



**Request for Proposal, 22MCO594 ASBESTOS REMOVAL – FORMER SALVATION ARMY BUILDING**

**Date Required: September 16, 2022**

**Time Required: 10:00am Local Time**

**INTRODUCTION:**

Midland County, hereafter called County, invites sealed proposals from interested qualified Vendors, hereinafter called Vendors, for asbestos removal from the former Salvation Army Building. The following pages provide general information about the requirements and specifications for the package.

This request for proposal ("RFP") is part of a competitive procurement process which provides qualified vendors with a fair opportunity for their commodities and services to be considered, and to provide information concerning their expertise and experience in providing similar services to other customers. The RFP process provides a competitive negotiation platform, wherein price or cost is not the sole determinative factor. This process, designed to best serve the interests of the County, allows the County the flexibility to negotiate with interested, qualified Vendors (following designation by the Commissioners Court, one at a time) to arrive at a mutually agreeable relationship.

**SITE SURVEY:**

A **Mandatory Site Survey** will be held at the former Salvation Army Building. We will meet on the east side of the building at **10:00 on Thursday August 25, 2022** and will promptly begin the survey of the site. Proposing Vendors will be able to take measurements during this site survey.

**Former Salvation Army Building  
300 S. Baird St  
Midland, TX 79701**

**QUESTIONS:**

If further information is required, please contact the Midland County Purchasing Department. All requests for information must be submitted in writing. Responses to all questions received will be sent to each Contractor/Vendor known to have copies of the Request for Proposal. Requests for information may be faxed to 432-688-4914 or e-mailed to [pur103@co.midland.tx.us](mailto:pur103@co.midland.tx.us). All questions should be submitted on or before **5:00pm on Friday September 2, 2022**. Questions received after said date and time will not receive a response. Answers and clarifications which are considered to materially change the solicitation will be issued as written addenda to the original RFP and will be posted to the Midland County website at [www.co.midland.tx.us](http://www.co.midland.tx.us). Solution providers are responsible for ensuring all answers to questions are reviewed prior to bid submittal and that all issued added are properly acknowledged with their submitted proposal response. Midland County will not be responsible for any verbal exchange between the vendor and an employee of Midland County.

**COPIES AND RECEIPT:**

Please submit one (1) original, three (3) copies, and an electronic copy on USB drive of the proposal. **An executed copy of the Proposal Affidavit SIGNED AND NOTARIZED (Page 8) must be included in each submission.** Please note that if no Proposal Affidavit is included, the response will be rejected. Midland County is exempt from all state and federal taxes. Tax exempt certificates are available upon request.

All responses should be submitted in a sealed envelope, marked on the outside,

**22MCO594 ASBESTOS REMOVAL – FORMER SALVATION ARMY BUILDING**

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**Company Name**

Responses must be received by **10:00am Local Time on Friday September 16, 2022**. Late proposals will be rejected and returned without being opened. The clock in the Purchasing Agent’s office is the official time piece for this submission. If interested, Contractors may use mail or express systems to deliver their proposal to the Purchasing Department; they should insure that they are tendered to the carrier in plenty of time to reach the Purchasing Department by the time and date required. Facsimile transmitted proposals shall not be accepted.

**SUBMISSION LOCATION:** All bids which are mailed, shipped, delivered, etc. should be addressed as follows:

**Midland County Purchasing Department**  
Midland County Courthouse  
Attention: Kristy Engeldahl, Purchasing Agent  
500 N. Loraine Street, Suite 1101  
Midland, Texas 79701

**DOCUMENTATION SUBMISSION:**

The respondent must submit all required documentation. Failure to provide requested information may result in rejection of the proposal.

**ALTERATION OF PROPOSAL:**

A proposal may be altered, modified or amended by a Vendor at any time, prior to the time and date set forth above as the submission deadline. Alterations, modifications or amendments to a proposal must be made in the offices of the Purchasing Department. Any interlineations, alteration or erasure made on a proposal before the submission deadline must be initialed by the signer of the proposal, guaranteeing authenticity. A proposal may not be altered, modified or amended after the submission deadline.

**WITHDRAWAL:**

A proposal may not be withdrawn or canceled by the respondent for a period of sixty (60) days following the date designated for the receipt of proposals, and respondent so agrees upon submittal of their proposal.

**CONFLICT OF INTEREST:**

No public official shall have interest in this contract, in accordance with Vernon's Texas Codes annotated Local Government Code Title 5, Subtitle C, Chapter 171. Vendor is required to sign affidavit form included in Proposal documents.

**SILENCE OF SPECIFICATIONS:**

The apparent silence of these specifications as to any detail of the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

**CONFIDENTIALITY:**

Contents of the proposals will remain confidential until the contract is awarded. At that time the contents will be made public under the Texas Public Information Act; except for any portion of a proposal which has been clearly marked as a trade secret or proprietary data (the entire proposal may not be so marked). Proposals will be opened, and the name of the firm submitting the proposal read aloud, acknowledged, at **10:05am on Friday September 16, 2022**, in the Purchasing Department Conference Room located in the Midland County Courthouse, Suite 1101. All respondents or other interested parties are invited to attend the opening.

Vendors are hereby notified that the Owner strictly adheres to all statutes, court decisions, and opinions of the Texas Attorney General with respect to disclosure of public information.

**ADDITIONAL INFORMATION AND DEMONSTRATION, NEGOTIATIONS:**

Prior to award, selected Vendors may be asked to provide further information concerning their proposal, up to and including presentations/demonstrations. The Midland County Commissioners Court reserves the right to reject any and all proposals or waive formalities as deemed in the best interests of Midland County. The County may also enter into discussions and revisions of proposals after submission and before award for the purpose of obtaining the best and final offer, and to accept the proposal deemed most advantageous to Midland County.

This request for proposal (RFP) is part of a competitive procurement process which is designed to best serve the interests of the County in obtaining complicated commodities and/or services. It also provides interested Contractors with a fair opportunity for their goods and services to be considered. The RFP process is designed to be a competitive negotiation platform, where price is not required to be the sole determinative factor. Also, the County has the flexibility to negotiate with interested vendors (one at a time) to arrive at a mutually agreeable relationship. Negotiations will be arranged with vendors in a hierarchal order, starting with the vendor selected as the primary. If a contract cannot be negotiated, negotiations will, formally and in writing, end with that Vendor and proceed to move to the second vendor, and so forth until a contract is negotiated.

**RIGHTS OF THE CONTRACTING AUTHORITY:**

Midland County reserves the right to withdraw this RFP at any time and for any reason. Midland County also has the right to terminate its selection process at any time and to reject all responses, or all proposals. Receipt of the proposal materials by Midland County or submission of a proposal to Midland County confers no rights upon the vendor nor obligates Midland County in any manner.

All costs associated with the preparation or submittal of proposals shall be borne by the vendor, and no cost shall be sustained by Midland County.

**ORAL COMMITMENT:**

Vendors should clearly understand that any verbal representations made or assumed to be made during any discussions held between representatives of a vendor and any Midland County personnel or official are not binding on Midland County.

**WAIVER OF CLAIMS:**

Submission of a proposal indicates Vendor's acceptance of the evaluation technique and Vendor's recognition that some subjective judgments must be made by the County during the determination of qualification.

**SELECTION CRITERIA:**

Price is a primary consideration; however, it is not the only consideration to be used in the selection. The product and/or service to be provided is also of major importance. Midland County will require that the successful vendor provide a representative for all County related business, service, billing, installation, activation and termination of said service.

**ORDINANCES AND PERMITS:**

The Contractor/Vendor shall obtain all necessary permits from the City of Midland, Texas Building Inspection Department and any other agency having jurisdiction prior to commencement of work. Contractor/Vendor agrees, during the performance of the work, to comply with all applicable Federal, State, or local code and ordinances.

**INVOICES:**

Invoices are to be mailed to P.O. Box 421, Midland, Texas 79702 and should cite the applicable Purchase Order Number. Any and all notices or other communications required or permitted by any contract awarded as a result of this RFP shall be served on or given to Midland County, in writing, by personal delivery to the Purchasing Agent of Midland County, Texas, or by deposit with the United States Mail, postage prepaid, registered or certified mail, return receipt requested, addressed to the Midland County Purchasing Agent 500 N. Loraine Suite 1101 Midland, TX 79701, or at such other address as may have been specified by written notice to Vendor.

**INSURANCE:**

The awarded Vendor will maintain such insurance as will protect the Vendor and the County from claims under the Workers' Compensation Acts, and any amendments thereof, and from any other claims for damages from personal injury, including death, which may arise from operations under this agreement, whether such operations be by themselves or by any sub-Contractor, or anyone directly or indirectly employed by either of them. Current Certificate of such insurance shall be furnished to Midland County and shall show all applicable coverage(s). Any subcontractor must adhere to the same requirements listed above and below (with the exception of the pollution liability).

**Other insurance requirements are:**

- General Liability (including completed operations) with a \$1,000,000 per occurrence limit and \$2,000,000 general aggregate.
- Commercial Automobile Liability with a limit of no less than \$1,000,000. The coverage will also extend liability to hired and non-owned autos.
- Workers' Compensation with limit of \$1,000,000 for Employers Liability.
- We also require a minimum umbrella (or follow form excess policy covering over general liability, auto liability and workers compensation) of no less than \$2,000,000.
- Pollution liability coverage to for nay cleanup cost and damage to third parties in an amount of no less than \$1,000,000 per occurrence.

Midland County will require the selected Vendor to name Midland County as an additional for both the general liability and auto liability. A waiver of subrogation in favor of the County is required for the workers compensation. If the additional insured status or waiver of subrogation is not blanket, please send a copy of the actual endorsements prior to commencement of any work.

Midland County will require the selected Vendor to name Midland County as an additional insured and provide a waiver of subrogation prior to making a contract. All insurance must be placed through an insurance carrier licensed to operate in Texas and have an AM Best Rating greater than A-VI.

**INDEMNIFICATION:**

The Vendor shall defend, indemnify and save whole and harmless the County and all its officers, agents and employees from and against any and all demands, claims, suits, or causes of action of any character, name, kind or description brought for, or on account of, arising out of or in connection with the Vendor's performance or non-performance of any obligation of Vendor or any negligent act, misconduct or omission of the Vendor in the performance of its contractual obligations. The Vendor shall defend, indemnify, save, and hold harmless the County and its officers, agents, representatives and employees from and against any and all demands, claims, suits, or causes of action of any character, name, kind or description brought for, on account of, arising out of or in connection with Vendor's product or service.

**STATUS OF INDEPENDENT CONTRACTOR:**

Vendor shall be considered an independent contractor, for all purposes. Vendor will not at any time, directly or indirectly, act as an agent, servant, representative or employee of the County. Vendor will not take any action which is intended to create any commitments, duties, liabilities or obligations on behalf of the County, without prior written consent of the County.

**PARTIAL INVALIDITY:**

In the event any one or more of the provisions contained in this RFP or any contract resulting therefore, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this RFP or any contract resulting therefore and this RFP or the contract resulting therefore shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

**CONTRACT TERMINATION:**

Non-performance of the Vendor/Contractor in terms of specifications or noncompliance with terms of this contract shall be basis for termination of the contract by the County. Termination in whole or in part, by the County may be made at its option and without prejudice to any other remedy to which it may be entitled at law or in equity, or elsewhere under this contract, by giving (60) sixty days written notice to the Contractor/Vendor with the understanding that all work being performed under this contract shall cease upon the date specified in such notice. The County shall not pay for work, equipment, services or supplies which are unsatisfactory. Contractor/Vendor may be given reasonable opportunity prior to termination to correct any deficiency. This, however, shall in no way be construed as negating the basis for termination for non-performance. The right to terminate the notice thereof is controlled by these proposal specifications and is not subject to being altered by contract.

**LAW GOVERNING:**

The parties under contract shall be subject to all Federal laws and regulations, and all rules and regulations of the State of Texas. The laws of the State of Texas shall govern the interpretation and application of the contract; regardless of where any disagreement over its terms should arise or any case of action arise. Vendor agrees to follow all local, state and federal laws.

**REMEDIES:**

The successful vendor and Midland County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

**VENUE:**

It is hereby agreed that the contract will be made in Midland, Midland County, Texas, and any dispute arising as a result of it shall be governed by the laws of the State of Texas for the purpose of any law suit, and the parties agree that such lawsuit shall be brought in Midland County, Texas.

**FUNDING CONTINGENCY:**

Any contract awarded pursuant to this RFP shall be contingent on sufficient funding and authority being made available in each fiscal period by the appropriate officials of Midland County. If sufficient funding or authority is not made available, the contract shall become null and void.

**ASSIGNMENT:**

The Contractor shall not sell, assign transfer or convey this contract in whole or in part, without the prior written consent of the County.

**REQUIRED FORM  
COMPANY AFFIDAVIT**

The affiant, \_\_\_\_\_ states with respect to this submission to County:

I (we) hereby certify that if the contract is awarded to our firm that no member or members of the governing body, elected official or officials, employee or employees of said County, or any person representing or purporting to represent the County, or any family member including spouse, parents, or children of said group, has received or has been promised, directly or indirectly, any financial benefit, by way of fee, commission, finder's fee or any other financial benefit on account of the act of awarding and/or executing a contract.

I hereby certify that I have full authority to bind the company and that I have personally reviewed the information contained in the RFP and this submission, and all attachments and appendices, and do hereby attest to the accuracy of all information contained in this submission, including all attachments and exhibits.

I acknowledge that any misrepresentation will result in immediate disqualification from any consideration in the submission process.

I further recognize that County reserves the right to make its award for any reason considered advantageous to the County. The company selected may be without respect to price or other factors.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Phone \_\_\_\_\_

Title \_\_\_\_\_

Firm Name \_\_\_\_\_

Type of business organization (corporation, LLC, partnership, proprietorship)

Address \_\_\_\_\_

County, State, Zip \_\_\_\_\_

Notary Seal Below

## SPECIFICATION

### **PURPOSE:**

Midland County is in need of a vendor to completely remove all asbestos materials from 300 S. Baird St., Midland, TX. Work shall include, but not be limited to: preparation, asbestos removal, air monitoring and air sampling.

### **PROJECT OBJECTIVES:**

- A. Remove all asbestos containing material from the former Salvation Army Building.
  - 1. Abatement of Ceiling texture (popcorn) in the basement, 1<sup>st</sup> and 2<sup>nd</sup> floor
  - 2. Abatement of Drywall w/ tape, bed and drag texture on the 1<sup>st</sup> floor
  - 3. Abatement of 12 inch flooring tile with mastic on the 1<sup>st</sup> and 2<sup>nd</sup> floor
  - 4. Abatement of pipe insulation throughout the building
  - 5. Abatement of pipe fitting insulation throughout the building
  - 6. Abatement of CMU surfacing throughout the interior perimeter walls
- B. Contractor shall insure that no individual is exposed to asbestos fibers in excess of levels set by law.
- C. Contractor shall insure that no asbestos contamination occurs outside any containment erected by Contractor.
- D. Contractor shall insure that all asbestos waste is disposed of in accordance to all applicable laws.
- E. Contractor shall document all activities pertaining to this project in accordance with all applicable laws.

Prior to removal, utilizing full PPE, the Contractor shall clean and dispose of non-asbestos materials as regular waste if materials can be de-contaminated. The Contractor will be responsible for disposal of all waste. No debris shall be left on the property.

### **PERSONNEL QUALIFICATIONS:**

All Contractor personnel involved in this project must be trained and have EPA Approved Certifications showing they are fully qualified to do asbestos removal. Contractor shall insure that every worker is thoroughly familiar with the standard operating procedure of the Contractor for abatement work and with all applicable laws.

### **SUBCONTRACTOR AND/OR SUPPLIER IDENTIFICATION:**

Should the Bidder subcontract any work, the Bidder shall indicate below the name of each subcontractor and/or supplier the bidder will use in the performance of the contract. The Bidder shall specify the work to be performed by the subcontractor or the materials to be provided by the supplier. Any changes in subcontractor and/or supplier listed below shall require prior approval by the Purchasing Office.

### **SPECIFICATIONS:**

Vendor will be responsible for providing all supplies, equipment and labor to completely remove asbestos, per the Project Design as explained in **ATTACHMENT A**.

**REFERENCES:**

Please provide at least 2 references for commercial projects, preferably any local/state government clients that the vendor has provided a similar type of work as requested in this RFP.

**EVALUATION PROCESS:**

The County will award to the bidder that submits a bid which represents the “best value” to the County. The best value shall not be based solely upon price but the bid which receives the highest cumulative score for each of the evaluation factors delineated herein.

**CRITERIA:**

Introduction (Executive Summary): 1 page maximum

Tab 1 Previous Related Experience: (15 points, maximum)

- Indicate experience with publicly funded facilities of same approximate size and type as the anticipated project.
- Indicate safety record on previous projects.
- Indicate whether Vendor has had similar contracts terminated prior to completion or whether a bonding company surety has had to pay funds under a bond of the Vendor.

Tab 2 Identity and Location of Vendor: (15 points, maximum)

- Indicate the exact legal name of Vendor, its type of legal organization, its state of organization, its mailing address, the office/business location of the Vendor from which the Project will be managed; and, address Vendor’s availability to the Project and the County and the response time.

Tab 3 References: (Include name, address, and phone number of contact): (20 points, maximum)

- Indicate (2 minimum) general references who can attest to the Vendor’s ability, performance, and safety record.

Tab 4 Cost: (50 points, maximum)

- Indicate the Vendor’s proposed price for the asbestos removal as completed.



# TEXAS CONSULTING SERVICES, LLC.

PO Box 9910, Midland, Texas 79708

Phone: (432) 687-5455

Email: [Info@texconsulting.net](mailto:Info@texconsulting.net)

## Specification Manual Asbestos Abatement

### CLIENT:

Midland County  
500 North Loraine Street  
Midland, Texas 79701  
Attn: Mr. Eddie Melendez, Facilities Manager

### PROJECT SITE:

Salvation Army facility  
300 South Baird Street  
Midland, Texas 79701

### INSPECTION DATE:

June 10, 2020 – June 11, 2020 (ETech)



### ABATEMENT DATES:

TBD

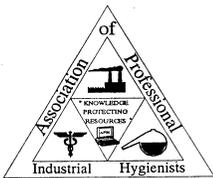


**Tony Strong, CIAQP, CIEC, MAC0293, ASB 10-5631**

*Certified Indoor Air Quality Professional*

*American Indoor Air Quality Council*

*TX DSHS Asbestos Consultants License #10-5631*



*LABORATORY LICENSE 30-0210*

*TEXAS CONSULTING SERVICES*

*MIDLAND, TEXAS*



## **TABLE OF CONTENTS**

### **TAB 1 PROJECT DESIGN & SPECIFICATIONS**

**Section 100 – Scope of work**

**Section 200 – General Requirements**

**Section 300 – Technical Requirements**

### **TAB 2 FLOOR PLANS**

### **TAB 3 ETECH ENVIRONMENTAL SURVEY REPORT**

# TAB 1

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## PROJECT DESIGN & SPECIFICATIONS

## Section 100

### Scope of Work - Asbestos Abatement

#### RELATED DOCUMENTS:

*This specification covers the abatement of asbestos hazards from building structures and components listed in these Contract Documents. It is the intent of the Contract Documents to show all the work necessary to complete the project.*

*All work is to be completed following these specifications and all applicable Federal, State, and local rules and regulations. Where a conflict exists between these specifications and/or applicable rules and regulations, the more stringent will apply.*

#### Section 100-1 - Scope of Work:

- 100-1-1 All quantities are approximate and must be field verified by the Contractor.*
- 100-1-2 The Abatement Contractor is responsible for all sampling as required by OSHA, and results will be made available to the Project Manager daily. The Abatement Contractor must give the Project Manager a letter stating exactly how this OSHA sampling is to be accomplished.*
- 100-1-3 Pre-abatement air sampling of the designated work area and the adjoining area is to be accomplished by the Project Manager or Consultant.*
- 100-1-4 No pre-abatement work is to start until the Project Manager or Consultant has approved all submittals required in these specifications.*
- 100-1-5 The scope of work for this project includes the removal of the following estimated quantities of asbestos-containing building materials (ACBM).*

<b>MATERIAL</b>	<b>LOCATION</b>	<b>QUANTITY</b>	<b>SECTION</b>
Ceiling texture (popcorn)	Basement (001) 1 <sup>st</sup> floor (117-119, 123, 126-132) 2 <sup>nd</sup> floor (208-210 & closet)	2248 ft <sup>2</sup>	1, 2, 5, 10
Drywall w/ tape, bed and drag texture	1 <sup>st</sup> floor (120-122)	297 ft <sup>2</sup>	1, 2, 5, 10
12-inch flooring tile with mastic	1 <sup>st</sup> floor (109-114, 116, 125 & stairwell) 2 <sup>nd</sup> floor (201, 203, 204, 207 & closet)	1777 ft <sup>2</sup>	1, 2, 4, 10
Pipe insulation	Throughout building	Unknown	1, 2, 9, 10
Pipe fitting insulation	Throughout building	Unknown	1, 2, 9, 10
CMU surfacing	Interior perimeter walls	11,000 ft <sup>2</sup>	1, 2, 5, 10

*Materials and amounts are based upon original asbestos inspection as provided by Midland County/Etech which was performed on January 10-11, 2020.*

*These materials are to be removed in accordance with these general specifications, specific sections as well as the following special conditions:*

**\*\*SPECIAL CONDITIONS / ABATEMENT ESTIMATE:**

- 1. Prep requires critical barriers, air filtration, splashguards (if floors removed prior to sheetrock removal), decontamination facility and personnel / respiratory protection.*
- 2. Prep work is to be as follows: two layers of 6-mil poly sheeting on the floors and two layers, critical barriers, air filtration, decontamination facility and personnel / respiratory protection.*
- 3. Prep requires critical barriers, two layers of 4-mil ply sheeting on the walls, decontamination facility and personnel / respiratory protection.*
- 4. Contractor is to remove components and wrap in two layers of 6-mil poly sheeting.*

***Section 100.2 - Pre-Abatement Activities (Interior Preparation):***

- 100.2.1 Verify lockout and seal any HVAC equipment supplying or within work areas with a minimum of two layers of 6-mil poly sheeting, individually applied.*
- 100.2.2 Verify and lockout all electrical power to work areas. Provide temporary power and lighting as necessary to maintain a safe and comfortable work environment. Electrical service and water are to be provided by the Contractor. Connections at any site with current electrical and water service are the responsibility of the Contractor. Connection to existing electrical service will require the use of a State licensed electrician.*
- 100.2.3 All moveable soft, porous goods (pillows, cushions, curtains, etc.) in containment are to be discarded as contaminated asbestos waste. All non-moveable hard goods are to be decontaminated in containment prior to clearance monitoring.*
- 100.2.4 Verify and locate all potential fire exits. Maintain emergency and fire exits from the work areas or established alternative exits satisfactory to fire officials. Mark fire exits appropriately on the work area side of the containment. Exit arrows pointing in the direction of the nearest exit are to be clearly marked in Spanish and English.*
- 100.2.5 Seal off work areas from those in which work will not occur with a critical barrier consisting of at least two layers of 6-mil poly sheeting, individually applied. Place appropriate warning signs in*

*English and Spanish on the outside of critical barriers and at all entrances to work areas.*

- 100.2.6 Construct separate personnel and barrel/equipment decontamination units in compliance with EPA guidelines concerning number, size, and placement of airlocks, etc. Shower in the personnel decontamination unit shall open into and airlock on both the contaminated and uncontaminated sides and shall be equipped with both hot and cold running water. Decontamination units shall be framed with 2" X 4" lumber (or an acceptable material approved by the Project Manager). Equipment room for the decontamination units shall be at least 6'X6' square. Construct decontamination units of appropriate materials to provide airtight barriers to allow continuous reduced air pressure to be maintained.*
- 100.2.7 All shower wastewater is to be filtered to a final pore size of 5.0 microns. All wastewater is to be drained into the sanitary sewer or removed from the site. Shower waste filters are to be replaced when they become clogged, but not less than every third day. Dispose of all filters as asbestos-contaminated waste.*
- 100.2.8 Cover floor areas, except where floor tile and or mastic materials are to be removed, with two layers of 6-mil (true thickness) plastic sheeting, individually applied, extending at least 12 inches up the walls. Cover wall areas, except those surfaces scheduled for demolition/renovation, with two layers of 4-mil (true thickness), individually applied, extending at least 12 inches onto the floor. Seal seams to prevent leakage. No seams shall be located at wall to wall or wall to floor joints. Do not cover contaminated surfaces.*
- 100.2.9 Place work areas under reduced air pressure as specified. Allow no air movement system or air filtering equipment to discharge unfiltered air outside the work area. Submit proposed number, rated flow, placement, and route of exhaust to Project Manager for review and approved prior to beginning work. The Consultant may complete this process and provide to the Contractor.*
- 100.2.10 Ensure that all barriers and plastic sheeting enclosures remain effectively sealed and taped for the duration of abatement and subsequent cleaning. Visually inspect enclosures at the beginning and end of each work shift. Repair damaged barriers and remedy defects immediately upon discovery. Use smoke methods or other approved methods to evaluate effectiveness of barriers when requested by the Project Manager.*

- 100.2.11 *Maintain a sign-in/out log in the immediate area of the change room to be signed by every person each time upon entering and leaving the work area(s).*
- 100.2.12 *Inside each work area place a fire extinguisher with a minimum NFPA rating of 10BC (dry chemical) for every 1,000 feet<sup>2</sup>, or fraction thereof, of work area for the duration of abatement and subsequent cleaning activities. The same type of fire extinguisher is to be placed in the vicinity of the change room.*
- 100.2.13 *Contractor is to install a fully functional 5-stage decontamination facility at the entrance to the containment area, and warm water is to be available at the shower prior to ANY removal. Preparatory work for this containment is to include decontamination facility, air filtration and critical barriers. All materials are to be wetted as removed and bagged as soon as removed. Contractor is to remove any insulation located in ceilings and walls as asbestos-contaminated waste. Contractor will be required to remove all sheetrock fastening devices (as required).*
- All debris currently in areas to be abated is to be treated as asbestos-contaminated waste. Prior to cleanup of these areas and installation of containment, Contractor will be required to install critical barriers, air filtration devices and functional decontamination unit.*
- 100.2.14 *Contractor will be responsible for maintaining "negative pressure" within the containment area (minimum of -.02" w.c. on a digital manometer). Electricity is not available at the site, and generator use will always require a written plan for maintenance of pressure within the containment area during abatement activity. Contractor will be always required while work is taking place to have a fully functional digital manometer installed within the containment area. At times when work is not taking place, Contractor will install the digital manometer at a place prescribed by the TCS Project Manager. Contractor will also be required to supply water at the site.*
- 100.2.15 *Notify Project Manager for review of the preparation of the work area(s) prior to any disturbance of asbestos-containing materials. Prior to notification, complete plasticizing of the work area, and construction of personnel and barrel/equipment decontamination*

enclosure systems. No removal work can begin until preparations have been observed and accepted by the Project Manager.

### *Section 100.3 - Pre-Abatement Activities (Exterior Preparation)*

- 100.3.1 Restrict access to exterior grounds immediately adjacent to work areas by barrier tape of similar means.*
- 100.3.2 In lieu of critical barriers installation within the structure, Contractor may cover window and door openings with at least two layers of 10-mil poly sheeting, individually applied. Poly sheeting is to be secured with 1" x 2" furring strips.*
- 100.3.3 Place appropriate warnings signs, in English and Spanish on at least every other window/door opening and at the decontamination facility.*

### *Section 100.4 - Removal Activities (Floor Tile and/or Mastic)*

- 100.4.1 Prepare work area as previously specified.*
- 100.4.2 Thoroughly wet the asbestos-containing materials to be removed with amended water prior to handling or stripping to reduce fiber dispersal into the air. Accomplish wetting with a fine mist of amended water. Spray materials repeatedly during the work process to maintain a continuously wet condition throughout progress of the removal work.*
- 100.4.3 Remove saturated asbestos-containing materials in small sections. Do not allow materials to dry out. As they are removed, place floor tile into one "onion bag" and then place bag into two properly labeled 6-mil disposal bags. Materials may also be put into metal drums or Gaylord boxes which are six mil poly-lined and wrapped in 6 mil poly.*
- 100.4.4 Upon completion of floor tile removal, Contractor is to remove mastic (as required). Removal of mastic is to be accomplished via a solvent with a minimum flash point of 140 degrees Fahrenheit. Solvent is to be massaged into the mastic and removed via squeegee. Solvent is to be solidified prior to removal from the containment.*
- 100.4.5 Provide general clean up of the work area concurrent with the removal of all asbestos-containing building materials. Do not permit the accumulation of debris on work area floors.*
- 100.4.6 Upon completion of asbestos-containing materials, all surfaces within the work area shall be wet-wiped/mopped to remove residual*

accumulated materials. Continue wet cleaning until all surfaces are free of visible debris.

#### *Section 100.5 - Removal Activities (Gypsum Wallboard/Sheetrock and/or surfacing)*

- 100.5.1 Prepare work area as previously specified.*
- 100.5.2 Thoroughly wet the asbestos-containing materials to be removed with amended water prior to handling or stripping to reduce fiber dispersal into the air. Accomplish wetting with a fine mist of amended water. Spray materials repeatedly during the work process to maintain a continuously wet condition throughout progress of the removal work.*
- 100.5.3 Remove saturated asbestos-containing materials in small sections. Do not allow materials to dry out. As removed, gypsum wallboard/sheetrock or surfacing is to be placed into two properly labeled 6-mil disposal bags.*
- 100.5.4 Upon completion of wallboard/sheetrock or surfacing removal, Contractor is to remove all associated fastening devices. All insulation which may be in walls and/or ceilings to be removed is to be disposed of as asbestos-contaminated waste.*
- 100.5.5 Provide general clean-up of the work area concurrent with the removal of all asbestos-containing materials. Do not permit the accumulation of debris on work area floors.*
- 100.5.6 Upon completion of asbestos-containing materials, all surfaces within the work area shall be wet-wiped/moped to remove residual accumulated materials. Continue wet cleaning until all surfaces area free of visible debris.*

#### *Section 100.6 - Removal Activities (Linoleum Flooring)*

- 100.6.1 Prepare work area as previously specified.*
- 100.6.2 Thoroughly wet the asbestos-containing materials to be removed with amended water prior to handling or stripping to reduce fiber dispersal into the air. Accomplish wetting with a fine mist of amended water. Spray materials repeatedly during the work process to maintain a continuously wet condition throughout progress of the removal work.*
- 100.6.3 Remove saturated asbestos-containing materials in small sections. Do not allow materials to dry out. Linoleum is to be removed via "razor scraper" from substrate and may be removed as a component system when floors area to be removed/demolished.*

Bulk linoleum is to be placed into two properly labeled 6-mil disposal bags, and component systems are to be wrapped in two layers of 6-mil poly sheeting, each individually installed.

100-6-4 Provide general clean up of the work area concurrent with the removal of all asbestos-containing building materials. Do not permit the accumulation of debris on work area floors.

100-6-5 Upon completion of asbestos-containing materials, all surfaces within the work area shall be wet-wiped mopped to remove residual accumulated materials. Continue wet cleaning until all surfaces are free of visible debris.

#### *Section 100-7 - Removal Activities (Exterior Windows/Doors)*

100-7-1 Prepare work area as previously specified.

100-7-2 Thoroughly wet the unit and/or frame to be removed prior to stripping or tooling to reduce fiber dispersal into the air. Spray the materials repeatedly during removal to maintain a continuously wet condition.

100-7-3 Remove affected unit and remove intact from the building. Remove residual caulking from window/door perimeter.

100-7-4 Removed frames are to be disposed of as asbestos-contaminated waste.

#### *Section 100-8 - Removal Activities (Parapet Mastic)*

100-8-1 Prepare work area as previously specified.

100-8-2 Contractor is to install a drop cloth extending from exterior wall base out fifteen feet from the structure to catch debris from roof mastic removal.

100-8-3 Contractor is to utilize "hatchet" removal techniques.

100-8-4 Roof mastic is to be placed into two properly labeled 6-mil disposal bags, and mastic is to be lowered from the roof.

#### *Section 100-9 - Removal Activities (Thermal Insulation / Piping)*

100-9-1 Glove Bag Procedures

100-9-2 The glove bag shall consist of 6-12 mil bag with long sleeve gloves, a tool pouch, and an opening for water spray nozzle. NOTE: ALL GLOVE BAG REMOVAL SHALL BE DONE IN FULL CONTAINMENT PROCEDURES.

Materials necessary but not limited to shall be:

- a. glove bag
- b. sprayer

- c. HEPA vacuum
  - d. utility knife
  - e. nylon scrub brush
  - f. lint free rags
  - g. encapsulant
  - h. wire cutters
- 100-9-3 A team of two persons shall perform the removal.
- 100-9-4 Before work begins, all necessary Sections of this specification shall be followed.
- 100-9-5 Mix the surfactant with water in the sprayer. Bring into the work area all materials that will be used.
- 100-9-6 Place a sheet of poly underneath the pipe wide enough to cover the area where debris might fall to floor. Usually, two feet extending on either side of pipe.

#### Section 100-10 - Specific Removal Guidelines

Removal is to be conducted in accordance with all applicable TAHPA, NESHAP, and OSHA rules and regulations, the enclosed specifications, as well as the following site-specific requirements:

- 100-9-7 Contractor will be allowed to work as deemed appropriate by owner, consultant, and contractor agreement. Work schedule must be provided via DSHS notification as filed by the awarded contractor.
- 100-9-2 The structure is to remain secure during all abatement activities, and security will be the sole responsibility of the Contractor.
- 100-9-3 Please note that demolition of properties does not include disposal of demo debris unless specifically requested by the client.

### Section 200

#### General Requirements - Asbestos Abatement

##### RELATED DOCUMENTS:

This section covers General Requirements to be completed during the removal of asbestos-containing building materials. This section in conjunction with Sections 100 and 300 comprise the specifications required for completion of asbestos abatement within the

*Jerry Stray*

*structure(s) covered by these specifications. It is the intent of the Contract Documents to show all the work necessary to complete the project.*

*All work is to be completed following these specifications and all applicable Federal, State, and local rules and regulations. Where a conflict exists between these specifications and/or applicable rules and regulations, the more stringent will apply.*

- 200.1 All bidding contractors will be fully aware of and comply with all current licensing and other requirements for asbestos removal work in the State of Texas and shall, prior to bidding, obtain all licenses and/or pass all examinations required by any State or Federal agency for asbestos removal work by contractors in the State of Texas and particularly the new Texas Department of Health rules and regulations. The contractor shall secure and pay for transportation and disposal of asbestos including permits, government fees, and licenses as necessary for proper execution and completion of the work as applicable at the time of receipt of bids.*
- 200.2 Bidding contractors are encouraged to visit the jobsite and inspect all areas that are affected by these specifications prior to submitting a bid. Contractors shall verify all measurements provided within these specifications and associated inspection reports, as no increase in contract amount will be allowed.*
- 200.3 Furnish Texas Consulting Services, LLC (Consultant) with copies of ten (10) day notification sent to the Texas Department of Health, via facsimile, email, or US Postal mail. Provide the Consultant with notices required by any other local, state, or federal agency relating to the asbestos-related activity to be performed at this site.*
- 200.4 The successful bidder will be required to fully comply with all specified items regardless of if they exceeded EPA, OSHA, NIOSH, or State regulations. Where not covered or exceeded by these specifications, all EPA, OSHA, NIOSH, and State regulations governing asbestos removal shall apply.*
- 200.5 The Contractor shall have, at all times, in his possession at his office and in view at the jobsite - one copy of OSHA Regulation 1926-58, Asbestos and Environmental Protection Agency 40 CFR Part 61, Subpart B: - National Emission Standard for Asbestos, Asbestos Stripping Work Practices and Disposal of Asbestos Waste,*

as well as copies of all other manuals listed under the Texas Asbestos Health Protection Rules, any other applicable governing regulations, as well as a complete copy of the project abatement specifications.

200-6 The Contractor shall notify Texas Consulting Services, LLC in writing at least three calendar days prior to his arrival at the jobsite to initiate preparatory work. This notification shall include the time and date of contractor arrival.

200-7 Before being eligible for final payment, the Contractor shall deliver to Texas Consulting Services, LLC the following items relative to this project:

- (1) A copy of Contractor's Work Records, including but not limited to, daily sign-in sheets, containment rosters, etc.
- (2) Contractor's letters signed by a principal of the contractor stating his inspection of the abatement area after removal indicates the work to be complete and that no identified asbestos remains within the designated area.
- (3) All asbestos waste manifests.
- (4) All personnel air monitoring results.
- (5) All other documents requested in the project manual.

200-8 The Contractor shall always have a licensed Texas State Asbestos Abatement Supervisor present at each work area that work of any type herein described is in progress, including preparatory work. The supervisor will be required to enter the containment/work area a minimum of 25% of the daily work shift. In addition to the supervisor, the contractor shall provide one or more supervisors at each area at all times that work of any type herein described is in progress who is familiar with and experienced with asbestos abatement, related work, safety procedures, and equipment. It is required that either the supervisor or supervisor be always inside each work area or containment.

200-9 Bidders are advised that the Owners Project Manual shall constitute all information, which the Owner will furnish. No other information given by the Owner, or any official thereof, prior to the execution of the contract shall ever become a part of or change the Contract, Project Manual, or be binding on the Owner. Bidders are required, prior to submitting any proposal, to read

*Jerry Strong*

*carefully all plans on file, to visit the site of the work, to carefully examine local conditions, inform themselves by their independent research of the difficulties to be encountered and judge for themselves accessibility to the work and all attending circumstances affecting the cost of doing the work or the time required for its completion, and obtain all information required to make an intelligent proposal. Bidders shall rely exclusively upon their estimates, investigations and other data that are necessary for full information upon which the proposal may be based. Submission of a bid proposal will be evidence that the Bidder has made the examinations and investigations required herein.*

*200-10*

*All work under this contract shall be conducted in strict accordance with all applicable Federal, State and Local regulations, standards and codes governing asbestos abatement and any other trade work done in conjunction with the abatement.*

*The most recent edition of any relevant regulation, standard, document, or code shall be in effect and a copy shall be kept at the jobsite for use by the Owner. Where conflict among the requirements exists, the most stringent requirements, as determined by the Owner Representative, shall be utilized.*

*Copies of all standards, regulations, codes, and other applicable documents, including this project manual shall be available at the work site in the vicinity of the clean change area of the worker contamination system.*

*Specific documents shall include, but not necessarily be limited to:*

*200-10-1 Occupational Safety and Health Administration (OSHA)*

- a) Title 29, Code of Federal Regulations Section 1910-1001 - General Industry Standard for Asbestos*
- b) Title 29, Code of Federal Regulations Section 1910-134 - General Industry Standard for Respiratory Protection.*
- c) Title 29, Code of Federal Regulations Section 1926 Construction Industry.*

d) Title 29, Code of Federal Regulations Section 1910-2 - Access to Employee Exposure and Medical Records.

e) Title 29, Code of Federal Regulations Section 1910.1200 - Hazard Communication.

200.10.2 Environmental Protection Agency (EPA)

a) Title 40. Code of Federal Regulations part 61 Subparts A and M (Revised Subpart B) - National Emission Standard for Asbestos.

200.10.3 Texas Asbestos Health Protection Rules:

a) Texas Civil Statutes, Article 4477-3a, Section 12, most recent edition.

200.10.4 Contractor will abide by all other applicable laws, rules, and regulations, including, but not limited to:

- a) Workers Compensation (Statutory limited required)
- b) Liability Insurance (Minimum \$1,000,000.00 limits required by abatement contractor, with Owner named as additional insured)
- c) EPA, OSHA, DOT, and TDH rules and regulations
- d) Contract issued by the Owner
- e) Wage rates (Federal and State)

200.11 The Contractor supervisor and his supervisor must have at a minimum attended an accredited Asbestos Abatement School course of study comprising not less than thirty-two (32) hours of asbestos training and obtained an asbestos abatement contractor's license from the TDH. All workers must meet the accreditation requirements of the State of Texas as outlined in Texas regulations and have obtained an asbestos worker's license.

200.12 The Contractor shall comply with all notification requirements - specified in:

Texas Civil Statutes, Article 4477-3a, providing the Texas Board of Health with the authority to administer licensing and registration for all asbestos abatement activities. For all public or public access buildings, notice will be given not less than ten (10) working days (Monday through Friday), before such activities area to commence, and in the manner required by the department.

*Jerry Strong*

*EPA NESHAP Rules (40 CFR §61.156) require a minimum ten (10) day notification involving any demolition or removal of asbestos if the project involves more than 160 feet<sup>2</sup> or 260 linear feet of asbestos-containing material. The Texas Department of Health is the duly appointed agent for this notification.*

*The Contractor shall submit to Texas Consulting Services, LLC. Satisfactory proof that required permits (State and local), transportation of asbestos-containing waste, as well as disposal site location have been made. Owner may visit and inspect disposal site before contract is signed if deemed necessary by the Owner.*

*200-13 The work area is to be restricted only to authorized, trained, and protected personnel. These may include the Contractors employees, employees of the Subcontractors, Owner employees and representatives, Federal, State and Local inspectors, and any other appropriate individuals. The Contractor shall designate his certified project supervisor as the only person, other than representatives of Texas Consulting Services, LLC., and the Owner, who can allow or deny the entrance of all other persons into the work area. Texas Department of Health employee's area the only exception to this restriction.*

*200-14 Emergency planning shall be developed by the Contractor prior to abatement initiation*

*Emergency planning shall include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips, and falls, confined spaces, and heat-related injury. Written procedures shall be developed and employee training in procedures shall be provided.*

*Employees shall be trained in evacuation procedures in the event of workplace emergencies.*

*200-14.1 For non-life-threatening situations, employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers, if necessary, before exiting the workplace to obtain proper medical treatment.*

*200-14.2 For life-threatening injury or illness, worker decontamination shall take least priority after measures to*

*Jerry Strong*

*stabilize the injured worker, remove him from the workplace and secure proper medical treatment.*

*Exits inside critical areas and containments will have highly visible exits signs placed as necessary to ensure rapid exit during a controlled emergency egress and shall be written in Spanish and English. Exit arrows in a fluorescent paint are to indicate the exit direction and shall have exit written above the arrows in English and below the arrows in Spanish.*

*Contractor shall maintain a minimum of two fire extinguishers and an OSHA-approved first aid kit at the work site. In addition, contractor is required to have on site one fire extinguisher for each 1,000 feet<sup>2</sup> of containment area as required by the Texas Asbestos Health Protection Rules.*

*Telephone numbers of all emergency response agencies shall be prominently posted in the clean change area and equipment room, along with the location of the nearest telephone. Contractor will be required to have on-site a functional telephone, either land-based or cellular.*

*The Owner shall provide Contractor with emergency procedures for whom to notify in case of worker injury.*

*As required by the Consultant, the contractor must submit special reports within one day of an occurrence requiring such a special report, with one copy retained for the final Document, and copies to others affected by the occurrence.*

*The reporting of unusual events (occurrence), as previously mentioned, shall occur when an event of an unusual and significant nature occurs at the project site (examples: failure of exhaust ventilation system, rupture of temporary enclosure, accidents involving injury to workers, etc.). Contractor shall prepare and submit a special report, or daily log sheet, listing chain of events, persons affected and participating in, response by contractor personnel, evaluation of results or effects, and similar pertinent information.*

*When such events are known or predictable in advance, the contractor is to advise the Consultant Representative in advance, or at the earliest possible time.*

*The reporting of Significant Accidents shall be recorded and documented by data taken at the site, or anywhere else that work is in progress. For this purpose, a Significant Accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of property loss or personal injury.*

*200-15 There shall be a pre-construction meeting at a mutually agreed time and place. Attending this meeting will be representatives of the Owner, and Contractor. The Contractor and his Certified Project Supervisor assigned to this project must attend. The owner may elect to forego this meeting.*

*The Contractor shall provide to Texas Consulting Services, LLC. all documents specified to be furnished prior to the beginning of job site work. No pre-start meeting will be held unless all documents are first received. No job site work shall start unless all pre-start meeting items are satisfactory to the Owner. Pre-start meeting may be waived by the Consultant.*

*At the pre-start meeting, the Contractor shall provide written detailed information as follows:*

*200-15-1 A list of employees (with their social security number) who will participate in the project, including State of Texas Worker or Supervisor TDH Licensure, most recent refresher training course, current medical surveillance report, qualitative fit test, executed notarized Certificates of Worker Release Forms, and assigned responsibilities of each employee during the project.*

*200-15-2 Work plans required by the Consultant. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan, the location and layout of decontamination areas; the sequencing of asbestos work; the interface of trades*

*involved in the performance of work; work schedule including work shift time, number of employees, date of start and completion including dates of preparatory work, removal and final clearance dates; methods to be used to assure the safety of building occupants and visitors to the site; disposal plan including location of approved disposal site; and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system, method of removal to prohibit visible emissions in the work area, and packaging of removed asbestos debris. Also set specific times and dates of load outs. The plan must be approved by the consultant prior to the commencement of work.*

*200-15-3 Contractor shall provide a daily report showing, by name and duty, each employee who worked on the removal/abatement project and who entered/left, and at what times the controlled containment area.*

*200-15-4 Preparation of work area and location of decontamination area.*

*200-15-5 Decontamination procedures for personnel, work area and equipment.*

*200-15-6 Abatement methods and procedures to be utilized.*

*200-15-7 Air monitoring procedures.*

*200-15-8 Procedures for handling and disposing of waste materials.*

*200-15-9 Procedures for final decontamination and cleanup.*

*200-15-10 Personal protective equipment including respiratory protection and protective clothing.*

*200-15-11 Procedures for dealing with heat stress and other emergencies.*

*200-15-12 Electrical requirements for equipment and lighting to be used on the project.*

*200-16 Store all materials subject to damage off the ground, away from wet or damp surfaces and under cover sufficient to prevent damage or contamination. Chemicals used at the jobsite are required to be stored in an area where they will be unlikely to reach their upper explosive thresholds.*

Damaged, deteriorating or previously used dirty materials as determined by Texas Consulting Services, LLC shall not be used and shall be properly removed from the work site.

200-17 A meeting with the Contractor and representatives from the Owner will be held at least weekly to determine work progress and compliance with State, Federal and local requirements, these plans and specifications, and any other governing regulations.

200-18 Definitions:

**Abatement:** Procedures to control fiber release from asbestos-containing materials. Includes removal, encapsulation, enclosures, repair, demolition, and renovation activities.

**Accredited or Accreditation:** when referring to a person or a laboratory means that such a person or laboratory has met the training, experience, and/or quality control requirements to perform work in accordance with AHERA.

**AHERA:** means the Asbestos Hazard Emergency Response Act of 1986 and rules and regulations enacted by EPA for its implementation.

**AHERA Abatement Project Designer:** means a person who develops plans and specifications for the abatement of asbestos. For the purposes of these rules, Abatement Project Designers will be a category of contractors.

**AIHA:** American Industrial Hygiene Association.

**Airlock:** A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three (3') feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination. Each curtain will be constructed, thereby preventing flow-through contamination. Each curtain will be constructed of at least 3 layers of polyethylene or polyvinylchloride a minimum of 6-mil thickness. The first sheet will be attached along the top of the doorway, and along one side of the doorway. Each subsequent layer of sheeting will be attached along one side of the doorway and along the opposite side as the previous layer. If not attached along the floor, each will be long enough to drape past the sill and onto the floor, preventing simultaneous opening of more than one doorway. It is

not the intent of this equipment to provide an airtight seal, as makeup air will flow from the outside of the decontamination chamber through the chambers to the inside by design.

**Air Monitoring:** The process of measuring fiber content of a known volume of air collected during a specific period. The procedure normally utilized for asbestos follows the NIOSH Standard Analytical Method for Asbestos in Air, Method 7400. For clearance air monitoring, Transmission Electron Microscopy (TEM) methods may be utilized for lower detectability and specific fiber identification.

**Air Sampling Professional:** The professional contracted or employed by the Building Owner to supervise an/or conduct on-site air monitoring. This individual may also retain a license to function as the Asbestos Project Manager, if qualified. Supervision of air sampling and evaluation of results should be performed by an individual who has completed an EPA approved NIOSH 582 course and has specialized experience in air sampling for asbestos. This individual shall not be affiliated in any way other than through this contract with the Contractor performing the abatement work.

**Amended Water:** Water to which a surfactant has been added.

**Asbestos:** The asbestiform varieties of serpentine (chrysotile) and amphibole (crocidolite, amosite, anthophyllite, actinolite, and tremolite).

**Asbestos-Containing Material (ACM):** Material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or nonfibrous materials.

**Asbestos-Containing Waste Material:** Asbestos-containing material or asbestos contaminated objects requiring disposal.

**Asbestos Project Manager:** The person designated by the Consultant to manage all asbestos work.

**Authorized Visitor:** The Building Owner, inspecting architect, and any representative of a regulatory or other agency having authority over the project.

**Building Owner:** The Owner or his authorized representative. The Owner and Owner Representative for purposes of this project manual are to be considered synonymous.

**Clean Room:** An uncontaminated area or room, which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.

**Commissioner:** means the Texas Commissioner of Health.

**Contractor:** The individual and/or business with which the Building Owner contracts to perform the asbestos abatement.

**Containment:** Reference to the prepared work area when full containment is utilized (as opposed to erecting only critical barriers).

**Critical Barrier:** A single layer of plastic sheeting over all doorways, windows, fixtures, or any other breaches in walls, floors, ceilings, HVAC vents and registers, etc. used to prevent contamination by asbestos fibers. Critical barriers will consist of securely fastened 6-mil poly sheet and be installed prior to construction of containment.

**Curtained Doorway:** A device to allow entry and exit from one room to another while permitting minimal air movement between the rooms, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of the first and third sheets along one vertical side of the doorway and securing the vertical edge of the second sheet along the opposite vertical side of the doorway. Two of these, one on either side of a small room or a breezeway, constitute an airlock.

**Decontamination Enclosure System (Decon):** A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers and equipment. The three rooms are the worker decontamination enclosure (adjacent to the containment or critical area), the shower room, and the clean room. All entry and exit to/from the containment will take place through this system.

**Demolition:** The wrecking or taking out of any load-supporting structural member of a facility together with any handling operations.

**Encapsulant:** A liquid material which can be applied to asbestos-containing material, controlling the possible release of asbestos fibers from the material, either by creating a membrane over the surface (bridging encapsulant) or by penetrating the material and binding its components together (penetrating encapsulant).

**Encapsulation:** The application of encapsulant.

**Enclosure:** The construction of an air-tight, impermeable barrier around the work area to control the release of asbestos fibers into the air.

**EPA:** US Environmental Protection Agency

**Equipment Decontamination Enclosure System:** That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment into or out of the work areas, typically consisting of a washroom and holding area, which is to have an air filtration machine installed to maintain negative pressure inside the containment area.

**Equipment Room:** A contaminated area or room, which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

**Facility:** Any institutional, commercial, or industrial structure, installation, or building.

**Fixed Object:** A piece of equipment or furniture in the work area, which cannot be removed from the work area.

**Friable Asbestos Material:** any material that contains asbestos of one percent (1%) or more by weight, which can be crumbled, pulverized, or reduced to powder by applying hand pressure.

**Glove bag Technique:** A method with limited applications for removing small amounts of friable asbestos-containing material from HVAC ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces in a non-contained (plasticized) work area. The glove bag assembly is a manufactured or fabricated device consisting of a glove bag (typically constructed of 6-mil transparent polyethylene or polyvinylchloride plastic), two inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glove bag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all the asbestos fibers released during the process. All workers who are permitted to use the glove bag technique must be highly trained, experienced, and skilled in this method.

**HEPA Filter:** HEPA means High Efficiency Particulate Absolute. A HEPA air filter can remove airborne or waterborne particles greater than 0.3 microns in diameter with 99.97% efficiency.

**HEPA Vacuum:** A vacuum system equipped with HEPA filtration.

**Holding Area:** A chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area. The holding area is comprised of an airlock.

**HVAC:** Heating, Ventilation, and Air Conditioning system.

**Load out:** See Waste Transfer Airlock.

**Lockdown:** Lockdown is the procedure of applying a protective coating or sealant to a surface from which asbestos-containing material has been removed. Its primary function is to control and minimize the amount of airborne asbestos fiber generation that might result from any residual asbestos-containing debris on the substrate. Though the substrate may appear to be clean, miniscule fibers may have become ledged in cracks or crevices that were inaccessible.

**Moveable Object:** A piece of equipment or furniture in the work area, which can be removed from the work area.

**NESHAP:** The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

**NIOSH:** The National Institute for Occupational Safety and Health.

**On-Site Day:** Any day on which work is being done on an asbestos abatement project that would require the services of a licensed asbestos worker, including but not limited to site preparation, establishment of decontamination facilities, removal, and encapsulation, lock-down, removal of preparation materials and asbestos waste. This includes non-working days between working days in the same work area.

**OSHA:** The Occupational Safety and Health Administration.

**Plasticize:** To cover floors, walls, and ceilings (as required), with plastic sheeting in an approved manner.

**Pressure Differential Ventilation System:** A portable system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow into contaminated areas from adjacent uncontaminated areas.

**Removal:** The stripping of any asbestos-containing materials from surfaces or components of a facility.

**Renovation:** Altering in any way, one or more facility components. Removal of load-supporting structural members are excluded from this definition.

**Replacement:** Replacing any material removed from systems with non-asbestos containing material, in the same manner as spray back.

**Shower Room:** A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination.

**Spray Back:** Spray back is the process of replacing the asbestos-containing material that was originally removed with an effective substitute. This material should have architectural properties and capabilities adequate to meet specifications and requirements originally set for the space (i.e., acoustical insulation, fireproofing). Caution should be used when choosing a spray back material to ensure that other adverse problems will not result (i.e., potentially harmful vapors generated during application), and that the lockdown material is fully compatible with the spray back material.

**Staging Area:** The holding area or an area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

**Structural Member:** Any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting walls or any non-load-supporting member, such as ceilings and non-load-supporting walls.

**Surfactant:** A chemical wetting agent (surface acting agent) added to water to improved penetration.

**TDH:** Texas Department of Health

**Visible Emissions:** Any emissions containing particulate materials that are visually detectable without the aid of instruments.

**Waste Transfer Airlock (Load out):** A decontamination system utilized for transferring containerized waste from inside to outside the work area.

**Wet Cleaning:** The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos-contaminated waste.

**Worker:** Any employee of a contractor physically engaged in the abatement of asbestos or performing a task for the contractor in which direct contact with asbestos is likely.

**Work Area:** Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated because of such abatement actions. A contained work area is a work area, which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled access work area, which has not been plasticized nor equipped with a decontamination enclosure system.

**Worker Decontamination Enclosure:** A decontamination system consisting of a clean room, a shower room, and an equipment room separated from each other and from the work area by airlocks and curtained doorways.

### Section 300

#### Technical Requirements - Asbestos Abatement

##### RELATED DOCUMENTS:

This section covers General Requirements to be completed during the removal of asbestos-containing building materials. This section in conjunction with Sections 100 and 200 comprise the specifications required for completion of asbestos abatement within the structure(s) covered by these specifications. It is the intent of the Contract Documents to show all the work necessary to complete the project.

All work is to be completed following these specifications and all applicable Federal, State, and local rules and regulations. Where a conflict exists between these specifications and/or applicable rules and regulations, the more stringent shall apply.

##### Section 300.1 Project Supervision

300.1.1 A representative of the Project Consultant shall provide administrative and supervisory assistance for coordination of work on this project.

The Project Consultant for this project is as follows:

Texas Consulting Services, LLC

Mr. Tony Strong, DSHS Consultant #10-5631

PO Box 9910  
Midland, Texas 79708  
Office: (432) 687-5455

- 300-1-2 *The Project Consultant shall decide the meaning and intent of any portion of the specifications, and of any plans or drawings where some may be found obscure or to be in dispute. All work shall be conducted and completed to the satisfaction of the Project Consultant. He shall decide all questions, which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, interpretation of the plans and specifications, and suspension of work.*
- 300-1-3 *Provide and use personal respirator equipment (PPE). Respirators shall be provided that have been assessed and approved by the National Institute of Occupational Safety and Health for use in asbestos contaminated atmospheres. If contractor anticipates that the airborne fiber concentration results, from personnel air monitoring based on an eight (8) hour Time Weighted Average, will be more than 0.5 fibers/cc, then work shall begin in Type "C", air supplied respirators and shall be of Grade "D" breathing air quality. Under no circumstances shall anything other than an oilless compressor be utilized. If airborne fiber concentrations are anticipated to be lower than 0.5 fibers/cc on personnel air monitoring based on 8-hour Time Weighted Average, then the initial respiratory protection shall be in accordance with the requirements set forth under title V - Personnel Protection Requirements, Paragraph E of this document. Occupational Safety and Health Administration's Asbestos Exposure in Public Buildings, §289.146c shall be in full effect and govern all work.*
- 300-1-4 *Spectacle kits and eyeglasses must be provided for employees who wear glasses and who must wear full-face piece respirators.*
- 300-1-5 *Full body disposable protective clothing, including head, body and foot coverings recommended by the EPA shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing.*
- 300-1-6 *Nonskid footwear shall be provided to all abatement workers and will be required to be worn during abatement activities. Disposable*

clothing shall be adequately sealed to the footwear to prevent body contamination.

- 300-1-7 A sufficient supply of disposable mops, rags and sponges for work area decontamination shall be available.
- 300-1-8 A sufficient supply of scaffolds, ladders, lifts, and hand tools (scrapers, wire cutter, brushes, utility knives, wire saws, etc.) shall be provided as needed.
- 300-1-9 Sprayers with pumps, capable of providing Maximum of 400 pounds per square inch (psi) at the nozzle tip at a flow rate of one (1) gallon per minute for spraying amended water shall be provided and utilized if necessary. Under no circumstances shall pumps with greater pressure and flow capability be utilized or be located at the jobsite.
- 300-1-10 Rubber dustpans and rubber squeegees shall be provided for cleanup. No brooms will be allowed at the site and no dry sweeping will be allowed.
- 300-1-11 A sufficient supply of HEPA filtered vacuum systems shall be available during cleanup activities.
- 300-1-12 Hand tools equipped with HEPA filtered local exhaust ventilation shall be utilized during the installation of enclosures and supports if there is any need to disturb asbestos-containing material. As an alternative, asbestos material may be partially removed following proper containment procedures prior to the installation of supports and enclosures.

Section 300-2 Gross Removal - Full Containment

- 300-2-1 Spray asbestos material with amended water, using an airless-type spray device. Saturate the material sufficiently so that the amended water penetrated the substrate without causing excess dripping. Spray the asbestos and mist the air continuously during the removal to maintain a wet condition and to minimize fiber release.
- 300-2-2 The contractor shall use techniques, methods, and equipment, which will not permit the fiber count during removal operations to exceed .7 fibers/cc on personnel samples during an 8-hour time weighted average.
- 300-2-3 Remove all visible material within the containment area such that all surfaces are clean of debris.

- 300.2.4 *Collect the material that has been removed and place it into clear 6-mil asbestos bags correctly imprinted with warning labels required by applicable regulation. Each bag will be wet wiped, properly sealed, and removed from the immediate area to a holding area.*
- 300.2.5 *During load out: Clean the asbestos 6-mil bags with water or wet cleaning techniques in a room separate from the decontamination facility; immediately place into clean clear 6-mil marked bag and seal with as little free air space as possible, twist top of bag, gooseneck, and wrap securely with duct tape; pass bags out for disposal.*
- 300.2.6 *Contractor is required to clean up daily all asbestos material removed and to keep this material wet throughout the day until bagged.*
- 300.2.7 *Contractor will utilize a solvent for mastic removal (as required), which would not require the workers inside the containment to use a chemical vapor cartridge in addition to their HEPA filters.*

Section 300.3 Clean-up Procedures - Full Containment

- 300.3.1 *Containerize and remove from the work area all visible accumulation of asbestos-containing material and asbestos contaminated debris while maintaining the material wet throughout the duration of the clean-up procedure. Use rubber or plastic tools to pick up or move accumulated waste.*
- 300.3.2 *Remove all containerize waste from the work area.*
- 300.3.3 *Decontaminate all tools and equipment and remove from containment area when they are no longer needed in the cleaning sequence.*
- 300.3.4 *Following complete removal of all asbestos containing materials, a visual inspection by Texas Consulting Services, LLC., shall be conducted.*
- 300.3.5 *Following satisfactory test results of clearance air monitoring the containment is no longer considered contaminated and all materials, remaining barriers at doors, windows and other openings may be removed and properly disposed of, consistent with Item "D" above.*

Section 300.4 Personnel Protection Requirements

- 300.4.1 *Prior to commencement of abatement activities, all personnel who will be required to enter the work area or handle containerized*

- asbestos materials must have received adequate training, and possess a valid license issued by the Texas Department of Health.
- 300.4.2 Special on-site training in use of equipment and procedures unique to each jobsite shall be performed as required.
- 300.4.3 Training in emergency response and evacuation procedures shall be provided.
- 300.4.4 Workers shall be provided with personally issued, individually identified (marked with waterproof designation) respirators and qualitatively fit-tested for each worker.
- 300.4.5 Respirators shall be provided that meet the latest mandatory requirements of the Texas Department of Health, OSHA, EPA, NIOSH, or this Project Manual. In addition to meeting the recommendations of current good practices of industrial hygiene, additional protection will be required to meet these specification requirements as follows:

*Fiber Concentration/cc with HEPA filtration protection based on an 8-hour Time Weighted Average:*

- |                            |  |
|----------------------------|--|
| <i>&gt;0.01 to &lt;0.1</i> | <i>Dual Cartridge Half Face APR with HEPA filtration</i>     |
| <i>&gt;0.1 to &lt;0.5</i>  | <i>Dual Cartridge Full Face or PAPR with HEPA filtration</i> |
| <i>&gt;0.5</i>             | <i>Pressure Demand with Backup Breathing Air</i>             |

- 300.4.6 Backup breathing air must be self-contained emergency egress bottles.
- 300.4.7 Should personnel sample results exceed 0.5 fibers/cc in the work area, then Type "C" Pressure Demand respiratory protection shall be utilized. Should airborne fibers within the work area exceed 1.0 fibers/cc, then work must be discontinued until such a time as alternative measures are taken in the abatement process to reduce fiber concentrations to less than 1.0 fibers/cc.
- 300.4.8 Key points of the respirator program include proper selection of respirator type and size, training of personnel in the proper inspection, donning, use, cleaning, and maintenance procedures for the respirator selected including their use limitations and a good fitting and fit testing program to provide proper protection.

- 300.4.9 *Workers shall be given a qualitative fit test in accordance with procedures detailed in the OSHA standard (29 CFR 1926.58(h)) for all respirators to be used on this abatement project.*
- 300.4.10 *Documentation of adequate respirator fit testing is a contractor responsibility.*
- 300.4.11 *The contractor will not permit anyone wearing a beard or showing face stubble to don a respirator or enter the work area.*
- 300.4.12 *Additional respirators must be available at the work site for authorized visitors who may be required to enter the work area. These respirators are to be sanitized and sealed.*
- 300.4.13 *Disposable clothing including head, foot, and full body protection shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors.*
- 300.4.14 *Hard hats, protective eyewear, gloves, rubber boots and/or specialized items shall be provided as needed or determined by Texas Consulting Services, LLC. for workers, an authorized visitor.*

#### Section 300.5 Waste Disposal Procedures

- 300.5.1 *Disposal must occur at an authorized site in accordance with regulatory requirements of applicable Federal, State and Local guidelines and regulations, and as agreed to in advance, by the Owner. Application for disposal approval shall be made in writing to the EPA and any other required Federal, State or Local authorities and shall contain the following information:*
  - 300.2.1a *The type of waste intended to be disposed of and the name of the premises at which it was generated.*
  - 300.2.1b *The amount of waste designated for disposal, expressed either as cubic yards or containerized materials or lineal feet of individually wrapped materials.*
  - 300.2.1c *The disposal site to which the waste is to be transported.*
  - 300.2.1d *The time-period over which the waste is expected to be transported to the disposal site.*
  - 300.2.1e *The name of the waste generator and the person responsible for transporting the waste to the disposal site.*
- 300.5.2 *Copies shall be made of all dump receipts, trip tickets, transportation manifests or other documentation of disposal and such copies sent to the owner prior to final payment. Record keeping format shall utilize a chain of custody form, which includes the names and addresses of the Generator (Building Owner),*

*Contractor, and the Disposal Site Operator, as the responsibility for the material changes hands. If a separate hauler is employed, his name, address, telephone number and signature should also appear on the form.*

*300.5.3 Once drums, bags and wrapped components have been removed from the work area, they shall be loaded into an enclosed truck or transport vehicle for transportation. Truck enclosure shall have a solid bottom, top, sides, front and back. Enclosed asbestos material area shall be always locked and protected from vandalism.*

*300.5.4 The enclosed cargo area of the truck shall be free of debris and lined with 6-mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Tape all enclosure cracks prior to installation of plastic lining. Floor sheeting shall be installed first and extend 12 inches up the sidewalls. Wall sheeting shall be overlapped and taped into place, and ceiling sheeting is to be installed.*

*300.5.5 Drums shall be carefully placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural components shall be secured to prevent shifting. Bags shall be placed (not thrown) to avoid damage.*

*300.5.6 Personnel loading asbestos-containing waste shall be protected by opaque disposable clothing including head, body, and foot protection and at a minimum, half-face, air purifying, dual cartridge respirators equipped with high efficiency HEPA filters.*

*300.5.7 Any debris or residue observed on containers or surfaces outside of the work area resulting from cleanup or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet cleaning techniques as appropriate.*

*300.5.8 Large metal dumpsters are sometimes used for asbestos waste disposal. These shall have doors or tops that can be closed and locked to prevent vandalism or other disturbance of the bagged asbestos debris. Unbagged material shall not be placed in these containers. Bags shall be placed (not thrown) into these containers to avoid splitting.*

*300.5.9 Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos-containing waste.*

*300.5.10 Bags, drums, and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be*

repacked in empty drums or bags, as necessary. Local requirements may not allow disposal of waste in drums. Check with appropriate agency for alternative procedures.

- 300-5-11 Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of trucks (weight of wet material could rupture containers).
- 300-5-12 Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body, and foot protection and, at a minimum, half-face, air purifying, dual cartridge respirators equipped with high efficiency HEPA filters.
- 300-5-13 Following the removal of all containerized waste, the asbestos cargo area shall be decontaminated using HEPA vacuums and/or wet cleaning techniques to ensure that visible debris has been removed. Polyethylene sheeting shall be removed and discarded along with contaminated cleaning materials and protective clothing, in asbestos labeled bags or drums at the disposal site.
- 300-5-14 If landfill personnel have not been provided with personnel protective equipment for the compaction operation by the landfill operator, Contractor shall supply protective clothing and respiratory protection for the duration of this operation.
- 300-5-15 Wastewater and other liquid waste that contains friable asbestos containing materials that result from an asbestos removal project, an asbestos encapsulation project or an asbestos related maintenance, dismantling or demolition operation may be disposed of by mixing them with solid waste materials and disposing of the mixture in accordance with the requirements of this regulation. Wastewater that cannot be managed in this manner shall be disposed of by one of the following methods:
  - 300-5-15a All shower water waste shall be filtered down to the 1-micron range utilizing filtering mechanisms approved by the appropriate governing regulatory agency. All decontamination shower facilities shall have either a functioning hot water storage capacity of five gallons per on-site worker at 130° Fahrenheit, or a functioning in-line water heater capable of delivering a continuous supply of water at a temperature of 100° Fahrenheit.
  - 300-5-15b Discharge of any other asbestos contaminated wastewater or liquid waste or the use of any other method for the

*Jerry Strong*

*disposal of contaminated liquid wastes shall only be at a location and in a manner specifically approved by the EPA and any other Federal, State or Local authorities in writing.*

*300-5-16 Asbestos-containing waste material shall be treated, packaged, labeled, transported, and disposed of in accordance with 29 CFR 1926-1101 (OSHA), 40 CFR 61-150 (EPA), and 49 CFR 107 et al. (DOT).*

*Section 300-6 Medical/Project Record Keeping*

*300-6-1 Contractor shall submit documentation from a physician that all employees or agents who may be exposed to airborne asbestos more than background levels have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, document that personnel have received medical monitoring as required in OSHA 29 CFR 1926-58 (m). The Contractor must be aware of and provide information to the examining physician about unusual conditions in the workplace environment (elevated temperatures, humidity, chemical contaminants) that may impact on the employee's ability to perform work activities.*

*Section 300-7 Air Monitoring - Full Containment*

*300-7-1 The Contractor shall provide personnel fiber counts utilizing NIOSH Method 7400 "A" counting rules. The person monitoring shall have an Air Monitoring Technicians License issued by the Texas Department of Health, with a current refresher-training certificate. In addition, the air monitoring technician is responsible for managing all monitoring, inspections, and testing required by the OSHA regulation 29 CFR 1926-58 October 1988 version, or a more recent version. This technician must be on-site during removal activities to calibrate airflow, check pump(s) for malfunction, and accurately record on/off times for sampling accuracy. This technician will be asked to provide technical data for approval by Texas Consulting Services, LLC.*

*300-7-2 Texas Consulting Services, LLC. will provide environmental samples during the length of the project and report daily results and*

progress. All air monitoring will be conducted in compliance with sampling requirements made by the Texas Department of Health, OSHA, and EPA, and will accommodate any changes required thereby. Air monitoring results provided by Texas Consulting Services, LLC. will serve as a sole basis for any decision relating to abatement procedures and protocols.

Sampling will be full shift for all samples and be collected as follows.

Background Monitoring

1. Background prevalent level air samples, collected on media for analysis by phase contrast microscopy, will be obtained from representative areas immediately prior to the start of the project start and may be analyzed.

300.7.3

Monitoring During Preparation of the Area for Abatement

1. Any result greater than 0.01 fibers/cc within the abatement area, will be considered excessive and the Contractor will be required to utilize personal protective equipment. A minimum of dual cartridge half mask and full body, disposable coverall including head and foot covering will be necessary.
2. Any result greater than background or 0.01 fibers/cc in adjacent areas will be considered excessive and a complete wipe down of the area will be required.

300.7.4

Contractor will:

300.7.4a Collect/analyze a minimum of 2 or twenty-five percent, whichever is greater, personnel air samples per shift if personnel protective equipment is required under paragraph 1, monitoring during preparation of the area for abatement. Consultant will provide this on-site service should the Contractor desire.

300.7.5

Texas Consulting Services, LLC. will:

300.7.5a Collect/analyze 1 sample for each 1,500 feet<sup>2</sup> of work area per shift (as required).

300-7-5b *Collect/analyze air samples in adjacent outside areas per shift.*

300-7-6 *Required Monitoring During Abatement Activity:*

1. *Results within the abatement area will be consistent with the personal protection worn and in accordance with the Texas Department of Health requirements, OSHA, and this project manual.*
2. *Any result outside the abatement area shall not exceed 0.01 fibers/cc or background, whichever is greater. Results greater than 0.01 fibers/cc will require a complete wipe down of the area and retesting to demonstrate that control of the area has been re-established. All abatement work will stop until such a time as control of the adjacent area has been established as demonstrated by air monitoring.*
3. *Any result inside the containment area greater than .20 fibers/cc will require current activity to stop and to initiate a change in activity yielding lower fiber counts.*

300-7-7 *Required Clean-Up and Monitoring Upon Completion of Abatement Activity*

300-7-7a *Standard of cleaning for Final Clearance: Consider work areas and all other decontaminated and cleaned areas clean when:*

1. *Surfaces are free from dust, dirt, residue, and debris from abatement operations or other activities subordinate to these operations.*
2. *Level of cleanliness has been approved by Project Manager.*
3. *Air testing performed by Project Manager indicates that the air in the work area is acceptable, as specified in this section.*

300-7-7b *Containment and enclosure clearance sequence.*

1. *Wet clean and HEPA-vacuum all surfaces in the work area.*
2. *Clean all equipment (excluding that which will be needed for further cleaning phases) used in the work areas and remove from work areas via the equipment decontamination enclosure system.*

3. *Replace all pre-filters in air filtration devices with clean filters. Clean all air filtration devices.*
4. *Notify Project Manager for observation to determine completeness of cleaning. Re-clean and continue to clean, at Contractor's expertise, areas with visible dust, dirt, or debris.*
5. *Once Project Manager has accepted the area as clean, Project Manager will perform air testing using NIOSH 7400 Method. If airborne fiber concentrations are greater than 0.03 fibers/cc, a three-hour waiting period and subsequent cleaning will be required. Project Manager will perform additional testing at Contractor's expense, and sequence will continue until airborne fiber concentrations of 0.03 fibers/cc or less are achieved. This pre-encapsulation air testing may be waived if all work area air samples collected during final cleaning stages indicate airborne fiber concentrations of 0.03 fibers/cc or less.*
6. *Following the cleaning sequence, when the air fiber count is 0.03 fibers/cc or less, and prior to removing the first layer of plastic sheeting, apply one coat of sealant to all surfaces. Apply sealant as follows:*
  - A) *Misting, spraying, and pumping equipment, as recommended by the encapsulant material's manufacturer, shall be used.*
  - B) *Encapsulant shall be applied by procedures as recommended by the manufacturer's written instructions and shall be the one approved for this work.*
7. *After sealant is applied to all surfaces in the work area, allow a minimum two-hour drying period. Additional drying time may be required.*
8. *Notify Project Manager for observation to determine completeness of cleaning.*
9. *PCM Final Clearance Testing as follows:*
  - A) *Project Manager will assess for the final air clearance levels once the work area is observed by the Project Manager to be visually decontaminated. Final clearance air testing shall be performed using aggressive sampling techniques.*
  - B) *At least three (3) samples per work area will be collected and analyzed. The area will be considered clean if all samples indicate airborne fiber concentrations area 0.01 fibers/cc or*

ambient prevalent level, whichever is greater, calculated at the 95% upper confident level (UCL), or less.

- C) Re-clean, and continue to clean at Contractor's expense, areas which do not comply with the specified final clearance level. Contractor shall bear the cost of all follow-up tests necessitated by the failure of the air tests to meet the specified final clearance level.
- 10. If TEM final clearance testing is employed, the area will be considered clean if all samples indicate asbestos structure densities of 70 structures per square millimeter or less.
- 11. Upon notification from the Project Manager that final clearance samples indicate acceptable airborne levels, dismantle work area containment and thoroughly HEPA-vacuum and wet clean immediate areas.
- 12. Dispose of debris from removal operation, used cleaning materials, unsalvageable materials used for sturdy barriers, and any other remaining materials. Consider the materials to be contaminated and dispose of accordingly.

All samples must meet specified clearance levels for the area being evaluated to be considered clean.

- 1. Final clearance air samples will be of at least 1250 liters of air, collected at a flow rate from 5 to 15 liters per minute.
- 2. Visual observations will be made by the Project Manager after final clean-up and de-mobilization to determine the presence of visible dust, dirt, debris, and abatement refuse indicative of improper cleaning and decontamination procedures.
- 3. Contractor shall perform additional cleaning at no additional expense to Owner if, in the opinion of the Project Manager, based upon the final visual observation, previous clean-up operations were determined to be inadequate.

300.7.8 Contractor will:

- 300.7.8a Monitor at least 25% of all abatement personnel on a daily (full shift) basis. Rotate samples such that all workers area monitored periodically. Pumps should be worn by at least

*one worker removing and at least one worker bagging debris.*

*300.7.9 Texas Consulting Services, LLC. will:*

- 300.7.9a Collect/analyze area samples within the containment area during each shift.*
- 300.7.9b Collect/analyze a sample in the exhaust of each pressure differential device air machine per shift.*
- 300.7.9c Collect/analyze a sample within the clean room per shift.*
- 300.7.9d Collect/analyze 1 area sample in each adjacent area (outside each critical barrier) each shift.*
- 300.7.9e Collect/analyze 1 area sample outside the load out facility, per shift, while it is in use.*

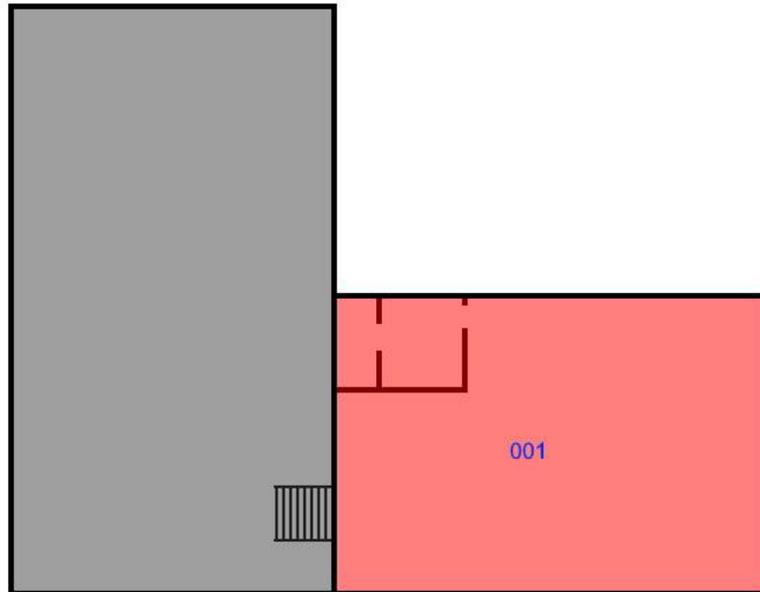
# TAB 2

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# FLOOR PLANS

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Salvation Army Building  
Basement  
ACM Ceilings



 C02 - Popcorn Ceiling Texture

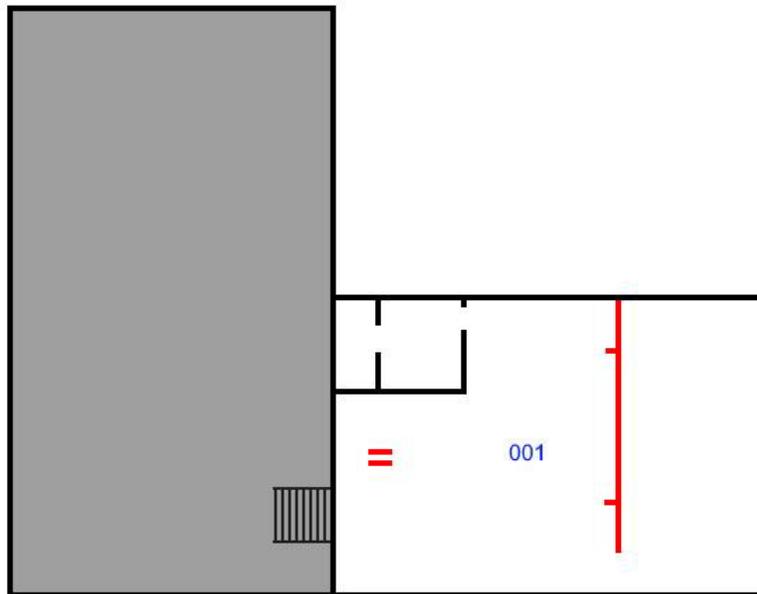


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# Salvation Army Building

Basement

ACM Pipe & Fitting Insulation

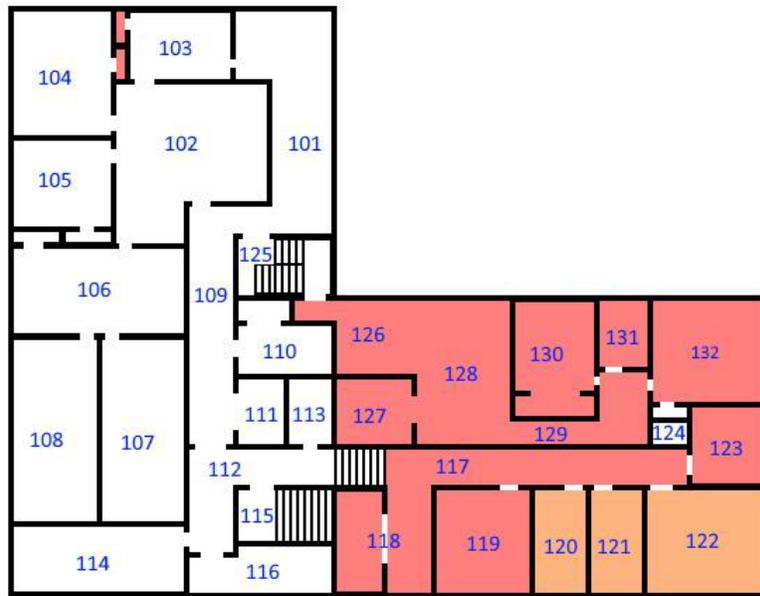


 Pipe insulation (ACM mud/mastic on outer layer in some areas) and Pipe Fitting Insulation. These materials are assumed to exist throughout the building.



# Salvation Army Building

Ground Floor  
ACM Ceilings



- C02 - Popcorn Ceiling Texture
- C04 - Drywall w/ Tape, Bed, & Drag Texture (<1%)

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# Salvation Army Building

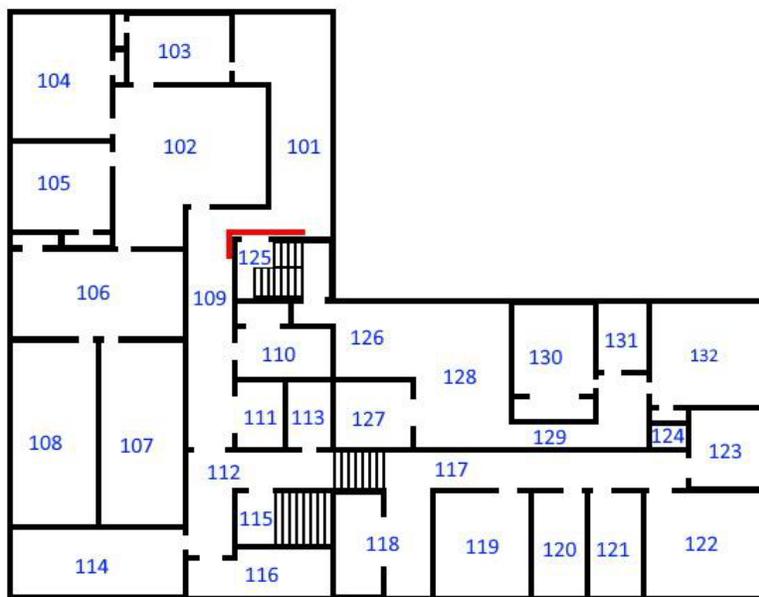
Ground Floor  
ACM Floors



-  F01 - 12x12 Resilient Floor Tile - White w/ Multi Accents & Black Mastic
-  F02 - 12x12 Resilient Floor Tile - Brown w/ Multi Accents & Black Mastic



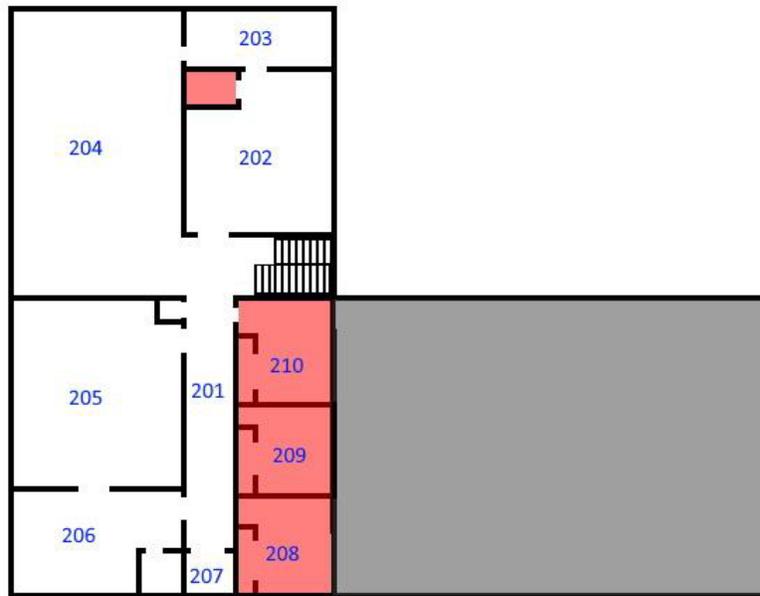
Salvation Army Building  
Ground Floor  
ACM Pipe & Fitting Insulation



 Pipe insulation (ACM mud/mastic on outer layer in some areas) and Pipe Fitting Insulation. These materials are assumed to exist throughout the building.

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Salvation Army Building  
2nd Floor  
ACM Ceilings



 C02 - Popcorn Ceiling Texture



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# Salvation Army Building

2nd Floor  
ACM Floors



-  F01 - 12x12 Resilient Floor Tile - White w/ Multi Accents & Black Mastic
-  F02 - 12x12 Resilient Floor Tile - Brown w/ Multi Accents & Black Mastic



# TAB 3

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*ETECH ENVIRONMENTAL  
INSPECTION REPORT  
JUNE 10, 2022 - JUNE 11, 2022*



## Asbestos Survey Report

Project:  
300 S. Baird Street  
Midland, TX

For:  
Midland County  
P.O. Box 421  
Midland, TX 79702

E-Tech Project # 1245-12541-000

Inspection Date: 10-11 June 2020

Report Date: 17 June 2020

## Table of Contents

<b>1.0</b>	<b>Executive Summary.....</b>	<b>3</b>
<b>2.0</b>	<b>Asbestos Bulk Sampling Methodology .....</b>	<b>3</b>
<b>3.0</b>	<b>Conclusions.....</b>	<b>4</b>
<b>4.0</b>	<b>Recommendations.....</b>	<b>4</b>
<b>5.0</b>	<b>Limitations .....</b>	<b>4</b>
<b>6.0</b>	<b>Use by Third Parties.....</b>	<b>5</b>
<b>7.0</b>	<b>Unidentifiable Conditions .....</b>	<b>5</b>

## Attachments

**Attachment 1** - Asbestos Lab PLM Bulk Results

**Attachment 2** - Chain of Custody

**Attachment 3** - Site Diagrams

**Attachment 4** - Copy of E-Tech Licenses

## 1.0 Executive Summary

On June 10-11, 2020, Wally McNeil and Brandon Smitherman of E-Tech Environmental & Safety Solutions performed a visual inspection and collected bulk samples of suspect asbestos-containing materials found in the building located at 300 S. Baird Street in Midland, Texas. A total of sixty (67) samples were collected from twenty-one (21) homogeneous materials. The suspect asbestos-containing materials identified were:

\*Contains Asbestos by PLM  
\*\* Contains less than 1% Asbestos by PLM  
\*\*\*Assumed to contain Asbestos to prevent damage

HA	ACM	Description	Est. SF
C01		24x24 Suspended Acoustical Tile - Fissured & Perforated	3145
C02	*	Popcorn Texture	2248
C03		Vinyl-Covered Gypsum board	1263
C04	**	Drywall w/ Tape, Bed, & Drag Texture	297
C05		24x48 Suspended Acoustical Tile - Fissured & Perforated	10935
F01	*	12x12 Resilient Floor Tile - White w/ Multi Accents & Black Mastic	1633
F02	*	12x12 Resilient Floor Tile - Brown w/ Multi Accents & Black Mastic	144
F03		Linoleum - White w/ Multi Accents	846
F04		Linoleum - Gray Slate Pattern	184
M01		Stair Tread Glue - Gold (Under Black Rubber)	105
M02		Window Glaze	100
P01	*	Pipe Insulation	Throughout
P02	*	Pipe Fitting Insulation	Throughout
R01		Rolled Roofing	34160
R02		Roof Flashing	1500
W01		Vinyl-covered Gypsum Panels	15108
W02		Vinyl Cove Base - 6" Brown	177
W03		Vinyl Cove Base - 6" Green	182
W04		Vinyl Cove Base - 4" Brown	223
W05		Drywall w/ Tape, Bed, & Modern Drag Texture	160
W06		Drywall w/ Tape, Bed, & Smooth Texture	2650

The suspect asbestos-containing materials were submitted under chain of custody for analysis by Polarized Light Microscopy (PLM) to J3 Resources, a NVLAP accredited bulk PLM laboratory located in Houston, Texas.

## 2.0 Asbestos Bulk Sampling Methodology

Suspect asbestos bulk samples were collected and placed in zip-lock bags for laboratory analysis. The sampling was performed to identify asbestos in specific suspect asbestos-containing materials. The samples were submitted for analysis via polarized light microscopy (PLM).

The PLM method is the most commonly used method to analyze building materials for the presence of asbestos. The PLM method is in accordance with the EPA Interim Method of the Determination of Asbestos in Bulk Samples. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a sample.

The detection limit of the PLM method for asbestos identification is approximately one percent asbestos.

### **3.0 Conclusions**

Homogeneous materials C02, F01, F02, P01, and P02 tested positive for asbestos – greater than 1% – by PLM.

Homogeneous material C04 tested positive for asbestos – less than 1% – by PLM.

### **4.0 Recommendations**

A copy of this survey should be kept on site during demolition or renovation activities.

Materials containing 1% or greater asbestos should be abated prior to demolition or renovation activities which would cause the materials to be disturbed.

Materials containing less than 1% asbestos are not regulated, however there is no safe level of exposure to asbestos. Etech recommends the use of wet methods, containments, and respiratory protection at minimum during the removal of these materials.

Asbestos abatement (of materials 1% asbestos or greater) must be conducted by licensed asbestos abatement workers employed by a licensed asbestos abatement company.

Abatements must be designed by a licensed asbestos consultant and a representative of the asbestos consultant must be present during asbestos abatement on the interior of public buildings in the State of Texas. Etech can provide asbestos consulting services.

If suspect asbestos-containing materials other than those already tested are encountered during demolition, then they should be assumed to contain asbestos or they should be tested to prove otherwise.

### **5.0 Limitations**

The field observations, measurements and research reported herein are considered sufficient in detail and scope to determine the asbestos content of the tested materials at the subject property on the date of the inspection. The assessment, conclusions and recommendations presented herein are based upon specifically limited data. They do not represent all conditions at the subject property. E-Tech warrants the findings and conclusions contained herein have been promulgated in accordance with generally accepted industrial hygiene methodology and only for the site described in this report.

## 6.0 Use by Third Parties

This report was prepared pursuant to the agreement between E-Tech, and Midland County. The agreement relationship included an exchange of information about the subject property. Reliance or any use of this report by anyone other than the client(s), for whom it was prepared, is prohibited and therefore not foreseeable to E-Tech.

Reliance or use by any such third party without express written authorization from E-Tech does not make said third party a third-party beneficiary to E-Tech's agreement with the client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

## 7.0 Unidentifiable Conditions

This asbestos related environmental consulting report has been developed to provide the client with information regarding apparent conditions related to limited accessible building materials in the subject property. Although E Tech believes that the findings and conclusions provided in this report are reasonable, the assessment is necessarily limited to the conditions observed and to the information available at the time of the inspection. Due to the nature of the work, there is a possibility conditions exist that could not be identified within the scope of the assessment or which were not apparent at the time it was conducted. It is also possible that the testing methods employed at the time of the report may later be superseded by other methods. E-Tech does not accept responsibility for changes in the state of the art.

We have employed state-of-the-art practices to perform this analysis of risk and identification, but this evaluation is limited in scope to the areas listed above. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles and practices.

Written by,



Brandon Smitherman  
Texas Asbestos Inspector  
License # 60-3048  
Expires: 9/1/2020

Reviewed and approved by,



Ronnie Matte  
Texas Individual Asbestos Consultant  
License # 10-5771  
Expires: 2/13/2022

Asbestos Inspection  
300 S. Baird  
Midland, TX

Midland County  
P.O. Box 421  
Midland, TX

## **PLM Laboratory Results**



**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**

**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

**Brandon Smitherman**  
**Etech Environmental & Safety Solutions, Inc.**  
**P.O. Box 62228**  
**Midland TX 79711**

**J3 Order #:** JH20119903  
**Project #:** 12541  
**Date Received:** 12-Jun-2020  
**Date Analyzed:** 12-Jun-2020  
**Date Reported:** 17-Jun-2020

**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents
1	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 40% Mineral Wool 40% Non-Fibrous Material 20%
2	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 40% Mineral Wool 40% Non-Fibrous Material 20%
3	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 40% Mineral Wool 40% Non-Fibrous Material 20%
4	Popcorn Texture, White, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
5	Popcorn Texture, White, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
6	Popcorn Texture, White, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
7	Popcorn Texture, White, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
8	Popcorn Texture, White, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
9	Ceiling Tile, White/ Lt. Pink, Homogeneous	None Detected	Cellulose Fiber 10% Fibrous Glass <1% Non-Fibrous Material 90%

Revision: Pg 3 - include results for sample  
 20 layer 2

Juliann Johnson Analyst

  
 Scott Ward, Ph.D. Lab Director

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents
10	Ceiling Tile, White/ Lt. Pink, Homogeneous	None Detected	Cellulose Fiber 10% Fibrous Glass <1 Non-Fibrous Material 90%
11	Ceiling Tile, White/ Lt. Pink, Homogeneous	None Detected	Cellulose Fiber 10% Fibrous Glass <1 Non-Fibrous Material 90%
12	LAYER 1 Texture, White, Homogeneous	Chrysotile <1%	Non-Fibrous Material 100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber 100%
	LAYER 3 Joint Compound, White, Homogeneous	Chrysotile <1%	Non-Fibrous Material 100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber 10% Fibrous Glass <1 Non-Fibrous Material 90%
13	LAYER 1 Texture, White, Homogeneous	Chrysotile <1%	Non-Fibrous Material 100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber 10% Fibrous Glass <1 Non-Fibrous Material 90%
14	Joint Compound, White, Homogeneous No Wallboard Present	None Detected	Non-Fibrous Material 100%
15	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 50% Mineral Wool 30% Non-Fibrous Material 20%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents
16	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 50% Mineral Wool 30% Non-Fibrous Material 20%
17	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber 50% Mineral Wool 30% Non-Fibrous Material 20%
18	LAYER 1 Floor Tile, White, Homogeneous	None Detected	Non-Fibrous Material 100%
	LAYER 2 Mastic, Yellow/ Black, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
19	LAYER 1 Floor Tile, White, Homogeneous	None Detected	Non-Fibrous Material 100%
	LAYER 2 Mastic, *Not analyzed per client request		
20	LAYER 1 Floor Tile, White, Homogeneous	None Detected	Non-Fibrous Material 100%
	LAYER 2 Mastic, Yellow/ Black, Homogeneous	Chrysotile 3%	Non-Fibrous Material 97%
21	LAYER 1 Floor Tile, Brown, Homogeneous	Chrysotile 2%	Non-Fibrous Material 98%
	LAYER 2 Mastic, Black, Homogeneous	Chrysotile 5%	Non-Fibrous Material 95%
22	Flooring, *Not analyzed per client request		
23	Flooring, *Not analyzed per client request		

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
24	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	30% <1 70%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
25	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	30% <1 70%
	LAYER 2 Mastic, Yellow/ Brown, Homogeneous	None Detected	Non-Fibrous Material	100%
26	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	30% <1 70%
	LAYER 2 Mastic, Yellow/ Brown, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 3 Leveling Compound, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
27	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 3 Wood, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	95% 5%

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 Scott Ward, Ph.D. Lab Director

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**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
28	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 3 Wood, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	95% 5%
29	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 3 Wood, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	95% 5%
30	Stair Tread Mastic, Brown/ Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
31	LAYER 1 Stair Tread, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
32	Stair Tread Mastic, Brown/ Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
33	Window Glazing, White, Homogeneous	None Detected	Non-Fibrous Material	100%
34	Window Glazing, White, Homogeneous	None Detected	Non-Fibrous Material	100%

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**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents
35	Window Glazing, White, Homogeneous	None Detected	Non-Fibrous Material 100%
36	LAYER 1 Paper/ Foil Wrap, Beige/ Silver, Homogeneous	None Detected	Cellulose Fiber 45% Fibrous Glass 10% Non-Fibrous Material 45%
	LAYER 2 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%
37	LAYER 1 Mastic Wrap, White, Homogeneous	None Detected	Cellulose Fiber 80% Non-Fibrous Material 20%
	LAYER 2 Paper/ Foil Wrap, Beige/ Silver, Homogeneous	None Detected	Cellulose Fiber 45% Fibrous Glass 10% Non-Fibrous Material 45%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%
38	LAYER 1 Mastic, Beige, Homogeneous	Chrysotile 2%	Non-Fibrous Material 98%
	LAYER 2 Paper/ Foil Wrap, Beige/ Silver, Homogeneous	None Detected	Cellulose Fiber 45% Fibrous Glass 10% Non-Fibrous Material 45%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%

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**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**

**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

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**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents
39	LAYER 1 Mastic Wrap, White, Homogeneous	Chrysotile 5%	Fibrous Glass 15% Non-Fibrous Material 80%
	LAYER 2 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%
40	LAYER 1 Mastic Wrap, *Not analyzed per client request		
	LAYER 2 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%
41	LAYER 1 Mastic Wrap, *Not analyzed per client request		
	LAYER 2 Paper/ Foil Wrap, Beige/ Silver, Homogeneous	None Detected	Cellulose Fiber 45% Fibrous Glass 10% Non-Fibrous Material 45%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool 95% Non-Fibrous Material 5%
42	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material 100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous No Rolled Roofing Present	None Detected	Cellulose Fiber 10% Non-Fibrous Material 90%

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 Scott Ward, Ph.D. Lab Director

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
43	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous No Rolled Roofing Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
44	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous No Rolled Roofing Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
45	LAYER 1 Cove Base, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Roof Flashing Present	None Detected	Non-Fibrous Material	100%
46	LAYER 1 Cove Base, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Roof Flashing Present	None Detected	Non-Fibrous Material	100%
47	LAYER 1 Cove Base, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Roof Flashing Present	None Detected	Non-Fibrous Material	100%
48	LAYER 1 Cove Base, Green, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Wallboard Present	None Detected	Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
49	LAYER 1 Cove Base, Green, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Wallboard Present	None Detected	Non-Fibrous Material	100%
50	LAYER 1 Cove Base, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous No Wallboard Present	None Detected	Non-Fibrous Material	100%
51	LAYER 1 Cove Base, Brown, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Brown, Homogeneous	None Detected	Non-Fibrous Material	100%
52	LAYER 1 Cove Base, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
53	LAYER 1 Cove Base, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
54	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
55	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
56	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%

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57	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
58	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
59	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous No Cove Base Present	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%

Juliann Johnson Analyst

  
 Scott Ward, Ph.D. Lab Director

This report relates only to the materials tested. This report is for the exclusive use of the addressed client and shall not be reproduced except in full, without written approval by J3 Resources, Inc. (J3). Samples are analyzed according to the methods listed above and are subject to the inherent limitations of PLM and interference of matrix components. Reporting limit for the above method is a function of the quantity of sample analyzed, matrix interference, sample preparation, fiber size, and distribution. Asbestos may be detected in concentrations of <1% by area if sufficient material is analyzed. J3 recommends TEM confirmation of soils, vermiculite and non-friable organically bound materials (NOB) reported as None Detected or < 1% Asbestos by PLM. All samples received in good condition unless otherwise noted. This report shall not be used to claim product approval, certification, or endorsement by NVLAP, NIST, or any agency of the federal government.



**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**

**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

**Brandon Smitherman**  
**Etech Environmental & Safety Solutions, Inc.**  
**P.O. Box 62228**  
**Midland TX 79711**

**J3 Order #:** JH20119903  
**Project #:** 12541  
**Date Received:** 12-Jun-2020  
**Date Analyzed:** 12-Jun-2020  
**Date Reported:** 17-Jun-2020

**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
60	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
61	LAYER 1 Paint Texture, Lt. Blue, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
62	Roof Tar, Silver/ Black, Homogeneous No Wallboard System Present	None Detected	Fibrous Glass Non-Fibrous Material	<1% 100%
63	Roof Tar, Silver/ Black, Homogeneous No Wallboard System Present	None Detected	Fibrous Glass Non-Fibrous Material	<1% 100%
64	Roof Tar, Silver/ Black, Homogeneous No Wallboard System Present	None Detected	Fibrous Glass Non-Fibrous Material	<1% 100%
65	Roof Tar, Silver/ Black, Homogeneous No Wallboard System Present	None Detected	Cellulose Fiber Non-Fibrous Material	3% 97%

Juliann Johnson Analyst

  
 Scott Ward, Ph.D. Lab Director

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**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**

**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

**Brandon Smitherman**  
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**J3 Order #:** JH20119903  
**Project #:** 12541  
**Date Received:** 12-Jun-2020  
**Date Analyzed:** 12-Jun-2020  
**Date Reported:** 17-Jun-2020

**Salvation Army Building (Revised)**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
66	LAYER 1 Roll Roofing, Silver/ Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	8% 92%
	LAYER 2 Tar, Black, Homogeneous No Wallboard System Present	None Detected	Non-Fibrous Material	100%
67	LAYER 1 Roof Tar, Silver/ Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	3% 97%
	LAYER 2 Mesh Tape, Black, Homogeneous No Wallboard System Present	None Detected	Fibrous Glass Non-Fibrous Material	90% 10%

Juliann Johnson Analyst

  
 Scott Ward, Ph.D. Lab Director

This report relates only to the materials tested. This report is for the exclusive use of the addressed client and shall not be reproduced except in full, without written approval by J3 Resources, Inc. (J3). Samples are analyzed according to the methods listed above and are subject to the inherent limitations of PLM and interference of matrix components. Reporting limit for the above method is a function of the quantity of sample analyzed, matrix interference, sample preparation, fiber size, and distribution. Asbestos may be detected in concentrations of <1% by area if sufficient material is analyzed. J3 recommends TEM confirmation of soils, vermiculite and non-friable organically bound materials (NOB) reported as None Detected or < 1% Asbestos by PLM. All samples received in good condition unless otherwise noted. This report shall not be used to claim product approval, certification, or endorsement by NVLAP, NIST, or any agency of the federal government.

Asbestos Inspection  
300 S. Baird  
Midland, TX

Midland County  
P.O. Box 421  
Midland, TX

## **Chain of Custody**

# IH CHAIN OF CUSTODY



J3 Resource:

Open Lab Fee

J3 Order # (Lab Use Only)  
**119903**

<b>Submitter Name:</b> Brandon Smitherman	<b>Bill to:</b> E-Tech Environmental
<b>Company:</b> E-Tech Environmental	<b>Address:</b> P.O. Box 62228
<b>Address:</b> 13000 W. CR 100	
<b>City/State:</b> Midland, TX	<b>City/State:</b> Midland, TX <b>Zip:</b> 79711
<b>Zip:</b> 79711	<b>PO #:</b>

### Project Information

<b>Project Name:</b> Salvation Army Building	<b>Project Manager:</b> Brandon Smitherman
<b>Project #:</b> 12541	<b>Telephone - Office/Cell:</b> 432-894-2100
<b>Reports - Email Address:</b> b.smitherman@etechenv.com	
<b>Invoice - Email Address:</b> kristi@etechenv.com	<b>Notification By:</b> Email: <input type="checkbox"/> Verbal: <input type="checkbox"/>

Special Instructions:

### Turnaround Times - Please Select One

<b>Emergency*</b> <input type="checkbox"/>	<b>1 Day</b> <input checked="" type="checkbox"/>	<b>2 Day</b> <input type="checkbox"/>	<b>3 Day</b> <input type="checkbox"/>	<b>5 Day</b> <input type="checkbox"/>
--	--	---------------------------------------	---------------------------------------	---------------------------------------

### ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
<b>EPA 600/R-93/116</b> <input checked="" type="checkbox"/> Visual Estimation (<1%) <input type="checkbox"/> 400 Point Count 0.25% <input type="checkbox"/> 1,000 Point Count 0.1% <input type="checkbox"/> Gravimetric Reduction <input type="checkbox"/> Matrix Reduction (+/-) <input type="checkbox"/> NIOSH 9002 <input type="checkbox"/> OSHA ID-191	<input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> ASTM D7201 <input type="checkbox"/> ISO 8672 <input type="checkbox"/> OSHA ID-160	<input type="checkbox"/> AHERA <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> ASTM D6281 <input type="checkbox"/> ISO 10312 <input type="checkbox"/> ISO 13794	<input type="checkbox"/> Gravimetric Reduction (<1%) <input type="checkbox"/> Matrix Reduction (+/-) <input type="checkbox"/> Qualitative (+/-) <input type="checkbox"/> Drop Mount <input type="checkbox"/> Filtration	<input type="checkbox"/> EPA 100.2 Drinking Water <input type="checkbox"/> >10 µm fibers <input type="checkbox"/> ≥0.5 µm fibers <input type="checkbox"/> EPA 100.2 Effluent / WW Received on ice: <input type="checkbox"/> Yes <input type="checkbox"/> No Temp: _____	<input type="checkbox"/> ASTM D5755 Microvac <input type="checkbox"/> ASTM D6480 Wipe <input type="checkbox"/> 600/J-93/167 Carpet - EPA <input type="checkbox"/> Bulk Dust Qualitative	<input type="checkbox"/> ASTM 7521-TEM (+/-) <input type="checkbox"/> ASTM 7521-TEM (<1%) <input type="checkbox"/> CARB 435-Modified <input type="checkbox"/> Soil - PLM Only (+/-) <input type="checkbox"/> Vermiculite - TEM (+/-) <input type="checkbox"/> Vermiculite-Cincinnati <input type="checkbox"/> Erionite ID

### METALS

### SILICA/PARTICULATES

Flame AA	Graphite Furnace AA - LEAD	ICP	X-Ray Diffraction / Gravimetric
<input type="checkbox"/> Lead in Paint - SW846 7420/3050B <input type="checkbox"/> Lead in Air - NIOSH 7082 <input type="checkbox"/> Lead in Wipes - SW846 7420/3050B <input type="checkbox"/> Lead in Soil - SW846 7420/3050B <input type="checkbox"/> TCLP - SW846-1311/6010B	<input type="checkbox"/> Drinking Water - EPA 200.9 <input type="checkbox"/> Wastewater - SW846-7421 <input type="checkbox"/> Soil/Sludge - SW846-7421 <input type="checkbox"/> Air - NIOSH 7105	<input type="checkbox"/> Elements in Air - NIOSH 7300 <input type="checkbox"/> Wipe/Soil - SW846-6010B <input type="checkbox"/> Effluent - SW846-6010B <input type="checkbox"/> Welding Fume - NIOSH 7300M	<input type="checkbox"/> Respirable Crystalline Silica NIOSH 7500 / OSHA 142 <input type="checkbox"/> NIOSH 0500 - Total Particulates <input type="checkbox"/> NIOSH 0600 - Respirable Particulates

**Total Number of Samples Submitted:** 67 **Positive Stop:**  YES  NO

### Signatures

<b>Relinquished By:</b> _____	<b>Date:</b> 6/11/2020	<b>Time:</b> 13:30
<b>Received By:</b> _____	<b>Date:</b> 6/11/2020	<b>Time:</b> 0:58
<b>Relinquished By:</b> _____	<b>Date:</b> _____	<b>Time:</b> _____
<b>Received By:</b> _____	<b>Date:</b> _____	<b>Time:</b> _____

\*Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.  
 \*\*TAT's are in Business Days rather than Hours (i.e.1 Day TAT = End of Next Business Day)



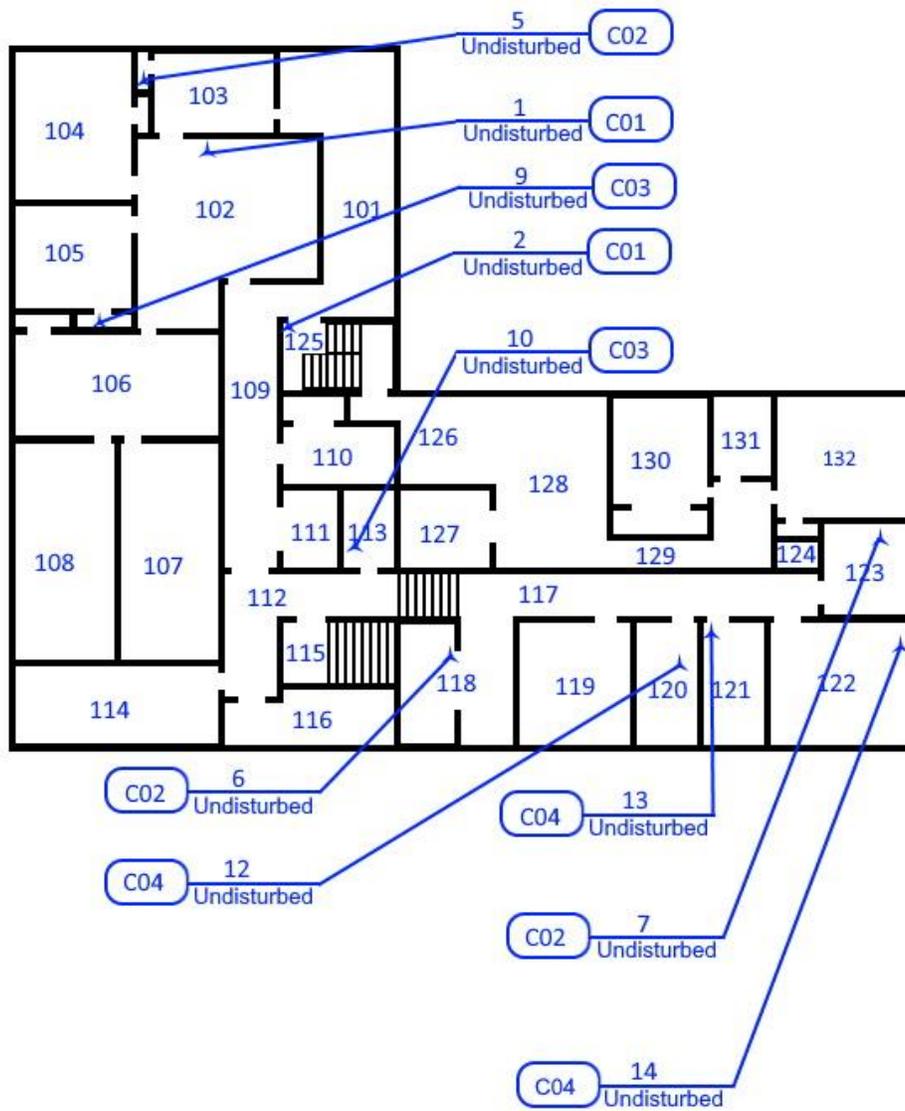
Asbestos Inspection  
300 S. Baird  
Midland, TX

Midland County  
P.O. Box 421  
Midland, TX

## Site Diagrams

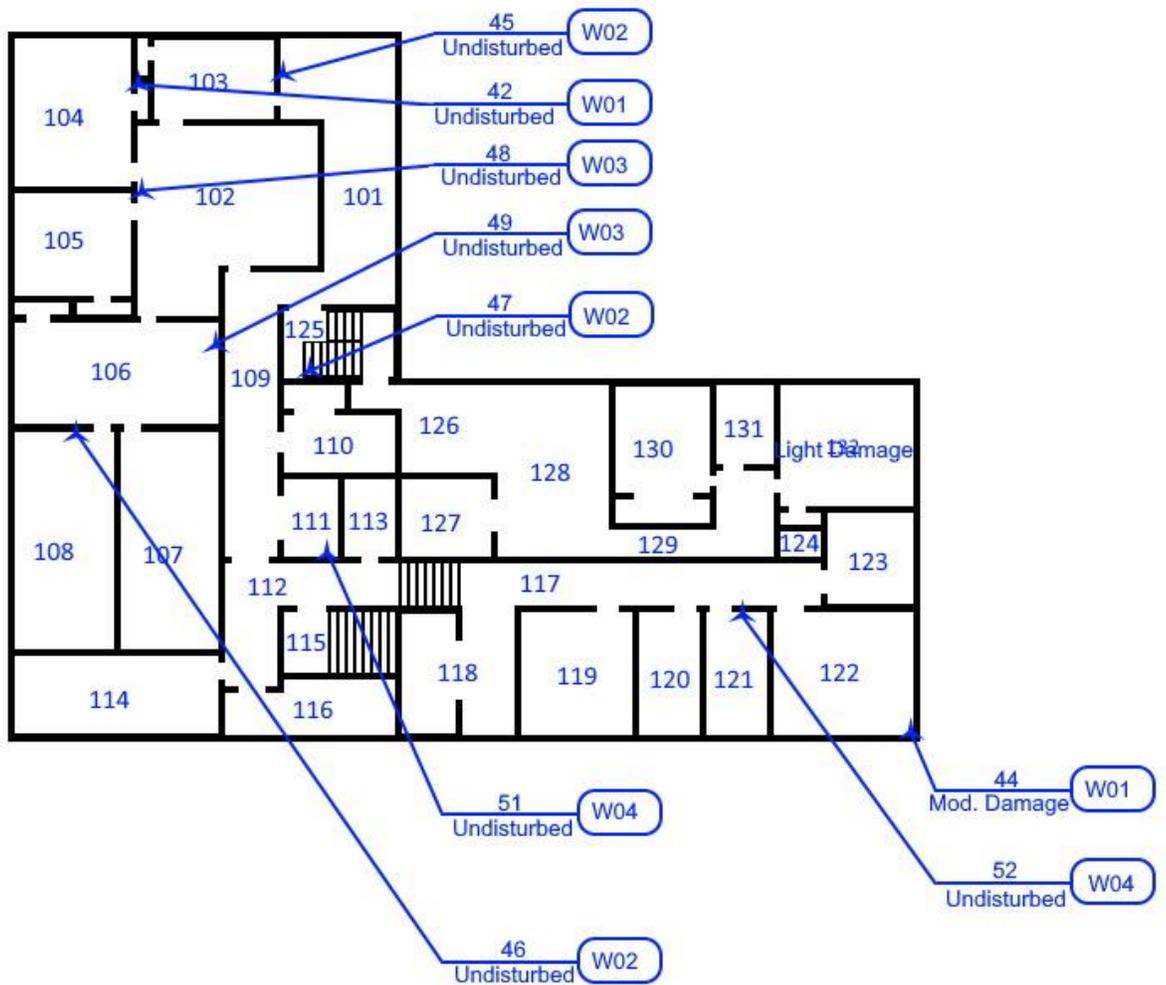
# Salvation Army Building

Ground Floor  
Sample Locations - Ceilings



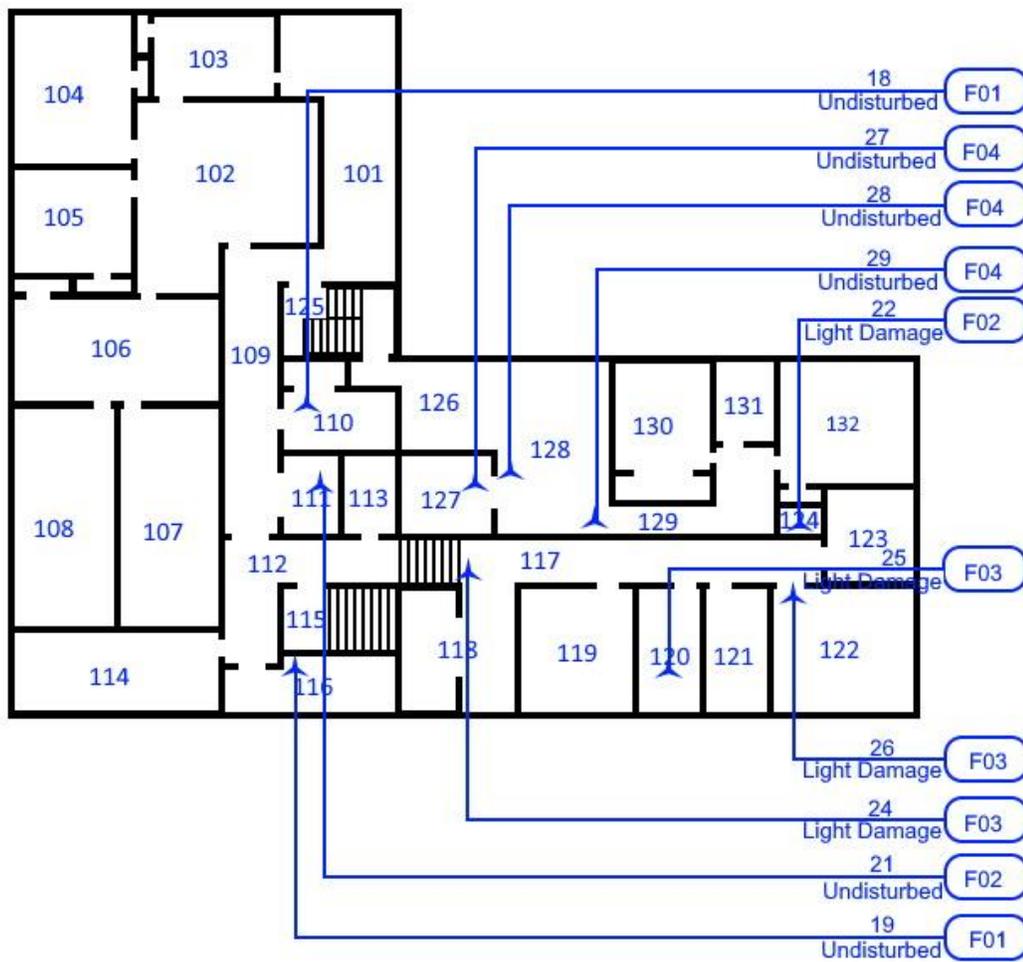
# Salvation Army Building

Ground Floor  
Sample Locations - Walls



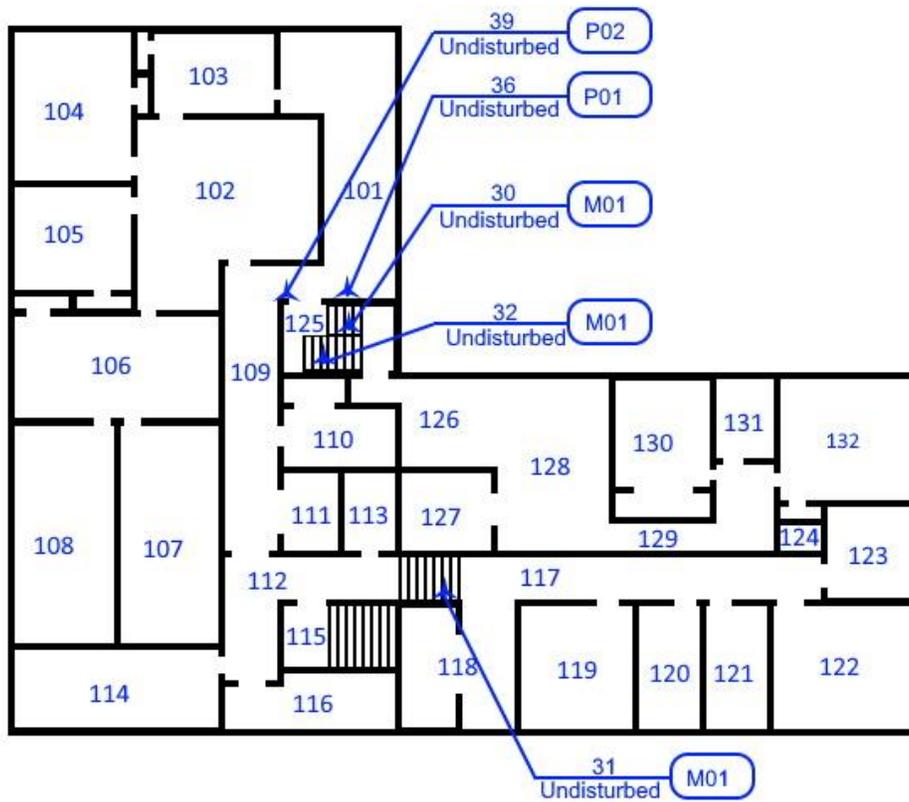
# Salvation Army Building

Ground Floor  
Sample Locations - Flooring



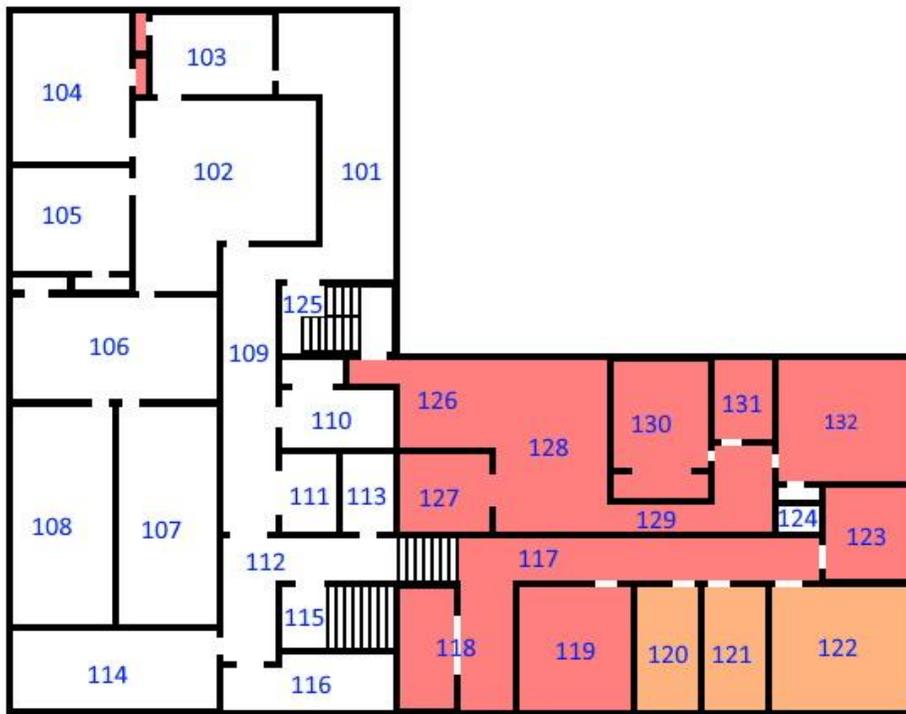
# Salvation Army Building

Ground Floor  
Sample Locations - Pipe & Misc



# Salvation Army Building

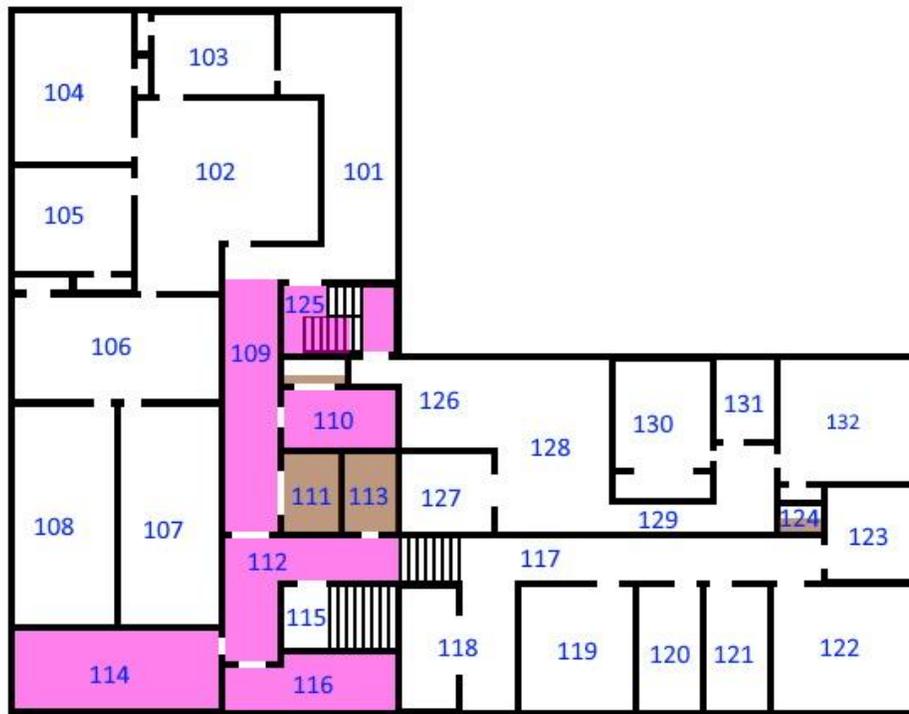
Ground Floor  
ACM Ceilings



-  C02 - Popcorn Ceiling Texture
-  C04 - Drywall w/ Tape, Bed, & Drag Texture (<1%)

# Salvation Army Building

Ground Floor  
ACM Floors

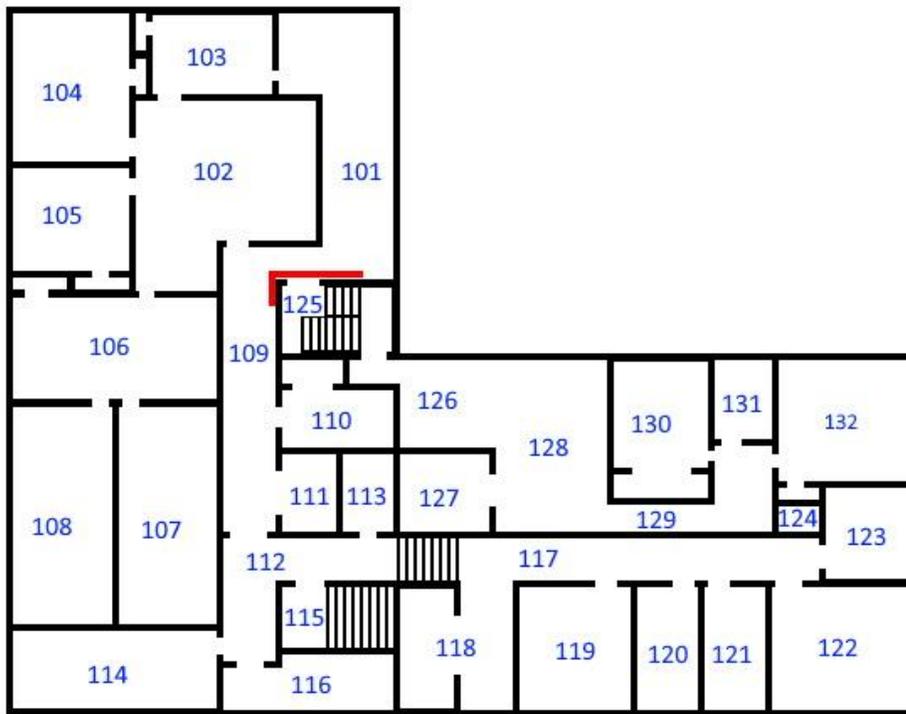


-  F01 - 12x12 Resilient Floor Tile - White w/ Multi Accents & Black Mastic
-  F02 - 12x12 Resilient Floor Tile - Brown w/ Multi Accents & Black Mastic



# Salvation Army Building

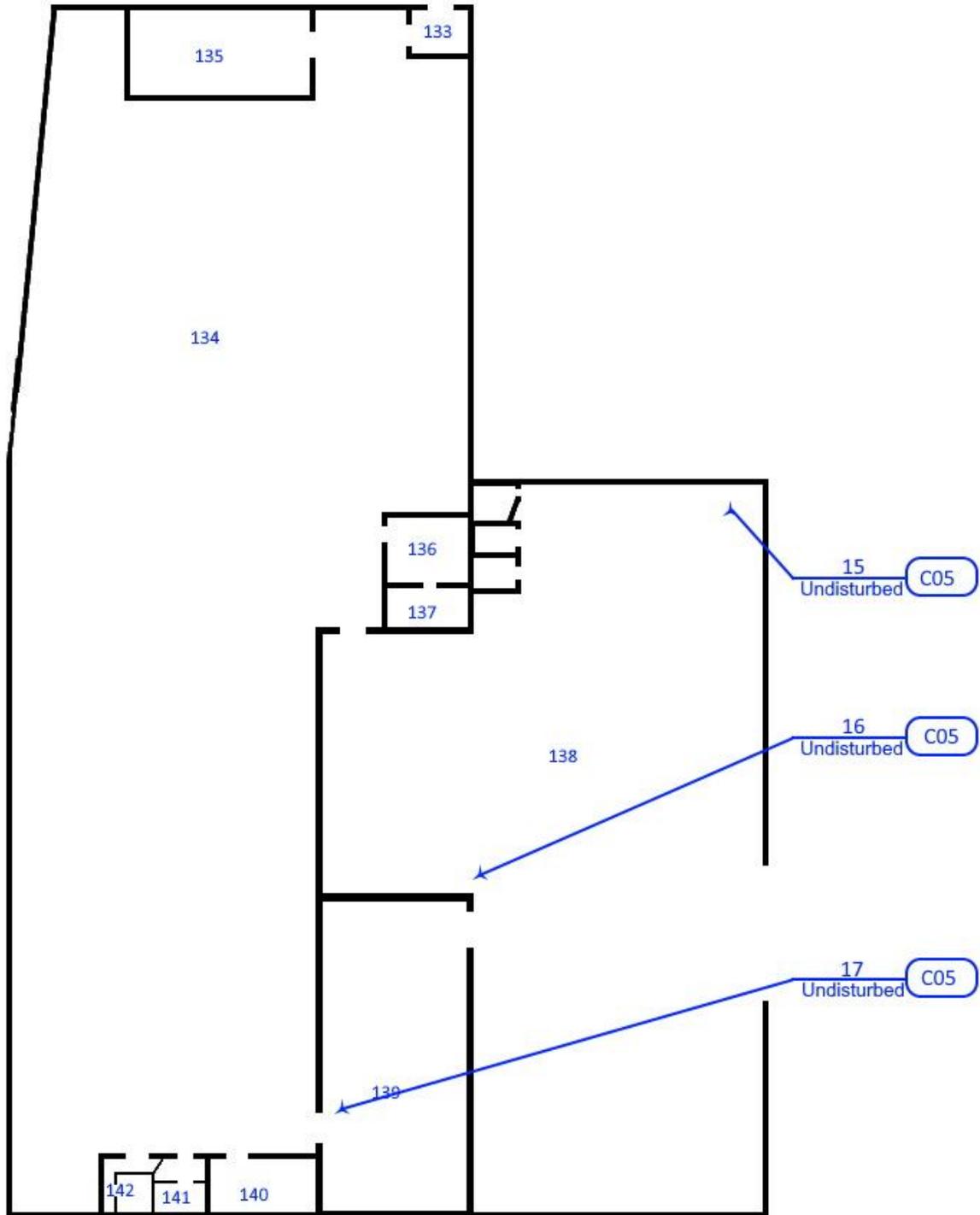
Ground Floor  
ACM Pipe & Fitting Insulation



 Pipe insulation (ACM mud/mastic on outer layer in some areas) and Pipe Fitting Insulation. These materials are assumed to exist throughout the building.

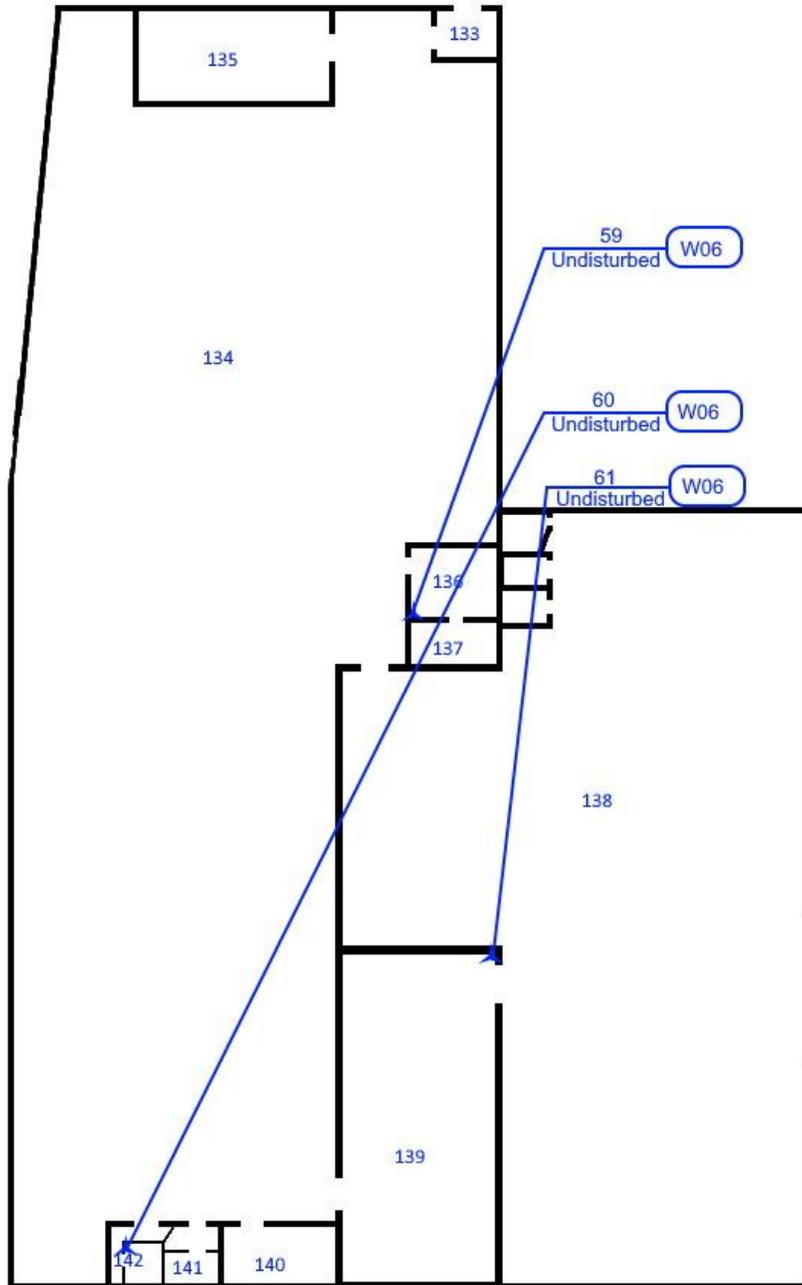
# Salvation Army Building

Warehouse  
Sample Locations - Ceilings



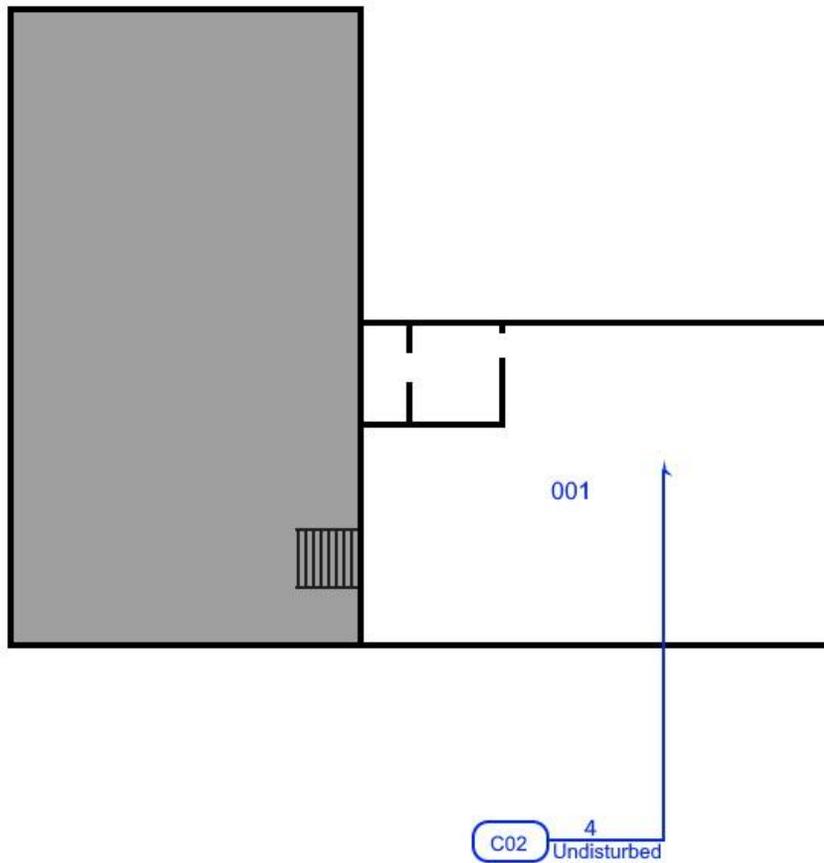
# Salvation Army Building

Warehouse  
Sample Locations - Walls



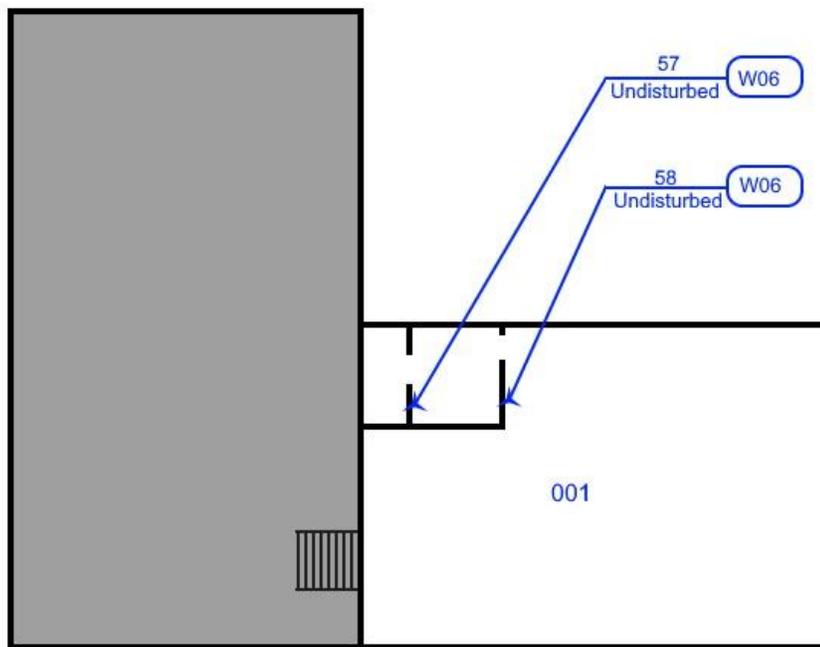
# Salvation Army Building

Basement  
Sample Locations - Ceilings



# Salvation Army Building

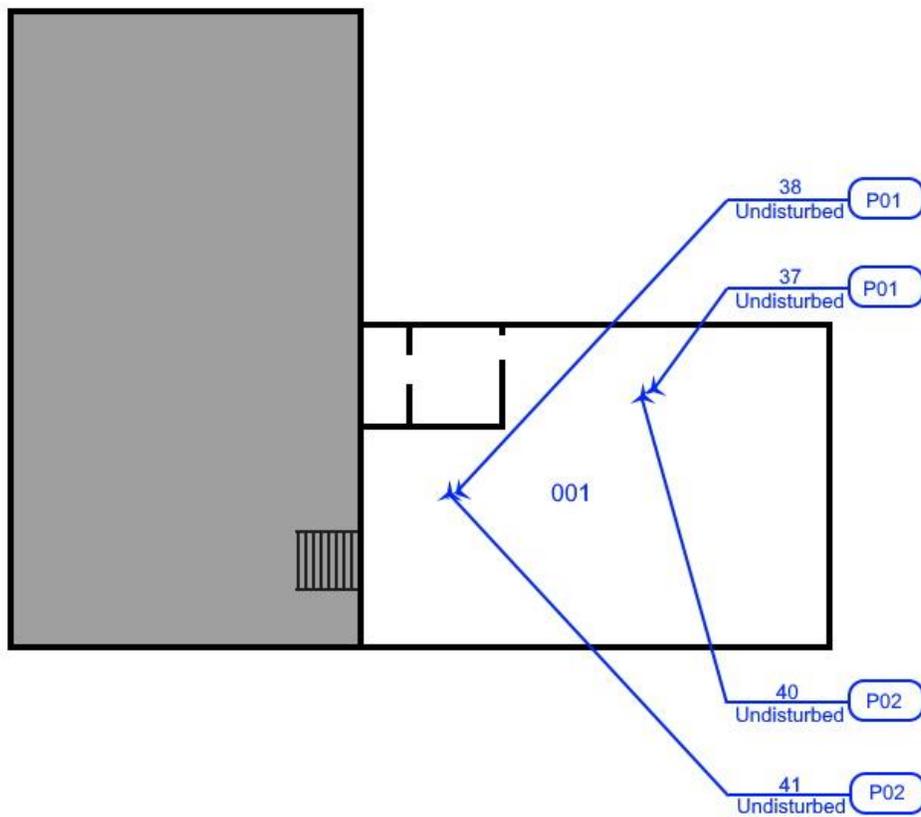
Basement  
Sample Locations - Walls



# Salvation Army Building

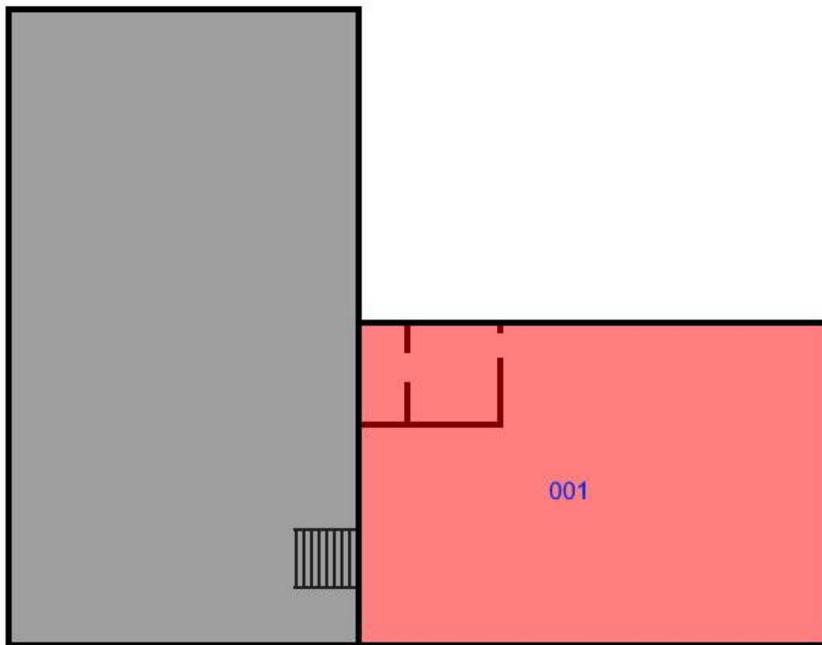
Basement

Sample Locations - Pipe



# Salvation Army Building

Basement  
ACM Ceilings

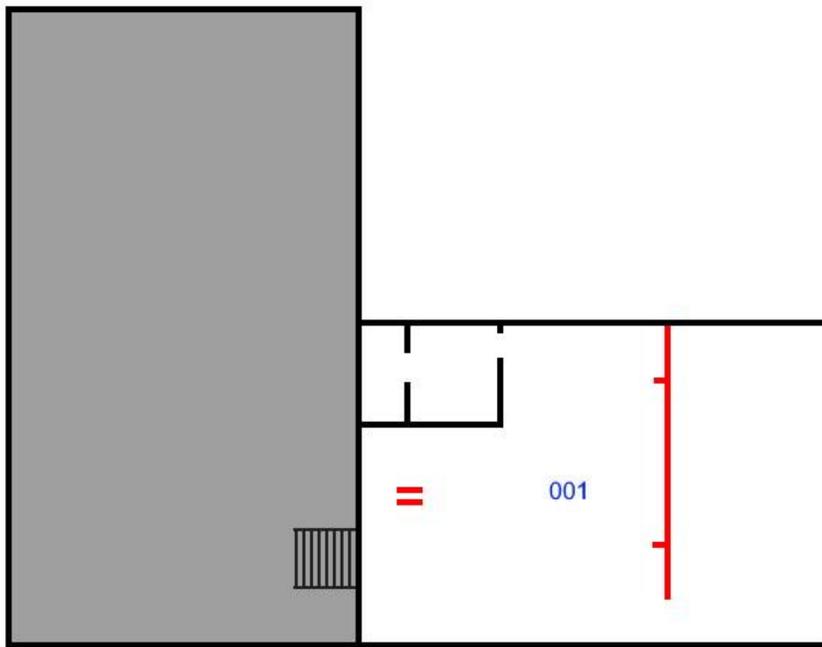


 C02 - Popcorn Ceiling Texture



# Salvation Army Building

Basement  
ACM Pipe & Fitting Insulation

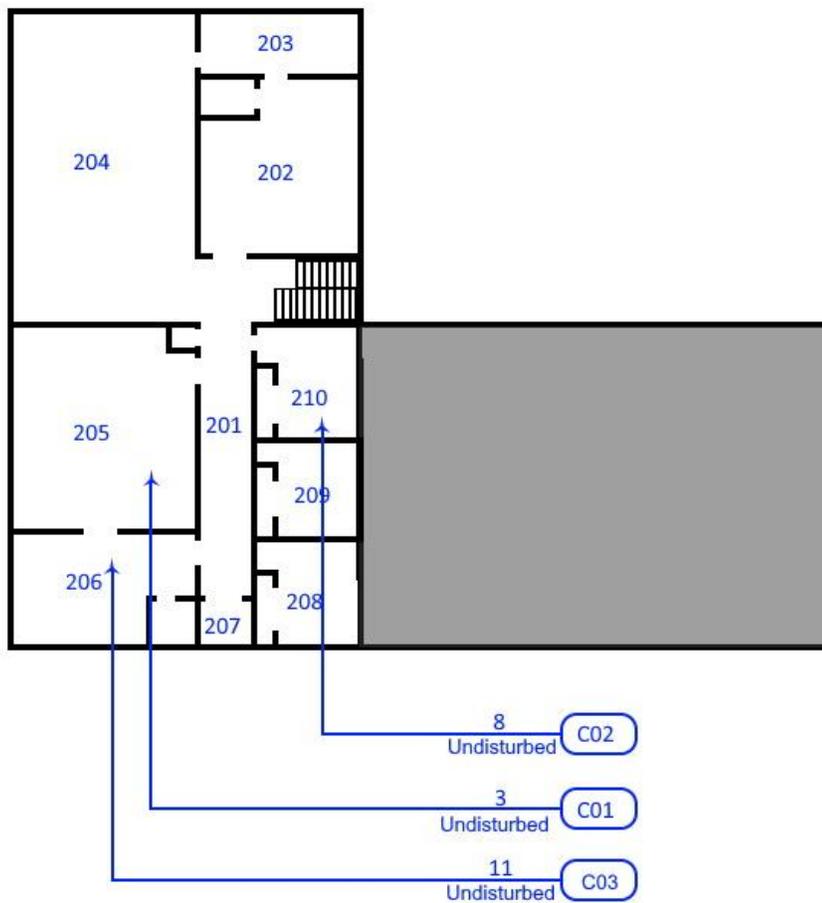


 Pipe insulation (ACM mud/mastic on outer layer in some areas) and Pipe Fitting Insulation. These materials are assumed to exist throughout the building.



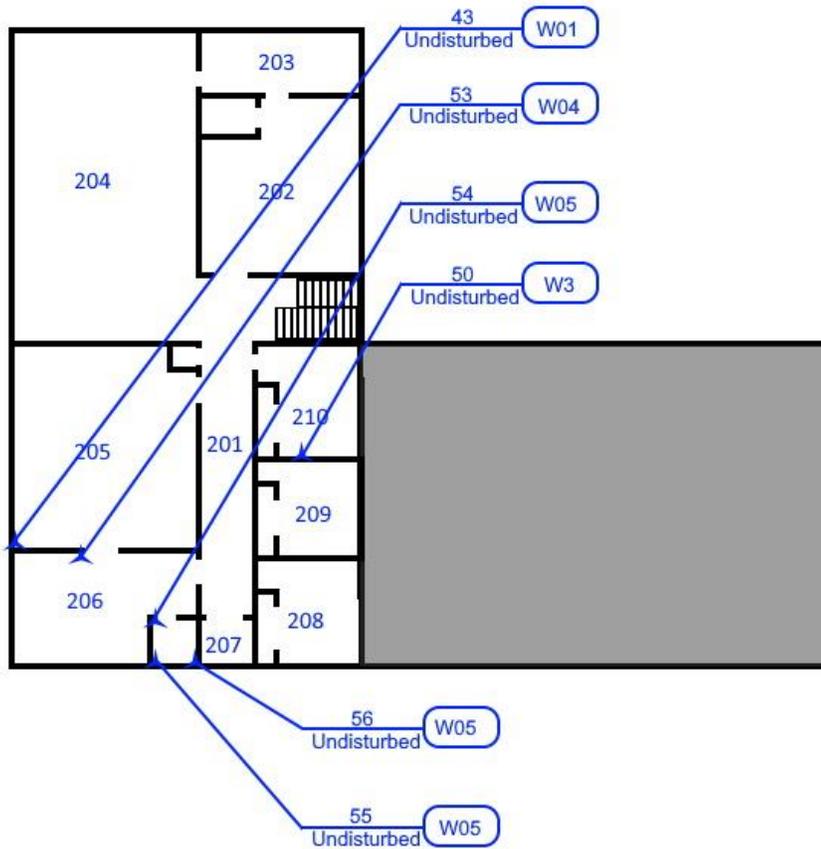
# Salvation Army Building

2nd Floor  
Sample Locations - Ceilings



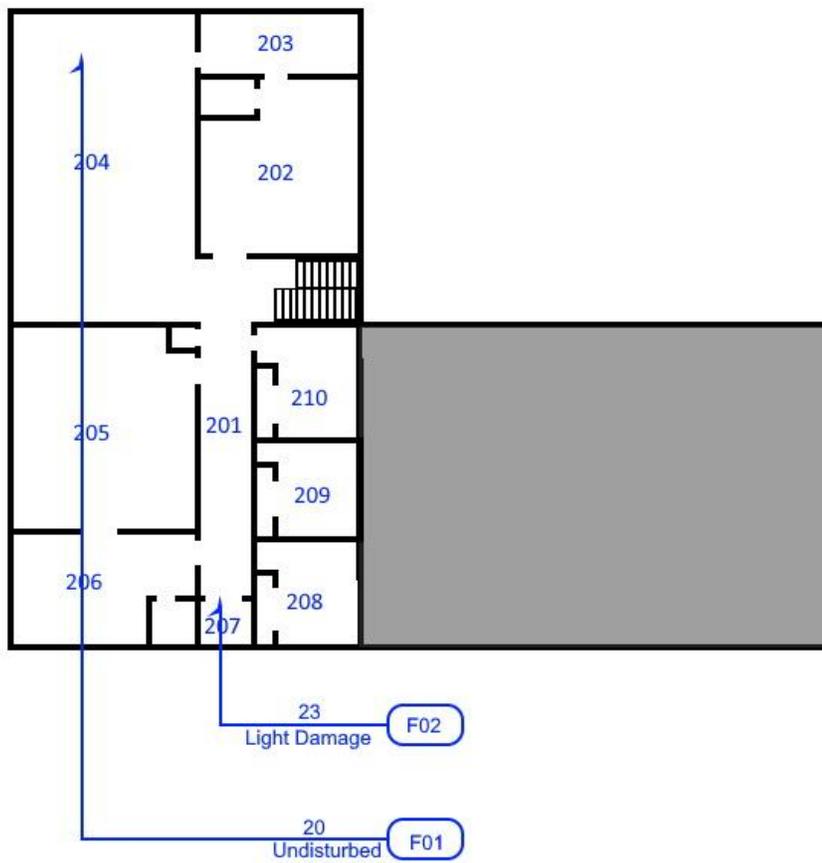
# Salvation Army Building

2nd Floor  
Sample Locations - Walls



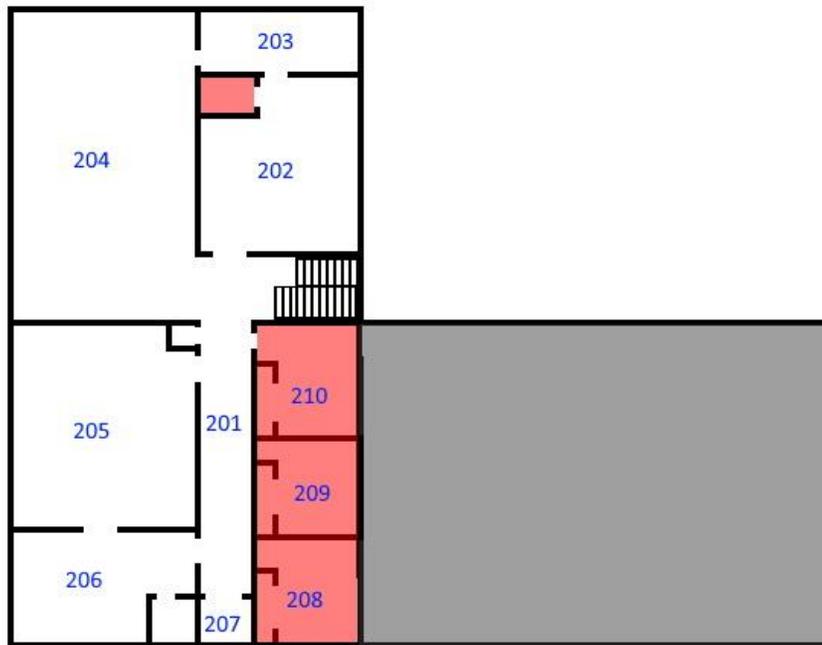
# Salvation Army Building

2nd Floor  
Sample Locations - Flooring



# Salvation Army Building

2nd Floor  
ACM Ceilings



 C02 - Popcorn Ceiling Texture



# Salvation Army Building

2nd Floor  
ACM Floors

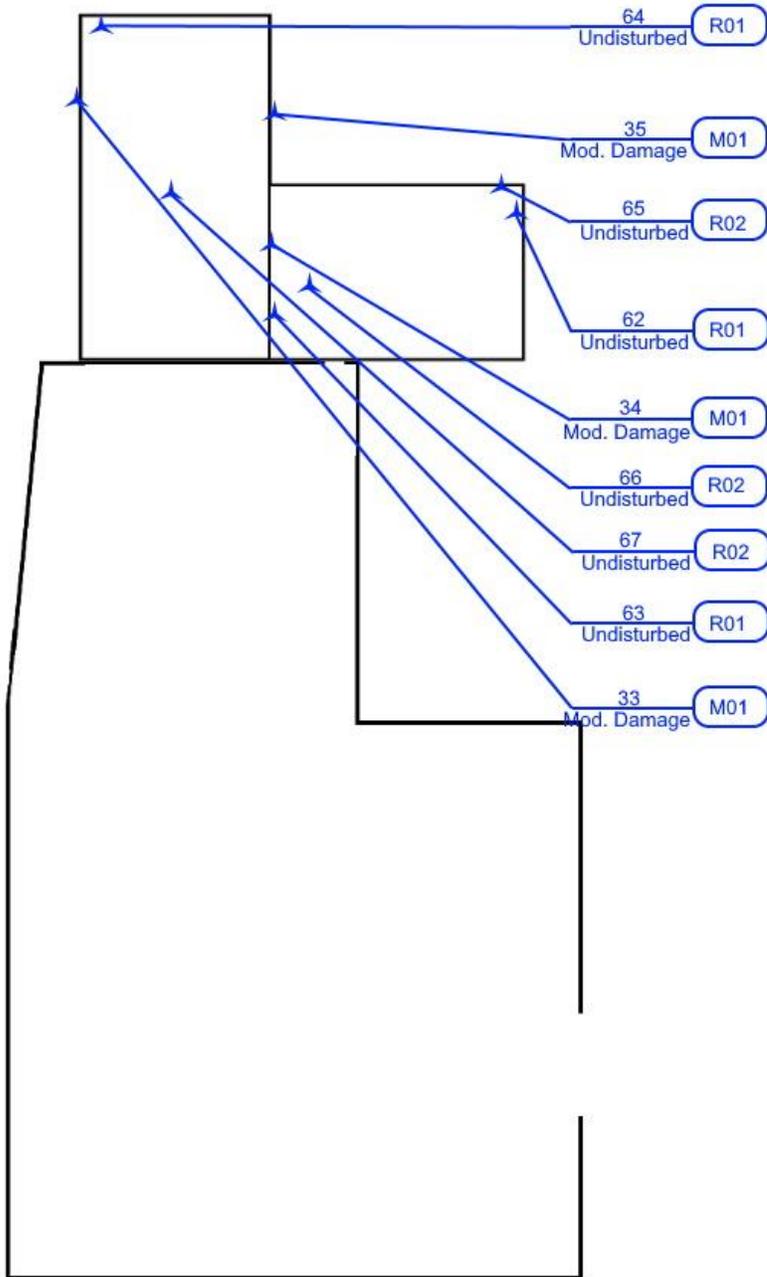


 F01 - 12x12 Resilient Floor Tile - White w/ Multi Accents & Black Mastic

 F02 - 12x12 Resilient Floor Tile - Brown w/ Multi Accents & Black Mastic



### Salvation Army Building Exterior - Complete Sample Locations - Exterior



Asbestos Inspection  
300 S. Baird  
Midland, TX

Midland County  
P.O. Box 421  
Midland, TX

## **E-Tech Licenses**



Texas Department of State Health Services

ETECH ENVIRONMENTAL & SAFTEY SOLUTIONS INC

*is certified to perform as an*

Asbestos Consultant Agency

*in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.*



License Number: 100507

Expiration Date: 02/25/2022

Control Number: 97256

  
John Hellerstedt, M.D.,  
Commissioner of Health

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK



**Texas Department of  
State Health Services**

**Asbestos Individual Consultant**

**RONNY J MATTE**

**License No. 105771**

**Control No. 97669**

**Expiration Date: 13-Feb-2022**



GEBCO Associates certifies that  
**Brandon P. Smitherman**  
 464-55-1649



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS CONTRACTOR/SUPERVISOR REFRESHER**

Date of Issue: 08/06/2019 Certificate No: 19243  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-282-9886




**Texas Department of State Health Services**

Asbestos Project Manager

**BRANDON P SMITHERMAN**  
 License No. 501390  
 Control No. 98154  
 Expiration Date: 11-Mar-2021



GEBCO Associates certifies that  
**Brandon P. Smitherman**  
 464-55-1649



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS AIR MONITORING TECHNICIAN REFRESHER**

Date of Issue: 08/09/2019 Certificate No: 19184  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-282-9886




**Texas Department of State Health Services**

Asbestos Air Monitoring Technician

**BRANDON P SMITHERMAN**  
 License No. 706532  
 Control No. 98317  
 Expiration Date: 11-Mar-2021



GEBCO Associates certifies that  
**Brandon P. Smitherman**  
 464-55-1649



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS INSPECTOR REFRESHER**

Date of Issue: 08/07/2019 Certificate No: 19227  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-282-9886




**Texas Department of State Health Services**

Asbestos Inspector

**BRANDON P SMITHERMAN**  
 License No. 603048  
 Control No. 99093  
 Expiration Date: 9/1/2020



GEBCO Associates certifies that  
**Jimmy W. McNeil, Jr.**  
 459-19-8382



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS CONTRACTOR/SUPERVISOR REFRESHER**

Date of Issue: 08/12/2019 Certificate No: 19271  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-262-9888




**Texas Department of State Health Services**

**Asbestos Project Manager**

**JIMMY W MCNEIL JR**

License No. **500901**  
 Control No. **98391**  
 Expiration Date: **30-Jan-2022**



GEBCO Associates certifies that  
**Jimmy W. McNeil, Jr.**  
 459-19-8382



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS AIR MONITORING TECHNICIAN REFRESHER**

Date of Issue: 08/13/2019 Certificate No: 19200  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-262-9888




**Texas Department of State Health Services**

**Asbestos Air Monitoring Technician**

**JIMMY W MCNEIL JR**

License No. **706031**  
 Control No. **98598**  
 Expiration Date: **3-Mar-2022**



GEBCO Associates certifies that  
**Jimmy W. McNeil, Jr.**  
 459-19-8382



has successfully completed the Texas Department of State Health Services approved course entitled:  
**ASBESTOS INSPECTOR REFRESHER**

Date of Issue: 08/14/2019 Certificate No: 19259  
 Certificate expires one year from date of issue.

Course schedule anytime @ [www.gebco.org](http://www.gebco.org)

GEBCO Associates, LP  
 815 Trailwood Dr, Suite 200 Phone: 817-268-4006  
 Hurst, TX 76053 Fax: Fax: 817-262-9888




**Texas Department of State Health Services**

**Asbestos Inspector**

**JIMMY W MCNEIL JR**

License No. **602130**  
 Control No. **99432**  
 Expiration Date: **28-Aug-2021**

