

REQUEST FOR BIDS
PRE-DEMOLITION ABSESTOS ABATEMENT
COMMERCIAL STRUCTURE
122 HOUT STREET, WARRENSBURG MISSOURI 64093

DATE: April 10, 2025

PROJECT MANUAL – SECTION 1:

Bid Information
Contract Documents
General Conditions
Wage Rates
Job Special Provisions

PROJECT MANUAL - SECTION 2: TECHNICAL SPECIFICATIONS

OWNER:

Johnson County, Missouri
Johnson County Courthouse
300 N. Holden Street
Warrensburg MO 64093

ENVIRONMENTAL CONSULTANT:

Dusty Onwiler, Managing Principal
New Environmental Concepts
P O Box 1212
Warrensburg MO 64093
(660) 653-2363

PROJECT ADMINISTRATION:

Tracy E. Brantner
Johnson County Economic Development Corp.
300 N. Holden Street, Suite 301
Warrensburg MO 64093
(660) 747-0244
brantner@growjocomo.com

Date of Legal Notice Publication	April 15, 2025
MANDATORY PRE-BID MEETING AND ONE OF TWO SITE VISITS	<u>Site Visit 1:*</u> 10:00 a.m. on Friday, April 25, 2025 <u>Pre-Bid Meeting:</u> 1:00 p.m. on Friday, April 25, 2025 <u>Site Visit 2:*</u> 2:00 p.m. on Friday, April 25, 2025 *same content for both site visit options – must attend at least one site visit and the pre-bid meeting*
QUESTIONS AND CLARIFICATIONS DEADLINE DATE	4:00 p.m. on Wednesday, May 7, 2025
RFP SUBMISSION DEADLINE DATE and TIME	1:30 p.m. on Thursday, May 22, 2025
BID TITLE	Request for Bids – Pre-Demolition Asbestos Abatement
COUNTY CONTACT PERSON	Tracy E. Brantner, Economic Development
COUNTY CONTACT INFORMATION	(660) 747-0244 brantner@growjocomo.com
Note: All time references are Central Daylight Savings Time or Warrensburg, MO, local time.	

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- Hold Harmless and Indemnity Agreement
- Anti-Collusion Statement
- Certification Regarding Disbarment, Suspension, and Other Responsibility Matters
- Affidavit of Work Authorization
- Applicant Affidavit for Public Benefit Under Section 208.009
- Affidavit of Work Safety Compliance

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- Master Agreement for Professional Services (Contract)
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GENERAL CONDITIONS

WAGE RATES

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JOB SPECIAL PROVISIONS

PROJECT MANUAL – SECTION 2

TECHNICAL SPECIFICATIONS

REQUEST FOR BIDS
PRE-DEMOLITION ASBESTOS ABATEMENT
COMMERCIAL BUILDING – 122 HOUT STREET
WARRENSBURG, MISSOURI

SECTION 1: BID DOCUMENTS

Johnson County, Missouri
Johnson County Courthouse
300 N. Holden Street
Warrensburg MO 64093

Note to Editor: Please publish one (1) time in the "Legal Notices" section of the:

- Warrensburg Star Journal on Tuesday, April 15, 2025

Please provide one (1) affidavit of publication. Send bill to: Johnson County Clerk Chief Deputy, marked "Pre-Demolition Asbestos Abatement" via email: jpowers@jocomo.gov
Thank You.

**REQUEST FOR BIDS
PRE-DEMOLITION ASBESTOS ABATEMENT – COMMERCIAL BUILDING
122 HOUT STREET, WARRENSBURG MO 64093**

NOTICE IS HEREBY GIVEN that Johnson County, Missouri, is requesting sealed bids from qualified Contractors to remove previously identified hazardous asbestos materials in accordance with the technical specifications for the County-owned building located at 122 Hout Street, Warrensburg MO 64093, in preparation for building demolition and site clearance.

Mandatory site visit and pre-bid meeting will be held on April 25, 2025.

Please mail or deliver two (2) ORIGINAL, COMPLETE AND FULLY EXECUTED bids with all required attachments in a sealed envelope labeled "**DO NOT OPEN – ASBESTOS ABATEMENT**" for receipt by the County **NO LATER THAN 1:30 PM on MAY 22, 2025** to:

ATTN: Tracy E. Brantner
Johnson County Economic Development
300 North Holden Street, Suite 301
Warrensburg, MO 64093
Phone: (660) 747-0244

Emailed electronic submissions will not be accepted.

For a complete Project Manual – Section 1 and Section 2, go to:
<https://www.jococourthouse.com/bids.html>

The County reserves the right at any time to change or extend the due date and time for any reason. Johnson County reserves the right to accept or reject any or all bids submitted.

JOHNSON COUNTY COMMISSION

INSTRUCTIONS TO BIDDERS

The following instructions should be carefully followed in proposal preparation. Omissions or irregularities may cause bid rejection.

1. The Bidder shall carefully review this entire document. The Bidder shall carefully review project in the field.
2. On the "Bid Form" fill in the "Total Cost" in addition to the other blanks. Unit pricing for this project will not be needed.
3. Sign and date the Bid Form properly. If submitted in the name of a firm or corporation the legal name of the firm or corporation should appear in the space designated and be signed for by one or more persons legally qualified to execute papers in the name of said firm or corporation.
4. Submit bid bond executed by bidder and surety (or attach cashier's check or approved money order). Bidder may use bond form provided in bid documents or may attach surety company's bid bond form.
5. Acknowledge and submit with the bid any Addenda by signing, dating, and stating the addendum number and date on the Proposal.
6. The Bidder shall complete and submit the following documents with the Bid:
 - A. Bidder Qualification
 - B. Anti-Collusion Statement
 - C. Certification Regarding Disbarment, Suspension, and Other Responsibility Matters
 - D. Affidavit of Work Authorization
 - E. Applicant Affidavit for Public Benefit
 - F. Affidavit of Work Safety Compliance
7. Present or mail two (2) complete sets of original documents in a sealed envelope which is plainly marked with Bidder's name, address, telephone number, project title, bid date, and bid time.

INFORMATION FOR BIDDERS

(1) NOTICE TO BIDDERS

Bids will be received by: JOHNSON COUNTY, MISSOURI
(herein called the "Owner"), at the Office of the Economic Development Director, Johnson County Courthouse, 300 N. Holden Street, Suite 301, Warrensburg MO 64093
until 1:30 p.m. CST on May 22, 2025. Bids received on or before the deadline will be publicly opened and read aloud not less than 30 minutes immediately following.

Each Bid must be submitted in a sealed envelope, addressed to:

Johnson County, Missouri – Tracy E. Brantner, at Johnson County Economic Development Office, 300 N. Holden Street, Suite 301, Warrensburg MO 64093.

Each sealed envelope containing two (2) complete sets of original bid documents must be plainly marked on the outside, as follows:

Do Not Open – Asbestos Abatement

The envelope should bear on the outside the Bidder's name, address and license number if applicable, and the name of the project for which the bid is submitted.

If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the Owner at:

Johnson County, Missouri
Attention: Economic Development
300 N. Holden Street, Suite 301
Warrensburg, MO 64093

The bids will be opened publicly not less than 30 minutes following the bid deadline or approximately 2 p.m. in the County Commission Chambers located on the 2nd floor of the Johnson County Courthouse, 300 N. Holden Street, Warrensburg MO 64093. Only bids received before the 1:30 p.m. deadline will be publicly opened.

(2) MANDATORY PRE-BID CONFERENCE AND WALK-THROUGH

Bidders are required to attend the MANDATORY pre-bid conference and at least one (1) walk-through of the project in its entirety. In addition, each participant in the walk-through will be required to execute the Hold Harmless and Indemnity Agreement. Generally, work consists of the removal of asbestos containing materials from selected areas at the Commercial Structure located at 122 Hout Street prior to demolition of the building. A pre-bid meeting at the Johnson County Courthouse, 300 North Holden, Warrensburg, Missouri 64093 has been scheduled for 1:00 p.m. on Friday, April 25, 2025.

A pre-bid walk through at 122 Hout Street, Warrensburg, Missouri has been scheduled for Friday, April 25, 2025 at 10:00 a.m. and a second pre-bid walk through at 2:00 p.m. The location of the walkthrough will begin at Commercial Structure located at 122 Hout Street, Warrensburg, Missouri 64093.

(3) GENERAL INFORMATION

The Bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, documents, together with the "Special Provisions, Job and General", if any, attached to this proposal, hereby proposed to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work. The Owner shall provide to Bidders prior to bidding, all information which is pertinent to, and delineates and describes, the Owner's property and temporary easements acquired or to be acquired.

All Bids must be made on the required Bid Form. All blank spaces for bid prices must be filled in, in ink or typewritten, and the bid form must be fully completed and executed when submitted.

The Owner may waive any informalities or minor defects or reject any and all Bids. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered, will not be opened, and will be returned to the Bidder. No Bidder may withdraw a Bid within 90 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period the time may be extended by mutual agreement between the Owner and the bidder.

Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site and a review of the drawings and specifications including addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or of the nature of the work to be done.

(4) BID AND PERFORMANCE GUARANTY

Each Bid must be accompanied by a Bid Bond, Cashier's Check, or approved Money Order payable to the Owner for 5 percent of the total amount of the Bid. As soon as the bid prices have been compared, the Owner will return the bond, check, or money order of all except the three lowest responsible Bidders. When the Agreement is executed the bonds of the two remaining unsuccessful Bidders will be returned. The Bid Bond of the successful bidder will be retained until the payment bond and the performance bond have been executed and approved, after which it will be returned. A certified check may be used in lieu of a bid bond.

A Performance Bond and a Payment Bond each in the amount of 100 percent of the contract price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract

Attorneys-in-fact who sign bid bonds or payment bonds and performance bonds must file with each bond a certified and effective dated copy of their power of attorney.

(5) ADDENDA

The Administrator, in consultation with the Environmental Consultant, if required, will issue an Addendum regarding any changes to the Specifications, or Contract Documents that result from clarifications or determination of equality of products or methods, eight (8) days prior to bid opening on the website at: <https://www.jococourthouse.com>. Each Bidder will also receive an email notification of Addendum. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has reviewed all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

Any verbal information given to a Bidder other than by means of Drawings and Specifications or Addenda as described below is informal for convenience and it is not guaranteed.

(6) PERIOD OF PERFORMANCE

The Contractor shall complete this project starting after the notice to proceed has been issued and notification to MDNR. The abatement contractor will have 20 working shifts to complete this project to avoid liquidated damages. Should the asbestos abatement contractor not complete the project by the above scheduled completion date, the abatement contractor shall be liable and charged for all costs associated with New Environmental Concepts.

(7) LIQUIDATED DAMAGES

The Contractor agrees to pay the Owner Two Thousand Dollars (\$2,000.00) per day for each calendar day that the asbestos removal work extends beyond the completion date set in the Abatement Schedule. Liquidated damages shall be deducted from the final Contract Sum due to Contractor. Liquidated damages shall be charged per phase of the schedule as shown in the project specifications.

The Contractor agrees to pay the Owner for all Phase Contrast Microscopy (PCM) sample analysis for each group of samples collected which fail to pass the criteria established in the Specifications for completion of response actions. Contractor shall be responsible for all costs incurred for all required additional clearance testing performed by the Owner or Environmental Consultant. TEM Sample analysis costs are \$750.00 per clearance samples set and PCM sample analysis costs of \$500.00 per clearance set analyzed for 24-hour maximum waiting period. Sample analysis costs to be paid by the Contractor shall be deducted from the final contract sum due to the Contractor.

(8) CONTRACT AWARD

The Contract, if awarded, will be made to the lowest responsive, responsible, most qualified Bidder based upon the total bid price. A conditional or qualified Bid will not be accepted.

The Owner may make such investigations as deemed necessary to determine the ability of the lowest responsive, responsible Bidder to perform the work, and the Bidder shall furnish to the Owner all such information, data, and references for this purpose as the Owner may request. The Owner reserves the right to reject any or all Bids if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the work contemplated therein. The Owner reserves the right to reject any and all Bids.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance Bond and Payment Bond within fifteen (15) calendar days from the date when Notice of Award is delivered to the Bidder, unless otherwise notified. The Notice of Award shall be accompanied by the necessary Agreement and bond forms. In case of failure of the Bidder to execute the Agreement, the Owner may consider the Bidder in default, in which case the Bid Bond accompanying the proposal shall become the property of the Owner. Upon default by the first low Bidder the award may then be made to the next lowest responsible Bidder, or the work may be re-advertised for a construction contract or otherwise, as the Owner may decide.

The Owner upon receipt of an acceptable Certificate of Insurance and Agreement signed by the party to whom the Agreement was awarded, shall within a reasonable period of time sign the Agreement and return to such party an executed duplicate of the Agreement. The Owner upon signing the Agreement and within a reasonable period of time shall issue the Notice to Proceed.

The low Bidder shall supply the names and addresses of major material suppliers and subcontractors at the time of contract award unless the owner requests this information at an earlier date.

(9) COMPLIANCE WITH CONTRACT PROVISIONS

Each Bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to its Bid. In the case on conflicts within the Contract Documents, Plans and/or Specifications, the most stringent requirement shall prevail. Any standard list shall refer to the most current revision thereof.

The Prime Contractor must perform with its own organization, contract work amounting to not less than 50 percent of the total original contract price.

The Contract Documents contain the provisions required for the construction of the project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve the Contractor from fulfilling any of the conditions of the contract.

The Contractor must agree to use only those products and methods described in the Drawings and Specifications as amended by the issued Addenda.

Notwithstanding any reference to any rule or regulation, the Consultants do not assume any responsibility to provide supervision of construction methods and/or procedures. The Contractor shall assume risks from storms and accidents and shall be responsible for all damage to adjoining property, environment, and to persons until work is completed and accepted. All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

(10) MISSOURI SECRETARY OF STATE REGISTRATION

Bidders are required to have their business entity registered with the Missouri Secretary of State and lawfully conduct work in the State of Missouri pursuant to the Missouri State Statutes. A copy of the Bidder's registration certificate with the Missouri Secretary of State and Certificate of Good Standing shall be provided to the Owner upon request.

The awarded Contractor shall provide a copy of the business registration certificate with the Missouri Secretary of State and a copy of the Certificate of Good Standing with the executed agreement.

(11) LABOR AND STANDARD PROVISIONS

The Contractor shall comply with all requirements of the Prevailing Wage Law of Missouri, Revised Statutes of Missouri, Sections 290.210 to and including 290.340. Wage rates for this project will be determined by the State of Missouri Division of Labor Standards and are included within this project manual. The Contractor shall pay all workers performing work under this contract wage rates not less than the prevailing hourly rate of wages for each craft or classification of workman (Section 290.250, RSMo). A legible list of all prevailing wage rates must be posted and easily accessible at the worksite by the Contractor.

The Contractor will forfeit a penalty to the contracting public body of \$100.00 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the Contractor or by any Subcontractor (Section 290.250, RSMo). For detailed

information on rules and occupation titles, see 8 CSR 30-3.010 through 3.060.

Wage Rates will be reviewed 10 days prior to bid for a possible update. If required for the project, the new wage rates will be posted on the website at: <https://www.jococourthouse.com/bids> and included in the Addendum, as needed. State wage determinations may be obtained by contacting the Missouri Department of Labor and Industrial Relations, Division of Labor Standards, 421 East Dunklin Street, Jefferson, Missouri 65102. Telephone (314) 751-4091.

(12) CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The Contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–330) as supplemented by Department of Labor regulations (29 CFR part 5).

(13) OCCUPATION SAFETY AND HEALTH ADMINISTRATION (OSHA) TRAINING

The Contractor and their Subcontractors shall comply with Section 292.675, RSMo. Any person signing a contract to work on the construction of public works for any public body must require all on-site employees complete the ten-hour Occupational Safety and Health Administration (OSHA) construction safety program, which includes a course in construction safety and health approved by OSHA or a similar program approved by the Missouri Department of Labor and Industrial Relations which is at least as stringent as an approved OSHA program.

The Contractor will forfeit a penalty to the contracting public body of \$2,500.00 plus an additional \$100.00 for each employee by the Contractor or Subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training (Section 292.675, RSMo).

(14) EQUAL OPPORTUNITY

The Contractor and the Contractor's Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, or national origin. The Contractor shall take affirmative action to ensure that the applicants employed, and that employees are treated during employment without regard to their race, religion, color, sex, sexual orientation, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, promotion, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies for non-discrimination.

(15) DEBARMENT AND SUSPENSION

Any bidder or equipment supplier whose firm or affiliate is listed on the General Services Administration (GSA) publication entitled "Lists of Parties Excluded from Federal Procurement or Non-procurement Programs" will be prohibited from the bidding process. Anyone submitting a bid who is so listed will be determined to be a non-responsive bidder in accordance with 40 CFR 32. The General Services Administration (GSA) publication entitled "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" will identify those who are prohibited from the bidding process. Any bidder or equipment supplier listed on the Contractor and Business Debarment Lists for the Missouri Secretary of State, Missouri Department of Labor, Missouri Department of Transportation, and/or other related public agency shall be prohibited from the bidding process. The "Certification Regarding Debarment, Suspensions, and Other Responsibility Matters" shall be completed and submitted with the bid proposal.

A Contractor's Suspension/Debarment Certification will be contained in the specifications; however, this certification should not preclude any interested party from ascertaining whether the certifying firm or person is actually on the list. To determine a person's and/or firms' eligibility for award in accordance with the Debarment, Suspension, and Voluntarily Excluded Regulation, 40 CFR 52.500(b), or Missouri State Agency contact the grantee's authorized representative.

(16) EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED

Bidders are informed that pursuant to Section 285.530 RSMo as a condition of the award of any contract in excess of \$5,000.00, the successful Bidder shall, by sworn affidavit and provision of documentation, affirm its enrollment and documentation, affirm its enrollment and participation in a federal work authorization program within respect to the employees working in connect to the contracted services. Successful Bidders shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection to the contracted services.

Pursuant to Section 285.530.1, RSMo, the subrecipient assures that it, as well as its subrecipients do not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the State of Missouri, and shall affirm, by sworn affidavit and provision of documentation, its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Further, the subrecipient assures that it, as well as its subrecipients shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

In accordance with Sections 285.525 to 285.550, RSMo a general contractor or subcontractor of any tier shall not be liable when such contractor or subcontractor contracts with its direct subcontractor who violates subsection 1 of Section 285.530, RSMo if the contract binding the contractor and subcontractor affirmatively states that the direct subcontractor is not knowingly in violation of subsection 1 of Section 285.530, RSMo and shall not henceforth be in such violation and the contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.

(17) PROOF OF LAWFUL PRESENCE

Pursuant to Section 208.009, RSMo no alien unlawfully present in the United States shall receive any state or local public benefit. At time of application for such public benefits all applicants shall submit affirmative proof that applicant is a citizen or permanent resident of the United States or is lawfully present in the United States. Such affirmative proof shall include documentary evidence recognized by the department of revenue when processing an application for a driver's license, a Missouri driver's license, as well as any document issued by the federal government that confirms an alien's lawful presence in the United States. Alternatively, applicant can receive temporary public benefits by providing an affidavit at time of application affirming that the applicant is lawfully present within the United States.

(18) MISSOURI PRODUCTS

In accordance with Chapter 71.140, Missouri Revised Statutes 1986, preference shall be given to Missouri Products.

(19) MISSOURI FIRMS

Pursuant to Section 34.076 RSMo. 1986 Cumulative Supplements, a preference shall be given to those persons doing business as Missouri firms, corporations, or individuals, or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price is the same or less. In addition, in order for a nondomiciliary Missouri bidder's bid, as would be required for a Missouri bidder to successfully bid in the nondomiciliary's state.

(20) MISSOURI SALES TAX EXEMPTION

Missouri State Statutes 144.062, effective August 28, 1994, allows for a sales tax exemption to Contractors constructing, repairing or remodeling facilities, or purchasing personal property and materials to be incorporated into and consumed in the construction of projects for a tax exemption entity. If requested by the Contractor, the tax-exempt entity shall furnish a signed exemption certification authorizing such purchases for the construction, repair or remodeling project to each Contractor or Subcontractor. For further information, please contact the Missouri Department of Natural Resources or the Missouri Department of Revenue, P.O. Box 840, Jefferson City, Missouri 65105, Telephone (573) 751-2836.

(21) NO SECOND-TIER SUBCONTRACTING

Second tier subcontracting will not be permitted on this project. It will be the responsibility of the Contractor to ensure that his subcontractors do not, in turn, subcontract any portion of the work.

(22) PAYMENT

Payment will be made monthly less five (5) percent retainer pending final approval of work, unless otherwise specified or agreed upon by the Owner. Partial Payment Estimates may require the concurrence of the funding agency before payment is made by the Owner. Concurrence by the funding agency does not attest to the correctness of quantities or that the work has been performed in accordance with the Contract Documents & Drawings.

(23) INSURANCE

The successful Contractor agrees to obtain and maintain throughout the term of the contract, the General Insurance Requirements as follows:

Firm shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the Firm's work, whether such execution be by the Firm, any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone whose acts any of them may be liable:

Workers Compensation - Claims under workmen's compensation, disability benefit and other similar employee benefit acts in amounts required by law. In case any class of employees engaged in hazardous work under this Agreement is not protected under the workmen's compensation statute, the Firm shall provide adequate and suitable insurance for the protection of its employees not otherwise protected.

Bodily Injury - Claims for damages because of bodily injury, occupational sickness or disease, or death of employees in the amounts required by law.

Personal Injury - Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the

employment of such person by the Firm, or (2) by any other person.

Third Person Bodily Injury - Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees in the amount of at least \$441,130.00 per person and \$2,940,868.00 per occurrence, or such amounts as are annually listed as the governmental sovereign immunity waiver in section 537.610 RSMo, as annually adjusted.

Automobile Coverage - Claims for damages because of injuries to persons and property arising out of the operation of the following in the execution of projects:

Firm's own automobiles and trucks,
Hired automobiles and trucks, and
Automobiles and trucks now owned by the Firm.

The insurance shall cover the use of the above-mentioned automobiles and trucks during the term of this Agreement. The minimum amounts of such insurance shall be the same as required for Public Liability and Property Damage Insurance.

Professional Liability - Claims for damages resulting from errors or omissions of the Firm or its employees in the amount of at least \$1,000,000.00 per occurrence or \$2,000,000.00 aggregate including Asbestos Abatement and Contractor's Pollution Liability.

Public Liability and Property Damage - Claims for damages because of damage to any property, building, or structure on or adjacent to the County's premises, or the injury to or destruction of property resulting from the Firm's services in the amount of at least \$441,130.00 per person and \$2,940,868.00 per occurrence per occurrence, or such amounts as are annually listed as the governmental sovereign immunity waiver in section 537.610 RSMo, as annually adjusted.

Certificates of Insurance acceptable to the County shall be filed with the County prior to the commencement of any work assigned under this Agreement. These certificates shall contain a provision that coverage afforded under the policies will not be cancelled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the County.

(24) GUARANTY

The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from the date of completion and acceptance of the work.

(25) PUBLIC RECORD

All information received from prospective Bidders will be deemed public records and presumed to be open.

(26) PROTEST RESOLUTION FOR BIDDING PROCESS

The following procedure shall be followed for bid protests or disagreements during the bidding phase:

A. Filing Procedure

A protest letter shall be filed with the County Attorney by certified mail no later than 10 days prior to the bid date. Protest must be received in the Attorney's office 10 days prior to bid, not just postmarked. Protest shall include complete background and explanation

with detailed request for resolving the protest.

Protest must be clearly labeled and signed for authorization by Officer or Owner of protesting company. Name, address, phone, and fax numbers shall be included for resolution. Protest may be rejected if all requirements are not met.

B. Resolution Procedure

Protests will be reviewed by the Attorney for the County, County Commissioners, Environmental Consultant and Administrative staff. Resolution will be forwarded by certified letter 3 days prior to bid opening. All decisions are final.

(27) PATENT REQUIREMENTS

The Contractor shall pay all royalties and license fees. Contractor shall protect, defend, indemnify, and save harmless the Owner and the Environmental Consultant from all liabilities, judgments, costs, damages, and expense which may in any way come against the Owner and or Environmental Consultant by reason of the use of any material, machinery, devices, equipment or processes furnished or used in the performance of the Work for which patents or licensing agreements exist or by reason of the use of designs furnished by the Contractor for which patents or licensing agreements exist, but the Contractor shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents.

The Contractor is hereby notified that certain procedures and systems that Contractor may choose to employ to perform certain requirements specified herein, specifically the use of a particular negative air system in conjunction with HEPA filtered exhaust equipment, are registered, patented processes. The Contractor shall be responsible for all royalties and license fees in relation to such patents and shall hold harmless and indemnify the Owner and Environmental Consultant from and against all claims, losses, damages and expenses including reasonable attorneys' fees, arising out of any failure on the part of the Contractor to properly comply with patent requirements.

(28) QUESTIONS

Bidders shall submit questions about the Bidding Documents to Tracy E. Brantner, Johnson County Economic Development Office in writing either hand-delivery, U.S. Mail and/or email at brantner@growjocomo.com. Replies will be issued to all Bidders of Record by Addenda and will become part of the Contract Documents. The Administrator, Environmental Consultant and Owner will not make oral clarifications.

(29) SUBSTITUTIONS

Substitutions will not be allowed before the receipt of the Bids.

(30) BID FORM

Bids shall be made on an unaltered Bid Form as included in Bid Form. Submit two (2) paper versions of the completed Bid Form both with original signatures. Fill in all blank spaces on the Bid Form; failure to do so may be cause for rejection.

Any additional Stipulation on the Bid Form or qualifications in any manner may be cause for rejection. The Bid Form shall be signed by the person or persons legally authorized to bind the Bidder to a contract.

If erasures or other changes appear on the forms, the person signing the Bid must initial each such erasure or change.

(31) BIDDER'S CERTIFICATION

The Bidder's signature on this proposal constitutes execution of all certifications which are a part of this proposal.

- A. Bidder Qualifications
- B. Anti-Collusion Statement
- C. Certification Regarding Disbarment, Suspensions, and Other Responsibility Mat
- D. Affidavit of Work Authorization
- E. Applicant Affidavit for Public Benefit Under Section 208.009
- F. Affidavit of Work Safety Compliance

**BID FORM
PRE-DEMOLITION- ASBESTOS ABATEMENT
COMMERCIAL STRUCTURE
122 HOUT STREET
WARRENSBURG, MISSOURI 64093**

DATE: _____

FIRM NAME: _____

CONTACT NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE NUMBER: (_____) _____

FAX NUMBER: (_____) _____

TO: Johnson County, Missouri
c/o Johnson County Econ. Dev. Corp.
300 North Holden, Suite 301
Warrensburg, Missouri 64093

RE: Asbestos Abatement
Commercial Structure
122 Hout Street
Warrensburg, Missouri

Having examined all Bidding Documents including the General Conditions and Specifications prepared by New Environmental Concepts (NEC) for the project entitled above, dated April 11 2025, including Addenda Nos. _____ **visited the site and examined all conditions affecting work**, the Undersigned proposes to furnish all labor, materials, and equipment and appliances required by said work for the COMPLETE WORK for a stipulated Sum as follows:

BASE BID #1:

Removal and disposal of asbestos containing pipe insulation, mudded pipe fittings, stair tread/adhesive, floor tile/mastic, fire doors, drywall systems, building caulking and roof sealant materials from selected areas at the Commercial Structure located at 122 Hout Street per the project specifications. All work shall be performed in accordance with the Contract Documents including the Project Specifications and General Conditions.

_____ DOLLARS (\$_____)

TIME OF COMPLETION:

If Undersigned negotiates above-mentioned Agreement with the Owner, he agrees to complete the work in accordance with the project schedule in these specifications.

LIQUIDATED DAMAGES: The Contractor agrees to pay the Owner **Two Thousand Dollars (\$2,000.00) per day for each calendar day** that the asbestos removal work extends beyond the completion date set in the Abatement Schedule. Liquidated damages shall be deducted from the final Contract Sum due to Contractor. Liquidated damages shall be charged per phase of the schedule as shown in the project specifications.

The Contractor agrees to pay the Owner for all Phase Contrast Microscopy (PCM) sample analysis for each group of samples collected which fail to pass the criteria established in the Specifications for completion of response actions. **Contractor shall be responsible for all costs incurred for all required additional clearance testing performed by the Owner or Environmental Consultant.** TEM Sample analysis costs are \$750.00 per clearance samples set and PCM sample analysis costs of \$500.00 per clearance set analyzed for 24-hour maximum waiting period. Sample analysis costs to be paid by the Contractor shall be deducted from the final contract sum due to the Contractor.

LIST OF SUBCONTRACTORS

Undersigned agrees, if notified of the acceptance of this Proposal, that he will utilize the following subcontractors for the following noted types of work, and that all other work not listed below will be handled directly by the Undersigned. No substitutions shall be made in the employment of subcontractors without written approval by the Owner.

<u>Subcontractor</u>	<u>Type of Work</u>
(Name, Address, Telephone Number)	

(Use additional page if necessary)

PREVAILING WAGE RATES:

The Undersigned acknowledges and agrees to pay the current Prevailing Wage Rates for all trades and subcontractors on this project. Prevailing wage shall be as defined by the Missouri Department of Labor for Johnson County, Missouri. Changes in prevailing wages throughout this contract will not allow for additional cost increases from the contractor, these costs should be incorporated into the bid.

* * * * *

Name of Bidder: _____

Signed by: _____

Date: _____

Title: _____

Bidder's Address: _____

Bidder's Telephone Number: _____

Missouri Asbestos Abatement Contractor Registration Number

Bid must be signed by a person or persons authorized to bind the bidder to a contract. Failure to complete the Bid Form may be cause for rejection of Bid.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal,

_____ as Surety,

are hereby held and firmly bound unto _____ as Owner,

in the penal sum of _____

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

Signed, this _____ day of _____, 20____.

The condition of the above obligation is such that whereas the principal has submitted to

_____ a certain

Bid, attached hereto and hereby made a part hereof to enter into a Contract in writing, for

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

NOW, THEREFORE,

- a. If said Bid be rejected, or
- b. If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said Bid) and shall furnish a Bond for faithful performance of said contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bids; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)
Principal

Surety

By: _____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

BIDDER QUALIFICATIONS

Project:

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

Firm Name:

(Company Name)

(Address)

(City, State, Zip Code)

(Phone Number)

(Fax Number)

(E-mail)

☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation ☐ Limited Liability Co.

General Information:

Federal ID Number: _____

Percent of work done by Contractor: _____

Number of Permanent Employees: _____

Number of years in business: _____

Geographical limits of operation: _____

If you have done business under a different name, please give name and location:

Has firm ever failed to complete a project or defaulted on a contract? If so, state where and why:

Has firm ever had a notice of violation? If so, state where and why:

Construction Capabilities: (Check all that apply)

☐ General Contracting

☐ Carpentry

☐ Concrete

☐ Plumbing

☐ Electrical

☐ HVAC

☐ Utilities

☐ Earthworks

☐ Paving

☐ Demolition

☐ Lead Abatement

☐ Asbestos Abatement

☐ Other: _____

For Corporations Only:

Federal ID Number: _____

Number of State(s) in which incorporated: _____

Date(s) of incorporation: _____

If not incorporated in Missouri:

1. Attach Certificate of Authority to do Business in Missouri

2. Certificate Number: _____ Date: _____

President's Name

Vice-President's Name

Secretary's Name

Treasurer's Name

For Partnerships Only:

Date of Organization: _____

Type of Partnership: ☐ General ☐ Limited ☐ Association

Names and Addresses of all partners: (use additional sheet if necessary)

1. _____
(Name) (Address) (City, State, Zip Code)

2. _____
(Name) (Address) (City, State, Zip Code)

Date:

Date this _____ day of _____, 20____.

Signatures:

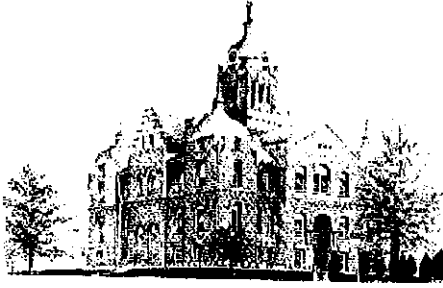
Bidder's Signature

Corporate Secretary's Signature and Seal

Typed or Printed Name of Signor

Partner/Joint Venture Signature

Typed or Printed Name of Signor



Johnson County Commission

Troy A. Matthews

Presiding Commissioner

Rusty Sproat

Commissioner, Eastern District

Charles Kavanaugh

Commissioner, Western District

Diane Thompson

County Clerk

**JOHNSON COUNTY, MISSOURI
HOLD HARMLESS AND INDEMNITY AGREEMENT**

This Hold Harmless and Indemnity Agreement (this "Agreement") is made and entered into by and between the County of Johnson, Missouri, 300 N. Holden Street, Warrensburg MO 64093 (hereafter "County") and Party Two defined as:

Please Print:

Name of Individual: _____

Name of Company being Represented by the Individual above, if applicable: _____

Address of Individual/company: _____ (City) _____

(ST) _____, (6 digit Zipcode) _____ Direct Telephone of individual: _____

(hereinafter "Party Two").

In consideration of permitting Party Two to access the property which is the subject to the Request for Proposal for purposes of inspection and assessment, Party Two agrees to indemnify, defend and hold County, its affiliates, directors, officers, employees, agents, successors, and assigns (collectively the "Indemnified Parties") harmless from and against any and all claims, liabilities, demands, actions, proceedings, judgments, executions, losses, damages, expenses and costs, including reasonable attorneys' fees, and consequential damages, of any nature whatsoever that the Indemnified Parties sustain or incur which arise out of or are in any way connected with Party Two's access, inspection and assessment of the Property.

This Agreement may be executed in counterparts, which taken together will shall constitute a complete and binding agreement. This Agreement may be executed by facsimile signatures or DocuSign. Delivery of this Agreement bearing a facsimile signature or signature reproduced by PDF or other reproductive or electronic format shall have the same force and effect as if this Agreement bore an inked original signature.

This Agreement is freely and voluntarily given by the undersigned on behalf of Party Two, without any duress or coercion. This Agreement shall be governed by and construed in accordance with the laws of the State of Missouri, and the exclusive jurisdiction for the institution and maintenance of any action for judicial relief hereunder shall be in the state court sitting in the Circuit Court of Johnson County, Missouri. Party Two hereby waives any claim that such court does not have personal jurisdiction over it or is an inconvenient forum.

IN WITNESS WHEREOF, the undersigned has executed this Agreement on this _____ day of _____, 2025.

Party Two Signature

Party Two Title

ANTI-COLLUSION STATEMENT

Project:

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

STATE OF _____

COUNTY OF _____

_____ Being first duly sworn,
deposes and says that he or she is _____

Title of Person Signing

of _____

Name of Bidder

that all statements made and facts set out in the proposal for the above project are true and correct; and that the Bidder (person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that Bidder is not financially interested in, or financially affiliated with, any other Bidder for the above project.

BY _____

BY _____

BY _____

Sworn to before me this _____ day of _____ 20_____.

Notary Public

My Commission Expires: _____

**CERTIFICATION REGARDING DISBARMENT, SUSPENSIONS,
AND OTHER RESPONSIBILITY MATTERS**

Project:

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

The President or authorized official of Bidder, under penalty of perjury under the laws of the United States, certifies that, except as noted below, the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal, state, or public funds:

1. is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal, state, or public agency;
2. has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal, state, or public agency within the past 3 years;
3. does not have a proposed debarment pending; and
4. has not been indicted, convicted, or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions, the Bidder shall list below:

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency, and dates of action:

Providing false information may result in criminal prosecution or administrative sanctions.

Authorized Representative's Signature

Printed Name

Title

Date

AFFIDAVIT OF WORK AUTHORIZATION

Project:

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

The Bidder/Contractor who meets the Section 285.525, RSMo definition of a business entity must complete and return the following Affidavit of Work Authorization.

Comes now _____ (Name of Business Entity Authorized Representative) as _____ (Position/Title) first being duly sworn on my oath, affirm _____ (Business Entity Name) is enrolled and will continue to participate in the E-Verify work authorization program with respect to employees hired after enrollment in the program who are proposed to work in connection with the services related to contract(s) with the State for the duration of the contract(s), if awarded in accordance with subsection 2 of section 285.530, RSMo.

I also affirm that _____ (Business Entity Name) does not and will not knowingly employ a person who is an unauthorized alien in connection with the contracted services provided to the contract(s) for the duration of the contract(s), if awarded.

In Affirmation thereof, the facts stated above are true and correct. (The undersigned understands that false statements made in this filing are subject to the penalties provided under section 575.040, RSMo.)

Authorized Representative's Signature

Printed Name

Title

Date

E-Mail Address

Subscribed and sworn to before me this _____ day of _____, 20_____.

I am commissioned as a notary public within the County of _____,

State of _____, and my commission expires on _____.

Signature of Notary

Date

APPLICANT AFFIDAVIT FOR PUBLIC BENEFIT UNDER SECTION 208.009

(a separate affidavit is required for each applicant)

STATE OF _____)
) ss
COUNTY OF _____)

On this _____ day of _____, 20____, before me appeared the Affiant
_____, personally know to me or proved to me on the basis of
satisfactory evident to be the person whose name is subscribed to this instrument, who being by me duly
sworn by me, deposed as follows:

My name is _____, and I am of sound mind, capable of making this
affidavit, and I personally certify the facts herein stated, as required by Section 208.009, RSMo, for failure
to provide affirmative proof of lawful presence in the United States of America in order to receive a public
benefit from the County of Johnson, Missouri ("the public body"):

I am the _____ of _____, which is applying
(Position/Title) (Business Entity Name)
for a public contract administered or provided by the public body in Missouri.

I am classified by the United States of America as: (check the applicable box)

☐ a United States citizen ☐ an alien lawfully admitted for permanent residence.

I am aware that Missouri law provides that any person who obtains any public benefit by means of a willfully
false statement or representation, or by willful concealment or failure to report any fact or event required to
be reported, or by other fraudulent device, shall be guilty of a crime of stealing pursuant to Section 570.030,
RSMo, which is a Class C felony for stolen public benefits valued between \$500 and
\$25,000 (punishable by a term of imprisonment not to exceed 7 years and/or a fine not more than \$5,000
– Section 558.011 and 560.011, RSMo), and is a Class B felony for stolen public benefits valued at
\$25,000 or more (punishable by a term of imprisonment not less than 5 years and not to exceed 15 years
– Section 558.011, RSMo).

I recognize that, upon proper submission of this sworn affidavit, I will only be eligible for temporary public
benefits until such time as my lawful presence in the United States is determined, or as otherwise provided
by Section 208.009, RSMo.

I understand that Missouri law requires the above public body to provide assistance in obtaining appropriate
documentation to prove citizenship or lawful presence in the United States, and I agree to submit any
requests for such assistance to the above public body in writing.

I acknowledge that I am signing this affidavit under oath and as a free act and deed and not under
duress.

Affiant's Signature

Social Security No. or Tax I.D. Number

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My commission expires:

AFFIDAVIT OF WORK SAFETY COMPLIANCE

Project:

Pre-Demolition Asbestos Abatement - Commercial Bldg - 122 Hout St., Warrensburg MO

The Bidder/Contractor shall comply with Section 292.675, RSMo and must complete and return the following Affidavit of Work Safety Compliance.

Comes now _____ (Name of Business Entity Authorized Representative) as _____ (Position/Title) first being duly sworn on my oath, affirm _____ (Business Entity Name) has verified the completion of a 10-hour construction safety program with respect to the employees working in connection with the contracted services in accordance with Section 292.675, RSMo.

In Affirmation thereof, the facts stated above are true and correct. (The undersigned understands that false statements made in this filing are subject to the penalties provided under section 292.675, RSMo.)

Authorized Representative's Signature

Printed Name

Title

Date

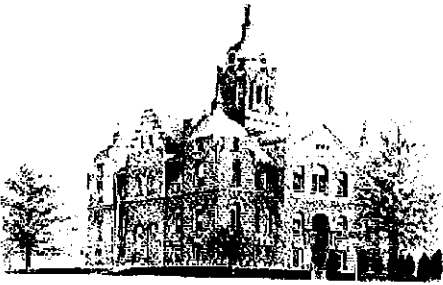
E-Mail Address

Subscribed and sworn to before me this _____ day of _____, 20_____.

I am commissioned as a notary public within the County of _____,
State of _____, and my commission expires on _____.

Signature of Notary

Date



Johnson County Commission

Troy A. Matthews

Presiding Commissioner

Rusty Sproat

Commissioner, Eastern District

Charles Kavanaugh

Commissioner, Western District

Diane Thompson

County Clerk

Johnson County Courthouse, 300 N Holden, Warrensburg, MO 64093

(660) 747-6161 - Fax 747-9332

www.jococourthouse.com

MASTER AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT dated this _____ day of _____, 2025, by and between the County of Johnson, Missouri, (herein "County") and _____ (herein "Firm").

IN CONSIDERATION OF the performance of the services rendered under this Agreement and payment for such services, the parties agree to the following:

1. **Services** - As authorized by the County in writing, the Firm shall provide professional services for the benefit of the County as set forth in specific Proposals and Scopes of Work submitted by the Firm and accepted by County, and the Firm shall provide the County, as applicable, with the services, inspections, reports, studies, surveys, plans, specifications, and other work outlined. Firm agrees to provide all such services in a timely manner as established by the County in writing for each assigned project, or in the absence of the designation, within a reasonable time after receipt of County directives. Firm agrees to provide services by and through qualified personnel under standards and conditions generally accepted by professionals in the field or occupations for which services are provided. Services shall be provided based only upon the Scope of Services described or by any additional proposals provided to the Firm by the County or County's representative, or a written proposal for services which is approved by the County in writing. No work shall be performed nor shall compensation be paid for the Firm's work performed without a County approved written proposal for professional services. Proposals for additional services shall be in written form and shall be specifically responsive to the criteria provided by the County. All work performed by the Firm, based upon County approved proposals submitted by the Firm, shall be subject to the terms and conditions of this agreement unless otherwise specifically agreed upon by the County and Firm in writing. All proposals for work submitted by the Firm to the County for work shall at a minimum contain the following:

1.1 Scope of Services - Each proposal for services shall contain a detailed description of work to be performed by the Firm. When the County provides the Firm with a written and/or graphic request for proposal, the Firm's proposal shall be responsive to the request with the same or greater level of specificity required by the request for proposal. The Firm shall specifically identify services which are included as basic services and those services which are excluded from basic services in the proposal. Services which the Firm does not identify as excluded from basic services under the proposal and which are necessary for successful completion of the work in the judgment of the County shall be presumed to be a part of basic services under the proposal. If a request for proposal requires the Firm to provide optional services, the Firm's proposal shall respond to the options requested, or provide reasons why the Firm cannot provide or respond to the request for optional services.

1.2 Creation of Contract Documents – Firm shall not without the express written permission of the County draft and/or create any contract documents, except for technical specifications and plans, for any project that Firm is assigned. Firm shall not be compensated for any contract documents drafted or created which are in violation of this provision. In the event that Firm is asked to draft and/or create contract documents by the County, then said contract documents must be in compliance with the County's then existing contract standards for projects and no compensation shall be provided to Firm for contract documents which fail to meet the County's standards.

1.3 Time for Completion - Each proposal for services shall contain a detailed description of the estimated time to complete each task or item of work to be performed by the Firm under the proposal. When the County provides the Firm with a written and/or graphic request for proposal, the Firm's proposal shall be responsive to any request for estimated or maximum completion times for work with the same or greater level of specificity required by the request for proposal unless otherwise specified in a specific proposal.

1.4 Compensation - Each proposal for services shall state the basis of compensation on either: (1) an hourly fee plus expense basis with a statement of a maximum compensation to be charged, or, (2) a lump sum payment of compensation for all work to be performed, or, (3) a payment based upon unit prices. Proposals for compensation for an hourly fee plus expense basis shall provide detailed time and expense estimates to support a maximum contract amount to be charged and shall be consistent with the hourly rates, unit prices and reimbursement rates made a part of this agreement by reference in paragraph two (2) below. When the County or County's representative requests the Firm to provide work on an hourly fee plus expense basis, the Firm's proposal shall be responsive

to the request and shall not propose payment on another basis unless otherwise authorized. Unit price proposals shall identify and estimate the quantity of units as a part of the proposal when they can be identified and estimated, or as necessary in response to a particular request for proposal requesting such information. Each proposal for services shall also state a proposed payment schedule at a frequency no greater than monthly in such amounts as are consistent with amount of work to be performed and billed. Reimbursable expenses proposed shall be specifically identified and estimated as a part of the proposal with a statement of the maximum amount to be charged unless the County's request for proposal specifies otherwise.

1.5 Signatures - Firm proposals for services under this agreement shall be signed and dated by the Firm or an authorized representative of the Firm (as applicable), and shall be considered binding offers to contract open for acceptance by the County for an indefinite duration unless limited in the proposal or withdrawn prior to acceptance by the County. All proposals for services under this agreement shall be on forms approved by the County; use of the signature block shown in this agreement on a proposal for services shall be considered an adequate signature block. In the absence of a County provided form, the signature block shall contain a signature line for each of the three County Commissioners and attested by the County Clerk. In addition, the signature block shall contain a line for insertion of the date the proposal is approved by the County.

2. Compensation - In consideration for the Firm's provision of services under this agreement, the County agrees to compensate the Firm for services rendered in accordance with the hourly rates, unit prices and reimbursement rates for expenses set forth in the proposal for the project for which compensation is sought. No increases in the rates and charges set forth in the proposal shall be permitted without the written authorization of the County. Payments shall be made within thirty (30) days of receipt of invoice by the County. Invoices shall be submitted periodically as mutually agreed upon by the County and Firm, or in the absence of such agreement, upon completion of the work constituting the task or project for which services are provided. Invoices for services on an hourly fee plus expense basis shall individually describe the task or project by name, show hours expended by classes of personnel in increments of not less than one-half hour and rates applied, as well as describe work performed during the invoice period; reimbursable expenses shall be itemized. Invoices for services performed on a unit price basis shall identify the task or project by name, identify and quantify units charged for services during the invoice period. Invoices for services on a lump sum basis shall identify the task or project by name and the invoiced amount. Periodic invoices shall not exceed the amounts permitted in the Firm's proposal approved by the County. When periodic requests for payment are made, they shall only reflect charges for work already complete. County may retain five percent (5%) of any partial payment pending final completion of the contract services to correct any deficiencies in performance. The County reserves the right to withhold payment for

inadequately documented invoices until documented as required herein. The County further reserves the right to withhold payments for unperformed work or work not performed on a timely basis in accordance with the Firm's proposal when delays in performance of services are not attributable to the County, or as a result of a billing dispute between the County and Firm. No penalty shall be assessed to County for such amounts withheld until after any dispute is resolved in Firm's favor.

3. **County Responsibilities** - County agrees to furnish Firm with all current and available information for each task or project assigned to Firm, along with any information necessitated by changes in work or services initiated by the County which may affect services rendered hereunder. Firm shall notify County of all information it may require from County or other Firms and Contractors of County sufficiently in advance so as to avoid delay of the work to be completed by Firm.

4. **Coordination of Work and Work Product** - Firm shall coordinate all work with the County's designated representative for each task or project assigned to Firm and submit to the County's representative all work product in written or graphic form (and in electronic form if requested) as applicable or required. Notwithstanding the Firm's right to ownership under Section 17, all reports, surveys, test data, memoranda, samples, plans, specifications, and other documents or materials submitted by or to the County shall also be considered the property of the County. When available and requested by the County, work product shall be provided in electronic form at actual cost in media compatible for use with County software and equipment, and Adobe .pdf format shall be acceptable.

5. **Protection of Work, Property and Persons** - To the extent Firm's work will require any field work, testing, sampling or otherwise, during any active construction or excavation activities, the requirements of this Section shall apply. The Firm will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with their employees and services provided under this Agreement. The Firm will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all of its employees providing work under this Agreement and other persons who may be affected thereby, all the provided services and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The Firm shall comply with all pertinent provisions of the Occupational Safety and Health Administration (OSHA), any State Safety and Health agency requirements, and County's Construction Safety Plan.

5.1. The Firm will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction.

5.2 In emergencies affecting the safety of persons or the scope of work or property at the site or adjacent thereto, the Firm, will give the County prompt written notice of any significant changes in the scope of work caused thereby, and a change order shall thereupon be issued covering the changes and deviations involved.

5.3 Firm agrees that any employees engaged for services that require presence on an active construction work site will require any employee of Firm on the work site to complete ten hours of training pursuant to Section 292.675 RSMo within sixty days of beginning work on the project.

Any Firm violating the training requirements of Section 292.675 RSMo shall forfeit as a penalty to the public body on whose behalf the contract is made the sum of \$2,500.00 plus \$100.00 for each violating employee, per day. These penalties shall accrue on expiration of the time limits set forth in Sections 292.675.2 and 292.675.3 RSMo.

All sums due for such forfeiture and penalty shall be withheld from payments owed under the Contract. No payment otherwise due shall be made during any term of uncorrected violations of Section 292.675 RSMo and no interest or penalties shall accrue on any such unpaid payment.

6. **General Insurance Requirements** - Firm shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the Firm's work, whether such execution be by the Firm, any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone whose acts any of them may be liable:

6.1 **Workers Compensation** - Claims under workmen's compensation, disability benefit and other similar employee benefit acts in amounts required by law. In case any class of employees engaged in hazardous work under this Agreement is not protected under the workmen's compensation statute, the Firm shall provide adequate and suitable insurance for the protection of its employees not otherwise protected.

6.2 **Bodily Injury** - Claims for damages because of bodily injury, occupational sickness or disease, or death of employees in the amounts required by law.

6.3 **Personal Injury** - Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Firm, or (2) by any other person.

6.4 Third Person Bodily Injury - Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees in the amount of at least \$441,130.00 per person and \$2,940,868.00 per occurrence, or such amounts as are annually listed as the governmental sovereign immunity waiver in section 537.610 RSMo, as annually adjusted.

6.5 Automobile Coverage - Claims for damages because of injuries to persons and property arising out of the operation of the following in the execution of projects:

- a) Firm's own automobiles and trucks,
- b) Hired automobiles and trucks, and
- c) Automobiles and trucks now owned by the Firm.

The insurance shall cover the use of the above-mentioned automobiles and trucks during the term of this Agreement. The minimum amounts of such insurance shall be the same as required for Public Liability and Property Damage Insurance.

6.6 Professional Liability - Claims for damages resulting from errors or omissions of the Firm or its employees in the amount of at least \$1,000,000.00 per occurrence or \$2,000,000.00 aggregate including Asbestos Abatement and Contractor's Pollution Liability.

6.7 Public Liability and Property Damage - Claims for damages because of damage to any property, building, or structure on or adjacent to the County's premises, or the injury to or destruction of property resulting from the Firm's services in the amount of at least \$441,130.00 per person and \$2,940,868.00 per occurrence per occurrence, or such amounts as are annually listed as the governmental sovereign immunity waiver in section 537.610 RSMo, as annually adjusted.

Certificates of Insurance acceptable to the County shall be filed with the County prior to the commencement of any work assigned under this Agreement. These certificates shall contain a provision that coverage afforded under the policies will not be cancelled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the County.

7. Indemnification - Failure of Firm to obtain or maintain such insurance during this contract, or to provide proper proofs thereof upon request of the County, shall not diminish, waive or otherwise reduce the Firm's obligations to maintain such insurance coverage and Firm shall indemnify and hold the County and all its personnel harmless from and against any and all claims, damages, losses and expenses, including reasonable attorney's fees and litigation costs,

arising out of or resulting from the performance of services, provided that any such claim, damage, loss or expenses, is caused in whole or in part by the negligent act, omission and or liability of the Firm, its agents or employees. Further, Firm shall hold County harmless from any failure by Firm to complete their work in compliance with all applicable local, state and federal regulations.

8. **Delegation and Subcontracting** - Unless otherwise proposed and approved in the Firm's proposal for services, the Firm shall not delegate or subcontract any work to be performed by the Firm under this agreement to any other person, business or entity without the express advance written approval of the County for such delegation or subcontract work.

9. **Records and Samples** - To the extent not otherwise transferred to the County's possession, Firm agrees to retain and provide the County with reasonable access to all work product, records, papers and other documents involving transactions and work related to or performed under this agreement for a period of three (3) years after this agreement expires. When services involve testing or sampling, Firm agrees to either retain all test products or samples collected by or submitted to Firm, or return same to the County as mutually agreed upon. In absence of agreement, Firm shall not dispose of test samples or products without notice to or consent by the County or the County's representative.

10. **Additional Services** - No compensation shall be paid for any service rendered by the Firm considered an additional service beyond the scope of services approved by the County unless rendition of that service and expense thereof has been authorized in writing by the County in advance of performance of such service. Any additional services performed by the Firm prior to such authorization by the County shall be deemed a part of basic services for work performed under a County approved proposal for services governed by this agreement, whether enumerated in this agreement or not, for which the Firm shall be entitled to no additional compensation.

11. **County Authorization** - When the term County is used in this agreement, it shall mean the Commissioners of the County. Authorization by the County shall mean written instruction from the County Commissioners or the County Clerk, or their designee. It is further understood and agreed that no person or party is authorized to bind the County to any proposed agreement for services under the auspices of this agreement without having obtained the prior approval of the County Commissioners, County Clerk, or their designee. In this regard, it is understood and agreed that the Firm shall not be entitled to rely upon verbal representations by any agent or employee of the County in deviation to the terms and conditions of this agreement, or as authorization for compensation for services except as may be approved by the County Commission or County Clerk in writing. When the term County's representative is used, it shall mean the County Clerk or their designee as specified in writing.

12. **Period of Services and Termination** – The period of performance under this agreement shall be as specified in the proposal. The County may and reserves the right to terminate this agreement at any time with or without cause by giving the Firm written notice of termination. Upon receipt of such notice, Firm shall discontinue all services in connection with the performance of services authorized under this agreement or County approved proposal for services and County shall upon invoice remit payment for all authorized services completed up to the date of termination notice. Upon payment of this invoice, the Firm shall deliver any and all work product including drawings, plans, and specifications, or other documents, prepared as instruments of service, whether complete or in progress. It is further agreed that if services are terminated the Firm shall be compensated for all services rendered through the date of termination not to exceed the amount authorized for services through the date of termination. If the County questions the extent of work on a final invoice, the Firm shall give the County the opportunity to review and evaluate all work upon which the invoice is based in the offices of the Firm prior to payment. This agreement or work performed under the provisions of this agreement may also be terminated by the Firm upon not less than seven days written notice in the event the County shall substantially fail to perform in accordance with the terms and conditions of this agreement, through no fault of the Firm. In the event of termination by the Firm, the other provisions concerning termination contained in this paragraph shall be applicable. This Contract shall govern all scopes of work approved by the County under its terms for a period of twelve months from its execution, and annually thereafter in any year for which Firm is qualified by County to perform services.

13. **Governing Law** - This agreement shall be governed by the laws of the state of Missouri and it is agreed that this agreement is made in Johnson County, Missouri and that Johnson County, Missouri is proper venue for any action pertaining to the interpretation or enforcement of any provision within or services performed under this agreement.

14. **Certification of Lawful Presence / Work Authorization** - Firm will complete the required certifications of lawful presence and, if the contract is to exceed \$5,000.00, shall complete and return the Work Authorization Certification attached hereto. Firm shall indemnify and hold harmless the County and its officials, agents and employees from all costs and liabilities incurred as a result of Firm's failure, or failure of its employees, agents or Subcontractors, to comply with Section 285.530 RSMo regarding unauthorized aliens, Section 208.009 RSMo regarding contracts with public entities, Section 292.675 RSMo regarding OSHA training for Public Works, to the extent the same are applicable during the term of this Agreement. Attached hereto are certifications of compliance required.

15. **Nature of Relationship** - Firm herein is an independent party and shall not act as an agent for the County, nor shall Firm be deemed to be an employee of the County for any

purposes whatsoever. The Firm shall not enter into any agreement or incur any obligations on the County's behalf or commit the County in any manner.

16. **Miscellaneous** - This agreement constitutes the entire agreement of the parties superseding all prior negotiations, written or verbal, and may only be amended by signed writing executed by the parties through their authorized representatives hereunder.

17. **Ownership of Plans and Documents - Records.** In addition to County's ownership rights under Section 4, the field notes, design notes, original drawings of the construction plans, and logs of any wells drilled, as instruments of service, are and shall remain, the property of the Firm; however, the County shall be furnished, at no additional cost, one set of reproducible Mylars of the original drawings of the work. Mylars shall be polyester with clear matte on both sides. The Firm shall also deliver all electronic information on CD in Adobe ".pdf" format. Any documents submitted in AutoCAD format shall have Firm's seal removed. County shall assume all liability for reuse of AutoCAD documents other than by Firm, or except as specifically authorized by Firm.

The County shall make copies, for the use of the Firm, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Firm pursuant to this Agreement, and also make available any other maps, records, or other materials available to the County from any other maps, records, or other materials available to the County from any other public agency or body. The Firm shall have no liability for defects in the services attributable to the Firm's reliance upon or use of data, design criteria, as-built drawings, or other information furnished by the County or third parties retained by the County.

The Firm shall furnish to the County, copies of all maps, records, field notes, and soil tests which were developed in the course of work for the County and for which compensation has been received by the Firm.

[This space intentionally blank.]

18. **Conflict of Interest** - Firm hereby covenants that at the time of the submission of any proposal and the execution of this Agreement it has no other contractual or employment relationships which would create any actual or perceived conflict of interest with the County. The Firm further agrees that during the term of this Agreement neither the Firm nor any of its employees shall acquire any other contractual relationships which create such a conflict. Firm shall complete the required Conflict of Interest Form attached hereto and shall have an affirmative duty to update said form if there are any changes to the answers provided therein during the term of this Agreement.

IN WITNESS WHEREOF, the parties have executed this agreement by their duly authorized signatories effective the date and year first-above written.

PROFESSIONAL FIRM:

Name of Authorized Representative: _____

BY: _____

Name of Firm: _____

Address of Firm: _____

COUNTY OF JOHNSON, MISSOURI:

ATTEST:

BY:

Troy A. Matthews, Presiding Commissioner

Diane Thompson, County Clerk

Rusty Sproat, Eastern Commissioner

Charles Kavanaugh, Western Commissioner

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that:

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Individual, Corporation, Partnership, Joint Venture, LLC)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Johnson County, Missouri
(Name of Owner)

300 N. Holden Street, Suite 203, Warrensburg MO 64093
(Address of Owner)

hereinafter called Owner, in the total aggregate penal sum of

_____ Dollars
(\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain Contract with the Owner, dated the ____ day of _____, 20 ____, a copy of which is hereto attached and made a part hereof, for the construction of:

Project Title:

Pre-Demolition Asbestos Abatement – Commercial Bldg - 122 Hout Street, Warrensburg MO

NOW, THEREFORE, if the Principal shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and during the one-year correction period, and if the Principal shall satisfy all claims and demands incurred under such Contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees, that no change, extension of time, alteration, or addition to the terms of the Contract or the work to be performed thereunder, or the Specifications and Drawings accompanying same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract, or to the work, or to the Specifications and Drawings.

PROVIDED, FURTHER, that it is expressly agreed that the Bond shall be deemed amended automatically and immediately, without formal and separate amendments thereto, upon amendment to the Contract not increasing the Contract Price more than twenty (20) percent, so as to bind the Principal and the Surety to the full and faithful performance of the Contract so amended. The term "Amendment", wherever used in the Bond, and whether referring to this Bond, the Contract, or the Loan Documents, shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the Owner and the Principal, shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied. The Owner is the only beneficiary hereunder.

IN WITNESS WHEREOF, the instrument is executed in 4 counterparts, each of which shall be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

_____	_____
(Principal) Secretary	Principal
(SEAL)	
_____	By _____
_____	_____
(Witness as to Principal)	_____
_____	(Address)

(Address)	_____
	(Surety)

ATTEST:

_____	By _____
Witness to Surety	Attorney-in-Fact
_____	_____
_____	_____
(Address)	(Address)

NOTE: Date of Bond must not be prior to date of Contract.

If Contractor is partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that:

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Individual, Corporation, Partnership, Joint Venture, LLC)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Johnson County, Missouri (Name
of Owner)

300 N. Holden St., Suite 203, Warrensburg, MO 64093
(Address of Owner)

hereinafter called Owner and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of

_____ Dollars
(\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain Contract with the Owner, dated the ____ day of _____, 20 ____, a copy of which is hereto attached and made a part hereof, for the construction of:

Project Title:

Pre-Demolition Asbestos Abatement – Commercial Bldg -122 Hout Street, Warrensburg MO

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, whether by subcontractor or otherwise, at not less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed and not less than the prevailing hourly rate of wages for legal holiday and overtime work (exclusive of maintenance work) in the locality in which the work is performed both as determined by the Department of Labor and Industrial Relations or determined by the Courts of Appeal, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and for all labor cost incurred in such work including that by a Subcontractor, and to any mechanic or materialman lienholder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the Subcontractors, and persons, firms, and corporations having a direct contract with the Principal or its Subcontractors.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the work or to the Specifications.

PROVIDE, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The Principal, the Owner or the Surety above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration of one (1) year following the date of which Principal ceased work on said Contract, it being understood, however, that if any limitation embodied in the Bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the Principal and the Surety to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this Bond and whether referring to this Bond, the contract or the loan Documents shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, the instrument is executed in 4 counterparts, each of which shall be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

_____	_____
(Principal) Secretary	Principal
(SEAL)	
_____	By _____

_____	_____
(Witness as to Principal)	(Address)

_____	_____
(Address)	(Surety)

ATTEST:

_____	By _____
Witness to Surety	Attorney-in-Fact
_____	_____
_____	_____
(Address)	(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.

If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

CERTIFICATE OF OWNER'S ATTORNEY

PROJECT:

Pre-Demolition Asbestos Abatement – Commercial Bldg - 122 Hout Street, Warrensburg MO

I, the undersigned, _____, the duly

authorized and acting legal representative of: Johnson County, Missouri,

do hereby certify as follows:

I have examined the foregoing contract(s) of:

(Contractor)

and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements have been duly executed by the Owner acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof. In addition, I have examined the Certificate of Insurance for amounts and coverages per the requirements of the General Conditions/Supplemental General Conditions of the Contract Documents and find that adequate insurance is in full force and effect.

(Project Attorney)

(Date)

(Address)

NOTICE OF AWARD

TO: _____

PROJECT:

Pre-Demolition Asbestos Abatement – Commercial Bldg -122 Hout Street, Warrensburg MO

The Owner has considered your Bid submitted by you for the above described work in response to its Notice for Bids dated _____ and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$_____.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond, and Certificates of Insurance within fifteen (15) calendar days from the date of this Notice, or unless otherwise notified. If you fail to execute said Agreement and to furnish said Bonds, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid abandoned and as a forfeiture of Bid. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner. OWNER:

Johnson County, Missouri
Attention: Tracy E. Brantner
Johnson County Economic Development Corp.
300 N. Holden Street, Suite 301
Warrensburg MO 64093

Signature: _____

Print Name: _____

Title: _____

Date: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged.

CONTRACTOR _____

Address

By: _____

Print Name: _____

Title: _____

Date: _____

Employer Identification Number

NOTICE TO PROCEED

TO: _____

PROJECT:

Pre-Demolition Asbestos Abatement – Commercial Bldg -122 Hout Street, Warrensburg MO

You are hereby notified to commence work in accordance with the Agreement dated _____, on or before _____, and you are to complete the work by _____.

If you fail to fully complete the work, the Owner will be entitled to assess liquidated damages the sum of \$2,000.00 for each consecutive calendar day thereafter the indicated date of completion.

You are required to return an acknowledged copy of this Notice to Proceed to the Owner.

OWNER: Johnson County, Missouri
300 N. Holden Street, Suite 203
Warrensburg, MO 64093

Signature: _____

Print Name: _____

Title: _____

Date: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged.

CONTRACTOR _____

By: _____

Print Name: _____

Title: _____

Date: _____

Address

Employer Identification Number

AFFIDAVIT-COMPLIANCE WITH THE PREVAILING WAGE LAW

PROJECT:

Pre-Demolition Asbestos Abatement – Commercial Bldg - 122 Hout Street, Warrensburg MO

The Affidavit-Compliance with the Prevailing Wage Law shall be submitted with the request for final payment.

Before me, the undersigned Notary Public, in and for the County of _____

State of _____, personally came and appeared

_____ of the _____
(Name and Title) (Company Name)

(a corporation) (a partnership) (a proprietorship), and after being duly sworn did depose and say that all provisions and requirements set out in Chapter 290 Sections 290.210 through and including 290.340, Missouri Revised Statutes, pertaining to the payment of wages to workmen employed on public works projects have been fully satisfied and there has been no exception to the full and complete compliance with said provisions and requirements and with Wage Determination No. _____ or Annual Wage No. _____ issued by the Division of Labor Standards on Pre-Demolition Asbestos Abatement – Commercial Building 122 Hout Street, Warrensburg MO 64093 _____ (Name), Johnson County, Missouri, and completed on the _____ day of _____, 20____.

Signature

Subscribed and sworn to me this _____ day of _____, 20____.

My commission expires _____, 20____.

(SEAL)

Notary Public

PARTIAL PAYMENT ESTIMATE NO. _____

Project: Pre-Demolition Asbestos Abatement – Commercial Building 122 Hout Street,

Warrensburg MO 64093

Sheet _____ of _____ Contract

Days _____

Days Used _____

Days Remaining _____

Completion Date _____

% Complete _____

Contract \$ _____

Total Change Orders \$ _____

New Contract Amount\$ _____

From _____ 20____ to _____ 20____

Johnson County, Missouri
(Owner)

of _____
Johnson County
State of Missouri

(Contractor)

Address

Application is made for Payment, as shown below, in connection with the Contract.
Attach breakdown sheet if necessary.

Original Contract Sum	\$ _____
Net Change By Change Orders	\$ _____
Contract Sum to Date	\$ _____
Total Value of Completed Work & Material on Hand	\$ _____
Less 5% Retained	\$ _____
TOTAL AMOUNT DUE TO DATE	\$ _____
LESS PREVIOUS PAYMENT	\$ _____
NET AMOUNT DUE	\$ _____

I hereby certify that the degree of completion of work, as represented by this partial payment estimate, was performed in compliance with the Contract Documents.

CONTRACTOR (Submitted): _____ Date: _____

I, the Consultant, hereby certify that I or a delegated representative, based on on-site observation, and to the best of my knowledge, the degree of completion of the work, as represented by this partial payment estimate, conforms to the Drawings and Specifications.

CONSULTANT (Approved): _____ Date: _____

OWNER (Authorized Payment): _____ Date: _____

Sheet ___ of ___

Owner: Johnson County, Missouri

for

{Project}

I. Description, location, and reason for change of each item and effect on completion time (Attach additional sheets if required)

[illegible]

TOTALS \$. \$.

- | | | | |
|--|----|-------|---------|
| 1. Original Contract Amount | | \$ | _____ |
| 2. Add or Deduct This Change Order (H + I) | \$ | _____ | - |
| 3. Add or Deduct From Previous Change Order (Line 4 on Previous Order) | \$ | _____ | - |
| 4. Total Add or Deduct to Date (2 + 3) | | \$ | _____ - |
| 5. Revised Contract Amount (1 + 4) | | \$ | _____ - |

CONTRACTOR	DATE
------------	------

CONSULTANT (Arch. or Engr.)

DATE _____

OWNER	DATE
-------	------

Change order is subject to all provisions of the CONTRACT DOCUMENTS and is not in effect unless signed by all parties indicated.

PRE-DEMOLITION ASBESTOS ABATEMENT
COMMERCIAL BUILDING – 122 HOUT STREET,
WARRENSBURG MO 64093

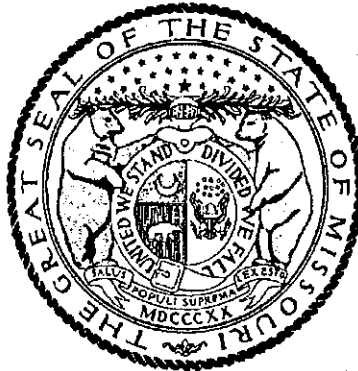
WAGE RATES
WAGE ORDER #31

JOHNSON COUNTY, MISSOURI
300 N. HOLDEN STREET, SUITE 203
WARRENSBURG MO 64093

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

Annual Wage Order No. 31

Section 051
JOHNSON COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director
Division of Labor Standards

Filed With Secretary of State: March 8, 2024

Last Date Objections May Be Filed: April 8, 2024

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$41.98
Boilermaker	\$25.75*
Bricklayer-Stone Mason	\$61.59
Carpenter	\$61.67
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$25.75*
Plasterer	
Communication Technician	\$25.75*
Electrician (Inside Wireman)	\$70.75
Electrician Outside Lineman	\$25.75*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$25.75*
Glazier	\$25.75*
Ironworker	\$68.78
Laborer	\$38.93
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$54.69
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$25.75*
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$25.75*
Plumber	\$78.74
Pipe Fitter	
Roofer	\$60.57
Sheet Metal Worker	\$76.10
Sprinkler Fitter	\$67.34
Truck Driver	\$25.75*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMo Section 290.210.

Heavy Construction Rates for
JOHNSON County

Section 051

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$64.53
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$25.75*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$51.91
General Laborer	
Skilled Laborer	
Operating Engineer	\$61.02
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$54.46
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

OVERTIME

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, **"overtime work"** shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

**SECTION 2 – ASBESTOS ABATEMENT
TECHNICAL SPECIFICATIONS FOR:

REQUEST FOR BIDS
PRE-DEMOLITION ASBESTOS ABATEMENT
COMMERCIAL STRUCTURE
122 HOUT STREET
WARRENSBURG, MISSOURI 64093**

Prepared for:

**JOHNSON COUNTY MISSOURI
300 NORTH HOLDEN
WARRENSBURG, MISSOURI 64093**

Prepared by:

**NEW ENVIRONMENTAL CONCEPTS
P.O. BOX 1212
WARRENSBURG, MISSOURI 64093
(816) 517-6968**

April 10, 2025

DOCUMENT TO BE RETAINED INDEFINITELY

MISSOURI ACCREDITED PROJECT DESIGNER
James Yasitis, Certificate Number 7118092624MOPDR508

REQUEST FOR BID
PRE-DEMOLITION ASBESTOS ABATEMENT
COMMERCIAL STRUCTURE
122 HOUT STREET, WARRENSBURG, MISSOURI

INDEX TO PROJECT MANUAL – SECTION 2

DIVISION 1 - GENERAL REQUIREMENTS

- 01013 - Summary of Work
- 01043 - Project Coordination
- 01091 - Definitions and Standards
- 01092 - Codes, Regulations, and Standards
- 01301 - Submittals
- 01410 - Air Monitoring - Test Laboratory Services
- 01503 - Temporary Facilities
- 01513 - Temporary Pressure Differential and Air Circulation System
- 01526 - Temporary Enclosures
- 01529 - Glovebags and Mini-Enclosures - Asbestos Abatement
- 01560 - Worker Protection
- 01562 - Respiratory Protection
- 01563 - Decontamination Units
- 01601 - Materials and Equipment
- 01701 - Project Closeout
- 01711 - Project Decontamination
- 01712 - Cleaning and Decontamination Procedures
- 01714 - Work Area Clearance

DIVISION 2 - SITE WORK

- 02062 - Non-Asbestos Demolition
- 02081 - Removal of Asbestos-Containing Materials
- 02084 - Disposal of Waste Materials

DIVISION 16 – GENERAL ELECTRIC REQUIREMENTS

SECTION 01013 - SUMMARY OF WORK

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings, general provisions of Contract Documents, including but not limited to other Division-1 Specification Sections, apply to Work of this section.

PROJECT/WORK IDENTIFICATION:

General: Project name is the Pre-Demolition Asbestos Abatement at Commercial Structure located at 122 Hout Street in Warrensburg, Missouri as shown on Contract Documents prepared by the Environmental Consultant, New Environmental Concepts. The Project Manual is dated April 10, 2025.

Contract Documents: The Contract Documents set forth the Contract Work and related requirements and conditions that have an impact on the Project. Related requirements and conditions that are contained in the Contract Documents include, but are not limited, to the following:

Applicable codes and regulations.

Notices and permits.

Existing site conditions and restrictions on use of the site.

Work to be performed by the Owner and/or separate Contractors.

Alterations to and coordination with existing work.

Work to be performed concurrently by separate contractors.

Work to be performed subsequent to Work under this Contract.

Summary by References: Work of the Contract can be summarized by reference to the Contract, General Conditions, Supplementary General Conditions, Specification Sections, Addenda and Modifications to the Contract Documents issued subsequent to the initial printing of this Project Manual and including, but not limited to, printed material referenced by any of these Contract Documents.

Project Schedule: The Contractor shall complete this project starting after the notice to proceed has been issued and notification to MDNR. The abatement contractor will have 20 working shifts to complete this project to avoid liquidated damages. Should the asbestos abatement contractor not complete the project by the above scheduled completion date, the abatement contractor shall be liable and charged for all costs associated with New Environmental Concepts.

Abbreviated Written Summary: Briefly and without force and effect upon the contract documents, the Work of the Contract can be summarized as the proper removal and disposal of the following estimated quantities of asbestos-containing materials:

Commercial Structure – 122 Hout Street Warrensburg, Missouri

- Removal and disposal of approximately 280 linear feet of visible asbestos containing pipe insulation from throughout the building. Removal and disposal of unknown quantity of pipe insulation from behind walls, in chases and above ceilings. The abatement contractor will be responsible for general demolition to access all asbestos containing pipe insulation as part of the base bid for this project.
- Removal and disposal of approximately 80 each of visible asbestos containing mudded pipe fitting insulation from throughout the building. Removal and disposal of unknown quantity of pipe insulation from behind walls, in chases and above ceilings. The abatement contractor will be responsible for general demolition to access all asbestos containing pipe insulation as part of the base bid for this project.
- Removal and disposal of approximately 40 square feet of asbestos containing stair treads and adhesive from the selected stairwell areas within the building. The stair tread and adhesive shall be removed in its entirety. Removal of flooring consists of stair treads, mastics, filler etc. to clean concrete flooring.
- Removal and disposal of approximately 6,200 square feet of asbestos containing drywall systems from the basement areas within the building. The remaining drywall on the other floors was reported less than 1% asbestos containing and will be left for demolition at this time.
- Removal and disposal of approximately 1,650 square feet of visible asbestos containing floor tile/mastic from the basement and stairwell of the building. Portions of the asbestos containing floor tile mastic within the basement/stairwell area is covered by non-asbestos containing floor tile and/or carpeting that will be removed by the abatement contractor as part of the base bid to access the asbestos containing flooring to be removed. Removal and disposal of unknown quantity of floor tile/mastic from beneath walls that were placed over the floor tile/mastic previously. The abatement contractor will be responsible for general demolition to access all asbestos containing floor tile as part of the base bid for this project. The floor tile and adhesive shall be removed in its entirety. Removal of flooring consists of floor tile, mastics, filler etc. to clean concrete flooring.
- Removal and disposal of approximately 300 square feet of visible asbestos containing floor tile/mastic from the second floor of the building. Removal and disposal of unknown quantity of floor tile/mastic from beneath walls that were placed over the floor tile/mastic previously. The abatement contractor will be responsible for general demolition to access all asbestos containing floor tile as

part of the base bid for this project. The floor tile and adhesive shall be removed in its entirety. Removal of flooring consists of floor tile, mastics, filler etc. to clean concrete flooring.

- Removal and disposal of approximately 18 each asbestos containing fire doors and framing (as necessary, if ACM is present).
- Removal and disposal of asbestos containing building caulking from the exterior of the building.
- Removal and disposal of asbestos containing parapet wall sealant. The abatement contractor will be responsible for general demolition to access all asbestos containing parapet wall sealant as part of the base bid for this project.
- The building will be left in its current condition as is with no movement of furniture, supplies, etc. by the owner prior to the abatement. The abatement contractor as part of their bid will be responsible for moving/disposal of items necessary to complete the abatement of the asbestos within the building prior to the demolition. Also, no microbial remediation will be undertaken prior to asbestos abatement, therefore the abatement contractor will accept the building as is and protect its workers in accordance with applicable federal, state and local laws and regulations.

The actual hours the Contractor plans to work must be submitted with the bid must be approved by the owner and New Environmental Concepts. The Contractor may perform work during hours outside of the above stated time if submitted with the bid and approved in writing by the Owner. In addition, the Contractor may work during hours outside those submitted with the bid if the Contractor agrees to compensate the owner representative appropriately and the request is approved in writing by the Owner.

All Work under this section is to be performed while utilizing proper personal protection as specified in Section 01560 and proper respirator protection as specified in Section 01562.

1. Disable or lock out ventilation systems, if any, within the area as specified in Section 01526.
2. Install Critical Barriers as Specified in Section 01526. Critical barriers shall be placed on all windows, vents, doors and other access into or out of the work areas.
3. Install Primary Barriers as Specified in Section 01526, including at a minimum one (1) layer of 6-mil plastic on the floors, walls and ceilings within the work areas (as necessary dependent upon the materials being removed).
3. Install Temporary Pressure Differential and Air Circulation System in accordance with Section 01513.
4. Install three (3) stage (including 2 airlocks) "wet" Decontamination Unit as specified

SUMMARY OF WORK

01013-3

in Section 01563.

5. Notify Environmental Consultant of need for pre-abatement inspection. Do not proceed with the Work until authorized by the Environmental Consultant.
6. Upon approval from Environmental Consultant, proceed with removal as specified in Section 02081, utilizing Personnel Protection as specified in Section 01529 and/or Section 01560, and proper respiratory protection in accordance with Section 01562.
7. Upon completion of removal Work, perform Project Decontamination in accordance with Section 01711.
8. Perform inspection of Work Area and prepare New Environmental Concepts visual inspection form in accordance with Section 01711.
9. Notify Environmental Consultant of need for Final Certification of Visual Inspection. Do not proceed further until authorized by Environmental Consultant.
10. Upon authorization of Environmental Consultant, apply "lockback" in accordance with Section 01711 and continue to maintain and monitor Work Area engineering controls until Work Area Clearance is performed in accordance with Section 01714.
11. If Work Area fails to meet Clearance Criteria as specified in Section 01714, Contractor shall repeat steps 8 - 10 and shall be responsible for all costs for additional clearance testing. Once Work Area meets Clearance Criteria in accordance with Section 01714, Contractor shall proceed to step 13.
12. Remove engineering controls and perform Project Closeout procedures to include "Punch List" items in accordance with Section 01701.

The Work includes the removal of asbestos-containing materials according to the requirements of the following; and the specification sections indicated:

General and Administrative Requirements: are set forth in the following specification sections:

01013 Summary of the Work
01043 Project Coordination
01091 Definitions and Standards
01301 Submittals
01601 Materials and Equipment
01701 Project Closeout

Abatement Work: requirements are set forth in the following specification sections, listed here according to the sequence of the Work:

01092 Codes, Regulations and Standards: sets forth-governmental regulations and industry standards, which are included and incorporated herein by reference and made a part of the specification. This section also sets forth those notices and permits known to the Owner which

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must be applied for and received, or which must be given to governmental agencies before start of Work.

01503 Temporary Facilities: sets forth the support facilities needed such as electrical and plumbing connections for the decontamination units.

01526 Temporary Enclosures: details the requirements for the sheet plastic barriers isolating the Work Area from the balance of the building.

01410 Test Laboratory Services: describes air monitoring by Owner so that the building beyond the Work Area will remain uncontaminated. Air monitoring to determine required respiratory protection is the responsibility of the Contractor.

01563 Decontamination Units: explains the setup and operation of the personnel and material decontamination units.

01513 Temporary Pressure Differential and Air Circulation System: sets forth the procedures to set up pressure differential isolation and ventilation of the Work Area.

01560 Worker Protection: describes the equipment and procedures for protecting workers against asbestos contamination and other workplace hazards except for respiratory protection.

01562 Respiratory Protection: sets forth the procedures and equipment required for adequate protection against inhalation of asbestos hazards.

Asbestos Removal Work Procedures: are described in the following specification sections:

01529 Glovebags and Mini-Enclosure - Asbestos Abatement

02081 Gross Removal of Asbestos-Containing Materials

02084 Disposal of Waste Materials

Decontamination of the Work Area: to be performed after completion of abatement Work is described in the following sections:

01711 Project Decontamination: describes the sequence of cleaning and decontamination procedures to be followed during removal of the sheet plastic barriers isolating a Work Area.

01714 Work Area Clearance: describes the analytical methods used to determine if the work Area has been successfully cleaned of contamination.

01701 Project Closeout: details the closeout procedures to end the project once abatement work is complete including final paperwork requirements.

PLAN OF ACTION:

Submit a detailed plan of the procedures proposed for use in complying with the requirements of this Project Manual after award of bid and before the project can begin. Include in the plan the location and layout of decontamination areas, the sequencing of asbestos Work, the interface of trades

involved in the performance of Work, methods to be used to assure the safety of building occupants and visitors to the site, disposal plan including location of approved disposal site, and a detailed description of the methods to be employed to control potential pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system, method of removal to prohibit visible emissions in Work Area, and packaging of removed asbestos debris. The Environmental Consultant prior to commencement of Work must accept the plan.

POTENTIAL ASBESTOS HAZARD:

The disturbance or dislocation of asbestos-containing materials may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper Work procedures, which must be followed.

Where in the performance of the Work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified asbestos-containing materials, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with all applicable laws, rules and regulations of federal, state and local agencies.

STOP WORK:

If the Owner, the Environmental Consultant, or the Owner's Representative presents a written stop work order, immediately and automatically stop all Work. Do not recommence Work until authorized in writing by the Environmental Consultant.

ASBESTOS-CONTAINING MATERIALS:

Asbestos-containing materials are known to be present at the Project Site. If any materials other than those previously identified by the Owner are found which are suspected of containing asbestos, notify the Environmental Consultant immediately.

A copy of the bulk sampling survey conducted by the Owner is available for review upon request.

CONTRACTOR USE OF PREMISES:

General: The Contractor shall limit its use of the Project Site to the Work indicated.

Keep driveways and entrances serving the Project Site clear and available to the Owner and his employees at all times. Do not use these areas for parking or storage of materials.

OWNER OCCUPANCY:

The building will not be occupied by others at the time of the abatement. Furthermore, there the environmental safety of the personnel within the building will be the abatement

contractor's responsibility; The abatement contractor shall incorporate into his bid necessary items for the protection of the personnel within the building.

SUBMITTALS:

Before the Start of Work: Submit the following to the Environmental Consultant for review. Do not begin work until these submittals are approved.

Plan of Action: Submit as a written report a job specific plan of action regarding the protection of the personnel within the building and the security of the work areas during the asbestos abatement operations.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION - 01013

SECTION 01043 - PROJECT COORDINATION

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not limited to:

- Administrative and supervisory personnel.
- Progress Meetings.
- Pre-Construction Conference.
- Daily Log.
- Special reports.
- Contingency Plans.

ADMINISTRATIVE AND SUPERVISORY PERSONNEL:

General Superintendent: Provide a full-time General Superintendent who is experienced in administration and supervision of asbestos abatement Projects including Work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos-containing materials. The Owner, owner's representative and New Environmental Concepts prior to start of the project, must approve the general superintendent.

Experience and Training: The General Superintendent must have completed a supervisor's course at an EPA and Missouri approved training center in asbestos abatement procedures and have had a minimum of four (4) years on-the-job training in asbestos abatement procedures.

Competent Person: The General Superintendent is to be a Competent Person as required by OSHA.

Accreditation: The General Superintendent is to be accredited as an Asbestos Abatement Supervisor in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C and Title 10 of the Missouri Code of State Regulations.

PROGRESS MEETINGS:

General: In addition to specific coordination and pre-installation meetings for each element of Work, and other regular Project meetings held for other purposes, the Environmental Consultant may hold general progress meetings as required. These meetings will be scheduled, where possible, at times and places convenient to all parties. Each entity involved in planning, coordination or performance of Work is to be properly represented at each meeting.

PRE-CONSTRUCTION CONFERENCE:

An initial progress meeting may be convened by the Environmental Consultant prior to start of any Work, with General Superintendent, Owner, Environmental Consultant, Project Administrator, and other entities concerned with the Work. The Pre-Construction Conference will convene at the Project Site, or as otherwise directed.

When feasible, 24 hours advance notice will be provided to the Contractor prior to convening Pre-Construction Conference.

This is an organizational meeting, to review responsibilities and personnel assignments and to locate the containment and decontamination areas and temporary facilities including power, light, water, etc.

DAILY LOG:

Daily Log: Maintain at the Project Site, a daily log that includes, but is not limited to, the following documentation:

- Meetings: purpose, attendees, brief discussion.
- Visitors: authorized and unauthorized.
- Personnel, by name and social security number, entering and leaving the Work Area.
- Special or unusual events, i.e. barrier breaching, equipment failures, accidents.
- Personal air monitoring tests and test results.
- Documentation of Contractor's activities at the jobsite.
- Submit copies of this log at final closeout of Project as a Project closeout submittal.

SPECIAL REPORTS:

General: Except as otherwise indicated, submit special reports to the Environmental Consultant within one day of occurrence requiring special report.

Reporting Unusual Events: When an event of an unusual and significant nature occurs at site (examples: failure of pressure differential system, rupture of temporary enclosures), prepare and submit a special report listing chain of events, persons participating, and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. When such events are known or predictable in advance, advise Environmental Consultant in advance at earliest possible date.

CONTINGENCY PLAN:

Contingency Plan: Prepare a contingency plan for emergencies including fire, accident, power failure, pressure differential system failure, supplied air system failure, or any other event that may require modification or abridgement of decontamination or Work Area isolation procedures. Include in plan specific procedures for decontamination or Work Area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency.

Post: in clean room of Personnel Decontamination Unit telephone numbers and locations of emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company, etc.

NOTIFICATIONS

Notify other entities at the jobsite of the nature of the asbestos abatement activities, location of asbestos-containing materials, requirements relative to asbestos set forth in these specifications and applicable regulations.

Notify emergency service agencies including fire, ambulance, police or other agencies that may service the abatement Work site in case of an emergency. Notification is to include methods of entering Work Area, emergency entry and exit locations, modifications to fire notification or fire fighting equipment, and other information needed by agencies providing emergency services.

Notifications of Emergency: Any individual at the job site may notify emergency service agencies if necessary, without effect on this Contract or the Contract Sum.

SUBMITTALS

Before the Start of Work: Submit the following to the Environmental Consultant for review. No Work shall begin until these submittals are returned with the Environmental Consultant action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.

- Contingency Plans: for emergency actions.
- Telephone Numbers: and location of emergency services.
- Notifications: sent to emergency service agencies.
- Resume: of general superintendent.
- Accreditation: submit evidence in form of training course certificate for General Superintendent as an asbestos abatement supervisor.

Staff Names: Within two (2) days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses and telephone numbers. Post copies of the list in the Project meeting room, the temporary field office, and at each temporary telephone.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION - 01043

SECTION 01091 - DEFINITIONS AND STANDARDS

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

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.) Certain terms used in Contract Documents are defined in this Section.

General Requirements: The provisions or requirements of Division-1 sections apply to entire Work of Contract.

SUBMITTALS:

Permits, Licenses and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

DEFINITIONS:

General: Definitions contained in this Article are not necessarily complete but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.

Environmental Consultant: An authorized representative of Johnson County Missouri that has the authority to act on the Owner's behalf in regard to the Work specified herein.

Indicated: This term refers to graphic representations, notes or schedules on the Drawings, or other Paragraphs or Schedules in Specifications, and similar requirements in Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help locate the reference; no limitation on location is intended except as specifically noted.

Directed: Terms such as "directed", "requested", "authorized", "selected", "accepted", "required", and "permitted" mean "directed by the Environmental Consultant", "requested by the Environmental Consultant, and similar phrases. However, no implied meaning shall be interpreted to extend the Environmental Consultant's responsibility into the Contractor's area of construction supervision.

Accepted: The term "accepted," where used in conjunction with the Environmental Consultant's action on the Contractor's submittals, applications, and requests, is limited to the responsibilities and duties of the Environmental Consultant stated in General and Supplementary Conditions. Such acceptance shall not release the Contractor from responsibility to fulfill Contract Document requirements, unless otherwise provided in the Contract Documents.

Regulations: The term "Regulations" includes laws, statutes, ordinances, rules and lawful orders issued by authorities having jurisdiction, as well as rules, conventions and agreements within the construction industry that control performance of the Work, whether they are lawfully imposed by authorities having jurisdiction or not.

Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."

Install: The term "install" is used to describe operations at Project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations."

Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."

Installer: An "Installer" is an entity engaged by the Contractor, either as an employee, subcontractor or sub-subcontractor for performance of a particular construction activity, including installation, erection, application and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

Project Site: is the space available to the Contractor for performance of the Work, either exclusively or in conjunction with others performing other construction as part of the Project. The extent of the Project Site may or may not be identical with the description of the land upon which the Project is built.

Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.

Owner's Representative: This is an authorized employee of the Johnson County Missouri and/or may be a Owner's designated representative, i.e. New Environmental Concepts and Johnson County Economic Development Corporation.

General Superintendent: This is the Contractor's Representative at the Work site. This person will be the Competent Person required by OSHA in 29 CFR 1926.

DEFINITIONS RELATIVE TO ASBESTOS ABATEMENT:

Accredited or Accreditation (when referring to a person or laboratory): A person or laboratory accredited in accordance with Section 206 of Title II of the Toxic Substances Control Act (TSCA).

Air Monitoring: The process of measuring the fiber content of a specific volume of air.

Amended Water: Water to which a surfactant has been added to decrease the surface tension to 35 or less dynes.

Asbestos: The asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. For purposes of determining respiratory and worker protection both the asbestiform and non-asbestiform varieties of the above minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos.

Asbestos-Containing Material (ACM): Any material containing more than 1% of asbestos of any type or mixture of types.

Asbestos-Containing Waste Material: Any material, which is or is suspected of being or any material contaminated with an asbestos-containing material, which is to be removed from a Work Area for disposal.

Asbestos debris: Pieces of ACBM that can be identified by color, texture, or composition, or dust, if the dust is determined by an accredited inspector to be ACM.

Authorized Visitor: The Owner, the Environmental Consultant, testing lab personnel, the Architect/Engineer, emergency personnel or a representative of any federal, state and local regulatory or other agency having authority over the Project.

Barrier: Any surface that seals off the Work Area to inhibit the movement of fibers.

Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.

Ceiling Concentration: The concentration of an airborne substance that shall not be exceeded.

Demolition: The wrecking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations.

Disposal Bag: A properly labeled 6-mil thick leak-tight plastic bag used for transporting asbestos waste from Work and to disposal site.

Encapsulant: A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

Bridging encapsulant: an encapsulant that forms a discrete layer on the surface of an in situ asbestos matrix.

Penetrating encapsulant: an encapsulant that is absorbed by the in situ asbestos matrix without leaving a discrete surface layer.

Encapsulation: Treatment of asbestos-containing materials, with an encapsulant.

Enclosure: The construction of an airtight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.

Friable Asbestos Material: Material that contains more than 1.0% asbestos and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

Glovebag: A sack (typically constructed of 6 mil transparent polyethylene or polyvinylchloride plastic) with inward projecting long-sleeve gloves, which are designed to enclose an object from which an asbestos-containing material is to be removed.

HEPA Filter: A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining

99.97% of asbestos fibers greater than 0.3 microns in diameter.

High-efficiency particulate air filter: (HEPA) refers to a filtering system capable of trapping and retaining 99.97 percent of all monodispersed particles 0.3 microns in diameter or larger.

Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.

Personal Monitoring: Sampling of the fiber concentrations within the breathing zone of an employee.

Pressure Differential and Ventilation System: A local exhaust system, utilizing HEPA filtration capable of maintaining a pressure differential with the inside of the Work Area at a lower pressure than any adjacent area, and which cleans recirculated air or generates a constant air flow from adjacent areas into the Work Area.

Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.

Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.

Time Weighted Average (TWA): The average concentration of a contaminant in air during a specific time period.

Visible Emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

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

Work Area: The area where asbestos-related Work or removal operations are performed which is defined and/or isolated to prevent the spread of asbestos dust, fibers or debris, and entry by unauthorized personnel. Work Area is a Regulated Area as defined by 29 CFR 1926.

SPECIFICATION FORMAT AND CONTENT EXPLANATION

This Article is provided to help the user of these Specifications understand the format, language, implied requirements, and similar documents. None of the explanations shall be interpreted to modify the substance of Contract requirements.

Specification Format: These Specifications are organized into Divisions, Sections or Trade Headings based on the Construction Specifications Institute's 16-Division format and the MASTERFORMAT numbering system. This organization conforms generally to recognized construction industry practice.

Specification Content: This Specification has been produced employing conventions in the use of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:

Singular words will be interpreted as plural and plural words interpreted as singular where applicable and where the full context of the Contract Documents so indicates.

Imperative Language is used generally in the Specifications. Requirements expressed imperatively are to be performed by the Contractor. At certain locations in the text, for clarity, subjective language is used to describe responsibilities, which must be fulfilled indirectly by the Contractor, or by others when so noted.

Assignment of Specialists: The Specification requires that specialists who are recognized experts in the operations to be performed shall perform certain specific construction activities. The specialists must be engaged for those activities, and the assignments are requirements over which the Contractor has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor.

This requirement should not be interpreted to conflict with enforcement of building codes or regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.

Trades: Use of titles such as "carpentry" is not intended to imply that accredited or unionized individuals of a corresponding generic name, such as "carpenter", must perform certain construction activities. It also does not imply that specified requirements apply exclusively to tradespersons of the corresponding generic name.

INDUSTRY STANDARDS

Applicability of Standards: Except where Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into Contract Documents. Such standards are made a part of the Contract Documents by reference. Individual Sections indicate which codes and standards the Contractor must keep available at the Project Site for reference.

Referenced industry standards take precedence over standards that are not referenced but recognized in the construction industry as applicable.

Unreferenced industry standards are not directly applicable to the Work, except as a general requirement of whether the Work complies with recognized construction industry standards.

Publication Dates: Where compliance with an industry standard is required, comply with standard in effect as of date of performance of the Work.

Conflicting Requirements: Where compliance with two or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, the most

stringent requirement will be enforced, unless the Contract Documents indicate otherwise. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the Environmental Consultant for a decision before proceeding.

Minimum Quantities or Quality Levels: In every instance the quantity or quality level shown or specified shall be the minimum to be provided or performed. The actual installation may comply exactly, within specified tolerances, with the minimum quantity or quality specified, or it may exceed that minimum within reasonable limits. In complying with these requirements, indicated numeric values are minimum or maximum values, as noted, or appropriate for the context of the requirements. Refer instances of uncertainty to the Environmental Consultant for decision before proceeding.

Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.

Where copies of standards are needed for performance of a required construction activity, the Contractor shall obtain copies directly from the publication source.

Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where acronyms or abbreviations are used in the Specifications or other contract documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction or other entity applicable to the context of the text provision. Refer to "The Encyclopedia of Associations", published by Gale Research Company, available in most libraries.

Trade Union Jurisdictions: The Contractor shall maintain, and require subcontractors to maintain, complete current information on jurisdictional matters, regulations and pending actions, as applicable to construction activities. The manner in which Contract Documents have been organized and subdivided is not intended to indicate trade union or jurisdictional agreements.

Discuss new developments at Project meetings at the earliest feasible dates. Record relevant information and actions agreed upon.

Assign and subcontract construction activities and employ tradesmen and laborers in a manner that will not unduly risk jurisdictional disputes that could result in conflicts, delays, claims and losses.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION – 01091

SECTION 01092 - CODES, REGULATIONS, AND STANDARDS ABATEMENT

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

This section sets forth governmental regulations and industry standards, which are included and incorporated herein by reference and made a part of the Specification. This section also sets forth those notices and permits, which are known to the Owner and which either must be applied for and received, or which must be given to governmental agencies before start of Work.

Requirements include adherence to Work practices and procedures set forth in applicable codes, regulations and standards.

Requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with codes, regulations, and standards.

SUBMITTALS:

Before Start of Work: Submit the following to the Environmental Consultant for review. No Work shall begin until these submittals are returned with Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.

Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work including:

Notices: Submit notices required by federal, state and local regulations together with proof of timely transmittal to agency requiring the notice.

Permits: Submit copies of current valid permits required by state and local regulations.

Licenses: Submit copies of all State and local licenses and permits necessary to carry out the Work of this Contract.

CODES, REGULATIONS AND STANDARDS

General Applicability of Codes, Regulations and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the Contract Documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies are bound herewith.

Contractor Responsibility: The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local laws, rules, ordinances and regulations pertaining to the Work, including, but not limited to work practices, storage, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations.

Federal Requirements: which govern asbestos abatement work or storage, hauling and disposal of asbestos waste materials include regulations enforced by the following agencies:

OSHA: U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA).

DOT: U. S. Department of Transportation.

EPA: U. S. Environmental Protection Agency (EPA).

State and Local Requirements: Abide by all state and local requirements, which govern asbestos abatement, Work and storage, and hauling and disposal of waste materials including Title 10 of the Missouri Code of State Regulations.

NOTICES:

U.S. ENVIRONMENTAL PROTECTION AGENCY

Send written notification as required by USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M) to the regional Asbestos NESHAP Contact on date contract is awarded.

STATE AND LOCAL AGENCIES:

Send written notification as required by Missouri's asbestos regulations, (Title 10 of Missouri Code of State Regulations, Section 10-6.080) to state and local agencies, on date contract is awarded. Send to:

Missouri Department of Natural Resources
Air Pollution Control Program (Asbestos)
P.O. Box 176
Jefferson City, Missouri 65102

PERMITS:

Permit: If required, waste is to be transported by an entity maintaining a current "Industrial waste hauler permit" specifically for asbestos waste materials, as required, for transporting of asbestos waste materials to a disposal site.

LICENSES:

Licenses: Maintain current licenses as required by applicable state or local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the Work of this Contract.

POSTING AND FILING OF REGULATIONS

Posting and Filing of Regulations: Post all notices required by applicable federal, state and local regulations. Maintain two (2) copies of applicable federal, state and local regulations and standards. Maintain one copy of each at job site. Keep one copy of each on file in Contractor's office.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION - 01092

SECTION 01301 - SUBMITTALS

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:

- Shop Drawings
- Product Data
- Miscellaneous Submittals

Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

- Notifications
- Permits
- Applications for Payment
- Insurance certificates
- List of Subcontractors

SUBMITTAL PROCEDURES

Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.

Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

The Environmental Consultant reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

The Environmental Consultant will promptly advise the Contractor when a submittal being processed must be delayed for coordination.

If an intermediate submittal is necessary, process the same as the initial submittal.

No extension of Contract Time or increase in Contract amount will be authorized because of failure to transmit submittals to the Environmental Consultant sufficiently in advance of the Work to permit processing.

Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Environmental Consultant using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.

On the transmittal record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

SUBMITTAL SCHEDULE

Before Start of Work: All submittals required prior to Start of Work must be submitted and accepted prior to issuance of Notice to Proceed.

Submittals: Submit 2 copies of each required submittal. The Environmental Consultant will retain one and will return one copy to the Owner.

Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

MISCELLANEOUS SUBMITTALS:

Material Safety Data Sheets: Process Material Safety Data Sheets as "Product Data."

Standards: Where submittal of a copy of standards is indicated, and except where copies of standards are specified as an integral part of a "Product Data" submittal, submit a single copy of standards for the Environmental Consultant's use. Where workmanship, whether at the project site or elsewhere is governed by a standard, furnish additional copies of the standard to fabricators, installers and others involved in the performance of the Work.

Closeout Submittals: Refer to section 01701 and to individual sections of this Specification for specific submittal requirements of project closeout information.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 01301

SUBMITTAL CHECKLIST

The submittals required from the Contractor include, but are not limited to the following:

01013 Summary of Work

Before Start of Work:
Plan of Action
Pre-construction Inspection

01043 Project Coordination

Before Start of Work:
Contingency Plans
Telephone Numbers
Notifications sent to emergency service agencies
Accreditation of all workers
Staff Names:
Periodically During Work:
Daily Logs
Event Reports
Accident Reports

01092 Codes, Regulations, and Standards

Before Start of Work:
Licenses
Notifications
Permits
Periodically During Work:
None

01513 Temporary Pressure Differential and Air Circulation System

Before Start of Work:
Pressure Differential System Design
HEPA Filtered Fan Units: Product Data
Periodically During Work:
None

01560 Worker Protection

Before Start of Work:
AHERA and state Accreditation Certificate: for each worker and supervisor.
Certificate of Worker Acknowledgement: for each worker and supervisor.
Report from Medical Examination: for each worker and supervisor.
Periodically During Work:
None

01562 Respiratory Protection

Before Start of Work:
Product Data.
NIOSH and MSHA Certifications.
Respiratory Protection Program: written manual.

Respiratory Protection Program: form at end of section.
Periodically During Work:
None

02084 Disposal of Waste Materials

Before Start of Work:

Waste Hauler License, if required
Name and address of disposal facility
Disposal facility contact person and telephone number
Chain of Custody form
Waste Manifest form
Label Samples

Periodically During Work:

Copies of manifests and disposal site receipts

END OF SUBMITTAL CHECKLIST

SECTION 01410 - AIR MONITORING - TEST LABORATORY SERVICES

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

Air Monitoring: Work Area clearance is described in Section 01714 Work Area Clearance.

DESCRIPTION OF THE WORK

Not in Contract Sum: This section describes Work being performed by the Owner. This Work is not in the Contract Sum.

This section describes air monitoring carried out by the Owner to verify that the building beyond the Work Area and the outside environment remains uncontaminated. This section also sets forth airborne fiber levels both inside and outside the Work Area as action levels, and describes the action required by the Contractor if an action level or permissible exposure limit is met or exceeded.

AIR MONITORING:

Work Area Isolation: The purpose of the Owner's air monitoring is to detect faults in the Work Area isolation such as:

- Contamination of the building outside of the Work Area with airborne fibers,
- Failure of filtration or rupture in the differential pressure system,
- Airborne fiber contamination inside the Work Area.

Should any of the above occur, immediately cease asbestos abatement activities until the fault is corrected. Do not recommence Work until authorized in writing by the Environmental Consultant.

Work Area Airborne Fiber Count: The Owner will monitor airborne fiber counts in the Work Area. The purpose of this air monitoring will be to detect airborne fiber concentrations, which may challenge the ability of the Work Area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.

Work Area Clearance: To determine if the elevated airborne fiber counts encountered during abatement operations have been reduced to an acceptable level, the Owner will sample and analyze air per Section 01714 Work Area Clearance.

Transmission Electron Microscopy (TEM) will be performed for clearance sampling and may be performed to on daily air monitoring if the Environmental Consultant representatives and the owner deem it necessary for more thorough results.

The Owner will conduct air monitoring throughout the course of the Project with the exception of OSHA personnel monitoring required by the Contractor. OSHA personnel sampling will be completed by a Missouri licensed and accredited Air Sampling Professional or Missouri accredited Air Sampling Technician and signed off by a MDNR Air Sampling Professional. The OSHA samples will be required to be analyzed by an AAR registered analyst and/or by a NVLAP accredited laboratory and results will be posted on-site by the next work shift or a stop work order may be issued to determine the necessity of increasing respiratory protection.

STOP ACTION LEVELS:

Inside Work Area: Maintain an average airborne count in the Work Area of less than 0.1 fibers per cubic centimeter. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. If the Time Weighted Average (TWA) fiber count for any work shift or 8-hour period exceeds 0.1 fibers per cubic centimeter, stop all Work, leave Pressure Differential System in operation and notify Environmental Consultant. After correcting cause of high fiber levels, do not recommence Work for 24 hours unless otherwise authorized, in writing, by Environmental Consultant.

If airborne fiber counts exceed 0.5 fibers per cubic centimeter for any period of time, cease all Work except corrective action until fiber counts fall below 0.1 fibers per cubic centimeter and notify Environmental Consultant. After correcting cause of high fiber levels, do not recommence Work for 24 hours unless otherwise authorized, in writing, by Environmental Consultant.

Outside Work Area: If any air sample taken outside of the Work Area exceeds the base line or 0.01 f/cc, immediately and automatically stop all Work except corrective action. The Environmental Consultant will assess the source of the high reading and so notify the Contractor in writing.

If the high reading was the result of a failure of Work Area isolation measures, initiate the following actions:

Immediately erect new critical barriers as set forth in Section 01526 Temporary Enclosures to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (eg. wall, ceiling, and floor).

Require that respiratory protection as set forth in Section 01562 Respiratory Protection is worn in affected area until area is cleared for reoccupancy in accordance with Section 01714 Work Area Clearance.

Leave Critical Barriers in place until completion of Work and ensure that the operation of the pressure differential system in the Work Area results in a flow of air from the balance of the building into the affected area.

If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a decontamination facility consisting of a Shower Room and Changing Room, as set forth in Section 01563 Decontamination Units, at entry point to affected area.

After Certification of Visual Inspection in the Work Area, remove critical barriers separating the Work Area from the affected area. Final air samples will be taken within the entire area as set forth in Section 01714 Work Area Clearance.

If the high reading was the result of other causes, initiate corrective action as determined by the Environmental Consultant.

Effect on Contract Sum: Complete corrective Work with no change in the Contract Sum if high airborne fiber counts were caused by Contractor's activities. The Contract Sum and schedule may be adjusted for additional Work caused by high airborne fiber counts beyond the Contractor's control.

ANALYTICAL METHODS:

The Owner in analyzing filters used to collect air samples will use the following methods. Sampling rates may be varied from printed standards to allow for high volume sampling.

Phase Contrast Microscopy (PCM) will be performed using the NIOSH 7400 method.

SAMPLE VOLUMES:

General: The Air Sampling Professional will determine the number and volume of air samples taken by the Owner. Sample volumes may vary depending upon site conditions and the analytical method used.

SCHEDULE OF AIR SAMPLES:

Before Start of Work:

The Owner will secure Air Samples to establish a base line before start of Work.

Sample cassettes: Samples will be collected on 25 mm. cassettes as follows:

PCM: 0.8 micrometer mixed cellulose ester.

Sampling sensitivity is as follows:

Detection Limit for PCM analysis as set forth in the analytical method used.

Base Line: an action level expressed in fibers per cubic centimeter, which is the largest of the following:

Average of the PCM samples collected at each Work Area

0.01 fibers per cubic centimeter

Daily:

From start of Work of Section 01526 Temporary Enclosures through the Work of Section 01711 Project Decontamination, the Owner may be taking the following samples on a daily basis.

Samples will be collected on 25 mm. cassettes with the following filter media:

PCM: 0.8 micrometer mixed cellulose ester.

Location Sampled	Number of Samples	Analysis Method	Detection Limit Fibers/cc	Minimum Volume (Liters)	Rate LPM
Each Work Area	1	PCM	0.01 OR AS REQUIRED BY CONDITIONS	1,200	1-10
Outside Each Work Area at Critical Barrier	1	PCM	0.01 OR AS REQUIRED BY CONDITIONS	1,200	1-10
Output Pressure Differential Sys	1	PCM	0.01 OR AS REQUIRED BY CONDITIONS	1,200	1-10

Additional samples may be taken at Owner's or Environmental Consultant's discretion. If airborne fiber counts exceed allowed limits, additional samples will be taken as necessary to monitor fiber levels.

LABORATORY TESTING:

The services of a testing laboratory will be employed by the Owner to perform laboratory analyses of the air samples. For PCM samples, microscope and technician will be set up at the job site, or samples will be sent on a daily basis to the laboratory, so that verbal reports on air samples can be obtained within 24 hours. For TEM samples, samples will be sent on a daily basis to the laboratory, so that verbal reports on air samples can be obtained within 48 hours. The Contractor will have access to air monitoring tests and results upon request.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

ADDITIONAL TESTING:

Upon written notice and authorization from the Owner and New Environmental Concepts, the Contractor may conduct his own air monitoring and laboratory testing. All air sampling conducted by the Contractor shall comply with these specifications and specifically in accordance with Section 01410. If he elects to do this, the cost of such air monitoring and laboratory testing shall be at no additional cost to the Owner.

END OF SECTION - 01410

SECTION 01503 - TEMPORARY FACILITIES

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF REQUIREMENTS:

General: Provide temporary electric and water sources for this project and/or provide temporary facilities as required herein or as necessary to carry out the Work.

SUBMITTALS

Before the Start of Work: Submit the following to the Environmental Consultant for review.

Scaffolding/Lifts: Submit list of rolling and fixed scaffolding and/or lifts intended for use on the Project. Submit sufficient detail to indicate compliance with applicable worker safety regulations or other requirements.

Temporary Electrical Service: Submit data on temporary electrical source to be used on project.

Temporary Water Service: Submit data on temporary water source to be used on this project

Ground Fault Circuit Interrupters (GFCI): Submit product data.

Lamps and Light Fixtures: Submit product data.

Fire Extinguishers: Submit product data. Submit schedule-indicating location at job site.

PART 2 - PRODUCTS

MATERIALS AND EQUIPMENT:

General: Provide new or used materials and equipment that is undamaged and in serviceable condition. Provide only materials and equipment that is recognized as being suitable for the intended use, by compliance with appropriate standards.

SCAFFOLDING:

Provide all scaffolding, ladders and/or staging, etc. as necessary to accomplish the Work of this Contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding shall comply with all applicable OSHA provisions.

Equip rungs of all ladders, etc. with an abrasive non-slip surface.

Provide a nonskid surface on all scaffold surfaces subject to foot traffic.

WATER SERVICE:

Temporary Water Service Connection: The abatement contractor will be responsible for providing the water service required for abatement. The Owner, at this time, will not provide water service for the abatement activities and providing water services for abatement activities will be the full responsibility of the abatement contractor as part of the base bid. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to the nearest drain or located over an existing sink or grade where water will not damage existing finishes or equipment.

Water Hoses: Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each Work Area and to each Decontamination Unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.

Hot Water: Abatement contractor will be responsible for providing hot water for the project at their costs with if necessary backflow protection is installed at point of connection as described in this section under Temporary Water Service connection. The hot water will be at the sole cost of the abatement contractor as the owner will not provide this service.

ELECTRICAL SERVICE:

General: Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service.

Voltage Differences: Provide identification warning signs at power outlets, which are other than 110-120-volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry type transformers shall be provided where required to provide voltages necessary for Work operations.

Ground Fault Protection: Equip all circuits for any purpose entering Work Area with ground fault circuit interrupters (GFCI). Locate GFCI's exterior to Work Area so that all circuits are protected prior to entry to Work Area. Provide circuit breaker type ground fault circuit interrupters (GFCI) equipped with test button and reset switch for all circuits to be used for any purpose in Work Area, decontamination units, exterior, or as otherwise required by national electrical code, OSHA or other authority.

Electrical Power Cords: Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas of Work.

Lamps and Light Fixtures: Provide general service incandescent lamps or fluorescent lamps of

wattage indicated or required for adequate illumination as required by the Work of this section.

Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide vapor tight fixtures in Work Area and decontamination units. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

FIRST AID:

First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry.

FIRE EXTINGUISHERS:

Fire Extinguishers: Provide Type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other locations provide type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.

PART 3 - EXECUTION

SCAFFOLDING:

If scaffolding and/or lifts are to be rented, the contractor must submit a letter from the rental company stating that the rental company is aware of what the scaffolding/lifts are to be used for.

During the erection and/or moving of scaffolding/lifts, care must be exercised so that the polyethylene is not damaged.

Clean as necessary, debris from non-slip surfaces.

At the completion of abatement Work, clean all construction aids within the Work Area, wrap in one layer of 6-mil polyethylene sheet and seal before removal from the Work Area.

INSTALLATION, GENERAL:

General: Use qualified tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they will serve the entire Project adequately and result in minimum interference with the performance of the Work.

Require that tradesmen accomplishing this Work be licensed as required by local authority for the Work performed.

Relocate, modify and extend services and facilities as required during the course of Work so as to accommodate the entire Work of the Project.

WATER SERVICE:

General: The abatement contractor will be responsible for providing the water service required

for abatement. The Owner, at this time, will not provide water service for the abatement activities and providing water services for abatement activities will be the full responsibility of the abatement contractor as part of the base bid. Install utilizing vacuum breakers or other backflow preventer as required by the local authority. Hot water shall be supplied at a minimum temperature of 100 degrees F. Supply hot and cold water to the Decontamination Unit in accordance with Section 01526.

Maintain hose connections and outlet valves in leakproof condition. Where finish work below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize the possibility of water damage. Drain water promptly from pan as it accumulates.

ELECTRICAL SERVICE:

General: Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of Work during the construction period. Install temporary lighting adequate to provide sufficient illumination for safe Work and traffic conditions in every area of Work.

Lockout: Lockout all existing power through the Work Area as described below. All power and lighting to the Work Area and Decontamination facilities are to be provided from temporary electrical panel described below or by existing power outside the Work Area.

Lockout power to Work Area by switching off all breakers serving power or lighting circuits in Work Area. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Lock panel and have all keys under control of Contractor's Superintendent or Owner's designated Representative.

Lockout power to circuits running through Work Area wherever possible by switching off all breakers serving these circuits. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Sign and date danger tag. Lock panel and supply keys to Contractor, Owner and Environmental Consultant. If circuits cannot be shut down for any reason, label at intervals 4'-0" on center with tags reading, "DANGER live electric circuit. Electrocution hazard."

Temporary Electrical Panel: **Provide temporary electrical panel sized and equipped to accommodate all electrical equipment and lighting required by the Work.** Connect temporary panel to existing building electrical system. Protect with circuit breaker or fused disconnect. Locate temporary panel within the Project Site, outside of the Work Area and away from heavy traffic areas, unless otherwise directed by Environmental Consultant in writing.

Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general, run wiring overhead, and rise vertically where wiring will be least exposed to damage from construction operations.

Circuit Protection: Protect each circuit with a ground fault circuit interrupter (GFCI) leading into the Work Area.

Temporary Wiring: in the Work Area shall be type UF non-metallic sheathed cable located overhead and exposed for surveillance. Do not wire temporary lighting with plain, exposed (insulated)

electrical conductors. Provide liquid tight enclosures or boxes for wiring devices.

SANITARY FACILITIES:

Toilets: The abatement contractor will be responsible for temporary toilet facilities, at the abatement contractor cost, for the workforce employees as the owner will not provide toilet facilities at this site. The specific location of the temporary toilet facilities will be approved by the environmental consultant and the owner prior to setting these facilities at the site.

FIRE EXTINGUISHERS:

Fire Extinguishers: Comply with the applicable recommendations of NFPA Standard 10 "Standard for Portable Fire Extinguishers". Locate fire extinguishers where they are most convenient and effective for their intended purpose but provide not less than one extinguisher in each Work Area in Equipment Room and One outside Work Area in Clean Room.

END OF SECTION - 01503

SECTION 01513 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUBMITTALS

Before Start of Work: Submit design of pressure differential system to the Environmental Consultant for review. Do not begin Work until submittal is returned with the Environmental Consultant's approval indicating that the submittal is returned for unrestricted use. Include in the submittal, at a minimum:

- Number of HEPA filtered fan units required and the calculations necessary to determine the number of machines
- Anticipated pressure differential across Work Area enclosures
- Manufacturer's product data on the HEPA filtered fan units to be used
- Location of the machines in the Work Area
- Method of supplying adequate power to the machines and designation of building electrical panel(s) which will be supplying the power
- Description of Work practices to ensure that airborne fibers travel away from workers
- Manufacturer's product data on equipment used to monitor pressure differential between inside and outside of the Work Area

PART 2 - PRODUCTS

HEPA FILTERED FAN UNITS:

General: Supply the required number of HEPA filtered fan units to the site in accordance with these specifications. Use units that meet the following requirements.

Cabinet: Constructed of durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Provide units whose cabinets are:

Factory-sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance

Arranged to provide access to and replacement of all air filters from intake end

Fans: Rate capacity of fan according to usable air-moving capacity under actual operating conditions.

HEPA Filters: Provide units whose final filter is the HEPA type with the filter media (folded into closely pleated panels) completely sealed on all edges with a structurally rigid frame.

Provide units with a continuous rubber gasket located between the filter and the filter housing to form a tight seal.

Provide HEPA filters that are individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3-micron dioctyl phthalate (DOP) particles when tested in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Provide filters that bear a UL586 label to indicate ability to perform under specified conditions.

Provide filters that are marked with: the name of the manufacturer, serial number, airflow rating, efficiency and resistance, and the direction of test airflow.

Prefilters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of prefiltration are required. Provide units with the following prefilters:

First-stage prefilter: low-efficiency type (e.g., for particles 100 micron and larger)

Second-stage (or intermediate) filter: medium efficiency (eg, effective for particles down to 5 microns)

Provide units with prefilters and intermediate filters installed either on or in the intake grid of the unit and held in place with special housings or clamps.

Instrumentation: Provide units equipped with:

Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed

Elapsed time meter to show the total accumulated hours of operation

Safety and Warning Devices: Provide units with the following safety and warning devices:

Electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter

Automatic shutdown system to stop fan in the event of a rupture in the HEPA filter or blocked air discharge

Warning lights to indicate normal operation (green), too high a pressure drop across the filters (i.e., filter overloading) (yellow), and too low of a pressure drop (i.e., rupture in HEPA filter or obstructed discharge) (red). Audible alarm if unit shuts down due to operation of safety systems

Electrical Components: Provide units with electrical components approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit is to be

equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet are to be grounded.

PART 3 - EXECUTION

PRESSURE DIFFERENTIAL ISOLATION

Isolate the Work Area from all adjacent areas or systems of the building with a Pressure Differential that will cause a movement of air from outside to inside at any breach in the physical isolation of the Work Area.

Relative Pressure in Work Area: Continuously maintain the work area at an air pressure that is lower than that in any surrounding space in the building, or at any location in the immediate proximity outside of the building envelope. This pressure differential when measured across any physical or critical barrier must equal or exceed a static pressure of:

0.02 inches of water.

Accomplish the pressure differential by exhausting a sufficient number of HEPA filtered fan units from the work area. The number of units required will depend on machine characteristics, the seal at barriers, and required air circulation. The number of units will increase with increased make-up air or leaks into the Work Area. Determine the number of units required for pressure isolation by the following procedure:

Establish required air circulation in the work area, personnel and equipment decontamination units.

Establish isolation by increased pressure in adjacent areas or as part of seals where required.

Exhaust a sufficient number of units from the work area to develop the required pressure differential.

The required number of units is the number determined above plus one additional unit.

Vent HEPA filtered fan units to outside of building unless authorized by Environmental Consultant.

- Mount units to exhaust directly or through disposable ductwork.
- Use only new ductwork except for sheet metal connections and elbows.
- Use ductwork and fittings of same diameter or larger than discharge connection on fan unit.
- Use inflatable, disposable plastic ductwork in lengths not greater than 50 feet.
- Use spiral wire-reinforced flex duct in lengths not greater than 100 feet.
- Arrange exhaust as required to inflate duct to a rigidity sufficient to prevent flapping.
- If direction of discharge from fan unit is not aligned with duct use sheet metal elbow to change direction. Use six feet of spiral wire reinforced flex duct after direction change.

AIR CIRCULATION IN THE WORK AREA:

Air Circulation: For purposes of this section air circulation refers to either the introduction of outside air to the Work Area or the circulation and cleaning of air within the Work Area.

Air circulation in the Work Area is a minimum requirement intended to help maintain airborne fiber counts at a level that does not significantly challenge the Work Area isolation measures. The Contractor may also use this air circulation as part of the engineering controls in his worker protection program.

Determining the Air circulation Requirements: Provide a fully operational air circulation system supplying a minimum of the following air circulation rate:

4 air changes per hour

Determine Number of Units needed to achieve required air circulation according to the following procedure:

Determine the volume in cubic feet of the Work Area by multiplying floor area by ceiling height. Determine total air circulation requirement in cubic feet per minute (CFM) for the Work Area by multiplying this volume by the air change rate and dividing by 60.

Air Circulation Required in Cubic Feet of Air per Minute (CFM) =

$$\frac{\text{Volume of Work Area (cu. ft.)} \times \text{Number of air changes per hour}}{60 \text{ (minutes per hour)}}$$

Divide the air circulation requirement (CFM) above by capacity of HEPA filtered fan unit(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machine's labeled operating characteristics.

Number of Units Needed =

$$\frac{\text{Air circulation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)}}$$

Add one (1) additional unit as a backup in case of equipment failure or machine shutdown for filter changing.

EXHAUST SYSTEM:

Isolation and air circulation in the Work Area are to be accomplished by an exhaust system as described below.

Exhaust all units from the Work Area to meet air circulation requirements of this section.

Location of HEPA Filtered Fan Units:

Locate fan unit(s) so that makeup air enters Work Area primarily through the decontamination units and traverses Work Area as much as possible. This may be accomplished by positioning the HEPA

filtered fan unit(s) at a maximum distance from the worker access opening or other makeup air sources.

Place End of Unit and intake duct or its exhaust duct through an opening in the plastic barrier or wall covering. Seal plastic around the unit or duct with tape.

Vent to Outside of Building, unless authorized by the Environmental Consultant. The Building must remain secure at all times.

Supplemental Makeup Air Inlets: Provide where required for proper air flow through the Work Area in locations accepted by the Environmental Consultant by making openings in the plastic sheeting that allow air from outside the building into the Work Area. Locate auxiliary makeup air inlets as far as possible from the fan unit(s) (e.g., on an opposite wall), off the floor (preferably near the ceiling), and away from barriers that separate the Work Area from occupied clean areas. Cover with flaps to reseal automatically if the pressure differential system should shut down for any reason. Spray flap and around opening with spray adhesive so that if flap closes, meeting surfaces are both covered with adhesive. Use adhesive that forms contact bond when dry. Weight the bottom of the flaps.

AIR CIRCULATION IN DECONTAMINATION UNITS:

Pressure Differential Isolation: Continuously maintain the pressure differential required for the Work Area in the:

Personnel Decontamination Unit: across the Shower Room with the Equipment Room at a lower pressure than the Clean room.

Equipment Decontamination Unit: Across the Holding Room with the Washroom at a lower pressure than the Clean Room.

Air Circulation: Continuously maintain air circulation in Decontamination Units at same level as required for Work Area.

Air Movement: Arrange air circulation through the Personnel Decontamination Unit so that it produces a movement of air from the Clean Room through the Shower Room into the Equipment Room.

USE OF THE PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM:

General: Each unit shall be serviced by a dedicated minimum 115V-20A circuit with ground fault circuit interrupter (GFCI) supplied from temporary power supply installed under requirements of Section 01503 "Temporary Facilities."

Testing the System: Test pressure differential system before any asbestos-containing material is wetted or removed. After the Work Area has been prepared, the decontamination facility set up, and the fan unit(s) installed, start the unit(s) (one at a time). Demonstrate operation and testing of pressure differential system to Environmental Consultant.

Demonstrate Condition of Equipment for each HEPA filtered fan unit and pressure differential monitoring equipment including proper operation of the following:

- Squareness of HEPA Filter
- Condition of Seals
- Proper operation of all lights
- Proper operation of automatic shut down if exhaust is blocked
- Proper operation of alarms

Demonstrate Operation of the pressure differential system to the Environmental Consultant. This demonstration will include, but not be limited to, the following:

- Plastic barriers and sheeting move lightly in toward Work Area
- Curtain of decontamination units move lightly in toward Work Area
- There is a noticeable movement of air through the Decontamination Unit.
- Use smoke tube to demonstrate air movement from Clean Room through Shower Room to Equipment Room.
- Use smoke tubes to demonstrate a definite motion of air across all areas in which Work is to be performed.
- Use a continuous read differential pressure meter or manometer to demonstrate the required pressure differential. **This is mandatory for all containments.**

If the pressure differential system is not sufficient, as determined by the Environmental Consultant, additional machines may be required at no additional cost to the Owner.

Use of System During Abatement Operations:

Start fan units before beginning Work (before any asbestos-containing material is disturbed). After abatement Work has begun, run units continuously to maintain a constant pressure differential and air circulation until decontamination of the Work Area is complete. Do not turn off units at the end of the Work shift or when abatement operations temporarily stop.

Do not shut down air pressure differential system during encapsulating procedures, unless authorized by the Environmental Consultant in writing. Supply sufficient pre-filters to allow frequent changes.

Start abatement Work at a location farthest from the fan units and proceed toward them. If an electric power failure occurs, immediately stop all abatement Work and do not resume until power is restored and fan units are operating again.

At completion of abatement Work, allow fan units to run as specified under section 01711, to remove airborne fibers that may have been generated during abatement Work and cleanup and to purge the Work Area with clean makeup air.

Dismantling the System:

When a final inspection and the results of final air tests indicate that the area has been decontaminated, fan units may be removed from the Work Area. Before removal from the Work Area, remove and properly dispose of pre-filter, decontaminate exterior of machine and seal intake to the machine with 6-mil polyethylene to prevent asbestos contamination from the filters.

Royalties, Patents and Licensing:

The Contractor shall pay all royalties and license fees. The Contractor shall protect, defend, indemnify, and save harmless the Owner or Environmental Consultant from all liabilities, judgements, costs, damages, and expenses which may in any way come against the Owner or Environmental Consultant by reason of the use of any material, machinery, devices, equipment or processes furnished or used in the performance of the Work for which patents or licensing agreements exist or by reason of the use of designs furnished by the Contractor for which patents or licensing agreements exist.

The Contractor is hereby notified that certain procedures and systems that the Contractor may choose to employ to perform certain requirements specified herein, specifically the use of a particular negative air system in conjunction with HEPA filtered exhaust equipment, are registered, patented processes. The Contractor shall be responsible for all royalties and license fees in relation to such patents and shall hold harmless and indemnify the Owner and Environmental Consultant from and against all claims, losses, damages and expenses, including reasonable attorney's fees, arising out of any failure on the part of the Contractor to properly comply with patent requirements.

END OF SECTION - 01513

SECTION 01526 - TEMPORARY ENCLOSURES

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

All containments are to be constructed in accordance with AHERA, Title 10 of the Missouri Code of State Regulations and these specifications unless a waiver is requested and granted by the proper authorities and the environmental consultant. The Environmental Consultant prior to submittal to the proper authorities shall review all waivers.

SUBMITTALS:

Spray Cement: Submit following:

Product description including major components and solvents.

Manufacturer's installation instructions. Indicate portions applicable to the Project.

Material Safety Data Sheet: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for spray cement material proposed for use on the Work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

PART 2 - PRODUCTS

SHEET PLASTIC:

Polyethylene Sheet: A single polyethylene film, 6 mil thick, in the largest sheet size possible to minimize seams, clear, frosted, or black as indicated.

MISCELLANEOUS MATERIALS:

Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive, which is formulated to stick aggressively to sheet polyethylene.

Spray Cement: Provide spray adhesive in aerosol cans, which is specifically formulated to stick tenaciously to sheet polyethylene.

Fire Rated Gypsum Board: Provide fire rated gypsum board when building a hard barrier between the work area and occupied areas.

PART 3 - EXECUTION

SEQUENCE OF WORK:

Carry out Work of this section sequentially. Complete each activity before proceeding to the next.

GENERAL:

Work Area: The location where asbestos-abatement Work occurs. It is a variable of the extent of Work of the Contract. It may be a portion of a room, a single room, a complex of rooms, or an exterior space. A "Work Area" is considered contaminated during the Work and must be isolated from the balance of the building and decontaminated at the completion of the asbestos-control Work.

Completely isolate the Work Area from other parts of the building on the outside so as to prevent asbestos-containing dust or debris from passing beyond the isolated area. Should the area beyond the Work Area(s) become contaminated with asbestos-containing dust or debris as a consequence of the Work, clean those areas in accordance with the procedures indicated in Section 01711. Perform all such required cleaning or decontamination at no additional cost to owner.

Place all tools, scaffolding, staging, etc. necessary for the Work in the area to be isolated prior to completion of Work Area isolation.

Disable ventilating systems or any other system bringing air into or out of the Work Area. Disable system by disconnecting wires, removing circuit breakers, by lockable switch or other positive means that will prevent accidental premature restarting of equipment.

Power to Work Area:

Lockout power to the Work Area by switching off all breakers serving power or lighting circuits in Work Area. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Lock panel and have all keys under control of Contractor's Superintendent.

Inspection Windows: Install inspection windows as required. Install windows in locations where the largest amount of work can be viewed. Each inspection window is to have an 18" X 18" viewing area fabricated from 1/4" acrylic or polycarbonate sheet. Install window with top at 6'-6" above floor height in a manner that provides unobstructed vision from outside to inside of the Work Area. Protect window from damage from scratching, dirt or any coatings used during the work. A sufficient number of windows are to be installed to provide observation of all portions of the Work Area that can be made visible from adjacent areas.

EMERGENCY EXITS:

Provide emergency exits as set forth below:

Emergency Exits: At each existing exit door from the Work Area provide the following means for emergency exiting:

Arrange exit door so that it is secure from outside the Work area but permits exiting from the Work Area.

Mark outline of door on Primary and Critical Barriers with luminescent paint or tape at least 1" wide. Hang a retractable blade razor knife on a string adjacent outline. Arrange Critical and Primary barriers so that they can be easily cut with one pass of razor knife. Paint inside the door outline, the words "EMERGENCY EXIT" no higher than three feet (3') off of the floor with luminescent paint or tape in letters at least one foot high and 2" thick.

CONTROL ACCESS:

Isolate the Work Area to prevent entry into building(s), Work Area(s) or surrounding controlled areas by unauthorized personnel. Areas of the interior hallway, in which asbestos containment areas will be present due to connections of classrooms shall control access using a hard barrier constructed of 2' x 4' framing and plywood or an approved substitute. These hard barriers shall be moved in conjunction with the asbestos containments allowing access for other trades to areas remediated previously.

Provide Warning Signs at each door leading to Work Area reading as follows:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA

Provide spacing between respective lines at least equal to the height of the respective upper line.

ALTERNATE METHODS OF ENCLOSURE:

Alternate methods of containing the Work Area may be submitted to the Environmental Consultant for review in accordance with procedures set forth. Do not proceed with any such method(s) without prior written acceptance from the Environmental Consultant.

RESPIRATORY AND WORKER PROTECTION:

Before proceeding beyond this point in providing Temporary Enclosures:

Provide Worker Protection per Section 01560
Provide Respiratory Protection per Section 01562
Provide Personnel Decontamination Unit per Section 01563

CRITICAL BARRIERS:

Completely Separate the Work Area(s) from other portions of the building, and the outside by closing all openings with sheet plastic barriers at least two layers of 6-mil in thickness.

Where the work area is immediately adjacent to an occupied area, the Abatement Contractor shall construct a rigid, hard barrier comprised of fire rated sheetrock/gypsum board, screwed to studs placed

24" on center. This barrier shall be framed and painted on the occupied side to match the existing surroundings.

Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors, speakers, etc. in the Work Area with duct tape alone or with polyethylene sheeting at least 6-mil in thickness, taped securely in place with duct tape. Maintain seal until all Work including Project Decontamination is completed. Power to lighting fixtures shall be disconnected prior to sealing with polyethylene sheeting to avoid melting or burning of sheeting or contractor may opt to use fire retardant poly.

Provide Sheet Plastic barriers at least 6 mil in thickness as required to seal openings completely from the Work Area into adjacent areas.

Exterior Windows critical barriers will require the use of black or colored 6 mil thick plastic sheeting

Provide Pressure Differential System per Section 01513.

Clean housings and ducts of all overspray materials prior to erection of any Critical Barrier that will restrict access.

PREPARE AREA:

Scaffolding/Lifts: If fixed scaffolding/lifts are to be used to provide access, HEPA vacuum and wet clean area prior to scaffolding/lift installation.

Remove all general construction items such as cabinets, casework, door and window trim, moldings, ceilings, trim, etc., which cover the surface of the Work as required to prevent interference with the Work.

Clean All Surfaces in Work Area with a HEPA filtered vacuum or by wet wiping, prior to the installation of primary barrier.

PRIMARY BARRIERS:

Protect building and other surfaces in the Work Area from damage from water and high humidity or from contamination from asbestos-containing debris, slurry or high airborne fiber levels by covering with a primary barrier as described below.

Sheet Plastic: Protect surfaces in the Work Area as follows unless a waiver has been submitted and approved. Perform Work in the following sequence.

Cover all floors in Work Area including "Critical Barrier" sheet plastic barriers with, at a minimum, one (1) layer of polyethylene sheeting, at least 6 mil in thickness, mechanically supported and sealed with duct tape or spray-glue in the same manner as "Critical Barrier" sheet plastic barriers. Tape all joints including the joining with the wall covering with duct tape or as otherwise indicated on the Contract Documents or in writing by the Environmental Consultant. Contractor may opt to submit a waiver from these requirements.

Cover all walls and ceilings in Work Area including "Critical Barrier" sheet plastic barriers with, at a minimum, one (1) layer of polyethylene sheeting, at least 6 mil in thickness, mechanically supported and sealed with duct tape or spray-glue in the same manner as "Critical Barrier" sheet plastic barriers. Tape all joints including the joining with the floor or wall covering with duct tape or as otherwise indicated on the Contract Documents or in writing by the Environmental Consultant.

Stairs and Ramps: Do not cover stairs or ramps with unsecured sheet plastic. Where stairs or ramps are covered with plastic, provide 3/4" exterior grade plywood treads securely held in place, over plastic. Do not cover rungs or rails with any type of protective materials.

Repair of Damaged Polyethylene Sheeting: Remove and replace plastic sheeting, which has been damaged by abatement operations or where seal has failed allowing water to seep between layers. Remove affected sheeting and wipe down entire area. Install new sheet plastic only when area is completely dry.

STOP WORK: If the Critical or Primary barrier falls or is breached in any manner, stop Work immediately. Do not start Work until authorized in writing by the Environmental Consultant.

EXTENSION OF WORK AREA: If the Critical Barrier is breached in any manner that could allow the passage of asbestos debris or airborne fibers, then add affected area to the Work Area, enclose it as required by this Section of the Specification and decontaminate it as described in Section 01711 Project Decontamination.

END OF SECTION - 01526

SECTION 01529 - GLOVEBAGS AND MINI-ENCLOSURES - ASBESTOS ABATEMENT

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF THE WORK:

Glovebag Enclosures:

Removal of piping and pipe joint insulation in an area that is not adjacent to other Work Areas where critical enclosure procedures have been performed.

Other comparable situations, as determined by the Environmental Consultant and approved prior to the start of the Work.

Any areas that are not allowable as glovebag or mini-enclosure Work Areas shall have Work performed in accordance with applicable sections of this Project Manual.

Removal within Mini-Enclosures:

Removal of thermal system insulation using glovebag procedures.

SUBMITTALS:

Before Start of Work submits the following to the Environmental Consultant for review. Do not begin Work until these submittals are returned with the Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use.

Surfactant: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements.

NESHAP Certification: Submit certification from manufacturer of surfactant or removal encapsulant that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet asbestos-containing materials to which it is applied as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M).

Material Safety Data Sheet: Submit Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant and encapsulating material proposed for use. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

Spray Cement: Submit following:

Product description including major components and solvents

Manufacturer's installation instructions. Indicate portions applicable to the Project

Material Safety Data Sheet: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for spray cement material proposed for use on the Work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

Sheet Plastic: For fire retardant plastic submit test reports on NFPA 701 test.

Glovebags: Submit product data.

Mini-enclosure: Provide shop drawing of mini-enclosure arrangement to be used.

PART 2 - PRODUCTS

SHEET PLASTIC:

Polyethylene Sheet: A single polyethylene film in the largest sheet size possible to minimize seams, 6.0 mil thick as indicated, clear, frosted, or black as indicated.

Reinforced Polyethylene Sheet: Where plastic sheet constitutes the only barrier between the Work Area and the building exterior, provide translucent, nylon reinforced or woven laminated polyethylene film that conforms to requirements. Provide largest size possible to minimize seams, 6.0 mil thick as indicated, frosted or black as indicated.

MISCELLANEOUS MATERIALS:

Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.

Spray Cement: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

Wetting Materials: For wetting prior to disturbance of asbestos-containing materials, use either amended water or a removal encapsulant:

Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the asbestos-containing material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of one ounce of a solution of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

Glovebag: provide minimum 6 mil polyethylene, polyvinylchloride or equivalent plastic sack, with two sealed inward projecting long-sleeved gloves or mittens, preprinted with same warning notice as a disposal bag, equipped with a pouch for storage of tools, with designated location for wand or HEPA vacuum wand, and sufficient capacity to hold removed materials and permit sealing as specified.

Garden Sprayer: Provide a hand pump type pressure-can garden sprayer fabricated out of either metal or plastic, equipped with a metal wand at the end of a hose that can deliver a stream or spray of liquid under pressure.

PART 3 - EXECUTION

GENERAL:

Complete the following before start of Work of this section:

01526 Temporary Enclosures
01562 Respiratory Protection
01560 Worker Protection

WORKER PROTECTION:

Before beginning Work with any material for which a Material Safety Data Sheet has been submitted, provide workers with the required protective equipment. Require that appropriate protective equipment be used at all times.

GLOVEBAG:

Area Preparation shall be performed by installing critical barriers and drop cloths in accordance with Section 01526 of this Specification.

Decontamination Units consisting of a Work Room, Change Room and a Step Off Area as specified under Mini-Enclosures of this Section shall be established for each glovebag removal area.

Contractor shall use negative pressure glovebags when carrying out work of this section.

Remove asbestos-containing material inside a glovebag according to the general industry standard. Sliding of glovebags is not permitted.

MINI-ENCLOSURES:

A Mini-Enclosure consists of a small Work Room with an attached separate Change Room. Worker decontamination requires a remote personnel decontamination unit, unless otherwise authorized by the Environmental Consultant in writing.

Sequence of Work: Before beginning Work of this sub-section complete the following:

Isolation of area in accordance with Section 01526 Temporary Enclosures.

Construction of a personnel decontamination unit in accordance with Section 01563 Decontamination Units.

Work Room: Construct Work Room in the same manner as a Primary Barrier fabricated from 6 mil sheet plastic. Arrange so that Primary Barrier provides both a Critical and Primary Barrier. Line walls and floor of Work Room with a continuous Secondary Barrier.

Change Room: Provide an approximately 3'-0" by 3'-0" Change Room, with additional space as required for storage, attached to each Work Room. Fabricate Change Room from 6 mil sheet plastic in the same manner as a Primary Barrier. Locate so that access to Work Area is through Change Room.

Step Off Area: Cover floor in front of entry to Change Room with one layer of 6 mil sheet plastic. Securely anchor sheet plastic to prevent slipping.

Flapped Door Construction: Provide flapped door as entry to Change Room and entry from Change Room to Work Room. Fabricate each flapped door from overlapping contacting layers of sheet plastic. Fasten each layer on the top and one side. Each flap is to be 3" longer than door opening. Reinforce free side and bottom of each sheet with duct tape. Alternate sides that are fastened on each layer. Form arrows pointing to entry side from duct tape on inside and outside of door.

Signage: At entry to Change Room post an approximately 20 inch by 14 inch manufactured caution sign displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

LEGEND

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA

Provide spacing between respective lines at least equal to the height of the respective upper line.

Complete requirements of the following:

Section 01560 Worker Protection
Section 01562 Respiratory Protection
Section 01513 Temporary Pressure Differential & Air Circulation System

Entry to Work Room: Require that any time a worker enters the Work Room the following procedure is followed.

Outside of Change Room remove all street clothes and don clean coveralls and respirator.
Enter Work Room making sure that entry is completely closed.

Worker Decontamination: Require that any time a worker leaves the mini-Enclosure the following procedure be followed.

Maintain a bucket of clean water in the Work Area. Do not amend with a wetting agent.

Remove contaminated suit inside the Work Area. Leave respirator in place.

Wash hands, face and surface of respirator with water and wet paper towels. Use caution to avoid breaking seal between respirator face-piece and face.

Proceed with respirator in place to Change Room.

Be sure that entry to Work Area is completely closed.

In Change Room don clean disposable suit leaving respirator in place.

Exit change room making sure that entry to Change Room is completely closed. Proceed to next Mini-Enclosure, or a remote shower.

At end of workday decontaminate fully in accordance with procedures in appropriate specification section describing Worker Protection, unless otherwise authorized by the Environmental Consultant.

Material Decontamination: Require that the following procedure be used in removing equipment and bagged debris from the Work Room.

Three workers are required. One in the Work Room, one in the Change Room, and one on the Step Off Area.

Equipment and bagged debris are to be removed from the Mini-Enclosure in separate operations.

Worker in Work Room cleans equipment and bagged debris and hands one piece of equipment or one bag of debris at a time to worker in Change Room.

Worker in Change Room wet cleans each piece of equipment or bag and stores them in Change Room. Equipment is sealed completely in 6 mil sheet plastic in the Change Room.

When the amount of stored material in the Change Room becomes large enough that the worker cannot clean incoming material without contacting previously cleaned material the door between the Work and Clean Room is closed.

The worker in the Changing Room then passes each item into a new disposal bag held open in the doorway between the Changing Room and Step Off Area by the worker on the Step Off Area. The Worker on the Step Off Area places each bag in a sealed cart for transport to the load out area.

All bags are to be transported through the building in clean sealed containers that have never been in an asbestos Work Area, Mini-Enclosure or decontamination unit.

Mini-Enclosure Decontamination: At completion of all Work, decontaminate the Work and Changing Rooms as set forth in Section 01711 Project Decontamination.

END OF SECTION - 01529

SECTION 01560 - WORKER PROTECTION

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF WORK:

This section describes the equipment and procedures required for protecting Workers against asbestos contamination and other workplace hazards except for respiratory protection.

RELATED WORK SPECIFIED ELSEWHERE:

Respiratory Protection: is specified in Section 01562.

WORKER TRAINING:

AHERA Accreditation: All workers are to be accredited as Abatement Workers as required by the AHERA regulation 40 CFR 763 Appendix C to Subpart E, April 30, 1987.

State and Local License: All workers are to be trained, certified and accredited as required by all state and local codes and regulations including Title 10 of the Missouri Code of State Regulations.

Train, in accordance with OSHA, all workers in the dangers inherent in handling asbestos and breathing asbestos dust and in proper Work procedures and personal and area protective measures.

MEDICAL EXAMINATIONS:

Provide medical examinations for all workers who will enter the Work Area for any reason. Examination shall as minimum meet OSHA requirements. In addition, provide an evaluation of the individual's ability to wear a respirator and to work in environments capable of producing heat stress in the worker, signed by a physician.

SUBMITTALS:

Before Start of Work: Submit the following to the Environmental Consultant for review. Do not start Work until these submittals are returned with Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use.

AHERA Accreditation: Submit copies of certificates from an EPA and Missouri approved AHERA Abatement Workers course for each worker as evidence that each asbestos Abatement Worker is

accredited as required by the AHERA Regulation 40 CFR 763 Appendix C to Subpart E, April 30, 1987.

State and Local License: Submit evidence that all workers have been trained, certified and accredited as required by all state and local codes and regulations, including but not limited to Title 10 of the Missouri Code of State Regulations.

Certificate of Worker Acknowledgement: Submit signed copy of the Certificate of Worker's Acknowledgement, for each worker who is to be at the job site or enter the Work Area.

Report from Medical Examination: conducted within last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the Work Area. Submit, at a minimum, for each worker the following:

Date of Examination

Name and Social Security Number

Physicians Written Opinion from examining physician including at a minimum the following:

Whether worker has any detected medical conditions that would place the worker at an increased risk of material health impairment from exposure to asbestos.

Any recommended limitations on the worker or on the use of personal protective equipment such as respirators.

PART 2 - EQUIPMENT

PROTECTIVE CLOTHING:

Coveralls: Provide disposable full-body coveralls with attached head and foot coverings and require that all workers in the Work Area wear them, at all times. Provide a sufficient number for all required changes, for all workers in the Work Area. Provide the New Environmental Concepts representative with a minimum of 10 Tyvek brand coveralls for each shift of work.

Boots: Provide Work boots with non-skid soles, where required by OSHA. Provide boots at no cost to workers. Do not allow boots to be removed from the Work Area for any reason, after being contaminated with asbestos-containing material. Thoroughly clean, decontaminate and bag boots before removing them from the Work Area.

Hard Hats: Provide head protection (hard hats) as required by OSHA for all Workers, and provide 3 spares for use by Environmental Consultant, Project Administrator, and Owner. Require hard hats to be worn at all times that Work is in progress that may potentially cause head injury. Provide hard hats of type with plastic strap type suspension. Require hats to remain in the Work Area throughout the Work. Thoroughly clean and decontaminate hard hats before removing them from the Work area.

Goggles: Provide eye protection (goggles) as required by OSHA for all workers involved in demolition, scraping, spraying, or any other activity which may potentially cause eye injury. Thoroughly clean, decontaminate and bag goggles before removing them from the Work Area at the end of the Work.

Gloves: Provide Work gloves, if required, to all workers and require that they be worn at all times in the Work Area. Do not remove gloves from the Work Area. Dispose of as asbestos-contaminated waste at the end of the Work.

Ear Protection: Provide ear protection, if required, to all workers and require that they be worn at all times in the Work Area.

ADDITIONAL PROTECTIVE EQUIPMENT:

Respirators, disposable coveralls, head covers, and footwear covers shall be provided by the Contractor for the Owner, Environmental Consultant, Project Administrator and other authorized representatives who may inspect the job site. Provide two (2) new PAPR respirators and ten (10) complete coveralls and, where applicable, eight (8) respirator filter changes per shift.

PART 3 - EXECUTION

GENERAL:

Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the Work. The following procedures are minimums to be adhered to regardless of fiber count in the Work Area.

Each time Work Area is entered remove all street clothes in the Changing Room of the Personnel Decontamination Unit and put on new disposable coverall with attached head and foot coverings and a clean respirator. Proceed through shower room to equipment room and put on Work boots. In the event of a remote decontamination facility, workmen must use double layered disposable coveralls and a clean respirator into the containment.

DECONTAMINATION PROCEDURES:

Require all workers to adhere to the following personal decontamination procedures whenever they leave the Work Area:

Negative Pressure or Powered Air-Purifying Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the Work Area:

When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room and place in disposable bag. When a remote decontamination unit is acceptable the workmen must remove the outer disposable coverall folding it outward away from their body and place this suit in a disposable bag.

The remaining suit should be HEPA vacuumed off and wet wiped along with the respiratory protection and another disposable suit donned prior to proceeding to the remote decontamination location.

Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid exposure to asbestos fibers while showering. The following procedure is required as a minimum:

- Thoroughly wet body including hair and face. If using a Powered Air-Purifying Respirator (PAPR) hold blower unit above head to keep canisters dry.
- With respirator still in place thoroughly wash body, hair, respirator face piece, and all parts of the respirator except the blower unit and battery pack on a PAPR. Pay particular attention to seal between face and respirator and under straps.
- Take a deep breath, hold it and/or exhale slowly, completely wet hair, face, and respirator. While still holding breath, remove respirator and hold it away from face before starting to breathe.
- Carefully wash facepiece of respirator inside and out.
- If using PAPR: shut down in the following sequence, first cap inlets to filter cartridges, then turn off blower unit (this sequence will help keep debris which has collected on the inlet side of filter from dislodging and contaminating the outside of the unit). Thoroughly wash blower unit and hoses. Carefully wash battery pack with wet rag. Be extremely cautious of getting water in battery pack as this may short out and destroy battery.
- Shower completely with soap and water.
- Rinse thoroughly.
- Rinse shower room walls and floor prior to exit.
- Proceed from shower to Changing Room and change into street clothes or into new disposable Work items.

Within Work Area:

Require that workers NOT eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the Work Area. To eat or drink, workers shall follow the procedure described above, and then dress in street clothes before entering the non-Work Areas of the building. No smoking or chewing o tobacco products will be allowed on the premises.

END OF SECTION - 01560

SECTION 01562 - RESPIRATORY PROTECTION

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF WORK:

Instruct and train each worker involved in proper respiratory use and require that each worker always wear a properly fitted respirator in the Work Area from the start of any operation, which may cause airborne asbestos fibers until the Work Area is completely decontaminated. Use respiratory protection appropriate for the environmental hazard encountered in the Workplace or as required for other toxic or oxygen-deficient situations encountered.

STANDARDS:

Except to the extent that more stringent requirements are written directly into the Contract Documents, the following regulations and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

OSHA - U.S. Department of Labor, Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 1910.134. 29 CFR 1926.58.

CGA - Compressed Gas Association, Inc., New York, Pamphlet G-7, "Compressed Air for Human Respiration", and Specification G-7.1 "Commodity Specification for Air".

CSA - Canadian Standard Association, Rexdale, Ontario, Standard Z180.1-1978, "Compressed Breathing Air".

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2-1980.

NIOSH - National Institute for Occupational Safety and Health

SUBMITTALS:

Before Start of Work submits the following to the Environmental Consultant for review. Do not begin Work until these submittals are returned with the Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use.

Product Data: Submit manufacturer's product information for each component used, including NIOSH Certifications for each component in an assembly and/or for entire assembly.

Respiratory Protection Program: Submit outline of Contractor's written respiratory protection program manual as required by OSHA 1926.58.

Respiratory Protection Schedule: Submit "Respiratory Protection schedule" on the form included at the end of this Section.

DELIVERY:

Deliver replacement parts, etc., not otherwise labeled by NIOSH to job site in manufacturer's containers.

PART 2 - EQUIPMENT

AIR PURIFYING RESPIRATORS

Respirator Bodies: Provide half or full-face type respirators. Equip fullface respirators with a nose cup or other anti-fogging device as would be appropriate for use in air temperatures less than 32 degrees Fahrenheit.

Filter Cartridges: Provide, at a minimum, P100 HEPA type filters labeled with NIOSH Certification for "Radionuclides, Radon Daughters, Dust, Fumes, Mists including Asbestos-Containing Dusts and Mists" and color coded in accordance with ANSI Z228.2 (1980). In addition, a chemical cartridge section may be added, if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate color code and NIOSH Certification.

Non-permitted respirators Do not use quarter face respirators.

PART 3 - EXECUTION

GENERAL:

Respiratory Protection Program: Comply with ANSI Z88.2 - 1980 "Practices for Respiratory Protection" and OSHA 29 CFR 1910 and 1926.

Require that respiratory protection be used at all times that there is any possibility of disturbance of asbestos-containing materials whether intentional or accidental.

Require that a respirator be worn by anyone in a Work Area at all times, regardless of activity, during a period that starts with any operation which could cause airborne fibers until the area has been cleared for re-occupancy in accordance with Section 01714.

Regardless of Airborne Fiber Levels: Require that the minimum level of respiratory protection used be half mask negative pressure respirators with high efficiency filters.

FIT TESTING:

Initial Fitting: Provide initial fitting of respiratory protection during a respiratory protection course of training set up and administered by a competent person. Fit types of respirator to be actually worn by each individual. Allow an individual to use only those respirators for which training and fit testing has been provided.

On a Weekly Basis, check the fit of each worker's respirator by having irritant smoke blown onto the respirator from a smoke tube.

Upon Each Wearing: Require that each time an air-purifying respirator is put on it be checked for fit with a positive and negative pressure fit test in accordance with the manufacturer's instructions or ANSI Z88.2 (1980).

TYPE OF RESPIRATORY PROTECTION REQUIRED:

Provide Respiratory Protection as indicated on the "Respiratory Protection Schedule" at the end of this section. Where this schedule does not apply, consult Environmental Consultant for level of respiratory protection required.

PERMISSIBLE EXPOSURE LIMIT (PEL):

8-Hour Time Weighted Average (TWA) and Ceiling Concentration of asbestos fibers to which any worker may be exposed shall not exceed 0.01 fibers/cubic centimeter

Fibers: For purposes of this section, fibers are defined as all fibers regardless of composition as counted in the NIOSH 7400 procedure.

Electron Microscopy: If Electron Microscopy is used to determine airborne fiber levels, only asbestos fibers will be enumerated, but fibers of any size detected by the testing of Section 01714 Work Area Clearance will be counted.

AIR PURIFYING RESPIRATORS:

Negative pressure - half or full facepiece: Supply a sufficient quantity of respirator filters, so that workers can change filters during the Workday. Require that respirators be decontaminated, and filters discarded, each time a worker leaves the Work Area. Require that new filters be installed each time a worker re-enters the Work Area. Store respirators and filters at the job site in the changing room and protect from exposure to asbestos prior to their use.

Powered air purifying - half or full facepiece: Supply a sufficient quantity of high efficiency particulate air respirator filters approved for asbestos so that workers can change filters at any time that flow through the filter decreases to the level at which the manufacturer recommends filter replacement. Require that regardless of flow, filter cartridges be replaced after 40 hours of use. Require that HEPA elements in filter cartridges be protected from wetting during showering. Require entire exterior housing of respirator, including blower unit, filter cartridges, hoses, battery pack, face mask, belt, and cords, be decontaminated each time a worker leaves the Work Area. Caution should be used to avoid shorting battery pack during washing. Provide an extra battery pack for each respirator so that one can be charging while one is in use.

END OF SECTION - 01562

SECTION 01563 - DECONTAMINATION UNITS

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF WORK:

Provide Personnel and Equipment Decontamination facilities. Require that the Personnel Decontamination Unit be the only means of ingress and egress for the Work Area. Require that all materials exit the Work Area through the Equipment Decontamination Unit.

RELATED WORK SPECIFIED ELSEWHERE:

Refer to Section 01503 Temporary Facilities for electrical requirements and requirements relative to connection of decontamination facilities to building systems such as water, sewer, and electrical.

SUBMITTALS

Before the Start of Work: Submit the following to the Environmental Consultant for review. Do not begin work until these submittals are returned with Environmental Consultant's approval indicating that the submittal is returned for unrestricted use or final-but-restricted use.

Personnel Decontamination Unit: Provide shop drawing showing location and assembly of personnel decontamination units.

Equipment Decontamination Unit: Provide shop drawing showing location and assembly of equipment decontamination units.

Filters: Provide product data and shop drawing of installation on decontamination unit.

Sump Pump: Provide product data.

PART 2 - PRODUCTS

Polyethylene Sheet: A single polyethylene film in the largest sheet size possible to minimize seams, 6.0 mil thick as indicated, clear, frosted, or black as indicated.

Reinforced Polyethylene Sheet: Where plastic sheet is the only separation between the Work Area and building exterior, provide translucent, nylon reinforced, laminated, polyethylene film that conforms to requirements. Provide largest size possible to minimize seams, 6.0 mil thick as indicated, frosted or black as indicated.

Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive, which is formulated to stick aggressively to sheet polyethylene.

Spray Adhesive: Provide spray adhesive in aerosol cans, which is specifically formulated to stick tenaciously to sheet polyethylene.

Shower Head and Controls: Provide a factory-made showerhead producing a spray of water, which can be adjusted for spray size and intensity. Feed shower with water mixed from hot and cold supply lines. Arrange so that control of water temperature, flow rate, and shut off is from inside shower without outside aid. **Provide, at a minimum, one (1) showerhead for every eight (8) workers.**

Filters: Provide cascaded filter units on drain lines from showers or any other water source carrying water from the Work Area. Provide units with disposable filter elements as indicated below. Connect so that discharged water passes through primary filter and output of primary filter passes through secondary filter.

Primary Filter - Passes particles 20 microns and smaller
Secondary Filter - Passes particles 5 microns and smaller

Sump Pump: Provide totally submersible waterproof sump pump with integral float switch. Provide unit sized to pump 2 times the flow capacity of all showers or hoses supplying water to the sump, through the filters specified herein when they are loaded to the extent that replacement is required. Provide unit capable of pumping debris, sand, plaster or other materials washed off during decontamination procedures without damage to mechanism of pump. Adjust float switch so that a minimum of 3" remains between top of liquid and top of sump pan.

PART 3 - EXECUTION

PERSONNEL DECONTAMINATION UNIT:

Provide a Personnel Decontamination Unit constructed of sufficient framing and polyethylene sheeting at least 6 mil in thickness, in a serial arrangement consisting of connected rooms or spaces, Changing Room, Drying Room, Shower Room, Airlock and Equipment Room. Require all persons without exception to pass through this Decontamination Unit for entry into and exiting from the Work Area for any purpose. Do not allow parallel routes for entry or exit. Do not remove equipment or materials through Personnel Decontamination Unit.

Changing Room (clean room): Provide a room that is physically and visually separated from the rest of the building for the purpose of changing into protective clothing.

- Construct, using polyethylene sheeting, at least 6 mil in thickness, to provide an airtight seal between the Changing Room and the rest of the building.
- Locate so that access to Work Area from Changing Room is through Shower Room.
- Separate Changing Room from the building by a sheet plastic flapped doorway.
- Require workers to remove all street clothes in this room, dress in clean, disposable coveralls, and don respiratory protection equipment. Do not allow asbestos-contaminated items to enter this room. Require Workers to enter this room either from outside the structure dressed in street clothes, or naked from the showers.

- An existing room may be utilized as the Changing Room if it is suitably located and of a configuration whereby workers may enter the Changing Room directly from the Shower Room. Protect all surfaces of room with sheet plastic as set forth in Section 01526 Temporary Enclosures. Authorization for this must be obtained from the Environmental Consultant in writing prior to start of construction. Submit written request detailing layout and protective measures proposed.
- Maintain floor of changing room dry and clean at all times. Do not allow overflow water from shower to wet floor in changing room.
- Provide posted information for all emergency phone numbers and procedures.

Drying Room: Provide a drying room as an airlock and a place for workers to dry after showering. Construct room by providing a pan continuous with or draining to Shower Room pan. Install a freely draining wooden or non-skid metal floor in pan at elevation of top of pan. Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.

Separate this room from the Changing Room and Shower Room by a triple flapped sheet plastic doorway fabricated of 6-mil polyethylene.

Provide a continuously adequate supply of disposable bath towels.

Shower Room: Provide a completely watertight operational shower to be used for transit by workers wearing proper personnel protection and respiration, heading for the Work Area from the Changing Room, or for showering by workers headed out of the Work Area after undressing in the Equipment Room.

- Construct room by providing a shower pan and 2 shower walls in a configuration that will cause water running down walls to drip into pan. Install a freely draining wooden or non-skid metal floor in shower pan at elevation of top of pan.
- Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
- Separate this room from the Drying Room and Airlock with splashproof entrances with doors arranged in the following configuration:
At each entrance to the Shower Room construct a doorframe out of nominal 2" x 4" lumber with 1-1/2" sides and 1-1/2" top and bottom. Attach to this doorframe two overlapping flaps of elastomeric membrane material, fastened at the top and sides. Overlap the flaps a minimum of 6" in a direction that presents a shingle-like configuration to the water stream from the shower. Overlap bottom by 1-1/2" minimum. Arrange so that any air movement out of the Work Area will cause the flaps to seal against the door frame.
- Provide showerhead and controls.
- Provide temporary extensions of existing hot and cold water and drainage, as necessary for a complete and operable shower.
- Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.
- Arrange so that water from showering does not splash into the Changing or Equipment Rooms.
- Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the Work Area.

- Provide flexible hose shower head.
- Pump wastewater to drain or to storage for use in amended water. If pumped to drain, provide 20 micron and 5-micron wastewater filters in line to drain or wastewater storage. Contractor must receive approval from building owner and the local sewer district prior to discharge into sewer. Change filters daily or more often if necessary. Locate filters so that a shower pan catches water lost during filter changes.

Airlock: Provide an airlock between Shower Room and Equipment Room. This is a transit area for workers. Separate this room from Equipment Room by a triple flapped sheet plastic doorway.

Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.

Separate this room from the Equipment Room and Shower Room with triple flapped doorways fabricated of 6-mil polyethylene.

Equipment Room (contaminated area): Require work equipment, footwear and additional contaminated Work clothing to be left here. This is a change and transit area for workers.

Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.

Separate this room from the Shower Room and Air Lock with triple flapped doorways fabricated of 6-mil polyethylene.

Provide a drop cloth layer of sheet plastic on floor in the Equipment Room. Provide a minimum of two (2) layers of plastic at all times. Use only clear plastic to cover floors.

Airlock: Provide an airlock between Equipment Room and Work Area. This is a transit area for workers.

Separate this room from Equipment Room and Work Area by a triple flapped sheet plastic doorway fabricated of 6-mil polyethylene.

Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.

Work Area: Separate Work Area from the Equipment Room by triple flapped doorways fabricated of 6-mil polyethylene. If the airborne asbestos level in the Work Area is expected to be high, add an intermediate cleaning space between the Equipment Room and the Work Area. Damp wipe clean all surfaces as needed.

Decontamination Sequence: The Contractor shall require that all workers adhere to the following sequence when entering or leaving the Work Area.

Entering Work Area: Worker enters Changing Room and removes street clothing, puts on clean disposable overalls and respirator, and passes through the Shower Room into the Equipment Room.

Any additional clothing and equipment left in Equipment Room needed by the worker are put on in the Equipment Room.

Worker proceeds to Work Area.

Exiting Work Area:

Before leaving the Work Area, require the worker to remove all gross contamination and debris from coveralls and feet.

The worker then proceeds to the Equipment Room and removes all clothing except respiratory protection equipment.

Extra work clothing such as boots, hard hats, goggles and gloves are to be stored in contaminated end of the Equipment Room.

Disposable coveralls are placed in a bag for disposal as asbestos waste.

Require that Decontamination procedures found in Section 01560 be followed by all individuals leaving the Work Area.

After showering, the worker moves to the Changing Room and dresses in either new coveralls for another entry or street clothes if leaving.

EQUIPMENT DECONTAMINATION UNIT (Load-Out):

Provide an Equipment Decontamination Unit consisting of a serial arrangement of rooms, Clean Room, Airlock, Holding Room, Airlock and Washroom for removal of equipment and material from Work Area. Do not allow personnel to enter or exit Work Area through Equipment Decontamination Unit. The equipment decontamination unit shall remain secured when not loading out equipment or debris.

Arrange with airlocks between rooms as required below.

Wash Down Station: Provide an enclosed Shower Unit located in Work Area just outside Washroom as an equipment, bag and container cleaning station.

Fabricate waterproof floor extending 6' - 0" beyond Wash Down station in all directions. Install seamless waterproof membrane over area and extend over curbs on all four sides. Form curbs from 2" x 4" lumber laid on the flat.

Do not allow water to collect on waterproof membrane. Remove continuously with wet vacuum(s) or mop(s).

Washroom: provide washroom for cleaning of bagged or containerized asbestos-containing waste materials passed from the Work Area.

Construct washroom of wood, metal or plastic framing and polyethylene sheeting, at least 6 mil in thickness and located so that packaged materials, after being wiped clean, can be passed to the Holding Room.

Separate this room from the Work Area by a triple flapped door of 6-mil polyethylene sheeting.

Provide a drop cloth layer of plastic on floor in the Washroom. Provide a minimum of two (2) layers of plastic at all times. Use only clear plastic to cover floors.

Airlock: Provide an airlock between Washroom and Holding Room. This is a transit area.

Separate this room from Washroom and Holding Room with triple flapped sheet plastic doorways fabricated of 6-mil polyethylene.

Separate this room from the rest of the building and adjacent spaces with airtight walls fabricated of 6 mil polyethylene.

Holding Room: Provide Holding Room as a drop location for bagged asbestos-containing materials passed from the Washroom. Construct Holding Room of wood, plastic or metal framing and polyethylene sheeting, at least 6 mil in thickness.

Separate this room from Washroom and the Clean Room by triple flapped doors fabricated from 6-mil sheet plastic.

Separate this room from the rest of the building and adjacent spaces with airtight walls fabricated of 6 mil polyethylene.

Airlock: Provide an airlock between Holding Room and Clean Room. This is a transit area.

Separate this room from adjacent Holding Room and Clean Room by triple flapped sheet plastic doorways fabricated of 6-mil polyethylene.

Separate this room from the rest of the building and adjacent spaces with airtight walls fabricated of 6 mil polyethylene.

Clean Room: provide Clean Room to isolate the Holding Room from the building exterior. If possible, locate to provide direct access to the Holding Room from the building exterior.

Erect Critical and Primary Barriers as described in Section 01526 "Temporary Enclosures" in an existing space. If no space exists, construct Clean Room of wood, plastic or metal framing and polyethylene sheeting, at least 6-mil in thickness.

Separate this room from the exterior by a triple flapped door of 6-mil polyethylene sheeting.

Load-out Area: The load-out area is the transfer area from the building to a truck or dumpster. It may be the Clean Room of the Equipment Decontamination unit or a separate room or loading dock area.

Decontamination Sequence: Take all equipment or material from the Work Area through the Equipment Decontamination Unit according to the following procedure:

At wash down station, thoroughly wet clean contaminated equipment or sealed polyethylene bags and pass into Washroom.

When passing equipment or containers into the Washroom, close all doorways of the Equipment Decontamination Unit, other than the doorway between the Wash down Station and the Washroom. Keep all outside personnel clear of the Equipment Decontamination Unit.

Once inside the washroom, wet clean the bags and/or equipment and place into second disposable bag.

When cleaning is complete, pass items into Holding Room. Close all doorways except the doorway between the Holding room and the Clean Room.

Workers from the building exterior enter Holding Area and remove decontaminated equipment and/or containers for disposal.

Require these workers to wear full protective clothing and appropriate respiratory protection.

At no time is a worker from an uncontaminated area to enter the enclosure during this sequence.

CONSTRUCTION OF THE DECONTAMINATION UNITS:

Walls and Ceiling: Construct airtight walls and ceiling using polyethylene sheeting, at least 6-mil in thickness. Attach to existing building components or a temporary framework.

Floors: Use 2 layers (minimum) of 6-mil polyethylene sheeting to cover all surfaces in all areas of the Decontamination Units. Use only clear plastic to cover floors.

Flap Doors: Fabricated from three (3) overlapping sheets with openings a minimum of three feet (3') wide. Configure so that sheeting overlaps adjacent surfaces. Weigh sheets at bottoms as required so that they quickly close after being released. Put arrows on sheets to indicate direction of overlap and/or travel. Provide a minimum of six feet (6') between entrance and exit of any room. Provide a minimum of three feet (3') between doors to airlocks.

Visual Barrier: Where the Decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque polyethylene sheeting at least 6-mil in thickness so that worker privacy is maintained, and Work procedures are not visible to building occupants.

Alternate methods of providing Decontamination facilities may be submitted to the Environmental Consultant for acceptance. Do not proceed with any such method(s) without written authorization of the Environmental Consultant.

Electrical: Provide sub panel at Changing Room to accommodate all equipment. Power sub panel directly from a building electrical panel. Connect all electrical branch circuits in Decontamination unit and particularly any pumps in shower room to a ground-fault circuit protection device.

CLEANING OF DECONTAMINATION UNITS:

Clean debris and residue from inside of Decontamination Units on a daily basis. Damp wipe or hose down all surfaces after each shift change. Clean debris from shower pans on a daily basis.

If the Changing Room of the Personnel Decontamination Unit becomes contaminated with asbestos-containing debris, abandon the entire Decontamination Unit and erect a new Decontamination Unit. Use the former Changing Room as an inner section of the new Equipment Room.

SIGNS:

Post an approximately 20" x 14" inch manufactured caution sign at each entrance to the Work Area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

LEGEND

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA

Provide spacing between respective lines at least equal to the height of the respective upper line.

Post an approximately 10 inches by 14-inch manufactured sign at each entrance to each Work Area displaying the following legend with letter sizes and styles of a visibility at least equal to the following:

LEGEND

NOTATION

NO FOOD, BEVERAGES OR TOBACCO PERMITTED	3/4" Block
ALL PERSONS SHALL DON PROTECTIVE CLOTHING (COVERINGS) BEFORE ENTERING THE WORK AREA	3/4" Block
ALL PERSONS SHALL SHOWER IMMEDIATELY AFTER LEAVING WORK AREA AND BEFORE ENTERING THE CHANGING AREA	3/4" Block

END OF SECTION - 01563

SECTION 01601 - MATERIALS AND EQUIPMENT

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project.

Standards: Refer to Section "Definitions and Standards" for applicability of industry standards to products specified.

Administrative procedures for handling requests for substitutions made after award of the Contract are included in Section 1632 Product Substitutions.

DEFINITIONS

Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well recognized meanings in the construction industry.

"Products" are items purchased for use in performing the Work or for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

"Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature that is current as of the date of the Contract Documents.

"Foreign Products", as distinguished from "domestic products," are items substantially manufactured (50 percent or more of the product's value) outside of the United States and its possessions, or produced or supplied by entities substantially owned (more than 50 percent) by persons who are not citizens of nor living within the United States and its possessions.

"Materials" are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.

"Equipment" are products that may be either operational or fixed.

Operational Equipment are products with operating parts, whether motorized or manually operated, which requires temporary or permanent service connections, such as wiring or piping.

Fixed Equipment are products necessary for accomplishing the Work that are used as a temporary facility during the Work and removed afterward.

QUALITY ASSURANCE

Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

PRODUCT DELIVERY, STORAGE, AND HANDLING

Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.

Deliver products to the site in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.

Inspect products upon delivery to ensure compliance with the Contract Documents, and to ensure that products are undamaged and properly protected.

Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.

Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.

PART 2 - PRODUCTS

PRODUCT SELECTION

General Product Requirements: Provide products that contain 0% asbestos and that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation.

Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.

Standard Products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.

Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous project experience. Procedures governing product selection include the following:

Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application.

Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.

Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01601

SECTION 01701 - PROJECT CLOSEOUT

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements for Project closeout, including but not limited to:

- Inspection procedures.
- Project record document submittal.
- Final cleaning.
- Final paperwork submission.

SUBSTANTIAL COMPLETION

Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.

In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documents for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.

If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete Work, and reasons the Work is not complete.

Advise Owner of pending insurance change over requirements.

Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.

Inspection Procedures: On receipt of a request for inspection, the Environmental Consultant will either proceed with inspection or advise the Contractor of unfulfilled requirements. The Environmental Consultant will accept the Work following inspection or advise the Contractor of Work that must be completed or corrected before the Work is accepted.

The Environmental Consultant will repeat inspection when requested and assured that the Work has been substantially completed.

Results of the completed inspection will form the basis of requirements for final acceptance.

Reinspection Procedure: The Environmental Consultant will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items the completion of which has been delayed because of circumstances acceptable to the Environmental Consultant.

Upon completion of reinspection, the Environmental Consultant will accept the Work, or advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for Final Acceptance.

If necessary, reinspection will be repeated; however, the Contractor shall be responsible for and pay all costs for reinspections starting with the second re-inspection conducted at a Project Site. Reinspection costs will be deducted from the Contract amount, by executed Change Order, prior to Final Payment.

Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and Modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and Modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation.

Upon completion of the Work, submit record Specifications to the Environmental Consultant for the Owner's records.

CLOSEOUT DOCUMENTS:

Prepare and submit two (2) copies of all closeout documents required for the Project to the Environmental Consultant. Closeouts should be tabbed and organized as indicated below. The closeout documentation is required 30 days from the completion of each phase of the project. **If the closeout documentation is not provided within 30 days from the completion of each phase of the project the abatement contractor will be charged a fee of \$250.00 per day for each day over the 30-day period.**

Section 1: Project Summary

- A. List Project name, address and project number
- B. Dates when Work was performed
- C. Scope of Work
- D. Contractor's name and address
- E. Name of Contractor's Project Manager
- F. Environmental Consultant's name and address
- G. Any other pertinent information

Section 2: Contract Administration Documentation

- A. Proof of Missouri State Registration
- B. Name, AHERA and State Accreditation Certificates of Each Worker
- C. Worker's Medicals, Fit Tests & Certification of Acknowledgement
- D. 10 Day Missouri/NESHAP Notification

- E. Asbestos Abatement Permit from Issuing Agency
- F. Insurance Certificates
- G. Copy of all executed Change Orders
- H. Payment Applications
- I. Fully executed waste Manifest(s), Landfill Receipts and Chain of Custody
- J. Waste Hauler's Permit & License
- K. Contractor's Daily Log Reports

Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Environmental Consultant.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

FINAL CLEANING

General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".

Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.

Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

END OF SECTION 01701

SECTION 01711 - PROJECT DECONTAMINATION

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF REQUIREMENTS:

General: Decontamination of the Work Area following asbestos abatement.

The pressure differential system shall be used to remove airborne fibers generated by the abatement Work.

RELATED WORK SPECIFIED ELSEWHERE:

Removal of Gross Debris is integral with the performance of abatement work and as such is specified in the appropriate Work Section(s) of these Specifications:

Section 02081 Removal of Asbestos-Containing Materials

Work Area Clearance: Air testing and other requirements, which must be met before release of Contractor and reoccupancy of the Work Area, are specified in Section 01714 Work Area Clearance.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

GENERAL:

Work of This Section includes the decontamination of air in the Work Area which has been, or may have been, contaminated by the elevated airborne asbestos fiber levels generated during abatement activities, or which may previously have had elevated fiber levels due to friable asbestos-containing materials in the space.

Work of This Section includes the cleaning, decontamination, and Removal of temporary facilities installed prior to abatement Work, including:

Critical Barriers erected by Work of Section 01526
Decontamination Unit erected by Work of Section 01563
Pressure Differential System installed by Work of Section 01513

Work of This Section includes the cleaning, and decontamination of all surfaces (ceiling, walls, floor) of the Work Area, and all equipment in the Work Area.

START OF WORK:

Previous Work: During completion of the asbestos abatement work specified in other Sections, one layer of polyethylene sheeting installed on floor will have been removed and disposed of along with any debris generated by the asbestos abatement Work.

Start of Work: Work of this Section involves cleaning of critical barriers and the final layer of polyethylene.

CLEANING:

Cleaning: Carry out cleaning of all surfaces of the Work Area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp-cleaning and mopping, and/or a High Efficiency Particulate Air (HEPA) filtered vacuum. (Note: A HEPA vacuum may fail if used with wet material.) Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue cleaning until there is no visible debris on plastic sheeting or other surfaces.

Contractor's Testing: At the completion of cleaning, visually inspect all surfaces. Reclean if any dust, debris, etc. is found. At completion of this inspection, contractor may want to sweep entire Work Area including walls, ceilings, ledges, floors and other surfaces in the Work Area with exhaust from forced-air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). Do not direct forced-air equipment at any seal in any Critical Barrier. If any debris or dust is found repeat the cleaning. Continue this process until no debris dust or other material is found while sweeping of all surfaces with forced-air equipment.

VISUAL INSPECTION:

Temporary lighting: Provide a minimum of 100-foot candles of lighting on all surfaces in the areas to be subjected to visual inspection. Provide handheld lights providing 150-foot candles at 4 feet capable of reaching all locations in Work Area.

Lifts: Provide ladders, scaffolding, and lifts as required providing access to all surfaces in the area to be subjected to visual inspection. Access is to allow touching of all surfaces.

After Final Cleaning, Perform a Complete Visual Inspection of the entire Work Area including: all surfaces, ceiling, walls, floor, decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any sources, residue on surfaces, dust or other matter. If any debris, residue, dust or other matter is found, repeat final cleaning and continue decontamination procedure from that point. When the area is visually clean, complete the visual inspection certification (this inspection is not complete until confirmed in writing, on the certification by Project Superintendent) and notify New Environmental Concepts of need for a final Certification of Visual Inspection. The Environmental Consultant will conduct a visual inspection of the area. If area is not deemed visually clean by the Environmental Consultant, Contractor shall reclean and reinspect as specified above.

FINAL CLEANING:

Cleaning: Remove final layer of polyethylene. This cleaning will be performed on existing wall, floor and ceiling surfaces and critical barriers. Carry out cleaning of all surfaces of the Work Area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp cleaning and mopping, and/or a High Efficiency Particulate Air (HEPA) filtered vacuum. (Note: A HEPA vacuum may fail if used with wet material.) Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue cleaning until there is no visible debris on plastic sheeting or other surfaces.

Contractor's Testing: At the completion of the final cleaning, visually inspect all surfaces. Reclean if any dust, debris etc. if found. At completion of this inspection, contractor may want to sweep entire Work Area including walls, ceilings, ledges, floors and other surfaces in the Work Area with exhaust from forced-air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). Do not direct forced-air equipment at any seal in any Critical Barrier. If any debris or dust is found repeat the cleaning. Continue this process until no debris dust or other material is found while sweeping of all surfaces with forced-air equipment.

LOCKBACK:

Encapsulation of substrate: After the Work Area is certified by the Environmental Consultant to be visually clean, Contractor may perform Encapsulation of substrate by use of a tinted lockdown. Maintain Pressure Differential System in operation during Encapsulation Work. Perform Work only after meeting the following requirements:

Surfaces to be covered have met the requirements for a visual inspection in this Section.

FINAL AIR SAMPLING PCM:

Phase Contrast Microscopy (PCM): After the Work Area is found to be visually clean, air samples will be taken and analyzed in accordance with the procedure for Phase Contrast Microscopy set forth in Section 01714 Work Area Clearance:

If Release Criteria are not met, repeat Final Cleaning and continue Decontamination Procedure from that point. **Contractor shall be responsible for all costs incurred for all required additional clearance testing performed by the Owner or Environmental Consultant.**

If Release Criteria are met, proceed to Work of this Section on Removal of Work Area Isolation.

REMOVAL OF WORK AREA ISOLATION:

After all requirements of this Section and Section 01714 Work Area Clearance have been met:

Shut down and remove the Pressure Differential System. Seal HEPA filtered fan units, HEPA vacuums and similar equipment with 6 mil polyethylene sheet and duct tape to form a tight seal at intake end before being moved from Work Area.

Remove Personnel Decontamination Unit.

Remove the Critical Barriers separating the Work Area from the rest of the building. Remove any small quantities of residual material found upon Removal of the plastic sheeting with wet wiping, HEPA filtered vacuum cleaners and local area protection. If significant quantities, as determined by the Environmental Consultant, are found then the entire area affected shall be decontaminated as specified in Section 01712 Cleaning & Decontamination Procedures.

Remove all equipment, materials, and debris from the Work site.

Dispose of all asbestos-containing waste material as specified in Section 02084 Disposal of Waste Material.

SUBSTANTIAL COMPLETION OF ABATEMENT WORK:

Asbestos Abatement Work is Substantially Complete upon meeting the requirements of this section and Section 01714 Work Area Clearance, including submission of Certificates of Visual Inspection.

CERTIFICATE OF VISUAL INSPECTION:

A Certificate of Visual Inspection certification is to be completed by the Contractor for each Work Area. Upon completion of the required certification, the Contractor shall request a visual inspection by the Environmental Consultant. Submit completed Certificates with Application for Final Payment.

END OF SECTION - 01711

SECTION 01712 - CLEANING AND DECONTAMINATION PROCEDURES

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF THE WORK:

The extent of cleaning and decontamination Work includes:

- HEPA Vacuuming and Wet Cleaning Work Areas
- Cleaning of Contaminated Objects
- Decontamination of Rooms or Spaces

RELATED WORK SPECIFIED ELSEWHERE:

Work Area Clearance: Specified in Section 01714 Work Area Clearance

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTIONS

GENERAL:

Complete the following (where applicable) prior to start of Work of this section:

- 01560 Worker Protection
- 01562 Respiratory Protection

PRE-CLEANING:

All Work Areas shall be pre-cleaned prior to the initiation of any asbestos removal as follows:

HEPA vacuum or wet-clean all floors and all other horizontal surfaces.

Dispose of all debris, filters, mopheads, protective clothing and other equipment in accordance with Section 02084 of this Specification.

WET CLEANING:

Accomplish wet cleaning during decontamination with paper towels or disposable rags:

Immerse paper towel or rag in container of water with surfactant, wring out, fold into quarters, wipe surface once and refold to a fresh face of cloth. Proceed in this manner until all available faces of paper towel or rag have been used.

Do not place rags back in container to rinse out or for any other purpose. If a used towel or rag comes in contact with water, empty container, rinse and refill.

HEPA Vacuuming Requirements:

Surfaces that cannot be wet cleaned shall be cleaned using a HEPA vacuum. Surfaces containing damaged friable ACM shall not be cleaned.

HEPA vacuum all surfaces in the room starting at the ceiling, then top of walls and work downward to the floor.

HEPA vacuum the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch carpeted floors and are within 1/16" of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one half the width of the floor attachment. At the completion of one cleaning, vacuum the floor a second time a right angle to the first, utilizing the same procedure.

HEPA filtered fan units shall be in operation during cleaning Work.

CLEANING AND DECONTAMINATING OBJECTS

Perform all Work of decontaminating objects wherever possible on a plastic drop cloth.

HEPA vacuum all surfaces of object and immediate area before moving the object.

Pick-up object, if possible, and HEPA vacuum all surfaces.

Hand to off-sheet Worker who will wet-clean object, if possible, and pass out of Work Area for placement in storage location.

Decontaminate area where object was located by HEPA vacuuming twice, in two perpendicular directions. Wet clean if necessary, to remove any debris.

DECONTAMINATION OF ROOMS:

General: These procedures apply to any rooms adjacent to a Work Area, which become contaminated by fiber migration or gross debris.

Shut down all ventilation into space.

Seal entry to Work Area with 6 mil polyethylene. Slit polyethylene for entry. Install a flap to cover the slit automatically; tape slit closed after entry.

Install Differential Pressure System in accordance with Section 01513.

HEPA vacuum all surfaces in the room starting at the ceiling, then top of walls and work downward to the floor.

HEPA vacuum the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch the floor if carpeted and are within 1/16" of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one half the width of the floor attachment. At the completion of one cleaning, vacuum the floor a second time at right angles to the first.

Operate HEPA filtered fan unit in space for 24 hours minimum.

At completion of Decontamination Work, workers decontaminate in accordance with Section 01560.

Secure area from occupancy until air-monitoring results per Section 01714 Work Area Clearance indicate area has passed clearance criteria.

END OF SECTION - 01712

SECTION 01714 - WORK AREA CLEARANCE

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to other Division-1 Specification Sections, apply to this Section.

Visual Inspection: required as a prerequisite of air testing, is set forth in Section 01711 Project Decontamination.

Air Monitoring: performed by the Owner during abatement Work, is described in Section 01410 Test Laboratory Services.

SUMMARY

This Section sets forth post-abatement airborne fiber concentrations in the Work Area and describes testing procedures the Owner will use to measure these levels.

Retesting required due to Contractor's failure to meet final air sampling criteria shall be paid for by the Contractor by executed Change Order prior to final payment.

VISUAL INSPECTION:

Work of this Section will not begin until the visual inspection described in Section 01711 Project Decontamination is complete and has been accepted by the New Environmental Concepts representative.

CONTRACTOR RELEASE CRITERIA:

The Asbestos Abatement Work Area is Cleared when the Work Area is visually clean and airborne fiber concentrations have been reduced to less than 0.01 f/cc or 70 structures per millimeter squared, whichever is applicable.

Air Monitoring:

To determine if the elevated airborne asbestos structure concentration encountered during abatement operations has been reduced to the specified level, the Owner will secure samples and analyze them according to the following procedures.

Aggressive Sampling procedures as described below will be followed.

Air Monitoring Samples will be secured as indicated below. If the area meets the clearance criteria, Work of Section 01711 can continue

Aggressive Sampling:

Air Samples will be taken using aggressive sampling techniques, if required, as follows:

Before sampling pumps are started, the exhaust from forced-air equipment (leaf blower with an approximately 1 horsepower electric motor) will be swept against all walls, ceilings, floors, edges and all other surfaces in the room.

Air samples will be collected in areas subject to normal air circulation away from room corners, obstructed locations, and sites near windows, doors or vents.

Schedule of Air Samples: Phase Contrast Microscopy:

In each homogeneous Work Area after completion of all cleaning Work, samples will be taken and analyzed as follows:

Samples will be collected on 25 mm. cassettes with an 0.8 mixed cellulose ester in a cassette with a conductive extension cowl.

Detection Limit: 0.01 fibers per cubic centimeter

Analysis: Fibers on each filter will be measured using the NIOSH Method 7400 entitled "Fibers" published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987.

Fibers: referred to in this section include fibers regardless of composition as counted by the NIOSH 7400 Method.

Release Criteria: Decontamination of the Work Site is complete when every Work Area sample is below 0.01 f/cc above and the 95% Upper Confidence Level is at or below the Detection Limit. If any sample is above the Detection Limit, then the decontamination is incomplete and recleaning per section 01711 Project Decontamination is required.

LABORATORY TESTING:

PHASE CONTRAST MICROSCOPY:

The services of a testing laboratory (Third Party Air Monitor) will be employed by the Owner to perform laboratory analysis of the air samples. A microscope and technician will be set up at the job site, or samples will be sent daily so that verbal reports on air samples results can be obtained within 24 hours. A complete record of air monitoring tests and results can be furnished to the Contractor upon request.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION - 01714

SECTION 02062 - NON-ASBESTOS DEMOLITION

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work of this section.

DESCRIPTION OF WORK:

Extent of non-asbestos demolition work is demolition of any materials that need demolished to access asbestos work.

JOB CONDITIONS:

Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.

Conditions existing at time of commencement of Contract will be maintained by Owner insofar as practicable.

Protection: Provide temporary barricades and other forms of protection as required to protect personnel and from injury due to selective demolition work.

Traffic: Conduct demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, works, and other adjacent occupied or used facilities.

Do not close, block or otherwise obstruct streets, walks or other occupied or used alternate routes around closed or obstructed traffic ways if required by governing regulations.

Explosives: Use of explosives will not be permitted.

Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

DEMOLITION:

Perform demolition work in a systematic manner. Use such methods as required to complete work in accordance with demolition schedule and governing regulations.

Provide services for effective air and water pollution controls as needed or as required by local authorities having jurisdiction.

Asbestos contamination: If a disturbance of asbestos-containing material occurs, remove any released material and decontaminate the immediate vicinity of the release in accordance with the requirements of this Specification.

DISPOSAL OF DEMOLISHED MATERIALS:

Debris, rubbish and other materials resulting from demolition operation must be disposed of in an approved demolition landfill.

If hazardous, non-asbestos-containing materials are encountered during demolition operations, notify the Environmental Consultant immediately and comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.

Burning of removed materials is not permitted on project site.

Disposal of asbestos-containing waste is not in the work of this section. Disposal of this material is specified in Section 02084 Disposal of Waste Materials.

END OF SECTION 02062

SECTION 02081 - REMOVAL OF ASBESTOS-CONTAINING MATERIALS

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to Division-1 Specification Sections, apply to this Section.

GENERAL:

Work of this Section applies to removal of asbestos-containing materials that include, but are not limited to, the following:

- Removal of Asbestos Containing Pipe Insulation
- Removal of Asbestos Containing Mudded Pipe Fitting Insulation
- Removal of Asbestos Containing Stair Tread & Adhesive
- Removal of Asbestos Containing Floor Tile & Mastic
- Removal of Asbestos Containing Fire Doors
- Removal of Asbestos Containing Building Caulk
- Removal of Asbestos Containing Parapet Wall Sealant

RELATED WORK SPECIFIED ELSEWHERE:

Installation of Critical and Primary Barriers, and Work Area Isolation Procedures are set forth in Section 01526 Temporary Enclosures.

Project Decontamination procedures after Removal of the Primary Barrier are specified in Section 01711 Project Decontamination.

Disposal of waste materials is specified in Section 02084 Disposal of Waste Materials.

SUBMITTALS:

Before Start of Work: Submit the following to the Environmental Consultant for review. Do not start Work until these submittals are returned with Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use.

Surfactant: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements.

NESHAP Certification: Submit certification from manufacturer of surfactant, removal encapsulant and mastic remover that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet or remove Asbestos-Containing Materials to which it is applied as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M).

Material Safety Data Sheet: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant, encapsulating material, mastic remover and solvent proposed for use on the Work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

PART 2 - PRODUCTS:

Wetting Materials: For wetting prior to disturbance of ACM, use amended water.

Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the Asbestos-Containing Material and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

Polyethylene Sheet: A single polyethylene film in the largest sheet size possible to minimize seams, 6.0 mil thick as indicated, clear, frosted, or black as indicated.

Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive, which is formulated to stick aggressively to sheet polyethylene.

Spray Cement: Provide spray adhesive in aerosol cans, which is specifically formulated to stick tenaciously to sheet polyethylene.

Disposal Bags: Provide 6 mil thick leak-tight polyethylene bags labeled as required by Section 02084 Disposal of Asbestos-Containing Waste Material.

Fiberboard or Metal Drums: Provide heavy-duty leak tight fiberboard or metal drums, if required, with tight sealing locking metal tops.

PART 3 - EXECUTION

WORKER PROTECTION:

Before beginning Work with any material for which a Material Safety Data Sheet has been submitted provide workers with the required protective equipment. Require that appropriate protective equipment be used at all times.

Thoroughly wet to satisfaction of Environmental Consultant, Asbestos-Containing Materials to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for amended water to penetrate material thoroughly. Spray material repeatedly during the Work process to maintain a continuously wet condition. Perforate outer covering of any installation which has been painted and/or jacketed in order to allow penetration of amended water or use injection equipment to wet material under the covering. Where necessary, carefully strip away while simultaneously spraying amended water on the installation to minimize dispersal of asbestos fibers into the air.

Mist Work Area continuously with amended water whenever necessary to reduce airborne fiber levels.

Remove saturated Asbestos-Containing Material in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags bend over and seal with minimum three wraps of duct tape. Clean outside and move to Wash Down Station adjacent to Material Decontamination Unit.

Evacuate air from disposal bags with a HEPA filtered vacuum cleaner before sealing.

Friable Materials: Spray with a mist of amended water. Allow amended water to saturate material to substrate. Remove material and hand-place in a disposal bag. Do not allow to drop to floor. Remove any residue with stiff bristle nylon hand brush.

All materials shall be disposed of in accordance with Section 02084 of this Specification.

END OF SECTION - 02081

SECTION 02084 - DISPOSAL OF WASTE MATERIALS

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract Documents, including, but not limited to Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF THE WORK:

This section describes the disposal of Waste Materials. Disposal includes packaging, transportation and disposal of all waste materials.

DISPOSAL FACILITIES:

For asbestos-containing waste, the contractor shall use list in their proposal which landfill they are proposing to use. The Owner has the right to make the final selection on the landfill

SUBMITTALS:

Before Start of Work: Submit the following to the Environmental Consultant for review. Do not start Work until these submittals are returned with Environmental Consultant's action stamp indicating that the submittal is returned for unrestricted use.

Copy of state or local license for waste hauler, if required.

Sample of labels to be used. Include label identifying the name of the waste generator and the location at which the waste was generated.

Chain of Custody form and sample of Waste Shipment Record as required by NESHAP.

Submit fully executed copies of all manifests and disposal site receipts including grid location of disposed materials to the Owner and Environmental Consultant as required by NESHAP.

PART 2 - PRODUCTS:

Disposal Bags for Asbestos Waste: Provide 6 mil thick leak-tight polyethylene bags labeled with three labels with text as follows:

First Label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
BREATHING AIRBORNE ASBESTOS, TREMOLITE, ANTHOPHYLLITE, OR
ACTINOLITE FIBERS IS HAZARDOUS TO YOUR HEALTH

Second Label: Provide in accordance with U. S. Department of Transportation regulation on hazardous waste marking, 49 CFR parts 171 and 172. Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987:

RQ HAZARDOUS
SUBSTANCE,
SOLID, NOS,
ORM-E, NA 9188
(ASBESTOS)

Third Label: Affix a label to each waste container with the following, in accordance with USEPA National Emission Standards for Hazardous Air Pollutants; asbestos NESHAP revision, Final Rule, 40 CFR Part 61, published November 20, 1990:

Name, Address and Telephone number of Contractor

Johnson County Missouri
Commercial Structure
122 Hout Street
Warrensburg, Missouri

PART 3 - EXECUTION

Comply with the following sections during all phases of this Work:

Section 01560 Worker Protection
Section 01562 Respiratory Protection

GENERAL:

All waste is to be hauled by a waste hauler with all required licenses from all state and local authorities with jurisdiction.

Load all asbestos-containing waste material in disposal bags or leak-tight drums in accordance with all state and local landfill regulations.

Protect interior of truck or dumpster with Critical and Primary Barriers as described in Section 01526 Temporary Enclosures.

Mark vehicle used to transport waste during loading and unloading with signs specified in accordance with USEPA, National Emission Standard for Hazardous Air Pollutants; Asbestos NESHAP Revision, Final Rule, 40 CFR 61.149(d)(1). Published November 20, 1990:

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
Authorized Personnel Only

Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to ensure that no unauthorized persons have access to the material.

Do not store containerized materials outside of the Work Area. Take containers from the Work Area directly to a sealed truck or dumpster. Truck or dumpster shall be locked at all times when not loading or unloading.

Do not transport disposal-bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as asbestos-containing waste and dispose of in accordance with this specification.

At disposal site unload containerized waste:

Sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, return to Work Site for rebagging. Clean entire truck and contents using procedures set forth in section 01711 Project Decontamination.

Retain receipts from landfill for materials disposed.

Indicate grid where each load is disposed at the landfill.

At completion of hauling and disposal of each load, submit fully executed Waste Shipment Record and, if applicable, landfill receipt to Owner with a copy to the Environmental Consultant with the Application for Payment for the construction period covered by the application submitted, or within 35 days from the date the waste was accepted by the initial transporter.

The contractor is responsible for performing all disposal work in accordance with local, state and federal regulations governing asbestos waste.

END OF SECTION - 02084

SECTION 16000 - GENERAL ELECTRICAL REQUIREMENTS

The abatement contractor will be responsible for supplying New Environmental Concepts with 10 each 16-guage 100 ft. extension cords in proper working condition with adequate electrical service to each for the sole use of the Environmental Consultants. As well as the electrical extension cords, the abatement contractor will be responsible for 3 each 3-way extension plugs for use by the Environmental Consultant. These extension cords and 3-way extension plugs are for the Environmental Consultants use only and cannot be utilized by the abatement contractor during this project. These extension cords must be connected to the electrical supply utilizing a GFCI and must remain operational for the entire project. If any of these cords are not functioning at any time during the project, the Environmental Consultant may implement a stop work order until the electrical situation is corrected at no additional cost to the Owner or Environmental Consultant.

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract Documents, including, but not limited to Division-1 Specification Sections, apply to this Section.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

DESCRIPTION OF WORK

Includes the furnishing of all labor, material, tools, supervision, etc., required to disconnect, remove, and replace electrical components as necessary in order to facilitate asbestos abatement procedures.

Any removal of electrical equipment, conduit, wire, etc., shall be done as required. Items deemed reusable will be stored in a manner, which facilitates reuse. Damage to equipment due to poor workmanship on the part of the contractor shall be replaced at his expense.

Any existing electrical work obstructing the removal of materials listed in other sections of these specifications of impeding the progress of asbestos abatement will be removed according to guidelines previously stated.

END OF SECTION - 16000