

**REQUEST FOR PROPOSAL
MIDWESTERN STATE UNIVERSITY
PURCHASING & CONTRACT MANAGEMENT DEPARTMENT
3410 Taft Blvd., Daniel Bldg., Rm. 200
Wichita Falls, TX. 76308**

BID NUMBER

BID TITLE

735-18-4285

**Moffett Library Reading Room Asbestos
Abatement**

**BIDS WILL BE RECEIVED BY SEALED BID OR EMAIL UNTIL:
2:00 P.M. CT,
September 28, 2018:
Offices of the Director of Purchasing & Contract Management,
3410 Taft Blvd., Daniel Bldg., Rm. 200
Wichita Falls, TX. 76308**

GENERAL TERMS AND CONDITIONS

These General Terms and Conditions apply to all offers made to Midwestern State University (herein after referred to as "University") by all prospective vendors (herein after referred to as "Bidders") on behalf of Solicitations including, but not limited to, Invitations to Bid and Request for Quotes.

INSTRUCTIONS FOR SUBMITTING BIDS

Review this document in its entirety. Be sure your bid is complete, and double check your bid for accuracy.

Questions requiring only clarification of instructions or specifications will be handled through the email process. If any questions results in a change or addition to this Bid, the change(s) and addition(s) will be addressed to all vendors involved as quickly as possible in the form of an addendum. It is the responsibility of the bidder to view the posting on the MSU purchasing web page located at <http://mwsu.edu/purchasing/>.

Sign the **Vendor's Affidavit Notice** and return with your bid.

BIDDERS SHALL SUBMIT BID ON THE FORM PROVIDED, SIGN THE VENDOR AFFIDAVIT, AND RETURN ENTIRE BID PACKET. In the event of inclement weather and the University Offices are officially closed on a bid opening day, bids will be received until 2:00 p.m. of the next business day. At which time said bids will be privately opened.

BIDS SUBMITTED AFTER THE SUBMISSION DEADLINE SHALL BE RETURNED UNOPENED AND WILL BE CONSIDERED VOID AND UNACCEPTABLE.

SUCCESSFUL VENDOR WILL BE NOTIFIED BY EMAIL OR MAIL. All responding vendors will receive written notification regarding the outcome of the award. Bid tabulations will be posted to the MSU Purchasing we page.

PLEASE NOTE CAREFULLY

THIS IS THE ONLY APPROVED INSTRUCTION FOR THIS BID. ITEMS BELOW APPLY TO AND BECOME PART OF TERMS AND CONDITIONS OF BID. ANY EXCEPTIONS THERETO MUST BE IN WRITING.

1. Each bid shall be emailed or placed in a separate envelope completely and properly identified with the name and number of bid. Bids must be in the Purchasing Office **BEFORE** the hour and date specified.
2. **QUOTE F.O.B. DESTINATION.** If otherwise, show exact cost to deliver. Bid unit price on quantity specified – extend and show total. In case of errors in extension, UNIT prices shall govern. Bids subject to unlimited price increase will not be considered.
3. Bids **MUST** give full firm name and address of the bidder. Failure to manually sign bid will disqualify it. Person signing bid should show TITLE or AUTHORITY TO BIND HIS FIRM IN A CONTRACT.
4. Bids **CANNOT** be altered or amended after opening time. Any alterations made before opening time must be initialed by bidder or his authorized agent. No bid can be withdrawn after opening without the approval by the Vice-President of Administration & Finance based on a written acceptable reason.
5. The University is exempt from State Sales Tax and Federal Excise Tax. **DO NOT INCLUDE TAX IN BID.**
6. Any catalog, brand name or manufacturer's reference used in a bid invitation is descriptive-**NOT** restrictive-it is to indicate type and quality desired unless otherwise indicated. Bids on brand of like nature and quality will be considered. If bid is based on other than referenced specifications, proposal must show manufacturer, brand or trade name, lot number, etc., of article offered. If other than brand(s) specified is offered, illustrations and complete description should be made part of the bid. If bidder takes no exception to specifications or reference data, he will be required to furnish brand names, numbers, etc., as specified.

7. Samples, when requested, must be furnished free of expense to the University. If not destroyed in examination, they will be returned to the bidder on request, at his expense. Each sample should be marked with bidder's name, address, and University bid number. **DO NOT ENCLOSE OR ATTACH SAMPLE TO BID.**
8. **Delivery:** Bid must show number of days required to make delivery to place material in receiving agency's designated location under normal conditions. Failure to state delivery time obligates bidder to complete delivery in 14 calendar days. A five-day difference in delivery promise may break a tie. Unrealistically short or long delivery promises may cause bid to be disregarded. Consistent failure to meet delivery promises without valid reason may cause removal from bidder list. Delivery shall be made during normal working hours only, 8:00 a.m. to 5:00 p.m., unless prior approval for late delivery has been obtained from the Director of Purchasing.
9. If delay is foreseen, contractor shall give written notice to Director of Purchasing. The University has the right to extend delivery date if reasons appear valid. Contractor must keep University advised at all times of status of order. Default in promised delivery (without accepted reasons) or failure to meet specifications, authorizes the University to purchase supplies elsewhere and charge full increase in cost and handling to defaulting contractor.
10. All items proposed shall be new, in first class condition suitable for shipment and storage (Midwestern State University prefers recycled packaging whenever possible), unless otherwise indicated in bid. Verbal agreements to the University will not be recognized. All materials and services shall be subject to Purchaser's approval. Unsatisfactory materials will be returned at Seller's expense.
11. Written and verbal inquiries pertaining to bids must give Bid Number and Commodity.
12. No substitutions or cancellations permitted without written approval of Director of Purchasing.
13. The University reserves the right to accept or reject all or any part of any bid, waive minor technicalities and award to the Bidder that bids to the Best Value to the University. The University reserves the right to award by item or by total bid. Prices should be itemized.
14. Consistent and continued tie bidding could cause rejection of bids by the University and/or investigation for Anti-Trust violations.
15. The contractor agrees to protect the University from claims involving infringement of patents or copyrights.
16. This is a Quotation inquiry only and implies no obligation on the part of the University. All costs quotations must include all the various features needed to

satisfy the requirements. Note: No amounts will be paid for the items in this BID in excess of the amounts quoted.

17. **Award:** A written purchase order or notice of award mailed or otherwise furnished to the successful bidder within the time of acceptance specified in this package results in a binding contract without further action by either party.
18. **Variation in Quantity:** The University assumes no liability for commodities produced, processed or shipped in excess of the amount specified herein.
19. **Invoicing:** Bidder shall submit two (2) copies of an itemized invoice showing bid number and purchase order number to:

**Midwestern State University
Accounts Payable
3410 Taft Blvd.
Wichita Falls, TX. 76308**

20. **Payments:** The University, after receipt of completed order will make payment to the contractor within 30 days from the receipt of goods or invoice whichever is later. All partial shipment must be pre-approved by the Director of Purchasing. In the event of partial shipments the University is not required to make payments until the order is complete. Acceptance of and final payment for the item will be contingent upon satisfactory performance of the product received by the University.
21. **Discrimination:** In order to comply with the provisions of fair employment practices, the contractor agrees as follows; 1.) the contractor will not discriminate against any employee or applicant for employment because of race, sex, religion, handicap, or national origin; 2.) in all solicitations or advertisements for employees, the contractor will state that all qualified applicants will receive consideration without regard to race, color, sex, age, religion, handicap or national origin; 3.) the contractor will furnish such relevant information and reports as request by the University for the purpose of determining compliance with these regulations; and 4.) failure of the contractor to comply with these laws will be deemed a breach of contract and it may be cancelled, terminated or suspended in whole or in part.
22. **Assignment:** Any contract entered into pursuant to this request is not assignable, nor the duties thereunder, by either party without the written consent of the other party in the contract.
23. **Other Remedies:** In addition to the remedies stated herein, the University has the right to pursue other remedies permitted by law or in equity.
24. **E-Verify:** Contractor is responsible to verify all employees are approved by The Homeland Security E-Verify program.

REQUEST FOR PROPOSAL

Moffett Library Reading Room Asbestos Abatement MIDWESTERN STATE UNIVERSITY

It is the intent of these specifications to describe the minimum requirements for **the above titled project** at Midwestern State University in sufficient detail to secure comparable bids.

Each bidder must confirm he fully understands these specifications and the University's needs and satisfies himself that he is cognizant of all factors relating to requirements contained in these specifications.

The bid analysis will include compliance to bid specifications, past performance with vendor, references, delivery time, which will have a weighted average of 30 percent and the overall cost to the university, which will have a weighted average of 70 percent. Midwestern State University reserves the right to consider deviations from these specifications.

Award of this bid will be contingent on availability of Midwestern State University funds.

References shall be included on this bid form. Three current customers with a comparable purchase shall be listed with complete name, address, telephone number and contact person.

Bids must be submitted on this form and the bidder shall return the entire bid/specification package which will constitute a contract equally binding between the bidder and Midwestern State University if bids accepted by the University. Each bid shall be placed in a sealed envelope or emailed, signed by a person having the authority to bind his/her firm in a contract.

This contract shall remain in effect until completion and acceptance by the University. Midwestern State University reserves the right to enforce the performance of this contract in any manner prescribed by law or deemed to be in the best interest of the University in the event of breach or default of this contract. Midwestern State University reserves the right to terminate the contract immediately in the event the successful bidder fails to make delivery in accordance with the specifications.

Questions concerning these specifications should be directed **via email** no later than **12:00 p.m.** CT, September 19, 2018 to:

Joseph J. Mrugalski Jr., Interim Director of Purchasing and Contract Management
3410 Taft Blvd. Daniel Bldg. Rm. 200
Wichita Falls, TX. 76308
joe.mrugalski@mwsu.edu
(940) 397-4095

Midwestern State University may in its sole discretion respond in writing to questions concerning this bid request. Only MSU responses made by formal written addendum to this proposal shall be binding and shall be posted on the MSU purchasing web site located at <http://mwsu.edu/purchasing/>. Oral or other written interpretations or clarifications shall be without legal effect.

All bids meeting the intent of this invitation to bid will be considered for award. Bidders taking exception to the specifications, or offering substitutions, shall state these exceptions by attachment as part of the bid. The absence of such a list shall indicate that the bidder has not taken exception and shall hold the bidder responsible to perform in strict accordance with the specifications of the invitation. Midwestern State University reserves the right to accept any and all or none of the exception(s) / substitution(s) deemed to be in the best interest of the University.

PRE-BID MEETING: A ***NON_MANDATORY*** pre-bid meeting will be held at **1:30 p.m. on Tuesday, September 18, 2018 at in the Reading Room @ the east end of the Moffett Library (first floor).**

Proposals are to be sent via email or hand delivered by September 28, 2018 @ 2:00 pm CT to:

Joseph J. Mrugalski Jr., Interim Director of Purchasing and Contract Management
3410 Taft Blvd. Daniel Bldg. Rm. 200
Wichita Falls, TX. 76308
joe.mrugalski@mwsu.edu
(940) 397-4095

SPECIFICATIONS

RFP #735-18-4285

Please see specifications and drawing at the below Link under current bid opportunities listed under the RFP number:

<http://mwsu.edu/purchasing/>

Please supply a HUB Subcontracting Plan with your bid, which can be found at the below listed link: This is required if your bid is \$100,000 or above.

<http://www.window.state.tx.us/procurement/prog/hub/hub-subcontracting-plan/>

Please supply schedule and lead time for project with bid:

Supply an insurance certificate with your Bid.

Supply a W-9 With your Bid if new to Midwestern State University.

2010 Uniform General Conditions apply to this Bid and can be found at the below listed link:

<http://mwsu.edu/purchasing/contract-management>

A Five Percent (5%) Bid Bond will required to accompany your Bid.

If awarded the project a Payment Bond will be required if your bid is \$25,000 or above.

If awarded the project a Performance Bond will be required if your bid is \$100,000 or above.

The Moffett Phase 2 construction project is split into two sub-phases: IIA and IIB where IIA involves closing the third floor and the western half of the second floor, and IIB is the eastern half of the second floor and all of the first floor. The abatement of the Reading Room ceiling described in this specification shall occur at the start of the Phase IIB construction effort, immediately after Phase IIA is complete. Phase IIA is tentatively planned to end by 3/8/19 and Phase IIB will begin on 5/13/19 so the abatement shall begin on 3/11/19 and be completed no later than 5/10/19. (Finals and finals prep occur between 4/29/19 and 5/11/19; it is HIGHLY preferred the abatement be completed prior to 4/29/19.)



SECTION 2000 General and Specific Requirements for Abatement of Asbestos Containing Materials

For:

Asbestos Abatement at
Moffett Library Foyer
Midwestern State University
3410 Taft Blvd,
Wichita Falls, TX 76308

Owner:

Midwestern State University

Designed by: L. F. Skaggs AIC 105110
License Expires 05/09/2020

Specification Date

August 15, 2018

Flint Inspection Consulting Services, Inc.
P.O. Box 235 Burkburnett, TX 76354
(940) 569-4876 Fax (866) 469-0378

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Attachment 1 Certificate of Worker's Acknowledgement

Attachment 2 Building Drawings

Notations from the Architect on drawings are for general construction. Asbestos Abatement Contractor is to comply with notations added by the Consultant
 “SEPARATE ATTACHMENT”

IMPORTANT NOTICE:

This document is not designed to stand alone. It only covers the requirements for the removal and disposal of asbestos containing materials. Additional bid and contract requirements are covered in associated documents issued by the Owner. This document will be transmitted electronically and not all parts may be contained herein. Please refer to the above table as the attachments not included in this file are designated by the notation “SEPARATE ATTACHMENT FILE”

SECTION 2000 ASBESTOS ABATEMENT

1.0 DOCUMENT EXPLANATION:

1.1 These documents cover work to be conducted with regard to the complete removal and disposal of asbestos containing materials and asbestos contaminated materials, as shown on the specifications, drawings and contract documents, prepared by the Owner's Consultant, L. F. Skaggs, Individual Asbestos Consultant, herein referred to as the "Consultant". The specific requirements for this project will be specified within this document as designed by the Consultant.

2.0 PROJECT NAME AND INFORMATION:

2.1 Project Name and Location: "Moffett Library Foyer"

The Building is located South of the intersection of Taft Blvd and Comanche Trail, Wichita Falls, TX

2.2 Owner: Midwestern State University, 3410 Taft Boulevard, Wichita Falls, Texas 76308

2.3 RELATED DOCUMENTS: Drawings and general provisions of the contract documents, other sections that apply to the work under this section. Specific references to required work will be listed in Subsection 9 as it relates to the drawings. As this project develops, changes may have to be made to the scope of the work to accommodate the needs of the Owner and the demolition design by the Architect. The referenced drawings are not for design of asbestos abatement containments but define the scope of work required by the Asbestos Abatement Contractor.

3.0 DEFINITIONS AND STANDARDS

3.1 ASBESTOS ABATMENT CONTRACTOR: Refers to the licensed asbestos abatement contractor selected for the project.

3.2 PRIME CONTRACTOR: Refers to the contractor at risk selected by the Owner for the project.

3.3 OTHER CONTRACTOR: Refers to the other contractors selected for the mechanical and electrical work required by this project.

3.4 RELATED DOCUMENTS: Drawings and general provisions of the contract documents, other sections that apply to the work under this section.

3.5 General Explanation: A substantial amount of specification language constitutes definitions for terms found in other contract documents, including the drawings. Drawings must be recognized as diagrammatic in nature and not completely descriptive of the requirements indicated thereon. There are terms used in the project contract documents that are defined within these specifications. Definitions and explanations of this section are not necessarily complete, inclusive, nor exclusive, but are general for the work, to the extent they are not stated more explicitly in another element of the contract documents.

3.6 General Requirements: The provisions or requirements indicated herein apply to the entire scope of work under the project contract documents and, where so indicated, to other elements which are included in other project documents.

3.7 Indicated: The term "Indicated" is a cross-reference to graphic representations, notes or schedules on drawings, to other paragraphs or schedules in the specifications and to similar means of recording requirements in "as specified" are used in lieu of "indicated". The intended purpose is to aid the Contractor with document cross-references, and no limitation is intended except as specifically noted.

3.8 Directed, Requested, etc.: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by Owner's Representative", "requested by Owner's Representative", and similar phrases, and all such responses must be written and signed to carry contractual weight. No implied or written statement may be interpreted as extending the Owner Representative's authority or responsibility into the realm of the Contractor's responsibility for construction supervision.

3.9 Approve: Where used in conjunction with Owner Representative's response to submittals, change orders, requests, applications, inquiries, reports and claims by Contractor, the meaning of term "approved" will be limited to the responsibilities and duties granted the Owner Representative, under the clause of these specifications. In no case, and under no condition, will "approval" by the Consultant be interpreted as a release of the Contractor from his responsibilities in fulfilling the requirements of the contract documents, using state of the art techniques, and exercising due diligence.

3.10 Stop Work: The Consultant shall have the authority to issue a stop work order when a serious problem arises, and a start work order when the problem is addressed to the satisfaction of the Consultant. A stop work order will only be issued as a last resort, when there is the potential for harm or asbestos exposure to any person or party, or if the Owner's property or business is jeopardized by the contract or subcontract work. Other reasons for issuing a stop work order may arise, and this paragraph is not meant to limit the use of stop work orders. All contractual scheduling lost because of the issuance of a stop work order, will be the contractor's responsibility.

3.11 Asbestos Supervisor: The Asbestos Supervisor is the abatement contractor's on site representative for the project. This person will generally be the competent person required by OSHA in §29 CFR 1924. This person must have received training under the requirements of NESHAP (§40 CFR 61 Subpart M), and be further licensed by the State of Texas as an Asbestos Abatement Supervisor.

4.0 DEFINITIONS SPECIFIC TO ASBESTOS ABATEMENT:

4.1 Aerosol: A system consisting of particles, solid or liquid, suspended in air, that requires the use of some form of propellant to achieve atomization.

4.2 Air Cell: An Insulating material used in some thermal systems, which is comprised of corrugated cellulose fiber interwoven with asbestos fiber and combined with polymer and refractory binders for structural strength.

4.3 Air Monitoring: The process collecting a measurable volume of air, straining the collected air through a suitable filter media, and using a phase contrast microscope (PCM) and the NIOSH 7400 dispersion statistics method to determine the amount of fibrous material collected on the filter media.

4.4 Amended Water: A surfactant (soap like substance) that is added to water in a 1/1 ratio, used as an aerosol, under high air pressure, to mitigate the dust and fiber concentrations that have become airborne in the course of demolition and abatement procedures.

4.5 Asbestos: The asbestiform varieties of Serpentine Group, Chrysotile, and the Amphibole Group, Riebeckite (Crocidolite), Cummingtonite - Grunerite (Amosite), Anthophyllite, Actinolite, and Tremolite.

4.6 Asbestos Abatement Contractor: Any company or individual that conducts for the removal of asbestos containing materials and is responsible for all the work practices and procedures that anticipate or require the intentional disturbance of asbestos containing materials. The asbestos abatement Contractor must be currently licensed, according to the Texas Department of State Health Services, Texas Asbestos Health Protection Rules.

4.7 Asbestos Containing Material (ACM): Any material containing more than one (1%) percent of any of the listed asbestos minerals, or of any mixture of types of asbestos minerals are classified, under federal regulation, as an asbestos containing material.

4.8 Asbestos Containing Waste Material: Any material that has been contaminated, or is suspected of being contaminated with an asbestos containing material, must be treated as an asbestos containing material.

4.9 Asbestos Disposal Bag: A six (6) millimeter plastic bag used for the temporary storage and transportation of asbestos containing materials and asbestos contaminated waste materials.

4.10 Project Site: The term "project site" is defined as the locale available to Contractor in the performance of the work, either exclusively, or in conjunction with others, under the contract documents. The extent of project site is shown on the project drawings, and the trailer, disposal dumpster, material storage, and other Contractor considerations may be as indicated on the project drawings or modified by the Consultant.

- 4.11 Furnish:** Except as otherwise defined, the term "furnish" is defined as "to supply and deliver to the project site, trained and licensed personnel in various disciplines, equipment, construction materials, portable toilets, disposal dumpsters, and any other items that are required to complete each phase of the project.
- 4.12 Install:** Except as otherwise defined, the term "install" is used to describe all contractual operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and all other similar operations, and any other operations that are required to complete each phase of the project.
- 4.13 Provide:** Except as otherwise defined, the term "provide" means to furnish and install all contractually required items, completely installed, tested, and ready for their intended use, that are required to complete each phase of the project.
- 4.14 Installer:** The term "installer" is defined as the entity engaged by the Contractor or an approved subcontractor or subcontractors, engaged for performance of a particular unit of work at the project site. It is a general requirement that the "Installer" be expert and licensed, where applicable, in the operations they are engaged to perform, and approved by the Consultant. The Consultant will make all "Installer" qualification determinations, and such determinations will be final.
- 4.15 Testing Laboratory:** The term "testing laboratory" is defined as an independent entity engaged to perform specific inspections or tests of the work, either at project site or elsewhere; and to report and (if required) interpret the results of those inspections or tests.
- 4.16 Consultant:** The Consultant for the purpose of this document will be the assigned licensed Individual Asbestos Consultant of the asbestos consulting firm hired by the Owner to design the project, removal procedures and overall project oversight of the actions of the Asbestos Abatement Contractor. All air monitoring requirements and clearance sampling and determination will be the scope of work of the Consultant. Additional responsibilities are to document the activities of the project and to coordinate the work of the Asbestos Abatement Contractor with the work of the Owner and other contractors on the site. The Consultant shall act as an Owner Representative in regard to asbestos related activities.
- 4.17 Project Manager:** This is a licensed Asbestos Project Manager that is under the direct supervision of the Consultant. The Project Manager will act as the full time representative of the Consultant during overall project activities, and shall report any needs to modify the work if the requirements of the contract are better served and will relay and record the modifications as needed. The Project Manager shall have complete authority to stop work on the project if the contract documents or specifications are being violated; the interests of the Owner are not being met, or if there is any serious safety violation. Under the authority of the Consultant, the Project Manager may conduct project documentation, pre-removal inspections, post removal inspections and collect all air quality sampling required under the duties of the Consultant.
- 4.18 Authorized Visitor:** The Consultant will authorize the contents of the visitors list. The visitors list may include the asbestos abatement contractor and subcontractors, the building Owner, the Asbestos Consultant, Air Monitoring personnel, the Architect, Engineer, or a representative of any Federal, State and Local regulatory agency.
- 4.19 Base bid:** The base bid shall include overhead, profit, labor, travel and lodging expenses, rental expenses, construction materials, asbestos disposal cost, and all and any miscellaneous expenses not stated herein. The base bid shall include all the contractual requirements and obligations, stated or implied that are called for in the drawings and specifications.
- 4.20 Barrier:** A wall, surface, tape, or other barrier fabricated according to the requirements of this set of specifications, with the intent of sealing or barring entry into one area from an adjoining area.
- 4.21 Breathing Zone:** A persons breathing zone (hemisphere) forward of the shoulders, between the waist and chin, with a radius of approximately 6 to 9 inches.
- 4.22 Certified Industrial Hygienist:** An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene (ABIH) and the American Industrial Hygiene Association (AIHA).

- 4.23 Contractor:** The general use of the term "Contractor" under these specifications indicates the Asbestos Abatement Contractor. Any other mention of the term "Contractor" may indicate a subcontracting company or individual involved in project work, under the control of the Asbestos Abatement Contractor and approved by the Consultant.
- 4.24 Demolition:** The removal or wrecking of any building or structural building component, whether complete or partial, combined with the related waste material handling, storage, and waste transportation and disposal.
- 4.25 Differential Pressure System:** An impermeable air tight containment or enclosure is fabricated, and then a vacuum system is applied to the inner atmosphere of the enclosure, lowering the atmospheric pressure inside the enclosure. An atmospheric pressure drop is established between the inner enclosure atmosphere and the outside atmosphere, thus insuring that any breach in the air tight enclosure will result in an inflow of air from higher pressure outside atmosphere to the lower pressure inner atmosphere of the enclosure. The net result yields no contamination to the outside air.
- 4.26 Encapsulate:** An adhesive based liquid, applied under pressure, forming an aerosol spray which binds asbestos fibers in a hard adhesive matrix after drying, thus preventing the release of asbestos fibers.
- 4.27 Encapsulation:** The treatment of asbestos containing materials with an encapsulating substance. This substance does not necessarily have to be a commercial product designed specifically for the treatment of asbestos containing materials. Encapsulates may include a variety of paints, lacquers, and varnishes, that produce similar effects to commercially purchased asbestos specific encapsulates. The Consultant must approve all for use.
- 4.28 Enclosure:** An airtight, impermeable, semi-permanent barrier used during asbestos abatement procedures, to prohibit asbestos containing materials and asbestos fibers from entering the clean outside atmosphere. The enclosure may or may not be under a negative differential pressure, and is generally used for very small projects.
- 4.29 Filter:** A porous media component through which a liquid or gas is passed in order to remove unwanted components, especially suspended material. Refer to specific requirements for specialized filters to be utilized in conjunction with this project.
- 4.30 Friable Asbestos Material:** Material that contains more than one (1%) percent asbestos by dry weight or volume, that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- 4.31 Glove bag:** An asbestos disposal bag, typically constructed of six (6) millimeter transparent polyethylene plastic, with two inward projecting long sleeve gloves, which are designed to enclose the asbestos containing object that is subject to removal.
- 4.32 HEPA Filtered Vacuum Cleaner (HEPA Vac):** A vacuum cleaner equipped with a high efficiency particulate air filter air exhaust system capable of collecting and retaining asbestos and other fibers. The filter parameters are the same as for a HEPA filter, and should be capable of filtering and trapping 99.97% of all fibers greater than one (1) micron in diameter and three (3) microns or larger in length, prior to exhausting the air.
- 4.33 HEPA Filter:** A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97% of asbestos or other fibers greater than one (1) micron in diameter and three (3) microns or larger in length.
- 4.34 Negative Pressure Respirator:** A head worn HEPA filtered device, powered by normal human respiration, used for breathing protection in an asbestos contaminated environment, by insuring that the air pressure inside the respirator is positive during exhalation with relation to the outside atmospheric air pressure, forcing the exhaust air stream through the mask exhaust valve and seals, and negative during inhalation with regard to the outside atmospheric air pressure, forcing the inlet air stream through the HEPA filter.
- 4.35 Negative Pressure Ventilation System:** A ventilation and filtering system wherein a series of differential pressure machines are utilized to evacuate air from an air tight containment or enclosure, and provide the required atmospheric pressure drop between the air tight enclosed/contained work area, and the outside environment. Each differential pressure machine has a HEPA filtration installed in the exhaust air stream, allowing the evacuation of filtered clean air from inside of the enclosure/containment to the outside environment. The required pressure drop, under federal and state regulations is measured in inches of water column, with the minimum allowable pressure drop listed at -0.02"

water column (W.C.), as measured with a recording manometer. OSHA requires this type of system be used and sized to completely exchange the enclosure/containment inside atmosphere (air) at least four (4) times per hour. See Differential Pressure Systems for more information.

- 4.36 Negative Pressure:** See Differential Pressure Systems and Negative Pressure Ventilation System.
- 4.37 Personnel Monitoring:** OSHA regulation §29 CFR 1926 dictates that one asbestos abatement employee for each asbestos job description, and an aggregate of at least twenty-five (25%) of all asbestos abatement personnel, or a minimum of two (2) persons if the total number of asbestos personnel is less than four (4) have air samples collected in the employee's breathing zone. These samples will be collected in a fashion suitable for the collection of multiple air samples, providing sufficient sampling time throughout the work day in order to establish an eight (8) hour time weighted average (TWA), and random 30-minute exposure limit (EL) sampling through the work day.
- 4.38 Protection Factor:** The outside air concentration of an airborne substance divided by the respirator air filtration system rated protection factor yields an inside the mask concentration of the substance. The protection factor is a measure of the degree of protection provided by a respirator to the wearer, as tested and certified by National Institute for Occupational Safety and Health (NIOSH)
- 4.39 Respirator:** A head worn device designed to protect the wearer from the inhalation of harmful substances. Each type of respirator has a protection factor assigned by OSHA and MSA, and each filtration system used with the respirator has additional safety ratings, and specific use ratings. The combination must be balanced perfectly to provide the maximum protection to the worker using the protective device.
- 4.40 Surfactant:** Soap like substance that reduces the surface tension of water molecules to enhance the wetting properties. The surfactant is designed specifically for use in controlling airborne asbestos fibers. The surfactant is mixed with water to form "Amended Water" The amended water is used as an aerosol, under pressure, to mitigate the dust and fiber concentrations that have become airborne in the course of demolition and removal procedures.
- 4.41 Time Weighted Average (TWA):** The statistical average of several personnel air samples collected over an approximate eight (8) hour period, used to determine the average outside concentration of an airborne substance during an average work day.
- 4.42 Visible emissions:** Any emission emanating from an enclosure, containment, or building that contains particulate material that is visually detectable without the aid of instruments, is considered to be a visible emission. In some cases visible emissions may take place internal to an enclosure or containment area if, in the opinion of a Texas Department of State Health Services Inspector, there is not enough water being used to safely regulate the hazardous materials being removed. Visible emissions do not normally include condensed water vapor. Any visible airborne dust, water leaks, or debris found emanating from any asbestos removal enclosure or containment, worker decontamination unit, waste disposal containers, temporary disposal container storage areas, waste transport trailers, and dumpsters will be considered a visible emission, and therefore a violation of federal and state regulations. The asbestos abatement Contractor will be held solely liable for all damage, violations, and any other liability that may be incurred by the emanation of visible emissions.
- 4.43 Wet Cleaning:** The process of eliminating surface asbestos contamination from the building surfaces and objects, using rags, disposable towels, cloths, mops, or other cleaning utensils which have been dampened with amended water or diluted removal encapsulate. All disposable items used in this fashion must be disposed of in accordance with the state regulations regarding asbestos contaminated materials. HEPA filtered vacuum cleaners and other equipment may be cleaned and used again.
- 4.44 Regulated Work Area:** The regulated work area generally uses barrier tape to prevent entry by unauthorized persons into the asbestos work area, where regulated asbestos work is being conducted. The regulated work area is to be isolated by a second barrier, to prevent the spread of asbestos contaminants, or other debris from the work area. The regulated work area is a regulated area as defined by §29 CFR 1924.

4.45 Work: As used herein the term "Work" is used to mean that normally done at the location of the regulated work area and surrounding areas. The term "Work" also includes all plans, scheduling, labor, materials, and supplies necessary to properly perform and/or incidental to, the completion of each phase of this contract.

4.46 Written Notice: Any oral notice of event, request, or intention given the Asbestos Consultant or Project Manager or the Contractors General Superintendent, must be forwarded in written form within five (5) working days, and delivered by registered mail to the last known business address of the recipient of the written document. The formal contract documents and specifications will take precedence over this clause unless otherwise agreed upon in writing.

5.0 SPECIFICATION EXPLANATIONS:

5.1 Overlapping and Conflicting Requirements: Where compliance with two (2) or more industry standards or sets of requirements is specified and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, the most stringent requirement is intended and will be enforced, unless specifically detailed language was written into the contract documents clearly indicating that a less stringent requirement is to be used. The Consultant will make the final decision in this situation, and such decisions will always reflect the best interests of the Owner.

5.2 Contractor's Options: With the above stated exception, and in full compliance with the project specifications and contract documents, the assignment, management, and possible modification of work practices to expedite contractual work is intended to be the asbestos abatement Contractor's domain, regardless of whether or not it is specifically indicated as such. The Consultant prior to implementation must approve all specification or approved submittal variation.

5.3 Minimum Quality and Quantity: In every instance, the quality level, quantity shown and work completed is intended to be at least within minimum condition and tolerances for the work required under the project specifications and the contract documents. Except as otherwise specifically indicated, actual work may either comply exactly with the minimum specified conditions and tolerances or exceed the minimum conditions and tolerances, except where such conditions and tolerances must be exact. The Consultant will interpret the contract specifications and contract documents in determining the parameters of the conditions and tolerances required for this project.

5.4 Specialists: In certain instances, the project specifications require that specific work or portions of work be assigned to specialists, or other expert entities, who must be engaged for the performance of that work. Such assignments shall be recognized as contractual requirements, over which the Contractor has no choice or option. These requirements should not be interpreted as to conflict with the enforcement of building codes and similar regulations governing the work. These requirements are not designed, or intended to interfere, with local labor union jurisdiction, grievance filings, strike, settlements, or other similar conventions. Such assignments are intended solely to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated specific work or operation. Nevertheless, the final responsibility for the contractual completion of the current project remains with the Contractor.

5.5 Trades: Except as otherwise indicated, the use of titles such as the mechanical contractor, the carpenter, the electrical contractor, and other trades and subcontractors require that the corresponding work must be performed by an accredited, insured, bonded, licensed contractor, subcontractor, and/or tradesman. Time and experience may be taken into consideration and a variation allowed in areas that do not present a danger to the project, and at the discretion of the Consultant.

5.6 Abbreviations: The language of project specifications and contract documents is of the abbreviated type in certain instances, and implies words and meanings, which will be appropriately interpreted. Actual work abbreviations of a self-explanatory nature have been included in the text. Specific abbreviations have been established, principally for lengthy technical terminology and primarily in conjunction with the coordination of specification requirements with notations on drawings and in project schedules. These are frequently defined in a section at the first instance of use. Trade association names and titles of general standards are frequently abbreviated. Singular words may be interpreted as plural and plural words may be interpreted as singular, where applicable, and where the full context of the project

specifications and contract documents indicates. The Consultant will decide the final terminology meaning as it applies to specific situations.

6.0 INDUSTRY STANDARDS:

- 6.1 General Applicability of Standards:** Except to the extent that more explicit or more stringent requirements are written directly into the project specifications or contract documents, applicable standards of the asbestos abatement and construction industry have the same force and effect and are made a part of the contract documents by reference. Refer to the other contract documents for resolution of overlapping and conflicting requirements, which may result from the application of several different industry standards to the same unit work. Refer to individual unit of work sections for indications of which specialized codes and standard the Contractor must keep at the project site. The Consultant will determine the applicability of all unremunerated industry standards.
- 6.2 Referenced standards:** Asbestos abatement standards referenced directly in project specifications, contract documents or in federal, state, and local regulations have precedence over non-referenced standards which are recognized in industry for their applicability to asbestos abatement or construction projects.
- 6.3 Non referenced standards:** These asbestos abatement standards are general standards developed by and among asbestos abatement contractors and other parties, and have no applicability to the contractual work under this contract.
- 6.4 Publication Dates:** The most recently published regulation or industry standard will be used to comply with the requirements of the project specifications and the contract documents, whether sited in these documents or not. The Consultant will weigh any change to federal or state regulation during the course of this project, and the asbestos abatement Contractor will be instructed on complying with these changes. The Consultant will keep current, and provide information on changes in these standards and determine the minimum response, if any, that is suitable.
- 6.5 Updated Standards:** Asbestos abatement contractors should follow and be aware of pending federal and state regulations. The asbestos abatement contractor may submit a change order proposal when impacted through a sudden change in a federal, state, or local regulation, or industry standards. The Consultant will decide on the approval or disapproval of the submitted change order. If in the opinion of the Consultant, the Contractor has not been diligent in following industry changes, the change order will be denied, and the asbestos abatement contractor will be required to implement the current changes at no additional cost to the Owner.
- 6.6 Copies of Standards:** The contract documents require that each person performing work be experienced in that part of the work being performed. Each person is also required to be familiar with recognized industry standards applicable to that part of the work. There are no copies of the applicable asbestos standards bound with the contract specifications or contract documents. Where copies of said standards are legally required on site or needed for the proper performance of the work, the asbestos abatement contractor is required to obtain such copies directly from the publication source.
- 6.7 Site Standard Requirements:** The Consultant requires the asbestos abatement contractor to submit copies of these construction standards upon project award, and to maintain all the construction standards in the following listing, in a separate log located at the project site trailer.
- 6.8 Abbreviations and Names:** The following acronyms or abbreviations as referenced in project specification and the contract documents are defined to mean the associated names. Both names and addresses are subject to change and are believed to be, but are not assured to be, accurate and up-to-date as of date of contract documents:

AIA American Institute of Architects
1735 New York Ave. NW; Washington, DC 20006
202-626-7474

ANSI American National Standards Institute
1430 Broadway; New York, NY 10018
212-/354-3300

ASHRAE	American Society for Heating, Refrigerating, and Air Conditioning Engineers 1791 Tullie Circle NE; Atlanta, GA 30329 404-/636-8400
ASTM	American Society for Testing and Materials 1916 Race St.; Philadelphia, PA 19103 215-/299-5400
CFR	Code of Federal Regulations Available from Government Printing Office; Washington, DC 20402 (usually first published in Federal Register)
CGA	Compressed Gas Association 1235 Jefferson Davis Hwy. Arlington, VA 22202 703-979-0900
CS	Commercial Standard of NIST (U.S. Dept. of Commerce); Government Printing Office; Washington, DC 20402
EPA	United States Environmental Protection Agency 401 M Street, SW; Washington, DC 20460 202-382-3949
GA	Gypsum Association 1603 Orrington Avenue; Evanston, IL 60201 312-491-1744
NIST	National Institute of Standards and Technology (U. S. Dept. of Commerce) Gaithersburg, MD 20899 301-921-1000
NEC	National Electrical Code (by NFPA)
NFPA	National Fire Protection Association Batterymarch Park, Quincy, MA 02269 617-770-3000
OSHA	Occupational Safety & Health Administration (U. S. Dept. of Labor) Government Printing Office, Washington, DC 20402
PS	Product Standard of NIST (U. S. Dept. of Commerce) Government Printing Office, Washington, DC 20402
UL	Underwriters Laboratories 333 Pfingsten Road, Northbrook, IL 60062 312-272-8800

7.0 INSURANCE

General Requirements

The Contractor must maintain the type and amounts of insurance required in this contract throughout the term of the agreement for the section of work effected. Contractor must provide a Certificate of Insurance evidencing the required coverage types and amounts before the Contract is signed. All policies are subject to examination and approval by the Owner's Risk Manager for their adequacy. The Owner may terminate this contract if the Contractor fails to comply with all insurance requirements.

Insurance naming the Owner as additional insured must be primary insurance and not contributing with any other insurance available to the Owner, under any third party liability policy.

These requirements are applicable to the contractor and all sub-contractors as it is applicable to their work. Any extended coverage of sub-contractors shall be in writing with affirmation from the carrier.

Before the start of work, the contractor shall submit for review certificates of insurance for their work and all sub-contractors that will be working on the site or working directly or indirectly with this project.

Additional Requirements

The required liability insurances and their certificates must:

- a. Name the Owner as an additional insured for operations under this contract.
- b. Provide for 30 days advance written notice of cancellation or material change.
- c. It is hereby agreed and understood that the insurance required by the Owner is primary coverage and that any insurance or self-insurance maintained by the Owner, its officers, agents, employees or authorized volunteers will not contribute to a loss. All insurance shall be in full force prior to commencing work and remain in force until the entire job is completed or the length of time that is specified in the contract.

1. GENERAL LIABILITY COVERAGE

A. Commercial General Liability

- (a) \$1,000,000 general aggregate
- (b) \$1,000,000 products - completed operations aggregate
- (c) \$500,000 personal injury and advertising injury
- (d) \$500,000 each occurrence limit

B. Insurance must include:

- (a) Premises and Operations Liability
- (b) Personal Injury
- (c) Explosion, collapse and underground coverage
- (d) Products/Completed Operations
- (e) The general aggregate must apply separately to this project/location

2. BUSINESS AUTOMOBILE COVERAGE

- A. Limits - \$250,000 each person/\$500,000 each accident for Bodily Injury and \$100,000 for Property Damage
 - (a) OR

- (b) \$500,000 Combined Single Limit for Bodily Injury and Property Damage each accident
- B. Must cover liability for "Any Auto" - including Owned, Non-Owned and Hired Automobile Liability

- 3. **WORKERS COMPENSATION AND EMPLOYERS LIABILITY** - If required by Texas State Statute or any Workers Compensation Statutes of a different state.
 - A. Must carry coverage for Statutory Workers Compensation and Employers Liability limit of:
 - (a) \$100,000 Each Accident
 - (b) \$500,000 Disease Policy Limit
 - (c) \$100,000 Disease - Each Employee

- 4. **AUTOMOBILE POLLUTION LIABILITY (including loading and unloading)**
 - A. Limits - \$1,000,000 each occurrence
 - B. \$2,000,000 annual aggregate
 - C. Maximum deductible is \$2,500. Insured is responsible for any claims under the deductible
 - D. Must cover pollutant clean up, and resulting bodily injury and property damage liability.
 - E. Must cover liability for "any auto" including owned, non-owned and hired automobile liability.

5. **ASBESTOS ABATEMENT CONTRACTOR**

In addition to the requirements stated herein, the Asbestos Abatement Contractor shall as a General Contractor or as a Sub-contractor carry and supply said coverage to this project the following coverage with at least the minimum limit: Environmental Impairment/Contractor's Pollution \$2,000,000 per occurrence

6. **ADDITIONAL PROVISIONS**

- A. **Additional Insured - On the General Liability Coverage, Business Automobile Coverage, Umbrella Coverage, Automobile Pollution Liability and Environmental Impairment/Contractor's Pollution The Owner, and its officers, agents, employees, and authorized volunteers shall be Additional Insured.**
- B. **Endorsement - The Additional Insured Policy endorsement must accompany the Certificate of Insurance.**
- C. **Certificates of Insurance - A copy of the Certificate of Insurance must be on file with the Owner**
- D. **Notice – Owner requires 30 day written notice of cancellation, non-renewal or material change in the insurance coverage.**
- E. **The insurance coverage required must be provided by an insurance carrier with the "Best" rating of "A" or better. All carriers shall be admitted carriers in the State of Texas.**

8.0 PROJECT OBJECTIVE

The objective of this project is the safe and thorough removal and disposal of asbestos containing materials, as shown on the project drawings and described in project specifications and contract documents.

- 8.1 The work area for each phase will be precleaned using wet methods, HEPA vacuuming, and other techniques prior to the construction of any walls, enclosures, containments, or decontamination units. The Asbestos Abatement Contractor will establish barrier tape regulated areas prior to precleaning. The Asbestos Abatement Contractor will utilize respiratory protection that is appropriate for this function.

- 8.2 All remaining furniture, fixtures, equipment, and other miscellaneous items within the work area are to be removed by the Asbestos Abatement Contractor and stored in area provided the Owner. The Owner will be responsible for the storage of all removed furniture and fixtures. The Asbestos Abatement Contractor will not be required to install the stored items after project completion. The Asbestos Abatement Contractor will utilize respiratory protection that is appropriate for this function.
- 8.3 The Project will require a minimum of three stage decontamination units will be constructed, as specified in the submitted abatement work plan, in conjunction with the project specifications and documents. The Asbestos Abatement Contractor will utilize a minimum of one **decontamination unit** per containment / enclosure unit.
- 8.4 The Asbestos Abatement Contractor will install air filtration systems that maintain a constant differential pressure. The system shall be capable of maintaining a minimum differential pressure of -0.030 inches of water column (WC). The minimum operating pressure during active removal shall be -0.025 WC. If the pressure drops below -0.02" WC, all work will stop until the situation is corrected. Continual measurement of the pressure differential between the interior of the enclosure unit and the area exterior the enclosure will be with a recording manometer provided by the Asbestos Abatement Contractor. Copies of the pressure differential record will be submitted to the Owner as Project Close-Out Documents. Said records will be annotated to indicate date and enclosure area from which the reading was collected. The differential pressure system must be properly designed to exchange the inside containment atmosphere at least four (4) times per hour while maintaining the required atmospheric pressure differential. The Asbestos Abatement Contractor will utilize respiratory protection that is appropriate for this function.
- 8.4 One or more enclosed asbestos disposal dumpsters or trailers must be on site and ready for use, prior to the start of any asbestos abatement activity. The Asbestos Abatement Contractor may not utilize the building or any exterior area as storage for asbestos containing waste material.
- 8.5 The work area for each phase will be set up as a regulated area, under OSHA regulations. The Contractor will have dedicated personnel to secure the regulated area, and the containment work areas access points inside the regulated area. The regulated area will be constructed according to the submittals, OSHA regulations, and the project specifications. It will be the responsibility of the Contractor to maintain continual security of the site during the course of asbestos removal or disturbance activities during the project. The Asbestos Abatement Contractor is responsible for security of the section of the building in which work is being conducted.
- 8.6 The Asbestos Abatement Contractor will take every precaution in preventing the exposure of any person to asbestos fibers include, but are not limited to, the proper construction of containment areas, the proper construction of regulated containment areas, and the prompt repair of any breach of containment that may occur during the course of the project.
- 8.7 All disturbance of Asbestos Containing Materials or Asbestos Contaminated Materials to include waste generated by the work process shall be maintained adequately wet. Large accumulations of un-containerized waste within the work area will not be allowed. All dislodged material shall be containerized before the end of the work shift. Dry removal is grounds for a stop work order from the Consultant. Continual incidences will be reported to the regional inspector for Texas Department of State Health Services. Continual abuse of not adequately wetting said materials can be considered a breach of contract.
- 8.8 Disturbance of ACBM in quantities greater than small scale short duration shall require a working airless with amended water to be operated within the containment to mist the air and to wet materials. Other devices may be used if it is proven that the atomize the water into the air and can deliver amended water. Small scale short duration disturbance may use pump-up garden sprayers for wetting.
- 8.7 The Consultant will inspect the work quality for each step or phase of work. The Consultant will conduct a thorough visual inspection of each finished removal area, prior to final air sampling, using the ASTM inspection protocol for asbestos projects. Final air quality sampling will not be conducted in any work area until all visible asbestos containing materials or presumed asbestos containing material residue required to be removed under this contract is completely removed as determined by the Consultant. Upon finding evidence of contamination the entire removal, area will be cleaned again.

- 8.8** The Asbestos Abatement Contractor must possess a current asbestos transporter license or use a properly licensed subcontractor to transport asbestos containing material, asbestos contaminated material, and any other asbestos abatement byproduct to an USEPA and TCEQ approved landfill.
- 8.9** The Asbestos Abatement Contractor will keep detailed project documents, including, but not limited to daily project logs, containment entry logs, visitor logs, pressure differential monitoring records, waste manifest shipment logs, OSHA personnel monitoring logs, and current bulletin boards. Copies of all project record documents will be bound in chronological order and will submit **two (2)** copies to the Consultant at the completion of the Project.

9.0 SCOPE OF WORK:

The Asbestos Abatement Contractor will be required to complete all listed services and provide listed products to the Owner's satisfaction. Services are to include all services, labor, equipment, travel, clerical, communication, service fees, taxes, permits and associated items to complete all listed items for this phase of the renovation project.

The asbestos abatement contractor shall complete each of the following removal activities in accordance with this document and all referenced documents. It is the intent of this project for all known asbestos containing materials to be removed from the buildings. Material location, approximate quantities and details can be found in the attached asbestos inspection report for each Building.

9.0.1

1. Acoustical Ceiling Texture – The Acoustical plaster, base plaster, expanded metal lathe, black metal support, tie wires. All associated overspray on the deck, structural members and other building components is to be removed as part of this project. All components must be disposed of as asbestos containing materials. The ceiling to be removed is two stories up in an open foyer. The distance from the floor to the finished ceiling is 21 feet. There is approximately ~1,500 Square Feet of ceiling system. The associated overspray is not quantified.
 - a. All waste material must be lowered or transported to the ground level. Dropping of small waste more than seven feet will not be allowed. The use of chutes will not be allowed.
 - b. Any mechanical lift systems used within the work area must be sealed systems that can be thoroughly cleaned at the end of the project. Lift systems used to transport containerized waste but outside of the removal area must be surface cleaned at the end of each shift.

9.1 Special Work Requirements:

And miscellaneous

- 9.1.1. Work Place Hazards:** It is the Asbestos Abatement Contractor's responsibility to monitor hazardous conditions and comply with all standards which have relevance to this project. The Asbestos Abatement Contractor must assess the work area and develop contingencies for any safety / hazard issues.
- 9.1.2. Proof of Training:** The Asbestos Abatement Contractor will supply positive proof that all project personnel have had the minimum required training for all potential hazards associated with this project. The training must include a walkthrough of the work areas in which the scopes of the project and safety considerations are explained to personnel in the applicable primary language of the workers. On-site work area training is to be limited to an instructor to student ratio of 1:5. Each training group must be comprised of same language participants.
- 9.1.3. Electrical Systems:** The Asbestos Abatement Contractor will supply appropriate personnel to make all the appropriate electrical connections and disconnection.

10.0 PROJECT ABATEMENT MEASUREMENTS:

All measurements were taken from the original scaled drawings and field measurements. Bidders are encouraged to verify all measurements prior to bidding the project. No extra charge or compensation will be allowed after contract award, for any perceived difference between actual dimensions and the measurements indicated in the contract specifications and contract drawings. Any variation between contract documents and actual conditions found by bidders in the field during the site visit will be

verified by the Consultant, and if found to be true, an addendum to the contract will be sent to all bidding parties. Addendum for change will be issued only if the adjusted amount of materials is greater than ten (10%) percent of the totals, as listed in this document. The asbestos abatement contractor will be responsible for the removal and disposal of all materials designated in the contract specifications, drawings, and contract documents regardless the quantity specified herein.

11 SPECIAL CONDITIONS / LIQUIDATED DAMAGES

- 11.1. All Bidders and potential sub-contractors will not be allowed a change order for any specific conditions, variance of materials, site conditions and constraints that could have been observed during the site visit. All bidders are encouraged to attend the site visit.
- 11.2. The working hours for all phases will be within the normal hours of a work day. A day is considered 8 hours normally worked 7 a.m. to 4 p.m. or 8 a.m. to 5 p.m. for a combined total of 40 hours per week. Any variance from this should be submitted for approval prior to the start of the Project. Overtime hours will only be allowed if there is an agreement between the Consultant and the Owner to pay the additional fees or if the Contractor is willing to reimburse the Owner for additional overtime fees of the Consultant. If the Asbestos Abatement Contractor desires to work extended hours, arrangements must be made in advance by submitting a request to the Project Consultant. Extended hours may not be worked unless approval of the Consultant is given.

12.0 PRECLEANING OF WORK AREAS

- 12.1 Many of the work areas have ACBM that has been disturbed. Prior to preparation of the work area. Pre-cleaning will need to be conducted.
- 12.2 The workers will be fully protected with proper personal protection equipment due to the potential of airborne fiber concentrations
- 12.3 The work area will be demarcated with red barrier tape that bears the wording "DANGER ASBESTOS" in two-inch block letters. This tape will establish a regulated area, placed approximately 10 or more feet away from the entrances to the work area. Critical barriers will be established prior to the construction of the work area for precleaning and preparation work.
- 12.4 Critical barriers will be constructed of two independently sealed layers of 6 mil polyethylene sheeting sealed with framing as needed, spray adhesive and durable duct tape at all HVAC supply and return, doors, windows and other areas where air flow into or out of the work area is possible. These barriers must be sealed air and water tight. All work will stop immediately upon the failure of a critical barrier.
- 12.5 Once the regulated areas and critical barriers are in place, all furniture, equipment, wall mounted objects and other movable items are to be wet wiped and HEPA vacuumed. Once these items are clean, they are to be moved out of the work into a secure storage area. The storage location for these items will have to be coordinated with the Consultant.
- 12.6 All immovable objects, shelves, chillers, HVAC systems, electrical and communications trays, electrical outlets, thermostats, sensor units, wall mounted equipment and fixtures and other horizontal and vertical surfaces are to be cleaned, and then sealed with double layers of six (6) millimeter polyethylene sheeting. The barriers are to be sealed air and water tight with spray adhesive and duct tape. Care is to be taken to protect finishes.
- 12.7 Construct barriers that will prohibit the migration of airborne asbestos fibers from the work area to other areas of the building, during the precleaning phase of this project.
- 12.8 All floor drains and other openings will be sealed, prior to the start of the precleaning phase of the project.

12.9 All areas will be thoroughly wetted with amended water prior to precleaning.

12.10 All waste collected during the precleaning phase of the project will be placed in appropriately marked double wrapped asbestos disposal bags, and immediately transported to the asbestos dumpster for future disposal.

12.11 The Asbestos Abatement Contractor's air monitoring technician will collect and analyze personnel air samples during the precleaning, preparation, and abatement phases of this project.

13.0 OTHER CONSIDERATIONS:

13.1 All items of the project specifications must be completed to the Owner's satisfaction.

13.2 The Asbestos Abatement Contractor will be responsible for all collection, transportation and analysis expenses for all additional final clearance sampling incurred by the Owner for additional clearance sampling due to the Asbestos Abatement Contractor's failure to meet final air quality standards.

14.0 CONSTRUCTION MEETINGS:

14.1 The awarded Asbestos Abatement Contractor will attend a meeting with the Owner and the Consultant. Project scheduling and logistics will be discussed, in order for the Asbestos Abatement Contractor to generate the required time schedule and work plan for the project. This is an organizational meeting, to review responsibilities and personnel assignments, to locate the placement of trailers, dumpsters, containment and decontamination areas, and the establishment of temporary utilities.

14.2 The Asbestos Abatement Contractor will attend progress meetings on each day of the on-site work; with the Consultant to rectify problems, answer questions, and discuss the project scheduling.

15.0 PROJECT REPORTS AND DOCUMENTATION:

The Asbestos Abatement Contractor will be required to submit two copies of the following documents to the Consultant no later than the scheduled Project Close Date. All copies must be bound and in chronological order.

15.1 Daily Project Log: The onsite Asbestos Abatement Contractor project superintendent must maintain a day by day log of the project activities and occurrences, and time tag each entry into the daily log. The daily log must contain but is not limited to, the following items. All pertinent discussions, meeting purposes, attendees, personnel problems, safety meeting times and summaries, personnel by name, entering and leaving the work area, Special or unusual events, regulated area violations, containment breaches and remedies, equipment failures, documentation and confirmation by the Consultant of unscheduled changes, inspection of pre abatement containment areas, Inspection of post abatement pre encapsulation areas, ASTM visual final inspections, load out and shipping of asbestos waste materials. Copies of supporting documents will be incorporated into the Project Log as part thereof.

15.2 Visitors Log: The Asbestos Abatement Contractor will maintain a daily visitors log and sign in and sign out all visitors to the project site, whether the visitor is authorized or unauthorized, and regardless of whom they may represent. The visitors log must record the name, company affiliation, and reason for the visit to the project site. This log must be submitted to the Consultant each Monday, for the previous week.

15.3 Containment Entry Log: The Asbestos Abatement Contractor will maintain a separate containment entry log at each containment location, used to record the time of entry and exit to the work area for Asbestos Abatement Contractor personnel and authorized subcontractors and visitors. The log must record the name, time of ingress and egress, affiliation, and reason for containment entry. This log must be submitted to the Consultant each Monday, for the previous week.

- 15.4 Asbestos Abatement Contractor Bulletin Board:** The Asbestos Abatement Contractor will maintain a bulletin board at the project site posted with appropriate TEXAS DEPARTMENT OF STATE HEALTH SERVICES poster, labor rates and standards, emergency telephone numbers, TEXAS DEPARTMENT OF STATE HEALTH SERVICES violations and other standard required information. The Asbestos Abatement Contractor must only submit a signed statement stating that this was posted at the site.
- 15.5 OSHA Personnel Monitoring Log:** The Asbestos Abatement Contractor or his subcontractor will collect and have analyzed all the OSHA required personnel air samples. The personnel air sample results from the previous day must be posted in this log and on the bulletin board prior to the start of work on the day after the samples were collected.
- 15.6 Pressure Differential Monitoring Log:** The Asbestos Abatement Contractor will install differential pressure systems at each of the containments, capable of maintaining a minimum negative differential pressure of -0.030 inches of water column (WC). Continual measurement of the pressure differential between the interior of the enclosure unit and the area exterior the enclosure will be with a recording manometer provided by the Asbestos Abatement Contractor. Copies of the pressure differential record will be submitted to the Owner as Project Close-Out Documents. Said records will be annotated to indicate date and enclosure area from which the reading was collected.
- 15.7 Verification of Personnel Eligibility:** The Asbestos Abatement Contractor will furnish copies of the following documents for all personnel in his employ and all sub-contractors as applicable:
- of proof of current training
 - physician's written approval for work in a respirator
 - proof of licensing or certification in the State of Texas for their position
 - proof of current fit testing and respirator training
 - Signed acknowledgement of asbestos hazard form. This acknowledge form is attached to this document as Attachment 1

16.0 ASBESTOS ABATEMENT CONTRACTOR USE OF PREMISES:

- 16.1 General Use of the Construction Site:** THE Asbestos Abatement Contractor shall limit his use of the premises to the work area as required by project phase, allowing other contractors, the Owner and the public to conduct business as usual. The following items will not be allowed within any regulated area, storage area, or work area of this project. A violation of these limitations may result in work stop order;
- 16.2** The Asbestos Abatement Contractor must confine operations at the site to the areas permitted under the contract documents, and as designated by the Consultant and Prime Contractor.
- 16.3** The Asbestos Abatement Contractor must keep the parking lot, adjacent driveways, and entrances serving the Asbestos Abatement Contractor storage and mobilization area secured from public use, and maintained in a clean and orderly condition. The Asbestos Abatement Contractor shall comply with the parking requirements imposed of this project.
- 16.4** The Asbestos Abatement Contractor must not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and the location of storage areas to the building areas designated or in the parking lot areas indicated. If additional storage is necessary the Asbestos Abatement Contractor will obtain and pay for such storage off site.

- 16.5** The Asbestos Abatement Contractor must lock and maintain in a secured condition at all times, all trailers, dumpsters, vehicles, equipment, storage facilities and the entry to the work. The Asbestos Abatement Contractor shall not leave waste dumpsters, material areas, or equipment storage trailers open and unattended. All construction dumpsters, material areas, and equipment trailers shall remain locked when unattended. The Asbestos Abatement Contractor shall not leave any vehicle or motorized equipment, unattended, with the motor running, or the ignition key in a location accessible to unauthorized persons.
- 16.6** The consumption of food or beverages is prohibited inside any asbestos work area. Any and all breaks will be taken in the designated break area. The Asbestos Abatement Contractor will be responsible for collection of all debris within and around work and break areas.
- 16.7** The chewing, sniffing, smoking or other use of tobacco products will only be allowed in designated areas. Tobacco use is prohibited in any building located on the Owner's facility.
- 16.8** The removal of protective equipment within a regulated work area or entering a regulated work area without proper personal protection equipment is strictly prohibited. Violation of this requirement will result in the violating person being ejected from the Project site for the duration of the Project. An exception will be made in the event of emergency medical treatment or work place fires.
- 16.9** The Asbestos Abatement Contractor will not allow employees to engage in any sort of horse play, practical jokes, fighting, hitting, or other physical contact or activity that might cause physical injury or a stoppage of work. The Asbestos Abatement Contractor will not allow employees to throw any items including, but not limited to food, equipment, disposal bags, clothing, or respirators.
- 16.10** The Asbestos Abatement Contractor must maintain the existing building in a safe and weather tight condition throughout the construction period.
- 16.11** The Asbestos Abatement Contractor must repair any and all damage caused by construction operations or personnel activities.
- 16.12** The Asbestos Abatement Contractor must take all precautions necessary, to protect the building and its occupants during the construction period.
- 16.13** The Asbestos Abatement Contractor must keep public areas free from any accumulation of materials, waste, rubbish or construction debris.
- 16.14** The Asbestos Abatement Contractor must provide his personnel with restroom facilities. The Asbestos Abatement Contractor will not be allowed to utilize building facilities. All port-a-potties or other enclosed toilet facilities must be maintained in a good condition with regular service. These units will be placed in an area designated by the Owner.

17.0 OWNER OCCUPANCY:

Owner Occupancy: The Owner will occupy the area around the work area during the entire period of project. The Asbestos Abatement Contractor must cooperate fully with the Owner, other contractors and the Consultant during project operations, thereby minimizing conflicts and facilitating the business of the contractual parties.

18.0 TRADE PERMITS AND LICENSING:

- 18.1 Permits and Regulations:** All city building permits and tradesman licenses, either permanent or temporary, is the sole responsibility of the Asbestos Abatement Contractor. All fees paid to secure permits and licensing will be the responsibility of the Asbestos Abatement Contractor. All citations or other disciplinary action that is the result of an action by the Asbestos Abatement Contractor through a failure in securing a required permit or license shall be the sole responsibility of the Asbestos Abatement Contractor. Any and all legal and required fees are to be incorporated into the bid.

18.2 The Consultant will submit the required notifications and amendments, where necessary, to the Texas Department of State Health Services. The Asbestos Abatement Contractor will provide all the required information needed for the notification to the Consultant during the submittal process, or when requested. The Owner will pay all applicable State notification fees. The Contractor shall not file notifications and / or amendments unless specific authorization from the Consultant is granted.

18.3 The Asbestos Abatement Contractor must comply with all federal, state, and local regulations, laws, ordinances, and pay applicable fees that have a bearing on the conduct of the project, except where noted otherwise.

19.0 INSPECTION OF WORK:

The Consultant or designated representative shall have access at all times, to all portions of the project site. The Asbestos Consultant or Project Manager shall conduct all final visual containment inspections. The Asbestos Consultant / Owners Representative retains the right to give interpretation, direction and require changes to the Asbestos Abatement Contractors work procedures and practices, when they vary from the written project documentation, or violate Federal, State, or Local regulations.

20.0 WORK AREA ENTRY

20.1 It will be the responsibility of the Asbestos Abatement Contractor to assure that all personnel entering the work area meet the following criteria. Proof of these requirements must be established prior to ingress into the work area.

20.2 Personnel entering the work area must provide proof of training in the use and limitations of the respiratory protection equipment.

20.3 Personnel entering the work area must provide documentation that they have had a qualitative and quantitative fit test for the type of respirator they are using within the last six (6) months.

20.4 Personnel entering the work area must provide a current Texas Department of State Health Services medical document, physician's approval required for all personnel that are to conduct work while wearing negative pressure respiratory protection equipment or other respirators.

20.5 Personnel entering the work area must provide proof of the appropriate training and current licensing status with the Texas Department of State Health Services.

20.6 All verifiable Environmental Protection Agency, Occupational Safety and Health Administration, and Texas Department of State Health Services inspectors, along with certain other federal and state agencies have the right to investigate all areas of the project site, with no requirement to produce any documents, other than their identity cards and badges. All contracting parties will abide with this paragraph politely.

21.0 WORK AREA ENTRY AND EXIT PROCEDURES:

21.1 ENTRY PROCEDURES

- 21.1.1. All persons entering the abatement work area will put on protective disposable clothing in the clean room of the decontamination unit. All street clothes, including undergarments and jewelry will be removed and stored in a clean conveniently located locker inside the clean room.
- 21.1.2. The visitor, supervisor, or asbestos worker will enter the decontamination unit clean room through a double flapped airlock and put on disposable underpants.
- 21.1.3. The visitor, supervisor, or asbestos worker entering the clean room will then put on disposable coveralls.
- 21.1.4. The visitor, supervisor, or asbestos worker will then put on rubber boots, or may wait until entry into the equipment room and put on the rubber boots from the previous day's work.
- 21.1.5. The disposable suit wrists are taped, and ankles are taped to the rubber boots and other areas, as necessary, in order to reduce the hazard of tripping.
- 21.1.6. The required respiratory equipment is inspected, put on, and fit checked by the visitor, supervisor, or asbestos worker.
- 21.1.7. The visitor, supervisor, or asbestos worker will then put the disposable suit hood over the straps of the respirator.
- 21.1.8. The visitor, supervisor, or asbestos worker will then enter his name, social security number, and time of entry into either the daily containment entry log or the authorized visitor log and record the reason for entry into the work place.
- 21.1.9. The visitor, supervisor, or asbestos workers will then pass through a double flapped airlock, and proceed through the shower room, through another double flapped airlock into the equipment room.
- 21.1.10. The visitor, supervisor, or asbestos worker entering the equipment room will then put on disposable gloves, and possibly rubber boots from the previous day, and collect additional equipment and tools, and proceed through another double flapped airlock into the asbestos work area.

21.2 AREA EXIT PROCEDURES

- 21.2.1. Whenever a supervisor, asbestos worker, or authorized visitor leaves the asbestos work area that individual must go through the decontamination sequence. This sequence will include the following.
- 21.2.2. The supervisor, asbestos worker, or authorized visitor will enter the equipment room through a double flapped airlock and proceed to clean reusable abatement equipment and protective equipment, including boots, safety glasses, and hard hats.
- 21.2.3. The supervisor, asbestos worker, or authorized visitor will use an HEPA vacuum to vacuum outer disposable suit and remove the disposable clothing. The disposable clothing will be removed, after cleaning, and disposed of as asbestos contaminated waste, in a container located in the equipment room, and marked for that purpose. The respiratory protection equipment must remain on the individual into the shower room.
- 21.2.4. The supervisor, asbestos worker, or authorized visitor will then proceed through a double flapped airlock into the shower room, still wearing the respiratory protection equipment.
- 21.2.5. The supervisor, asbestos worker, or authorized visitor will then completely shower from head to foot, using liquid soap. The supervisor, asbestos worker, or authorized visitor will then soak the filter cartridges of respirator under the shower and discard them in a plastic bag positioned for that purpose.
- 21.2.6. The supervisor, asbestos worker, or authorized visitor will then proceed through a double flapped airlock into the clean room to dry off, and then dress in street clothes.
- 21.2.7. The supervisor, asbestos worker, or authorized visitor will then disinfect, inspect, dry, and store the respirator in a locker. New cartridges should be placed in respirator prior to storage in the locker.
- 21.2.8. The supervisor, asbestos worker, or authorized visitor will then sign time out on either the daily containment entry log or the authorized visitor entry log.
- 21.2.9. The supervisor, asbestos worker, or authorized visitor will then proceed through a double flapped airlock out of the decontamination unit and exit the regulated area.

22.0 MEDICAL EXAMINATIONS:

- 22.1** Prior to the commencement of working in the abatement areas of this project, all personnel must have received a medical examination as stated in §29 CFR 1924.58(m) with special emphasis directed to the pulmonary, cardiovascular and gastrointestinal systems as per §29 CFR 1924.1101 Appendix D.
- 22.2** Each employee working within the control zone must have received a medical examination within the last twelve months. All employees will receive a reexamination that is in accordance with the regulations within twelve months of the last examination.
- 22.3** Documentation of this examination will be recorded on forms approved and supplied by the State of Texas Department of State Health Services, Occupational and Health Division.
- 22.4** The Asbestos Abatement Contractor must maintain copies of this document for each individual, on the project site, throughout the course of the project.

23.0 SIMILAR OR EQUAL MATERIALS AND EQUIPMENT:

- 23.1** It is not the intent of these specifications to limit the choice of the Asbestos Abatement Contractor to any specified product or to any one manufacturer, but to set a standard, which must be met or exceeded. The Consultant shall make the final decision as to similarity or equality of proposed changes, to the materials and equipment that are mentioned in the project specifications.
- 23.2** The Asbestos Abatement Contractor may submit proposed changes in materials or equipment specified herein, in the submittal package due with the project bid package.
- 23.3** The Asbestos Abatement Contractor may submit further changes regarding the project at the pre-construction meeting, prior to the notice to proceed.
- 23.4** The Asbestos Abatement Contractor is reminded that material safety data sheets (MSDS) or safety data sheets (SDS) are required for all submitted materials, whether specified or a request for change and the material safety data sheets for a requested change should accompany a written request for change, allowing five (5) working days for approval or disapproval of the request. All change order request documents are to be submitted to the Consultant.

24.0 ASBESTOS ABATEMENT CONTRACTOR PERSONNEL:

- 24.1 Project Superintendent:** The Asbestos Abatement Contractor shall maintain an experienced general construction project superintendent on site at all times that contractual work is in progress. This person must have the authority to make decisions, implement change requests, and schedule project alterations when required.
- 24.2 Project Abatement Supervisor:** The Asbestos Abatement Contractor shall maintain a Texas Department of State Health Services licensed project abatement supervisor on site at all times that the project contractual work is in progress. This person must meet all Federal, State and Local laws for Asbestos Abatement Supervisors, this person must demonstrate that he has at least three years of experience as a primary supervisor of asbestos abatement projects, and that at least one (1) of the past projects was of similar size and scope.
- 24.3 Asbestos Abatement Workers:** The Asbestos Abatement Contractor asbestos abatement personnel must qualify and be in possession of a current Asbestos Abatement Workers certification issued by the Texas Department of State Health Services, Occupational Safety and Health Division, along with a current respirator fit test certificate, and a current Texas Department of State Health Services model physical.

- 24.4** A record of all the Asbestos Abatement Contractor's project personnel with regard to training is to be maintained in the Asbestos Abatement Contractor's project records. The Asbestos Abatement Contractor must maintain copies of all employees' current Texas Department of State Health Services model physical examinations and approval, by a physician, to wear the current respirator. Respirator fit testing and job safety training documentation is to be submitted to the Consultant, for review, prior to their being involved in the work required on this project. The addition of new personnel will need to conform to this requirement.

25.0 PROJECT SITE HAZARDS:

- 25.1** The Asbestos Abatement Contractor shall inform all asbestos worker, supervisory personnel, subcontractors, tradesmen, and all parties having project involvement, of the dangers of electricity in a wet environment, along with polyethylene plastic sheeting fire potential and smoke toxicity hazards and other hazards that might be associated with this project.
- 25.2** All contractors are to be advised of the following hazards of asbestos exposure, and are to inform all personnel involved with this project of that hazard. The disturbance or dislocation of asbestos containing materials can cause asbestos fibers to be released into the building's atmosphere, thereby creating a health hazard to workmen and building occupants. Consistent with the content of the training on asbestos control work, the Asbestos Abatement Contractor shall inform all asbestos workers, supervisory personnel, subcontractors, tradesmen, and all others that may visit the project site, of the seriousness of the health hazards, proper precautionary measures, and of proper work procedures, which must be followed.
- 25.3** When in the performance of the project work, asbestos workers, supervisory personnel, subcontractors, tradesmen, and others may encounter, disturb, or otherwise function in the immediate vicinity of an identified asbestos containing material. There will be appropriate continuous measures taken to protect all parties from the hazard of exposure to airborne asbestos fibers.
- 25.4** Such measures shall include the procedures and methods described herein, as well as the regulations of the Occupational Safety and Health Administration [OSHA] the Environmental Protection Agency [EPA], Texas Department of State Health Services [DSHS], Texas Commission on Environmental Quality [TCEQ], and other local rules and regulations.
- 25.5** The Asbestos Abatement Contractor will coordinate with the Consultant and the Owner to ensure that all sources of ignition is to be eliminated. All fuel sources are to be shut off and the pilot lights in all stoves, boilers, water heaters, compressors are to be extinguished. The Asbestos Abatement Contractor is to ensure that lighters, matches and other sources of flame or ignition are not allowed in the work area.
- 25.6** The Asbestos Abatement Contractor will make as minimum ten-pound dry chemical fire extinguishers with ABC ratings and current inspection stickers available in all work areas and in the Clean Room of all decontamination units. The Asbestos Abatement Contractor is to supply a minimum one (1) fire extinguisher at the decontamination unit and one extinguisher per one thousand square feet inside the work areas. The dry chemical fire extinguishers in the work area are to be positioned where they may be accessed at all times.
- 25.7** Fire and Emergency exits are to be clearly marked and directional fluorescent arrows are to be placed in adjacent areas indicating the exit route. All project personnel are to be made familiar with the location of the emergency exits. The Asbestos Abatement Contractor will establish an emergency evacuation plan for the facility. This plan will include a designated inside containment assembly location.
- 25.8** The Asbestos Abatement Contractor will maintain the project area and all adjacent areas in a neat, clean, and uncluttered manner.
- 25.9** A diagram of the facility that shows all work areas will be posted at the main entrance to the facility and at the entrance of all decontamination units. This diagram will bear the name of the facility, address, and phone numbers of local Fire Department, Rescue Squad, Police, Ambulance service, and Local Hospital. The location of the nearest phone that may be accessed during working hours will need to be clearly marked on the diagram.

- 25.10** The Asbestos Abatement Contractor will maintain an outside security person inside the regulated area and outside the containment, to handle project abatement assignments and to act as the lead man in response to emergency situations and in the interception of visitors. This person is to be trained in emergency procedures and should be trained in first aid, and treatment of heat stress.
- 25.11** The Asbestos Abatement Contractor will establish some means of warning, an air horn or alarm, the workers inside the work area of danger and the need for evacuation. This alarm system must be effectively heard throughout the project area.
- 25.12** The Asbestos Abatement Contractor is responsible for the safe operation of all tools and equipment. The Asbestos Abatement Contractor is to ensure that all personnel are aware of the proper operation of tools, equipment, and of the safety measures that should be observed with their operation.
- 25.13** The Asbestos Abatement Contractor will be responsible for the safety of all personnel and project visitors during the course of the project. The Asbestos Abatement Contractor will notify the Consultant of all injuries associated with the project as soon as possible. The Asbestos Abatement Contractor will submit a written report to the Consultant outlining the type and extent of the injuries, personnel involved, actions taken, resulting outcome, and preventive measures taken by the Asbestos Abatement Contractor to guard against additional accidents.

26.0 AIR QUALITY MONITORING:

- 26.1** The Air Monitoring Laboratory selected by the Owner will provide the baseline, ambient and final air quality monitoring for the duration of the project, in compliance with provisions of the NESHAPS and NIOSH 7400 standards.
- 26.2** The Consultant will conduct the initial baseline air sampling. The Air Monitoring Technician will collect a set of phase contrast microscopy (PCM) baseline air samples, prior to any on site project activity.
- 26.3** **The final clearance air sampling will be conducted using aggressive air sampling techniques in accordance to AHERA protocol. Clearance samples will be analyzed on-site by phase contract microscopy (PCM), under the NIOSH 7400 analytical method, "A "counting rules. The acceptable final clearance level will be less than one hundredth of a fiber per cubic centimeter (0.01 f/cc). The Consultant's laboratory will conduct the analysis of the PCM clearance samples.**
- 26.4** Asbestos removal conducted using small enclosures and mini-containment of less than 160 square feet or 260 linear feet or 1 square meter of ACM to be disturbed will be required to achieve a final air clearance using Phase Contrast Microscopy (PCM). In these circumstances the NIOSH 7400 method will be used in the collection and analysis of samples. When this method is used, the clearance level will be equal to or less than 0.01 fibers per cubic centimeter (f/cc).
- 26.5** All OSHA Compliance Personnel Air Sampling results must be posted on the project bulletin board, and the sample results must be explained to the asbestos workers and supervisors on a daily basis. The asbestos laboratory must submit copies of three (3) of the most recent AIHA proficiency in analytical testing (PAT) rounds, along with a copy of the Texas Department of State Health Services asbestos laboratory license.
- 26.6** The Asbestos Abatement Contractor may provide the services of an air-monitoring technician, employed by a licensed asbestos laboratory, to conduct OSHA personnel airborne fiber monitoring and analysis prior to, during, and after each phase of project. The air-monitoring technician must demonstrate successful completion of instruction in the calibration of optical equipment, calculation of optimum fiber concentrations, and the OSHA Compliance Personnel Air Sample collection requirements.

- 26.7** The Asbestos Abatement Contractor may collect and ship the OSHA Compliance Personnel Air Samples out for analysis by an Asbestos Laboratory licensed by the Texas Department of State Health Services if the Asbestos Abatement Contractor has a Texas Department of State Health Services licensed air monitoring technician in his employ; however, this individual is prohibited from analyzing the air samples under state regulation. The reporting requirements are in effect with regard to posting the sample results the next day.
- 26.8** In either situation, the OSHA personnel analysis results must be given to the Consultant by midday of the next workday following the sample collection. Faxed or emailed air sample results are authorized, if legible, and must be immediately followed by hard copy reports.
- 26.9** The Asbestos Abatement Contractor's air monitoring technician will provide, install, and operate all necessary air sampling equipment to satisfy the OSHA requirements for time weighted averaging and short term exposure level air monitoring for the Asbestos Abatement Contractor's asbestos workers and supervisors.
- 26.10** The Asbestos Abatement Contractor's air monitoring technician will conduct the collection of samples, shipping of all samples, on site Phase Contrast analysis, properly record all data, and provide the Consultant with analysis results by midday of the next workday.

27.0 ANALYTICAL METHODS:

The following methods and equipment shall be used in the collection and analysis of the filter media used to collect particulate matter from the inside and outside atmosphere of each containment area.

- 27.1** Mixed cellulose ester filters will be analyzed using the NIOSH 7400 analysis method utilizing Phase Contrast Microscopy (PCM). The air-sampling filter must be twenty-five (25-mm) millimeters in diameter with an eight (0.8 µm) micron pore size.
- 27.2** All samples collected on the project will follow these specifications, except for Transmission Electron Microscopy (TEM) samples which will use the NIOSH 7401 analysis method, and a four (0.45 µm) pore size.
- 27.3** All OSHA personnel air samples collection will not exceed a sampling pump flow rate of two point five (2.5 L/PM) liters per minute. The Asbestos Abatement Contractor's Air Monitoring Technician will endeavor to collect a sufficient number of personnel samples daily to calculate at least an eight hour time weighted average (TWA) for all the personnel tested.
- 27.4** The Asbestos Abatement Contractor's Air Monitoring Technician will collect periodic Excursion Limit (EL) thirty (30) minute personnel air samples.
- 27.5** Ambient air sample collection by high volume sampling pumps will not exceed ten (10 L/PM) liters per minute flow rate.

28.0 SAMPLING REQUIREMENTS:

- 28.1 Personnel Sampling: Compliance with OSHA requirements for monitoring is the responsibility of the Asbestos Abatement Contractor.** The following recommendations are made. Samples taken in this area should represent, with reasonable accuracy, the airborne concentration of asbestos fibers, which may reach the breathing zone of the asbestos removal personnel. A minimum of 25% of the workers, or at least two (whichever is greater), of each job type will be required to wear a sampling device designed for this type of sampling. Personnel exposure monitoring shall be conducted during the preparation, removal, cleaning, and disposal phases of this project.

The Consultant may choose to conduct comparative personnel sampling of the project personnel. The Asbestos Abatement Contractor shall make his personnel available to the Consultant for the wearing of personnel pumps for periodic monitoring as deemed necessary for project monitoring by the Consultant.

- 28.2 Ambient outside Sampling:** In and around the immediate area of the containment, negative air machine exhausts, and the decontamination unit clean room ambient air monitoring will be conducted. The samples will be collected at a height of 3 to 5 feet above the floor level of the sampling area. Ambient samples should be changed on a scheduled basis with a minimum of twelve hundred (1200) liters of air collected when possible. Negative air machine exhaust samples should be rotated between different units on a daily basis, covering at least twenty-five (25%) percent of the machines in use.
- 28.3 Ambient inside Sampling:** Samples will be collected inside the work area in areas that have the highest potential for fiber concentration collection. The samples will be collected at a height of 3 to 5 feet above the floor level of the sampling area. Ambient inside samples should be changed on a shorter scheduled basis to avoid filter over load, however a minimum of twelve hundred (1200) liters of air collected is still required when possible.
- 28.4 Other Miscellaneous Sampling:** If non-protected personnel are working near the containment work area, ambient air samples will be collected in the area between them and the containment work area. Ambient air samples will be collected at regular intervals at the exit to the waste load unit, and entrance to the disposal trailer during asbestos disposal bag load out.

29.0 SAMPLE LOCATION DRAWINGS:

- 29.1** All stationary sample station locations will be marked on a drawing of the building. This drawing will indicate the containment enclosure unit with the location of air filtration systems, water filtration systems, recording manometers, negative air machines and exhaust, decontamination units and waste load-out units.
- 29.2** The sample location will be marked and the sample number will be noted next to the mark. There will be a drawing submitted for each day that air sampling is conducted. One drawing is required for each separate or individual containment, enclosure, mini enclosure, or single glove bag location.

30.0 PROJECT UTILITIES:

- 30.1** The Asbestos Abatement Contractor will supply electricians to install electrical supply NEMA 12 rated main breaker panel, equipped with adequate breakers sized to carry the required construction equipment load. All electrical equipment, extension cords, and gang receptacle boxes used on this project must be equipped with a true 3-wire cord with the green safety ground wire permanently fixed to either a grounding rod or other true ground source. All electrical connections that enter the containment area must be connected to a ground fault indicating circuit (GFIC) panel that is correctly grounded and tested prior to use.
- 30.2** All electrical outlets and switches in the work areas will be sealed and water proofed for the duration of the project. The asbestos worker and supervisors must not plug electrical supply lines through the water proofed outlet covering.
- 30.3** The GFIC panel must be certified by an electrician to be capable of servicing the projected load and that all circuits are Ground Fault Circuit Interrupt (GFCI) protected. No aluminum wire or cords will be allowed on this project. No extension cords smaller than ten (10 AWG) American Wire Gauge may be used inside the containment enclosure.
- 30.4** Each negative air filtration unit is to have one (1) designated electrical supply line, of at least ten (10 AWG) stranded copper wire, with a 20 ampere GFIC circuit breaker. The circuit will be designated for the one (1) unit only.
- 30.5** The Asbestos Abatement Contractor will supply a singular electrical supply line, at least ten (10 AWG) of copper stranded wire, with a 20 ampere GFCI circuit breaker, to each decontamination unit. This line is to be GFCI protected with a four-gang receptacle for use with the decontamination unit.

- 30.6** The Asbestos Abatement Contractor is to supply sealed temporary lighting into the work area. The Asbestos Abatement Contractor must supply the electrical extension cords for this application. The Asbestos Abatement Contractor will follow the guidance previously listed for extension cords and other equipment that enter the containment enclosure.
- 30.7** The Asbestos Abatement Contractor will supply 120 volt GFCI protected supply circuits in each work area in which abatement is to be conducted. This line is to be equipped with a waterproof four-gang receptacle. This line is to be set aside for the use of the air monitoring technician's sampling and monitoring equipment. The Asbestos Abatement Contractor will also make available OSHA approved extension cords for the air monitoring technician's and the Consultant's use. This supply line is to remain in service until the Asbestos Abatement Contractor is given notice that it is no longer needed.
- 30.8** The Asbestos Abatement Contractor will use non-conducting tools and equipment in the work area as much as possible. All asbestos workers and supervisors will wear rubber boots with non-conducting soles and steel toes while in the work area.
- 30.9** The Asbestos Abatement Contractor will immediately replace any faulty or damaged electrical service lines, circuit breakers, extension cords, and equipment.
- 30.10** All waste water will be collected and filtered, and then the clean water may be exhausted to a sanitary sewer connection designated on a project phase by phase basis.
- 30.11** The use of high-pressure spray equipment is prohibited on this project. High-pressure spray systems do not include airless sprayers operated at pressures under 1200 PSI.
- 30.12** Upon project completion, the Asbestos Abatement Contractor will engage electrician to remove all the temporary electrical services that the Asbestos Abatement Contractor had installed for this project. The Asbestos Abatement Contractor will be responsible for the restoration of the Owner's electrical system to original status or better.

31.0 RESPIRATORS - ACTIVITY ORIENTED

- 31.1 Precleaning:** All personnel involved in precleaning activities, prior to asbestos abatement will wear appropriate respiratory protection equipment as required by the Asbestos Abatement Contractor's respiratory protection program. The minimum respiratory protection shall be half mask respirator equipped with P100 filters.
- 31.2 Preparation:** All personnel involved in preparation activities that do not directly disturb or might disturb asbestos containing materials, prior to asbestos abatement will wear appropriate respiratory protection equipment as required by the Asbestos Abatement Contractor's respiratory protection program
- 31.3 Abatement:** All personnel conducting asbestos abatement will wear appropriate respirators determined air sample analysis fiber concentrations. At the start of gross removal operations of friable asbestos containing thermal or surfacing materials, the minimum use respirator will be type "C" pressure demand supplied air respirators. The Asbestos Abatement Contractor may supply historical air monitoring data from a similar project for down grade approval. The minimum down grade for friable materials will be a powered air purifying respirator (PAPR) equipped with HEPA filters. For the removal of non-friable miscellaneous materials such as floor tile and adhesives, the Asbestos Abatement Contractor may utilize half mask or full face negative pressure respirators with the appropriate filters for all hazards present.
- 31.4** Powered air purifying respirator (PAPR) will be worn by all personnel and authorized visitors entering the work area when asbestos containing elements are still present as long as this type of respirator provides adequate protection.

- 31.5** All respirators shall be fit tested to personnel by an experienced individual. Fit testing will be performed as stated in §29 CFR 1910.132. Fit tested respirators shall be permanently marked to identify the individual fit tested, and use of that respirator shall be limited to the tested individual.
- 31.6** No respirator shall be issued to personnel without the personnel participating in a respiratory protection-training program. This program must include the proper use, donning, care, and limitations of the type of respirators that shall be worn by personnel.
- 31.7** Reserve respirators will be maintained in serviceable condition on site at all times for spare units and for use by site visitors. This requirement will apply to each type of respiratory protection equipment utilized on this project.
- 31.8** The types of respirators and minimum use requirements must be in compliance with current regulations. The Respiratory Protection Program Coordinator of the Asbestos Abatement Contractor's company may follow a more stringent guideline in the selection of appropriate respirators. The selection of the respirator to be worn must be based on worse case situations. In evaluating personnel monitoring results, the highest concentrations should be considered as well as the time weighted average. The selection of the appropriate respirator is to be based on respiratory hazards in the work area
- 31.9** No respirators shall be issued to personnel without such personnel participating in a respiratory protection-training program. This program must include the proper use, donning, care and limitations of the type of respirators that shall be worn by personnel.
- 31.10** The Asbestos Abatement Contractor Project Supervisor shall evaluate all asbestos supervisors, asbestos workers, corporate employees, and authorized site visitors in their use of respirators. The Project Supervisor will question their knowledge of the type of respirator to be used, and will make a determination if their knowledge is sufficient to allow entry into a work area. In the event that a person is determined to be lacking in the skills or knowledge required, they will be notified they are not authorized to enter the work area, until additional training is obtained. The Project Supervisor may make this determination. The Project Supervisor will evaluate any individual designated by the Owner's Representative or the Asbestos Consultant. This section does not pertain to Federal, State, or Local regulatory personnel, which have identification and desire to enter the work area.

32.0 WORKER PROTECTION EQUIPMENT AND CLOTHING:

Protection Equipment: Throughout each step of work area precleaning, preparation, asbestos abatement, and final cleaning activities, personnel entering the work area shall wear appropriate respirators, disposable coveralls with hoods, gloves and steel toed, skid resistant, nonconductive soled rubber boots.

- 32.1** The suits will be taped at the wrists and ankles or top of boots. All personnel will be required to wear appropriate eye and ear protection as necessary.
- 32.2** The Asbestos Abatement Contractor will have on site a sufficient quantity of earplugs designed for the reduction of noise.
- 32.3** The Asbestos Abatement Contractor will have on site a sufficient quantity of ANSI approved safety glasses, which must be worn when full-face respirators are not in use and the asbestos workers and supervisors are engaged in other activities at the project site.
- 32.4** The Asbestos Abatement Contractor will have on site a sufficient quantity of approved hard hats and bump caps, which will be worn when there is a potential for head injury, and whenever any overhead activity is conducted.
- 32.5** The Asbestos Abatement Contractor will have on site a sufficient quantity of rubber boots with arch support in various sizes that are available to personnel, upon request. When asbestos abatement is in progress all workers entering the work area must wear rubber boots. The specification for the rubber boot includes non-conducting soles, skid resistant sole design, calf high rubber sides, arch support, and steel toes. These boots will be cleansed, disinfected and dried on a daily basis.

- 32.6** The Asbestos Abatement Contractor will have on site a sufficient quantity of safety harnesses, lanyards, and other OSHA required items when work is conducted from scaffolding or other means. The safety lanyards and harness must be worn, possibly in conjunction with safety wires, whenever there is a potential for a fall that may cause bodily injury.
- 32.7** The Asbestos Abatement Contractor will have on site a sufficient quantity of fire retardant disposable protective whole body clothing, head coverings, gloves, foot coverings, and disposable plastic or rubber gloves for comfort. The disposable clothing must be secured with tape at the wrists and at the ankles.
- 32.8** The Asbestos Abatement Contractor will have on site a sufficient quantity of protective clothing articles ensuring that a minimum change of five complete disposable outfits per day is available for each individual on site. The Asbestos Abatement Contractor must provide additional protective disposable clothing for the air monitoring technician, and other authorized visitors.

33.0 RECORD KEEPING - PROJECT INFORMATION:

- 33.1** The Asbestos Abatement Contractor must maintain copies of each of the following items on file at the project site for the duration of the project.
- 33.2** All items with an "*" at the beginning indicates that these items are required project close out documentation.
- 33.3** All Asbestos Abatement Contractor project records must be maintained for a period of thirty (30) years. If the Asbestos Abatement Contractor goes out of business, the Asbestos Abatement Contractor must contact the Director of the Texas Department of State Health Services Occupational Health Division and the Director of the National Occupational Safety and Health Institute (NIOSH) and arrange to turn over all archived business and project records to those agencies.
- 33.4** Medical Records (30 years beyond termination)
- 33.5** * Texas Department of State Health Services required physician statement and medical examination.
- 33.6** * A copy of training courses attended including, the EPA approved initial course and consecutive refresher courses.
- 33.7** * A copy of the Texas Department of State Health Services license, for position the employee occupies.
- 33.8** A copy of the Asbestos Abatement Contractor's respiratory training program.
- 33.9** * A copy of the respirator fit test for each of the authorized visitor and the Asbestos Abatement Contractor's supervisor and asbestos workers.
- 33.10** * A copy of the Supervisor's daily project log, containment entry log, visitors log, and the OSHA compliance personnel air monitoring log shall be submitted.
- 33.11** * A copy of all daily manometer charts or tapes shall be submitted.

34.0 CONTAINMENT ENCLOSURE UNIT CONFIGURATION:

Containment Unit: The work area containment enclosures will be constructed in the following manner.

- 34.1** The Containment enclosure shall consist of a minimum of two layers of four- (4) millimeter polyethylene sheeting for vertical surfaces. A minimum of two layers of six- (6) millimeter polyethylene sheeting will be used for the floor surface and all horizontal surface areas of the enclosure. An additional layer of six (6) millimeter polyethylene floor sheeting is to be installed after the completion of the enclosure unit, and used as a drop cloth.
- 34.2** Vertical polyethylene sheeting shall be secured to walls and temporary framing with spray adhesive and then sealed with duct tape. Floor polyethylene sheeting shall be placed so that the seams in the floor will not overlap one another. In the event of failure of any polyethylene layer it is to be patched upon discovery. Floor polyethylene sheeting will be extended a minimum of 12 inches up walls, secured with spray adhesive, and then sealed with duct tape. Wall polyethylene sheeting will be extended a minimum of 12 inches beyond the wall floor junction into the floor, secured with spray adhesive, and then sealed with duct tape. Each layer of polyethylene sheeting is to be installed so that it may be removed separately.
- 34.3** In areas where there is carpet that is not removed as part of the work; double layers of six (6) millimeter polyethylene will be placed on the cleaned carpet. A layer of corrugated paper will be placed on the floor over the polyethylene sheeting. Two more layers of six (6) millimeter polyethylene sheeting will be installed.
- 34.4** Access to the containment enclosure shall be restricted to the decontamination unit clean room airlock. Emergency fire exits shall be framed out, taped and posted with red spray paint or fluorescent tape, as emergency exits only. Use of emergency exits is intended for egress from the containment area in case of fire or medical emergency.
- 34.5** All areas where floor tile and adhesive are to be the only material removed the Asbestos Abatement Contractor may install a single layer of 6 mil polyethylene sheeting over walls in the work area. This section does not negate the requirements for critical barriers as required in these sections. Wall sheeting will be sealed at the top and bottom of the walls. Sheeting floors will still be required in areas where floor tile and / or adhesive is not being removed but still within the containment area. This variance may not be used in areas where asbestos containing materials are friable or may become friable during the removal process.
- 34.6** The Asbestos Abatement Contractor may not leave the containment floor sheeting out of areas where both friable materials and floor tile are to be removed. Flooring will be required during the removal of friable materials.

35.0 AIR QUALITY ENGINEERING CONTROLS:

The following air quality engineering control practices will be utilized to minimize airborne fiber concentrations inside and outside the asbestos work areas.

- 35.1** The Asbestos Abatement Contractor shall set up a differential pressure air filtration system within each containment enclosure. This equipment should be of the proper size and horsepower to maintain a negative pressure differential of 0.03 inches of WC (water column) in the work area, and be shall be capable of changing the containment enclosure atmosphere at least four times per hour. This equipment will have an appropriate HEPA filtration system inhibiting the release of airborne fibers beyond the containment enclosure area. The HEPA filtration system must be 99.97% efficient in filtering out fibers of three (0.3 μm) microns in diameter or larger.
- 35.2** This equipment will be positioned to reduce fiber concentrations within the containment area, and to prevent the escape of airborne fibers from the work area. Whenever possible the units will be set opposite the decontamination units and other make up air intakes for the containment enclosure unit. The equipment will be positioned so that the HEPA filters can be changed from inside the containment area. Use of the differential pressure filtration system will be in accordance with manufacturer's instructions.

- 35.3** The Project Supervisor will verify to the Consultant that the appropriate numbers of air filtration machines are being utilized, prior to the commencement of abatement activities. One (1) additional differential air filtration machine will be integrated into each containment enclosure as a backup, in case of unit malfunction and for scheduled filter change. All differential air filtration machines must have pressure alarms, and the alarm systems must be demonstrated, as to being operational to the Consultant.
- 35.4** The effectiveness of the air filtration unit to maintain the pressure differential of 0.03 inches of WC (water column), will be measured with a recording device, a manometer, that records a written time and dated record of the pressure readings at fifteen (15) minute intervals throughout each working day. Each containment enclosure must have one (1) recording manometer installed, prior to the start of abatement.
- 35.5** The Consultant will inspect each containment enclosure, under pressure, prior to the start of asbestos abatement. The Asbestos Abatement Contractor may not commence asbestos related activities until notice to proceed has been given by the Consultant. The recordings of each manometer will be collected and analyzed daily and corrective action will be instigated where necessary. These recordings will be submitted as part of the daily and final project documentation.
- 35.6** The Consultant will halt the contractual work if, in his judgment, there is a situation of serious health risk to workers or building occupants, due to the performance of work, inefficiency of the differential pressure filtration systems, or problems caused by mechanical or electrical problems.

36.0 CRITICAL BARRIERS:

Temporary enclosures shall be provided to completely isolate the asbestos work area from other unsealed parts of the building to prevent asbestos containing dust or debris from passing beyond the isolated area.

- 36.1 Critical barriers constructed of doubled; independently sealed layers of six (6-mil) millimeter polyethylene sheeting** will be established on all exits and entrances to the work areas. All accouterments and fixtures within the work area will be thoroughly sealed with 6 mil polyethylene, adhesive tape and spray adhesive to form an airtight internal enclosure. All openings, vents, room penetrations, and areas with a potential for airflow to areas outside of the work area will have critical barriers established. An additional layer of six (6-mil) millimeter polyethylene sheeting will be used to form an airtight critical barrier at all locations where temporary framing is utilized.

37.0 DECONTAMINATION UNIT - CONSTRUCTION:

- 37.1** The Asbestos Abatement Contractor will construct a decontamination unit consisting of a separate air lock, clean room, air lock, shower room, air lock, equipment room, and air lock, located at the entry to each containment or enclosure work area. For exterior locations, the Asbestos Abatement Contractor Shall construct a weather resistant enclosure with framing and sheathing.
- 37.2** The Asbestos Abatement Contractor will build these units in a watertight drip pan that is oversized for the size of the units. The pan is to be approximately 2" inches deep. There shall be a water collection system. The Asbestos Abatement Contractor will install these units so, as it is level and structurally sound.
- 37.3** The decontamination units will be constructed and then lined with two (2) layers of six (6) millimeter polyethylene sheeting on the interior floor, walls, and ceiling, with two (2) exterior layers of four (4) millimeter polyethylene sheeting on the walls and ceiling. If the decontamination unit will be exposed to the weather the Asbestos Abatement Contractor must use reinforced ten (10) millimeter polyethylene sheeting for construction.
- 37.4** All sections of the decontamination units are to be wet wiped at the end of each shift. The equipment room is to be cleaned daily.

- 37.5** The decontamination unit shower and washing area are to be equipped with a shower head, adequate amounts of soap, towels, continual warm water and a waste pump that has a higher capacity output than the shower unit input capacity. Water is not to be left standing in any section of the decontamination unit. Leaks in this unit must be immediately repaired.
- 37.6** Both sections of the decontamination unit, on either side of the shower, will have a clean drop cloth placed on the floor at the beginning of each shift. The drop cloths are to be constructed of four (4) millimeter polyethylene sheeting secured to the floor of the decontamination unit, thus reducing the potential for tripping or slipping. The four (4) millimeter polyethylene sheet drop clothes are to be disposed of as asbestos contaminated waste material at the end of the each shift.
- 37.7** The clean room must meet the following requirements:
- 37.7.1. The Asbestos Abatement Contractor will provide access to and from clean room shall be through triple layered six (6) millimeter polyethylene sheeting doorway, weighted to close quickly and tightly against the outside entrance to the clean room doorway frame.
 - 37.7.2. This area will be constructed in a way that will accommodate all personnel working within the containment enclosure area. Appropriate lighting is to be provided by either natural or artificial means. If artificial lighting is used, the system must be waterproofed, and properly grounded.

37.8 Decontamination Unit Shower Room:

The shower room must meet the following requirements:

- 37.8.1. The Asbestos Abatement Contractor will construct the shower room providing a minimum size of thirty-two (32") inches wide, by thirty-two (32") inches long, by ninety (90") inches in height.
- 37.8.2. The Asbestos Abatement Contractor will supply the shower room with hot and cold running water, soap, and clean towels for all personnel.
- 37.8.3. The Asbestos Abatement Contractor will construct the shower room with the aim of providing the maximum amount of privacy and lighting.
- 37.8.4. The Asbestos Abatement Contractor will provide access to and from shower room through double layers of six (6) millimeter polyethylene sheeting doorways, weighted to close quickly and tightly against the entrances to the shower room doorway frame.
- 37.8.5. The Asbestos Abatement Contractor will provide access to and from the shower will through double layers of six (6) millimeter polyethylene sheeting airlocks, approximately three (3') feet by three (3') feet or larger, with double flap doorways at all entrances and exits.
- 37.8.6. All personnel shall shower prior to removing respirators and entering clean locker room. The Asbestos Abatement Contractor will provide a sufficient supply of disposable twenty (20") inch by forty (40") inch bath towels to accommodate a minimum of five showers per day for each individual entering the containment enclosure work area.
- 37.8.7. The Asbestos Abatement Contractor may dispose of all filtered water by collecting the clean filtered water and putting the water into a sanitary drain or as directed by the Consultant. All waste water must be filtered through a twenty five (25 µm) micron filter, then a five (5 µm) micron final filter prior to discharging the filtered water a sanitary drain.
- 37.8.8. All contaminated water from shower areas and abatement area must be disposed of in compliance with all local State and Federal regulations. Contaminated water will be treated in accordance with work practices specified for asbestos containing materials and waste.
- 37.8.9. Any visible water leaks from the containment or shower unit will constitute a stop work order until the water has been cleaned up and the breach of the containment or shower unit patched in a satisfactory manner.

37.9 EQUIPMENT DECONTAMINATION / STORAGE ROOM

The equipment room must meet the following requirements:

- A. The Asbestos Abatement Contractor will provide access to and from the equipment room through double layered six (6) millimeter polyethylene sheeting airlocks, weighted to close quickly and tightly against the entrances to the equipment and shower room doorway frames.
- B. The Asbestos Abatement Contractor will provide a HEPA vacuum to clean asbestos contaminated equipment and disposable protective clothing, prior to entry into shower room.
- C. The Asbestos Abatement Contractor will provide impermeable, labeled bags for the disposal of contaminated disposable protective clothing and respirator filters. All personnel shall remove and bag their contaminated clothing prior to entering shower area. Personnel shall clean their respirators in the shower room, and dispose of the filters in the disposal bag in the equipment room.

38. SIGNS AND LABELS:

- 38.1 The Asbestos Abatement Contractor is to affix the Texas Department of State Health Services required poster at the entrance to the work area prior to commencing any asbestos related activity.
- 38.2 The Asbestos Abatement Contractor is to affix danger signs and barrier tape at all approaches to asbestos control work area. Locate these signs where personnel may read the sign and take any necessary protective steps required before entering the area.
- 38.3 The Asbestos Abatement Contractor is to affix OSHA asbestos warning labels and TCEQ generator information labels to all asbestos disposal bags, polyethylene wrapped disposal packets and any other properly wrapped and sealed package that contains asbestos materials, asbestos contaminated materials, or asbestos contaminated waste materials.
- 38.4 The Asbestos Abatement Contractor is to affix OSHA required warning signs in vertical format conforming to OSHA requirements a minimum of twenty (20") inches by fourteen (14") inches displaying the OSHA legend. The wording on the OSHA warning signs must be printed in both the English language and the Spanish language.
- 38.5 All asbestos dumpsters must display the OSHA warning signs on all sides in both the Spanish and English language. The dumpster should also display the Department of Transportation sign with the designation of "NA2212".
- 38.6 All asbestos disposal trailers must display the OSHA warning signs on the inside of all doors that may be opened to receive asbestos disposal materials. The OSHA warning signs must be printed in both the Spanish and English language. The trailer should also display the Department of Transportation sign with the designation of "NA2212".

39.0 EXTERIOR REMOVAL REQUIREMENTS

During all exterior asbestos containing material disturbance / removal, the Asbestos will make sure that the following is adhered to:

- 1. Work area is demarcated with appropriate signs and barrier tape.
- 2. All personnel within the demarcated work area or handling asbestos containing materials, waste or equipment that has been in the work area will don appropriate PPE. Minimum requirement is half mask respirator with P100 filters, disposable coveralls, washable boots, gloves and eye protection. It will be the responsibility of the Competent Person for the Asbestos Contractor to determine if additional protection is needed.
- 3. A decontamination station is to be made available for workers to leave the work area for water breaks and to wash their face, hands and respirators.
- 4. Drop cloths will be installed to extend out from the work area. Whenever possible, drop cloths will extend out ten feet from all approaches to the work area. Drop cloths will be installed where they are

secure and do not present a trip hazard. Drop cloths will be a minimum of one layer of 6 mil polyethylene sheeting. Any seams will be overlapped by 12 inches. All drop cloths will be disposed of as asbestos contaminated material.

5. Visual clearance of the area is required before the area can be released. Please refer to Visual Clearance requirements in this document.

40.0 GLOVEBAG REMOVAL OPERATIONS

The following section will apply for the removal of thermal system insulation with the use of glovebags. The Asbestos Abatement Contractor must comply with all Federal and State regulations concerning the use of glovebags if this removal method is utilized. The use of glovebags will not be allowed on high temperature applications unless the Asbestos Abatement Contractor can prove that it can be done effectively and safely.

40.1 Installation of critical barriers in accordance with conditions set forth in this document. The Asbestos Abatement Contractor will preclean the work area and install a single layer of 6-mil polyethylene sheeting that completely covers the floor of the work area.

40.2 Glovebag: Remove ACM inside a glove bag according to the following procedure:

1. Use at least two persons to perform glovebag removals operations.
2. Use each glovebag only once
3. Do not move glovebag once it has been mounted in place.
4. Do not use glovebag on surface whose temperature exceeds 150°F (65.6°C).
5. Check materials adjacent to locations where glovebag will be installed. Wrap damaged (broken lagging, hanging, etc.), loose or friable material in 2 layers of 6 mil (0.15 mm) plastic and "candy-stripe" with duct tape, or render material intact by some other method. Place one layer of duct tape around undamaged pipe at each location where the glove bag will be attached.
6. Slit top of the glove bag open (if necessary) and cut down the sides to accommodate the size of the pipe (about two inches longer than the pipe diameter) and allow additional so that the top of the glove bag will be clear of the pipe after installation.
7. Place necessary tools into pouch located inside glove bag. This will usually include: bone saw, utility knife, rags, scrub brush, wire cutters, tin snips and pre-wetted cloth.
8. Place a strip of duct tape along both edges of the open top slit of glove bag for reinforcement.
9. Place the glove bag around section of pipe to be worked on and staple top together through reinforcing duct tape. Staple down sides approximately 6 inches so that top of the glove bag is clear of pipe. Seal top and sides with duct tape. Next, duct tape the ends of glove bag to pipe itself, where previously covered with plastic or duct tape.
10. Install glovebag so that it completely covers the circumference of pipe or other structures where the work is to be done.
11. Use smoke tube and aspirator bulb to test seal. Place tube into water sleeve (two-inch opening to glove bag) squeezing bulb and filling bag with visible smoke. Remove smoke tube and twist water sleeve closed. While holding the water sleeve tightly, gently squeeze glove bag and look for smoke leaking out, (especially at the top and ends of the glove bag). If leaks are found, tape closed using duct tape and re-test.
12. Insert wand from garden sprayer through water sleeve. Duct tape water sleeve tightly around the wand to prevent leakage.
13. Thoroughly wet material to be worked on with amended water or removal encapsulant and allow the liquid to soak into the material. Wet adequately to penetrate and soak material through to substrate.

14. One person places their hands into the long-sleeved gloves while the second person directs garden sprayer at the work.
15. Use bone saw, if required, to cut insulation at each end of the section to be removed. A bone saw is a serrated heavy gauge wire with ring-type handles at each end. Throughout this process, spray amended water or removal encapsulant on the cutting area to keep dust to a minimum.
16. Remove insulation using putty knives or other tools. Place pieces in bottom of bag without dropping.
17. Rinse all tools with water inside the bag and place back into pouch.
18. Using scrub brush, rags and water, scrub and wipe down the exposed pipe.
19. Thoroughly wash and wipe down interior of glovebag to a point below the location where the bag will be twisted and taped to seal waste in bottom of bag.
20. Remove water wand from water sleeve and attach the small nozzle from HEPA-filtered vacuum. Turn on the vacuum only briefly to collapse the bag.
21. Remove the vacuum nozzle, twist water sleeve closed and seal with duct tape.
22. From outside the bag, pull the tool pouch away from the bag. Place duct tape over twisted portion and then cut the tool bag from the glove bag, cutting through the twisted/taped section. Contaminated tools may then be placed directly into next glove bag without cleaning. Alternatively, tool pouch with the tools can be placed in a bucket of water, opened underwater, and tools cleaned and dried. Discard rags and scrub brush with asbestos waste.
23. With removed insulation in the bottom of the bag, twist the bag several times and tape it to seal material in the bottom during removal of the glove bag from the pipe.
24. Slip a 6 mil (0.15 mm) disposal bag over the glove bag (still attached to the pipe). Remove tape or cut bag and open the top of the glove bag and fold it down into disposal bag.
25. Clean all surfaces in the Work Area using disposable cloths wetted with water with surfactant or removal encapsulant added. When these surfaces have dried, clean with a HEPA filtered vacuum. Material adhered to a surface with removal encapsulant may require the application of additional removal encapsulant to facilitate cleaning.
26. Seal exposed ends of remaining pipe insulation in accordance with Section on Encapsulation.
27. Remove disposable suits and place these into bag with waste.
28. Collapse the bag with a HEPA vacuum twist top of bag, seal with at least 3 wraps of duct tape, bend over and seal again with at least 3 wraps of duct tape.
29. After all glovebags in the area are completed, request a visual inspection by the Consultant.
30. After visual and air quality clearance have been verified by the Consultant, remove all barriers and coverings from the work area.

41.0 ENCAPSULATION OF POST ASBESTOS CONTAINING MATERIALS REMOVAL:

The following section will apply for the encapsulation of a substrate material from which asbestos containing materials have been removed, and the encapsulation and sealing of exposed ends of pipe insulation.

- 41.1 **Types of Encapsulate:** The type of encapsulates will be determined by the Asbestos Abatement Contractor through the submittal process, and has to be approved for use by the Consultant.
- 41.2 The composition and adhesion of new acoustical and other finishes to an encapsulated base or substrate material must be considered in selecting an encapsulant, and determining if the encapsulate should exhibit these various qualities.

Penetrating Encapsulant

Bridging Encapsulant

Bridging Encapsulant Paste for Pipe insulation

Unless specified directly by the Consultant, the Asbestos Abatement Contractor is to provide the specified liquid encapsulant. The Asbestos Abatement Contractor is to use a colored encapsulant on thermal systems and acoustical plaster over spray areas. A clear encapsulate will be used in all areas where a new finish will be applied after the abatement of asbestos containing materials have been removed. This material is to be applied with a low-pressure airless spray unit.

41.3 Worker Protection: Before beginning work with any material verify that the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) is available and that the appropriate personal protection equipment is used. This equipment will include, but is not limited, to full body coverage with impermeable coveralls, gloves, head and foot coverings.

41.4 Equipment: The Asbestos Abatement Contractor will provide and use airless spray equipment.

The Asbestos Abatement Contractor will apply the selected encapsulate with an airless spray gun, using air pressures and the nozzle orifice size recommended by the encapsulate manufacturer.

Apply the first coat encapsulate while the substrate is still damp from the asbestos removal procedures. If the surface has been permitted to dry, vacuum the surface with a HEPA filtered vacuum cleaner prior to spraying with the encapsulate. Apply a second coat over first coat in strict conformance with manufacturer's instructions.

41.5 Sealing Exposed Edges: Seal the edges of asbestos containing material exposed by the abatement up to an inaccessible spot, with two coats of encapsulate. Prior to sealing, permit the exposed edges to dry completely to permit penetration of the sealer.

The Asbestos Abatement Contractor will vacuum all loose pipe insulation debris with HEPA vacuum, spray the exposed ends with a penetrating encapsulate. The Asbestos Abatement Contractor will then apply a woven cloth doughnut or wrap that has been saturated with encapsulate over the exposed insulation, and then apply one (1) coat of a bridging encapsulate, and then allow the piping to dry.

42.0 WASTE DISPOSAL:

The Asbestos Abatement Contractor will dispose of asbestos containing waste materials in a manner that adheres to all Federal, State and Local regulations. The Asbestos Abatement Contractor will adhere to the requirements set forth in this document for the disposal of asbestos containing waste materials

42.1 All asbestos containing material will be placed in one (1) sealed, six (6) millimeter polyethylene disposal bags or similar wrapped package, and transferred to the decontamination unit shower for final cleaning

42.2 The disposal bag or package from the work area will be handed into the shower operator. The shower operator will cleanse the exterior of the disposal package. The disposal package will then be placed in a second, clean leak tight container. The Department of Transportation warning label bearing the designation of "NA2212" and the TCEQ generator identification label will be affixed to the disposal package and passed to the outside man, for transfer to the asbestos dumpster or trailer.

42.3 The clean disposal package is placed in an asbestos dumpster or trailer that has been lined with two (2) layers of six (6) millimeter polyethylene sheeting. The asbestos disposal waste materials will be transported to an EPA and TCEQ approved landfill periodically.

42.4 The asbestos transporter must possess a current Texas Department of State Health Services asbestos transporter license. The transporter must have a Texas Water Commission Hazardous Materials Waste Manifest completed prior to taking the asbestos dumpster or trailer to the landfill.

42.5 The dumpster is bear OSHA warning signs on all inside doors, and Department of Transportation warning label bearing the designation of "NA2212" on each side of the asbestos disposal dumpster or trailer.

43.0 VISUAL INSPECTIONS:

43.1 Pre-removal Inspection: The Asbestos Abatement Contractor will request an inspection by the Consultant of the enclosure unit prior to the disturbance of asbestos containing materials. The Consultant will verify that the enclosure meets the requirements set forth in this document and governing regulations and guidance. The Asbestos Abatement Contractor must correct all deficiencies pointed out by the Consultant or his representative prior to the start of any activity that disturbs asbestos containing materials.

43.2 Removal Procedures Inspection: Throughout the removal process, the Consultant will make inspections of the enclosure unit to insure that the unit is maintained in a good condition. At any time, the enclosure is found to have a breach, work will stop until the breach is repaired. The Consultant will make compliance inspections of the work procedures and will note areas of non-compliance to the Project Supervisor. All such non-compliance items must be corrected as soon as possible. Failure to correct non-compliance items in a timely manner will result in a work stop order being issued. The Consultant and his Project Manager do have contractual authority to issue a work stoppage for breaches of contract or in the interest of public health and client liability.

44.0 FINAL CLEANING, VISUAL INSPECTIONS AND CLEARANCE PROCEDURES:

Final air quality clearance sample collection will not be initiated by the Consultant until a successful final cleaning of the area has been completed and the area has passed all required visual inspections as stated below:.

44.1 First Visual Inspection and Final Cleaning: Once all of the asbestos containing material to be removed has been completely removed, the Asbestos Abatement Contractor shall request the **first** visual inspection of the removal surface. Removal requirements have not been met until the material(s) specified for removal have completely been removed to where they are not visibly detectable to the Consultant. Once the Consultant has conducted the visual inspection as stated in 44.2 VISUAL INSPECTIONS and has released the area as visually clean, the Asbestos Abatement Contractor will carry out a first cleaning of all surfaces within the work area, including polyethylene sheeting, tools, scaffolding, and staging with damp cleaning towels, mopping, and a HEPA filtered vacuum. Do not perform dry dusting or dry sweeping. Continue the first cleaning until there is no visible debris or residue on plastic sheeting or other surfaces. Replace the pre filters on the air filtration units. Dispose of the old filters as asbestos contaminated waste, properly double bagged and labeled. Once the initial cleaning has been completed, the Asbestos Abatement Contractor shall remove all layers of the polyethylene sheeting except for the final layer and critical barriers. Any excessively damaged sheeting or sections contaminated with debris or water bearing debris shall be replaced and the protected surface shall be wet wiped and HEPA vacuumed.

44.2 Visual Inspection: The work area must pass a visual inspection administered by the Consultant before the project is cleared for the removal of the containment or the collection of the final air quality clearance samples. The Asbestos Abatement Contractor will contact the Consultant when ready for inspection. The Consultant will conduct the visual inspection, using the current version of "ASTM Visual Inspection Practices for Asbestos Abatement Projects" protocol, established for use by the Consultant and as specified by the protocol. Only the Consultant or his Project Manager may determine as to whether the removal process has successfully been completed and the area is ready for final air quality clearance. The visual inspection will cease when it is determined by the Consultant that there is visible amounts of the materials that were to be removed or contamination and or debris from the removed materials that will take more than fifteen minutes of spot removal or cleaning to correct. If the Consultant can remove the material with a sharp object or wipe visibly detectable amounts onto a cloth or other wiping device, the area does not pass visual inspection. If all conditions set forth in the protocol are met, the area does not pass visual inspection. The cessation of the visual inspection for any of said reasons will be a failure of the visual inspection process.

44.3 Inspection Failure: Each time the visual inspection, by the Consultant is failed or incomplete, the Asbestos Abatement Contractor is required to continue to clean the work area and remove the specified asbestos containing material or assumed asbestos containing / contaminated material until all visible amounts have been removed. Once this has been completed the Asbestos Abatement Contractor shall notify the Consultant that he is ready for another visual inspection. If the Asbestos Abatement Contractor does not agree that the remaining residue of the failed inspection is the material specified in this document, they may request the Consultant to collect 3 to 5 samples of the suspect material and submit the material for comparative analysis with a material sample collected by the Consultant prior to the start of the removal by the Asbestos Abatement Contractor. The samples will be analyzed by a laboratory selected by the Consultant by transmission electron microscopy for comparison and for asbestos content. The Asbestos Contractor shall bear the cost of said sample collection, transport and analysis. The containment will not be cleared nor is the project deemed completed until the results of sample analysis available from the laboratory and the determination the suspect material is not the same material and does not contain asbestos fibers. No additional fees will be paid by the Owner or the Consultant to the Asbestos Abatement Contractor for additional labor, time, materials, and other additional cost incurred by the Asbestos Abatement Contractor due to inspection failure or shut down for additional testing.

44.4 Encapsulation of substrate: Once a successful completion of the Perform encapsulation of substrate in all areas. The Asbestos Abatement Contractor will utilize the encapsulate selected through the submittal process. The Asbestos Abatement Contractor will maintain the differential pressure filtration system in operation during the encapsulation of the work areas. The Asbestos Abatement Contractor will apply the encapsulation after authorization from the Consultant. Encapsulate will be applied with an airless spray set on low pressure.

44.5 Cleaning of Air in Work Area: Wait twelve (12) Hours to allow differential pressure air machines to clean the air of airborne asbestos fibers and allow the encapsulate to dry. The use of fans and leaf blowers during this phase is prohibited. The Asbestos Abatement Contractor will maintain the differential pressure system in operation for the entire twelve- (12) hour period.

44.6. Final Cleaning and Final Visual Inspection: Once the drying and air scrubbing process is complete:

- 44.6.1. the Asbestos Abatement Contractor will remove the last layer of enclosure sheeting from the containment. The Asbestos Abatement Contractor is to leave all critical barriers in place.
- 44.6.2. Upon completion of the removal of the enclosure layer, the Consultant will conduct a visual inspection to determine if visible amounts of asbestos containing material or debris have all been removed exposed area of the containment. The Asbestos Abatement Contractor will remove or clean all areas where ACM, asbestos containing debris or presumed ACM is detected by the Consultant.
- 44.6.3. Upon completion of the visual clearance, the Asbestos Abatement Contractor shall conduct a final cleaning of the containment and all personnel and unused equipment shall be processed out of the work area.
- 44.6.4. the Consultant will conduct final air quality clearance sampling as specified.
- 44.6.5. In case of failure of the work area air quality clearance samples, the Asbestos Abatement Contractor and the Consultant will restart the clearance and cleaning procedure.
- 44.6.6. Once notified by the Consultant that the area has passed final air quality clearance, the Asbestos Abatement Contractor will remove the remainder of the enclosure unit.
- 44.6.7. Upon completion of the removal of the enclosure, the Asbestos Abatement Contractor will request a visual inspection of the work area and surrounding area to be conducted by the Consultant and the Owner.
- 44.6.8. The Asbestos Abatement Contractor will be responsible for the completion of all items listed by the Owner and the Consultant for the completion of the required work under this contract. At the completion of the walkthrough, all damage and punch list items known at the time will be explained to the Asbestos Abatement Contractor.

- 44.6.9. Once all punch list items have been completed, the Asbestos Abatement Contractor will proceed with the Final Cleaning to include the removal of tape, adhesives, all generated waste, equipment and waste containers from the Owner's site immediately.
- 44.6.10. The Asbestos Abatement Contractor will then clean all vertical and horizontal surfaces of any type of visible debris. All surfaces will be cleaned of tape and adhesive residue.
- 44.6.11. The Asbestos Abatement Contractor will then restore any surface that has been damaged, any flooring that has been damaged, and any other finish that has been damaged.

45.0 ORDER OF WORK

The order of the work for this project will be determined during initial pre-work meetings.

The End of Section

ATTACHMENT NUMBER 1
WORKER ACKNOWLEDGEMENT FORM

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME: _____

PROJECT DATES: _____

PROJECT ADDRESS: _____

ASBESTOS ABATEMENT CONTRACTOR'S NAME:

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH VARIOUS TYPES OF CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NON-SMOKING PUBLIC.

Your employer's contract with the Owner for the above project requires that: You be supplied with the proper respirator and be trained in its use. You be trained in safe work practices and in the use of the equipment found on the job. You receive a medical examination. These things are to have been done at no cost to you.

RESPIRATORY PROTECTION: You must have been trained in the proper use of respirators, and informed of the type respirator to be used on the above referenced project. You must be given a copy of the written respiratory protection manual issued by your employer. You must be equipped at no cost with the respirator to be used on the above project.

TRAINING COURSE: You must have been trained at a course the equivalent in curriculum and training method to the asbestos workers course developed by EPA for asbestos workers who conduct activities that will result in the disturbance of ACM. This course must have been provided by a State of Texas approved trainer and meet all requirements as outlined in 25 TAC 295.64. This course must have included "hands-on" training in the use of respiratory protection and work practices and shall take at least 24 hours.

STATE OF TEXAS REGISTRATION: You must be registered with the State of Texas, Department of State Health Services as an Asbestos Worker or licensed as an Asbestos Abatement Supervisor as specified in 25 TAC 295.42 - 295.46 as it relates specifically to your position on the above named project.

MEDICAL EXAMINATION: You must have had a medical examination within the past 12 months at no cost to you. This examination must have included: health history, pulmonary function tests and may have included an evaluation of a chest x-ray.

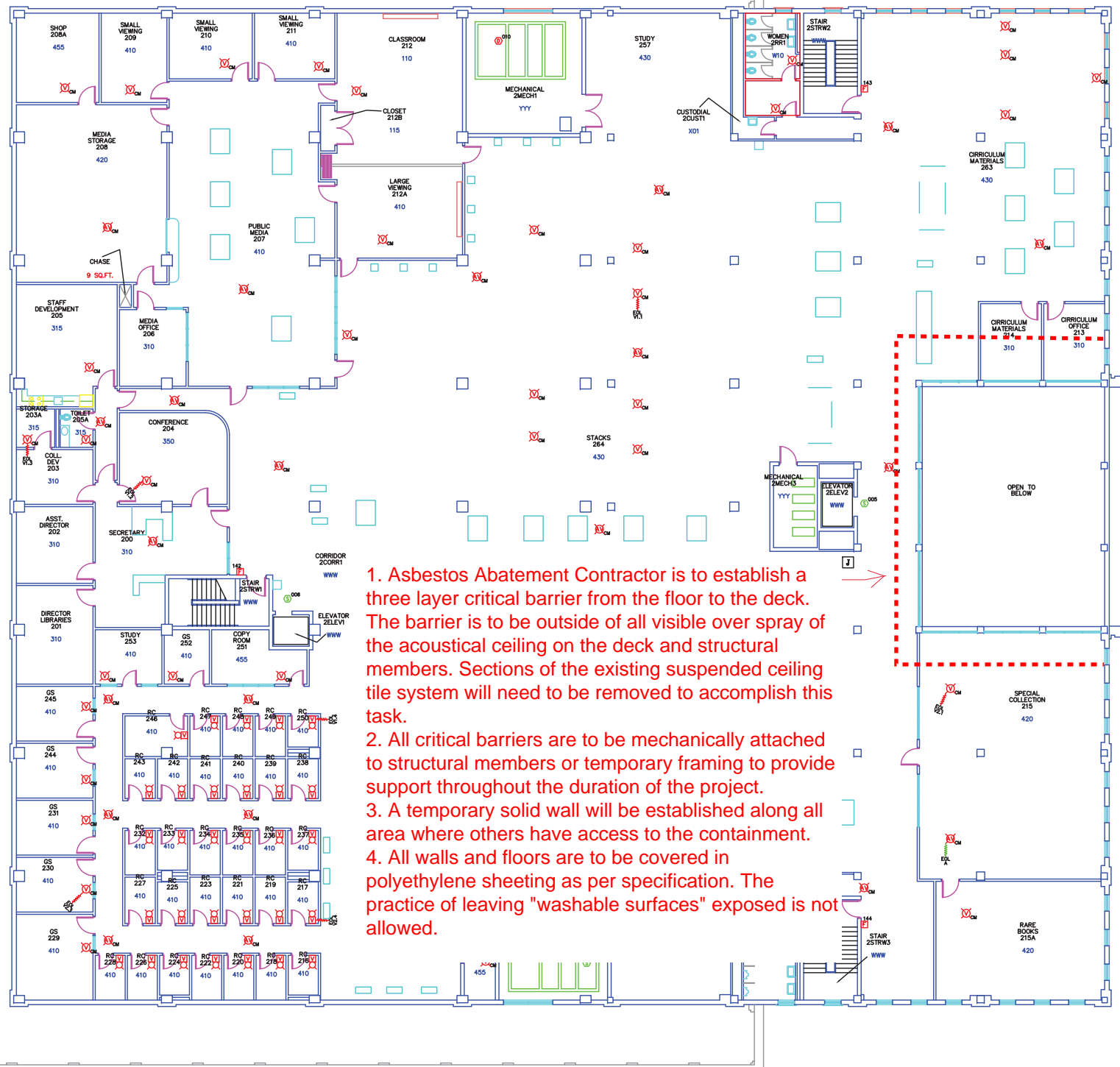
By signing this document you are acknowledging only that the Owner of the building you are about to work in has advised you of your rights to training and protection relative to your employer.

Signature _____ Employee Number: _____

Printed Name: _____ Date: _____

Witness Signature: _____

Witness Printed Name: _____



1. Asbestos Abatement Contractor is to establish a three layer critical barrier from the floor to the deck. The barrier is to be outside of all visible over spray of the acoustical ceiling on the deck and structural members. Sections of the existing suspended ceiling tile system will need to be removed to accomplish this task.
2. All critical barriers are to be mechanically attached to structural members or temporary framing to provide support throughout the duration of the project.
3. A temporary solid wall will be established along all area where others have access to the containment.
4. All walls and floors are to be covered in polyethylene sheeting as per specification. The practice of leaving "washable surfaces" exposed is not allowed.

VENDOR REFERENCES

Please list three (3) references of current customers who can verify the quality of service your company provides. The University prefers customers of similar size and scope of work to this proposal. ***THIS FORM MUST BE RETURNED WITH YOUR PROPOSAL.***

REFERENCE ONE

Government/CompanyName: _____

Address: _____

ContactPersonandTitle: _____

Phone: _____ Fax: _____

Contract Period: _____ ScopeofWork: _____

REFERENCE TWO

Government/CompanyName: _____

Address: _____

ContactPersonandTitle: _____

Phone: _____ Fax: _____

Contract Period: _____ ScopeofWork: _____

REFERENCE THREE

Government/CompanyName: _____

Address: _____

ContactPersonandTitle: _____

Phone: _____ Fax: _____

Contract Period: _____ ScopeofWork: _____

AFFIDAVIT

The undersigned certifies that the bid prices contained in this proposal have been carefully checked and are submitted as correct and final and if bid is accepted (within 90 days unless otherwise noted by vendor), agrees to furnish any and/or all items upon which prices are offered, at the price(s) and upon the conditions contained in the Specifications.

STATE OF TEXAS
COUNTY OF WICHITA

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared

who, after having first been duly sworn, upon oath did depose and say;

That the foregoing proposal submitted by _____

____ hereinafter called "Bidder" is the duly authorized agent of said company and that the person signing said proposal has been duly authorized to execute the same. Bidder affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Name and Address of Bidder:

Telephone number _____

Email _____

Signature

Name: _____

Title: _____

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ day of _____,
20 _____.

Notary Public in and for the
State of Texas.

**PURCHASING AGREEMENT
BETWEEN
MIDWESTERN STATE UNIVERSITY
AND**

Choose an item.

This Standard Purchasing Agreement ("Agreement") is entered into between the **Midwestern State University ("University") and, ("Contractor")**. University and Contractor may be referred to singularly as a "Party" and collectively as the "Parties." The Parties mutually agree and covenant as follows:

1. **TERM:** The term of this Agreement ("Term") will begin on _____, and end on _____, unless terminated earlier pursuant to the terms of this Agreement or extended by mutual written agreement of the Parties.

2. **GOODS/SERVICES :**

☐ Check here if an exhibit, offer, proposal or other similar document (collectively, "Attachment") is being added as part of this Agreement. Any such Attachment: (i) should be described above in this Section 2 and attached to this Agreement; and (ii) is hereby incorporated by reference. In the event of any inconsistency between the Attachment and this Agreement, or any other similar document of Contractor and this Agreement, this Agreement will prevail.

3. **COMPENSATION:** Check one box only:

☒ **This is a fixed price contract.** University will pay Contractor the amount of **\$0.00**.

☐ **This is not a fixed price contract.** University will pay Contractor an amount not to exceed \$ _____ based on an hourly fee and /or other method of calculation as follows:

☐ **This is not a fixed price contract and will be performed on a service-order basis.** University will pay Contractor an amount not to exceed \$ _____ (based on service order form(s) to be completed and signed by the Parties, a version of which will be provided to Contractor by University). University will engage Contractor on an "as-needed if needed" basis and does not guarantee the purchase of any quantity or dollar amount of services.

4. **PAYMENT TERMS:** Contractor shall submit detailed invoices to University describing the services rendered the times when such services were performed, compensable expenses and the amount due. University will pay undisputed amounts within thirty (30) days of receiving goods or invoices, whichever occurs later. Payment terms are subject to Chapter 2251 of the *Texas Government Code*. Contractor understands and agrees that payments under the Agreement may be subject to the withholding requirements of §3402(t) of the *Internal Revenue Code*. University, an agency of the State of Texas, is exempt from Texas sales and use tax on goods and services in accordance with §151.309, *Texas Tax Code*, and Title 34 *Texas Administrative Code* (TAC) Section 3.322.

Notwithstanding any contrary provision of this Agreement, each payment obligation of the University created by this Agreement is conditioned upon the availability of funds that are appropriated or allocated for the payment of the goods or services. If such funds are not allocated and available, this Agreement may be terminated by the University. The University shall notify Contractor at the earliest possible time before such termination. No penalty shall accrue to the

**PURCHASING AGREEMENT
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AND**

Choose an item.

University in the event this provision is exercised, and the University shall not be obligated or liable for any future payments due or any damages as a result of termination under this section. This provision shall not be construed so as to permit the University to terminate this Agreement in order to purchase, lease, or rent similar goods or services from another party.

5. **ELIGIBILITY TO RECEIVE PAYMENT:** In accordance with Section 231.006 of the *Texas Family Code* and Sections 2155.004 and 2155.006 of the *Texas Government Code*, Contractor certifies that it is not ineligible to receive the award of or payments under this Agreement and acknowledges that the Agreement may be terminated and payment withheld if this certification is or becomes inaccurate. Contractor acknowledges that, in accordance with Section 403.055 of the *Texas Government Code*, as applicable, if the Texas Comptroller of Public Accounts is currently prohibited from issuing a warrant to Contractor, Contractor agrees that payment under this Agreement will be applied to the debt or delinquent taxes are paid in full. And pursuant to Sections 2107.008 and 2252.903, *Texas Government Code*, Contractor agrees that any payments owing to Contractor under the Agreement may be applied directly toward any debt or delinquency that Contractor owes the State of Texas or any agency of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.
6. **CONTRACTOR'S STATUS AND RESPONSIBILITIES:** In performing the services, Contractor will be deemed an independent contractor and not the University's agent or employee. This Agreement will not be construed to create any partnership, joint venture or other similar relationship between the Parties. As an independent contractor, Contractor will be solely responsible for determining the means and methods for performing the services. Contractor shall perform the services in strict accordance with this Agreement and in accordance with the highest standards of care, skill, diligence and professional competence applicable to contractors engaged in providing similar services.
- ☐ Check here if Contractor is an individual and has been a temporary or permanent employee of the State of Texas (including any employment with Midwestern State University) within the past two (2) years; if so, Contractor must attach a separate statement setting for the name of the agency or department by which Contractor was employed, the dates of employment, the annual rate(s) of compensation during such employment and the nature of the Contractor's duties.
7. **INTELLECTUAL PROPERTY:** Contractor represents that it has all intellectual property rights necessary to enter into and perform its obligations in this Agreement.
8. **OWNERSHIP OF WORK PRODUCT:** All work products, including any software, research, reports, studies, data photographs, negatives or other documents, drawings or materials prepared by Contractor in the performance of its obligation under this Agreement will be deemed work for University upon completion, termination or cancellation of this Agreement. Any program data or other materials furnished by University for use by Contractor in connection with the services performed under this Agreement will remain University's property.
9. **INDEMNITY:** To the fullest extent permitted by law, Contractor shall indemnify and hold harmless University, and each of their directors, officers, agents and employees from and against all liability, loss, expense (including reasonable litigation costs and attorney fees), or claims for injury or damages arising out of the performance of this Agreement (collectively, "Claim") to the extent the Claim arises from the negligence, willful act, breach of contract or violation of law by Contractor, its employees,

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agents, contractors or subcontractors.

10. **INSURANCE:** Unless an appropriate University representative agrees to waive the requirements by initialing the designated space near the signature block below, Contractor shall comply with general liability insurance coverage of \$1,000,000 per occurrence. If, during the term, Contractor will enter University property, Contractor shall also maintain the following insurance: (i) worker's compensation coverage as required by law with statutory limits for the State of Texas, including employers liability coverage of \$500,000 per accident; (ii) commercial automobile liability coverage of \$1,000,000 combined single limit; (iii) for engineers and architects only: professional liability coverage of \$5,000,000 per occurrence; and (iv) for builders only: builders risk coverage in the amount of the construction cost, including protection against named windstorm and flood. All policies must contain a waiver of subrogation against University. Comprehensive general liability and commercial automobile liability policies must name University as additional insured. Contractor shall provide certificates of Insurance evidencing the insurance requirements prior to the start of work.
11. **INSPECTION AND ACCEPTANCE OF SERVICES:** University reserves the right to inspect the services provided under this Agreement at all reasonable times and places during the term. If any of the services do not conform to the requirements set forth in this Agreement, University may (i) require Contractor to perform the services again in conformity with such requirements, with no additional charge to the University; or (ii) equitably reduce payment due Contractor to reflect the reduced value of the Services performed. These remedies do not limit other remedies available to University in this Agreement or otherwise available at law.
12. **RISK OF LOSS:** All work performed by Contractor pursuant to this Agreement will be at Contractor's exclusive risk until final and complete acceptance of the work by University. In the case of any loss or damage to the work prior to the University's acceptance, such loss or damage will be Contractor's responsibility. Delivery of any goods to University pursuant to this Agreement must be FOB destination.
13. **COMPLIANCE:** Contractor shall observe and abide by all applicable state and federal law requirements and University policies and procedures. Contractor shall certify that he/she or it is in compliance with all applicable state and federal laws as it relates to the terms and conditions of this Agreement.
14. **CONFIDENTIALITY; DATA PROTECTION:** Subject to the Texas Public Information Act and any similar legal requirements, neither Party shall disclose any confidential information obtained from the other Party without such Party's prior written approval. As applicable, Contractor shall maintain and process all information it receives in compliance with all applicable data protect/privacy laws and regulations and University policies.
15. **PUBLICITY:** Contractor shall not use University's name, logo or other likeness in any press release, marketing material or other announcement without University's prior written approval.
16. **SUBCONTRACTORS:** If Contractor is permitted to subcontract any of the services, Contractor shall ensure that each subcontractor complies with all provisions of this Agreement. Contractor will remain liable for the acts and omissions of such subcontractor(s) and the proper performance and delivery of

**PURCHASING AGREEMENT
BETWEEN
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AND**

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the services.

17. **PRODUCTS AND MATERIALS PRODUCED IN TEXAS:** In performing its obligations under this Agreement, Contractor shall purchase products and materials produced in Texas when such products and materials are available at a price and delivery time comparable to products and materials produced outside of Texas. [Section 2155.4441 of the Texas Government Code]
18. **TRAVEL EXPENSES:** In the event the Agreement requires the University to reimburse Contractor for travel expenses, then reasonable travel, meals, and lodging expenses shall be charged in accordance with and shall not exceed State of Texas travel, meal, and lodging reimbursement guidelines applicable to employees of the State of Texas.
19. **BONDS:** If applicable to the Services and this Agreement, Contractor shall secure payment and/or performance bonds in accordance with Section 2253.021 of the Texas Government Code upon executing this Agreement.
20. **AUDIT:** Execution of this Agreement constitutes Contractor's acceptance of the authority of University, the Texas State Auditors and/or their designated representative (collectively, "Auditor") to conduct audits or investigations in connection with this Agreement. Contractor agrees to cooperate with the Auditor conducting such audits or investigations and to provide all information and documents reasonably requested.
21. **TIME IS OF THE ESSENCE:** Time is of the essence in the performance of this Agreement.
22. **DEFAULT:** A party will be in default of this Agreement if such Party fails to comply with any obligation in this Agreement and such failure continues for ten (10) days after receiving written notice from the non-defaulting Party. In the event of default, upon written notice to the defaulting Party, the non-defaulting Party may terminate this Agreement as of the date specified in the notice, and may seek other relief as provided by law.
23. **TERMINATION FOR CONVENIENCE:** University may terminate this Agreement in writing at any time upon providing at least thirty (30) days written notice to Contractor. University will only be liable for payment for Services received prior to the effective date of such termination.
24. **NOTICE:** Any notice required or permitted by this Agreement must be in writing and addressed to the Party at the address set forth below, or such other address as is subsequently specified in writing. Notice will be effective at the date: (i) delivered by national courier service or Registered/Certified Mail, postage prepaid, return receipt required, or (iii) received by facsimile.
25. **BREACH OF CONTRACT CLAIMS:** To the extent Chapter 2260 of the *Texas Government Code* is applicable to this Agreement and is not preempted by other law, the dispute resolution process provided by Chapter 2260 and the related rules adopted by the Texas Attorney General pursuant to Chapter 2260 will be used by the Parties to attempt to resolve any claim for breach of contract made by Contractor against University that cannot be resolved in the ordinary course of business. An event or claim for breach of contract is not grounds for Contractor to suspend performance under this Agreement. The Parties specifically agree that (1) neither the execution of the Agreement by

**PURCHASING AGREEMENT
BETWEEN
MIDWESTERN STATE UNIVERSITY
AND**

Choose an item.

University nor any other conduct, action or inaction of any representative of University relating to the Agreement constitutes or is intended to constitute a waiver of University's or the State's sovereign immunity to suit; and (2) University has not waived its right to seek redress in the courts.

26. **FUNDING CONTINGENCY:** University's performance under this Agreement may be dependent upon appropriation of funds by the Texas State legislature ("Legislature") and/or allocation of funds by University's Board of Regents ("Board"). If the Legislature fails to appropriate the necessary funds or the Board fails to allocate the necessary funds, University may terminate this Agreement without liability by providing written notice to Contractor.
27. **CONTRACTOR REPRESENTATIONS:** If Contractor is a business entity, it represents that: (i) it is duly organized, validly existing and in good standing under the laws of the state of its organization; (ii) it is authorized and in good standing to conduct business in the State of Texas; (iii) it has all necessary power and has received all necessary approvals to execute and perform its obligations in this Agreement; and (iv) the individual executing this Agreement on behalf of Contractor is authorized to do so. If Contractor is a taxable entity as defined by Chapter 171, *Texas Tax Code*, then Contractor certifies that it is not currently delinquent in the payment of any taxes due under Chapter 171, or that Contractor is exempt from the payment of those taxes, or that Contractor is an out-of-state taxable entity that is not subject to those taxes, whichever is applicable.
28. **WAIVER:** Waiver by either Party of a breach or violation of any provision of this Agreement will not operate as waiver of any subsequent breach.
29. **SURVIVAL:** Termination or expiration of this Agreement will not affect the Parties' rights obligations that, by their nature and context, are intended to survive termination or expiration.
30. **ELECTRONIC DELIVERY:** Execution and delivery of this Agreement by exchange of email or fax copy containing the signature of a Party will constitute a valid and binding execution and delivery of this Agreement by such Party.
31. **LIMITATIONS:** The University is subject to constitutional and statutory limitations on its ability to enter into certain terms and conditions of the Agreement, which may include those terms and conditions relating to: liens on the University property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers, and limitations on legal rights, remedies, requirements, and processes; limitations of time in which to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorney's fees; dispute resolution; indemnities; and confidential information. Terms and conditions of this Agreement relating to these limitations will only be binding on the University to the extent permitted by the Constitution and the laws of the State of Texas.
32. **JURISDICTION AND VENUE; GOVERNING LAW:** It is expressly understood and agreed that the location and place of performance for this Agreement is stipulated to be in Wichita Falls, Wichita County, Texas, and the proper place of venue for suit of all disputes arising under this Agreement shall solely be in Wichita County, Texas. This Agreement and all of the rights and obligations of the Parties thereto and all of the terms and conditions hereof will be construed, interpreted and applied in

**PURCHASING AGREEMENT
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Choose an item.

accordance with and governed under the laws of the State of Texas.

33. **AUTHORITY:** The person signing below on behalf of the University and Contractor warrants that he/she has the authority to execute this Agreement according to its terms.
34. **OFFICIAL NOT TO BENEFIT:** No trustee, officer, director, regent, employee, administrator and representative of University shall be admitted to any share or part of this Agreement or to any benefit that may arise there from.
35. **NONDISCRIMINATION:** Contractor shall comply with State of Texas and federal civil rights laws and University policies prohibiting discrimination and harassment. Contractor shall not discriminate against an employee or applicant for employment with respect to the hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, gender, national origin, age, sexual orientation, veteran status, or disability that is unrelated to the individual's ability to perform the duties of a particular position. A breach of this covenant may be regarded as a material breach of this Agreement.
36. **NON-ASSIGNABLE CONTRACT:** This Agreement cannot be assigned, in whole or in part, by either party.
37. **MISCELLANEOUS:** This Agreement, together with any Attachment(s), constitute the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all prior contracts, agreements, representation and understanding made by the Parties relating to such subject matter. This Agreement may not be waived, altered, amended or otherwise modified except by the written agreement of both Parties. Contractor may not assign this Agreement with University's prior written consent. The invalidity or unenforceability of any provision(s) of this Agreement will not impair the validity and enforceability of the remaining provisions.
38. **EFFECTIVE DATE:** This Agreement shall be deemed to be effective on _____ and is signed by the respective Parties on the dates of their respective signatures as appear below.

<p>INSURANCE REQUIREMENTS WAIVER - IF the Insurance Requirements are not applicable to the services or if University otherwise chooses to waive such requirements for purposes of this <u>Agreement</u>, the appropriate University representative may waive the requirements by initialing here -----> _____.</p> <p>Otherwise, Contractor must satisfy the insurance requirements specified in this Agreement.</p>
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**PURCHASING AGREEMENT
BETWEEN
MIDWESTERN STATE UNIVERSITY
AND**

Choose an item.

IN WITNESS WHEREOF:

Midwestern State University:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

_____:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

SAMPLE