. oney or any other any public trust of
	By: Signature	
	Signature	
	Name:	
	Company:	
	Title:	
Subscribed and sworn to before me this	day of	, 20
Notary Public		
My Commission Expires:		
Notary Commission Number:		

ACKNOWLEDGMENT OF RECEIPT OF ADDENDA/AMENDMENTS

I hereby acknowledge receipt of the following addenda or amendments, and understand that such addenda or amendments are incorporated into the Bid

Packet and will become a part of any resulting contract.

List Date and Title/Number of all addenda or amendments: (Write "None" if applicable).

Sign Here ▶

Printed Name:

Title:

Date:

RESPONDENT INFORMATION SHEET

Respondent's Legal Name:					
(Must be Respondent's company name exactly as reflected on its organizational documents, filed with the state in which Respondent is organized; <u>not</u> simply a DBA.)					
State of Organization:					
Respondent's Type of Legal Entity: (check one () Sole Proprietorship () Partnership () Corporation () Limited Partnership	() Limited Liability Company () Limited Liability Partnership () Other:				
Address: Street	City State Zip				
Website Address:Emai	il Address:				
Sales Contact:	Legal or Alternate Sales Contact:				
Name:	Name:				
Street:	Street:				
City:	City: State: Phone:				
State:					
Phone:					
Fax:	Fax:				
Email:	Email:				

Price Sheet Summary

All costs must be included on Exhibit A

Name Printed: _____

		BID	ITEMS			
Materials	Friable	Location(s) of the Homogeneous Material	Asbestos Content	Estimated Quantity	Unit Price	Extended Price
Pipe Insulation	Friable		Chrysotile	2,800 LF	\$	
Pipe Fittings	Friable	Throughout the Building	Chrysotile	550 fittings	\$	
Fan and HVAC Insulation	Friable		Chrysotile	11,000 SF	\$	
Fire Door	Non-friable	HVAC Room – Southeast Corner	Unknown	2 doors	\$	
Total Extended	Price – Cos	Not to Exceed			\$	
		PROPOSED	MBE/WBE U	JSE		
Company Name	MBE / WBE	Service Type (Construction, Supplies, Services, or Equipment)			volume in	\$ % of Total
Total Proposed	MBE/WBE	Utilization			\$	
Company Na	ame:			Date:		

City of Tulsa General Contract Terms

It is anticipated that the City of Tulsa will enter into a contract with the selected Respondent for an initial term ending one (1) year from the date of its execution by the City's Mayor, with four (4) one-year renewals available at the option of the City. Contracts entered into by the City of Tulsa generally include, but are not limited to, the following terms:

- 1. Renewals. Contractor understands and acknowledges that any future contracts or renewals are neither automatic nor implied by this Agreement. The continuing purchase by City of the Services set forth in this Agreement is subject to City's needs and to City's annual appropriation of sufficient funds in City's fiscal year (July 1st to June 30th) in which such Services are purchased. In the event City does not appropriate or budget sufficient funds to perform this Agreement, this Agreement shall be null and void without further action by City.
- 2. No Indemnification or Arbitration by City. Contractor understands and acknowledges that City is a municipal corporation that is funded by its taxpayers to operate for the benefit of its citizens. Accordingly, and pursuant to Oklahoma law, City shall not indemnify nor hold Contractor harmless for loss, damage, expense or liability arising from or related to this Agreement, including any attorneys' fees and costs. In addition, Contractor shall not limit its liability to City for actual loss or direct damages for any claim based on a breach of this Agreement and the documents incorporated herein. City reserves the right to pursue all legal and equitable remedies to which it may be entitled. City will not agree to binding arbitration of any disputes.
- 3. Intellectual Property Indemnification by Contractor. Contractor agrees to indemnify, defend, and save harmless City and its officers, employees and agents from all suits and actions of every nature brought against them due to the use of patented, trademarked or copyright-protected appliances, products, materials or processes provided by Contractor hereunder. Contractor shall pay all royalties and charges incident to such patents, trademarks or copyrights.
- 4. **General Liability.** Contractor shall hold City harmless from any loss, damage or claims arising from or related to the performance of the Agreement herein. Contractor must exercise all reasonable and customary precaution to prevent any harm or loss to all persons and property related to this Agreement.
- 5. Liens. Pursuant to City's Charter (Art. XII, §5), no lien of any kind shall exist against any property of City. Contractor agrees to indemnify and hold the City harmless from all claims, demands, causes of action or suits of whatever nature arising out of the services, labor, and material furnished by Contractor or Contractor's subcontractors under the scope of this Agreement.
- 6. **No Confidentiality.** Contractor understands and acknowledges that City is subject to the Oklahoma Open Records Act (51 O.S. §24A.1 *et seq.*) and therefore cannot assure the confidentiality of contract terms or other information provided by Contractor pursuant to this Agreement that would be inconsistent with City's compliance with its statutory requirements there under.
- 7. **Compliance with Laws.** Contractor shall be responsible for complying with all applicable federal, state and local laws. Contractor is responsible for any costs of such compliance. Contractor shall take the necessary actions to ensure its operations in performance of this contract and its employment practices are in compliance with the requirements of the Americans with Disabilities Act. Contractor certifies that it and all of its subcontractors to be used in the performance of this agreement are in compliance with 25 O.S. Sec. 1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. Sec. 1313 and includes, but is not limited to, the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.

- 8. Right to Audit. The parties agree that books, records, documents, accounting procedures, practices, price lists or any other items related to the Services provided hereunder are subject to inspection, examination, and copying by City or its designees. Contractor shall retain all records related to this Agreement for the duration of the contract term and a period of three years following completion and/or termination of the contract. If an audit, litigation or other action involving such records begins before the end of the three year period, the records shall be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.
- 9. Governing Law and Venue. This Agreement is executed in and shall be governed by and construed in accordance with the laws of the State of Oklahoma without regard to its choice of law principles, which shall be the forum for any lawsuits arising under this Agreement or incident thereto. The parties stipulate that venue is proper in a court of competent jurisdiction in Tulsa County, Oklahoma and each party waives any objection to such venue.
- 10. **No Waiver.** A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other provision, nor shall any failure to enforce any provision hereof operate as a waiver of the enforcement of such provision or any other provision.
- 11. **Entire Agreement/No Assignment.** This Agreement and any documents incorporated herein constitute the entire agreement of the parties and supersede any and all prior agreements, oral or otherwise, relating to the subject matter of this Agreement. This Agreement may only be modified or amended in writing and must be signed by both parties. Notwithstanding anything to the contrary herein, the City does not agree to the terms of any future agreements, revisions or modifications that may be required under this Agreement unless such terms, revisions or modifications have been reduced to writing and signed by both parties. Contractor may not assign this Agreement or use subcontractors to provide the Goods and/or Services without City's prior written consent. Contractor shall not be entitled to any claim for extras of any kind or nature.
- 12. **Equal Employment Opportunity**. Contractor shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination

The undersigned agrees to the inclusion of the above provisions, among others, in any contract with the City of Tulsa.

Company Name:	Date:
Signature:	-
Name Printed:	-
Title:	_

City of Tulsa Finance Department

Request for

Competitive Sealed Proposal

CSP20-714 Air Force Plant 3 Property Renovation – Phase I

NIGP Commodity Code(s):

910-38 Asbestos Removal Services

Submit proposals (sealed) to:

Deputy City Clerk
City of Tulsa
175 E. 2ND St.
Suite 260
Tulsa, OK 74103



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Attachments include Special Specifications (Davis-Bacon regulations) and the Quality Assurance Project Plan

I. STATEMENT OF PURPOSE:

With this Competitive Sealed Proposal (CSP) request, we are searching to secure services to remove, transport, and properly dispose of regulated asbestos containing materials (RACM) from the City of Tulsa (City) owned Air Force Plant No. 3 (AFP3), Building 6, property located at 3300 North Mingo Road, Tulsa, OK 74116.

We enthusiastically look forward to receiving your proposal.

II. INSTRUCTIONS FOR SUBMITTING A PROPOSAL:

A. General Requirements

- The proposal must be received by 5:00 p.m. on Wednesday, January 08, 2020, Central Standard Time. Proposals must be sealed in an envelope or box clearly labeled "CSP20-714 Air Force Plant 3 Property Renovation – Phase I".
 Proposals arriving late will be returned unopened.
- **2.** Proposals must be delivered sealed to:

Deputy City Clerk City of Tulsa 175 E. 2nd St. Suite 260 Tulsa, OK 74103

- **3.** All interested Respondents (Sellers) are required to register with the Buyer, in order to receive updates, addenda or any additional information required. The City is not responsible for any failure to register.
- Inquiries to the Buyer requesting clarification regarding this CSP request or the content herein must be made via e-mail and must be received prior to the end of the business day on December 23, 2019.

Terry Thomas, Senior Buyer tthomas@cityoftulsa.org

Any questions regarding this CSP request will be handled as promptly and as directly as possible. If a question requires only clarification of CSP request instructions or specifications, it will be handled via e-mail, or verbally. If any question results in material changes or additions to the CSP request, those changes or additions will be forwarded to all registered Respondents as quickly as possible by addendum.

5. Respondents shall designate a contact person, with appropriate contact information, to address any questions concerning a proposal. Respondents shall also state the name and title of individuals who will make final decisions regarding contractual commitments and have legal authority to execute a contract on the Respondent's behalf.

6. Proposals will be opened on the morning after the due date, at 8:30am, at the:

Standards, Specifications, and Awards Committee Meeting 175 East 2nd Street, 2nd Floor City Council Chamber

 Mandatory Pre-proposal Meeting: Attending one of the two preproposal meetings is required for a response to be considered for award.

The meetings will be held at Air Force Plant No. 3 (AFP3), Building 6, 3300 North Mingo Road, Tulsa, OK and include a tour of the work area.

The meetings are scheduled for:

Tuesday, December 17, 2019, at 10:30 AM Central Standard Time and.

Friday, December 20, 2019, at 2:30 PM Central Standard Time. We will meet at the south end of Building 6 and begin our tour at the scheduled time. Please arrive early.

B. General Notifications

- **1.** With this Competitive Sealed Proposal request, the City reserves the right to do the following:
 - a. To conduct oral or written discussions with Respondents, after proposals are received, concerning technical and Price aspects of the proposals and/or to allow Respondents to revise their proposals, including Price;
 - b. To evaluate, after proposals are received, the relative abilities of Respondents to perform, including their technical or professional experience and/or expertise;
 - c. To conduct a comparative evaluation, after proposals are received, of the differing Price, service, quality, contractual factors, technical content and/or technical and performance capability of the proposals;
 - d. To negotiate mutually agreeable terms in a contract;
- 2. The City of Tulsa notifies all possible Respondents that no person shall be excluded from participation in, denied any benefits of, or otherwise discriminated against in connection with the award and performance of any contract on the basis of race, religious creed, color, national origin, ancestry, physical disability, sex, age, ethnicity, or on any other basis prohibited by law.
- **3.** All Respondents shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination.
- **4.** All Respondents shall comply with the Americans with Disabilities Act (ADA) and all proposals and any subsequent contract shall include the following statement:

"Contractor shall take the necessary actions to ensure its operations in performance of this contract and its employment practices are in compliance with the requirements of the Americans with Disabilities Act."

It is understood that the program of the Respondent is not a program or activity of the City of Tulsa. The Respondent agrees that its program or activity will comply with the requirements of the ADA. Any costs of such compliance will be the responsibility of the Respondent. Under no circumstances will the Respondent conduct any activity which it deems to not be in compliance with the ADA.

- **5.** Although it is the City's intent to choose only the most qualified Respondents to interview, the City reserves the right to choose any number of qualified finalists for interview and/or final selection.
- 6. This Competitive Sealed Proposal request does not commit the City of Tulsa to pay any costs incurred in the submission of a proposal or the costs incurred in making necessary studies and designs for preparation thereof, or contract for service or supplies.

III. CONTEXT:

AFP3 is a one-mile long building complex comprising 2.89 million square feet that was originally developed as a bomber manufacturing plant. Building 6 is a 56,266 sf building which makes up part of AFP3 and is located in the central-west section of the facility. The AFP3 facility was constructed in early 1942 for the production and repair of aircraft during World War II and remained in use until 1994 when aircraft production and repair operations ceased. During the late 1990's, McDonnell Douglas – Tulsa (The Boeing Company) occupied some of the buildings, but the majority remained vacant. The facility was eventually deeded to the City of Tulsa. McDonnell Douglas retained A & M Engineering and Environmental Services to conduct asbestos surveys of the facility. The surveys were initiated in late 1998 and a report finalized in March 1999. Today, the City of Tulsa has tenants in many of the buildings, but much of the asbestos remains. The City of Tulsa is looking to abate Building 6 of the asbestos containing materials (ACM) to allow more space to be modernized and restored to useful production.

IV. SCOPE OF WORK:

- **A.** All sampling and laboratory analytical work shall be performed in accordance with the attached Quality Assurance Project Plan (QAPP).
- **B.** The Respondent shall provide labor, material, supplies and equipment to abate asbestos in AFP3 Building 6 in accordance with the Project Design, which is included as Appendix B of the QAPP.

- **C.** The Respondent shall obtain all necessary federal, state, and local permits and licenses prior to commencing work. There are no local City of Tulsa permits.
- **D.** The Respondent shall conduct the work in accordance with its Site-Specific Health & Safety Plan (HASP).
- **E.** ACM to be abated includes:
 - 1. 2,800 LF Pipe Insulation
 - **2.** 550 Pipe fittings
 - 3. 11.000 sf Fan and HVAC insulation
 - 4. 2 Fire Doors
- **F.** Work shall be conducted in compliance with Davis-Bacon regulations. Reporting will be required documenting compliance.
- G. Work shall be conducted in compliance with federal objectives for Minority Business Enterprise/ Women Business Enterprise (MBE/WBE) contracting. The Respondent shall document in the bid how they intend to meet the fair share objectives in the Price Sheet Summary. The fair share objectives for this Agreement are as shown below. Reporting will be required for compliance.

Service Type	MBE	WBE
Construction	11.25%	7.41%
Supplies	16.15%	16.443%
Services	9.04%	19.85%
Equipment	6.68%	12.16%

- **H.** The Respondent shall make the following good faith efforts whenever procuring construction, equipment, services and supplies. Records documenting compliance with the good faith efforts shall be retained:
 - 1. Ensure Disadvantaged Business Enterprises (DBE)s are made aware of contracting opportunities to the fullest extent practicable through direct outreach. This will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
 - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for Agreements and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process.
 - 3. Consider breaking activities into small subtasks suitable for subcontracting with DBEs. DBEs may be used for indirect project expenses, such as on-site sanitary services or food service.
 - **4.** Form an Agreement with a consortium of DBEs when work is too large for one of these firms to handle individually.
 - Use the services and assistance of the Small Business Administration (SBA) and the Minority Business Development Agency of the Department of Commerce.

I. Before equipment and personnel are demobilized from the site, a pre-final site inspection will be performed with City of Tulsa representatives. A punch item list will be generated identifying tasks to be completed. Any identified punch list items will be immediately corrected and/or completed to the satisfaction of City of Tulsa. Assuming formal acceptance of work is granted, personnel of the Respondent will remove equipment, materials, and temporary facilities from the site. Equipment will be properly cleaned prior to demobilization from the site. Staging areas will be disassembled once no longer needed. Areas where construction activities occurred will be left in a clean and stable condition prior to fully demobilizing from the site. All required record documents and other pertinent submittals including final applications for payment/lien releases will be issued in a timely fashion after demobilization

V. DELIVERABLES:

The products, reports, and plans to be delivered to the City will include:

- 1) Health & Safety Plan
- 2) Respiratory Protection Program
- 3) Proof of US Department of Labor (DOL) contractor's license and supervisor's license
- 4) Any Oklahoma Department of Labor (ODOL) or Oklahoma Department of Environmental Quality (ODEQ) violations in the last 3 years.

The products, reports, and plans to be delivered to the City as final documents shall include:

- 1) Worker air monitoring records and calibration reports
- 2) Disposal waste manifests
- 3) Worker and supervisor licenses and proof of respirator clearances for all
- 4) DOL and other agency inspection reports
- 5) Area monitoring lab reports
- 6) Daily field logs
- 7) Davis-Bacon compliance reporting
- 8) MBE/WBE/DBE contracting reporting

VI. RESPONDENT AND PROPOSAL REQUIREMENTS:

To be considered, interested Respondents should submit or address the following:

- **A.** One (1) unbound original and one (1) bound copy of the proposal plus one electronic (1) copy on CD, DVD, or USB flash drive.
- **B.** A description of the Respondent's qualifications and experience and that of key personnel assigned to this project (and that of each firm proposed as part of the Respondent's team). It is noted that equipment, material and staff shall be provided by the Respondent.
- **C.** A description of three (3) previous projects that Respondent's firm has conducted for organizations of similar size and complexity. Provide:
 - 1. contact names and telephone numbers of references from these organizations

- 2. a narrative describing in detail the duration, extent, and quality of the Respondent's business experience with special emphasis on the experience and qualifications related to the subject operation. Be specific with respect to:
 - a. the type and dates of experience,
 - b. the Respondent's role in the management and specific duties, type and size of operation,
 - c. quality of operation including proposed and actual performance costs,
 - d. any health and safety incidents and how they were addressed,
 - e. public agency involvement,
 - f. contractual relationships and other factors that demonstrate an ability to successfully operate the proposed facility.
 - g. MBE/WBE/DBE team members, tasks, and volume of work by each in dollars

Attach additional information as needed

- **D.** Provide a project schedule, identifying beginning and ending dates of work, as well as project target dates.
- **E.** At the discretion of the City, one or more Respondents may be invited to be interviewed for purposes of clarification or discussion of the proposal.
- F. Any expenses incurred by the Respondent(s) in appearing for an interview or in any way providing additional information as part of the response to this Competitive Sealed Proposal request are solely the responsibility of the Respondent. The City of Tulsa is not liable for any costs incurred by Respondents in the preparation of proposals or any work performed by the Respondent prior to the approval of an executed contract by the City of Tulsa. The City assumes no responsibility or liability for any costs you may incur in responding to this CSP request, including attending meetings or contract negotiations.
- **G.** Provide history of incidences of accident, non-compliance and litigation
 - 1. During the last five (5) years, has the Respondent had a contract for services terminated for any reason, or has the Respondent received a notice of breach, notice of default, or similar notice?
 If so, provide full details related to the termination or notice.
 - 2. During the last five (5) years, describe any damages or penalties or settlements pertaining to contract disputes under any of the Respondent's existing or past contracts as it relates to services performed that are similar to the services contemplated by this CSP. If so, indicate the reason for the penalty, damages or exchange of property, goods, or services and the estimated amount of the cost of that incident to the Respondent.
 - **3.** During the last five (5) years, describe any order, judgment or decree of any Federal or State authority barring, suspending or otherwise

- limiting the right of the Respondent to engage in any business, practice or activity.
- 4. During the last five (5) years, list and summarize of all litigation, threatened litigation, administrative or regulatory proceedings, or similar matters to which the Respondent or its officers have been a party. The Respondent must also state whether it or any owners (other than general public stockholders), officers, or primary partners have ever been convicted of a felony. Failure to disclose these matters may result in rejection of the Bid Proposal or in termination of any subsequent Agreement. This is a continuing disclosure requirement. Any such matter commencing after submission of a Bid Proposal, and with respect to the successful Respondent after the execution of an Agreement, must be disclosed in a timely manner in a written statement to the Lead Agency.
- 5. During the last five (5) years, have any irregularities been discovered in any of the accounts maintained by the Respondent on behalf of others?
 If so, describe the circumstances of irregularities or variances and

VII. EVALUATION OF PROPOSALS:

Selection shall be determined to be in the best interest of the City as evaluated by the City of Tulsa. The approval of the selected Respondent will be subject to the final determination of the City and will be contingent on the successful completion of a contract between the City and the successful Respondent.

disposition of resolving the irregularities or variances.

VIII. TIME FRAME FOR REVIEW:

The committee expects the evaluation and selection process to be completed in approximately three (3) to five (5) weeks. However, this period depends on the number of participants and the complexity of the proposals

IX. AWARD OF PROPOSALS:

The City evaluates proposals based on the general criteria identified in Tulsa Revised Ordinance (TRO) Title 6, Chapter 4, and listed below:

- 1. The ability, capacity and skill of the Respondent to perform the contract or provide the service required,
- 2. Whether the Respondent can perform the contract or provide the service promptly or within the time specified, without delay or interference,
- 3. The character, integrity, reputation, judgment, experience and efficiency of the Respondent,
- 4. The quality of performance by Respondent of previous contracts or services,
- 5. The previous and existing compliance by the Respondent with laws and ordinances relating to the contract or service,

- 6. The sufficiency of the financial resources and ability of the Respondent to perform the contract or provide the service,
- 7. The quality, availability and adaptability of the Services offered by Respondent to the particular use required,
- 8. The ability of the Respondent to provide future maintenance, support and service related to Respondent's offer,
- 9. Where an earlier delivery date would be of great benefit to the Using Department, the date and terms of delivery may be considered in the Proposal award,
- 10. The degree to which the Proposal submitted is complete, clear, and addresses the requirements in the CSP request specifications,
- 11. If a point system has been utilized in the CSP request specifications, the number of points earned by the Respondent.
- 12. The total cost of ownership, including the costs of supplies, materials, maintenance, and support necessary to perform the item's intended function.
- 13. If an evaluation committee performs the evaluation, the recommendation of such committee.

X. MISCELLANEOUS:

- **A.** Your response to this CSP request will be considered part of the contract, if one is awarded to you.
- **B.** All data included in this CSP request, as well as any attachments, are proprietary to the City of Tulsa.
- **C.** The use of the City of Tulsa's name in any way as a potential customer is strictly prohibited except as authorized in writing by the City of Tulsa.
- D. Your proposal must clearly indicate the name of the responding organization, including the Respondent's e-mail address and web site information, if applicable, as well as the name, address, telephone number and e-mail address of the organization's primary contact for this proposal. Your proposal must include the name, address, telephone number and e-mail address of the Respondent and/or team of Respondents assigned to the City account.
- **E.** The City is bound to comply with Oklahoma's Open Records Act, and information submitted with your proposal, with few exceptions, is a matter of public record. For specifics on the Oklahoma Open Records Act, see the link below:

https://libraries.ok.gov/law-legislative-reference/library-laws/statutes-open-records/

The City shall not be under any obligation to return any materials submitted in response to this CSP request.

F. The City expects to enter into a written Agreement with the chosen Respondent that will incorporate this CSP request and your proposal. In addition to any terms and conditions included in this CSP request, the City may include in the Agreement other terms and conditions as deemed necessary.

- **G.** The Respondent to whom a contract is awarded will be required to furnish bonds as follows:
 - 1. <u>Performance Bond</u> A Performance Bond to the City in an amount equal to one hundred percent (100%) of the Contract price
 - **2. Statutory Bond** A Statutory Bond to the State of Oklahoma in the amount equal to one hundred percent (100%) of the contract price
 - **Maintenance Bond** A Maintenance Bond to the City in an amount equal to one hundred percent (100%) of the contract price.

The bonds shall be executed on the forms included in the contract documents by a surety company authorized to do business in the State of Oklahoma and acceptable as Surety to the City of Tulsa.

A "Power-of-Attorney" authorizing the attorney-in-fact to bind the Surety Company and certified to include the dates of the bonds shall accompany the bonds.

H. Seller and its subcontractors must obtain at Seller's expense and keep in effect during the term of the Purchase Agreement, including any renewal periods, policies of General Liability insurance in the minimum amounts set forth below and Workers' Compensation insurance in the statutory limits required by law.

Personal injury, each person	\$ 175,000.00
Property damage, each person	\$ 25,000.00
Auto Liability, each occurrence	\$ 1,000,000.00
Personal injury and property damage, each occurrence	\$ 1,000,000.00
Workers' Compensation	(Statutory limits)

SELLER'S INSURER MUST BE AUTHORIZED TO TRANSACT BUSINESS IN THE STATE OF OKLAHOMA.

You will have 10 days after notification that your Bid was selected for contract award by City to provide proof of such coverage by providing the assigned Project Buyer, shown in the "INSTRUCTIONS FOR SUBMITTING A PROPOSAL" section of this document, with a Certificate of Insurance. The Certificate of Insurance must be completed with the following information:

- A. Your name
- B. Insurer's name and address
- C. Policy number
- D. Liability coverage and amounts
- E. Commencement and expiration dates
- F. Signature of authorized agent of insurer
- G. Invitation for Bid number

The Seller shall not cause any required insurance policy to be cancelled or to permit it to lapse. It is the responsibility of Seller to notify City of any change in coverage or insurer by providing City with an updated Certificate of Liability Insurance. Failure of Seller to comply with the insurance requirements herein may be deemed a breach of the Purchase Agreement. Further, a Seller who fails to keep required insurance policies in effect may be deemed to be ineligible to bid on future projects, ineligible to respond to invitations for bid, and/or ineligible to engage in any new purchase agreements.

INTEREST AFFIDAVIT

STATE OF)			
) ss.			
COUNTY OF				
I,agent authorized by Seller to submit to employee of the City of Tulsa either directions.	he attached Propo	sal. Affiant f	urther states	that no officer or
Respondent's business or such a percentage the following officers, including any Tru Respondent's business which is less than	ge that constitutes a stee, and/or employ	controlling in	nterest. Affia y of Tulsa o	ant further states that
	Ву:	Signature		
	Title: _			
Subscribed and sworn to before me this _	day of		, 20	
Notary Public				
My Commission Expires:				
Notary Commission Number:				
County & State Where Notarized:				

NON-COLLUSION AFFIDAVIT

(Required by Oklahoma law, 74 O.S. §85.22-85.25)

STATE OF _)	
) ss.	
COUNTY OF	<u> </u>	
	, of lawful age, being first duly	
sworn, state th	nat: er's Authorized Agent)	
1.	I am the authorized agent of Seller herein for the purposes of certifying facts pertaining to the existence of collusion between and among Respondents and municipal officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the Proposal to which this statement is attached.	
2.	I am fully aware of the facts and circumstances surrounding the making of Seller's Proposal to which this statement is attached, and I have been personally and directly involved in the proceedings leading to the submission of such Proposal; and	
3.	 Neither the Seller nor anyone subject to the Seller's direction or control has been a party: a. to any collusion among Respondents in restraint of freedom of competition by agreement to Propose at a fixed price or to refrain from responding, b. to any collusion with any municipal official or employee as to quantity, quality, or price in the prospective contract, or as to any other terms of such prospective contract, nor c. in any discussions between Respondents and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract. 	
	By: Signature	
	Title:	
Subscribed an	d sworn to before me thisday of, 20	
Notary Public		
My Commissi	on Expires:	
Notary Comm	nission Number:	
County & Star	te Where Notarized:	

AFFIDAVIT OF CLAIMANT

STATE OF _______)

) ss.		
COUNTY OF)		
The undersigned, of lawful age, being first duly correct. Affiant further states that the work, se in accordance with the contract, plans, specifi Affiant further states that (s)he has made no pathing of value to any elected official, officer or ewhich the City is a beneficiary to obtain or process.	ervices or materials will be completed or cations, orders or requests furnished the syment directly or indirectly of money or employee of the City of Tulsa or any publ	supplied ne affiant any othe
	By:Signature	
	Name:	
	Company:	
	Title:	
Subscribed and sworn to before me this	day of,	20
Notary Public		
My Commission Expires:		
Notary Commission Number:		

ACKNOWLEDGMENT OF RECEIPT OF ADDENDA/AMENDMENTS

I hereby acknowledge receipt of the following addenda or amendments, and understand that such addenda or amendments are incorporated into the Bid Packet and will become a part of any resulting contract.

List Date and Title/Number of all addenda or amendments: (Write "None" if applicable).

Sign Here ▶
Printed Name:
Title:

Date:

RESPONDENT INFORMATION SHEET

lespondent's Legal Name:					
(Must be Respondent's company name exactly as reflected on its organizational documents, filed with the state in which Respondent is organized; <u>not</u> simply a DBA.)					
State of Organization:					
Respondent's Type of Legal Entity: (check () Sole Proprietorship () Partnership () Corporation () Limited Partnership Address:	() Limited Liability Company () Limited Liability Partnership () Other:				
Street	City State Zip				
Website Address:E	Email Address:				
Sales Contact:	Legal or Alternate Sales Contact				
Name:	Name:				
Street:	Street:				
City:	City:				
State:	State:				
Phone:	Phone:				
Fax:	Fax:				
Email:	Email:				

Price Sheet Summary

All costs must be included on Exhibit A

Name Printed: _____

All costs	must be in	cluded on Exhib				
		BID	ITEMS			
Materials	Friable	Location(s) of the Homogeneous Material	Asbestos Content	Estimated Quantity	Unit Price	Extended Price
Pipe Insulation	Friable		Chrysotile	2,800 LF	\$	
Pipe Fittings	Friable	Throughout the Building	Chrysotile	550 fittings	\$	
Fan and HVAC Insulation	Friable		Chrysotile	11,000 SF	\$	
Fire Door	Non-friable	HVAC Room – Southeast Corner	Unknown	2 doors	\$	
Total Extended I	Price – Cos	t Not to Exceed			\$	
		PROPOSED	MBE/WBE U	JSE		
Company Name	MBE / WBE	(Construction, Sup	Service Type (Construction, Supplies, Services, or Equipment)			n \$ % of Total
Total Proposed	MBE/WBE	Utilization			\$	
Company Na	ame:			Date:		
Signature: _						

City of Tulsa General Contract Terms

It is anticipated that the City of Tulsa will enter into a contract with the selected Respondent for an initial term ending one (1) year from the date of its execution by the City's Mayor, with four (4) one-year renewals available at the option of the City. Contracts entered into by the City of Tulsa generally include, but are not limited to, the following terms:

- 1. Renewals. Contractor understands and acknowledges that any future contracts or renewals are neither automatic nor implied by this Agreement. The continuing purchase by City of the Services set forth in this Agreement is subject to City's needs and to City's annual appropriation of sufficient funds in City's fiscal year (July 1st to June 30th) in which such Services are purchased. In the event City does not appropriate or budget sufficient funds to perform this Agreement, this Agreement shall be null and void without further action by City.
- 2. No Indemnification or Arbitration by City. Contractor understands and acknowledges that City is a municipal corporation that is funded by its taxpayers to operate for the benefit of its citizens. Accordingly, and pursuant to Oklahoma law, City shall not indemnify nor hold Contractor harmless for loss, damage, expense or liability arising from or related to this Agreement, including any attorneys' fees and costs. In addition, Contractor shall not limit its liability to City for actual loss or direct damages for any claim based on a breach of this Agreement and the documents incorporated herein. City reserves the right to pursue all legal and equitable remedies to which it may be entitled. City will not agree to binding arbitration of any disputes.
- 3. **Intellectual Property Indemnification by Contractor.** Contractor agrees to indemnify, defend, and save harmless City and its officers, employees and agents from all suits and actions of every nature brought against them due to the use of patented, trademarked or copyright-protected appliances, products, materials or processes provided by Contractor hereunder. Contractor shall pay all royalties and charges incident to such patents, trademarks or copyrights.
- 4. **General Liability.** Contractor shall hold City harmless from any loss, damage or claims arising from or related to the performance of the Agreement herein. Contractor must exercise all reasonable and customary precaution to prevent any harm or loss to all persons and property related to this Agreement.
- 5. Liens. Pursuant to City's Charter (Art. XII, §5), no lien of any kind shall exist against any property of City. Contractor agrees to indemnify and hold the City harmless from all claims, demands, causes of action or suits of whatever nature arising out of the services, labor, and material furnished by Contractor or Contractor's subcontractors under the scope of this Agreement.
- 6. **No Confidentiality.** Contractor understands and acknowledges that City is subject to the Oklahoma Open Records Act (51 O.S. §24A.1 *et seq.*) and therefore cannot assure the confidentiality of contract terms or other information provided by Contractor pursuant to this Agreement that would be inconsistent with City's compliance with its statutory requirements there under.
- 7. **Compliance with Laws.** Contractor shall be responsible for complying with all applicable federal, state and local laws. Contractor is responsible for any costs of such compliance. Contractor shall take the necessary actions to ensure its operations in performance of this contract and its employment practices are in compliance with the requirements of the Americans with Disabilities Act. Contractor certifies that it and all of its subcontractors to be used in the performance of this agreement are in compliance with 25 O.S. Sec. 1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. Sec. 1313 and includes, but is not limited to, the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.

- 8. Right to Audit. The parties agree that books, records, documents, accounting procedures, practices, price lists or any other items related to the Services provided hereunder are subject to inspection, examination, and copying by City or its designees. Contractor shall retain all records related to this Agreement for the duration of the contract term and a period of three years following completion and/or termination of the contract. If an audit, litigation or other action involving such records begins before the end of the three year period, the records shall be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.
- 9. Governing Law and Venue. This Agreement is executed in and shall be governed by and construed in accordance with the laws of the State of Oklahoma without regard to its choice of law principles, which shall be the forum for any lawsuits arising under this Agreement or incident thereto. The parties stipulate that venue is proper in a court of competent jurisdiction in Tulsa County, Oklahoma and each party waives any objection to such venue.
- 10. **No Waiver.** A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other provision, nor shall any failure to enforce any provision hereof operate as a waiver of the enforcement of such provision or any other provision.
- 11. **Entire Agreement/No Assignment.** This Agreement and any documents incorporated herein constitute the entire agreement of the parties and supersede any and all prior agreements, oral or otherwise, relating to the subject matter of this Agreement. This Agreement may only be modified or amended in writing and must be signed by both parties. Notwithstanding anything to the contrary herein, the City does not agree to the terms of any future agreements, revisions or modifications that may be required under this Agreement unless such terms, revisions or modifications have been reduced to writing and signed by both parties. Contractor may not assign this Agreement or use subcontractors to provide the Goods and/or Services without City's prior written consent. Contractor shall not be entitled to any claim for extras of any kind or nature.
- 12. **Equal Employment Opportunity**. Contractor shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination

The undersigned agrees to the inclusion of the above provisions, among others, in any contract with the City of Tulsa.

Company Name:	Date:	
Signature:		
Name Printed:		
Title:	_	

SPECIAL SPECIFICATIONS

www.wdol.gov

INSERT CURRENT WAGE DECISIONS THAT APPLY TO THE CONSTRUCTION PROJECT HERE IN CONTRACT SPECIFICATIONS

DAVIS-BACON WAGE DECISION

General Decision Number: OK160053 08/12/2016 OK53

Superseded General Decision Number: OK20150053

State: Oklahoma

Construction Type: Building Building Construction -does not include residential construction consisting of single family homes and apartments up to and including 4 stories. (Including building projects on industrial sites and treatment plants)

County: Tulsa County in Oklahoma.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication	Date
0	01/08/2016	
1	01/15/2016	
2	03/18/2016	
3	04/22/2016	
4	06/17/2016	
5	07/01/2016	
6	08/12/2016	

* BROK0005-004 06/01/2016

	Rates	Fringes	
BRICKLAYER		9.01	
ELEC0584-006 06/01/2015			-

Fringes Rates

ELECTRICIAN (Excludes Low Voltage Wiring and

Installation of Alarms and	
Sound and Communication	
Systems)\$ 27.73	78+9.30

ELEV0083-003 01/01/2016

	, p. e.	Rates	Fringes
ELEVATOR	MECHANIC\$	37.51	29.985+a+b

PAID HOLIDAYS:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

ENGI0627-020 06/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Group 1	.\$ 28.05	12.58
Group 2	.\$ 26.35	12.58
Group 3	.\$ 25.80	12.58
Group 4	.\$ 25.05	12.58
Group 8	.\$ 22.10	12.58
Group10	.\$ 21.10	12.58

POWER EQUIPMENT OPERATOR

GROUP 1: All Crane Type Equipment 200 ton and larger and including 400 ton capacity cranes. All Tower Cranes.

GROUP 2: All Crane Type Equipment 100 ton capacity and larger cranes, and less than 200 ton capacity.

GROUP 3: All Crane Type Equipment 50 ton capacity and larger cranes, and less than 100 ton capacity. Crane Equipment (as rated by mfg.) 3 cu. yd. and over Guy derrick Whirley Power Driven Hole Digger (with 30' and longer mast).

GROUP 4: CRANES with Boom Incl. Jib less than 100 ft and less than 3 cu. Yd.; Overhead Monorail Crane

GROUP 8: FORK-LIFT

GROUP 10:OILER; SEMI-TRAILER TRUCK DRIVER

IRON0584-025 06/01/2015		
	Rates	Fringes
IRONWORKER (Ornamental, Reinforcing and Structural)	\$ 24.00	13.53
PLUM0430-010 07/01/2016		
	Rates	Fringes
PLUMBER (Excludes HVAC Pipe and Unit Installation)	\$ 31.75	12.13
PLUM0430-019 07/01/2016		,
	Rates	Fringes
HVAC MECHANIC (Installation of HVAC Unit Only, Excludes Installation of HVAC Pipe and		
Duct)	\$ 31.75	12.13
PLUM0430-020 07/01/2016		
	Rates	Fringes
PIPEFITTER (Including HVAC Pipe Installation, excluding HVAC Unit Installation)	\$ 31.75	12.13
ROOF0143-001 06/01/2016		
	Rates	Fringes
ROOFER	\$ 20.79	7.42
SHEE0270-006 06/01/2012		\ = =
	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only)		11.52
SUOK2012-033 07/30/2012		
	Rates	Fringes
CARPENTER (Drywall Hanging Only)	\$ 15.08	1.21
ttp://www.wdol.gov/wdol/scafiles/davis	shacon/OK53 dvb	o?v=6 9/12

CARPENTER, Excludes Drywall Hanging, and Form Work\$	14.96	1.55
CAULKER\$	20.00	1.61
CEMENT MASON/CONCRETE FINISHER\$	13.72	1.27
DRYWALL FINISHER/TAPER\$	13.00	0.00
ELECTRICIAN (Alarm Installation)\$	19.48	3.34
ELECTRICIAN (Low Voltage Wiring)\$	20.65	3.06
ELECTRICIAN (Sound and Communications Systems		
Installation)\$	21.11	2.47
FORM WORKER\$	12.69	0.38
LABORER: Common or General\$	12.44	2.71
LABORER: Mason Tender - Brick\$	12.43	0.00
LABORER: Mason Tender - Cement/Concrete\$	13.00	1.91
LABORER: Pipelayer\$	12.39	0.00
OPERATOR: Asphalt Paver\$	16.25	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe\$	16.96	4.22
OPERATOR: Bulldozer\$	21.07	2.48
OPERATOR: Grader/Blade\$	14.28	1.70
OPERATOR: Loader (Front End)\$	16.18	0.00
PAINTER: Brush, Roller and Spray, Excludes Drywall Finishing/Taping\$	12.22	0.00
SHEET METAL WORKER, Excludes HVAC Duct Installation\$	22.11	4.93
SPRINKLER FITTER (Fire Sprinklers)\$	21.86	1.19

TRUCK DRIVER: Dump and

Flatbed Truck.....\$ 11.00 0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



QUALITY ASSURANCE PROJECT PLAN (QAPP)

Asbestos Abatement Portions of Air Force Plant 3

Tulsa International Airport
City of Tulsa, Tulsa County, Oklahoma

A & M Project Number 2320-001-008

Version 1 / Revision Date - N/A

August 1, 2019

Prepared For:



City of Tulsa

Office of the Mayor 175 East 2nd Street, Suite 15-041 Tulsa, Oklahoma 74103

Michelle Barnett, P.E. (Deputy Chief of Economic Development)

Email: mbarnett@cityoftulsa.org
Phone: (918) 596-7457



August 9, 2019

Ms. Michelle Barnett, P.E.
Deputy Chief of Economic Development
City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103

A & M Project Number 2320-001-008

Email: mbarnett@cityoftulsa.org

Phone: (918) 596-7457

REF: Quality Assurance Project Plan (QAPP) for Asbestos Abatement at Portions of Air Force Plant 3,

located at the Tulsa International Airport, City of Tulsa, Tulsa County, Oklahoma.

Dear Ms. Barnett:

A & M Engineering and Environmental Services, Inc. (A & M) has prepared the enclosed Quality Assurance Project Plan (QAPP) for **Asbestos Abatement** to be performed at the above referenced site.

Thank you for choosing A & M. If you have any questions feel free to contact us at (918) 665-6575 or via email.

Respectfully,

A & M Engineering and Environmental Services, Inc.

Jeff Jenkins, CIH, CSP Senior Industrial Hygienist

ODOL Project Designer (OKPD 143988)

jjenkins@aandmengineering.com

Jeff Elbert

Director of Compliance

jelbert@aandmengineering.com

Enclosure

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APPENDICES, TABLES, AND FIGURES

Appendices

Appendix A Project Figures

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Figures (See Appendix A)

Figure 1 Site Map

1.0 PROJECT TITLE AND QAPP APPROVAL

This Quality Assurance Project Plan (QAPP) will be reviewed and approved by the City of Tulsa's Quality Assurance Manager, United States Environmental Protection Agency's (USEPA's) Project Officer, Consultant's Project Manager, and Consultant's Project Quality Assurance Manager prior to implementation and commencement of project activities. Project title and approval information is provided below:

Project Title:	Asbestos Abatement at portions of Former Air Force Plant 3 located at the Tulsa International Airport, City of Tulsa, Tulsa County, Oklahoma		
Implementing Organization:	City of Tulsa		
QAPP Effective Date:	August 1, 2019		
Approving Officials:	The City of Tulsa's Quality Assurance Manager will have primary responsibility for project oversight and quality assurance on behalf of the City of Tulsa. The USEPA's Project Officer will ensure that the policies, goals, and objectives of the project are achieved on behalf of the USEPA. The consultant will provide a Project Manager designated with the primary responsibility for project oversight on behalf of the consultant. They will also provide a Project Quality Assurance Manager to ensure Quality Assurance expectations are met on behalf of the consultant. The consultant will also provide a Health and Safety Officer to ensure safe work practices throughout the project.		
Michelle Barnett, P.E.	Mulle Pt	9/3/19	
City of Tulsa's Quality Assurance Manager (print name)	Signature	Date	
Paul Johnson	PAUL JOHNSON Dict-CUS, Guld. Government, Questivoronmental Production Agency, and PAUL USHNSON, G9.2342.1 3903300.100.1.1 468001003655788 Date: 2015.096.0131-182-27-5000	9/3/2019	
USEPA's Project Officer (print name)	Signature	Date	
Jeff Elbert	ANS.	8-09-2019	
Consultant's Project Manager (print name)	Signature	Date	
Jeff Jenkins, CIH, CSP	Juspey of Jenbins	8-09-2019	
Consultant's Project Quality Assurance Manager and Health and Safety Officer (print name)	Signature	Date	

2.0 QAPP DISTRIBUTION AND PROJECT ORGANIZATION

Any individual or organization participating in this project may request a copy of this QAPP. All individuals listed in Section 1.0 of this QAPP will receive a final copy of this QAPP and comprise the project organization and distribution list, as listed below:

Name	Title	Company/Agency/Entity	Project Role
Michelle Barnett, P.E.	Deputy Chief of Economic Development	City of Tulsa	City of Tulsa's Quality Assurance Manager
Paul Johnson	EPA Project Officer	US EPA	USEPA's Project Officer
Bernita Hart	ODOL Director Asbestos	ODOL	ODOL Director Asbestos
Jeff Elbert	Director of Compliance	A & M Engineering and Environmental Services, Inc.	Consultant's Project Manager
Jeff Jenkins, CIH, CSP	Senior Industrial Hygienist/ Oklahoma Project Designer	A & M Engineering and Environmental Services, Inc.	Consultant's Project Quality Assurance Manager

It shall be the responsibility of the USEPA's Project Officer to distribute the QAPP to the required Project Managers, Quality Assurance Managers, and any other representatives of their groups involved in the project.

3.0 INTRODUCTION

This QAPP has been prepared to document quality assurance and quality control procedures to be implemented for Asbestos Abatement at the Former Air Force Plant 3, Building 6 located at the Tulsa International Airport, City of Tulsa, Tulsa County, Oklahoma, henceforth referenced as the Site. Appendix A (Project Figures) contains a Site Map (Figure 1).

This QAPP has been developed by A & M Engineering and Environmental Services, Inc. (A & M) in accordance with applicable USEPA protocols outlined in the USEPA's Requirements for Quality Assurance Project Plans, USEPA QA/R-5 (EPA, 2001), and USEPA Guidance for Quality Assurance Project Plans (EPA QA/G-5) (EPA, 2002).

The Asbestos Abatement Project Design has been prepared in accordance with the specific governing including but not limited to: 29 Code of Federal Regulations (CFR) 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), and Oklahoma Asbestos Control Act (OAC) 380:50 with approved variances.

4.0 OTHER PROJECT PLANS

This QAPP incorporates the following additional Project Plans including:

• **Project Design (PD)** that outlines the planned work activities and implementation. Appendix B contains a copy of the PD.

5.0 AMENDMENTS

All amendments to this QAPP and/or associated other plans (PD) will be reviewed/approved prior to implementation by the individuals identified in Section 1.0 of this QAPP. Appendix C contains a QAPP Amendment Log Form to be completed for all such amendments. Completed Amendment Log Forms will also be kept in Appendix C or the appropriate appendix of the other associated plans, as appropriate.

6.0 PROBLEM DEFINITION AND BACKGROUND

Air Force Plant 3 (AFP3) is located on approximately 332 acres of land immediately east of the Tulsa International Airport and contains a total of ninety-two (92) buildings, of these four (4) are electrical power stations.

The AFP3 facility was constructed in early 1942 for the production and repair of aircraft during World War II and remained in use until 1994 when aircraft production and repair operations ceased. During the late 1990's, McDonnell Douglas – Tulsa (The Boeing Company) occupied some of the buildings, but the majority remained vacant. The facility was eventually deeded to the City of Tulsa. McDonnell Douglas retained A & M Engineering and Environmental Services to conduct asbestos surveys of the facility. The surveys were initiated in late 1998 and a report finalized in March 1999.

Today, the City of Tulsa has tenants in many of the buildings, but much of the asbestos remains. The City of Tulsa is looking to abate the buildings of the asbestos containing materials (ACM) to allow more of the buildings to be modernized and restored to useful production.

7.0 PROJECT MANAGEMENT

Project management includes the elements and personnel in place to ensure that the project has defined goals that are understood by all participants and achieved with implementation of the designed approach. Project Managers ensure that project planning, implementation, Quality Assurance/Quality Control (QA/QC), and reporting are properly documented.

7.1 PROJECT/TASK ORGANIZATION

The individuals and organizations participating in this project along with their specific roles and responsibilities are categorized by Principal Data Users, Quality Assurance Managers, Consultants, Subcontractors, and Key Decision Makers as described below and on the following pages.

Principal Data Users

Those principal persons/representatives, companies, agencies, and/or entities that will represent principal users of the data generated during the course of this project are identified below along with their contact information:

City of Tulsa's Quality Assurance Manager				
Name:	Michelle Barnett, P.E.			
Title:	Deputy Chief of Economic Development			
Company/Agency/Entity:	City of Tulsa - Office of the Mayor			
Mailing Address:	175 East 2nd Street, Suite 15-041, Tulsa, Oklahoma 74103			
Email Address:	mbarnett@cityoftulsa.org			
Phone:	(918) 596-7457			
USEPA's Project Officer				
Name:	Paul Johnson			
Title:	EPA Project Officer			
Company/Agency/Entity:	US Environmental Protection Agency			
Mailing Address:	1445 Ross Avenue, Suite 1200; Dallas, TX 75202			
Email Address:	Johnson.Paul@epa.gov			
Phone:	(214) 665-2246			
DOL Director - Asbestos				
Name:	Bernita Hart			
Title:	Director – Asbestos/Alarm Locksmiths and Fire Sprinkler			
Company/Agency/Entity:	Oklahoma department of Labor			
Mailing Address:	3017 N Stiles, Suite 100; Oklahoma City, OK 73105			
Email Address:	Bernita.Hart@labor.ok.gov			
Phone:	(405) 521-6467			
	Consultant's Project Manager			
Name:	Jeff Elbert			
Title:	Director of Compliance			
Company/Agency/Entity:	A & M Engineering and Environmental Services, Inc.			
Mailing Address:	10010 East 16 th Street; Tulsa, OK 74128			
Email Address:	jelbert@aandmengineering.com			
Phone:	(918) 665-6575			
Consultant's Project	Quality Assurance Manager and Health and Safety Officer			
Name:	Jeff Jenkins, CIH, CSP			
Title:	Senior Industrial Hygienist/ OK Asbestos Project Designer			
Company/Agency/Entity:	A & M Engineering and Environmental Services, Inc.			
Mailing Address:	10010 East 16 th Street; Tulsa, OK 74128			
Email Address:	jjenkins@aandmengineering.com			
Phone:	(918) 665-6575			

Asbestos Abatement Contractor's Project and Quality Assurance Manager		
Name:	To Be Determined	
Title:	To Be Determined	
Company/Agency/Entity:	To Be Determined	
Mailing Address:	To Be Determined	
Email Address:	To Be Determined	
Phone:	To Be Determined	

Quality Assurance Managers

City of Tulsa's Quality Assurance Manager

The City of Tulsa's Quality Assurance Manager for this project will have primary responsibility for project oversight and quality assurance on behalf of the City of Tulsa.

Their project management responsibilities include the following:

- Overall contracting and management of the grant (as applicable) and project performance.
- Development of the QAPP and other associated project plans.
- Shared responsibility of review/approval of the QAPP and other associated project plans.
- Contractor oversight including review, evaluation and decision-making regarding the contractor's recommendations.
- Impose stop work authority, whenever necessary.

Their quality assurance responsibilities include QA/QC oversight comprised of the following:

- Technical assistance to ensure environmental compliance.
- Shared responsibility for review/approval of the QAPP and other associated project plans including subsequent revisions.
- Maintaining the official/approved QAPP and ensuring that all involved parties have the most recent version of the OAPP and receive all amendments.
- Serve as the official QA/QC contact for all intramural and extramural QA/QC activities for the City
 of Tulsa.
- Report directly, as a partner, to the City of Tulsa regarding all QA/QC matters.
- Review and concur with the QAPP and submit to the QAPP to the USEPA Project Officer prior to the planned initiation of secondary environmental data review activities.
- Work with the City of Tulsa personnel to take appropriate corrective action when, where, and however needed, during the proposed project activities.
- Assure that all secondary environmental data review activities are accomplished in strict compliance with QAPP requirements.
- Impose stop work authority, whenever necessary.

USEPA's Project Officer

The USEPA's Project Officer will ensure that the policies, goals, and objectives of the project are achieved on behalf of the USEPA and implement the following:

- Assist the City of Tulsa's QA/QC staff.
- Shared responsibility for review/approval of the QAPP and other associated project plans including subsequent revisions.
- Provide overall resources to accomplish the implementation of the associated program.
- Routinely evaluate the relevant programs effectiveness.
- Impose stop work authority, whenever necessary.

When necessary, the City of Tulsa's Quality Assurance Manager and/or USEPA's Project Officer will coordinate with all appropriate State Agencies in a manner that ensures that compliance with all applicable State regulatory requirements are achieved. These agencies may include the Oklahoma Department of Environmental Quality (ODEQ), Oklahoma Department of Labor (ODOL), and/or others, as appropriate.

ODOL Director - Asbestos

The ODOL Director - Asbestos will ensure that the policies, goals, and objectives of the project are achieved on behalf of the ODOL and implement the following:

- Review and Approve the Project Design.
- Shared responsibility for review/approval of the QAPP and other associated project plans including subsequent revisions.
- Provide required regulatory inspections during the course of the project.
- Impose stop work authority, whenever necessary.

Consultants

The Consultant's Project Manager and Project Quality Assurance Manager designated for this project are responsible for project oversight and QA/QC on behalf of the consultant.

Consultant's Project Manager

The Consultant's Project Manager responsibilities include project oversight comprised of the following:

- Oversee project work and scheduling.
- Interact with City of Tulsa and USEPA staff with regard to the project, provides progress reports, and participates in routine work progress meetings.
- Shared responsibility for review/approval of the QAPP and other associated project plans including subsequent revisions.
- Provide oversight of all project activities and assurance that compliance with the QAPP and other associated project plans is met.

- Manage amendments to the QAPP and other associated project plans.
- Review and submit final documents.
- Schedule, coordinate, and attend required/necessary meetings.
- Impose stop work authority, whenever necessary.

Consultant's Project Quality Assurance Manager and Health and Safety Officer

The Consultant's Project Quality Assurance Manager will work closely with the Consultant's Project Manager, City of Tulsa's Quality Assurance Manager, and Subcontractor's Project and Quality Assurance Manager to ensure the following:

- Adherence and compliance with the QAPP and other associated project plans.
- Proper review and approval of Subcontractor work plans, safety plans, and QA/QC procedures.
- Proper implementation and documentation of all QA/QC procedures in accordance with the QAPP and other associated project plans.
- Shared responsibility for review/approval of the QAPP and other associated project plans including subsequent revisions.
- Stop work authority is imposed, whenever necessary.

The Consultant's Health and Safety Officer will monitor project activities to ensure that they are performed in accordance with the Project Design (PD) to ensure the following:

- Proper and complete implementation of the PD.
- Safe and healthful working environment.
- Prevent safety incidents and close call incidents, which harm or could harm, people, the environment, or the assets or reputation of all parties involved.
- Pre-planning, pro-active implementation, and constant risk evaluation.
- Stop work authority is imposed, whenever necessary.

Asbestos Abatement Contractor

Asbestos Abatement Contractor's Project and Quality Assurance Manager

The Asbestos Abatement Contractor's Project and Quality Assurance Manager will work closely with the Consultant's Project Manager and Project Quality Assurance Manager to ensure that all their work plans, safety plans, and QA/QC procedures have been properly reviewed and approved prior to implementation. This close communication will also function to ensure proper implementation of the QAPP and other associated project plans as work is carried out. The Asbestos Abatement Contractor's Project and Quality Assurance Manager also has stop work authority.

Project organization has been established in order to demonstrate overall key personnel associated with this project and provide functional overview of the team that will be used to complete the scope of work, along with lines of authority. Appendix D contains a Project Organizational Chart.

Key Decision Makers

The key decision makers for this project include the following individuals representing the identified companies/agencies/entities:

City of Tulsa's Quality Assurance Manager		
Name:	Michelle Barnett, P.E.	
Title:	Deputy Chief of Economic Development	
Company/Agency/Entity:	City of Tulsa	
USEPA's Project Officer		
Name:	Paul Johnson	
Title:	EPA Project Officer	
Company/Agency/Entity:	US EPA	
ODOL Director Asbestos		
Name:	Bernita Hart	
Title:	Director – Asbestos/Alarm Locksmiths and Fire Sprinkler	
Company/Agency/Entity:	Oklahoma department of Labor	

7.2 PROJECT MEETINGS

Regularly scheduled teleconference meetings are planned for this project in order to ensure understanding and proper/safe implementation including a Pre-Work Meeting and Weekly Progress Meetings. Additionally, Called Meetings may be held (as necessary). A Project Close-Out Meeting will be held upon project completion.

Pre-Work Teleconference Meeting

A Pre-Work Meeting will be held via teleconference in order to review and resolve any uncertainties of the QAPP and other associated project plans prior to commencement of the work. All individuals on the project distribution list will be notified and invited to the meeting. This meeting will be organized and directed by the Consultant's Project Manager. A written record of the meeting discussions will also be kept by the Consultant's Project Manager.

Weekly Progress Teleconference Meetings

Weekly Progress Meetings will be held via teleconference or email distribution in order to review progress against the planned work schedule and to identify existing or anticipated problems. These meetings will also be utilized to provide updates on data acquisition and review, address safety issues, ensure maintenance of quality standards, discuss pending changes and substitutions, and discuss any other items that could affect timely completion of the work. All individuals on the project distribution list will be notified and invited to these meetings. These meetings will be organized and directed by the Consultant's Project Manager. A written record of the meeting discussions will also be kept by the Consultant's Project Manager.

Called Meetings

Called Meetings can be requested by any of the individuals listed on the project distribution list to discuss specific concerns, problems, or deficiencies. All individuals on the project distribution list will be notified and invited to these meetings. A written record of the meeting discussions will also be kept by the Consultant's Project Manager.

Project Close-Out Meeting

A Project Close-Out Meeting will be conducted upon completion to facilitate the collection of field data, final reports, records, invoices, and any other required documentation. All individuals on the project distribution list will be notified and invited to the meeting. This meeting will be organized and directed by the Consultant's Project Manager. A written record of the meeting discussions will also be kept by the Consultant's Project Manager.

7.3 PROJECT/TASK DESCRIPTION AND PRE-WORK SITE WALK

The project has been organized into specific tasks in order to ensure accuracy and efficiency.

Task 1 Contractor Bidding

Once the QAPP and other associated project plans have been signed by all individuals identified on the project distribution list, the Consultant will work with the City of Tulsa Quality Assurance Manager to obtain competitive bids from qualified asbestos abatement contractors. This task includes the gathering and evaluation of secondary environmental data. The Consultant will gather and evaluate existing data provided by the City of Tulsa for this project.

Task 2 Site Access Arrangements and Pre-Work Site Walk

The Consultant's Project Manager, in coordination with the City of Tulsa Quality Assurance Manager, will coordinate a mandatory Pre-Bid Walk Through to allow contractors the opportunity to view the project and ask specific questions prior to bidding. All individuals on the project distribution list will be invited.

Task 3 Document Review

The City of Tulsa will determine a top three (3) contractor's bids and may ask the consultant to determine if any quality issues with any of the three (3) contractors.

Task 4 Third Party Monitoring and Project Oversight

The Consultant Project and Quality Assurance Manager will provide Third-Party Air Monitoring during the Asbestos Abatement Phase as required by OAC 380:50-11-7. The Consultant Project and Quality Assurance Manager will provide project oversight on the City of Tulsa's behalf and immediately notify the City of Tulsa Quality Assurance Manager of any deviations from the approved QAPP, Project Design, or safety concerns. The Consultant Project and Quality Assurance Manager will be on-sight whenever the contractor is performing any type of asbestos abatement work activity.

Task 5 Reporting

A Final Report will be compiled by the Consultant of all work activity during the asbestos abatement. The report will include sufficient detail to meet the requirements for recordkeeping to include but not limited to: Worker licenses, worker respirator clearances, daily logs and air monitoring data, waste shipments, ODOL or USEPA inspections, etc. A single draft report will be circulated for comments by all individuals identified on the project distribution list. Comments will then be incorporated into a final report to be redistributed to the same individuals. The draft report will be provided in electronic Portable Document Format (PDF) only. The final report will be provided in both electronic PDF and hard copy.

The consultant during the project will conduct Davis Bacon wage interviews and supply the documentation with the final report as a separate document.

Task 6 Project Close-Out

A Project Close-Out Meeting will be conducted upon completion in order to confirm no outstanding items remain; to gain acknowledgment from all members of the project distribution list that the project is complete; and to facilitate invoicing. All individuals on the project distribution list will be notified and invited to the meeting.

8.0 PROJECT QUALITY OBJECTIVES, CRITERIA, AND PERFORMANCE MEASURES

In order to ensure project goals are met it is imperative that quality objectives and criteria are established and measured.

Project Quality Objectives

The data quality objectives take into account both the best practices for similar projects and the resources available for this project. If necessary, the Consultant's Project Manager will rely upon USEPA's *Generic Guide to Statistical Aspects of Developing and Environmental Results Program* (2003) for advice in making decisions related to optimizing the following aspects of data quality for this project, including:

Precision

Precision is the measurement of agreement or reproducibility among replicate samples of the same media under prescribed similar conditions. It is normally expressed as the Relative Percent Difference (RPD) between two (2) values.

Accuracy

Accuracy is a measure of the closeness of an individual measurement or the average of a number of measurements, to the true value. Bias is the systematic or persistent distortion of a measurement process that causes error in one direction. Accuracy is normally expressed as a percent recovery.

Representativeness

Representativeness is an expression of the degree to which a sample accurately and precisely represents a characteristic of a population, parameter variations at a sampling point or an environmental condition. Representativeness is a qualitative parameter, which relies upon the proper design of a sampling program and proper laboratory protocol.

Comparability

Comparability is defined as an expression of the confidence with which one data set can be compared to another. In most instances, the proficiency of field sampling efforts will be the determining factor that affects the overall comparability of environmental measurement data. To optimize the comparability of environmental measurement data, sample collection activities should always be performed using standardized procedures whenever possible. When performing a site investigation, adhering to the quality control criteria will facilitate these efforts.

Completeness

Completeness is defined as the measurement of the amount of data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions. Data completeness is often expressed as the percentage of valid data obtained from a given measurement system. To consider data valid, it is customary to assess if a set of data satisfies all of the specified acceptance and performance criteria (accuracy measures, precision measures, etc.) to render a determination.

Performance Measures

To the extent that performance measures rely on the generation of data, this QAPP and other associated plans seek to verify that the project quality objectives are appropriate for the regulatory and non-regulatory decisions to be made based upon that data. Performance measures to ensure the project quality objectives are achieved include the following:

- Protection of site workers and public through adherence to the PSAHP.
- Protection of the environment.
- Successful completion of abatement with no visible emissions or asbestos debris left behind
- Successful control of the asbestos abatement documented by air samples outside of containment less than 0.01 fibers per cubic centimeter (f/cc).
- Successful clearance of all abated spaces for re-occupancy documented by air samples outside of containment less than 0.01 f/cc.

9.0 SPECIAL TRAINING/CERTIFICATIONS

All Consultant's employees assigned to this project and will be onsite will be properly trained and licensed by the ODOL. Air monitoring analyst's performing on-site analysis of the collected air samples will have attended a National Institute of safety and Health (NIOSH) 582 course or an approved 582 equivalent (582e) course and will have demonstrated proficiency by successful completion in American Industrial Hygiene s (AIHA) Proficiency Analytical Program (PAT).

All Asbestos Abatement Contractor's employees will hold a current ODOL asbestos worker license and be medically cleared for respirator use. All work crews will be supervised by an ODOL licensed Asbestos Abatement Supervisor. The contractor will always have a licensed supervisor onsite when asbestos work activities are being conducted.

The Consultant's Air Monitor and Oversight Representative and/or Contractor's Supervisor will not allow anyone inside containment without proper training and licensure.

10.0 DOCUMENTATION AND RECORDS

Documents and records generated as a result of the asbestos abatement are considered quality assurance records and will be processed in accordance with the requirements of this QAPP and other project plans. Quality assurance records provide a record of events that have occurred for all aspects of the project. Their adequate generation, review, protection, and submittal are essential to the success of the process. Copies of all field generated data including daily field logs/notes and all other relevant forms and documentations will be maintained by the Consultant's Project Manager.

Records pertaining to this project and its related work tasks, including all field generated data, will be maintained by the Consultant for a minimum of five (5) years following the conclusion of work performed.

11.0 PROJECT SCHEDULE

It is anticipated that the project will begin immediately upon approval of the QAPP, Project Design approval, funding, and all notifications have been made. The total estimated project duration is ninety (90) calendar days. If necessary, time extension notices will be submitted.

12.0 DATA SELECTION AND MANAGEMENT

Readily available data will be selected and managed in association with this project to ensure proper project knowledge and familiarity with background information.

12.1 EXISTING DATA SOURCES

The primary existing data source for this project includes the asbestos survey report prepared by A & M (dated March 1999).

12.2 EXISTING DATA SOURCES INTENDED USES AND LIMITATIONS

Data from the A & M Asbestos Report will be utilized to identify the materials to be abated and their locations. A new asbestos survey report will not be conducted.

12.3 FIELD GENERATED DATA

The project will involve the field generation of data by both the Consultant and Contractor including primarily daily field logs, air monitoring data, and/or notes.

12.4 SAMPLING AND ANALYTICAL METHODS

Daily air monitoring will be conducted outside of containment at locations as identified in the Project design. Sample pump flow rates will be checked using a calibrated rotameter at the beginning and completion of the sampling period. The rotameter will be calibrated to a primary calibrator monthly as required by OAC 380:50-11-1(4). All daily air monitoring and analytical data will be entered onto an Air Monitoring Data Form. A copy of the Air Monitoring Data Form is provided in Appendix E.

Suspect materials identified during the abatement, that may not have been previously sampled or for confirmation, will be sampled for Bulk Asbestos Analysis by Polarized Light Microscopy (PLM) using method EPA/600/R-93/116. Bulk samples will be shipped to a Third-Party Laboratory that is accredited by National Voluntary Laboratory Accreditation program (NVLAP).

12.5 EQUIPMENT/INSTRUMENT OPERATION AND CALIBRATION

Equipment (rotameters) used for calibrating air sample flow rates will be calibrated to a primary standard on a monthly basis.

The Phase Contrast Microscopy (PCM) used for analysis of collected air samples will be checked each time it is moved using the HSE test slide and centering telescope for proper optical alignment.

All electrical equipment will be protected using Ground-Fault Circuit Interrupters (GFCI).

13.0 ASSESSMENT AND OVERSIGHT

Assessment and oversight procedures are in place to assess the effectiveness of project implementation and the associated QA/QC activities. The purpose of assessment is to ensure proper implementation of the QAPP and other associated project plans.

Self-assessment and performance evaluations will be conducted weekly to evaluate the effectiveness of project implementation and determine whether QAPP and other project plan procedures are being properly implemented. The self-assessments and performance evaluations will be conducted by the Consultant's Project Manager and/or Project Quality Assurance Manager, whom will have the authority to stop work in the event that non-conforming conditions are identified that cannot be remedied or resolved with immediate actions in a manner that protects the validity of the information being gathered.

The Consultant's Project Manager and/or Project Quality Assurance Manager will review the documentation required to be maintained. A record of any significant deviations from normal procedures will be documented to ensure that corrective actions are taken to correct any noted deficiencies. Minor deviation items will be corrected on the spot. Significant deviations or recurring deviations will be recorded and addressed at the Weekly Progress Meeting.

14.0 DATA REVIEW, VERIFICATION, VALIDATION, AND EVALUATION

This QAPP and other associated project plans will govern the operation of the project at all times. Each responsible party listed in the project distribution list shall adhere to the procedural requirements of the QAPP and other associated project plans and ensure that subordinate personnel do likewise.

This QAPP and other associate project plans will be reviewed at least quarterly to ensure that the project will achieve all intended purposes. All the persons listed in the distribution list shall participate in the review of the QAPP and other associated project plans. The Consultant's Project Manager and/or Project Quality Assurance Manager is responsible for determining that data are of adequate quality to support this project. The project will be modified as directed by the Consultant's Project Manager and/or Project Quality Assurance Manager. The Consultant's Project Manager and/or Project Quality Assurance Manager will be responsible for the implementation of changes to the project and shall document the effective date of all changes made.

Initial data review, verification, and validation of all data and information acquired will be accomplished by experienced/qualified team members performing within their disciplines and practicing professional judgment. The final layer of data review, verification, and validation will be performed by the Consultant's Project Manager and Project Quality Assurance Manager during their reviews. During either phase of these reviews the data can be accepted, rejected, or qualified by any of these individuals.

15.0 USER REQUIREMENTS RECONCILIATION

The results obtained from the project will be reconciled with the requirements defined by the data user and/or decision makers. The data will be analyzed to determine possible anomalies and/or departures from any assumptions made during the planning phase. The data will be analyzed by experienced/qualified team members performing within their disciplines and practicing professional judgment initially followed by reviews performed by the Consultant's Project Manager and Project Quality Assurance Manager. The decision makers will be made aware of any limitations associated with the data and/or information collected.

The work to be done on this project is fairly straightforward in that standard work procedures are to be used. No deviations from the QAPP or other associated project plans are anticipated at this time. Should unforeseen conditions arise that warrant a deviation from the QAPP or other associated project plans, the Consultant's Project Manager will notify the City of Tulsa's Quality Assurance Manager and a determination will be made regarding notification of the appropriate regulatory agencies and decision makers.

Corrective action will be taken whenever data are determined unacceptable by comparison to preestablished quality control limits. Corrective actions will be the responsibility of the Consultant's Project Manager or, in the case of Contractor's, the Contractor's Project and Quality Assurance Manager.

Corrective action will, in general, consist of the following:

- Review of raw data and calculations
- Review of procedures to determine that appropriate abatement procedures, sample collection, and analytical methods were followed.
- Review of instrumentation operation, calibration, and maintenance.
- Other actions as deemed necessary by the USEPA.

As a result of the above, corrective action may be identified and will be pursued as necessary. This action may include:

- Stop-Work until conditions have been corrected.
- Recleaning of an area using specilaizzed cleaning and/or abatement procedures.
- Recalibration of instrumentation/equipment.
- Instrumentation/equipment repairs.
- Additional training.
- Other action as deemed necessary by the USEPA.

A Deviation Record will be completed and approved by the individuals identified on the project distribution list. The final report will include a description of any deviations, assumptions, or limitations along with a summary of any associated reconciliation that occurred during the course of the project.

16.0 PROJECT COMPLETION AND REPORT

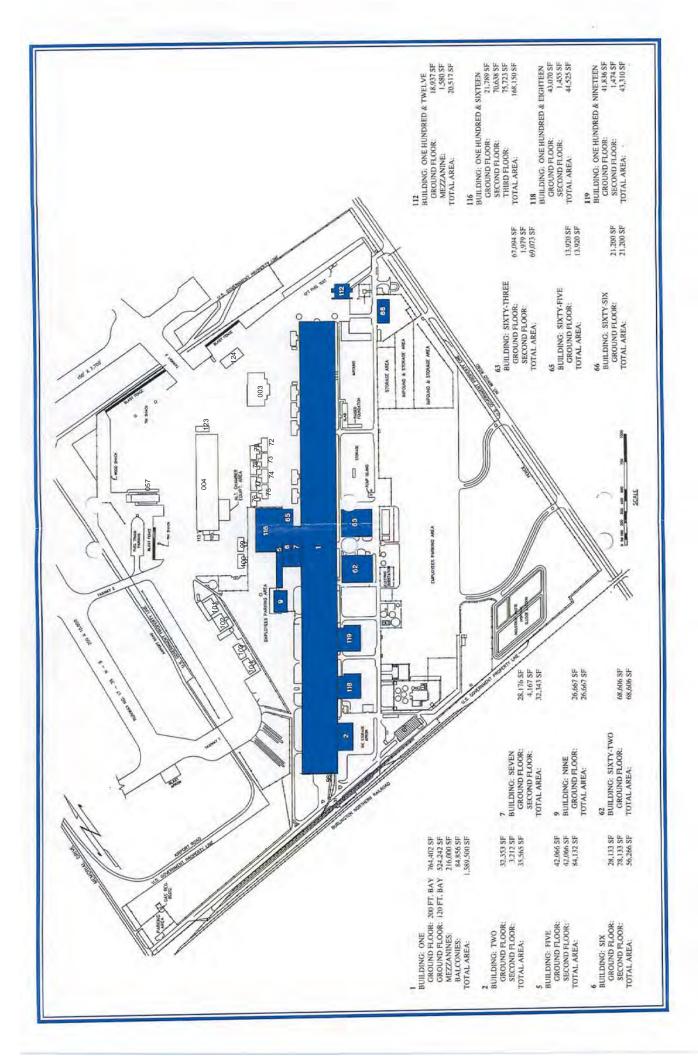
After completion of all work as outlined in this QAPP, the Consultant's Project Manager will deliver to the City of Tulsa's Quality Assurance Manager one (1) electronic PDF and hardcopies of the final report containing:

- List of any deviations, assumption, or limitations along with a summary of any associated reconciliation.
- Certification that all work specified in the QAPP has been completed.
- Summary of field activities and methodologies used.
- Overview of QA/QC procedures.
- Asbestos daily records to include notes and air monitoring data.
- ODOL inspection forms.
- Waste disposal receipts.
- Findings and recommendations.
- Bacon Davis Wage Interview forms

A Certificate of Work Completion and authorization for final payment will not be issued by the consultant representative until the documents and data are reviewed and approved by the client representatives, and the documents are submitted in satisfactory form.

Appendix A

Project Figures



Appendix B

Asbestos Abatement Project Design (PD)



Asbestos Abatement Project Design Former Air Force Plant 3, Building 6

Tulsa International Airport
City of Tulsa, Tulsa County, Oklahoma

A & M Project Number 2320-001-008

Version 1 / Revision Date - N/A

August 6, 2019

Prepared For:



City of Tulsa

Office of the Mayor 175 East 2nd Street, Suite 15-041 Tulsa, Oklahoma 74103

Michelle Barnett, P.E. (Deputy Chief of Economic Development)

Email: mbarnett@cityoftulsa.org
Phone: (918) 596-7457



August 6, 2019

Ms. Michelle Barnett, P.E.

Deputy Chief of Economic Development
City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103

A & M Project Number 2320-001-008

Email: mbarnett@cityoftulsa.org

Phone: (918) 596-7457

REF: Asbestos Abatement Project Design (PD) for Asbestos Abatement at the Former Air Force Plant

3, Building 6 located at the Tulsa International Airport, City of Tulsa, Tulsa County, Oklahoma.

Dear Ms. Barnett:

A & M Engineering and Environmental Services, Inc. (A & M) has prepared the enclosed Asbestos Abatement Project Design (PD) for **Asbestos Abatement** to be performed at the above referenced site.

Thank you for choosing A & M. If you have any questions, feel free to contact us at (918) 665-6575 or via email.

Respectfully,

A & M Engineering and Environmental Services, Inc.

Jeff Jenkins, CIH, CSP Senior Industrial Hygienist

ODOL Project Designer

jjenkins@aandmengineering.com

Enclosure (1)

Jeff Elbert

Director of Compliance

jelbert@aandmengineering.com

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TABLES

Table 1 Asbestos Materials to be Abated

APPENDICES

Appendix A Asbestos Sample Results Appendix B Proposed Abatement Layout

1.0 INTRODUCTION

This Asbestos Project Design was prepared by A & M Engineering and Environmental Services Inc. (A & M), to provide a prudent course of action for abating Asbestos-Containing Materials (ACM) associated with the Building 6 at the former Air Force Plant 3 (AFP3). Protocols to be used for compliance with governing regulations to protect workers and the environment from incidental exposure to airborne asbestos fibers during the work being performed are included or referenced.

PROJECT INFORMATION:

Project Name: Air Force Plant 3, Building 6

Description of Work/Occupancy: Removal of friable ACM (thermal insulation)

Project Type: Pre-renovation
Contractor: To be determined

Owner's Environmental Representative: A & M Engineering and Environmental Services, Inc. (A & M)

IH/Air Monitoring Firm: A&M: All air samples will be collected by an experienced

Industrial Hygiene Technician and holds a current asbestos

license in Oklahoma.

Laboratory: A & M: A & M is a new participant in the American Industrial

Hygiene Association (AIHA) Proficiency Analytical (AIHA) proficiency Analytical testing (PAT) program. All air monitoring techs performing analysis using NIOSH method 7400 A will have completed a NIOSH 582e course and shown to be proficient. The laboratory to be used for quality assurance testing and back-up analysis will be Quantem Laboratories, AIHA PAT Laboratory 101352. The Contractor is responsible for their personnel

samples.

2.0 REGULATORY COMPLIANCE

The specific governing regulations affecting this work include but are not limited to: 29 Code of Federal Regulations (CFR) 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), and Oklahoma Asbestos Control Act (OAC) 380:50 with approved variances. Waste transport and disposal is to be performed by an Oklahoma-licensed asbestos waste transporter with a waste disposal manifest/chain of custody signed by the receiving landfill. DOT Class 9 placards are to be displayed during transportation of asbestos waste.

The contractor shall maintain a daily log showing the number and names of workmen and supervisory personnel by craft physically on the job site each working day and a report of daily progress. The daily entries shall include a brief statement of the work in progress and a record of any accidents, injuries and/or safety meetings held on that day. All workmen must sign in and out during abatement operations and provide a brief description of

operations performed. These logs shall always be available for inspection at the job site while work is in progress. A reproducible copy of these logs shall be provided to the Owner's Representative at the weekly progress meeting. All personnel entering containment must have their current asbestos licenses onsite with them.

The technicians performing on-site air monitoring must maintain an onsite daily activity log. The log shall include, but not be limited to:

- Time of on-site arrival and departure.
- Times of entrance into the regulated area to ensure sample integrity.
- Signature of on-site asbestos supervisor.
- All cassettes must be properly labeled as they are placed for sample collection.
- At least one (1) technician performing on-site air monitoring will be present at the job site while asbestos abatement work is being performed.

3.0 WORK SEQUENCING/SCHEDULING

The asbestos abatement of the AFP3, Building 6 is being conducted in a single Phase, but may involve subsections or multiple areas. The tentative start date is estimated to be shortly after October 1, 2019. The work is to be scheduled by the Abatement Contractor in coordination with City of Tulsa and A & M. Work is expected to be conducted during normal work hours, Monday through Friday and hours of 7:00 AM to 5:00 PM.

4.0 EGRESS AND FIRE PROTECTION

Workers must be briefed on emergency exit procedures and the assembly point at the beginning of the work shift. In the event emergency evacuation is necessary, workers will exit immediately through the decon and to the nearest exit.

Emergency illumination shall be provided for not less than 1-1/2 hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of one (1) foot-candle (ft.-candle) and, at any point, not less than 0.1 ft.-candle, measured along the path of egress at walk surface. The emergency lighting system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting. Where maintenance of illumination depends on changing from one (1) energy source to another, a delay of not more than ten (10) seconds shall be permitted. The Abatement Contractor will provide a minimum of one (1) ABC dry-charged fire extinguisher ten (10) pound (lb.) for every three thousand (3,000) square feet (SF) of work area and outside the decon during abatement. The fire extinguishers must have a valid inspection tag and be decontaminated upon removal from the work area.

All poly used must be rated Fire Retardant Polyethylene and meet National Fire protection Association (NFPA) 701-04, American Standards for Testing and Materials (ASTM) E84, and Canvas Products Association International (CPAI) 84 or equivalent.

The Abatement Contractor must provide appropriate and sufficient signs at the abatement-controlled access entrances to direct pedestrian traffic away from blocked entrances. Signs shall be clearly visible and readable at fifty (50) feet from the abatement work area. The contractor shall install signs at the onset of work.

5.0 MATERIALS TO BE ABATED

Table 1 lists the identified ACM that is included as part of this Asbestos Project Design

Table 1
ACM to be Abated

Materials	Friable	Location(s) of the Homogeneous Material	% Asbestos Content	Estimated Quantity	Condition
Pipe Insulation	Friable		Chrysotile	2,800 LF	
Pipe Fittings	Friable	Throughout the	Chrysotile	550 fittings	Intact
Fan and HVAC Insulation	Friable	Building	Chrysotile	11,000	IIIIact
Fire Door	Non-friable	HVAC room – southeast corner	Unknown	2 doors	intact

ND = None Detected; NQ = Not Quantified; SF Square Foot; LF Linear Feet

A copy of the laboratory analyses (A&M March 1999 report) is provided in Appendix A. A site drawing of abatement is provided in Appendix B.

6.0 METHOD OF ABATEMENT

Building #6 will be cleared of any movable materials prior to any preparation work being conducted. The contractor must follow OAC 380:50-17 for abatement procedures.

Pipe insulation and fittings on piping that is not domestic water or sprinkler system pipes will be removed by using wrap and cut techniques. The pipes will be abated at manageable lengths using glove bag procedures allowing them to be cut. Most of the pipes are overhead and will be accessed by mechanical man-lifts or stepladders (in some situations). Piping exists on both first and second floors.

Domestic, sprinkler piping, pipe fittings will be abated using glove bag procedures with the pipes remaining in place. Domestic and sprinkler system piping may be overhead or in pipe chases feeding the four (4) restrooms. The restroom pipe chases may require selective demolition to provide access. Many of the pipes are overhead and will be accessed by mechanical man-lifts or stepladders (in some situations). Piping exists on both first and second floors.

The Heating, Ventilation, and Air conditioning (HVAC) rooms will be abated under full containment with a three (3) chamber decontamination room. All HVAC equipment in the HVAC rooms are to be demolished and removed in its entirety following the abatement by the contractor. The southeast HVAC room will be retrofitted into a compressor room; thus, the removal of the fire doors will be included in the abatement.

Removed material will be promptly bagged in accordance with OAC 380:50-17-6.

7.0 AIR MONITORING and RESPIRATORY PROTECTION

Daily air monitoring will be conducted in accordance with OAC 380:50-11-1 through 380:50-11-7. A minimum of one (1) area air monitor will be located:

- In each active abatement work area;
- Along the load-out path during loadout;
- > Each independent exit area directly outside and adjacent to the work area;
- Immediately outside the clean room;
- At the exhaust point of each Air Filtration Device (AFD) or from a bank of AFD's (may not exceed 0.01 fibers/cubic centimeter (f/cc));
- Outside of a critical barrier adjacent to the work area;

The Contractor is responsible for (may arrange with A&M to provide):

Personal air monitor samples will be collected on one (1) out of every four (4) workers (25%); or a minimum of two (2) personal air samples per abatement crew.

All non-primary calibration devices must be calibrated to a primary calibrator within one month of use and will not include any adjustable flow restricting devices as part of its construction. Calibration records or chart must be maintained onsite.

Removal of ACM materials must be conducted in full-face APR respirators fitted with High Efficiency Particulate Air (HEPA) cartridges.

8.0 CLEARANCE SAMPLING

The work area in the building is scheduled for re-occupancy; therefore, clearance by AHERA Phase Contrast Microscopy (PCM) protocol must be conducted. A minimum of five (5) samples per /work area shall be collected. Clearance samples shall be collected following the post-abatement ODOL inspection. Clearance samples inside of full containment areas will be conducted using aggressive sampling techniques.

9.0 AIR FILTRATION

Negative Air Machines (NAM) will be utilized to provide a negative air pressure of 0.02" negative pressure (water pressure drop) through the Decon of full containments. The NAMs must be fitted with HEPA filters. Ventilation must be adequate to provide four (4) Air Changes per Hour (ACH).

Each HVAC room will have approximately seven hundred (700) SF will be inside of containment and an estimated twenty (20) feet ceiling height. A minimum of one (1) two thousand (2,000) Cubic Feet per Minute (CFM) NAMs must be used inside of containment. One (1) NAM must be available for an operational back-up, if needed.

10.0 CONTAINMENT METHODS

Preparation of asbestos abatement work area will be per OAC 380:50-17-4. Critical barriers shall be utilized over openings (e.g. windows, doors, exhaust vents) where feasible and where construction of the critical barrier would not be of significant hazard. Non-moveable fixtures and equipment will be covered with a minimum single layer of 4 mil poly following pre-cleaning of surface debris prior to asbestos removal. All surfaces and equipment are to be thoroughly sprayed with a lock-down encapsulant after abatement.

11.0 DECONTAMINATION SYSTEM

A remote decontamination facility (decon) under negative pressure is planned for the abatement. The Remote Decon is to be used with the Glove-bag operations. The decon unit will be established per OAC 380:50-15-7 (Clean room requirements) and OAC 380:50-15-12 (decontamination facility preparation) consisting of three (3) chambers: a clean room, a shower and a dirty room. The airlocks for the decon unit shall consist of triple six (6) mil polyethylene overlapping flaps. The decon shower shall be equipped with a five (5) micron wastewater filter, liquid cleaning agent, non-porous shower grates and a functioning in-line water heater with capacity for five (5) gallons per worker. Disposal of wastewater will be into the sanitary sewer. The temperature of the clean room and decon must be maintained above fifty (50) degrees °F during abatement activities. Decon procedures will be per OAC 380:50-15-8 (Decontamination procedures).

Full containments (HVAC rooms) will have an attached decontamination facility (decon) with the "dirty room" opening to the work area. The containment will be under negative pressure with make-up air flowing through the three (3) chamber decon facility. The decon unit will be established per OAC 380:50-15-7 (Clean room requirements) and OAC 380:50-15-12 (decontamination facility preparation) consisting of three (3) chambers: a clean room, a shower and a dirty room. The airlocks for the decon unit shall consist of triple six (6) mil polyethylene overlapping flaps. The decon shower shall be equipped with a five (5) micron wastewater filter, liquid cleaning agent, non-porous shower grates and a functioning in-line water heater with capacity for five (5) gallons per worker. Disposal of wastewater will be into the sanitary sewer. The temperature of the clean room and decon must be maintained above fifty (50) degrees °F during abatement activities. Decon procedures will be per OAC 380:50-15-8 (Decontamination procedures).

12.0 SOIL CONTAMINATION CLEANUP

Not Applicable.

13.0 SPECIAL MATERIALS or METHODS

Scaffolding and Fall Protection

Work during this abatement may be conducted using ladders, man-lifts, or baker scaffolding. Fall protection must be used where appropriate. The asbestos abatement contractor will comply with 29 CFR 1926 Subpart L-Scaffolds and Subpart M-Fall Protection.

Electrical

Electric service is anticipated to be provided; however, tie-ins to the electrical service by a licensed electrician is the responsibility of the contractor. Lockout/tagout procedures must be used on all electrical circuits which penetrate the work area.

Water

Water service is anticipated to be provided; however, tie-ins may be in occupied buildings adjacent to Building #6.

Heat Stress

The contractor shall monitor heat stress in general accordance with OSHA Technical Manual Section III, Chapter 4

Sanitation Facilities

Currently the building is vacant, with electric operating. Sanitation facilities in the building is not available for use. The asbestos contractor will be responsible for arranging for sanitation facilities.

14.0 VARIANCES REQUESTED

No Variances are being requested.

15.0 CERTIFICATION

This project design was prepared by the undersigned for compliance with applicable federal and State regulations.

Jeff Jenkins, CIH, CSP

Asbestos Project Designer, OKPD 143988

August 6, 2019

Date

Appendix A

Asbestos Sample Results

BUILDING NO. 006:

Date of Construction:

1942

Original Use:

Maintenance Building

Floor Area:

56,266 square feet

Figure 006

Asbestos Containing Materials (ACM:

Homogeneous Areas:

HA-2: 9" x 9" floor tile – black with white streaks (+)

Consists of 700 square feet of 9" x 9" floor tile described as black with white streaks. The floor tile was installed in a checkered pattern with HA-3 (orange tan) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-3: 9" x 9" floor tile – orange tan (+)

Consists of 700 square feet of 9" x 9" floor tile described as orange tan in color. The floor tile was installed in a checkered pattern with HA-2 (black) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-6: 9" x 9" floor tile – red with white streaks (+)

Consists of 22,500 square feet of 9" x 9" floor tile described as red with white streaks. The floor tile is found in checkered patterns with various other tiles in both the first and second floor entries and the office areas (FS-1). This tile is in overall fair condition with some minor physical damage.

HA-8: White cementitious joints (+)

Consists of 250 joints described as white cementitious found in entries and office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4). The majority of joints are in good condition. However, some of the joints have been damaged from impacts and general deterioration and are in need of repair.

HA-9: White fibrous pipe and joint insulation (+)

Consists of 1,700 linear feet of pipe insulation and 300 joints described as white fibrous. The majority of pipe insulation and joints are in good condition. However, a few joints appear to be damaged and are in need of repair. This type of insulation is found throughout the first and second floor entry/office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4).

HA-10: Air handler insulation jacket – brown wool like under white fibrous (+)

Consists of 11,000 square feet of air handler insulation jacket, described as brown wool like under white fibrous. The insulation material is found in the mechanical rooms (FS-4) and is in good condition.

HA-11: 9" x 9" floor tile – aqua blue with white streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as aqua blue with white streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-12 (gray) and is in overall good condition.

HA-12: 9" x 9" floor tile – gray with white and black streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as gray with white and black streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-11 (aqua blue) and is in overall good condition.

HA-13: Gray fibrous pipe insulation (+)

Consists of 700 linear feet of pipe insulation described as gray fibrous. This insulation material found within the first floor office space (FS-1) and pipe chases (FS-3) is in overall good condition.

HA-14: Roof felt/tar/gravel (Assume +)

Consists of 30,000 square feet of roofing materials (felt/tar/gravel) located on the roof top (FS-5). This material is in a good non-friable condition.

Non-Asbestos Containing Materials Which Were Suspect:

Homogeneous Areas:

HA-1: 12" x 12" floor tile – white with gray specks found on first floor (south end of building (-)

- HA-4: 9" x 9" floor tile dark orange with white specks found on first floor (south/central end of building) (-). Checkered pattern with HA-5 (pink).
- HA-5: 9" x 9" floor tile pink with white specks found on first floor (south/central end of building) (-)... Checkered pattern with HA-4 (dark orange)...
- HA-7: Brown fibrous (cardboard like) pipe insulation (-)

TABLE 6-1 (Continued) Air Force Plant No. 3

Asbestos Survey Building Summary (Regulated & Non-Regulated)

Building Number		Description
	2)	Approximately 400 visible insulated joints. Unknown
		quantities of joints also exist above the ceilings and inside pipe chases. Probably figure total of \sim 1,500 joints.
	3)	Approximately 27,000 square feet of air handler jacket insulation.
	4)	An unknown quantity of duct insulation exists above the drop ceilings. Probably figure total of \sim 15,000 linear feet of 2' x 3' duct insulation.
	5)	Approximately 84,000 square feet of floor tile and associated mastic.
	6)	Approximately 100 square feet of transite board.
	7)	Approximately 84,500 square feet of roof materials.
Building #006	The i	maintenance building contains the following ACM:
	1)	Approximately 2,400 linear feet of pipe insulation.
	2)	Approximately 550 insulated joints.
	3)	Approximately 11,000 square feet of air handler insulation jacket.
	4)	Approximately 43,900 square feet of floor tile and associated mastic.
	5)	Approximately 57,000 square feet of roof materials.
Building #007	The l	boiler house contains the following ACM:
	1)	Approximately 20,300 linear feet of pipe insulation.
	2)	Approximately 3,500 insulated joints.
	3)	Approximately 66,350 square feet of boiler & tank jacket insulation.
	4)	Approximately 33,000 square feet of roof materials.
Building #008	The p	police building contains the following ACM:
	1)	Approximately 130 linear feet of pipe insulation.
	2)	Approximately 25 insulated joints.
	3)	Approximately 50 linear feet of duct insulation (2' x 3' size)
	4)	Approximately 100 square feet of furnace insulation.
	5)	Approximately 1,400 square feet of transite wall board.
	6)	Approximately 3,300 square feet of floor tile & mastic.
	7)	Approximately 84,500 square feet of roof materials.



Polarized Light Microscopy Asbestos Analysis Report

2033 Heritage Park Drive Oklahoma City, OK 73120 Ph. (405) 755-7272 Fax (405) 755-2058

QuanTEM Set ID: 9902P501001 Date Received: February 1, 1999 Client: A&M Engineering & Environmental Serv.

Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton

Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas Project Location: Tulsa, OK Project No.: 1640-001

QuanTEM Client Color / Non-Asbestos Description Other Sample ID Composition Asbestos Fiber Sample ID 1 57-FS1-HA1-001 homogeneous NAD cellulose < 1% gray bulk material 2 NAD 57-FS1-HA5-001 homogeneous tan cellulose 30% perlite 30% bulk material mineral wool 30% NAD cellulose 10% 3 57-FS2-HA3-003 homogeneous white / yellow bulk material glass fiber 25% 57-FS2-HA3-002 homogeneous white / yellow NAD cellulose 10% bulk material glass fiber 25% 5 white / yellow NAD cellulose 10% 57-FS2-HA3-001 homogeneous bulk material glass fiber 25% glass fiber 99% 6 57-FS2-HA2-001 homogeneous yellow NAD bulk material 7 NAD 57-FS1-HA4-001 homogeneous light gray n/a bulk material 8 57-FS3-HA6-001 yellow / gray NAD homogeneous n/a bulk material 9 7-FS1-HA2-001 homogeneous white chrysotile 45% n/a bulk material chrysotile 20% 10 7-FS1-HA2-002 homogeneous white n/a bulk material amosite 10% 7-FS1-HA5-00/ gray cellulose 70% 11 homogeneous NAD bulk material synthetic 20% NAD cellulose 95% 12 7-FS1-HA3-001 homogeneous tan bulk material 13 7-FS1-HA4-001 homogeneous white NAD mineral wool 99% bulk material

Eller M Kittrick

February 2, 1999

Date



Polarized Light Microscopy Asbestos Analysis Report

2033 Heritage Park Drive Oklahoma City, OK 73120 Ph. (405) 755-7272 Fax (405) 755-2058

QuanTEM Set ID: 9902P501001 Date Received: February 1, 1999 Client: A&M Engineering & Environmental Serv.

Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas Project Location: Tulsa, OK Project No.: 1640-001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
14	7-FS1-HA5-002	homogeneous	tan bulk material	chrysotile 3%	cellulose 92%	
15	6-FS1-HA4-001	homogeneous	tan bulk material	NAD	n/a	
16	6-FS1-HA8-001	homogeneous	white bulk material	chrysotile 20%	mineral wool 30%	
17	6-FS1-HA2-001	homogeneous	black bulk material	chrysotile 3%	n/a	
18	6-FS1-HA11-001	homogeneous	blue bulk material	chrysotile 10%	n/a	
19	6-FS1-HA3-001	homogeneous	tan bulk material	chrysotile 3%	n/a	
20	6-FS1-HA6-001	homogeneous	red bulk material	chrysotile 3%	n/a	
21	6-FS1-HA1-001	homogeneous	gray bulk material	NAD	cellulose 5%	
22	6-FS1-HA5-001	homogeneous	tan bulk material	NAD	n/a	
23	6-FS1-HA9-001	homogeneous	white bulk material	chrysotile 15%	cellulose 15% glass fiber 20%	
24	6-FS1-HA7-001	homogeneous	tan / black bulk material	NAD	cellulose 80% synthetic 5% animal hair 3%	
25	6-FS1-HA12-001	homogeneous	gray bulk material	chrysotile 10%	cellulose <1%	

Ellen Mikithrish
Reviewed and Approved

February 2, 1999

Date

A & M ENGINEERING AND AND ENVIRONMENTAL SERVICES, INC. TULBA, OKLAHOMA - BWPONMENTAL

CONSTRUCTION

BNOWEEPING

SAMPLING FIRM Adm

CLIENT CONTACT

PHONE N

818-665-6575 MIDONNELL DOUGLAS - TUESA, OK JEFF FLBERT PROJECT NAME H1640-001 PROJECT NUMBER

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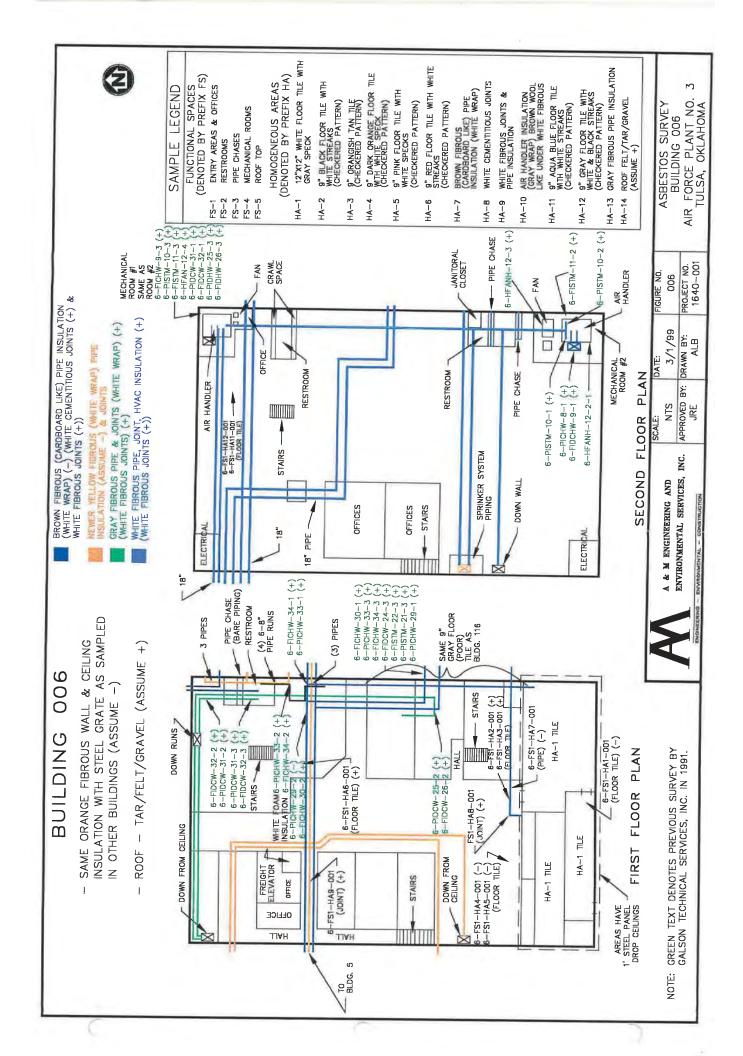
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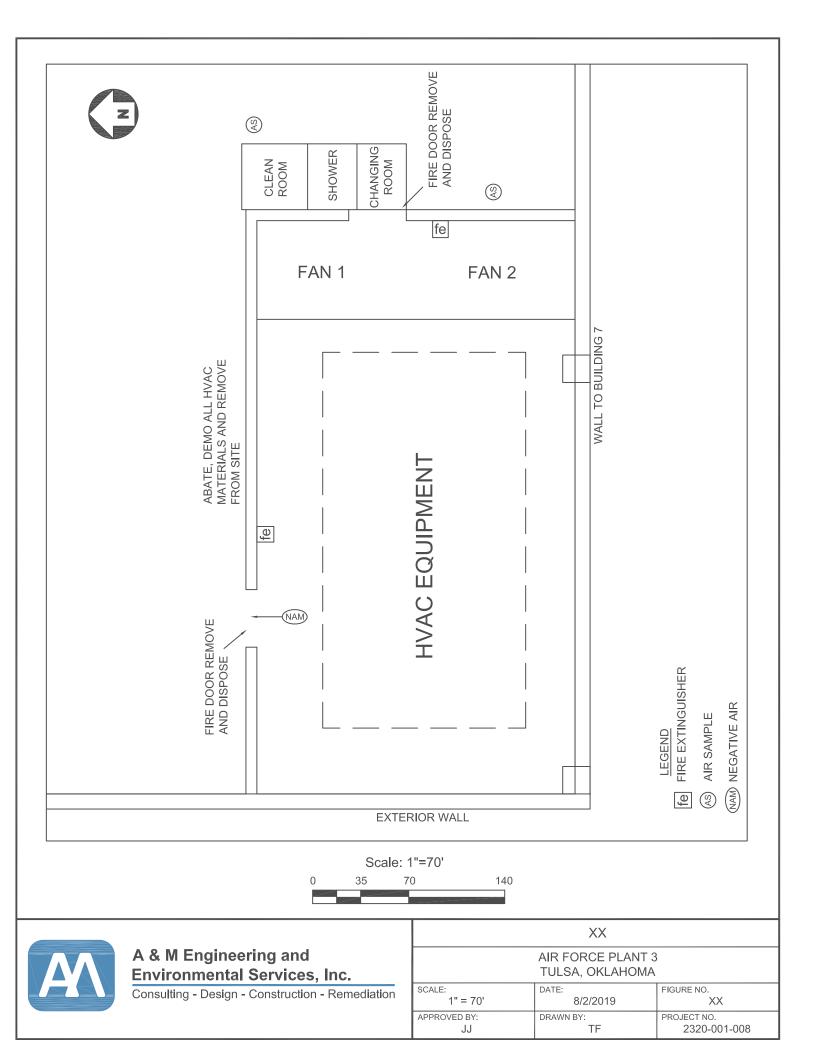
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Appendix B

Proposed Abatement Layout





Appendix C

QAPP Amendment Log Form and Completed Forms



QAPP Amendment Log Form

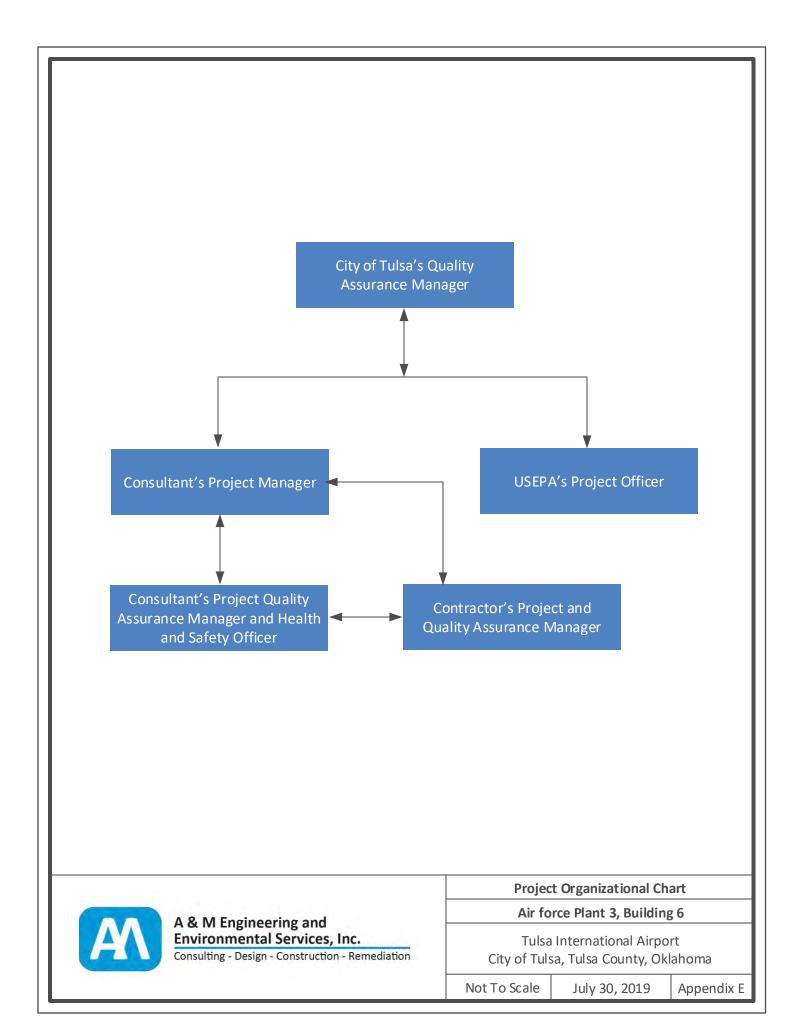
Asbestos Abatement
Air Force Plant 3, Building 6
Tulsa International Airport
City of Tulsa, Tulsa County, Oklahoma 74104

Number	Dates Completed	Descriptions	Amended By (Names)	Sections Affected	Approved by all Project Distribution Listed Individuals
1					☐ Yes
2					□ Yes
3					☐ Yes
4					☐ Yes
5					☐ Yes
6					☐ Yes
7					☐ Yes

Please attach amendment support documentation, as necessary.

Appendix D

Project Organizational Chart



Appendix E

Air Monitoring Data Form

A & M Engineering and Environmental Services 10010 East 16th Street Tulss, Oklahoma 74128 Phone: 918-665-6575 Fox: 918-665-6576

A & M Engineering and Environmental Services, Inc. Consulting - Design - Construction - Remediation

www.aandmengineering.com

www.aandmengineering.com	ngineering.com																
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Jeff Jenkins AM Technician:

Location: Contractor: Project Number: