INVITATION FOR BIDS

SOLICITATION INFORMATION AND SCHEDULE

Solicitation Number:	**2025-064**	
Solicitation Title:	**Abatement and Demolition of MSHP Troop A Campus**	
Release Date:	**July 28, 2025**	
Final Date and time for Inquiries:	**August 4, 2025 @ 2:30 PM**	
Bid Deadline:	**August 8, 2025 @ 2:30 PM**	
Bid Opening:	**August 8, 2025**	
Procurement Officer:	Lisa Azimi	Lisa.Azimi@cityofls.net (816) 969-1800

A mandatory pre-bid site walkthrough is scheduled for July 31, 2025 at 12:00 PM central-standard time (CST). Following the pre-bid site walkthrough, the site structures will remain open to contractors for further inspection until 4:00 PM CST. An owner's representative must escort the contractors at all times through the site structures. This will be the only opportunity contractors will have inside the site structures.

In accordance with the City of Lee's Summit Procurement Policy, competitive Bids for the specified items herein will be received until the date and time referenced above (the "Bid Deadline). Bids shall be submitted electronically via www.PublicPurchase.com per the instructions contained within the Bid. Bids received by the Bid Deadline shall be publicly opened and the Bid Price read. Bids must be in the actual possession of the City staff prior to the Bid Deadline. Late Bids shall not be considered.

* The City of Lee's Summit reserves the right to amend the solicitation schedule as necessary.

Any amendment to or deviation from the City's Standard Terms and Conditions may lead to your bid being rejected as non-responsive to this Bid.

LEE'S SUMMIT MISSOURI

City of Lee's Summit
Procurement and Contract Services
Bid No. 2025-064

OFFER

The undersigned (the "Bidder") offers this Bid as an offer to contract with the City under the terms and conditions set forth below, and certifies that Bidder has read, understands, and agrees to fully comply with, and be contractually bound by all the terms and conditions set forth in this Invitation For Bids ("IFB"), the Contract formed hereby (as defined below) and any amendments thereto, together with all Exhibits, Specifications, Plans and other documents included as part of this Contract (collectively the "Contract Documents").

By submission of this Offer, Bidder understands the City may award the contract by line item, groups of line items, or multiple award, whichever is deemed most advantageous to the City, pursuant to Section 2.11 "Award of Contract" set forth below.

Missouri Charter No: 00281728

Federal EIN: 431385449

AT Abatement Services, Inc.
Bidder's Full Legal Name

Bidder's d/b/a (if applicable)

4915 Stillwell
Address

Kansas City | MO | 64120
City | State | Zip Code

For Clarification of this Bid contact:

Name: Craig Jackson

Telephone: 816-325-0867

Email: cjackson@atindustriesinc.com

Signature of Person Authorized to Bind Bidder

Craig Jackson
Printed Name

Project Manager
Title

ACCEPTANCE OF OFFER (FOR CITY OF LEE'S SUMMIT USE ONLY)

Effective Date: _____ Contract No. 2025-064

CITY OF LEE'S SUMMIT, Missouri a municipal corporation

Mark Dunning, City Manager Date

ATTEST:

Office of City Clerk

APPROVED AS TO FORM:

Scott Ison, Chief Counsel of Infrastructure & Recreation

ARTICLE I - DEFINITIONS

For purposes of this Invitation for Bids, the following definitions shall apply:

1.1. "**Bid**" or "**Offer**" means a responsive bid or quotation submitted by a Bidder in response to this IFB.

1.2. "**Bid Deadline**" means the date and time set forth on the cover of this IFB for the Procurement Officer to be in actual possession of the sealed Bids.

1.3. "**Bid Opening**" means the date and time set forth on the cover of this IFB for opening of sealed Bids.

1.4. "**Bidder**" means any person or firm submitting a Bid in response to this IFB.

1.5. "**City**" means the City of Lee's Summit, Missouri, a municipal corporation. For purposes of solicitations by the Parks and Recreation Department, the term "City" may be substituted with "LSPR" per Section 2.2 of the City of Lee's Summit Procurement Policy.

1.6. "**City Manager**" means the City Manager of the City or his/her authorized designee. For purposes of solicitations by the Parks and Recreation Department, the term "City Manager" may be substituted with "Parks Administrator" per Section 2.2 of the City of Lee's Summit Procurement Policy.

1.7. "**City Representative**" or "**Project Manager**" means a City employee who has been designated to act as a contact person to the Procurement Officer, and who is responsible for (i) monitoring and overseeing the Vendor's performance under the Contract and (ii) providing information regarding details pertaining to the Contract.

1.8. "**Confidential Information**" means that portion of a Bid, Proposal, Offer, Specification or protest that contains information that the person submitting the information believes should be withheld, provided (i) such person submits a written statement advising the City of this fact at the time of the submission and (ii) the information is so identified wherever it appears.

1.9. "**Contract**" **or "Contract Documents"** means, collectively, (i) the executed Offer/Bid, (ii) this IFB, including all completed exhibits, (iii) the Notice of Award, (iv) the Notice to Proceed and/or Purchase Order(s), (v) any approved Addendum, Change Order or Amendment, (vi) the Vendor's Certificates of Insurance, endorsements, and a copy of the Declarations Page(s) of the insurance policies and (vii) any Plans, Specifications, or other documents attached, appended, or incorporated herein by reference. Alternate or optional bid items will become part of the Contract only if they are accepted by the City in writing on the Price Sheet.

1.10. "**Day(s)**" means calendar day(s) unless otherwise specified.

1.11. "**Invitation for Bids**" or "**IFB**" means this request by the City for participation in the competitive bidding process according to all documents, including those attached or incorporated herein by reference, utilized for soliciting Bids for the Materials and/or Services in compliance with the City's Procurement Policy.

1.12. "**Materials**" means any personal property, including equipment, materials, replacements, and supplies provided by the Vendor in conjunction with the Contract.

1.13. "**Multiple Award**" means an award of an indefinite quantity contract for one or more similar products, commodities, or Services to more than one Bidder.

1.14. "**Price**" means the total expenditure for a defined quantity of a commodity or service.

1.15. "**Procurement Officer**" means the City employee, as designated on the cover of this IFB, who has specifically been designated to act as a contact person to the Bidders and/or Vendors relating to their Invitation for Bids.

1.16. "**Procurement Policy**" means the City Procurement Policy, as amended from time to time.

1.17. "**Public Purchase**" means the City's procurement website, www.publicpurchase.com/.

1.18. "**Services**" means the furnishing of labor, time or effort by a Vendor, not involving the delivery of a specific end product other than reports which are merely incidental to the required performance and as further defined in the Contract.

1.19. "**Specification**" means any description of the physical characteristics, functional characteristics, or the nature of a commodity, product, supply, or Services. The term may include a description of any requirements for inspecting, testing, or preparing a supply or service item for delivery.

1.20. "**Subcontractor**" means both (i) those persons or groups of persons having a direct contract with the Vendor to perform a portion of the Contract and (ii) those who furnish Materials according to the plans and/or Specifications

required by this Contract.

1.21. "**Substitutions**" means Vendor's proposed changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.

1.22. "**Substitutions for Cause**" means changes proposed by Vendor that are required due to changed product conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.

1.23. "**Substitutions for Convenience**" means changes proposed by Vendor or City that are not required in order to meet other Project requirements, but which may offer advantage to Vendor or City.

1.24. "**Unit Price**" means the unit cost of a defined unit of measure of a commodity or service.

1.25. "**Vendor**" means the individual, partnership, corporation, or limited liability company who has submitted a Bid in response to this IFB and who, as a result of the competitive bidding process, is awarded a contract for Materials and/or Services by the City.

ARTICLE II – BID PROCESS; BID AWARD

2.1. **Scope of Work**. This IFB is to secure a qualified Vendor(s) to provide the City with a planned demolition and environmental remediation of the former Missouri State Highway Patrol Troop A campus located at 504 SE Blue Parkway in Lee's Summit, Missouri (the "Services") as more particularly described in Section 3.0 of the Remedial Plans & Specifications attached hereto and incorporated herein by reference. For the purpose of this solicitation, the Services required under this IFB shall be provided at the Price(s) specified in Appendix D Bid Form of the Remedial Plans & Specifications

a. **Unauthorized Provisions**. Vendor acknowledges and agrees that a Services Order containing unauthorized exceptions, conditions, limitations, or provisions in conflict with the terms of the Contract, other than City's project-specific requirements, is hereby expressly declared void and shall be of no force and effect.

2.2. **Amendment of IFB**. No alteration may be made to this IFB or the resultant Contract without the express, written approval of the City in the form of an official IFB addendum or Contract amendment. Any attempt to alter this IFB/Contract without such approval is a violation of this IFB/Contract and the City Procurement Policy. Any such action is subject to the legal and contractual remedies available to the City including, but not limited to, Contract cancellation and suspension and/or debarment of the Bidder or Vendor.

2.3. **Preparation/Submission of Bid**. Bidders are invited to participate in the competitive bidding process for the Services specified in this IFB. Bidders shall review their Bid submissions to ensure the following requirements are met.

a. **Non-responsive or Non-responsible Bids**. The City will consider as "non- responsive" or "non-responsible" and shall reject any Bid not prepared and submitted in accordance with the IFB and Specifications, or any Bid lacking sufficient information to enable the City to make a reasonable determination of compliance with the Specifications. Unauthorized or unreasonable exceptions, conditions, limitations, or provisions shall be cause for rejection. Bids may be deemed non-responsive or non-responsible at any time during the evaluation process if, in the sole opinion of the City, any of the following, but not limited to, are true:
   i. Bidder does not provide required documentation or authorized signature.
   ii. Bidder does not meet the minimum required skill, experience, or requirements to perform the Services.
   iii. Bidder has a past record of failing to fully perform or fulfill contractual obligations, regardless of whether the contract was with the City, particularly obligations similar to those included in this IFB.
   iv. Bidder cannot demonstrate financial stability.
   v. The Bid submission contains false, inaccurate, or misleading statements that, in the opinion of the City Manager or authorized designee, are intended to mislead the City in its evaluation of the Bid.

b. **Required Submittal**. Bidders shall provide the entire IFB document (all pages) that contains the following completed pages/documents in order to be considered a responsive Bid:
   i. Offer, signed in ink by a person authorized to bind the Bidder (Page i).
   ii. Statement of Bidder Qualifications (Appendix C of Remedial Plans & Specifications).

iii. Bid Form (Appendix D of Remedial Plans & Specifications)
iv. Bid Deposit (as stated in 2.7)
v. Acknowledgment page, signed in ink, for each Addendum received, if any.

c. **Bidder Responsibilities**. All Bidders shall (1) examine the entire Bid package, (2) seek clarification from the Procurement Officer, prior to the deadline for inquiries, of any item or requirement that may not be clear, (3) check all responses for accuracy before submitting a Bid and (4) submit the entire completed Bid package in accordance with Subsection 2.3(b) above, by the official Bid Deadline. Late Bids shall not be considered. Bids not submitted with an **original, signed (which includes an electronic signature as defined by 351.1222, RSMo., as amended)** Offer page by a person authorized to bind the Bidder shall be considered non-responsive. Negligence in preparing a Bid shall not be good cause for withdrawal after the Bid Deadline.

d. **Bid Forms**. All Bids shall be on the forms provided in this IFB. It is permissible to copy these forms if needed.

e. **Bidder Notations**. Additions, notations, or other revisions to the IFB document shall be initialed in original ink by the authorized person signing the Bid. The City reserves the right to accept or reject any Bidder Notations.

f. **Withdrawal**. At any time prior to the specified Bid Deadline, a Bidder (or designated representative) may amend or withdraw its Bid. No Bid shall be altered, amended or withdrawn after the specified Bid Deadline unless otherwise permitted in writing by the Procurement and Contract Services Manager.

g. **Clarifications**. The City reserves the right to contact Bidder to obtain clarification on submitted bids, including but not limit to contents that are unclear due to poor image quality, the meaning of abbreviations or acronyms, meaning of hand-written information, or other information as deemed necessary by the City.

2.4. **Inquiries; Interpretation of Specifications; Scope of Work**.

a. **Inquiries**. Any question related to the IFB, including any part of the Specifications, Scope of Work, or other Contract Documents, shall be submitted only via Public Purchase before the final date and time for inquiries using the Questions section for the IFB on Public Purchase. Questions unrelated to the IFB may be directed via email to the Procurement Officer whose name appears on the cover page of this IFB. Hand-delivered, mailed, verbal, or telephone inquiries directed to City staff **will not be answered**. Within two (2) business days following the Final Date and Time for Inquiries, unless otherwise extended, listed on the cover page of this IFB, answers to questions received will be posted in the Question and Answer section on Public Purchase. If an answer to a question results in a change or clarification to the specifications, the City will issue an Addendum via Public Purchase. Bidder is responsible to look at Public Purchase to find answers to submitted questions. Failure to look at Public Purchase does not excuse Bidder's failure to comply with any requirements of the IFB. The City will not respond to inquiries submitted after the Final Date and time for Inquiries. Any interpretations or corrections of the proposed Contract Documents will be made only by addendum(s) duly approved and issued by the City. The City will not be responsible for any other explanations or interpretations of the Contract Documents.

b. **Addenda**. It shall be the Bidder's responsibility to check for addenda issued to this IFB. Any addendum issued by the City relating to this IFB will be available on Public Purchase, the City's e-procurement website.

c. **Bid Quantities**. It is expressly understood and agreed by the parties hereto that the quantities of the various classes of Services to be furnished under this Contract, which have been estimated as stated in the Bidders' Offer, are only approximate and are to be used solely for the purpose of comparing, on a consistent basis, the Bidders' Offers presented for the Services under this Contract. The selected Vendor agrees that the City shall not be held responsible if any of the quantities are subsequently found to be incorrect and the Vendor shall not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of Services as estimated and the Services actually provided. If any error, omission, or misstatement is found to occur in the estimated quantities, the same shall not (1) invalidate the Contract or the whole or any part of the Specifications, (2) excuse Vendor from any of the obligations or liabilities hereunder, or (3) entitle Vendor to any damage or compensation except as may be provided in this Contract.

2.5. **Pre-Bid Conference**. A Pre-Bid Conference may be held. If scheduled, the date and time of the Pre-Bid Conference

will be indicated on the cover page of this IFB. The Pre-Bid Conference may be designated as mandatory or non-mandatory on the cover of this IFB. Bids shall not be accepted from Bidders who do not attend a mandatory Pre-Bid Conference. Bidders are strongly encouraged to attend those Pre-Bid Conferences designated as non-mandatory. The purpose of the Pre-Bid Conference will be to review the contents of the IFB in order to prevent any misunderstanding of the City's requirements. Bidders must present to the City any questions as to the requirements of this IFB or any apparent omission or discrepancy at the Pre-Bid Conference. The City will then determine if any action is necessary and may issue a written addendum to the IFB. Oral statements or instructions will not constitute an addendum to the IFB. When applicable, site visits may be a component of the Pre-Bid Conference and noted on the cover page of this IFB.

2.6. **Prices**. Services shall be provided at the unit prices as set forth in the Remedial Plans & Specifications/Appendix D Bid Form attached hereto and incorporated herein by reference. Bid Prices shall be submitted on a per unit basis by line item, when applicable, and include all applicable taxes, if any. In the event of a disparity between the unit price and extended price, the unit price shall prevail. If there is no cost for a line item, Bidder shall indicate such by entering a zero (0) or "included" as it applies to the line item in the unit price field. **NOTE: All pricing blanks must be filled in. Empty or unfilled spaces in the Price Sheet shall be deemed as a NO BID entry for that item**.

2.7. **Bid Deposit**. Bidder shall furnish a bid deposit in the form of a bond, certified check, or money order in the amount of 5% of Bidder's base Bid ("Bid Deposit") made payable to the City of Lee's Summit, Jackson County, Missouri, for the measure of liquidated damages which the City will sustain and the proceeds thereof will become the property of the City if, for any reason, Bidder:

a. Withdraws its Bid after the opening of the bids and before the time a formal written contract evidencing the contract has been signed and delivered to the City whether or not the bidder at the time of such withdrawal has been designated as the successful bidder, or

b. Upon written notification of the award of contract to him, he fails to properly sign and deliver to the City within 5 days Payment and Performance Bonds, if required; Certificate of Insurance, and the written Contract, formally evidencing the terms of the Invitation for Bid and his bid as submitted.

Bid further agrees the City may retain the Bid Deposit for up to one-hundred twenty (120) days from the date of opening of the bids. At the expiration of said time, or earlier at the option of the City, the Bid Deposit will be returned to the Bidder unless the Bid Deposit has become the property of the City as liquidated damages for one of the reasons stipulated above.

2.8. **Payment/ Discounts**. The City's standard payment terms are net 30 days. Any Bid that requires payment in less than 30 Days shall not be considered. Payment discounts of 30 Days or less will not be deducted from the Bid Price in determining the low Bid. The City shall be entitled to take advantage of any payment discount offered, provided payment is made within the discount period. Payment discounts shall be indicated on Price Sheet.

2.9. **Taxes**. Items required for this contract qualify for exemption from taxes in accordance with Section 144.062, RSMo. as well as in accordance with Section 39(10), Article 3, of the Missouri Constitution and is exempt from payment of Federal Excise Taxes in accordance with Title 26, United States Code annotated, the Missouri Department of Revenue has exempted all or those certain items of the contract from State and local sales and use taxes. If Bidder is located outside the State of Missouri and does not recognize the City of Lee's Summit's State of Missouri tax exempt status, all unit pricing submitted shall include any and all applicable taxes. It is the sole responsibility of the Bidder to determine any applicable tax rates and calculate the tax accordingly. Failure to accurately tabulate any applicable taxes may result in a determination that a Bid is non-responsive. The Bidder shall not rely on, and shall independently verify, any tax information provided by the City.

2.10. **Federal Funding**. It is the responsibility of the Bidder to verify and comply with federal requirements that may apply to the Materials (the "Federal Requirements"). It is also the responsibility of the Bidder to incorporate any necessary amounts in the Bid to accommodate for required federal record keeping, necessary pay structures or other matters related to the Federal Requirements, if any.

2.11. **Cost of Bid/Proposal Preparation**. Bids submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner. The City does not reimburse the cost of developing, presenting, or providing any response to this IFB; the Bidder is responsible for all costs incurred in responding to this IFB. All materials and documents submitted in response to this IFB become the property of the City and will not be returned.

2.12. **Public Record**. All Bids shall become the property of the City. After Bid Opening, Bids shall become public records and shall be available for public inspection in accordance with the City's Procurement Policy, except that any portion of a Bid that was designated as confidential pursuant to Section 2.13 below shall remain confidential from and after the time of Bid Opening to the extent permitted by Missouri law.

2.13. **Confidential Information**. If a Vendor/Bidder believes that a Bid, Specification, or protest contains information that qualifies as a closed record pursuant to Chapter 610, RSMo., a statement, including the legal citation supporting advising the Procurement Officer of this fact shall accompany the submission and the information shall be clearly identified. The information identified by the Vendor or Bidder as confidential shall not be disclosed until the Procurement Officer makes a written determination. The Procurement Officer shall review the statement and information with the City Attorney and shall determine, in writing, whether the information shall be withheld. If the City Attorney determines that it is proper to disclose the information, the Procurement Officer shall inform the Vendor or Bidder, in writing, of such determination.

2.14. **Vendor Licensing and Registration**. The awarded Bidder shall secure and maintain all applicable licenses and registrations imposed by law, regulation, or ordinance and pay all charges and fees, which shall include valid registration with the Missouri Secretary of State (if applicable) and a current City Business License. Before issuance of a contract to the successful bidder, proof of the licenses (i.e. copy of the paid receipt or the actual license) shall be provided to the Procurement Officer. It shall be the responsibility of the successful bidder to contact the Development Center, (816) 969-1220, https://cityofls.net/development-services/doing-business/business-and-contractor-licensing, for information to obtain business licenses.

2.15. **Work Authorization Affidavit and E-Verify**. Any contract for services in excess of five thousand dollars ($5,000), the bidder or business entity, as defined in § 285.530, RSMo, shall: 1. Provide; by sworn affidavit affirming that it does not knowingly employ any person who is an unauthorized alien and 2. Provide documentation affirming its enrollment and participation in a federal work authorization program with respect to the employees working in connection with this contract. The required documentation must be from the federal work authorization program provider (e.g. the electronic signature page from the E-Verify program's Memorandum of Understanding). Letter from Consultants reciting compliance is not sufficient. The Department of Homeland Security, U.S. Citizenship and Immigration Services, (USCIS) in partnership with the Social Security Administration (SSA) operate an FREE internet-based program called E-Verify, http://www.dhs.gov/everify that allows employers to verify the employment eligibility of their employees, regardless of citizenship. Based on information provided by employees on their Form I-9, E-Verify checks the information electronically against records contained in DHS and Social Security Administration databases. There are penalties for employing an unauthorized alien, including suspension of the Consultant's business license, termination of the contract, debarment from city and State work for a period of three years or permanently, and withholding 25% of the total amount due the Consultant. All submittals should include the signed and notarized Work Authorization Affidavit AND the electronic signature page from the E-Verify program.

CITY OF LEE'S SUMMIT, MISSOURI
WORK AUTHORIZATION AFFIDAVIT PURSUANT TO SECTION 285.530, RSMo
(FOR ALL BIDS FOR SERVICES IN EXCESS OF $5,000.00)
Effective 1/1/2009

County of Jackson)
) ss.
State of Missouri)

My name is Craig Jackson. I am an authorized agent of AT Abatement Services, Inc. ("Bidder"). Bidder is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the City of Lee's Summit, Missouri. Bidder does not knowingly employ any person who is an unauthorized alien in connection with the services being provided.

Bidder shall not knowingly employ or contract with an illegal alien to perform work for the City of Lee's Summit, Missouri or enter into a contract with a subbidder that knowingly employs or contracts with an illegal alien.

Craig Jackson
Affiant

Craig Jackson
Printed Name

Subscribed and sworn to before me this 1st day of July, 2025

WENDI CURTIS
Notary Public-Notary Seal
STATE OF MISSOURI
Jackson County
My Commission Expires June 30, 2026
Commission # 11512794

Wendi Curtis
Notary Public

SEAL

2.16. **Certification**. By submitting a Bid, the Bidder certifies:

a. **No Collusion**. The submission of the Bid did not involve collusion or other anti-competitive practices.

b. **No Discrimination**. It shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246.

c. **No Gratuity**. It has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip favor or service to a City employee, officer, agent or elected official in connection with the submitted Bid or a resultant Contract. In the event that the resultant Contract is canceled pursuant to Section 3.27(c) below, the City shall be entitled, in addition to any other rights and remedies, to recover and withhold from the Vendor an amount equal to 150% of the gratuity.

d. **Financial Stability**. It is financially stable, solvent and has adequate cash reserves to meet all financial obligations including any potential costs resulting from an award of the Contract.

e. **No Signature/False Statement**. The signature on the Bid and the Vendor Information Form is genuine. Failure to sign the Bid and the Vendor Information Form, or signing either with a false statement, shall void the submitted Bid and any resulting Contract, and the Bidder may be debarred from further bidding in the City.

2.17. **Award of Contract.**

a. **Multiple Award**. The City may, at its sole discretion, accept Bidder's Offer as part of a Multiple Award.

b. **Line Item Award**. The City reserves the right to award by individual line item, by group of line items, or as a total, whichever is deemed most advantageous to the City. The City's flexibility with respect to the method of award also includes any items bid as alternates, which may be accepted or rejected, in whole or in part, at the City's sole discretion.

c. **Evaluation**. The evaluation of this Bid will be based on, but not limited to, the following: (1) compliance with Specifications, (2) tax-inclusive Price, including alternates selected by the City, if any, and taxes, but excluding

"as-needed" services requested by the City and (3) Bidder qualifications to provide, and past performance providing, the Services.

d. **Waiver; Rejection; Reissuance**. Notwithstanding any other provision of this IFB, the City expressly reserves the right to: (1) waive any immaterial defect or informality, (2) reject any or all Bids or portions thereof and (3) cancel or reissue an IFB.

e. **Offer**. A Bid is a binding offer to contract with the City based upon the terms, conditions and Specifications contained in this IFB and the Bidder's responsive Bid, unless any of the terms, conditions, or Specifications are modified by a written addendum or contract amendment. Bids become binding Contracts when the Acceptance of Offer and Notice of Award is executed in writing by the City. Bidder Offers shall be valid and irrevocable for at least **120** Days after the Bid Opening.

f. **Protests**. Any Bidder may protest this IFB, the proposed award of a Contract, or the actual award of a Contract. All protests will be considered in accordance with the City's Procurement Policy.

2.18. **Required Contract Documents**. Awarded Bidder(s) shall provide the following applicable documents **within 5 days** after the City issues Bidder a Notice of Award. The City shall not execute the Contract until all of the documents are received.

a. Certificate from Secretary of State with Missouri Charter Number or Exemption Number;
b. City of Lee's Summit Business License;
c. Certificate of Insurance naming the City of Lee's Summit and complete endorsement documents for endorsements required in Section 3.25 "Insurance" of this Contract;
d. Completed Vendor Information Form with a current signed W-9;
e. E-verify Signature Page;
f. Work Authorization Affidavit; and
g. Performance and Payment Bonds.

ARTICLE III – GENERAL TERMS AND CONDITIONS

3.1. **Contract Time**.

a. Contract Times: Days. All Work will be completed within 60 days of the date on the Notice to Proceed. The contractor can expect a Notice to Proceed date to be within 5 days of this Contract being fully executed by the City.

b. Starting the Work. Contractor shall start to perform the Work on the day indicated on the Notice to Proceed. No Work may be done at the Site prior to such date.

c. Milestone One. Abatement and/or Demolition of the firing range building, communications building, garage portion of main building, tower piers, sheds, fencing, and all pavement and lighting behind the main building shall be achieved in the first 30 days after Notice to Proceed.

d. Milestone Two. Abatement and/or Demolition of the main building and the remaining pavement and lighting shall be achieved in the 30 days remaining in this Contract after Milestone One.

e. Liquidated Damages. Contractor and Owner recognize that time is of the essence and that the Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

i. *Completion of Milestone One:* Contractor shall pay Owner $1000 for each day that expires after the time specified above for Milestone One, until the Work is complete.

ii. *Completion of Milestone Two:* Contractor shall pay Owner $1000 for each day that expires after the time specified above for Milestone Two, until the Work is complete.

iii. Liquidated damages for failing to timely attain Milestones are not additive and will not be imposed concurrently.

3.2. **Compensation**. The City shall pay the Vendor for Services delivered and accepted by the City at the rates set forth in the Remedial Plans and Specifications/Appendix D Bid Form . The Vendor shall not commence any billable work or provide any Services under this Contract until the Vendor receives an executed purchase order from the City.

3.3. **Payments**. The Vendor will be paid on the basis of invoices submitted following acceptance of the Service. All invoices shall document and itemize all Services delivered in sufficient detail to justify payment and shall include the Purchase Order number authorizing the transaction, if applicable, and shall be delivered to the City Accounts Payable address indicated on the face of the Purchase Order or email to ap@cityofls.net, unless otherwise specified. All transportation charges must be prepaid by the Vendor. If an invoice is subject to a payment discount, the discount period will be calculated from the date of receipt of the claim or the Material or Service, whichever is later. Invoice(s) must be submitted by July 31 for all work completed prior to June 30.

3.4. **Documents**. All documents prepared and submitted to the City pursuant to this Contract shall be the property of the City.

3.5. **Changes; Cancellation**. The City reserves the right to cancel or make changes in the Services to be furnished by the Vendor within a reasonable period of time after issuance of Purchase Orders. If such changes cause an increase or decrease in the amount due under the Purchase Order, or in the time required for Vendor's performance, an acceptable adjustment shall be made and the Purchase Order shall be modified in writing accordingly. Vendor shall submit the adjusted price, if any, in writing to the City within 10 Days from when the change is ordered. Should a Purchase Order be canceled, the City may, but is not required to, reimburse the Vendor, but only for actual and documentable costs incurred by the Vendor due to and after issuance of the Purchase Order. The City will not reimburse the Vendor for any costs incurred after receipt of a notice of cancellation from the City, or for lost profits, shipment of product or costs incurred prior to issuance of a Purchase Order.

3.6. **General Warranty**. All Materials supplied pursuant to this Contract shall be fully guaranteed by the Vendor for a

minimum period of one year from the date of acceptance by the City (or such longer period as may be provided under warranties for such Materials). Any defects in design, workmanship, or Materials that would result in non-compliance with Contract Specifications shall be fully corrected by the Vendor (including parts and labor) without cost to the City. Vendor further agrees to execute any special guarantees as provided by the Contract, Remedial Plans & Specifications , or by federal, state, or local statutes, ordinances, regulations, or rules. Vendor shall require similar guarantees from all of its vendors or its Subcontractors. Vendor shall include a complete and exclusive statement of the product warranty.

3.7. **Price Warranty**. Vendor shall give the City the benefit of any price reductions before actual time of shipment. If the City permits shipment to be made prior to specified shipping date, the City shall have advantage of any price reductions that occur before the originally-scheduled shipping date.

3.8. **Inspection; Acceptance**. All Services are subject to final inspection and acceptance by the City within seven (7) days after receipt. Services failing to conform to the Specifications of this Contract will be held at Vendor's risk and may be returned to the Vendor. If so returned, all storage and return costs are the responsibility of the Vendor. Upon discovery of a non-conforming Service, the City may elect to do any or all of the following by written notice to the Vendor: (A) waive the non- conformance; (B) stop the use of the non-conforming Service immediately; or (C) bring Service into compliance and withhold the cost of same from any payments due to the Vendor.

3.9. **No Replacement of Defective Delivery**. Every delivery of Services shall fully comply with all provisions of the Contract and any resulting order. If a delivery is made which does not fully conform, this shall constitute a breach of the Contract as a whole.

3.10. **Right to Assurance**. Whenever one party to this Contract has a good faith reason to question the other party's intent to perform, such party may demand that the other party give a written assurance of its intent to perform. In the event that a demand is made and no written assurance is given within five (5) Days, the demanding party may treat this failure as an anticipatory repudiation of the Contract.

3.11. **Right to Inspect Plant**. The City may, at reasonable times, inspect the part of the plant or place of business of the Vendor or any Subcontractor that is related to the performance of this Contract.

3.12. **Patents and Copyrights**. All services, information, computer program elements, reports, and other deliverables which may be patented or copyrighted and created under this Contract are the property of the City and shall not be used or released by the Vendor or any other person except with the prior written permission of the City.

3.13. **Advertising**. Vendor shall not advertise or publish information concerning this Contract without prior, written consent of the City.

3.14. **Licenses; Materials**. Vendor shall maintain in current status all federal, state, and local licenses and permits required for the operation of the business conducted by the Vendor. The City has no obligation to provide Vendor, its employees or Subcontractors any business registrations or licenses required to perform the specific Services set forth in this Contract. The City has no obligation to provide tools, equipment, or material to Vendor.

3.15. **Indemnification**. Vendor shall indemnify, defend, and hold harmless the City and each council member, officer, employee and agent thereof (the City and any such person being herein called an "Indemnified Party"), for, from and against any and all losses, claims, damages, liabilities, costs and expenses (including, but not limited to, reasonable attorneys' fees, court costs and the costs of appellate proceedings) to which any such Indemnified Party may become subject, under any theory of liability whatsoever ("Claims"), insofar as such Claims (or actions in respect thereof) relate to, arise out of, or are caused by or based upon the acts, misconduct, errors, mistakes, or omissions, in connection with the performance of the Vendor, its officers, employees, agents, or any tier of Subcontractor or person for which Vendor may be legally liable in the performance of this Contract. The amount and type of insurance coverage requirements set forth below will in no way be construed as limiting the scope of the indemnity in this Section.

3.16. **Anti-Discrimination Against Israel Act**: If this Contract has a total potential value of $100,000 or more and Vendor has 10 or more employees, the following applies. Pursuant to Section 34.600, RSMo and to the fullest extent permitted by law, Vendor certifies that Vendor is not engaged in a boycott of Israel as of the Effective

Date of this Agreement, and agrees for the duration of this Agreement to not engage in a boycott of Israel as defined in Section 34.600, RSMo

3.17. **Davis Bacon Act:** The wages for any work utilizing this contract in which federal funding is utilized shall comply with any and all applicable federal laws and/or requirements to include but not limited to the Davis Bacon Act.

3.18. **Insurance**.

a. **General**.

i. **Insurer Qualifications**. Without limiting any obligations or liabilities of Vendor, Vendor shall purchase and maintain, at its own expense, hereinafter stipulated minimum insurance with insurance companies authorized to do business in the State of Missouri, with an AM Best, Inc. rating of A or above with policies and forms satisfactory to the City. Failure to maintain insurance as specified herein may result in termination of this Contract at the City's option.

ii. **No Representation of Coverage Adequacy**. By requiring insurance herein, the City does not represent that coverage and limits will be adequate to protect Vendor. The City reserves the right to review any and all of the insurance policies and/or endorsements cited in this Contract but has no obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in this Contract or failure to identify any insurance deficiency shall not relieve Vendor from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Contract.

iii. **Additional Insured**. All insurance coverage and self-insured retention or deductible portions, except Workers' Compensation insurance and Professional Liability insurance, if applicable, shall name and endorse, to the fullest extent permitted by law for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, directors, officials and employees as Additional Insured as specified under the respective coverage sections of this Contract.

iv. **Coverage Term**. All insurance required herein shall be maintained in full force and effect until the terms of this Contract are satisfactorily performed, completed and formally accepted by the City, unless specified otherwise in this Contract.

v. **Primary Insurance**. Vendor's insurance shall be, or endorsed to be, primary insurance with respect to performance of this Contract and in the protection of the City as an Additional Insured. Such coverage shall be at least as broad as ISO CG 20 01 04 13.

vi. **Claims Made**. In the event any insurance policies required by this Contract are written on a "claims made" basis, coverage shall extend, either by keeping coverage in force or purchasing an extended reporting option, for six (6) years past completion and acceptance of the services. Such continuing coverage shall be evidenced by submission of annual Certificates of Insurance and necessary endorsements citing applicable coverage is in force and contains the provisions as required herein for the six-year period.

vii. **Waiver**. All policies, except for Professional Liability, including Workers' Compensation insurance, shall contain a waiver of rights of recovery (subrogation) against the City, its agents, representatives, officials, officers and employees for any claims arising out of the Work or Services of Vendor. Vendor shall arrange to have such subrogation waivers incorporated into each policy via formal written endorsement thereto.

viii. **Policy Deductibles and/or Self-Insured Retentions**. The policies set forth in these requirements may provide coverage that contains deductibles or self-insured retention amounts. Such deductibles or self-insured retention shall not be applicable with respect to the policy limits provided to the City. Vendor shall be solely responsible for any such deductible or self-insured retention amount.

ix. **Automatic Escalator**. The limits of liability for each policy coverage amount stated below shall be automatically adjusted upward as necessary to remain at all times not less than the maximum amount of liability set forth in Chapter 537.610 RSMo. applicable to political subdivisions pursuant to 537.600; provided that nothing herein or in any such policy shall be deemed to waive the City's sovereign immunity. The statutory waiver of sovereign immunity for 2024 is $3,370,137 for all claims arising out of a single

accident or occurrence

x. **Use of Subcontractors**. If any portion of this Contract is subcontracted in any way, Vendor shall execute written contract(s) with its Subcontractors containing the indemnification provisions set forth above and insurance requirements set forth herein protecting the City and Vendor. Vendor shall be responsible for executing any contracts with its Subcontractor and obtaining certificates of insurance verifying the insurance requirements.

xi. **Notice of Claim**. The Vendor shall upon receipt of notice of any claim in connection with this Contract promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability. The Vendor shall also promptly notify the City of any reduction in limits of protection afforded under any policy listed in the certificate(s) of insurance in an amount such that the policy aggregate becomes less than the current statutory waiver of sovereign immunity regardless of whether such impairment is a result of this Contract. A breach of this provision is material breach of the contract.

xii. **Evidence of Insurance**. Prior to commencing any Work or Services under this Contract, Vendor will provide the City with suitable evidence of insurance in the form of certificates of insurance and a copy of the declaration page(s) of the insurance policies as required by this Contract, issued by Vendor's insurance insurer(s) as evidence that policies are placed with acceptable insurers as specified herein and provide the required coverages, conditions and limits of coverage specified in this Contract and that such coverage and provisions are in full force and effect. Confidential information such as the policy premium may be redacted from the declaration page(s) of each insurance policy, provided that such redactions do not alter any of the information required by this Contract. The City shall reasonably rely upon the certificates of insurance and declaration page(s) of the insurance policies as evidence of coverage but such acceptance and reliance shall not waive or alter in any way the insurance requirements or obligations of this Contract. If any of the policies required by this Contract expire during the life of this Contract, it shall be Vendor's responsibility to forward renewal certificates and declaration page(s) to the City 30 Days prior to the expiration date. All certificates of insurance and declarations required by this Contract shall be identified by referencing this Contract. Additionally, certificates of insurance and declaration page(s) of the insurance policies submitted without referencing this Contract will be subject to rejection and may be returned or discarded. Certificates of insurance and declaration page(s) shall specifically include the following provisions:

1. The City, its agents, representatives, officers, directors, officials and employees are Additional Insureds as follows:
   a. Commercial General Liability - Under Insurance Services Office, Inc., ("ISO") Form CG 20 10 03 97 and CG 20 37 07 04 or their equivalents.
   b. Auto Liability - Under ISO Form CA 20 48 or equivalent.
   c. Excess Liability - Follow Form to underlying insurance.
2. Vendor's insurance shall be primary insurance with respect to performance of the Contract.
3. All policies, except for Professional Liability, including Workers' Compensation, waive rights of recovery (subrogation) against City, its agents, representatives, officers, officials and employees for any claims arising out of Vendor's performance under this Contract.
4. ACORD certificate of insurance form 25 (2014/01) is preferred. If ACORD certificate of insurance form 25 (2001/08) is used, the phrases in the cancellation provision "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" shall be deleted. Certificate forms other than ACORD form shall have similar restrictive language deleted.

xiii. **Endorsements**. Vendor shall provide the City with the necessary endorsements to ensure City is provided the insurance coverage set forth in this Subsection.

b. **Required Insurance Coverage**.

i. **Commercial General Liability.** Vendor shall maintain "occurrence" form Commercial General Liability

insurance with an unimpaired limit of not less than $4,000,000 for each occurrence, $4,000,000 Products and Completed Operations Annual Aggregate and a $4,000,000 General Aggregate Limit. The policy shall cover liability arising from premises, operations, independent contractors, products-completed operations, bodily injury, personal injury and advertising injury. Coverage under the policy will be at least as broad as ISO policy form CG 00 01 93 or equivalent thereof, including but not limited to, separation of insured's clause. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, officials and employees shall be endorsed as an Additional Insured under ISO, Commercial General Liability Additional Insured Endorsement forms CG 20 10 03 97 and CG 20 37 07 04, or their equivalents, which shall read "Who is an Insured (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you." The policy shall contain an endorsement waiving rights of recovery (subrogation) against the City, its agents, representatives, officials, officers and employees. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

ii. **Vehicle Liability**. Vendor shall maintain Business Automobile Liability insurance with an unimpaired limit of $2,000,000 each occurrence on Vendor's owned, hired and non-owned vehicles assigned to or used in the performance of the Vendor's work or services under this Contract. Coverage will be at least as broad as ISO coverage code "1" "any auto" policy form CA 00 01 12 93 or equivalent thereof and contain, or be endorsed to contain Transportation Pollution Liability insurance covering materials to be transported by Vendor pursuant to this Contract and such coverage shall be at least as broad as policy form CA 99 48 03 06. This coverage may also be provided on the Vendors Pollution Liability policy. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, directors, officials and employees shall be endorsed as an Additional Insured under ISO Business Auto policy Designated Insured Endorsement form CA 20 48 or equivalent. The policy shall contain an endorsement waiving rights of recovery (subrogation) against the City, its agents, representatives, officials, officers and employees. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

iii. **Professional Liability**. If this Contract is the subject of any professional Services or Work, or if the Vendor engages in any professional Services or Work in any way related to performing the Work under this Contract, the Vendor shall maintain Professional Liability insurance covering negligent errors and omissions arising out of the Services performed by the Vendor, or anyone employed by the Vendor, or anyone for whose negligent acts, mistakes, errors and omissions the Vendor is legally liable, with an unimpaired liability insurance limit of $2,000,000 each claim and $2,000,000 annual aggregate.

iv. **Workers' Compensation Insurance**. If Vendor employs anyone who is required by law to be covered by workers' compensation insurance, Vendor shall maintain Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over Vendor's employees engaged in performance under this Contract and shall also maintain Employers' Liability Insurance of not less than $500,000 for each accident, $500,000 disease for each employee and $1,000,000 disease policy limit.

Vendor further understands and agrees that Vendor's employees, agents, subcontractors, and directors (referred to in this paragraph as "Employees"), are not serving as employees of the City in any manner and therefore are not entitled to any of the City's industrial benefit coverages, including Workers' Compensation coverages. Vendor acknowledges and agrees that any injury its Employees sustain in the performance of this Contract will be not be eligible for industrial benefits from the City and any necessary treatment will be Vendor's, or Vendor's insurer's, sole responsibility. Should Vendor's insurer attempt

to subrogate a Workers' Compensation claim against the City, including the City's employees, director, or agents, Vendor shall defend, indemnify, and hold harmless the City and the City's employees, director, or agents for, from, and against any and all claims, liabilities, demands, damages, losses, and expenses, including attorneys' fees and litigation expenses, arising out of such subrogation efforts.

v. **Vendor's Environmental/Pollution Liability**. Vendor shall carry and maintain Pollution Liability and/or Asbestos Pollution Liability and/or Errors and Omissions insurance applicable to the services and work being performed, with an unimpaired limit of no less than $3,000,000 per claim or occurrence and $3,000,000 aggregate per policy period of one year.

c. **Cancellation and Expiration Notice**. Insurance required herein shall not expire, be canceled, or be materially changed without 30 Days' prior written notice to the City.

3.19. **Applicable Law; Venue**. This Contract shall be governed by and construed in accordance with the laws of the State of Missouri and any suit pertaining to this Contract may be brought only in courts in eastern Jackson County, Missouri. The Parties expressly and irrevocably consent to the exclusive jurisdiction and venue of such courts and expressly waive the right to transfer or remove any such action.

3.20. **Termination; Cancellation**.

a. **For City's Convenience**. This Contract is for the convenience of the City and, as such, may be terminated without cause after receipt by Vendor of written notice by the City. The Notice of Termination shall specify the effective date of termination, which shall be not less than five (5) calendar days from the date the notice is personally delivered or ten (10) days from the date the Notice of Termination is sent by another method. Upon termination for convenience, Vendor shall be paid, for all undisputed Materials or Services that were delivered prior to the termination date.

b. **For Cause**. If either party fails to perform any obligation pursuant to this Contract and such party fails to cure its nonperformance within 30 Days after notice of nonperformance is given by the non- defaulting party, such party will be in default. In the event of such default, the non-defaulting party may terminate this Contract immediately for cause and will have all remedies that are available to it at law or in equity including, without limitation, the remedy of specific performance. If the nature of the defaulting party's nonperformance is such that it cannot reasonably be cured within 30 Days, then the defaulting party will have such additional periods of time as may be reasonably necessary under the circumstances, provided the defaulting party immediately (1) provides written notice to the non-defaulting party and (2) commences to cure its nonperformance and thereafter diligently continues to completion the cure of its nonperformance. In no event shall any such cure period exceed 90 Days. In the event of such termination for cause, payment shall be made by the City to the Vendor for the undisputed portion of its fee due as of the termination date.

The City shall have the right to declare the Vendor in default for the following reasons, which set forth examples, but are not the only reasons the Vendor may declared in default:

1. Upon a breach by the Vendor of a material term or condition of this Contract, including unsatisfactory performance of the services;
2. Upon insolvency or the commencement of any proceeding by or against the Vendor, either voluntarily or involuntarily, under the Bankruptcy Code or relating to the insolvency, receivership, liquidation, or composition of the Vendor for the benefit of creditors;
3. If the Vendor refuses or fails to proceed with the services under the Contract when and as directed by the City;
4. If the Vendor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are indicted or convicted after execution of the Contract under any state or federal law of any of the following:
    a. a criminal offense incident to obtaining or attempting to obtain or performing a public or private

contract;

b. fraud, embezzlement, theft, bribery, forgery, falsification, or destruction of records, or receiving stolen property;

c. a criminal violation of any state or federal antitrust law;

d. violation of the Racketeer Influence and Corrupt Organization Act, 18 U.S.C. § 1961 et seq., or the Mail Fraud Act, 18 U.S.C. § 1341 et seq., for acts in connection with the submission of bids or proposals for a public or private contract;

e. conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any statute described in subparagraph (d) above; or

f. an offense indicating a lack of business integrity that seriously and directly affects responsibility as a City vendor.

5. If the Vendor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are subject to a judgment of civil liability under any state or federal antitrust law for acts or omissions in connection with the submission of bids or proposals for a public or private contract; or

6. If the Vendor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities makes or causes to be made any false, deceptive, or fraudulent material statement, or fail to make a required material statement in any bid, proposal, or application for City or other government work.

c. **Gratuities**. The City may, by written notice to the Vendor, cancel this Contract if it is found by the City that gratuities, in the form of economic opportunity, future employment, entertainment, gifts or otherwise, were offered or given by the Vendor or any agent or representative of the Vendor to any officer, agent, employee, or elected official of the City for the purpose of securing this Contract. In the event this Contract is canceled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover and withhold from the Vendor an amount equal to 150% of the gratuity.

d. **Subject to Non-Appropriation.** The City is obligated only to pay its obligations set forth in this Contract from funds lawfully appropriated and budgeted for that purpose during the City's then current fiscal year. The City's obligations under this Contract are current expenses subject to the "budget law" and the unfettered legislative discretion of the City concerning budgeted purposes and appropriation of funds. Should the City elect not to appropriate and budget funds to pay its Contract obligations, this Contract shall be deemed terminated at the end of the then-current fiscal year term for which such funds were appropriated and budgeted for such purpose and the City shall be relieved of any subsequent obligation under this Contract. The parties agree that the City has no obligation or duty of good faith to budget or appropriate the payment of the City's obligations set forth in this Contract in any budget in any fiscal year other than the fiscal year in which this Contract is executed and delivered. The City shall be the sole judge and authority in determining the availability of funds for its obligations under this Contract. The obligation of the City to make any payment pursuant to this Contract is not a general obligation or indebtedness of the City. Vendor hereby waives any and all rights to bring any claim against the City from or relating in any way to the City's termination of this Contract pursuant to this section.

3.21. **Performance and Payment Bonds.** If the Bid, or any Services to be performed under this Contract, is in excess of $50,000.00 and involves a public works project, the Vendor shall submit a satisfactory Performance and Maintenance Bond and Payment Bond, each of which with a good and sufficient surety authorized to do business in the State of Missouri. The bonds shall be in the full amount of the bid submitted based on the bid quantity listed in the Bid Proposal form, and each in substantially the same form provided in the Bid Documents. The Payment Bond shall comply with all requirements of Section 107.170, RSMo. Such bonds shall be submitted within five (5) days after receipt of the written notification of award from the City. Bonds shall also hold a current Certificate of Authority as an acceptable surety under 31 CFR Part 223 (and be listed on the current U.S. Department of the

Treasury Circular 570 and have at least A Best's rating and a FPR9 or better financial performance rating per the current A.M. Best Company ratings).

The bonds shall be automatically increased in amount and extended in time without formal and separate amendments to cover full and faithful performance of the contract in the event of Change Orders regardless of the amount of time or money involved. It shall be Vendor's responsibility to notify his surety of any changes affecting the general scope of the work or change in the Contract Price. If at any time during the continuance of the Contract that the surety on any bond becomes unacceptable to City, City shall have the right to require additional and sufficient sureties which Contractor shall furnish to the satisfaction of City within ten (10) days after notice to do so.

3.22. **Miscellaneous**.

a. **Independent Contractor**. It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other for any purpose whatsoever. The Vendor acknowledges and agrees that all Services provided under this Contract are being provided as an independent contractor, not as an employee or agent of the City. Vendor, its employees and Subcontractors are not entitled to workers' compensation benefits from the City. The City does not have the authority to supervise or control the actual work of Vendor, its employees or Subcontractors. Vendor is neither prohibited from entering into other contracts nor prohibited from practicing its profession elsewhere. City and Vendor do not intend to nor will they combine business operations under this Contract.

b. **Laws and Regulations**. The Vendor shall keep fully informed and shall at all times during the performance of its duties under this Contract ensure that it and any person for whom the Vendor is responsible remains in compliance with all rules, regulations, ordinances, statutes or laws including, but not limited to, the following: (1) existing and future City and County ordinances and regulations; (2) existing and future state and federal statutes and regulations; and (3) existing and future Occupational Safety and Health Administration standards.

c. **Amendments**. This Contract may be modified only by a written amendment signed by persons duly authorized to enter into contracts on behalf of the City and the Vendor.

d. **Provisions Required by Law**. Each and every provision of law and any clause required by law to be in the Contract will be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract will promptly be physically amended to make such insertion or correction.

e. **Severability**. The provisions of this Contract are severable to the extent that any provision or application held to be invalid by a Court of competent jurisdiction shall not affect any other provision or application of the Contract which may remain in effect without the invalid provision or application.

f. **Entire Contract; Interpretation; Parol Evidence**. This Contract represents the entire contract of the parties with respect to its subject matter, and all previous contracts, whether oral or written, entered into prior to this Contract are hereby revoked and superseded by this Contract. No representations, warranties, inducements or oral contracts have been made by any of the parties except as expressly set forth herein, or in any other contemporaneous written contract executed for the purposes of carrying out the provisions of this Contract. This Contract shall be construed and interpreted according to its plain meaning, and no presumption shall be deemed to apply in favor of, or against the party drafting the Contract. The parties acknowledge and agree that each has had the opportunity to seek and utilize legal counsel in the drafting of, review of, and entry into this Contract.

g. **Assignment; Delegation**. No right or interest in this Contract shall be assigned or delegated by Vendor without prior, written permission of the City, signed by the City Manager. Any attempted assignment or delegation by Vendor in violation of this provision shall be a breach of this Contract by Vendor. The requirements of this

Contract are binding upon the heirs, executors, administrators, successors, and assigns of both Parties.

h. **Subcontracts**. No subcontract shall be entered into by the Vendor with any other party to furnish any of the Materials or Services specified herein without the prior, written approval of the City. The Vendor is responsible for performance under this Contract whether or not Subcontractors are used.

i. **Rights and Remedies**. No provision in this Contract shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of this Contract. The failure of the City to insist upon the strict performance of any term or condition of this Contract or to exercise or delay the exercise of any right or remedy provided in this Contract, or by law, or the City's acceptance of and payment for Materials, shall not release the Vendor from any responsibilities or obligations imposed by this Contract or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of this Contract.

j. **Offset for Damages**. In addition to all other remedies at law or equity, the City may offset from any money due to the Vendor any amounts Vendor owes to the City for damages resulting from breach or deficiencies in performance or breach of any obligation under this Contract.

k. **Notices and Requests**. Any notice or other communication required or permitted to be given under this Contract shall be in writing and shall be deemed to have been duly given if (1) delivered to the party at the address set forth below, (2) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below or (3) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to the City: City of Lee's Summit
220 Southeast Green Street
Lee's Summit, Missouri 64063
Attn: Procurement and Contract Services Office

With a copy to: City of Lee's Summit
220 Southeast Green Street
Lee's Summit, Missouri 64063
Attn: City Attorney's Office

If to Vendor: _____
_____
_____
Attn: _____

or at such other address, and to the attention of such other person or officer, as any party may designate in writing by notice duly given pursuant to this subsection. Notices shall be deemed received (1) when delivered to the party, (2) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage or (3) the following business day after being given to a recognized overnight delivery service, with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a party shall mean and refer to the date on which the party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

l. **Confidentiality of Records**. The Vendor shall establish and maintain procedures and controls that are acceptable to the City for the purpose of ensuring that information contained in its records or obtained from the City or from others in carrying out its obligations under this Contract shall not be used or disclosed by it, its agents, officers, or employees, except as required to perform Vendor's duties under this Contract. Persons

requesting such information should be referred to the City. Vendor also agrees that any information pertaining to individual persons shall not be divulged other than to employees or officers of Vendor as needed for the performance of duties under this Contract. Vendor shall ensure its subcontractors are aware of and comply with this provision.

m. **Conflicting Terms**. In the event of any inconsistency, conflict or ambiguity among the terms of this Contract, the IFB, the Specifications/Price Sheet, any City-approved Purchase Orders, invoices and the Vendor's response to the IFB, the documents shall govern in the order listed herein. Notwithstanding the foregoing, and in conformity with Section 2.1 above, unauthorized exceptions, conditions, limitations or provisions in conflict with the terms of this Contract (collectively, the "Unauthorized Conditions"), other than the City's project-specific quantities, configurations or delivery dates, are expressly declared void and shall be of no force and effect. Acceptance by the City of any invoice containing any such Unauthorized Conditions or failure to demand full compliance with the terms and conditions set forth in this Contract shall not alter or relieve Vendor from, nor be construed or deemed a waiver of, its requirements and obligations in the performance of this Contract. If the Contract is renewed pursuant to Subsection 3.1(B) above and such renewal includes any conflicting terms, other than price, those terms will be null and void.

n. **Non-Exclusive Contract**. This Contract is entered into with the understanding and contract that it is for the sole convenience of the City of Lee's Summit. The City reserves the right to obtain like goods and Services from another source when necessary.

o. **Cooperative Purchasing**. The Vendor by submitting a bid acknowledges that other Public Agencies may use this contract (Piggyback) under the same terms and conditions, during the effective period of any resulting contract – services and/or purchases being proposed in this bid, for the same prices and/or terms proposed. Vendor has the option to agree or disagree to allow contract PiggyBacks on a case-by-case basis. Before a Public Agency is allowed to PiggyBack any contract, the Agency must first obtain the vendor's approval – without the vendor's approval, the seeking Agency cannot PiggyBack. The City assumes no responsibility for payment, performance or any liability or obligation associated with any cooperative procurement under this Agreement. The City shall not be responsible for any disputes arising out of transactions made by others.

p. **Signatory Authority**. Each person signing this Contract represents that such person has the requisite authority to execute this Contract on behalf of the entity the person represents and that all necessary formalities have been met.

q. **E-Signature and Counterparts**. The Parties agree that this Contract may be signed in two or more counterparts and/or signed electronically, and all such counterparts together shall constitute one and the same contract; such signatures shall bind the signing party in the same manner as if a handwritten signature had been delivered.

r. **Time of the Essence**. Time is of the essence in this Contract. Unless otherwise specifically provided, any consent to delay in Vendor's performance of its obligation is applicable only to the particular transaction to which it relates, and is not applicable to any other obligation or transaction.

s. **Work Authorization/E-verify**. Pursuant to§ 285.530, RSMo. if Contract exceeds five thousand dollars ($5,000.00), Vendor warrants and affirms to the City that (i) Vendor is enrolled and participates in a federal work authorization program with respect to the employees working in connection with the contracted services and (ii) Vendor does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. Vendor shall swear to and sign an affidavit declaring such affirmation, and provide the City with supporting documentation of its enrollment and participation in a federal work authorization program with respect to the employees working in connection with this Contract. The required documentation must be from the federal work authorization program provider (e.g. the electronic signature page from the E-Verify program's Memorandum of Understanding); a letter from Vendor reciting compliance is not sufficient.

t. **Debarment**. By submission of its response, the Service Provider certifies that neither it nor its principals are presently debarred or suspended by any Federal Department or agency, including listing in the U.S. General

Services Administration's List of Parties Excluded from Federal Procurement or Non-Procurement programs; or if the amount of this response is equal to in excess of $100,000, that neither it nor its principals nor its subcontractors receiving sub-awards equal to or in excess of $100,000 is presently disbarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal Department, agency or provision of law. If the Service Provider is unable to certify any of the statements in this certification, the responder must attach an explanation to its response.

u. **Prevailing Wages**. Pursuant to § 290.230.5, RSMo. if this Contract, or a project of which this Contract is a part, exceeds seventy-five thousand dollars ($75,000.00) and involves construction of public works, Vendor shall pay all its workers the applicable prevailing hourly rate of wages for work of a similar character in Lee's Summit. If there is a dispute whether this Contract is subject to prevailing wages as required by §§ 290.210, et. seq., RSMo. the City's determination shall control.

v. **Force Majeure**. The Parties shall be excused from performance during the time and to the extent that they are prevented from obtaining, delivering, or performing for reasons beyond the Parties' reasonable control, including without limitation, by act of God, public health emergency, natural disaster fire, strike, loss or shortage of transportation facilities, lock-out, commandeering of materials, products, plants or facilities by the government, and any other events or circumstances beyond the reasonable control of the party, when satisfactory evidence is presented to the City, provided that it is satisfactorily established that the non-performance is not due to the fault or neglect of the Party not performing.

BID BOND (PENAL SUM FORM)

Bidder Name: AT Abatement Services, Inc. Address *(principal place of business)*: 4915 Stillwell Kansas City, MO 64120	**Surety** Name: Fidelity and Deposit Company of Maryland Address *(principal place of business)*: 1299 Zurich Way Schaumburg, IL 60196 - 1056
Owner Name: **City of Lee's Summit, Missouri** Address *(principal place of business)*: **220 SE Green Street** **Lee's Summit, Missouri 64063**	**Bid** Project *(name and location)*: **Solicitation No. 2025-064** **Abatement and Demolition of MSHP Troop A Campus** **(Locations as depicted on the maps)** Bid Due Date: **August 8, 2025**

Bond

Penal Sum: Five Percent of Bid Amount (5%)

Date of Bond: August 8th, 2025

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

Bidder	Surety
AT Abatement Services, Inc. *(Full formal name of Bidder)*	Fidelity and Deposit Company of Maryland *(Full formal name of Surety) (corporate seal)*
By: Craig Jackson *(Signature)*	By: Tessa R. Turner *(Signature) (Attach Power of Attorney)*
Name: Craig Jackson *(Printed or typed)*	Name: Tessa R. Turner *(Printed or typed)*
Title: Project Manager	Title: Attorney-in-Fact
Attest: Wendi Curtis *(Signature)*	Attest: JHutton *(Signature)*
Name: Wendi Curtis *(Printed or typed)*	Name: Jacob Hutton *(Printed or typed)*
Title: Office Administrator	Title: Witness

Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
   3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
   3.2. All Bids are rejected by Owner, or
   3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by Robert D. Murray, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Sean R. MILLER, Paige M. TURNER, D. C. PRUETT, Matthew J. MILLER, Tessa R. TURNER, Kelly R. WATSON, Amber M. MANNING, Christopher J. MILLER of Overland Park, Kansas, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings,** and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND,** this 10th day of October, A.D. 2023.

Colonial American Casualty and Surety Company CORPORATE SEAL
ZURICH AMERICAN INSURANCE COMPANY CORPORATE SEAL 1972 NEW YORK
Fidelity and Deposit Company of Maryland CORPORATE SEAL 1890

ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By: Robert D. Murray
Vice President

By: Dawn E. Brown
Secretary

State of Maryland
County of Baltimore

On this 10th day of October, A.D. 2023, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Genevieve M. Maison

GENEVIEVE M. MAISON
NOTARY PUBLIC
BALTIMORE COUNTY MD
My Commission Expires JANUARY 27, 2025

GENEVIEVE M. MAISON NOTARY PUBLIC EXP. 01/27/2025 BALTIMORE COUNTY MD

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V. Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 8th day of August, 2025.

Thomas O. McClellan
Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
reportsfclaims@zurichna.com
800-626-4577

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790

Remedial Plans and Specifications

Former Missouri State Highway Patrol Campus
504 SE Blue Parkway
Lee's Summit, Missouri 64063

City of Lee's Summit
220 SE Green Street
Lee's Summit, Missouri 64063

SCS ENGINEERS

27225340.00 | July 25, 2025

8575 West 110th Street, Suite 100
Overland Park, Kansas 66210
(913) 681-0030

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Section Page

Appendices

1.0 INTRODUCTION

It is the intent of this Remedial Plans & Specifications document to provide detailed information necessary to complete a planned demolition and environmental remediation project located at 504 SE Blue Parkway, Lee's Summit, Missouri (Site). The Site is a former Missouri State Highway Patrol campus located in Lee's Summit, Missouri and bound by Lee's Summit High School to the north and west, MO 291 Highways to the east, and Blue Parkways to the south. The Site contains three structures (Main Building, Firing Range Building, Communications (Comm.) Building, and two exterior wooden shed structures. The proposed demolition and environmental remediation scope of services will be conducted for and under contract with the City of Lee's Summit, Missouri (Owner).

SCS Engineers (SCS) is under contract with the Owner to serve as the Environmental Professional (EP) for this project. SCS conducted a regulated building materials survey to identify asbestos-containing materials (ACM), lead-based paint (LBP), lead-containing material (LCM), and universal/hazardous waste (UHW) items in preparation of this project. A copy of the survey report is located in **Appendix A**. Amounts of ACM, LBP, LCM (lead dust and backstop firing media), and UHW were identified for removal prior to building demolition activities.

The information contained within this Remediation Plans & Specifications document is to aid Contractors supplying abatement/demolition estimates to the Owner, make Contractors aware of the abatement/demolition requirements for the project and outline the expectations of the Owner's EP while the Contractor facilitates proper abatement and demolition activities.

The General Conditions governing this project (Section 2.0) detail important items and information Contractors must acknowledge and accept in the performance of this project. The Scope of Work (SOW) description (Section 3.0) outlines the extent of remediation and demolition activities for this project. The applicable standards and guidelines (Section 4.0) detail the appropriate regulations for the project. The primary environmental remediation specifications (Section 5 through Section 8) outline the remediation Contractor's responsibilities through project completion. Removal of identified UHW is located in Section 9.

2.0 GENERAL CONDITIONS

2.1 Bid Description

2.1.1 In general, the base bid shall be the total cost to demolish and dispose of non-ACM building materials; and properly remove and dispose of identified ACM, LBP, LCM, and UHW items. A detailed SOW is located in Section 3.0.

2.2 Bidding Requirements

2.2.1 By submitting a bid, the Contractor acknowledges that they have investigated and satisfied themselves as to:

a) The conditions affecting the work, including, but not limited to, physical conditions of the site which may bear upon site access, handling and storage of tools and materials, access to water, electricity or other utilities, or other conditions affecting performance of required activities;
b) The character and quantity of all surfaces and substrate materials or obstacles to be encountered in so far as this information is reasonably ascertainable from an inspection of the site, exploratory work done by the Owner's EP, and information presented in this document; and
c) The environmental condition, including the presence, location, and condition of ACM, LBP, LCM, and UHW materials at the site;

2.2.2 Any failure by the Contractor to acquaint himself with available information does not relieve them of the responsibility for estimating quantities and assessing the difficulty or cost of successfully performing the work. The Contractor **shall provide** its own estimated material quantities and will remove all non-ACM demolition debris, ACM, LBP, LCM and UHW materials as the total basis for the bid price. Any non-ACM demolition debris, ACM, LBP, LCM, and UHW materials and quantities indicated herein are approximate and intended to alert the Contractor to the general scope of the project, and are not to be relied upon. **No increase in contract cost for removal or disposal will be considered due to the Contractor's failure to physically verify all quantities associated with this project.**

2.2.3 Contractor's are to field verify quantities of materials for removal. The quantities provided in this bid document are for reference purpose only.

2.2.4 All Contractors supplying estimates to the Owner are responsible for reviewing the general **Abatement Floor Plans (Appendix B)**.

2.2.5 All Contractors supplying estimates to the Owner for this project are responsible for supplying a completed **Statement of Bidders Qualifications (Appendix C)** as part of its submittal package.

2.2.6 All Contractors supplying estimates to the Owner for this project are responsible for supplying a completed **Bid Form (Appendix D)** as part of its submittal package.

2.3 Schedule of Work

2.3.1 Upon award of the Contract and or Notice-to-Proceed (NTP) from the Owner, Contractor shall immediately apply, pay for and file all necessary notifications with the appropriate reportable Federal, state, and local agencies.

2.3.2 The Owner shall assess and approve or reject the Contractor abatement/demolition project schedule.

2.3.3 The Contractor shall schedule and complete all abatement/demolition work in such a manner so as to complete required work by the agreed upon scheduled completion date.

2.4 Responsibility of the Contractor

2.4.1 The Owner is not responsible for any conclusions or interpretations made by the Contractor based on the information supplied by the Owner or the Owner's representatives.

2.4.2 No bids will be accepted from any Contractor who has not inspected the project Site in person.

2.4.3 Asbestos abatement, removal of building components covered with LBP, lead dust, lead-containing backstop media, and removal of UHW items within each Site structure must be complete and cleared by the EP prior to beginning any structural demolition work. The abatement phase will be scheduled coordinated with the Owner and Owner's EP prior to the commencement of the work.

2.4.4 The Contractor acknowledges that this abatement project needs to be conducted in accordance with the Owner-approved project schedule.

2.4.5 Prior to the commencement of abatement work, the Contractor must submit a detailed work plan to the Owner's EP, which outlines specific engineering controls for this abatement project. The engineering controls proposed by the Contractor must be in accordance with Federal, state and local environmental regulations governing this type of regulated work.

2.4.6 The Contractor will be responsible for any and all costs incurred by the Owner and Owner's EP for project delays resulting from any project shut down do to elevated fiber counts above the OSHA PEL reported outside a NPE. This includes, but is not limited to, decontamination of cleared building areas, additional EP labor and air sampling analysis, etc.

2.4.7 The Contractor must assess the quantity of demolition debris, ACM, LBP, LCM, and UHW materials designated for abatement. The Contractor is responsible for accurately assessing the amount of materials included in the SOW (Section 2.2.2).

2.4.8 Contractor shall examine the Site and verify that there are no known "special conditions" which must be considered by the Contractor when performing the asbestos abatement (e.g. high temperatures, equipment that must remain in operation, other toxic substances in the air, high ceilings, or other non-asbestos contaminated surfaces or fixtures). Any failure by the Contractor to identify "special conditions" will not relieve them of the responsibility for estimating quantities or properly assessing the difficulty or cost of successfully performing the work.

2.4.9 The Contractor shall provide shift work overtime and/or crew sizes as needed to meet the construction schedule.

2.4.10 The Contractor shall provide material hoisting, personnel hoisting and scaffolding as required for Contractor's work effort.

2.4.11 An asbestos final visual inspection will be conducted for the Main Building and Firing Range Building following completion of abatement activity. Lead dust clearance sampling will occur following the interior decontamination of the Firing Range Building. Both the final visual work area inspections and lead dust clearance sampling will be provided and paid for by the Owner. Any additional testing, documentation and certification, as required, shall be provided and paid for by the Contractor. Any expense for retesting is at the Contractor's expense.

2.4.12 The Contractor is responsible for the protection of remaining building surfaces, components, utilities and structure during the work. The Contractor shall protect remaining surfaces, structure, equipment and appurtenances from damage. Damages to non-protected remaining surfaces shall be repaired at the Contractors expense.

2.4.13 Deliveries of materials and equipment should be sequenced and scheduled as closely as possible on an as-needed basis. Contractor is responsible for receiving, unloading, handling, hoisting and staging of their own material.

2.4.14 There is a sanitary sewer system on the Site. The Contractor is responsible for compliance with all applicable Federal, state and local provisions regarding wastewater disposal.

2.4.15 The Contractor is responsible for submitting all required abatement permit(s) to Federal, state and local regulatory agencies within the allotted time constraints.

2.4.16 Contractor shall apply and pay for, all environmental permits specifically required by the SOW. The Contractor must receive written approval permitting the commencement of abatement work from the enforcing regulatory agencies and provide copies to the EP for review prior to the commencement of abatement work.

2.4.17 Contractor will arrange for all inspections required for this work.

2.4.18 Daily clean-up of the Site will be performed and at the responsibility of the Contractor.

2.4.19 Throughout the removal and subsequent cleaning operations, the Contractor is responsible for all personnel air monitoring as required under OSHA regulations for the protection of their employees.

- **Asbestos:** Phase contrast microscopy (PCM) air samples shall be collected to establish an 8-hour Time-Weighted Average (TWA) and an initial exposure for each type of employee activity, maintaining exposure below the Permissible Exposure Limit (PEL) of 0.1 fibers per cubic centimeter (f/cc). Sampling and analysis shall be conducted in strict accordance with applicable OSHA regulations. Air samples shall be analyzed in accordance with the National Institute for Occupational Safety and Health (NIOSH) 7400 Method. Analytical results of personnel air samples shall be made available for review by the Owner's EP on a 24-hour maximum turnaround basis. A minimum of 25% of the workers in each type of work operation shall be monitored to establish a

negative exposure and ensure proper respiratory protection is utilized. Personnel air samples will be collected by a trained air-sampling technician under the direct supervision of a State of Missouri Air Sampling Professional (ASP). Personnel air samples shall be submitted under proper chain of custody procedures for analysis to a laboratory currently accredited in the AIHA Laboratory (PAT) Accreditation Program.

- **Lead:** Employee personnel air sampling and analysis shall be conducted in strict accordance with applicable OSHA regulations to maintain employee exposure at or below the PEL of 50 micrograms per cubic meter (µg/m^3) averaged over an 8-hour TWA. Respirators are required for lead exposure above the Action Level of 30 µg/m^3 based on an 8-hour TWA. Analytical results of personnel air samples shall be made available for review by the Owner's EP on a 24-hour maximum turnaround basis. A minimum of 25% of the workers in each type of work operation shall be monitored to establish a negative exposure and ensure proper respiratory protection is utilized. Personnel air samples will be collected by a trained air-sampling technician under the direct supervision of a State of Missouri Air Sampling Professional (ASP). Personnel air samples shall be submitted under proper chain of custody procedures for analysis to a laboratory currently accredited in the AIHA Laboratory (PAT) Accreditation Program.

2.4.20 The Owner's EP will collect PCM ambient air and clearance samples that will be analyzed in accordance with NIOSH Method 7400. If PCM clearance samples fail, the Contractor shall re-clean the abatement area(s) until successful air clearance is achieved. The Contractor is responsible for all labor, equipment, and material costs incurred by the Owner's EP for re-sampling a failed clearance abatement area.

2.4.21 The Contractor shall furnish all labor, materials, permits, notifications, insurance and equipment necessary for the total removal of all areas containing ACBM, lead and other identified hazardous waste materials at the Site.

2.4.22 Estimated quantities of ACM, LBP or other identified UHW materials are provided for reference purposes and are not to be relied upon. The Contractor shall spend sufficient time during their visit to the Site to estimate abatement quantities, assess the exact amounts of ACM, LBP and UHW materials present, as well as the extent of physical difficulty involved in the complete removal.

2.4.23 The Owner's EP or designated representative shall be located at the Site throughout all phases of the work.

2.4.24 The Contractor shall utilize Class I removal techniques for the removal of all friable ACM materials.

2.4.25 The Contractor shall utilize Class II removal techniques for all non-friable ACM materials.

2.4.26 The Contractor shall dispose of all non-ACBM at a municipal solid waste (MSW) landfill that accepts general construction/demolition debris.

2.4.27 The Contractor shall dispose of all ACBM and asbestos debris in an EPA approved landfill in a safe and approved manner and within compliance with all Federal, State and local statutes, laws, rules, regulations and requirements. The Contractor shall provide the Owner with records of the same (waste shipment records). In the event a procedural question arises that is not covered by this remediation specification, the Contractor will be guided by the most stringent interpretation offered by the governing regulations. Intentional or willful violations of these remediation specifications will be grounds for immediate termination of the contract and possible assessment of damages.

2.4.28 Unless otherwise specified, the Contractor shall remove all ACBM, lead and other hazardous waste materials from all work areas specified in this section and leave each work area of the Site in a condition free of ACBM, lead and hazardous waste materials.

2.5 Patents

2.5.1 By submitting a bid on this project, the Contractor acknowledges and accepts full responsibility for compliance with patent or licensing requirements on any equipment, procedures or systems utilized on this project.

2.6 Discrepancies

2.6.1 Should the Contractor find discrepancies in these Remediation Plans & Specifications document or should they be in doubt as to the meaning or intent of any part thereof, the Contractor must immediately notify (no later than five days prior to the bid submittal deadline) and request clarification in writing from the EP. Any discrepancies with regard to conflicts between this Remediation Plans & Specifications document and applicable Federal, State or local regulations or requirements shall be included herein. Failure to request such clarification is a waiver to any claim made by the Contractor for expenses made necessary by reason of later interpretation of this Remediation Plans & Specifications document by the Owner or their representatives.

2.6.2 Explanations desired by a prospective Contractor regarding these specifications or other bid documents shall be requested in writing to the Owner's EP.

2.6.3 Oral explanations or instruction will not be binding. Only written addenda are binding.

2.7 Licenses

2.7.1 The Contractor shall provide proof that it holds a valid State of Missouri Asbestos Abatement Contractor's License and Lead Abatement Contractor's License.

2.7.2 Proof of all required licensing must be provided to the Owner's EP at least 10 days prior to the commencement of abatement work.

2.7.3 The Contractor and its workers shall remain current with all required abatement licenses and not allow any license to expire. The Contractor shall incur all fees associated with Contractor licensing. Any costs arising from project delays related to an expired Contractor license will be the responsibility of the Contractor. The Contractor shall reimburse the Owner for all costs associated with the resulting delay.

2.7.4 The Contractor shall show proof that its supervisors and workers are properly trained, certified, and licensed to perform asbestos and lead abatement work in the State of Missouri. Such proof shall be submitted to the Owner's EP for review at least ten working days prior to start of work. Copies of all worker certifications shall be up to date and kept onsite throughout the project.

2.7.5 The Contractor shall show proof that its workers are properly trained in handling, packaging and preparing for disposal, any hazardous waste materials encountered onsite. Supervisors shall be required to possess a 40-hour Occupational Safety and Health Administration (OSHA) HAZWOPER, 29 CFR 1910.120(e) (Site Supervisor) training certificate, and workers shall possess a 32-hour OSHA HAZWOPER (Worker) certificate. Such proof shall be submitted to the Owner's EP for review at least ten working days prior to start of work. Copies of all worker certifications shall be up to date and kept onsite throughout the project.

2.8 General Construction Definitions

Definitions contained in this specification are not necessarily complete, but are general to the extent that they are not defined more explicitly elsewhere.

2.8.1 **Competent Person:** The Contractors person capable of identifying existing hazards in the workplace and selecting the appropriate control strategies and corrective measures to eliminate exposure.

2.8.2 **Contractor:** The firm responsible for providing permits, notifications, labor, materials and equipment necessary to complete the scope of work described throughout this document.

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

2.8.4 **General Superintendent:** This is the Contractor's Representative at the work site. This person shall be the Competent Person required by OSHA and Environmental Protection Agency (EPA) regulations and licensed as a supervisor in Missouri.

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

2.8.6 Environmental Professional: SCS Engineers

2.8.7 **Project Site:** 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 will be identified at the pre-bid walkthrough.

2.8.8 **Provide:** The term “provide” means “to furnish and install, complete and ready for the intended use”.

2.8.9 **Regulations:** The term "regulations" includes laws, statutes, ordinances, rules, regulations, requirements, guidance documents and similar guidelines 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.

2.9 Definitions Relative to Abatement

2.9.1 **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 Substance Control Act (TSCA) and other Federal, State and local laws applicable to the work.

2.9.2 **Abatement**: An act which is intended to permanently remove and eliminate ACM, LBP and UHW.

2.9.3 **Adequately Wet**: To sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from ACBM, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

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

2.9.5 **Amended Water**: Water to which a surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACBM.

2.9.6 **Asbestos**: The asbestiform minerals are chrysotile, amosite, crocidolite, anthophyllite, actinolite and tremolite. For purposes of assessing respiratory and worker protection, the asbestiform minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos.

2.9.7 **Asbestos-Containing Material (ACM)**: Any material containing greater than one percent asbestos fibers as confirmed by laboratory analysis.

2.9.8 **Asbestos-Containing Building Material (ACBM)**: Any ACM found within or on any part of a building.

2.9.9 **ACBM Waste**: Mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of 40 CFR 61. This term includes removed asbestos-containing material, containment sheeting, filters from air filtration machines, disposable removal equipment and clothing contaminated with asbestos, and disposal bags or other similar packaging containing asbestos.

2.9.10 **ACBM Debris**: Pieces of ACBM that can be identified by color, texture, or composition, and dust, if the dust is assessed by an accredited inspector to be ACBM.

2.9.11 **Authorized Person**: A person authorized by the Owner, Owner's EP and General Superintendent and is required by work duties to be present in the regulated area.

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

2.9.13 **Category I Non-friable ACBM**: Asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos that when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

2.9.14 **Category II Non-friable ACBM**: Any material, excluding Category I non-friable ACBM, containing more than one percent asbestos that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

2.9.15 **Class I asbestos work**: Activities involving the removal of friable Thermal System Insulation (TSI), surfacing ACBM and sheet vinyl.

2.9.16 **Class II asbestos work**: Activities involving the removal of ACBM which is not TSI or surfacing ACBM. This includes, but is not limited to, the removal of asbestos-containing wallboard system, floor tile, roofing materials, siding shingles, and construction mastics.

2.9.17 **Class III asbestos work**: Repair and maintenance operations, where ACBM, including thermal system insulation and surfacing material, is likely to be disturbed.

2.9.18 **Critical Barrier**: One or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.

2.9.19 **Decontamination Area**: An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.

2.9.20 **Demolition**: The disassembly or otherwise razing of building components or equipment in order to effect the complete removal or stripping of ACBM.

2.9.21 **Disposal Bag:** A properly labeled 6 millimeter (mm) thick leak-tight plastic bag used for transporting ACBM waste from the regulated area to the disposal site.

2.9.22 **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.
- **Removal Encapsulant**: A penetrating encapsulant specifically designed to minimize fiber release during removal of asbestos-containing materials rather than for in-situ encapsulation.

2.9.23 **Filter**: A media component used in respirators or ventilation equipment to remove solid fibers and particles from the processed air.

2.9.24 **Environmental Professional (EP):** The Owner's representative providing environmental oversight and management of the project.

2.9.25 **Friable ACBM**: Material containing more than one percent asbestos that when dry can be crumbled, pulverized, or reduced to powder by hand pressure.

2.9.26 **Glovebag**: An impervious bag (typically constructed with 6 mm polyethylene sheeting plastic) designed to be affixed around an object containing ACBM (typically TSI) with inward projecting long sleeve gloves which are used for the handling of tools and performing ACBM removal.

2.9.27 **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.

2.9.28 **HEPA Filtration System**: An air ventilation system utilizing HEPA filters and may or may not utilize a pressure differential relative to the work zone exterior.

2.9.29 **HEPA Filter Vacuum Collection Equipment (or Vacuum Cleaner)**: High efficiency particulate air filtered vacuum collection equipment with a filter system capable of collecting and retaining asbestos fibers. Filters should be of 99.97% efficiency for retaining fibers of 0.3 microns or larger.

2.9.30 **Lead-Based Paint:** Paint, varnish, shellac, or other coating on surfaces that contain 1.0 milligrams (mg) per square centimeter (cm^2) or more of lead or 0.5 percent or lead by weight.

2.9.31 **Lead-Based Paint Hazards:** Any condition that causes exposure to lead-contaminated dust, lead contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, frictional surfaces, or impact surfaces that would result in adverse human health effects as identified by the EPA Administrator under TSCA section 403.

2.9.32 **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.

2.9.33 **Non-ACM:** Any material not containing asbestos fibers, as confirmed by laboratory analysis.

2.9.34 **Permissible Exposure Limit (PEL)**: The level at which employees must not be exposed to airborne asbestos fibers. The OSHA PEL is 0.1 fibers per cubic centimeter (f/cc) averaged over an eight-hour workday.

2.9.35 **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.

2.9.36 **Regulated Area**: An area demarcated by the Contractor where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; a work area where airborne concentrations of asbestos exceed or the possibility they may exceed the OSHA PEL.

2.9.37 **Regulated Asbestos-Containing Material (RACM)**: Regulated asbestos-containing material (RACM) means (a) Friable asbestos material. (b) Category I non-friable ACBM that has become friable. (c) Category I non-friable ACBM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACBM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by 40 CFR 61.

2.9.38 **Removal**: All operations where ACM or LBP is stripped from building components, substrates, and/or removed from the project site by demolition operations.

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

2.9.40 **Surfacing material**: ACBM that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing and other purposes).

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

2.9.42 **Testing Laboratory:** A "testing laboratory" is an entity certified by the appropriate Federal, State and/or local agencies to perform specific analysis of asbestos bulk or air samples, either at the project site, or elsewhere.

2.9.43 **Thermal System Insulation (TSI) material**: ACBM applied to pipes, fittings, boilers, breaching, tanks, ducts or other structural components to prevent heat loss or gain.

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

2.9.45 **Trace ACBM:** Any material containing less than one percent asbestos fibers.

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

2.9.47 **Waste Shipment Record**: The shipping document (manifest), required to be originated and signed by the waste generator and used to track and substantiate the disposition of asbestos-containing waste material.

2.9.48 **Wet Cleaning**: The process of eliminating asbestos contamination from building surfaces and objects by using cloth, 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.

2.9.49 **Working Day**: Working day means an 8-hour work day, Monday through Friday, excluding holidays and weekends.

2.10 Abbreviations and Names

The following trade association names and titles of general standards are frequently abbreviated. Names and addresses are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date as of the date of this document:

AIHA American Industrial Hygiene Association
2700 Prosperity Ave, Suite 250
Fairfax, VA 22031
(703) 849-8888

ANSI American National Standards Institute
25 West 43rd Street, 4th Floor
New York, NY 10036
(212) 642-4900

ASTM American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428
(610) 832-9585

CFR Code of Federal Regulations
Available from Government Printing Office:
Washington, DC 20402
(202) 783-3238

DOT Department of Transportation
400 Seventh St., SW
Washington, DC 20509
(202) 366-4000

EPA Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave NW
Washington, DC 20460
(202) 272-0167

MDHSS Missouri Department of Health and Senior Services
912 Wildwood
P.O. Box 570
Jefferson City, Missouri 65102
Phone: 573-751-6400
Fax: 573-751-6010

MDNR Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, Missouri 65102
(573) 751-4817

NIST National Institute of Standards and Technology
(U.S. Department of Commerce)
100 Bureau Drive
Gaithersburg, MD 20899
(301) 975-6478

OSHA Occupational Safety & Health Administration
(United States Department of Labor)
200 Constitution Avenue, NW
Washington, DC 20210
(202) 783-3238

3.0 SCOPE OF WORK

3.1 Description of Work

3.1.1 The work specified in this section shall be the complete, licensed removal of all non-ACBM demolition debris, ACBM, LBP and UHW materials. Competent, licensed persons trained, knowledgeable and qualified in the techniques of structural demolition, asbestos, lead and hazardous waste abatement, handling, disposal and the subsequent cleaning of internal contaminated areas must perform this work. These competent persons must comply with all applicable Federal, state and local regulations and are capable of and willing to perform the work. The Contractor will be responsible for providing proof to the Owner's EP verifying the validity of each worker's licensing, certification, and accreditation. General floor plan drawings depicting areas within the building where abatement will be conducted are located in **Appendix C**.

3.2 Defined Work Areas

3.2.1 The defined work areas for this project will require complete abatement of the identified ACBM, LBP, LCM, and UHW materials within each Site structure and structure demolition. It is anticipated that the Contractor construct a NPE in the Firing Range Building to remove the identified lead waste and lead dust from interior ceilings, walls, floor, ducting, etc. The entire interior of the Firing Ragne Building is considered lead contaminated. It is not anticipated any other Site structure will require a NPE to complete abatement activities. Table 1 below presents the estimated size of each Site structure.

TABLE 1 – ESTIMATED BUILDING SIZE	
Building Description	**Estimated Square Feet**
Main Building/Garage	18,550
Firing Range Building	3,361
Comm. Building	489
Two Wooden Sheds	200 total
Estimated Total Square Feet	**22,600**

3.2.2 Contractors supplying estimates to the Owner must verify the size area footprint for each work area and not rely upon any supplied area quantities.

3.2.3 Individual work area containments are to be constructed and all identified asbestos, lead and other hazardous waste materials properly abated and disposed.

3.3 ACM Abatement Items

3.3.1 The intent of the asbestos abatement portion of this project is to permanently abate the Site structures of ACM to facilitate building demolition. The ACM abatement items located in the Site structures are listed in the survey report in **Appendix A** and are listed in Table 2 below.

TABLE 2 – ACM ABATEMENT ITEMS			
Material	**Location**	**Condition**	**Estimated Quantity**
12"x12" floor tile with black mastic	Main Building throughout	Category I non-Friable Good	9,431 square feet (sf)
Mudded Pipe Fittings	Main Building restrooms and garage	Friable Fair	30 each
Dark brown ceiling glue dots	Firing Range Building ceiling above firing line	Category II non-Friable Good	300 sf
Off-White Wall Texture (Block Filler)	205 North, East, and South interior cinder block walls	Category II non-Friable Good Will likely become friable during building demolition	3,000 sf
ASSUMED ASBESTOS ABATEMENT ITEMS			
Metal Fire Doors	Main Building, Firing Range Building and Comm. Building	Friable Fair	12 each
Ceiling-mounted ceiling light reflector	Main Building "Observation Room" (first floor)	Friable Fair	1 each
Electrical Components	Main Building Elevator Electrical Room	Category II non-friable Good	TBD
Elevator Brake Components	Main Building Top of Elevator Cab	Category II non-friable Good	TBD

3.3.2 Demolition of existing walls, portions of equipment and appurtenances will be required to accomplish adequate access to conduct asbestos and lead abatement activities. The Contractor must verify with the Owner's EP all demolition areas prior to performing any work.

3.4 LBP Abatement Items

3.4.1 The intent of the LBP abatement portion of this project is to permanently abate specific LBP-coated building components to facilitate building demolition. The LBP abatement items located in the Site structures are listed in the survey report in **Appendix A** and are listed in Table 3 below.

TABLE 3 – LBP ABATEMENT ITEMS						
Location (Building Number)	**Room/Side**	**Component**	**Condition**	**Color**	**XRF Reading (mg/cm^2)**	**Estimated Quantity**
Firing Range	Interior wall between office area and firing range	Metal window and door frame	Intact	Brown	4.06	40
Firing Range	Entire Interior	N/A	Dust Covered Surfaces	N/A	N/A	N/A

TABLE 3 – LBP ABATEMENT ITEMS						
Location (Building Number)	**Room/Side**	**Component**	**Condition**	**Color**	**XRF Reading (mg/cm²)**	**Estimated Quantity**
Firing Range	Backstop	Rubber chips and bullet media	Deteriorated	N/A	N/A	15 tons - 20 tons
Comm. Building	Interior – entryway	Tower cable anchor (loose item)	Deteriorated	Orange	>5.0	5
Comm. Building	Exterior – radio tower	Concrete tower piers	Deteriorated	Orange	3.81	20
Comm. Building	Exterior	Lintels	Deteriorated	Red	1.97	6
Comm. Building	Interior – Storage Room	Wood shelving bracing	Intact	Silver Yellow	1.25	3
Main Building	Exterior – Parking Stripes	Pavement	Deteriorated		1.62	200
Main Building	Exterior	Transformer	Intact	Green	4.56	60
Main Building	Exterior	Metal Handrail	Intact	White	>5.0	3
Main Building	Floor 1	Elevator Room Door – metal	Intact	Brown	1.98	42
Main Building	Floor 1	Door to Inspection/Maint. Room	Intact	Dark Brown	1.90	42
Main Building	Floor 1 - Boiler Room	Handrails - metal	Intact	Brown	>5.0	12
Main Building	Floor 1 - Boiler Room	Exterior Door	Intact	Brown	>5.0	42
Main Building	Floor 1 and 2 – Restrooms	Wall Tile (glazing)	Intact	Blue	3.89	2,010
Main Building	Floor 1 and 2 – Restrooms	Floor Tile (glazing)	Intact	White	>1.0	565
Main Building	Floor 1 and 2 – Restrooms	Sinks (glazing)	Intact	White	>1.0	7 Units
Main Building	Floor 1 and 2 – Restrooms	Toilets (glazing)	Intact	White	>1.0	6 Units
Main Building	Floor 1 – North Hall, west wall	Wall – concrete masonry units	Intact	Tan	1.23	140
Main Building	Floor 1- Northwest Storage	East wall - concrete masonry units	Intact	White/Green	1.70	300
Main Building	Floor 1 – Northwest Storage	South wall – concrete masonry units	Intact	White	2.80	300

3.5 UHW Abatement Items

3.5.1 The intent of this UHW abatement portion of the project is to permanently abate the Site structures of UHW items to facilitate building demolition. The UHW items to abate are listed in the survey report in **Appendix A** and are listed in Table 4 below.

TABLE 4 – UHW ABATEMENT ITEMS[1]		
Building	**Material**	**Estimated Quantity**
Main Building/Garage	**Product/Item**	**Estimated Quantity**
	Fire Extinguishers	15
	Fluorescent 4' Light Lamps	600
	Fluorescent 2' Light Lamps	87
	Single Fluorescent Lights (Bulbs)	24
	Ballasts (Assumed PCB Containing)	225
	Smoke Detectors	33
	Exit Signs	3
	Cleaning/Disinfectant Products ((1) 20 oz spray bottle, (4) 1 gallon jugs)	5
	Compressor Oil (1 gal)	2
	Desiccant Container (2.5 gal)	1
	Box of Air Boiler Treatment Pellets	1
	Exterior Paint Cans (1 gal and 5 gal)	2
	Quickcrete Products (1 qt, 20 lb., (3) 20 lb.	5
	Hydraulic Lift Oil ((2) 10 L)	2
	Parts Washer Solvent (5 gal)	1
	Uknown Containers	2
	Cleaning Products (Windshield Wash 1 gal, Degreaser 1 gal)	2
	Rooftop AC Units	2
	Refrigerators	4
	TV's	5
	CPU Monitor	1
	Projector	1
	Used Oil AST (500 gal)[2]	1
	Chiller Unit (containing refrigerant and oil)	1
	Gear Case Filler (2 gal)	1
Garage	Oily Water in Lift Pit (~700 Gallons)3	1
Firing Range	Fluorescent 4' Light Lamps	52
Firing Range	Ballast (Assumed PCB Containing)	26
Firing Range	Fire Extinguishers	1
Comm. Building	Fluorescent 4' Light Lamps	4
Comm. Building	Ballast (Assumed PCB Containing)	2
Comm. Building	Fire Extinguishers	1
Comm. Building	Natural Gas Generator	1
Comm. Building	Lead Acid 12V Batteries	3
Comm. Building	Window Mounted AC Units	2

[1]UHW items as of April 1, 2025.
[2]Uknown contents volume.
[3]The oily water contents of the garage floor pit should be removed by an oil recovery contractor. Following the removal of the pit contents, the side walls and bottom of the pit should be cleaned prior to demolition.

3.6 Non-ACM Interior Demolition

3.6.1 The extent of interior demolition is contained only to those areas requiring ACM, LBP, LCM, and UHW abatement.

3.6.2 Areas, Materials and Systems within the Site structures that require protection from interior demolition activities include:

- Building materials not slated for abatement;
- Building structural members (walls, flooring, roofing, etc.); and
- All other non-hazardous items present within the interior of the building, not listed above.

3.6.3 Demolition work of non-ACM, non-LBP, non-LCM, and non-UHW to access abatement items must be complete prior to commencement of abatement activity. Once interior demolition is complete, abatement activities can commence. No other construction trades will be allowed in an abatement area until the abatement contractor passes a final visual inspection for floor tile/mastic, mudded fittings, light reflector, elevator components, and electrical component removal (Main Building) and ceiling glue dot removal (Firing Range Building) and passes a lead dust wipe clearance event (Firing Range Building).

3.7 Building Demolition

3.7.1 Site structure demolition consists of the following:

- Removal of all above ground structures, concrete, and removal of all subsurface structural components (foundations, piers, piles, etc.), utilities (electrical, sewer, water, gas, etc.).

3.7.2 All utilities not needed by the abatement/demolition contractor are to be properly disconnected and capped where they enter the Site.

3.7.3 All adjacent building areas, alleys and other public ways and places shall be kept free and clear of all dirt, debris, rubbish, refuse and loose material resulting from the moving, demolition or demolition operations.

3.7.4 Each entity engaged in demolition or abatement on any part of this project is required to be familiar with industry standards applicable to that entities' construction activity. Copies of applicable standards are not bound here within. Where copies of standards are needed for performance of a required construction activity, the Contractor shall obtain copies directly from the publication source. Although copies of standards needed for enforcement of requirements may be part of required submittals, the Owner's EP reserves the right to require the Contractor to submit additional copies as necessary, for enforcement of requirements.

3.7.5 The Contractor is required to dispose of all material, debris, and wreckage resulting from interior and building demolition activities at an approved and permitted MSW construction and demolition (C&D) landfill, outside of the project limits in compliance with all applicable Federal, state and local laws and regulations.

3.7.6 Except as specified herein or identified in the drawings, specifications or agreements, all material and debris shall be the property of the Contractor. The Owner will coordinate removal of salvaged materials.

3.7.7 Owner shall be given the opportunity to salvage 200 white bricks and 200 brown bricks. The Contractor shall set aside these bricks during demolition activities in an area of the project site that does not interfere with other site activities.

3.7.8 Abandoned or replaced water meters and meter assemblies will be reviewed on a case by case basis.

3.7.9 Removed fire hydrants will be reviewed on a case by case basis.

3.7.10 The contractor shall remove from the Site all debris, rubbish and other materials resulting from demolition operations. Unless otherwise permitted, storage or sale of removed salvage or salvageable materials will not be permitted on the Site.

3.7.11 Unless processed according to an approved C&D Recycling Plan or attached Bid Plan, all demolition debris shall be disposed of at a legal MSW landfill or at a site where dumping of such materials is allowed under Federal, State and local laws.

3.7.12 Demolition debris is defined as used building materials resulting from demolition, and waste materials from the construction of buildings or site clearing. Broken concrete, reinforcing steel, and asphalt are some of the many things considered to be demolition debris.

3.7.13 Remove demolition debris from Site in covered trucks and any spills of demolition debris on public roadways shall be promptly removed by this Contractor and the public way shall be cleaned as necessary.

3.8 Demolition Site Security

3.8.1 The Contractor is responsible for securing the project Site on all sides with barriers to prevent unauthorized access to the Site during abatement and building demolition activities. Traditional temporary construction chain link fencing may be installed and joined at the corners along the north, south, east, and west Site boundaries. All fencing shall be joined at the corners and secured. The Contractor shall provide gate access at the northeast driveway (US MO 291 Highway) and southwest driveway (SE Blue Parkway) for vehicles and equipment to access the Site. The gated openings shall be secured daily with a padlock and chain to prevent unauthorized access to the Site. Following building demolition and soil grading activities, the temporary construction fence may be removed, unless desired by the Owner to remain in place during additional site work.

4.0 APPLICABLE STANDARDS AND GUIDELINES

4.1 Contractor Standards and Guidelines

4.1.1 All work under this conducted during this project shall be done in strict accordance with all applicable Federal, state and local regulations, standards and codes governing asbestos and lead abatement along with any other trade work done in conjunction with any abatement activity.

4.1.2 By initiating work on this project the Contractor is aware of and is knowledgeable of all current Federal, State and local regulations affecting the work on this project. The act of initiating work on this project indicates that the Contractor is willing to solely accept responsibility for the adherence to all regulations and the enforcement of all personal protection and safety requirements. The Contractor further acknowledges willingness to solely accept responsibility for the defense and resolution of any claims, filed by any party, as they may relate to the work performed by the Contractor on this project. Full indemnification shall be made part of the contract documents attached hereto and be present upon bid acceptance/award to contractor.

4.1.3 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.

4.2 Specific Regulations

4.2.1 The following specific regulations shall apply for this ACM, LBP, LCM, and UHW abatement project:

OSHA

- Title 29 Code of Federal Regulations Section 1910.134 – General Industry Standard for Respiratory Protection;
- Title 29 Code of Federal Regulations Section 1910.1001 – General Industry Standard for Asbestos;
- Title 29 Code of Federal Regulations Section 1910.1020 – Employee Exposure and Medical Records;
- Title 29 Code of Federal Regulations Section 1910.1025 – Lead;
- Title 29 Code of Federal Regulations Section 1910.1200 – Hazard Communication;
- Title 29 Code of Federal Regulations Section 1926.62 – Safety and Health Regulation for Construction; and
- Title 29 Code of Federal Regulations Section 1926.1101 – Construction Industry Standards for Asbestos.

EPA

Title 40 Code of Federal Regulations Part 61 Subparts A and M (Revised Subpart M-11/20/90) – National Emission Standards for Hazardous Air Pollutants – Asbestos.

Hazardous Materials Transportation Act (Department of Transportation)

Title 49 Code of Federal Regulations parts 171-180.

MDHSS

19 Code of State Regulations (CSR) 30-70.630(9)(B) – Lead Abatement Work Practice Standards

MDNR – Air Pollution Control Program

Division 10 – Air Conservation, Chapter 6 – Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri.

MDNR – Publications

- 2002: Disposal of Demolition Wastes Contaminated with Lead or Other Heavy Metals;
- 2045: Managing Construction and Demolition Waste;
- 2050: Special Waste;
- 2099: Asbestos and Lead-Based Paint Abatement Requirements at Brownfields/Voluntary Cleanup Program Sites;
- 2157: Asbestos Requirements for Demolition and Renovation Projects; and
- 2242: Construction and Demolition Waste Guidance.

4.3 Copies of Standards

4.3.1 Each entity engaged in construction of any part of the Project is required to be familiar with industry standards applicable to that entities' construction activity. Copies of applicable standards are not bound with this specification and are the responsibility of the Contractor. Where copies of standards are needed for performance of a required construction activity, the Contractor shall obtain copies directly from the publication source. Although copies of standards needed for enforcement of requirements may be part of required submittals, the Owner reserves the right to require the Contractor to submit additional copies as necessary for enforcement of requirements.

4.4 Permits

4.4.1 The following permits are required for this project. Any permits being waived shall be so indicated. The party responsible for obtaining and making payment for each permit shall be listed. Unless noted below, or on the actual permit, the Contractor is responsible for maintaining and fulfilling the permit requirements.

1. The Owner's Land Disturbance Permit is required and will be obtained by the Owner. The permit fee is waived for the Work.
2. The Owner's Right-of-Way Permit is waived for the Work.
3. The Owner's Traffic Control Permit is waived for the Work.
4. The Owner's Building Permit is not required for the Work.
5. The Owner's Demolition Permit is required and will be obtained by the Contractor.
6. MDNR APCP ASBESTOS PROJECT NOTIFICATION Form.
7. MDNR APCP ASBESTOS POST-NOTIFICATION Form.
8. MDNR APCP ASBESTOS NESHAP NOTIFICATION OF DEMOLITION AND RENOVATION Form.
9. A Blasting Permit is not applicable for the Work. No blasting is allowed.
10. An MDNR Land Disturbance Permit is required and will be obtained by the Owner.
11. The SWPPP (Stormwater Pollution Prevention Plan) has been developed and shall be maintained and updated by the Contractor.
12. A MoDOT Permit is not required for the Work.
13. A railroad permit is not required for the Work.
14. A Corps of Engineers Permit is not required for the Work.

15. Though not a permit, the Contractor and all Subcontractors are required to obtain or have:

a. current Lee's Summit business license;
b. an active and in good standing Missouri Secretary of State business registration.
c. State of Missouri Asbestos Abatement Contractor license.
d. EPA-trained and State of Missouri-certified Asbestos Supervisor's and Worker's.
e. State of Missouri Lead Abatement Contractor license.
f. EPA-trained and State of Missouri-certified Lead Abatement Supervisor's and Worker's.

5.0 CONTRACTOR-REQUIRED SUBMITTALS AND NOTICES

5.1 Pre-Abatement Submittals and Notices

5.1.1 Prepare and submit, to the Owner and its representatives, an estimated abatement schedule and anticipated completion date.

5.1.2 Send written notification in accordance with 40 CFR Part 61.145 of Subpart M (11/20/90 Revision) to the Federal air pollution control agency responsible for the enforcement of the National Emission Standard for Asbestos at least **20 working days** prior to the commencement of any on-site project activity (MDNR). Provide the Owner's EP with a copy of the notice prior to beginning removal of ACM and LBP.

5.1.3 Submit proof, satisfactory to the EP that all required permits have been obtained and that the disposal site location and arrangements for transportation of asbestos-containing waste and lead waste materials have been made. If a separate transporter (other than the Contractor) is to be employed to transport the ACBM and lead waste to the landfill, copies of the transporter's licenses and permits shall also be submitted to the Owner's EP.

5.1.4 Submit documentation satisfactory to the Owner's EP that the Contractor's employees (supervisors and abatement workers) are properly licensed in Missouri and have current refresher training.

5.1.5 Submit evidence acceptable to the Owner's EP that the third-party testing laboratory responsible for PCM analysis of the Contractors OSHA-mandated personnel air samples is currently accredited by the AIHA Laboratory Accreditation Program. OSHA sample collection and laboratory analysis shall be performed by an independent third party.

5.1.6 Submit to the Owner's EP, documentation from a physician that all employees or agents, who may be exposed to airborne asbestos fibers and lead in excess of background levels, have been provided with an opportunity to be medically monitored to assess whether they are physically capable of working while wearing a respirator. In addition, document that personnel have received medical monitoring as required in OSHA 29 CFR 1910.1001 (j). The Contractor must be aware of and provide information to the examining physician about unusual conditions in the workplace environment (i.e., high temperatures, humidity, and chemical contaminant) that may impact the employee's ability to perform work activities.

5.1.7 Submit, to the Owner's EP, shop drawings for layout and construction of decontamination enclosure system and barriers for isolation of the work area, as appropriate. Drawings shall indicate location of individual HEPA filtration systems and their respective exhausting locations. If Contractor is bidding an alternate method, detailed abatement design and work plan shall be attached to bid. If Contractor is bidding base bid only, shop drawings can be submitted prior to containment set-up.

5.1.8 Submit, to the Owner's EP, manufacturer's certification that HEPA vacuums and HEPA filtration units and any other local exhaust ventilation equipment conform to ANSI standards.

5.1.9 When rental equipment is to be used in abatement areas or to transport asbestos contaminated waste, a written notification concerning intended use of the rental equipment must be provided to the rental agency with a copy submitted to the Owner's EP.

5.1.10 Document NIOSH approvals for all respiratory protective devices utilized on-site. Include manufacturer certification of HEPA filtration capabilities for all cartridges and filters.

5.1.11 Submit documentation of respirator fit-testing for all Contractor employees and agents who must enter the regulated area. This fit-testing shall be in accordance with qualitative procedures as detailed in the OSHA Asbestos Standard 29 CFR 1910.1001 Appendix C, Qualitative Fit Test Protocol or be quantitative in nature.

5.1.12 The Contractor shall prepare an emergency plan as part of a Health and Safety Plan (HASP) prior to initiation of the asbestos/lead abatement action. A copy of the plan shall be available at the clean room of the worker decontamination area.

5.1.13 The emergency procedures in the Health and Safety Plan shall include telephone numbers for potential emergency response (police, fire department, and emergency medical needs), the location of the nearest telephone and the location to the nearest hospital. A map showing streets with directions to the hospital shall also be provided in the plan.

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

5.1.15 Employees shall be informed of the Health and Safety Planning and trained in evacuation procedures in the event of workplace emergencies.

5.1.16 For non-life-threatening situations (employees only slightly injured) shall decontaminate following normal procedures with assistance from fellow workers, if necessary, before exiting the work place to obtain proper medical treatment.

5.2 Submittals and Notices during Abatement

5.2.1 Submit weekly to the Owner's EP, copies of all transport manifests, waste shipment records, trip tickets and disposal receipts for all asbestos/lead waste materials removed from the work area during the abatement process, a list of abatement activities scheduled for the week and any additional information pertinent to that week of abatement activity.

5.3 Post-Abatement Submittals and Notices

5.3.1 Results of OSHA personnel sampling data (asbestos and lead) collected during the course of this abatement project shall be submitted by the Contractor by the Owner's EP. They serve only to monitor the Contractors performance of work during the project and shall not release the Contractor from any responsibility to sample personnel for OSHA compliance.

5.3.2 All final visual inspections and dust wipe clearance sampling data will be performed by the Owner's EP. A copy of the results of such inspection and sampling event(s) will be submitted to the Contractor within 30 days of project completion for inclusion into their permanent record.

5.3.3 The Contractor shall submit to the Owner' EP, a final closeout report documenting all activities performed during this ACM, LBP, LCM, and UHW abatement project. This report shall include, but is not limited to, a project narrative describing the project and copies of all abatement project-related paperwork (supervisor daily logs, containment sign-in/sign-out logs, daily manometer reading logs, abatement personnel certifications, waste manifests, all required project notifications, amendments, post-notifications, and any project photographs).

6.0 MATERIALS AND EQUIPMENT

6.1 Materials

6.1.1 Deliver all materials in the original packages, containers or bundles bearing the name of the manufacturer and the brand name (where applicable).

6.1.2 Store all materials subject to damage off the ground, away from wet or damp surfaces and under cover sufficient enough to prevent damage or contamination. Replacement materials shall be stored outside of the work area until abatement is completed.

6.1.3 Damaged, deteriorating or previously used materials shall not be used and shall be removed from the work Site and disposed of properly.

6.1.4 If used, Glove bags shall be a minimum of six (6) mm thickness and be seamless at the bottom. All glove bags shall be removed from the original packing material and thoroughly inspected for defects around all seams and at the point of glove and accessory attachments. Any defective glove bags will be repaired or discarded.

6.1.5 Polyethylene sheeting for walls and coverage of stationary objects shall be a minimum of four (4) mm thick. Exterior containments must be constructed with fire retardant polyethylene sheeting.

6.1.6 For floors and all other uses, wood sheeting on metal grates, sheeting of six (6) mm thickness shall be used in widths selected to minimize the frequency of joints.

6.1.7 Method of attachment may include any combination of duct tape or other waterproof tape, furring strips, spray glue, staples, nails, screws or sheets of polyethylene and capable of sealing polyethylene to dissimilar finished or unfinished surfaces under both wet and dry conditions and outdoor use (including the use of amended water).

6.1.8 Polyethylene sheeting utilized for worker decontamination enclosure shall be opaque white or black in color. Separate men's and women's worker decontamination units shall be constructed.

6.1.9 Disposal bags shall be of clear, six (6) mm polyethylene plastic and preprinted with labels per OSHA requirement 29 CFR 1910.1001 (j)(2) and 29 CFR 1926.1101 (k)(7).

6.1.10 Disposal drums shall be metal or fiber-coated with interlocking ring tops.

6.1.11 Apply stick-on labels for waste disposal drums per OSHA requirements.

6.1.12 Warning signs as required by OSHA 29 CFR 1910.1001 (j)(1)and 29 CFR 1926.1101 (k)(6).

6.2 Removal Chemicals

6.2.1 Surfactant (wetting agent) shall be a 50/50 mixture of polyethylene ether polyethylene ester, or equivalent, mixed in a proportion of one (1) fluid ounce of five (5) gallons of water or as specified by manufacturer. An equivalent surfactant shall be understood to mean a material with a surface tension of 29 dynes/cm as tested in its properly mixed concentration, using ASTM method D1331-56- "Surface and Interfacial Tension of Solutions of Surface Active Agents." Where work area temperature may cause freezing of the amended water solution, the addition of ethylene glycol in amounts sufficient to prevent freezing is permitted.

6.2.2 Chemical Remover shall be suitable to aid in the removal of ACBM. The chemical must not be solvent-based and be non-flammable.

6.2.3 Penetrating and bridging encapsulants shall be suitable to aid in removal of ACBM. The encapsulant shall act as a solvent and be capable of binding and encapsulating individual asbestos fibers.

6.3 Lockdown

6.3.1 Encapsulation lockdown paint materials shall be bridging type. Encapsulant should not be solvent-based or utilize a vehicle (the liquid in which the solid parts of the encapsulant are suspended) consisting of hydrocarbons and shall not be flammable. Encapsulant must be color tinted so that its application can be easily verified. The encapsulant paint must also comply with approved lead work practices.

6.4 Equipment

6.4.1 A sufficient quantity of HEPA filtration units equipped with multi-stage HEPA filtration will be operated in accordance with ANSI standards (local exhaust ventilation requirements) and EPA guidance document EPA 560/5-43-002 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings Appendix F. Recommended Specifications and Operating Procedures for the Use of Negative Pressure Systems for Asbestos Abatement shall be utilized so as to provide at least one workplace air change every fifteen (15) minutes. When performing abatement adjacent to occupied areas, initiate operation of HEPA filtration equipment as needed to provide six air changes in the work area every sixty (60) minutes as demonstrated by volumetric measurements and HEPA filtered air exhaust velocity measurements. If air-supplied respirators are utilized, estimate the volume of supplied air, and add to workplace air volume when calculating ventilation requirements.

6.4.2 Each HEPA filtration machine must have a minimum of 1800 to 2000 cubic feet of air per minute (CFM) capacity.

6.4.3 Each HEPA filtration machine shall have a back draft damper installed on the discharge of the machine. Dampers shall be properly fitted to the equipment utilizing a 20 gauge sheet metal transition fitting.

6.4.4 Type "C" air-supplied respirators in positive pressure or pressure demand mode with full face pieces and HEPA filtered disconnect protection have traditionally been recommended by the EPA for all full shift abatement work until the successful completion of final clearance air monitoring. However, powered air purifying respirators equipped with HEPA filters and full face-pieces with highest NIOSH assigned protection factor may be used if the air fiber level in the regulated area does not exceed 0.1 f/cc during removal work. If the project specific OSHA personnel air monitoring data indicates fiber concentrations, over a period of one full shift when abatement work is at its greatest activity, is below 0.1 f/cc, the Contractor employees may switch to half-mask type, HEPA filtered respirators. If for any reason, the Contractor OSHA personnel air monitoring data is detected above 0.1 f/cc, then the Contractor must immediately revert back to PAPR respiratory protection.

6.4.5 A sufficient supply of charged replacement batteries, HEPA filters and a flow test meter shall be available in the clean room for use with powered air purifying respirators. Spectacle kits and eyeglasses must be provided by the Contractor for employees who wear glasses and who must wear full face-piece respirators. Respirators shall be provided by the Contractor that have been tested and approved by NIOSH for use in asbestos contaminated atmospheres.

6.4.6 Compressed air systems shall be designed to provide air volumes and pressures to accommodate respirator manufacturer's specifications. The compressed air systems shall have a receiver of adequate capacity to allow escape of all respirator wearers from contaminated areas in the event of compressor failure. Compressors must meet the requirements of 29 CFR 1910.134 (d). Compressors must have an observable in-line carbon monoxide monitor. Documentation of adequacy of compressed air systems/respiratory protection system must be retained onsite. This documentation will include a list of compatible components with the maximum number of and type of respirators that may be used as described in Compressed Gas Association Specifications G-7.1. The Contractor is responsible for having a type "C" System at their disposal, if necessary.

6.4.7 Full body disposable protective clothing, including head, body and foot coverings (unless using reusable/cleanable footwear) consisting of material impenetrable by asbestos fibers (Tyvek or equivalent) authorized visitors in sizes adequate to accommodate movement without tearing.

6.4.8 Additional safety equipment (e.g. hard hats meeting the requirements of ANSI Standard Z87.1-1981, eye protection meeting the requirements of ANSI Standard Z87.1-1979, safety shoes meeting the requirements of ANSI Standard Z41.1-1967, disposable PVC gloves), as necessary, shall be provided by the Contractor to all workers and authorized visitors.

6.4.9 Any scaffolding erected for removal shall conform to requirements contained in OSHA 29 CFR 1926, Subpart L. The contractor will ensure that a "Competent Person", as defined by OSHA 29 CFR 1926.450, is present to inspect scaffolding during each day of project activity.

6.4.10 Non-skid footwear shall be provided to all abatement workers. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.

6.4.11 A sufficient supply of disposable mops, rags and sponges for regulated area decontamination shall be available.

6.5 Removal Equipment

6.5.1 A sufficient supply of scaffolds, ladders, lifts and hand tools (e.g. scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed and shall be erected or set-up and maintained in a safe manner.

6.5.2 Sprayers with pumps capable of providing 500 pounds per square inch (psi) at the nozzle tip at a flow rate of two gallons per minute for spraying amended water.

6.5.3 Rubber or plastic dustpans, shovels, and squeegees shall be provided for cleanup.

6.5.4 Brushes utilized for removing loose asbestos containing material shall have nylon or fiber bristles, not metal.

6.5.5 A sufficient supply of HEPA filtered vacuum systems shall be available during ACBM removal and cleanup. If an outside vacuum system is used, a full containment enclosure with negative air pressure will be required around the system so as to prevent possible contamination to the outside ambient air including exterior containments. A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained within the NPE as evidenced by taped recorded manometer measurements.

7.0 ASBESTOS ABATEMENT

7.1 Asbestos Hazard

7.1.1 An asbestos hazard occurs when ACM has released asbestos fibers into a building or ambient atmosphere, thereby creating a health hazard to workers, building occupants and others present at or near a project location. The Contractor shall take all precautions not to create an asbestos hazard. If an asbestos hazard occurs, the Contractor, at a minimum, shall perform the following actions:

- Apprise all abatement workers of the seriousness of the hazard and of proper work procedures which must be followed;
- Apprise all supervisory personnel, subcontractors, Owner and Owner's EP of the hazard; and
- Take all appropriate continuous measures, as necessary, to protect all building occupants or others from the hazard of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable Federal, State and local agencies.

7.2 General Removal Procedures

7.2.1 The following general abatement procedures shall be utilized on this project:

- Construct critical barriers on all windows, doors, roof vents and other openings to the outside of the building, consisting of one (1) layer of 6 mm polyethylene sheeting, glued and taped at the seams. For exterior containment, polyethylene sheeting must be fire retardant and able to withstand all weather conditions. Attach the worker decontamination unit, waste pass-out chamber, and place HEPA filtration system inside each containment area. The Contractor shall post the work area perimeters with caution tape and OSHA notifications and barriers.
- Contractor will provide labor, materials and equipment to properly install and maintain all interior and exterior containment's and decontamination units. Any interior or exterior contained work area shall maintain a minimum of -0.02 inches of water column with a minimum of four air exchanges per hour and be registered by a recording manometer 24-hours per day. Fluctuations below -0.02 inches of water column are unacceptable and may require temporary cessation of work until conditions are corrected. The Contractor will not be entitled to a change in conditions or scope due to repair of containment's and decontamination units due to Acts of God, vandalism or improper maintenance of the enclosures.
- Remove material from the substrate using wet methods. All ACBM waste generated shall be double-bagged, appropriately labeled, transported and disposed of at an approved landfill. All interior vertical and horizontal surfaces shall be abated, HEPA vacuumed, wet wiped and encapsulated as part of the decontamination process. A manifest must accompany the friable and non-friable ACBM waste during transport and disposal. Copies of the manifests for both friable and non-friable ACBM waste must be provided to the Owner at project completion.

7.2.2 The Contractor shall conduct asbestos removal in accordance with OSHA Standard 29 CFR 1926.1101 and MDNR regulations governing asbestos abatement projects.

7.2.3 The Owner's EP will conduct ambient air monitoring surrounding each regulated work area.

7.2.4 The Contractor shall use proper worker PPE, pass a final visual clearance inspection, pass an aggressive PCM final air clearance test (0.01 fibers per cubic centimeter or less) and apply a lockdown encapsulant to all exposed surfaces. Once satisfactory air clearance has been achieved, remove containment barriers and dispose as ACBM waste.

7.2.5 If any hot or exterior work will be done during asbestos abatement containment, all polyethylene sheeting must be fire proof and/or fire retardant.

7.3 Stop Work

7.3.1 If the Owner or Owner's EP presents a written Stop Work Order, immediately stop all work. Do not recommence work until authorized in writing by the Owner's EP.

7.4 Site Use

7.4.1 Contractor must confine operations at the site to the areas permitted under the contract. Portions of the site beyond areas on which work is indicated are not to be disturbed except as necessary to insure the safety of those present at or near the site. Conform to site rules and regulations affecting the work while engaged in project construction.

7.4.2 Keep existing driveways and entrances serving the premises clear and available to the Owner and their employees at all times. Do not use these areas for parking or storage of materials without prior consent from Owner.

7.4.3 Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials to the areas indicated by the Owner.

7.5 Site Security

7.5.1 The regulated area is to be restricted only to authorized, licensed, trained, and protected personnel. This may include the Contractor's employees, Owner's EP and employees of State/local enforcement inspectors and any other designated individuals. A list of authorized personnel shall be established prior to job start and posted in the clean room of the worker's decontamination area or at the entrance to the project site.

7.5.2 Entry into the regulated area by unauthorized individuals shall be reported immediately to the Owner's EP by the Contractor.

7.5.3 A log book shall be maintained by the Contractor in the clean room of the worker decontamination area. Anyone who enters the regulated area must record name, affiliation, time in, and time out for each entry. An on-site log and check list will be used to control security.

7.5.4 Access to the regulated area shall be through a single worker decontamination system. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exceptions for this rule are the waste pass-out airlock which shall be sealed except during removal of containerized asbestos waste from the regulated area, and emergency exits in case of fire or accident. Emergency exits shall not be locked from the inside. However, they shall be sealed with polyethylene sheeting and tape until needed.

7.6 Work Area Preparation - General Requirements

7.6.1 This section applies to the construction of a Negative Pressure Enclosure (NPE).

7.6.2 Post the appropriate warning signs and warning tape meeting the requirements of OSHA 29 CFR 1910.1001 (j)(1), 29 CFR 1926.1101 (k)(6) and 29 CFR 1910.1025(m)(2) to demarcate the regulated area or other approaches where airborne asbestos fiber concentrations and lead dust may be reasonably expected to exceed the PEL. Signs and warning tape shall be posted at a distance sufficiently far enough away from the regulated area to permit an employee or others to read the sign and take the necessary protective measures to avoid exposure. Exterior doors accessing the regulated area must be locked and posted on the outside with warning signs.

7.6.3 Shut down and lock out electric power to the regulated area. Make provisions to draw temporary power and lighting from outside the abatement area. Insure safe installation (including ground faulting) of temporary power sources and equipment by compliance with

all applicable electrical code requirements and OSHA requirements for temporary electrical systems.

7.6.4 Water and power for abatement purposes will be available to the Contractor for the duration of the project at the Owner's expense. The Contractor should, however connect to existing water and sewer systems where possible and be prepared to provide means of transporting the water. Temporary electrical panels made be used as long as they comply with all OSHA regulations.

7.6.5 Pre-clean all movable objects within the regulated area using a HEPA filtered vacuum and/or wet cleaning methods as appropriate. After cleaning, these objects shall be removed from the work area and carefully stored or disposed of in compliance with all applicable Federal, State and local laws. All porous construction debris within the regulated area shall be considered asbestos and lead contaminated and disposed of accordingly. Nonporous items may be cleaned to the satisfaction of the Owner's EP and disposed of or recycled as general construction debris.

7.6.6 Objects in the regulated area which cannot be moved shall be pre-cleaned and covered with one (1) layer of 6 mm polyethylene sheeting and secured with duct tape.

7.6.7 Seal off all windows, doorways, corridor entrances, drains, ducts, grates, diffusers, skylights and any other openings leading into, out of, or through the regulated area from areas outside of the regulated area with one layer of 6 mm polyethylene sheeting and duct tape/spray adhesive (critical barrier). All floor penetrations shall be sealed with a spray foam substance to prevent any potential spills or leakage out of the NPE. The spray foam shall be installed prior to any floor sheeting installation.

7.6.8 Metal HVAC systems containing asbestos shall be dismantled, cleaned and properly disposed.

7.6.9 Two layers of 6 mm polyethylene sheeting, at a minimum, shall be used during ACBM fireproofing abatement activities. Once all fireproofing removal is complete, the floor sheeting may be removed to abate ACBM floor materials.

7.6.10 Wall sheeting shall not be required on interior work area building surfaces being abated. Critical barriers and negative pressure will be required. Wall sheeting will be required only if an abatement work area adjoins an occupied area of the building.

7.6.11 Construct a **clear view port with a minimum size of 18"x 18"** installed to allow a view of the interior of the work area. Install as many view ports necessary to give a clear view of all abatement work operations.

7.7 Worker Decontamination Area

7.7.1 The Worker Decontamination Area shall be provided at locations contiguous to the regulated area where an attached wet three-stage decontamination chamber must be provided. The system may consist of existing rooms or areas outside of the work area, if the layout is appropriate, that can be enclosed in plastic sheeting and is accessible from the work area. When this situation does not exist, enclosure systems may be constructed out of metal, wood or plastic support as appropriate.

7.7.2 Worker decontamination enclosure systems constructed at the work site shall utilize 6 mm opaque black or white polyethylene sheeting or other acceptable materials for privacy.

7.7.3 The worker decontamination enclosure shall consist of, at least, a clean room, a shower room and an equipment room, each separated from each other and from the work area by airlocks.

7.7.4 Entry to and exit from all airlocks and decontamination enclosure system chambers shall be through curtained doorways consisting of three (3) sheets of overlapping polyethylene sheeting. One (1) sheet shall be secured at the top and left side, the other sheets at the top and opposing sides. All sheets shall have weights attached to the bottom to insure that they hang straight and maintain a seal over the doorway when not in use.

7.7.5 Access between any two (2) rooms in the decontamination enclosure system shall be through an airlock with at least three (3) feet separating each curtained doorway. Pathways into (from clean to contaminated) and out from (contaminated to clean) the work area shall be clearly designated.

7.7.6 Clean room shall be sized to adequately accommodate the work crew. Benches shall be provided as well as hooks for hanging up street clothes. Shelves for storing respirators shall also be provided in this area. Clean work clothes (if required under disposable clothing), clean disposable clothing, replacement filters for respirators, towels and other necessary items shall be provided in adequate supply in the clean room. A location for postings shall also be used to permit access into the clean room from outside the work area. Lighting, heat and electricity shall be provided, as necessary, for comfort. This space shall not be used for storage of tools, equipment or materials, (except as specifically designated) or as office space.

7.7.7 Shower room shall contain one shower head per every five (5) workers in containment or more as necessary to adequately accommodate workers. Each shower head shall be supplied with hot and cold water adjustable at the tap. The shower enclosure shall be constructed and available at all times. Shower water shall be drained, collected and filtered through a system with at least 0.5 to 1.0 micron particle size collection capability.

7.7.8 Notice: A system containing a series of several filters with progressively smaller pore sizes is recommended to avoid rapid clogging of filtration system by large particles.

7.7.9 No asbestos or lead contaminated water may be allowed to evaporate or leak into non-work areas. All filtered water must be disposed of in a sanitary sewer. This water must not be allowed to go to storm drains, or run off onto adjacent soil or paved surfaces.

7.7.10 The equipment room shall be suited for storage of equipment and tools at the end of a shift after they have been decontaminated using HEPA filter vacuum and/or wet cleaning techniques as appropriate. Replacement filters (in sealed containers until used) for HEPA vacuums and HEPA filtration ventilation equipment, extra tools, containers of surfactant and other materials and equipment that may be required during the abatement may also be stored here. A pool or equivalent filled with water shall be located in the work area just outside the equipment room for workers to clean off foot coverings after leaving the work area and prevent excessive contamination of the worker decontamination enclosure system. A drum lined with a labeled six (6) mm polyethylene bag for collection of disposable clothing may be located in this room. Contaminated footwear (e.g. rubber boots, other reusable footwear) shall be stored in this area for reuse the following work day.

7.8 Waste Container Pass-Out Airlock and or Direct Load Out

7.8.1 The waste container pass-out airlock shall be attached to the abatement containment barriers at a location near the waste disposal transport container.

7.8.2 This airlock system shall consist of an airlock, a container staging area, and another airlock with access to the abatement work area.

7.8.3 The waste container pass-out airlock shall be constructed in a similar fashion to the worker decontamination enclosure system using similar materials and airlock and curtain doorway designs.

7.8.4 The waste container pass-out airlock system **SHALL NOT** be used to enter or exit the work site. Waste containers **SHALL NOT** be removed from the containment through the worker decontamination unit(s).

7.9 Maintenance of the Negative Pressure Enclosure

7.9.1 Following completion of the construction of all polyethylene barriers and decontamination system enclosures, allow settling to insure that barriers will remain intact and secured to walls and fixtures before beginning actual abatement activities.

7.9.2 The Owner's EP shall inspect each NPE prior to beginning removal work and then be inspected at least twice daily; prior to the start of each day's abatement activities and following the completion of the day's abatement activities. Document inspections and observations on separate sheet or in the daily project log. The Owner's EP will also perform pre-abatement inspection prior to abatement activities.

7.9.3 Use smoke tubes to test and inspect the NPE.

7.9.4 Damage and defects in the NPE are the responsibility of the Contractor and immediately repaired upon discovery.

7.9.5 At any time during the abatement activities, if visible material is observed outside of the work area or if damage occurs to the NPE, work shall immediately stop, repairs be made to barriers, and debris/residue cleaned up using appropriate HEPA vacuuming and wet mopping procedures.

7.9.6 If air samples collected outside of the regulated area during abatement activities indicate airborne fiber concentrations greater than 0.1 f/cc, work shall immediately stop for inspection and repair of the NPE. Clean up of surfaces outside of the work area using HEPA vacuum or wet cleaning techniques may be necessary.

7.9.7 Install and initiate operation of HEPA filtration equipment as needed to provide one air change in the work area every fifteen (15) minutes. Openings made in the enclosure system to accommodate these units shall be made air-tight with tape, spray adhesive, and/or caulking as needed. If more than one (1) unit is installed, they should be turned on one at a time, checking the integrity of wall barriers for secure attachment and need for additional reinforcement. Insure that adequate power supply is available to satisfy the requirements of the ventilating units, air sampling pumps, and other equipment. HEPA filtration units shall be exhausted to the outside of the building whenever feasible. They shall not be exhausted into occupied areas of the building. Twelve (12) inch reinforced extension ducting shall be used to reach from the work area to the exhaust area. Contractor shall insure that HEPA filters are changed regularly, filters are not obstructed or damaged and that the exhaust ducting does not release fibers into uncontaminated building areas.

7.9.8 A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained within every NPE as evidenced by recorded manometer measurements.

7.9.9 The NPE shall be kept under negative pressure throughout the period of its use.

7.9.10 Monitoring of airborne fiber concentrations shall be performed by the Owner's EP in areas associated with the NPE. This air monitoring is intended to demonstrate the integrity of the enclosure, worker decontamination area, and HEPA filtration systems.

7.9.11 The area air monitoring will be performed at areas leading into or out of the NPE (clean room, waste pass-out chamber) and within 20 feet from exhaust ports of the HEPA filtration machines.

7.9.12 The air samples will be collected at flow rates between 2 liters per minute to 10 liters per minute, with a minimum total air volume per sample of 1200 liters of air.

7.9.13 The air sampling procedures will be similar to those described in Section 7.25.

7.9.14 Air sample cassettes collected for area monitoring shall be analyzed in accordance with NIOSH Method 7400 and submitted to an AIHA accredited laboratory on a 24-hour turnaround time for analysis.

7.10 Emergency Exits

7.10.1 Clearly identify and maintain emergency and fire exits from the work area. Emergency exits shall be established and clearly marked with duct tape arrows or other effective designations to permit easy visibility from anywhere within the work area. They shall be secured to prevent access from uncontaminated areas and still permit emergency exiting. These exits shall be properly sealed with polyethylene sheeting which can be cut to permit egress if needed. These exits may be the worker decontamination enclosure, the waste pass-out airlock and/or other alternative exits satisfactory to fire officials.

7.11 Removal of Fixtures

7.11.1 Clean, enclose in polyethylene sheeting and remove all equipment covering any overspray of surfacing material. Nothing is to remain attached to the concrete masonry unit (CMU) walls within the 205 structure. A clean and smooth surface must be all that remains after abatement is complete.

7.12 Work Commencement

7.12.1 Commencement of the work shall not occur until the following items have been verified:

- The NPE has been constructed and inspected for breaches and smoke-tested for leaks;
- HEPA filtration ventilation systems are functioning adequately;
- Electrical circuits in the NPE are deactivated unless equipped with ground-fault circuit interrupts;
- All pre-abatement submissions, notifications, postings, permits, and abatement drawings have been provided and are satisfactory to the Owner's EP;
- All equipment for abatement, clean-up and disposal are on hand and proven to be in operating order, and
- All worker documentation (training, certifications, medical, and respirator fit testing) is completed and evidence thereof has been provided to Owner's EP.

7.13 Workplace Entry and Exit Procedures

7.13.1 All workers and authorized personnel shall enter the work area through the worker decontamination area.

7.13.2 All personnel who enter the regulated area must sign the entry log, located in the clean room, upon entry and exit.

7.13.3 All personnel, before entering the regulated area, shall read and be familiar with all posted regulations, PPE requirements (including workplace entry and exit procedures) and emergency procedures.

7.14 Worker Protection Procedures During Entry and Exit

7.14.1 All personnel shall proceed first to the clean room, remove all street clothes and appropriately don respiratory protection (as deemed adequate for the job conditions) and launder able and/or disposable coveralls, head covering and foot covering. Hard hats, eye protection and gloves shall also be utilized, if required. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.

7.14.2 Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower room and equipment room to the regulated area.

7.14.3 Before leaving the regulated area, all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures. (Small HEPA vacuums with brush attachments may be utilized for this purpose, however, larger machines may tear the suits). Each person shall clean bottoms of protective

footwear in the walk-off pan using brushes or other appropriate equipment just prior to entering the equipment room.

7.14.4 Personnel shall proceed to equipment room where they remove all protective equipment except respirators. Deposit disposable (or launderable) clothing into appropriately labeled impermeable containers for disposal or laundering.

7.14.5 Reusable footwear (rubber boots) shall be stored in the equipment room when not in use in the work area. Upon completion of the work, each pair shall be decontaminated at the completion of the abatement action.

7.14.6 Still wearing respirators, personnel shall proceed to the shower area, clean the outside of the respirators and the exposed face area under running water prior to removal of respirator and shower and shampoo to remove residue asbestos contamination. Various types of respirators will require slight modification of these procedures. An airline respirator with HEPA filtered disconnect protection may be disconnected in the equipment room and worn into the shower. A powered air-purifying respirator face-piece will have to be disconnected from the filter-power pack assembly which is not waterproof, upon entering the shower. Cartridges must be changed for each new entry into the regulated area.

7.14.7 After showering and drying off, proceed to the clean room and don clean disposable (and/or launderable) clothing if there will be later re-entry into the regulated area or street clothes if it is the end of the work shift.

7.14.8 These procedures shall be posted in the clean room and equipment room.

7.15 Waste Container Pass-out Procedures

7.15.1 Asbestos and lead contaminated waste that has been containerized shall be transported out of the work area through the waste container pass-out airlock (or through the worker decontamination enclosure if a separate airlock has not been constructed).

7.15.2 Waste pass-out procedures shall utilize two (2) teams of workers, an "inside" team and an "outside" team.

7.15.3 The inside team, wearing appropriate protective clothing and respirators for inside the regulated work area, shall clean the outside, including bottom, of properly labeled, impermeable containers, bags, drums, or wrapped components using HEPA vacuum and wet wiping techniques. The cleaned containers shall then be placed into the waste container pass-out airlock. No worker from the inside team shall further exit the regulated area through this airlock.

7.15.4 The outside team, wearing protective clothing and appropriately assigned respirators, shall enter the airlock from outside the regulated area, enclose the ACBM and lead waste containers into another clean, labeled, six (6) mm polyethylene disposal bag and remove the bags from the airlock to the outside. No worker from the outside team shall enter any further into the regulated area through this airlock.

7.15.5 The double-wrapped disposal bags shall then be loaded into the ACBM and lead waste transport trailer.

7.15.6 The exit from this airlock shall be secured to prevent unauthorized entry.

7.16 Personnel Protection Requirements

7.16.1 The Contractor, by initiating work on this project, acknowledges that they alone are responsible for providing and enforcing OSHA personnel protection requirements on this project.

7.16.2 The Contractor shall perform OSHA mandated personnel air sampling in accordance with all Federal, state and local regulations.

7.16.3 The Contractor shall make the OSHA air monitoring data available for review by the Owner's EP within 24-hours of sample collection.

7.17 Training

7.17.1 Prior to commencement of abatement activities, all personnel who will be required to enter the regulated area or handle containerized ACM must have received adequate training, in accordance with this document and all applicable regulations.

7.17.2 Special onsite training on equipment and procedures unique to this job site shall be performed as required.

7.17.3 Training in emergency response and evacuation procedures shall be performed as required.

7.18 Respiratory Protection

7.18.1 All respiratory protection shall be provided to workers in accordance with the submitted written respiratory protection program, which includes all items in OSHA 29 CFR 1910.134 (a) (1-11). This program shall be posted in the clean room of the worker decontamination enclosure system. A negative exposure assessment is required.

7.18.2 Workers shall be provided with personally issued, individually identified (marked with waterproof designations) respirators.

7.18.3 The use of engineering controls such as HEPA filtration ventilation units and HEPA vacuums and good work practices such as the wetting of ACBM and LBP prior to abatement, removal in small sections, use of glove bags and proper clean-up and containerization all help to reduce airborne fiber and dust levels in the work area. Additionally, air movement should be directed away from workers in the NPE during removal and toward a HEPA filtration device. A properly designed air monitoring program, implemented by a qualified air sampling professional and analytical laboratory, may support the use of respiratory protective devices that provide a lower factor of protection to the workers than air supplied respirators, for some abatement activities. Safety problems associated with the use of airline systems and time and financial constraints may be reduced through the use of alternative types of respiratory protection. It is imperative, however, that adequate air monitoring of fiber and dust levels and a well-designed respiratory protection program [in accordance with 29 CFR 1910.134 and 29 CFR 1910.1025(f)(2)] be implemented. Basic points of the respirator program include: proper selection of respirator type and size, training of personnel in the proper inspection, donning, cleaning and maintenance procedures for the respirator selected including their use limitations, and a good filtering and fit testing program to provide proper protection. Single-use disposable respirators shall not be used during any asbestos abatement activities.

7.18.4 Unless the Contractor has documented personnel air monitoring for every exact substance to be encountered on this project, the Contractor must perform the scope of work in the highest level of PPE, until adequate personnel air monitoring data has been obtained to assess the proper protection factor.

7.19 Fit Testing

7.19.1 Workers must perform positive and negative pressure fit checks each time a respirator is donned.

7.19.2 Powered air-purifying respirators shall be tested for adequate flow as specified by the manufacturer.

7.19.3 Negative-pressure dual cartridge respirators shall be equipped with high efficiency filters and exhalation and inhalation valves to permit the performance of positive and HEPA filtration fit checks.

7.19.4 Workers shall be given a qualitative fit test in accordance with procedures detailed in the OSHA Asbestos Construction Standard (29 CFR 1926.1101, Appendix C) and OSHA Lead

Standard (29 CFR 1910.1025) for all respirators to be used on this abatement project. An appropriately administrated quantitative fit test may be substituted for qualitative fit test. Fit testing will comply with 1910.134, 1910.1025, or 1926.1101, whichever is more stringent.

7.19.5 Documentation of adequate respirator fit must be provided to the Owner's EP.

7.19.6 No one wearing a beard shall be permitted to don a respirator and enter the work area.

7.19.7 Additional respirators (minimum of 2 of each type) and training on their donning and use must be available at the work site for authorized visitors who may be required to enter the regulated area. All visitors must be enrolled in the Respiratory Protection Program, including a medical evaluation and fit test, before entering into any asbestos containment area.

7.20 Protective Clothing

7.20.1 Disposable clothing including head foot and full body protection shall be provided by the Contractor in sufficient quantities and adequate sizes for all workers and authorized visitors.

7.20.2 Launderable clothing, if used, shall be provided by the Contractor in sufficient quantities and adequate sizes for all workers and authorized visitors.

7.20.3 Protective eyewear, gloves, rubber boots and/or other footwear shall be provided by the Contractor as required for workers and authorized visitors. Safety shoes may be required for some activities.

7.21 Class I Asbestos Removal Procedures

7.21.1 Class I asbestos removal shall include all friable TSI, surfacing material, sheet vinyl and any non-friable material that will be rendered friable in the course of abatement activities.

7.21.2 Pre-clean, isolate and prepare the regulated area in accordance with Section 6.5, achieve negative pressure and record pressure differential utilizing a continuous recording manometer.

7.21.3 Wet the ACBM with amended water solution using appropriate equipment. Saturate the material to the greatest extent possible. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal.

7.21.4 Remove the ACBM from the substrate. At a minimum, a single layer of 4 mm polyethylene sheeting to act as a drop cloth shall be placed on surfaces beneath the removal activity.

7.21.5 Removed material should be containerized (disposal bags) before moving to a new location for continuance of work.

7.21.6 Materials removed from building structures or components shall not be dropped or thrown to the floor and/or ground. Materials should be removed as intact sections or components whenever possible, containerized and carefully lowered to the floor.

7.21.7 Containers (six-millimeter polyethylene disposal bags or drums) shall be sealed when full. Wet material can be exceedingly heavy and double-bagging of waste material is always required.

7.21.8 Asbestos containing waste with sharp-edge components (e.g. nails, screws, metal lath, tin sheeting, concrete, etc.) will tear the polyethylene bags and sheeting, therefore, these type of materials shall be segregated and from polyethylene waste bags and placed in drums for disposal.

7.21.9 After completion of any stripping work, surfaces from which ACBM has been removed shall be wet brushed and sponged or cleaned by some equivalent method to remove all visible residues.

7.21.10 Clean-up shall proceed in accordance with Section 7.24.

7.21.11 After the regulated area has been rendered free of visible residues, passed a final visual clearance inspection, the work area cleared in accordance with Section 7.25, one coat of a

satisfactory lockdown encapsulant agent shall be applied to all surfaces in the work area including structural members, building components and plastic sheeting on walls, floors and coverings over non-removable items, to seal in non-visible residue. Final air clearance monitoring shall commence once encapsulant paint has dried.

7.22 Class I Asbestos Removal - Glove Bag Procedures

7.22.1 Glove bags shall be constructed of 6 mm polyethylene sheeting and be seamless at the bottom. The glove bags must have built-in internal sleeve gloves, tool pouch and small openings for the insertion of water sprayers and/or HEPA vacuum nozzles. The glove bags shall be pre-labeled with appropriate EPA, OSHA and DOT warnings.

7.22.2 The glove bags may only be used on straight runs of thermal system insulation ACBM of unlimited lengths or on individual mudded pipe fittings, roof drains.

7.22.3 The glove bags may only be used once and may not be moved.

7.22.4 Glove bags shall not be used on surfaces whose temperatures exceed 150° Fahrenheit.

7.22.5 The glove bag removal work shall be performed by at least two properly trained Contractor employees. The work must also be supervised by the General Superintendent.

7.22.6 Glove bag equipment and supplies shall include, but are not limited to:

- Pump-up garden sprayer;
- Tape to seal glove bag to piping;
- Amended water and lockdown encapsulant;
- HEPA filtered vacuum system and/or HEPA filtration machine;
- Tools such as wire saws, utility knife, wire cutters, tin snips, scrub brush and rags;
- Pre-labeled, 6 mm disposal bags;
- 4-mm polyethylene sheeting drop cloth;
- Smoke tubes with aspirator bulb, and
- HEPA respirators and protective clothing.

7.22.7 Glove bag work practices shall consist of the following:

- Isolate the regulated area with critical barriers, one layer of 6 mm polyethylene sheeting, over all openings leading into or out of the area. Place one additional critical barrier layer over all HVAC openings. Demarcate the regulated area with warning signs;
- Place critical barriers (4 mm sheeting) over any HVAC system vents adjacent to the work area and drop cloths (4 mm sheeting) over all objects near the work area which cannot be moved;
- Ventilate the regulated area using HEPA filtration machine;
- Place one layer of 4 mm polyethylene sheeting on the floor or surface below the entire length of the pipe run or pipe fitting to be removed so that it extends at least 3 feet to either side of the material;
- Wrap and/or seal any pre-existing damaged, friable and/or loose TSI material with tape or a layer of 4 mm polyethylene sheeting prior to glove bag work;
- Securely attach glove bag to piping or object. The installation must completely cover the circumference of the pipe or object;
- Test glove bag for leaks using smoke tubes. Seal with tape any leaks and retest;
- Thoroughly wet the ACBM and strip/remove the material to the substrate. Maintain the ACBM in the glove bag in a wet condition during the removal process;
- After ACBM removal, clean the exposed surfaces with brushes and/or wet wiping to remove any remaining residue;
- Apply a lockdown encapsulant to exposed surfaces and adjacent TSI material, if applicable;

- Remove tools from glove bag by pulling them through internal sleeve gloves. Twist the sleeve gloves and tape. The tools may be placed into the next section of glove bag or decontaminated in a bucket of water;
- Make sure the removed ACBM is in the bottom of the bag, evacuate the air from the glove bag using a HEPA filtered vacuum system, twist the glove bag several times and tape the bag closed;
- Place the glove bag into a 6 mm disposal bag and perform clean-up procedures in accordance with Section 7.24; and
- Workers performing glove bag removal shall wear, at a minimum, a half-face, dual cartridge HEPA respirator and protective clothing.

7.22.8 Procedures for negative pressure glove bag use shall comply with work practices described above and are to include the following:

- A HEPA filtered vacuum system is attached to bag and a device shall be placed in bag to prevent collapse during work;
- The HEPA vacuum system and device to prevent collapse shall be used continuously during glove bag removal operations;
- A separate waste collection bag may be used during ACBM removal process. The waste bag may only be used once; and
- The collection/work bag may be reused if the bag is rinsed clean with water prior to next set-up.

7.23 Procedures for Class II Asbestos Removal

7.23.1 All Class II asbestos removal work shall be completed in accordance with the requirements stated in the OSHA Asbestos Standard 29 CFR 1926.1101(g)(7).

7.23.2 Demarcate the area around the removal area with asbestos warning tape and signs.

7.23.3 For indoor work, critical barriers shall be placed over all openings leading into or out of the regulated area.

7.23.4 For removal of floor tiles and mastic not conducted during friable fireproofing removal, isolate the work area by constructing a partial containment enclosure (one layer of 6 mm polyethylene sheeting) for temporary walls or along walls which are not ACBM. The containment shall have HEPA filtration machines placed in the work area. When performing abatement adjacent to occupied areas, initiate operation of HEPA filtration equipment as needed to provide six air changes in the work area every sixty (60) minutes. A minimum of -0.02 inches of water column pressure differential, relative to outside pressure, shall be maintained within the NPE as evidenced by manometer measurements. Or all removal will be completed in Class I containment. Work performed within the designated spill areas does not require placement of polyethylene sheeting on walls.

7.23.5 Class II removal practices shall consist of the following:

- One layer of 4 mm polyethylene sheeting shall be placed under the removal activity, where practical. A layer of 4 mm sheeting shall be placed at least 4 feet above the floor along walls in the work area. Contractor may utilize existing sheeting placed for construction of negative pressure enclosure at this area. The work area shall have HEPA filtration machines placed in the work area to provide one air change every 15 minutes. When performing abatement adjacent to occupied areas, initiate operation of HEPA filtration equipment as needed to provide six air changes in the work area every sixty (60) minutes. For removal of sheetrock systems, isolate the work area by constructing a partial containment enclosure (one layer of 6 mm polyethylene sheeting) for temporary walls or along walls which are not ACBM and a layer of 6 mm sheeting on the floor;
- The ACBM shall not be removed by high speed abrasive saws, sanders or drills, compressed air systems, mechanical chipping or other types of powered cutting

tools;

- The ACBM shall be removed in an intact state to the extent possible;
- The ACBM must be thoroughly wetted with amended water prior to removal;
- Removed material shall be immediately placed in impermeable leak-tight containers, pre-labeled disposal bags or wrapped in polyethylene sheeting. The material must remain in a wet condition and transferred into waste transport trailer, and
- Any ACBM debris shall be collected using HEPA vacuum system and/or wet wiped. Or all removal will be completed in Class I containment.

7.24 Clean-up Procedures

7.24.1 Remove and containerize all visible accumulations of ACBM and ACBM debris utilizing rubber dust pans and rubber squeegees. Use plastic shovels to pick up or move accumulated waste. Special care shall be taken to minimize damage to the floor.

7.24.2 Clean all surfaces in the regulated area using wet-dry HEPA vacuums, rags, mops and sponges as appropriate.

7.24.3 Remove and/or clean the outer layer of plastic sheeting from walls and floors. Windows, doors, HVAC system vents and all other openings shall remain covered. The NPE shall remain in place and continued to be utilized.

7.24.4 Remove all containerized waste from the regulated area and waste container pass-out airlock and place into waste transport trailer.

7.24.5 Decontaminate all tools and equipment and remove at the appropriate time in the cleaning sequence. Materials and/or equipment which cannot be thoroughly decontaminated must be placed in either locking containers or wrapped in two layers of 6 mm polyethylene sheeting.

7.24.6 Empty HEPA filtered vacuum collection units of ACBM waste and remove/change filters from HEPA filtration machines.

7.24.7 Inspect the regulated area for visible residue. If any accumulation of residue is observed, it will be assumed to be ACBM debris and the cleaning sequence will be repeated.

7.24.8 The regulated area shall be cleaned until it is free of all ACBM waste and debris and in compliance with Federal, State and local requirements. Any additional cleaning cycles shall be provided, as necessary, at no cost to the Owner, until all criteria have been met.

7.25 Asbestos Final Visual Inspections

7.25.1 Following the completion of clean-up operations, the Contractor shall notify the Owner's EP that the regulated area is ready for a final visual clearance inspection. Twenty-four (24) hour notice is required.

7.25.2 The Owner's EP shall then arrange with the Contractor's on-site Supervisor to visually survey areas where ACBM has been removed for any remaining asbestos materials or debris. The final visual inspection will be conducted in general accordance with ASTM Standard Practice for Visual Inspection of Asbestos Abatement Projects, E 1368 – 97, which is incorporated by reference.

7.25.3 If visible ACBM debris or residue is observed, the regulated area shall be re-cleaned. If the regulated area is free of visible ACBM debris or residue and passes the final visual clearance inspection, a lockdown encapsulant shall be applied to all surfaces in the work area and the NPE may be torn down.

7.25.4 Lockdown encapsulants shall be spray-applied with a color tinting only after the exposed substrate surfaces are dry.

7.25.5 Since all structures are slated for demolition following abatement activity, no final air clearance sampling will be conducted.

7.25.6 A regulated area that **does not** pass a final visual clearance inspection shall be re-cleaned until a satisfactory visual inspection is achieved. **The Contractor shall be responsible for all**

costs associated with all re-cleaning and visual re-inspection within each regulated area if the initial visual inspection fails.

7.26 Waste Disposal Procedures

7.26.1 For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.

7.26.2 All asbestos-containing waste material shall be disposed of as soon as is practical by the Contractor. The ACBM waste generated from the project site shall be transported directly from the site to the disposal facility. Contractor shall not mingle ACBM wastes from other facilities with wastes generated from the project site.

7.26.3 Disposal must occur at a landfill authorized to accept asbestos waste in accordance with regulatory requirements of NESHAP and other applicable Federal, state and local statutes, laws, ordinances, rules, guidelines and regulations.

7.26.4 Copies of all dump receipts, trip tickets, transportation manifests or other documentation of disposal shall be delivered to the Owner or Owner's EP for inclusion in their records. The record keeping format shall utilize a chain-of-custody form which includes the names and addresses of the Generator (Owner), Contractor, pickup site, and disposal site, the estimated quantity of the asbestos waste and the type of containers used. The form shall be signed by the Generator, the Contractor and the Disposal Site Operator, as the responsibility for the material changes hands. If a separate transporter is employed, their name, address, telephone number and signature shall also appear on the form.

7.26.5 For all asbestos-containing waste material transported off-site, maintain waste shipment records (WSR) as stipulated in Section 61.150 of the November 20, 1990, NESHAP Asbestos Revision (40 CFR, Part 61, Subpart M).

7.27 Transportation to the Landfill

7.27.1 Once drums, bags and wrapped components have been removed from the regulated area, they shall be loaded into a polyethylene sheeting-lined enclosed truck or container for transportation. This truck or container shall be locked to prevent access when not in use.

7.27.2 Mark vehicles used to transport asbestos-containing waste material with asbestos danger signs during the loading and unloading of waste so that the signs are visible. During transportation, the enclosed truck or container shall be marked with a Class 9 placard pursuant to DOT requirements.

7.27.3 The encapsulated cargo area of the truck shall be free of debris and lined with six (6) mm polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extended up the sidewalls. Wall sheeting shall be overlapped and taped into place.

7.27.4 Drums shall be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural components shall be secured to prevent shifting and bags placed on top. Do not throw containers into truck cargo area.

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

7.27.6 Any debris, water, or residue observed on containers or surfaces outside of the work area resulting from clean-up or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet methods as appropriate.

7.27.7 Large metal dumpsters are sometimes used for asbestos waste disposal. These should have doors or tops that can be closed and locked to prevent vandalism or other disturbance of the bagged asbestos debris and wind dispersion of asbestos fibers. Un-bagged material shall not be placed in these containers, nor shall the dumpster be used

for non-asbestos waste. Bags shall be placed, not thrown, into these containers to avoid splitting.

7.28 Disposal at the Landfill

7.28.1 If an independent transporter is employed, he shall, for the purposes of compliance with these specifications, be considered a subcontractor to the abatement contractor and shall be supplied with and held to the provisions of this section.

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

7.28.3 Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be placed in empty drums or bags or repaired using duct tape as necessary.

7.28.4 Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of trucks as the weight of wet material could rupture containers.

7.28.5 Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body and foot protection and, at a minimum, half-face, air-purifying, dual cartridge respirators equipped with high efficiency filters.

7.28.6 Following the removal of all containerized waste, the truck cargo area shall be decontaminated using EPA vacuums and/or wet methods to meet the non-visible residue criteria. Polyethylene sheeting shall be removed and discarded along with contaminated cleaning materials and protective clothing, in bags or drums at the disposal site.

7.29 Release and/or Re-establishment of the Regulated Area

7.29.1 Release of the regulated area shall only occur once the completion of clean-up procedures and passage of a final visual inspection has been performed and documented to the satisfaction of the Owner's EP.

7.29.2 Critical barriers and remaining polyethylene sheeting shall be removed from the regulated area and disposed as asbestos and lead contaminated waste.

7.29.3 HEPA filtration machines shall be wrapped in plastic before removal from the regulated area.

7.29.4 The Contractor and Owner's EP shall visually inspect the regulated area for any remaining ACBM and lead debris. Evidence of contamination will necessitate additional cleaning requirements to be performed at the Contractor's expense.

7.29.5 Additional air monitoring, if necessary, shall be performed at the Contractor's expense if additional clean-up is necessary.

7.29.6 All mandatory OSHA requirements for personal protective equipment during removal of remaining barrier sheeting must be followed and shall be enforced.

8.0 LEAD-BASED PAINT ABATEMENT

8.1 Lead Hazard

8.1.1 A lead hazard occurs when lead dust is released into a building or ambient atmosphere, thereby creating a health hazard to workers, building occupants and others present at or near a project location. The Contractor shall take all precautions not to create a lead hazard. If a lead hazard occurs, the Contractor, at a minimum, shall perform the following actions:

- Apprise all abatement workers of the seriousness of the hazard and of proper work procedures which must be followed;
- Apprise all supervisory personnel, subcontractors, Owner and Owner's EP of the hazard; and
- Take all appropriate continuous measures, as necessary, to protect all building occupants or others from the hazard of exposure to airborne lead dust. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable Federal, State and local agencies.

8.2 LBP Work Plans

8.3 Management Plan

8.3.1 The Contractor shall review the specified work tasks and methods and shall prepare a LBP Management Plan that identifies the work procedures, health, and safety measures to be used in LBP material removal/stabilization. The plan shall address the various sources of lead and the methods to be undertaken to remove the LBP material, debris and other LBP surface materials to include the following key elements:

a) Removal/Stabilization methods for each LBP-containing component.
b) Training requirements as required by federal, state, and local regulations.
c) Unique problems associated with the LBP removal project.
d) Eating, drinking, smoking, and restroom procedures.
e) Sequencing of LBP-related work.
f) Personnel protective equipment; respiratory protection program and controls.
g) Engineering controls and safety measures.
h) Worker exposure assessment procedures.
i) Work practice controls.
j) Housekeeping.
k) Hygiene facilities and practice.
l) Medical surveillance, including medical removal protection.
m) Sampling, testing and analytical methods, including personnel air sampling requirements of 29 CFR 1926.62, toxicity characteristic leaching procedure (TCLP) of the waste material in accordance with 40 CFR 261. Procedures must include frequency, locations, sampling and analytical methods utilized.

8.4 Emergency Contingency Plan

Contractor shall prepare and submit an emergency contingency plan that is prepared in accordance with 40 CFR 261. At a minimum, procedures must address at least the following LBP removal hazards, as well as others, as may be appropriate to the project:

a) Detection of unexpected dust lead and air lead levels in adjacent areas.
b) Spilling of lead debris bags or containers.

8.5 Hazardous Waste Management Plan

A Hazardous Waste Management Plan shall be prepared and submitted by the Contractor that complies with all applicable Federal, State and local requirements governing hazardous waste regulations and should address, including but not limited to:

a) Identification or documentation of potential LBP wastes or LBP-containing construction debris associated with the work.
b) Names, permits, licenses, and qualifications of each person and Contractor that will be transporting, storing, treating, and disposing of the LBP wastes or LBP construction debris. The facility location, phone number, and name of a 24-hour point of contact shall be included. Two copies of EPA, state, and local hazardous waste permit applications, permits, and EPA identification numbers shall be submitted to the Owner's EP for approval.
c) Names and qualifications (experience and training) of personnel who will be working onsite with LBP waste.
d) Spill prevention, containment and clean-up contingency measures to be implemented.
e) Work plan and schedule for LBP waste containment, removal, and disposal. LBP waste shall be cleaned up and containerized daily.
f) Handling and storage of LBP waste in accordance with the requirement of 40 CFR 262 and 40 CFR 265. The Contractor shall confirm that an EPA identification number has been obtained so that proper manifesting of the LBP waste will be addressed, and that site storage limitations, including the time of storage, container requirements, contingency plan, weekly inspection requirements, and personnel training have been complied with.
g) A written confirmation that the LBP waste and LBP construction debris will be treated and disposed of in accordance with the requirements of 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 264 and 40 CFR 268.
h) A written confirmation that transportation of the LBP waste and LBP construction debris will be handled in accordance with 40 CFR 263.
i) Waste subcontractor's name, address, telephone number, and landfill location, including copies of licenses and/or permits and signed agreements.
j) Landfill name, address, and telephone number. A copy of the landfill's state and locally issued permits and/or license, and a signed agreement that the landfill will accept the LBP wastes.
k) Detailed delivery tickets prepared, signed, and dated by an agent of the landfill, certifying the amount of LBP construction debris delivered to the landfill, within 3 days after delivery.

8.6 Sample Results

8.6.1 A daily log of the personnel air sampling test results, collected and submitted to an accredited laboratory by the Contractor, shall be reviewed by the Owner's EP and submitted, in written form, no more than 48-hours after completion of the sampling cycle. The log shall list each sample type, sampling time and date, identification of personnel and/or location monitored, placement of the cassette on employee and/or in area, description of employee tasks during sampling, factors that affected the sampling results, if any, cassette size and sample media, flow rate and duration, air volume sampled, pump and calibrator serial numbers, pre- and post-calibration records, calibrator certification, sample results, analytical method used, analyst's name and company, laboratory accreditation, and interpretation of results. Results shall be reported in micrograms of lead per cubic meter of air. Documentation of results that exceed specified limits [personal air samples that exceed the OSHA Action

level of 30 micrograms per cubic meter (µg/m^3)] or as required by Federal, state and local requirements shall be highlighted in the log in such a manner to make them easily distinguishable from monitoring results that do not exceed specified or regulatory limits. In addition, the daily log shall include results of any TCLP sampling.

8.6.2 The Contractor must conduct an "initial determination" as to the extent of lead exposure for any tasks being performed by their employees as required by 29 CFR 1926.62. The contractor performing the work and all contractor subs are covered by this standard.

8.6.3 When disturbance of lead-based paint occurs on window casings or other lead-based paint surfaces, OSHA requires the Contractor to assume that the employees' exposure is either 10 or 50 times the PEL depending on the specific activity. At these levels employees are required to wear at a minimum of a half mask air purifying respirator with high efficiency particulate air cartridges or a powered air purifying respirator (PAPR) for the 50 times the PEL.

8.6.4 In addition, all of the other portions of the standard include, but are not limited to, medical monitoring, record keeping, training, hand and face washing facilities. These must all be provided until the initial exposure determination is performed and provides evidence that airborne exposures from these activities will be below the OSHA Action Level. Removal or disturbance of surfaces by sanding, grinding, or stripping is covered under this standard regardless of the quantity of material disturbed.

8.7 Competent Person

8.7.1 Contractor shall certify it has a full-time onsite Competent Person whom meets the competent person requirements of 29 CFR 1926.62 and is experienced in administration and supervision of LBP removal projects, including work practices, protective measures for building and personnel, disposal procedures, etc.

8.8 Testing Laboratory

8.8.1 Contractor shall submit the name, address, and telephone number of the independent testing laboratory selected to perform analysis for personnel and TCLP analysis of waste for characterization.

8.8.2 Contractor shall submit documentation that the laboratory performing the analysis is an EPA National Lead Laboratory Accreditation Program (NLLAP) accredited laboratory and that it is rated proficient in the NIOSH/EPA Environmental Lead Proficiency Analytical Testing Program (ELPAT). Certification shall include accreditation for heavy metal analysis, list of experience relevant to analysis of lead in air, and a Quality Assurance and Quality Control Program. Currently, the American Association for Laboratory Accreditation (AALA) and the American Industrial Hygiene Association (AIHA) are the EPA-recognized laboratory accrediting agencies. Documentation shall include the date of accreditation or reaccreditation.

8.9 Respiratory Protection Devices

8.9.1 Contractor shall submit the manufacturer's certification of NIOSH approval for respiratory protection devices utilized on the site.

8.10 Cartridges, Filters, and Vacuum Systems

8.10.1 Contractor shall submit the manufacturer's certification of NIOSH approval of respirator cartridges (organic vapor, acid gas, mist, dust, high efficiency particulate); high efficiency particulate air (HEPA) filtration capabilities for all cartridges, filters, and HEPA vacuum systems.

8.11 Medical Records

8.11.1 Contractor shall submit a certification that all employees who are involved in the LBP removal work for this project have received medical examinations and will receive continued medical surveillance, including biological monitoring, as required by 29 CFR 1926.62 and by the state and local regulations pertaining to such work. Records shall be retained, at Contractor expense, in accordance with all applicable OSHA regulations. Contractor shall ensure access to records per OSHA regulations.

8.12 Training

8.12.1 Training shall also meet the requirements of 29 CFR 1926.62, 29 CFR 1926.59 and 49 CFR 172. Training shall be provided prior to the time of job assignment and, at least, annually.

8.12.2 Contractor shall document and submit information ensuring that the project specific training for each of the contractor's employees assigned to this project as a minimum, include the following:

a) Specific nature of any operation which could result in exposure to lead.
b) Purpose, proper selection, fitting, use, and limitations of respirators.
c) Purpose and description of the medical surveillance program and the medical removal protection program, including information concerning the adverse health effects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females and hazards to the fetus and additional precautions for employees who are pregnant).
d) Relevant engineering controls and proper work practices.
e) The contents of any compliance plan in effect.
f) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.
g) The employee's right of access to records under 29 CFR 1910.1020.

8.13 Documentation Review

8.13.1 Contractor shall review this specification and the LBP inspection report to assess the areas where LBP work will be performed and become familiar with all conditions which may affect any part of the work.

8.14 Safety and Health Regulatory Requirements

8.14.1 Contractor shall ensure that all work shall be performed in accordance with applicable regulations including, but not limited to 29 CFR 1910 and 29 CFR 1926, especially 1926.62. Matters of interpretation of the standards shall be submitted to the appropriate agency for resolution before starting work.

8.15 Preconstruction Safety Meeting

8.15.1 The Contractor shall attend a preconstruction safety meeting prior to commencement of any work involving LBP.

8.16 Health and Safety Plan

8.16.1 The Contractor shall prepare and submit a Health and Safety Plan (HASP) that shall be prepared in accordance with all applicable Federal, State, and local regulation. The HASP shall cover onsite work by the Contractor or its subcontractors. The Competent Person shall be responsible for development, implementation, and quality control of the content and actions required in the HASP. For each anticipated

work task, the HASP shall establish hazards and control measures. The HASP shall be easily readable, understandable and accessible by the Contractor's work force.

8.16.2 The HASP shall be prepared, signed and dated by the Contractor's Competent Person and submitted to the Owner's EP for review and approval at least 10 working days prior to the start of any abatement work. Deficiencies in the HASP, as determined by the EP, shall be discussed at the Preconstruction Safety Conference. The HASP will be revised by the Contractor to reflect the proper corrections, and resubmitted for acceptance. Onsite work shall not begin until the HASP has been accepted. One copy of the HASP shall be maintained in the Contractor's jobsite file, and a second copy shall be posted onsite where it will be accessible to all onsite personnel. As work proceeds, the HASP shall be adapted to new situations and conditions. Changes to the HASP shall be made concurrently by the Competent Person and Site Superintendent.

8.16.3 Should an unforeseen hazard become evident during performance of the work, the Competent Person shall bring such hazard to the attention of the Owner's EP, both verbally and in writing, for resolution as soon as possible. In the interim, the Contractor's competent person shall take all necessary action to re-establish and maintain safe working conditions; and safeguard onsite personnel, visitors, the public, and the environment. Disregard for provisions of this specification, or the accepted HASP shall be cause for stopping of work until the matter is rectified.

8.17 Respiratory Protection Program

8.17.1 Contractor shall have onsite a copy of their respiratory protection program per requirements of 29 CFR 1926.62 and in accordance with 29 CFR 1910.134. Appropriate and approved filters and respirator, shall be furnished to each employee that enters a LBP work control area.

8.18 Hazard Communication Program

8.18.1 A Hazard Communication Program shall be in writing and available onsite for review and implemented in accordance with 29 CFR 1926.59.

8.19 Safety and Health Oversight

8.19.1 The Contractor's Competent Person shall be the full time onsite person responsible for all coordination, safety, security, and execution of the work. The Competent Person shall be able to identify all health and safety hazards and shall have the authority to take immediate corrective measures to eliminate them.

8.20 Trained and Competent Personnel

8.20.1 Contractor shall have onsite documentation to prove that work will be performed by trained and competent personnel, qualified and trained in the abatement, monitoring, storage, handling, treatment, hauling, and disposal of contaminated LBP debris material, and in subsequent cleanup of the affected environment. Workers shall comply with all appropriate federal, state, and local regulations, which mandate training requirements and work practices. All of the contractor's personnel on-site shall be capable of performing any and all the work under this contract.

8.21 Posted Warnings and Notices

8.21.1 Contractor shall ensure accordance with applicable OSHA regulations regarding warning signs and notices.

8.21.2 Two copies of applicable federal, state, and local regulations and NIOSH/OSHA Booklet 3142 shall be maintained. One copy shall be posted at the job site in the Contractor's office/trailer.

8.21.3 OSHA compliant warning signs shall be placed so that they are visible from all angles of approach to the structure and are illuminated during all periods of low light conditions, in accordance with all applicable OSHA regulations.

8.21.4 Warning signs shall be in English and be of sufficient size to be clearly legible and display the following:

8.21.5 WARNING: LEAD WORK AREA, POISON, NO SMOKING OR EATING, AUTHORIZED PERSONNEL ONLY, RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

8.21.6 The Contractor shall ensure that their written Hazard Communication program is readily accessible to all personnel and developed in compliance with Federal, State, and local regulations.

8.21.7 Contractor shall ensure that all reports of daily personnel air monitoring results are prepared so they are easily understood by the workers, are presented to the applicable employee within 48 hours after receipt of results, and in a clearly visible area of the work site. Personnel air monitoring will be required if negative exposure assessment data, collected within the past six (6) months for similar lead tasks, is not available.

8.21.8 Contractor shall ensure that a list of emergency contact telephone numbers are posted at the site in an area accessible and known by all employees. The list shall include numbers of the local hospital. police and fire departments. Owner and Contractor representatives who can be reached 24 hours per day, and professional consultants directly involved in the project.

8.22 Equipment and Materials

8.22.1 Contractor shall ensure that sufficient quantities of all health and safety materials, as required by 29 CFR 1926.62, and all other OSHA Regulations, as well as all other materials and equipment needed to complete the project, shall be readily available and kept on the site.

8.22.2 Contractor shall provide all respirators and filters are approved for use to protect all employees from all hazardous airborne contaminants that may be encountered, as determined by the Competent Person. Respirators and filters shall comply with the requirements of 29 CFR 1926.62 and shall be selected, maintained and used in accordance with 29 CFR 1910.134.

8.22.3 Contractor shall provide a sufficient supply of respirator cartridges that are to be maintained at the work site to provide new cartridges to employees throughout the duration of the project. Cartridges shall be replaced according to the more stringent of OSHA guidance, and the manufacturer's recommendations, when breathing becomes difficult, or if the cartridge becomes wet.

8.22.4 The Contractor shall furnish, at no cost to personnel, all equipment/clothing that is necessary for the protection of all workers from all health and safety hazards. An adequate supply of these items shall be available for worker's use. Workers shall not remove protective clothing and equipment from the work site at any time. Examples of personal protective equipment include but are not to be limited to:

a) Disposable protective clothing (whole body protective coverings): Full-body, including foot covers shall be worn by all workers at all times in the work area. All protective clothing provided shall be disposable.

b) Gloves: Inner gloves, appropriate for the items and hazards encountered, and disposable outer work gloves shall be provided to each worker and shall be worn

while the worker is in the work area. Glove material shall be appropriate for the work activity and prevent lead permeation per the Contractor's written Hazard Communication Program. Gloves shall not be removed from the work area, and shall be disposed of as LBP-contaminated waste each day.

c) Hard Hats: Head protection (hard hats) shall be provided by the Contractor for workers and all authorized visitors. Protective plastic strap suspension hats shall be used. Hard hats shall be worn by all personnel at all times that work is in progress. Hats shall remain in the work location until the project is completed. Hats shall be thoroughly cleaned and decontaminated upon completion of the work.

d) As appropriate eye Protection: Fog-proof safety goggles, glasses or face shields for all personnel engaged in LBP abatement operations shall be worn when the use of a full face piece respirator is not required.

8.23 Polyethylene Sheeting and Bags - General

8.23.1 All polyethylene sheeting and bags shall be 6 mils thick. Duct tape shall be used to seal polyethylene sheeting and to close bags securely. Polyethylene sheets shall be in roll sizes to minimize seams.

8.23.2 Where a potential for fire exists, flame-resistant polyethylene sheets shall be used. Polyethylene film shall be frosted and shall conform to the requirements of NFPA 701.

8.24 Tape and Adhesive Spray

8.24.1 Tape and adhesive shall be capable of sealing joints between polyethylene sheets and for attachment of polyethylene sheets to adjacent surfaces. After dry application, tape or adhesive shall retain adhesion when exposed to wet conditions, including amended water.

8.25 Containers

8.25.1 Impermeable containers such as drums, roll off dumpsters, and bags, shall be used to receive and retain suitable lead-contaminated material until disposal. Containers shall be labeled in accordance with EPA, DOT, and OSHA standards.

8.26 Chemicals

8.26.1 All Chemicals, including but not limited to, all caustics and paint strippers, shall be properly labeled and stored in leak-tight containers.

8.27 Vacuum Systems

8.27.1 HEPA filtered vacuum systems shall be used during any and all demolition/renovation operations, which generate dust, such as mechanical removal of LBP components. HEPA filtered vacuum systems shall also be used for all clean up purposes. The systems shall be suitably sized for the project, and filters shall be capable of removing all particles as small as 0.3 micrometers, at a minimum efficiency of 99.97 percent.

8.28 Heat Blower Guns

8.28.1 Heat blower guns shall be the flameless, electrical, paint-softener type with controls to limit temperature to less than 590 degrees C (1,100 degrees F). Heat blowers shall have appropriate tools so as to prevent damage to all adjacent surfaces.

8.29 Chemical Paint Strippers

8.29.1 Chemical paint strippers shall not contain methylene chloride.

8.29.2 When recommended or required by the manufacturer, neutralizers for paint strippers shall be used and shall be compatible with the substrate and suitable for use with the chemical stripper that has been applied to the surface. Neutralization shall be considered complete when the pH range is between 6.5 and 7.5. Contractor shall document proper completion of neutralization and submit documentation to Owner's Representative.

8.30 Storage of Materials

8.30.1 Materials shall be stored in a place and manner that protects them from damage and contamination. During periods of cold weather, surface coatings, sealants, chemicals and plastic materials shall be protected from the cold. No flammable or hazardous materials shall be stored inside any building. Regularly inspect materials to identify damaged or deteriorating items. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered. Any materials that become contaminated with LBP waste shall be disposed of consistent with the requirements of 40 CFR 148 and this document. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the building.

8.31 Work Procedures

8.31.1 LBP work shall be performed in accordance with the accepted LBP Management Plan as approved by The Owner's EP. The Contractor must ensure complete compliance with state mandated work practice standards. Contractor must not allow the use of any prohibited work practice. Procedures and equipment required to limit occupational and environmental exposures, as defined by Federal, State and local regulations, to lead during LBP removal shall be in accordance with all state, Federal, State and local regulations and specifically 29 CFR 1926.62 and as specified herein. Paint chips and associated waste shall be disposed in compliance with Federal, State and local regulations.

8.31.2 Any LBP chips/dust/debris generated from the work must be cleaned up using HEPA vacuuming to prevent the release or entrainment of LBP dust into the work environment.

8.32 Personnel Protection Procedures

8.32.1 Personnel shall wear and use protective clothing and equipment as required federal, state, and local regulations. Eating, smoking, use of any tobacco product, drinking, chewing gum, and applying makeup shall not be permitted in the LBP control area at any time. Contractor shall ensure that all personnel of all trades that are not engaged in the abatement and disposal of LBP are not exposed at any time to airborne concentrations of lead equal to or in excess of 30 ~g/m3. Temporary electrical service shall be protected by a GFCI at all times. Because electricity and water shall be used on this project, the Contractor shall implement all necessary precautions to prevent electrocution.

8.33 Safety and Health Procedures

8.33.1 The Competent Person shall be present on the work site throughout the duration of the project to supervise, monitor, and document the project's health and safety provisions. A daily log shall be maintained by the Competent Person.

8.34 Safety and Health Responsibilities

8.34.1 The Competent Person shall:

a) Verify that all Contractors' personnel training meet all applicable requirements.
b) Review and approve the LBP Management Plan for conformance to the applicable referenced standards specifically for this project.
c) Inspect LBP removal work for conformance with the accepted LBP Management Plan, the scope of work and all applicable regulatory requirements and standards.
d) Ensure that worker medical monitoring and exposure monitoring activities are in accordance with 29 CFR 1926.62.
e) Ensure that work is performed in strict accordance with all applicable standards and regulations, as well as these specifications.
f) Ensure that there are no hazardous exposures to any personnel, the general public or to the environment.

8.35 Medical Surveillance Procedures

8.35.1 Medical surveillance shall be implemented in accordance with the approved Contractor's LBP Management Plan, and shall comply with the requirements of 29 CFR 1926.62, including the provisions for biological monitoring, exposure monitoring, medical removal protection, and a physician's written opinion, signed by the physician performing the employee examination.

8.36 LBP NPE Areas

8.36.1 The LBP NPE area is where any work occurs where surfaces or structures containing LBP will be stabilized. The LBP control area shall be considered contaminated, and shall be separated to the extent possible to prevent any LBP dust or debris from passing into adjacent non-work areas of the building or open areas. The control area shall be thoroughly cleaned at the completion of the LBP work, all cleaning shall be sufficiently comprehensive so as to ensure that all areas can pass a clearance standard of 5 micrograms per square foot (µg/ft^2) for floor surfaces. During the removal process, all gross debris in the work area shall be cleaned up to limit of the spread of dust. Contractor shall ensure OSHA Regulations governing housekeeping and emergency entrance/exit are in compliance.

8.37 Areas Adjacent to NPE Area

8.37.1 Exterior areas surrounding the boundary to the LBP NPE area shall remain free from LBP dust. The Contractor, while conducting abatement work in the building, shall protect building occupants from any potential lead exposure, which could result due to improper work practices. When possible a perimeter shall be established with barrier tape or other systems, where the LBP handling procedures are performed. At no time shall airborne concentrations exceed the OSHA Action Level.

8.38 Worker Decontamination

8.38.1 The decontamination area constructed for asbestos abatement activities complies with OSHA regulations governing proper worker decontamination.

8.39 NPE Entering and Exiting Procedures

8.39.1 No personnel shall enter the LBP removal area while wearing any street clothing or articles of personal clothing. A swimsuit is allowed to be worn underneath a worker's disposable suit. No personnel shall leave the job site while wearing any clothing or equipment used or worn during the workday. All equipment used during the project shall remain on the project site until project completion. To exit the NPE area, personnel must do the following:

a) HEPA Vacuum all disposable protective clothing before removing clothing.
b) Remove disposable protective clothing by rolling the disposable protective clothing down & inside out.
c) Place removed/rolled down disposable protective clothing in an approved impermeable disposal bag.
d) Pass into the decontamination shower to wash hands and face prior to leaving work area.

8.40 Building Ventilation Systems

8.40.1 As with the asbestos abatement project, control all HVAC into the NPE.

8.41 LBP Removal Methods

8.41.1 All work shall comply with the Federal, State and local mandated work practices. The Contractor shall not use any methods prohibited by Federal, State or local law. If the Contractor has an alternative means of performing work or accomplishing any task, contact the Owner's EP for guidance.

8.41.2 In all areas where peeling LBP is present, the Contractor shall use work practices that will prevent the generation of lead-containing dust or contamination of adjacent areas. All LBP debris shall be handled in accordance with proper lead work practices.

8.42 Lead Personnel Air Monitoring

8.42.1 During the entire LBP removal and disposal operations, the Contractor will be responsible for all OSHA personnel air monitoring requirements.

8.42.2 Airborne concentrations of lead shall be evaluated in accordance with 29 CFR 1926.62. Results shall be provided within 48 hours of completion of sampling and shall be reported in micrograms of lead per cubic meter of air. The licensed lead abatement supervisor shall use personal air monitoring results to determine the effectiveness of engineering controls, the adequacy of PPE, and assess if proper work practices are being employed correctly. The Owner's EP shall be notified if any personnel air monitoring result equals or exceeds the OSHA Action Level. The Contractor must take immediate and appropriate actions to reduce concentrations of lead in the air to a level that is less than the OSHA Action Level.

8.43 Waste Sampling and Testing

8.43.1 Representative TCLP waste sampling and analysis shall be in accordance with 40 CFR 261. As part of this project, the Contractor shall provide this service on behalf of the Owner for waste disposal purposes.

8.44 Daily Cleanup and Disposal

8.44.1 Surfaces in the LBP control area shall be maintained free of accumulations of paint chips and dust. The spread of visible dust and debris shall be prohibited; dust and waste shall not be distributed over the work area. Dry sweeping or compressed air shall not be used at any time. At the end of each shift, the area shall be cleaned of all visible lead paint contamination by vacuuming with a HEPA-filtered vacuum cleaner and wet mopping the area. All demolition work shall cease during the cleanup.

8.45 Cleanup Prior to Clearance

8.45.1 Upon completion of LBP abatement activities in a NPE area and satisfactorily passing a preliminary visual inspection by the Owner's EP, the Contractor shall perform a preliminary cleanup. This cleanup includes removal of any contaminated material, equipment or debris including polyethylene sheeting from the work area. Where

polyethylene sheeting has been used, it shall be sprayed or misted with water for dust control, debris removed, and then the sheeting removed by folding it in upon itself. The following methodology shall be utilized during the cleanup prior to clearance.

a) All lead-contaminated dust or debris shall be containerized. Six-mil Waste bags shall not be overloaded, shall be securely sealed, and shall be stored in the designated area (that The Owner's EP and the Contractor agrees upon) until disposal.
b) Once the polyethylene sheeting is removed from the work area, cleaning shall begin. It shall be done in the following sequence: HEPA vacuum; Tri-Sodium Phosphate (TSP) wash (or other approved cleaner); clean water rinsing and HEPA vacuum.
c) HEPA vacuum all surfaces. Begin with ceilings and proceed down the walls, including window, doors, all trim, and ending with floors. Begin vacuuming at the farthest corner away from the entrance to the NPE work area with lead detergents.
d) Wash all of the surfaces vacuumed in the same sequence shown above. The Contractor shall utilize a tri-sodium phosphate (TSP) detergent solution or other equally effective cleaning agent and allow the surface to dry. The Contractor shall clean water rinse all surfaces after TSP wash.
e) The Contractor shall prepare and use detergents containing five to ten percent TSP or other approved cleaning agent, which shall be used in accordance with the manufacturer's instructions.
f) HEPA vacuum all surfaces, as detailed in item "c" above, after all surfaces are dry.
g) The wastewater from cleaning shall be contained and disposed of according to applicable Federal, State and local regulations and guidelines. The wastewater shall not be disposed of in storm sewers, poured onto soil or down sanitary sewers without specific and written approval from the appropriate regulatory agency.

9.0 FINAL VISUAL INSPECTION

9.1.1 Upon completion of the final cleaning, the Contractor shall notify the Owner's EP and request a final visual inspection. If the area does not pass the visual inspection criteria, the Contractor shall re-clean the area at no additional expense to the Owner. Final clearance testing shall not proceed until the Owner's EP has accepted the final cleaning by the Contractor.

9.2 Clearance Wipe Sampling

9.2.1 Clearance wipe sampling for lead dust concentrations shall be collected by the Owner's EP. The clearance level has been established at 5 µg/ft^2 on horizontal floor surfaces, 40 µg/ft^2 on exterior porch surfaces, 100 µg/ft^2 for window sills, and 100 µg/ft^2 for window troughs.

9.2.2 If at any time the clearance wipe samples exceed the clearance levels identified in 9.2.1, the Contractor shall perform one re-cleaning of the affected NPE with no additional time allowances and at no additional cost to the Owner. Retesting will then be performed to assess if the NPE meets the specified clearance criteria.

9.2.3 The Owner's EP shall provide the results of each clearance wipe sampling event within 24 hours after the completion of the sampling.

9.2.4 If the laboratory analytical data indicates the clearance wipe samples have achieved successful clearance, the Owner's EP shall certify the NPE work area as complete.

9.3 Removal of NPE Area

9.3.1 The Contractor may remove the LBP NPE once the Owner's EP provides successful laboratory analytical data indicating the achievement of clearance.

9.4 Disposal

9.4.1 The Contractor shall contact the appropriate local/state agency in Missouri for disposal of waste and provide the Owner's EP with criteria for disposal. All non-hazardous waste shall be disposed of in accordance with the local, state and/or federal laws. The contractor shall provide all waste shipment disposal records in its file report to the Owner.

9.5 Hazardous Waste Concentration Results

9.5.1 If required by the waste hauler or waste disposal site, the results of the hazardous waste concentration analysis performed during abatement shall be used to determine waste disposal procedures.

9.6 Contaminated Waste

9.6.1 Lead-contaminated waste, scrap, and debris shall be disposed of as follows:

a) Waste, scrap, debris, bags, containers, equipment, and disposable protective clothing, from all project work areas, shall be stored in EPA and/or U.S. Department of Transportation 49 CFR 178 approved containers. Each container shall be labeled to identify the type of waste as defined in 49 CFR 172 and the date lead-contaminated wastes were first put into the container. The Uniform Hazardous Waste Manifest forms from federal and state agencies shall be obtained and completed by the Contractor. Land disposal restriction notifications shall be made by the Contractor as required by 40 CFR 268. Shipment of hazardous wastes shall be made as needed to ensure that containers do not remain at the work site.

b) Lead-contaminated waste shall be collected, secured, inspected, handled, stored, transported, and disposed of in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Land disposal restriction notification shall be as required by 40 CFR 268.

9.7 Disposal Documentation

9.7.1 Written evidence shall be provided by the disposal company certifying that the hazardous waste treatment, storage, or disposal facility is approved for lead disposal by the EPA and state or local regulatory agencies. One copy shall be submitted of the completed manifest; signed, and dated by the initial transporter in accordance with 40 CFR 262.

10.0 UHW ABATEMENT

10.1 Description

10.1.1 This section describes the segregation, packaging, labeling, transport, and disposal of all waste materials generated by abatement activities. These procedures should be followed for UHW disposal.

10.2 Contractor Responsibility

10.2.1 The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to hazardous waste management and disposal. The Contractor shall hold the Owner and Owner's EP harmless for failure to comply with any applicable work, hauling, disposal, safety, health or any other regulation on the part of the Contractor, the Contractor's employees, or Subcontractors.

10.2.2 Federal requirements which govern the management, hauling and disposal of hazardous waste include, but are not limited to, the following:

DOT – Hazardous Substances

- Title 49, Part 171 and 172 of the Code of Federal Regulations;
- General Awareness and Training Requirements for Handlers, Loaders and Drivers handling and transporting hazardous material;
- Title 49, Parts 171-180 of the Code of Federal Regulations;
- Hazardous Material Regulations incorporating editorial and technical revisions, and
- Title 49, Parts 171-180 of the Code of Federal Regulations.

EPA Regulations, including but not limited to:

- Management of Hazardous Wastes Resource Conservation and Recovery Act (RCRA) Title 40, Parts 260-268 of the Code of Federal Regulations, and
- State and Local Requirements: Abide by all state and local requirements which govern the management, hauling and disposal of hazardous waste.

10.3 Submittals

10.3.1 Before commencement of any work, submit the following to the Owner's EP for review:

a) Copy of state and local licenses for waste hauler;
b) U.S. EPA Identification Number of waste hauler;
c) Name and address of waste disposal facility where hazardous waste materials are to be disposed including:
    - Contact person and telephone number;
    - Copy of state license and permit, and
    - Disposal facility permits.
d) Specimen copy of Uniform Hazardous Waste Manifest form;
e) Copy of EPA "Notice of Hazardous Waste activity" form;
f) Copy of forms required by State and local agencies, and
g) Sample of disposal label to be used.

10.3.2 During performance of the work, submit the following as required by the work.

a) TCLP test results, as required to characterize waste for segregation and packaging purposes, and
b) Submit copies of all executed manifests and disposal site receipts to the Owner's EP.

10.4 Materials

10.4.1 Do not mix potentially hazardous waste streams. Where feasible, separate each type of hazardous waste from other types of hazardous wastes, from asbestos waste and from construction waste.

10.4.2 Segregate, package, label, transport and dispose of Hazardous Waste in accordance with DOT, EPA, State and local regulations.

a) Disposal Bags: Provide 6 mm (0.15 mm) thick leak-tight polyethylene bags;
b) DOT Hazardous Waste Disposal Drums: Provide DOT 1A2 Open -Top Drums (55-gallon) in accordance with DOT regulations title 49 CFR Parts 173, 178, and 179;
c) DOT Hazardous Waste Labels: in accordance with DOT regulations Title 49 CFR parts 173, 178, and 179, and
d) Any other applicable material needed to safely dispose of on-site environmental hazardous materials.

10.5 Hazardous Waste Designation

10.5.1 Where not otherwise designated by the Owner's EP as Hazardous waste, characterize all suspect waste products by conducting representative TCLP testing.

10.5.2 Representative sampling of waste products will be in accordance with EPA Document SW 846.

10.5.3 TCLP test analysis will be performed in accordance with EPA Method 1311.

10.6 Hazardous Waste

10.6.1 The following waste products are designated by the Owner's EP as non-salvageable and as Hazardous Waste Types:

1. Waste Type A, includes any PCB waste (PCB-containing light ballasts, PCB-containing electrical transformers and any other electrical equipment), lead and radioactive materials in smoke detectors.
2. Waste Type B, includes mercury-containing waste (mercury-containing thermostats, fluorescent mercury-vapor lamps and compact fluorescent bulbs) and regulated containerized hazardous waste items (paints, solvents, oils, fire extinguishers, etc.).

10.7 Hazardous Waste Packaging and Labeling:

10.7.1 **IMPORTANT: Do Not Mix Waste Streams**. Package each segregated Hazardous Waste Type A and Waste Type B, in specified containers as follows:

Waste Type-A

a) Package in DOT 1A2 Open-Top Drums;
b) Fill to capacity only with Waste Type-A;
c) Install gasket on lid, apply lock ring, and seal;
d) Apply Hazardous Waste Label to drum side;
e) Enter DOT Shipping Data as follows: RQ Waste Polychlorinated Biphenols, 9, UN 2315, PG-II, (MOOI); and
f) Adjacent to each label, enter the date indicating when waste was first placed in each drum.

Waste Type-B

a) Package in DOT 1A2 Open-Top Drums with Polyethylene disposal Bag liners;
b) Fill liner bags only with Waste Type B;
c) Then neck liner bags down into DOT 1A2 Open-Top Drum and seal with duct tape;
d) Install gasket on lid, apply lock ring, and seal;
e) Apply Hazardous Waste Label to drum side;
f) Enter DOT Shipping Data as follows: RQ Hazardous Waste Solid, NOS, 9, NA3077,

PG-III, (D009); and

g) Adjacent to each label, enter the date indicating when waste was first placed in each drum.

Sealed and Labeled Containers

a) Maintain all containers in a continuously sealed condition after they have been sealed;
b) Do not reopen sealed containers, and
c) Do not place additional waste in sealed containers.

10.7.2 Temporary Storage: Partially filled containers of hazardous waste may be stored at the work site for intermittent packaging provided that:

- Each container is properly labeled when it is first placed in service;
- Each container remains closed at all times except when compatible waste types are added; and
- When moved from site to site, each container remains within the geographic boundaries of the facility without moving or crossing public access highways.

10.7.3 Removal of Hazardous Wastes shall consist of the following:

10.7.4 Immediately seal containers of hazardous waste as each the container is filled;

10.7.5 Remove containers of hazardous waste from the work site within seventy-two (72) hours of being filled;

10.7.6 Transport filled containers from the work site to an approved disposal site or recycling center;

10.7.7 Continuously maintain custody of all hazardous material generated at the work site including security, short-term storage, transportation and disposition until custody is transferred to an approved disposal site or recycling center;

10.7.8 Document continuous chain-of custody;

10.7.9 Do not remove, or cause to be removed, hazardous waste from Owner's property without a legally executed Uniform Hazardous Waste manifest; and

10.7.10 At completion of hauling and disposal of each load submit copy of waste manifest, chain of custody form, and landfill receipt to Designer.

10.7.11 Recycling and recovery of materials shall be taken to an approved recycling center. Materials subject to recycling include, but are not limited to:

- Fluorescent light tubes;
- Thermostats with mercury switches;
- Lead acid batteries;
- Containerized chemicals, and
- Fire extinguishers.

The Contractor must provide written documentation of proper acceptance of materials recycled, from the facility permitted for this purpose and submit the proper documentation to the Designs Professional.

10.8 Back Charges

10.8.1 Where Contractor fails to fulfill packaging, handling, transport or disposal requirements as outlined herein, Owner will charge back to the Contractor all costs associated with insuring that hazardous wastes are segregated, packaged, transported and disposed of in accordance with all applicable Federal and state regulations. Environmental pollution of Owner's property or other environments resulting from Contractor's hazardous waste management activities will be promptly remediated under Owner's direction, to the Owner's sole satisfaction, and at the Contractor's sole expense. The Contractor agrees to either

reimburse the Owner, or reduce the Contract amount by change order to cover all costs associated with waste re-packaging, waste re-segregation, or pollution remediation efforts.

10.9 Removal of Non-Hazardous Waste Materials

10.9.1 Transport and legally dispose of non-hazardous waste products, materials, residues and refuse at a location not on Owner's property.

10.9.2 Non-hazardous waste products, materials, residues and refuse include, but are not necessarily limited to:

- Materials which are determined to be non-hazardous wastes through objective sampling in accordance with EPA Document SW-846 and laboratory analysis in accordance with EPA Method 1311;
- Personnel protective clothing and safety equipment with *de minimis* or trace contamination, as determined by visual inspection by Owner's EP;
- Keep premises in a clean and orderly condition during performance of all abatement work; and
- Place non-hazardous construction debris wastes on a daily basis in secure containers for local landfill disposal.

11.0 DEMOLITION HOT WORK PERMIT PROCEDURES

11.1 Hot Work

11.1.1 The purpose of this procedure is to prevent serious accidents that could result from cutting, welding or other heat-producing operations in a flammable atmosphere, where combustibles are present, or in confined spaces while working at the site. **Fire retardant polyethylene sheeting must be used for any and all containments if hot work is to be used within and or adjacent to any and all containments. Fire retardant polyethylene sheeting must also be used on all exterior containments.**

11.1.2 Do not use cutting torches until work area is cleared of flammable materials. Maintain fire watch and portable fire-suppression devices during any flame-cutting operations.

11.1.3 Maintain adequate ventilation when using cutting torches. The equipment needed to conduct hot work includes the following:

11.1.4 Lower Explosivity Level (LEL)/O_2 (Oxygen) meter; and

11.1.5 Hot Work Permit.

11.1.6 The normal personal protective equipment worn when working with hazardous materials generally provides inadequate protection from flames or heat. The person performing the work shall supplement the existing equipment with the following:

- Welding gloves made of leather or other fire-resistant material;
- Nomex fire resistant coveralls over Tyvek suits;
- Apron or jacket made of leather or other fire-resistant material;
- Face shield with darkened eye lenses that meet ANSI Standard 2.87.1-1968, and
- Flash-fire protection, if necessary.

Note: Normal chemical protective clothing is inappropriate for fire situations.

11.2 Personnel/Manpower Needed to Perform Hot Work

11.2.1 The following personnel are required to perform hot work:

- An individual who is familiar with the operation of an LEL/O_2 meter;
- A cutter; and
- A fire watch, not performing the work, is required.

11.3 Hot Work Operating Procedures

11.3.1 No Contractor employee shall begin hot work unless a hot-work permit has been obtained. It is the responsibility of the crew foreman to obtain this permit. The hot-work permit shall be signed by the supervisor and foreman and explained to each employee working the hot-work project; their signatures will indicate their understanding of the rules outlined in the permit. A Hot Work Permit is attached at the end of these procedures.

11.3.2 The hot-work permit will be valid for a single work-shift only. On projects requiring more than a single work-shift, a new permit shall be completed at the start of each shift. The permit shall be displayed at the project site.

11.3.3 At the conclusion of the hot work project, the hot-work permit(s) shall be returned to the Project Superintendent for termination of the permit. The expired permit will be filed in the Project Superintendent's office.

11.3.4 It is the responsibility of the project supervisor to see that workers comply with all safety practices of the hot-work permit.

11.3.5 The site supervisor or site-safety officer will complete the following procedures before beginning hot work:

- Conduct a visual inspection of area. Ensure that any combustible material surrounding the work area has been removed. Special attention will be paid to areas where hot slag can fall or spatter. Any combustible material that cannot be readily

removed will be covered or otherwise protected from the hot materials.

- Covering a combustible surface with 1 inch of soil or wetting it may be sufficient. Identify ducts and/or conveyor systems that may contain or carry sparks to combustibles. Identified ducts and/or conveyor systems will be suitably protected or removed from service. Precautions should be taken to prevent ignition of combustibles located adjacent to or in metal walls and while cutting or welding on pipes or other metal in contact with combustible walls, partitions, ceilings or roofs.
- Designate a fire watch. This person (or persons) sole responsibility will be to monitor the welding or burning operation and have immediate access to a fire extinguisher of sufficient size and type for the potential combustible material. In addition, this person(s) shall be trained in the proper use of the appropriate fire extinguisher and be knowledgeable of the emergency signal and evacuation procedures. A fire watch will be maintained for a minimum of 30 minutes after the hot work project is finished.
- Do not begin until all spaces, pipes and sumps have been opened and tested for the presence of flammables. If any flammables or combustible vapors exceed 10 percent lower LEL, no work will begin until levels are reduced. As a rule, no hot work will begin when any combustible vapor is present.
- All ventilation established during welding and cutting operations must be in accordance with 29 CFR 1910.252 (c), (2) and 1926.350-.354.
- All cylinder grounding will comply with 29 CFR 1926.351, 1910.254 (c)(2), (d)(3), 1910.255 (6)(9), (c)(6).
- Personnel working in the area of the hot work will be alerted to the fact that hot work is taking place.
- A hot-work permit will be completed and posted conspicuously at the work area.

11.3.6 At the conclusion of the work, return the permit to the site supervisor to terminate the permit. Be sure that all glowing cinders or hot slag is completely cooled to room temperature before leaving the job site.

HOT-WORK PERMIT		
LOCATION:	DATE:	PERMIT NO.
WORK TYPE:	START TIME:	FINISH TIME:
(Print) CONTRACTORS COMPANY AND NAME OF RESPONSIBLE INDIVIDUAL:	SIGNATURE OF RESPONSIBLE INDIVIDUAL:	

PRECAUTIONS BEFORE OPERATIONS:		
	CHECK ONE	
CHECKLIST	YES	NO
Did Fire Department Inspector inspect site?		
Are there procedures for Fire Department notification? Emergency #		
Are combustibles in area noted?		
Should combustibles be covered? (If yes, note in remarks)		
Are proper extinguishers on hand? Type_____ Size_____ Qty_____		
Is wet down necessary? (If yes, note in remarks)		
Is water hose available?		
Is continuous fire watch required?		
Is Fire Department stand by required?		
Pre-work monitoring: PID/FID ☐ LEL/O_2 ☐		
AUTHORIZED SIGNATURE:	DATE:	

PRECAUTIONS AFTER OPERATIONS:		
	CHECK ONE	
CHECK LIST	YES	NO
Was Fire Department notified after Hot-Work operation was complete?		
Time notified:		
Did Fire Department Inspector inspect work site?		
Time of inspection:		
Are after-work conditions safe? (If no, note in remarks)		
Are heat producing devices safe, if left at work site?		
RESPONSIBLE INDIVIDUAL'S SIGNATURE:	DATE:	
FIRE DEPARTMENT INSPECTOR'S SIGNATURE (if required):		
REMARKS:		

NOTE: PERMIT VALID ON DAY OF OPERATION AT ONE LOCATION ONLY

END OF REMEDIAL PLANS & SPECIFICATIONS DOCUMENT

APPENDIX A

SURVEY REPORT

Asbestos-Containing Material, Lead-Based Paint, Lead-Containing Materials, And Universal Hazardous Waste Survey Report

Former Missouri State Highway Patrol
Troop A Headquarters Campus
504 SE Blue Parkway
Lee's Summit, MO 64063

Prepared For:
City of Lee's Summit, MO
220 SE Green Street
Lee's Summit, MO 64063

SCS ENGINEERS

No. 27225221.00 | May 16, 2025

8575 West 110th Street, Suite 100
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(913) 681-0030

Table of Contents

Appendices

1.0 INTRODUCTION & OBJECTIVES

SCS Engineers (SCS) was retained by the City of Lee's Summit, Missouri (City) to conduct an asbestos-containing material (ACM), lead-based paint (LBP), lead-containing material (LCM), and universal hazardous waste (UHW) survey at the former Missouri State Highway Patrol (MSHP) Troop A Headquarters campus located at 504 SE Blue Parkway in Lee's Summit, Missouri (Property). In addition to the ACM, LBP, and UHW survey, lead dust and waste characterization sampling were performed. This report presents the findings of the regulated materials survey completed to support the planned demolition project for the Property. SCS conducted the survey on March 31 and April 1, 2025, in accordance with the scope of work presented in our proposal dated March 14, 2025.

The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and Missouri Department of Natural Resources (MDNR) require thorough inspections for asbestos in structures before proceeding with renovation and/or demolition activities. Therefore, the intent of the ACM survey was to identify and quantify ACM so they can be properly abated and/or managed prior to structure demolition, if present. The LBP survey was completed to identify the presence of lead prior to demolition activities so that LBP be properly managed during demolition. We also identified UHW so it could be removed as part of the demolition process.

1.1 Survey Area Description

The Property is occupied by a two-story main building with an attached former automotive service garage, an indoor firing range building, a former communications building, and two detached sheds. The buildings were constructed in the early 1960s. All site structures were included in the survey conducted by SCS. The Property layout is shown on Figure 1 provided in **Appendix A**.

2.0 ASBESTOS SURVEY

The asbestos survey was performed at the Property on March 31 and April 1, 2025, by Mr. Michael Dustman, Mr. Josh Olson, and Mr. Bryan Ross, Missouri certified asbestos inspectors. The inspection involved a visual survey to identify and evaluate the condition of suspect ACM, estimates of the extent and quantity of ACM, and sampling to confirm and characterize the suspect ACM. **Appendix E** contains a copy of Mr. Dusman's, Mr. Olson's and Mr. Ross' Missouri asbestos certifications.

2.1 Asbestos Survey Procedures

The inspector conducted the asbestos inspection in compliance with Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910.1001, **Appendix B**. The survey was conducted in general accordance with EPA guidelines at https://www.epa.gov/large-scale-residential-demolition/asbestos-containing-materials-acm-and-demolition for inspections to identify regulated asbestos-containing materials (RACM) under the NESHAP and OSHA. The NESHAP, 40 CFR 61, Subpart M, requires thorough inspections for asbestos in structures before renovation or demolition. The inspection included a visual survey of interior and exterior portions of the structures planned for demolition. The inspection included closets, flooring, insulation (where applicable), areas above ceilings, ceilings and other locations where suspect ACM could be present, if accessible.

A destructive survey was conducted in an attempt to thoroughly evaluate the existing building materials. However, it is possible that material(s) not sampled could be encountered during demolition. Therefore, if a demolition contractor encounters building materials different from those identified in this assessment, the demolition contractor should notify and contract a qualified firm employing properly licensed and certified asbestos inspectors so that these materials can be sampled and analyzed for asbestos content before complete removal and disposal. Without

notification as to the presence of uncovered building material, the demolition contractor is responsible for suspect materials that may be uncovered during future activities at the Property.

2.2 Sample Protocol

Bulk material sampling was conducted for suspect ACMs by collecting three samples of each homogeneous friable material (i.e. acoustical ceiling texture, plaster, etc.) and three samples of homogeneous non-friable material. The collected samples were at least one cubic centimeter in size and were placed in sealable plastic bags at the time of collection. Samples were collected using a clean small knife or other tool to collect a representative piece from the depth of the suspected material. Care was taken to prevent cross-contamination of the collected samples.

The bulk samples were shipped by overnight courier to Crisp Analytical, L.L.C. located in Carrollton, Texas, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. The samples were analyzed by polarized light microscopy (PLM), per EPA Method 600/R-93/116. In accordance with 40 CFR Part 61, Subpart M, a material is considered ACM if it contains greater than one percent asbestos. Bulk samples found to contain less than 1% asbestos were further analyzed by Point Count to assure adequate data is available for demonstrating compliance with NESHAP. Copies of the asbestos laboratory analytical reports are provided in **Appendix D**.

2.3 Numbering

The samples were numbered with the building numerical address followed by homogeneous sampling area number, and sequential number value. The number system restarted for each building. An example of the sample numbering is provided below. The sample numbers, descriptions, room, and locations were recorded on a field sampling form.

Example Sample ID number: 504^{A}-1^{B}-1^{C}-1^{D}

A = Building Address;

B = Assigned sample material number;

C = Floor Level or Area where sample was collected; and

D = Sequential numerical value counting total number of samples collected.

2.4 Asbestos Survey Results

A total of 57 suspect ACMs were identified at the Property during the survey and a total of 171 samples were collected. Positive sample locations and the locations of the identified ACM are shown on Figures 2 through 5 (**Appendix A**) and ACM Sample Summary lists for each building with estimated quantities are provided as Tables 1A through 1C (**Appendix B**). Analytical results did identify asbestos in concentrations greater than 1%, in the following building materials:

Main Building/Wooden Sheds

- **12" x 12" Floor Tile with Black Floor Tile Mastic (Category I non-friable)** – Approximately 9,431 square feet of floor tile with associated mastic located throughout the first and second floor of the building.
- **Mudded Pipe Elbow Fittings (Friable)** – Approximately 30 mudded pipe elbow fittings located on the first and second floors.

Firing Range Building

- **Dark Brown Ceiling Glue Dots (Category II non-friable)** – Approximately 300 square feet of ceiling glue dots are located on inside the firing range building.
- **Joint Compound (Category II non**-friable) – Asbestos-containing joint compound was identified on approximately 200 square feet of drywall. However, when reported as a composite drywall system, the drywall system is not considered to be asbestos-containing (less than 1%).

No other building materials sampled during this survey were reported by CA Labs as asbestos-containing. Photographic documentation of the building materials identified to contain asbestos is presented in **Appendix C**. Further discussion and guidance are provided in Section 7.0.

2.5 Assumed Asbestos-Containing Material

Assumed ACMs are those materials that were not sampled during the survey and are assumed to contain asbestos until tested and proven otherwise. Typically, the assumption of ACM is due to other factors, which include, but are not limited to, accessibility, safety, or scope. The following items are assumed to be asbestos-containing:

- Twelve metal doors located inside the Main Building, Firing Range, and Communications Building. The doors are assumed to contain asbestos fireproofing.
- One ceiling-mounted light fixture with a foil reflector and white paper backing in the Main Building, first floor, observation room.
- Electrical components (arc chutes, panels partitions, wire insulations, etc.) located inside the elevator electrical room.
- Elevator brake components located in the elevator shaft.

3.0 LEAD-BASED PAINT SURVEY

On March 31 and April 1, 2025, a Missouri licensed LBP inspector, Mr. Bryan Ross, performed the LBP survey on the interior and exterior portions of the Property structures and other painted surfaces. The survey consisted of determining the presence of LBP utilizing an X-Ray Fluorescence (XRF) lead paint analyzer. XRF readings were only obtained on painted surface components within the inspector's arm's length while standing on the ground surface or ladder. Any other painted surfaces that were not tested due to safe accessibility and not represented by a similar painted surface should be considered to be LBP. A copy of the State of Missouri inspector's license is included in **Appendix E**.

3.1 LBP Survey Procedures

SCS conducted a visual survey of accessible painted surfaces on structural members throughout the Property structure to evaluate paint condition, substrate, and paint color. A portable Olympus Vanta C XRF Analyzer was used to test for LBP. The XRF was calibrated and operated in accordance with the manufacturer's instructions.

As no XRF readings were inconclusive and the surface relief of components were flat, no paint chip samples for laboratory analysis were collected.

3.1.1 Building Component Descriptions

Building components are referenced as they were visually observed. For the purpose of this survey, the existing Property structures and other painted surfaces were analyzed for the presence of LBP.

3.1.2 Paint Conditions

During the survey, the painted surface condition was categorized as being intact or deteriorated as defined below:

Intact - Intact is defined as paint which is not flaking, peeling or chalking (i.e. you cannot lift the paint from the substrate with your fingernail).

Deteriorated - LBP in poor condition (i.e. flaking, chipping, or peeling) for 10% or more of the component.

3.2 LBP Survey Results

According to the EPA and HUD, LBP has been defined as having XRF measurements greater than or equal to 1.0 milligrams per square centimeter (mg/cm^2) or paint chip samples containing lead equal to or in excess of 0.5 percent by weight (5,000 milligrams per kilogram or parts per million).

A total of 151 XRF readings were collected from the relevant components of the Property structures and other painted surfaces. A total of 19 XRF readings exhibited a lead concentration greater than 1.0 mg/cm^2. The locations of the identified LBP are shown on Figures 1 through Figure 5 (**Appendix A**). The LBP XRF field data generated is presented in Tables 2A through 2C (**Appendix B**). Photographs of the identified LBP surfaces are provided in **Appendix C.**

3.3 LBP Survey Summary

The following table provides a summary of the identified LBP at the Property:

Building	Room/Location	Component	Condition	Color	XRF Reading (mg/cm^2)	Estimated Quantity (square foot)
Firing Range	Interior wall between office area and firing range	Metal window and door frame	Intact	Brown	4.06	40
Communications Building	Interior – entryway	Tower cable anchor (loose item)	Deteriorated	Orange	>5.0	5
Communications Building	Exterior – location of former radio tower	Concrete tower piers	Deteriorated	Orange	3.81	20
Communications Building	Exterior	Lintels	Deteriorated	Red	1.97	6
Communications Building	Interior – Storage Room	Wood shelving bracing	Intact	Silver	1.25	3
Main Building	Exterior – Parking Stripes	Pavement	Deteriorated	Yellow	1.62	200
Main Building	Exterior	Transformer	Intact	Green	4.56	60

Building	Room/Location	Component	Condition	Color	XRF Reading (mg/cm^2)	Estimated Quantity (square foot)
Main Building	Exterior	Metal Handrail	Intact	White	>5.0	3
Main Building	Floor 1	Elevator Room Door – metal	Intact	Brown	1.98	42
Main Building	Floor 1	Door to Inspection/ Maint. Room	Intact	Dark Brown	1.90	42
Main Building	Floor 1 - Boiler Room	Handrails - metal	Intact	Brown	>5.0	12
Main Building	Floor 1 - Boiler Room	Exterior Door	Intact	Brown	>5.0	42
Main Building	Floor 1 and 2 – Restrooms	Wall Tile (glazing)	Intact	Blue	3.89	2,010
Main Building	Floor 1 and 2 – Restrooms	Floor Tile (glazing)	Intact	White	>1.0	565
Main Building	Floor 1 and 2 – Restrooms	Sinks (glazing)	Intact	White	>1.0	7 Units
Main Building	Floor 1 and 2 – Restrooms	Toilets (glazing)	Intact	White	>1.0	6 Units
Main Building	Floor 1 – North Hall, west wall	Wall – concrete masonry units	Intact	Tan	1.23	140
Main Building	Floor 1- Northwest Storage	East wall - concrete masonry units	Intact	White/ Green	1.70	300
Main Building	Floor 1 – Northwest Storage	South wall – concrete masonry units	Intact	White	2.80	300

4.0 LEAD-CONTAINING MATERIALS

On March 31, 2025, SCS conducted lead dust and backstop stop media sampling inside the firing range building to assess the building for lead contamination. The assessment included a visual dust assessment/collection of lead dust wipe samples on multiple surfaces and collecting a representative sample of chipped rubber, spent bullets, and bullet fragments (backstop media) for waste disposal characterization.

4.1 Firing Range Lead Dust Assessment

A total of 10 lead dust wipe samples were collected from the interior of the firing range building from various surfaces using laboratory provided dust wipes. The sample locations are shown on Figure 4, **Appendix A**. For each wipe sample, a new 1 square foot sampling template was used. The sample was then transferred into a laboratory provided centrifuge tube and shipped to EMSL Analytical, Inc. for lead analysis by method SW 846-7000B. Laboratory reported lead concentrations ranged between 480 and 18,000 micrograms per square foot (µg/ft2). The analytical results are

summarized in Table 4 in **Appendix B** and a copy of the laboratory analytical report is provided in **Appendix D**.

4.2 Backstop Media Sampling

A sample of the firing range backstop media was collected and submitted to Teklab, Inc for TCLP lead analysis. The sample resulted in a lead concentration of 224 milligrams per liter (mg/L), exceeding the EPA's hazardous waste characteristic toxicity lead regulatory level of 5.0 mg/L. Therefore, the backstop media is characterized as hazardous waste. A copy of the laboratory report is provided in **Appendix D**.

5.0 UNIVERSAL HAZARDOUS WASTE SURVEY

A visual UHW survey of planned demolition areas was also completed. Typical regulated items commonly include paint, oils, fuels, pesticides, cleaning supplies, lead-acid batteries and self-illuminating exit signs. In addition, the EPA requires that all fluorescent light ballasts be considered PCB-containing unless specifically labeled as non-PCB containing. Mercury-containing fluorescent light bulbs are also considered hazardous due to the presence of mercury vapor in the bulbs. PCB and mercury can also be commonly present in older transformers, thermostats, and pressure gauges. Sampling of the identified materials for content of PCBs, mercury, and other hazardous materials were not conducted.

In summary, observed UHW included small containers of chemicals, paints, cleaners, florescent light bulbs, light ballasts, fire extinguishers, etc. Additionally, a used oil aboveground storage tank was observed at the property. A pit in the floor of the north bay of the service garage was observed full of oily water. A list of observed UHW and estimated quantities are provided as Table 3 (**Appendix B**) with photographs of examples of UHW items included in **Appendix D**.

5.1 UHW Survey Summary

The following table provides a summary of the identified UHW at the Property:

Building	Material	Estimated Quantity
Main Building	Product/Item	Estimated Quantity
	Fire Extinguishers	15
	Fluorescent 4' Light Lamps	600
	Fluorescent 2' Light Lamps	87
	Single Fluorescent Lights (Bulbs)	24
	Ballasts (Assumed PCB Containing)	225
	Smoke Detectors	33
	Exit Signs	3
	Cleaning/Disinfectant Products ((1) 20 oz spray bottle, (4) 1 gallon jugs)	5
	Compressor Oil (1 gal)	2
	Desiccant Container (2.5 gal)	1

Building	Material	Estimated Quantity
	Box of Air Boiler Treatment Pellets	1
	Exterior Paint Cans (1 gal and 5 gal)	2
	Quickcrete Products (1 qt, 20 lb., (3) 20 lb.	5
	Hydraulic Lift Oil ((2) 10 L)	2
	Parts Washer Solvent (5 gal)	1
	Uknown Containers	2
	Cleaning Products (Windshield Wash 1 gal, Degreaser 1 gal)	2
	Rooftop AC Units	2
	Refrigerators	4
	TV's	5
	CPU Monitor	1
	Projector	1
	Used Oil AST (500 gal)	1
	Chiller Unit (containing refrigerant and oil)	1
	Gear Case Filler (2 gal)	1
Firing Range	Fluorescent 4' Light Lamps	52
Firing Range	Ballast (Assumed PCB Containing)	26
Firing Range	Fire Extinguishers	1
Comm. Building	Fluorescent 4' Light Lamps	4
Comm. Building	Ballast (Assumed PCB Containing)	2
Comm. Building	Fire Extinguishers	1
Comm. Building	Natural Gas Generator	1
Comm. Building	Lead Acid 12V Batteries	3
Comm. Building	Window Mounted AC Units	2

6.0 BUILDING MATERIAL MEDIA SAMPLING

One bulk representative building material sample was collected from the Property structures. The bulk sample was submitted to Teklab, Inc for Toxicity Characteristic Leaching Procedure (TCLP)

Resource Conservation Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, silver, and selenium) analysis. No concentrations of RCRA 8 metals were detected above the laboratory reporting limits. A copy of the laboratory report is provided in **Appendix D**.

7.0 DISCUSSION AND RECOMMENDATIONS

7.1 Asbestos Survey

Missouri and NESHAP asbestos regulations requires friable ACM be removed prior to demolition or renovation of a structure that involves the disturbance of greater than or equal to 160 square feet, 260 linear feet, or 35 cubic feet of friable ACM. Any friable materials that meet this threshold is considered to be regulated asbestos containing materials (RACM). All RACM is required to be removed by a Missouri registered abatement contractor. Category I non-friable ACM generally will not be required to be removed prior to demolition unless the building is to be burned or the materials are made or become friable. Category II non-friable ACM must be removed prior to demolition if the materials would be subject to crushing, crumbling, or pulverizing during the process of demolition of the building or structure. All ACM should be disposed at an approved landfill in accordance with state and Federal laws. Although the removal of non-friable asbestos materials prior to demolition is not required, the removal of these materials prior to the start of demolition or renovation will allow for the remainder of the demolition materials to be disposed of as non-asbestos containing. SCS recommends that all ACM be removed by a Missouri registered abatement contractor to comply with applicable regulations and to ensure proper handling and disposal of the materials. The MDNR requires submission of an Asbestos Demolition Notification Form at least 10 days prior to the start of demolition activities.

7.2 Recommend ACM Abatement Items

SCS recommends the abatement of the following ACMs prior to demolition activities and are shown on Figures 2 through Figure 4 in **Appendix A**:

Main Building/Wooden Sheds

- **12" x 12" Floor Tile with Black Floor Tile Mastic (Category I non-friable)** – Approximately 9,431 square feet of floor tile with associated mastic located throughout the first and second floor of the building.
- **Mudded Pipe Elbow Fittings (Friable)** – Approximately 30 mudded pipe elbow fittings located on the first and second floors.

Firing Range Building

- **Dark Brown Ceiling Glue Dots (Category II non-friable)** – Approximately 300 square feet of ceiling glue dots are located on inside the firing range building.

Assumed ACM

- Twelve metal doors located throughout the Property buildings.
- One ceiling-mounted light fixture with a foil reflector and white paper backing in the Main Building, first floor, observation room.
- Electrical components (arc chutes, panels partitions, wire insulations, etc.) located inside the elevator electrical room.
- Elevator brake components located in the elevator shaft.

Following deenergizing the electrical system of the main building, any assumed ACM may potentially be eliminated by additional destructive sampling and material analysis confirming the absence of asbestos.

7.3 Lead-Based Paint Survey

LBP abatement is not required in advance of building demolition activities. Based on the results of the representative building materials TCLP sample, demolition debris containing lead-based coatings may be disposed as municipal solid waste. However, if concrete coated with LBP will be recycled (i.e., crumbled, pulverized, or reduced to a powder), the lead paint is required to be abated prior to recycling activities. It is advised that the client receive copies of non-hazardous or hazardous waste manifests and disposal/recycling certificates from waste receiving facilities. Demolition contractors should be informed of the locations of the identified LBP to comply with OSHA lead exposure regulations.

7.4 Firing Range Backstop Media and Lead Dust Contamination

Based on the laboratory analytical results of the firing range backstop media TCLP sample, the backstop material is characterized as hazardous waste. SCS estimates a range of approximately 15 tons to 20 tons of backstop material currently located inside the firing range building. The backstop material should be removed and disposed of by a hazardous waste contractor prior to demolition of the firing range building.

In addition, lead dust contamination was identified on various surfaces throughout the interior of the firing range building. These surfaces include metal ceiling truss', the north, south, east and west concrete masonry unit (CMU) block walls, interior metal air ducting, and floor. The EPA has recently adopted and is now enforcing any reportable amount of lead dust as a hazard. Furthermore, the EPA reduced the lead dust clearance limits to the following:

- 5 µg/ft^2 for floors,
- 40 µg/ft^2 for window sills, and
- 100 µg/ft^2 for window troughs.

Based on the current lead dust levels identified during our lead dust sampling event, the firing range structure will require decontamination of the identified leaded dust and pass a lead dust clearance event prior to building demolition. SCS recommends that a licensed lead abatement company thoroughly cleans the interior of the firing range building following the removal of the backstop material.

7.5 UHW Survey

UHW observed at the Property should be removed, transported, and properly disposed prior to the start of demolition activities. Contractors removing materials and components should be experienced, trained, licensed and insured for the hazards they may encounter. Our guidance for each of the identified UHWs in Table 3 is provided below:

- **Used Oil Tank:** The contents of the used oil tank should be removed and recycled by an oil recycling contractor. Following the removal of the contents, the tank should be cleaned. The tank then can be repurposed or recycled at a metal recycling facility.

- **Garage Floor Pit Oily Water:** The oily water contents of the garage floor pit should be removed by an oil recovery contractor. Following the removal of the pit contents, the side walls and bottom of the pit should be cleaned.

- **Refrigerants Containing Appliances** – Prior to building demolition, the refrigerants in appliances and air conditioner equipment should be recovered by a quailed contractor.

- **Miscellaneous Items:** The other various-sized containers of chemicals, paints, cleaners, florescent light bulbs, ballasts, fire extinguishers, electronics, and the other items listed in the UHW inventory list should be properly removed and properly disposed or recycled prior to demolition activities.

It is advised that the Client receive copies of non-hazardous or hazardous waste manifests and disposal/recycling certificates from waste receiving facilities.

8.0 LIMITATIONS

SCS does not and cannot represent that the Property contains no additional asbestos-containing materials, hazardous or toxic materials or products, or lead-based paint beyond those accessible and observed by SCS during the survey activities. Further, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

Sincerely,

Bryan Ross
Project Manager
Missouri-Licensed Asbestos/Lead Inspector

SCS ENGINEERS

Michael E. Dustman
Senior Project Manager
Missouri-Licensed Asbestos Inspector/Lead Risk Assessor
SCS ENGINEERS

Appendix A

Figures

Exhibit A

LEGEND

- POSITIVE LEAD-BASED PAINT XRF READING

40 0 40 80

SCALE FEET

Image Source: Google Earth 8/5/2022

NO.	REVISION	DATE
△		
△		
△		
△		
△		

SHEET TITLE: **EXTERIOR SAMPLE LOCATIONS**

PROJECT TITLE: **FORMER MO HIGHWAY PATROL CAMPUS**

CLIENT: **MISSOURI HIGHWAY PATROL PROPERTY**
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

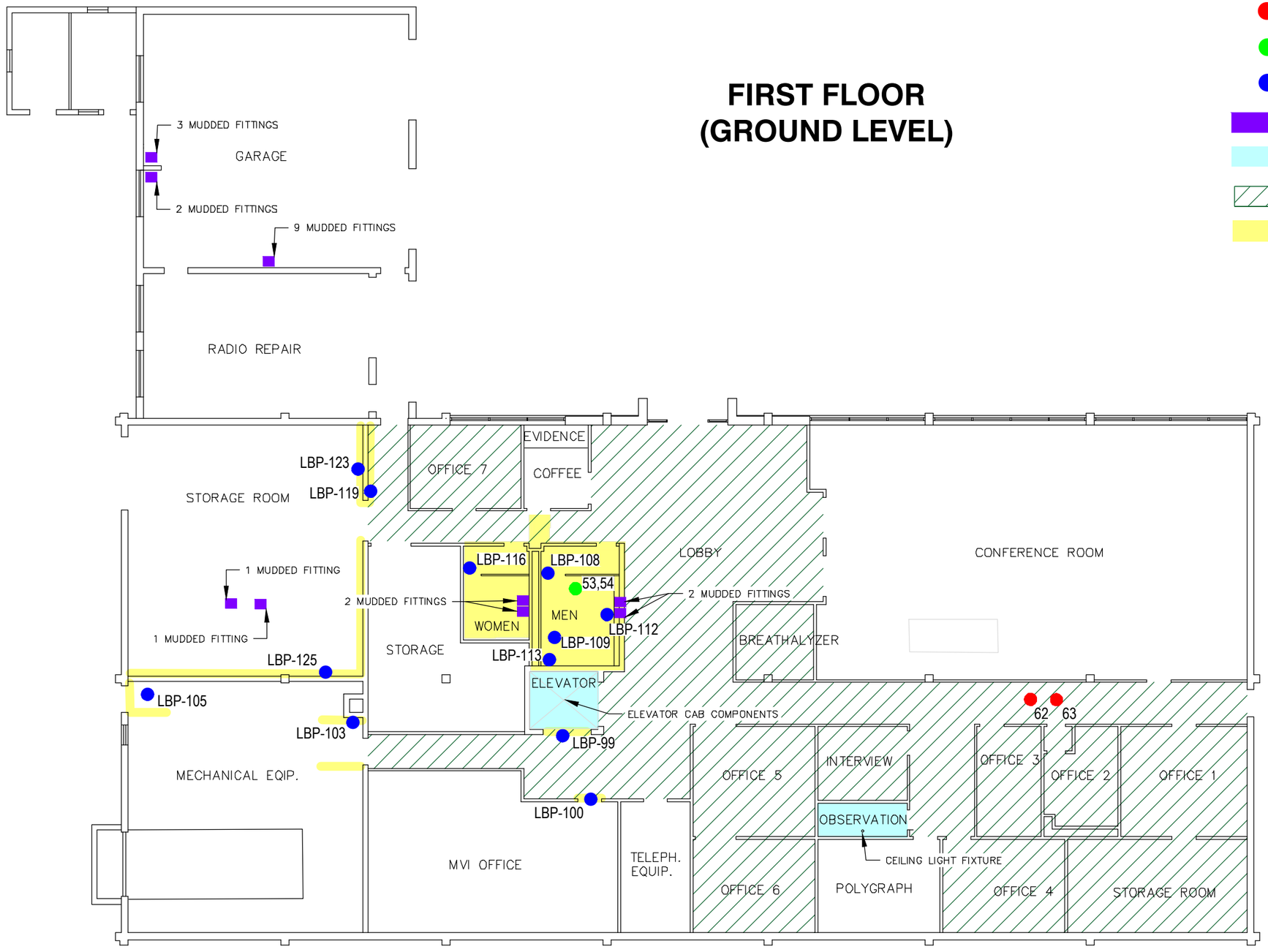
PROJ. NO.	DSN. BY:	QA/QC BY:
PROJ. #	LAS	BDR
DSN. BY:	CK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE: 4/24/25

FIGURE NO. **1**

Exhibit A

FIRST FLOOR (GROUND LEVEL)



LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING MUDDED ELBOWS
- ASSUMED ACM MATERIALS
- ASBESTOS CONTAINING FLOOR TILES AND MASTIC
- LEAD-BASED PAINT/GLAZING

NO. | REVISION | DATE

SHEET TITLE: MAIN BUILDING SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
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PROJ. NO. PROJ # | DSN. BY: LAS | DRAWN BY: BDR | PROJ. MGR BDR
REV. BY: BDR | CHK. BY: BDR

DATE: 4/24/25

FIGURE NO. 2

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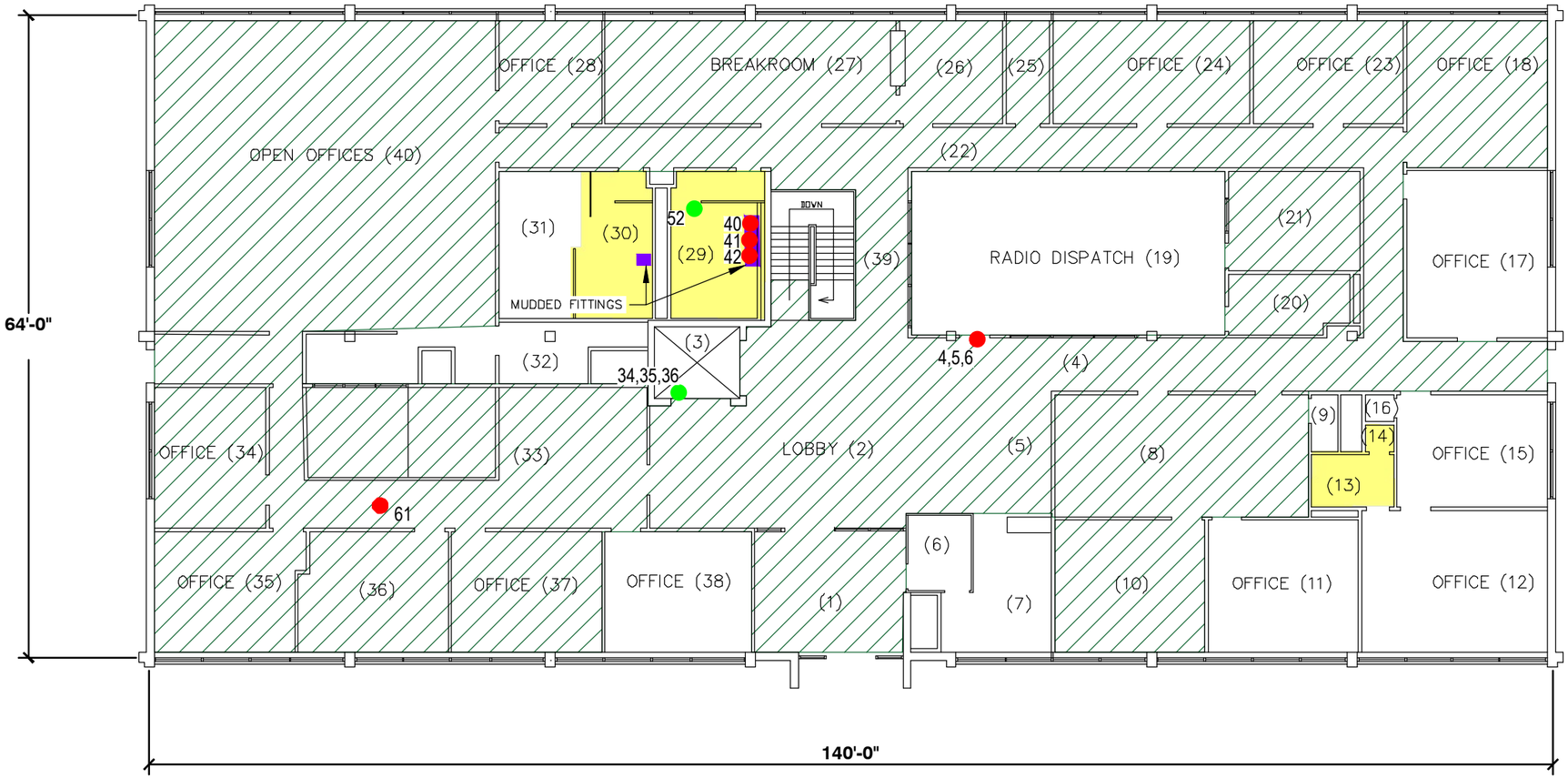
SECOND FLOOR
(UPPER LEVEL)

LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING MUDDED ELBOWS
- ASSUMED ACM MATERIALS
- ASBESTOS CONTAINING FLOOR TILES AND MASTIC
- LEAD-BASED PAIN/GLAZING



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NO.	REVISION	DATE

SHEET TITLE: MAIN BUILDING SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

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PROJ. NO.	DES. BY:	DRAWN BY:
PROJ. #	LAS	BDR
	CHK. BY:	PROJ. MGR
DSN. BY:	BDR	BDR
BDR		

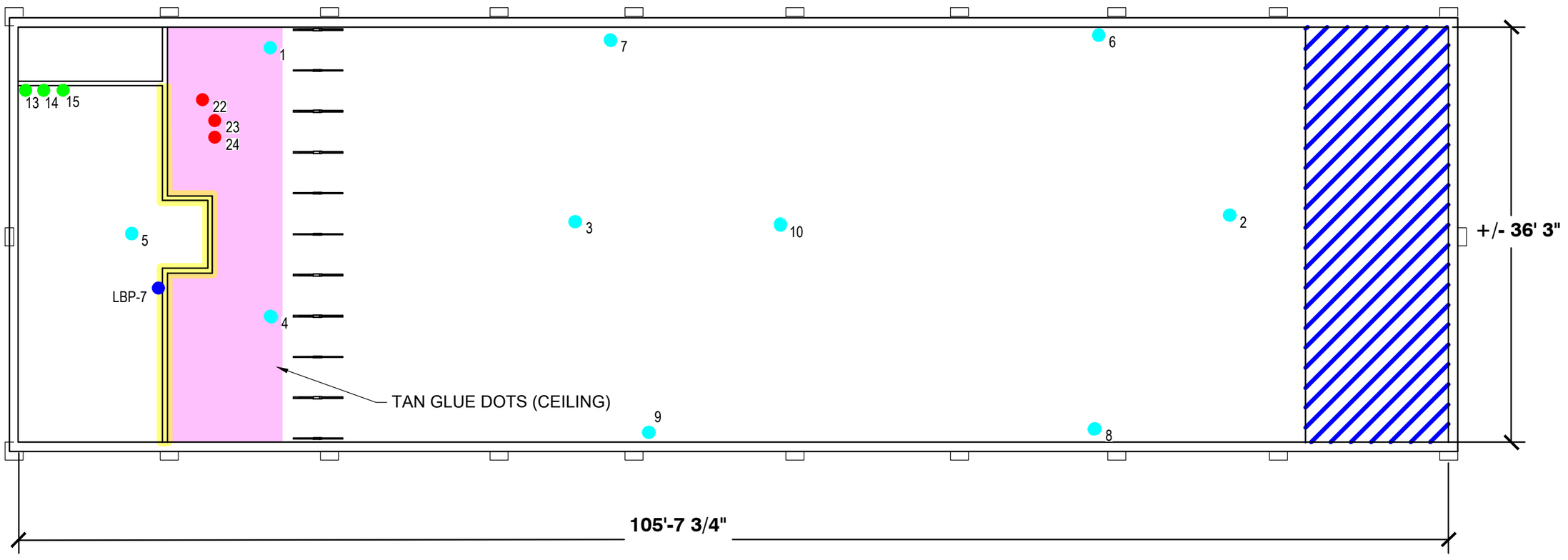
DATE: 4/24/25

FIGURE NO. 3

Exhibit A

LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- LEAD SHOT/CHIPPED RUBBER BACKSTOP
- LEAD DUST WIPE SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING GLUE DOTS
- LEAD-BASED PAINT/GLAZING



NO.	REVISION	DATE

SHEET TITLE: FIRINNG RANGE SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

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PROJ. NO.	DRN. BY:	DRAWN BY:
PROJ. #	LAS	BDR
DSN. BY:	CHK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE: 4/24/25

FIGURE NO. 4

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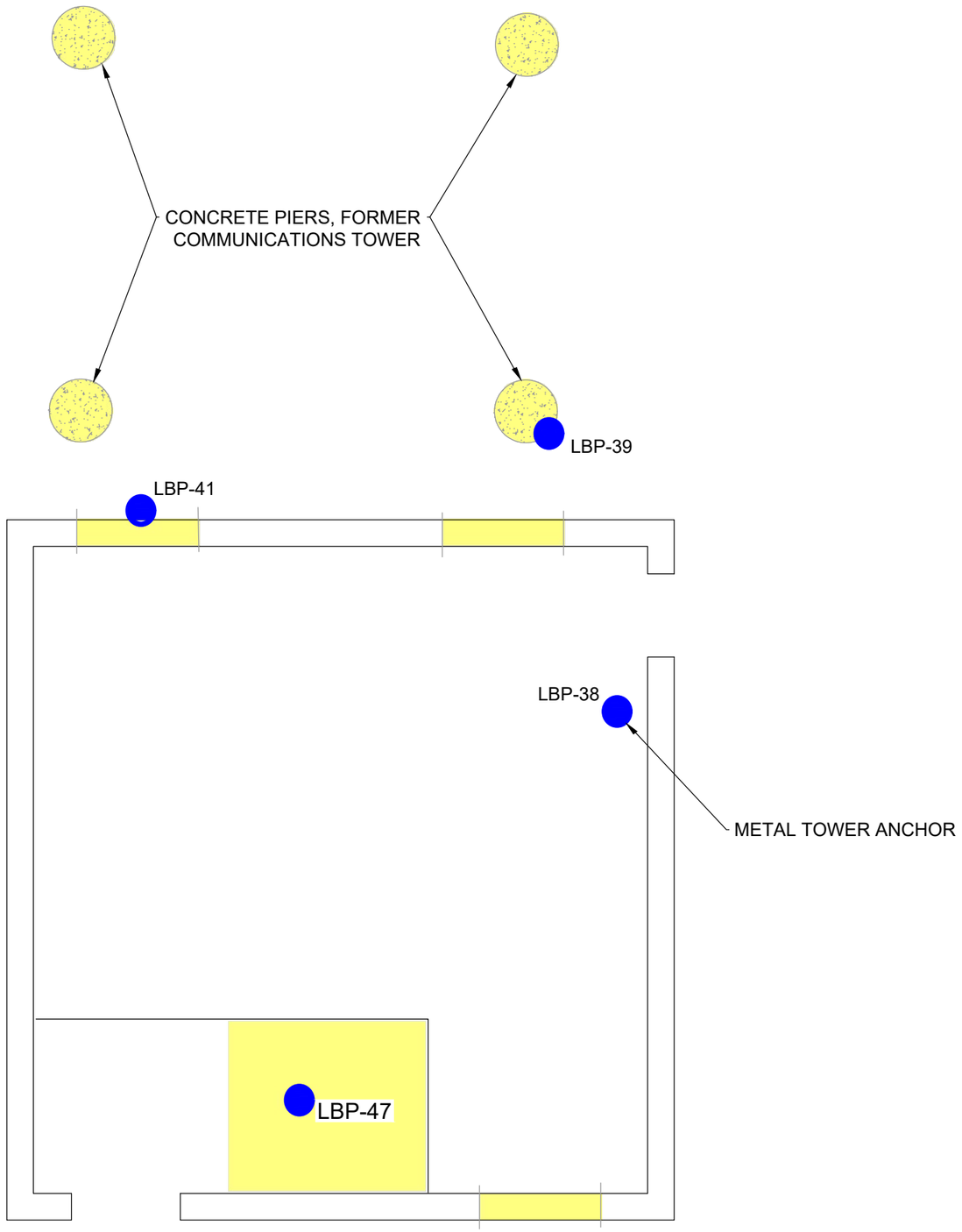
Exhibit A



LEGEND

POSITIVE LEAD-BASED PAINT XRF READING

LEAD-BASED PAIN/GLAZING

NOTE:
NO ASBESTOS-CONTAINING MATERIALS IDENTIFIED.

N

NO.	REVISION	DATE
1		
2		
3		
4		
5		

SHEET TITLE
COMMUNICATIONS BUILDING SAMPLE LOCATIONS

PROJECT TITLE
FORMER MO HIGHWAY PATROL CAMPUS

CLIENT:
MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

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PROJ. NO.	DSN. BY:	CK'K WW BY:
PROJ #	LAS	BDR
DSN. BY:	CHK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE:
4/24/25

FIGURE NO.
5

Appendix B

ACM, LBP, UHW, & Lead Dust Survey Data Tables

TABLE 1A - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
FIRING RANGE BUILDING

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-1-1-1	2'x4' white CT	South end	1	Ceiling along south wall	Good	Yes	None Detected	
504-1-1-2	2'x4' white CT	South end	1	Ceiling along south wall	Good	Yes	None Detected	
504-1-1-3	2'x4' white CT	South end	1	Ceiling along south wall	Good	Yes	None Detected	
504-2-1-4	Reddish brown wall base mastic	South east entrance	1	Wall along east/south east entrance	Good	No	None Detected	
504-2-1-5	Reddish brown wall base mastic	South east entrance	1	Wall along east/south east entrance	Good	No	None Detected	
504-2-1-6	Reddish brown wall base mastic	South east entrance	1	Wall along east/south east entrance	Good	No	None Detected	
504-3-1-7	Black window glazing	Interior office	1	Interior range partition windows	Good	No	None Detected	
504-3-1-8	Black window glazing	Interior office	1	Interior range partition windows	Good	No	None Detected	
504-3-1-9	Black window glazing	Interior office	1	Interior range partition windows	Good	No	None Detected	
504-4-1-10	Black vibration joint cloth	West closet	1	Closet west side of office	Good	No	None Detected	
504-4-1-11	Black vibration joint cloth	West closet	1	Closet west side of office	Good	No	None Detected	
504-4-1-12	Black vibration joint cloth	West closet	1	Closet west side of office	Good	No	None Detected	
504-5-1-13	Tan drywall joint compound	West wall	1	West office wall	Good	No	***JC = 2% Chrysotile System Composite = <1%***	
504-5-1-14	Tan drywall joint compound	West wall	1	West office wall	Good	No	***JC = 2% Chrysotile System Composite = <1%***	
504-5-1-15	Tan drywall joint compound	West wall	1	West office wall	Good	No	***JC = 2% Chrysotile System Composite = <1%***	
504-6-1-16	White 12"x12" CT	Range room	1	Ceiling above firing line	Good	Yes	None Detected	
504-6-1-17	White 12"x12" CT	Range room	1	Ceiling above firing line	Good	Yes	None Detected	
504-6-1-18	White 12"x12" CT	Range room	1	Ceiling above firing line	Good	Yes	None Detected	
504-7-1-19	Tan ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	None Detected	
504-7-1-20	Tan ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	None Detected	
504-7-1-21	Tan ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	None Detected	
504-8-1-22	Dark brown ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	***0.50% Chrysotile***	*300 s.f.*
504-8-1-23	Dark brown ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	***0.75% Chrysotile***	
504-8-1-24	Dark brown ceiling glue dot	Range room	1	Ceiling front end range room	Good	No	***1.00% Chrysotile***	
504-9-1-25	White acoustic wall board	Range room	1	Side walls range room	Good	Yes	None Detected	
504-9-1-26	White acoustic wall board	Range room	1	Side walls range room	Good	Yes	None Detected	
504-9-1-27	White acoustic wall board	Range room	1	Side walls range room	Good	Yes	None Detected	

TABLE 1A - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
FIRING RANGE BUILDING

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-10-E-28	White painted block filler	Building exterior	E	East/southeast/west exterior blocks	Good	Yes	None Detected	
504-10-E-29	White painted block filler	Building exterior	E	East/southeast/west exterior blocks	Good	Yes	None Detected	
504-10-E-30	White painted block filler	Building exterior	E	East/southeast/west exterior blocks	Good	Yes	None Detected	
504-11-E-31	White window caulk	Building exterior	E	South exterior windows	Good	No	None Detected	
504-11-E-32	White window caulk	Building exterior	E	South exterior windows	Good	No	None Detected	
504-11-E-33	White window caulk	Building exterior	E	South exterior windows	Good	No	None Detected	
504-12-E-34	White window glazing	Building exterior	E	South exterior windows	Good	No	None Detected	
504-12-E-35	White window glazing	Building exterior	E	South exterior windows	Good	No	None Detected	
504-12-E-36	White window glazing	Building exterior	E	South exterior windows	Good	No	None Detected	
504-13-R-37	Grey caulk	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-13-R-38	Grey caulk	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-13-R-39	Grey caulk	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-14-R-40	White roofing membrane	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-14-R-41	White roofing membrane	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-14-R-42	White roofing membrane	Roof	R	Base of HVAC fan unit	Good	No	None Detected	
504-15-R-43	Yellow vibration joint cloth	Roof	R	Inside HVAC fan unit	Good	No	None Detected	
504-15-R-44	Yellow vibration joint cloth	Roof	R	Inside HVAC fan unit	Good	No	None Detected	
504-15-R-45	Yellow vibration joint cloth	Roof	R	Inside HVAC fan unit	Good	No	None Detected	

TABLE 1B - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
COMMUNICATIONS BUILDING

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-1-R-1	Black roof vinyl	Roof	R	Comm roof	Good	No	None Detected	Not Applicable
504-1-R-2	Black roof vinyl	Roof	R	Comm roof	Good	No	None Detected	Not Applicable
504-1-R-3	Black roof vinyl	Roof	R	Comm roof	Good	No	None Detected	Not Applicable
504-2-E-4	Silicone caulk	Exterior	E	North outside window	Good	No	None Detected	Not Applicable
504-2-E-5	Silicone caulk	Exterior	E	North outside window	Good	No	None Detected	Not Applicable
504-2-E-6	Silicone caulk	Exterior	E	North outside window	Good	No	None Detected	Not Applicable
504-3-1-7	Ceiling drywall	Comm	1	Ceiling near north wall	Good	No	None Detected	Not Applicable
504-3-1-8	Ceiling drywall	Comm	1	Ceiling near north wall	Good	No	None Detected	Not Applicable
504-3-1-9	Ceiling drywall	Comm	1	Ceiling near north wall	Good	No	None Detected	Not Applicable

TABLE 1C - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND SHEDS

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-1-2-1	Mauve floor tile	Lobby	2	Upstairs lobby	Good	No	None Detected	
504-1-2-2	Mauve floor tile	Lobby	2	Upstairs lobby	Good	No	None Detected	
504-1-2-3	Mauve floor tile	Lobby	2	Upstairs lobby	Good	No	None Detected	
504-2-2-4	White floor tile	Lobby	2	Upstairs corridor outside radio room	Good	No	***FT = 2% Chrysotile Mastic= 3% Chrysotile***	9,431 SF Throughout First and Second Floor
504-2-2-5	White floor tile	Lobby	2	Upstairs corridor outside radio room	Good	No	***Positive Stop***	
504-2-2-6	White floor tile	Lobby	2	Upstairs corridor outside radio room	Good	No	***Positive Stop***	
504-3-2-7	White ceramic grout	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-3-2-8	White ceramic grout	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-3-2-9	White ceramic grout	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-4-2-10	Yellow ceramic glue	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-4-2-11	Yellow ceramic glue	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-4-2-12	Yellow ceramic glue	Bathroom	2	Upstairs men's bathroom	Good	No	None Detected	
504-5-2-13	White 2'x4' CT	Lobby	2	Lobby vestibule by camera	Good	No	None Detected	
504-5-2-14	White 2'x4' CT	Lobby	2	Lobby vestibule by camera	Good	No	None Detected	
504-5-2-15	White 2'x4' CT	Lobby	2	Lobby vestibule by camera	Good	No	None Detected	
504-6-2-16	White 2'x4' CT	Lobby	2	Lobby vestibule by ceiling light	Good	No	None Detected	
504-6-2-17	White 2'x4' CT	Lobby	2	Lobby vestibule by ceiling light	Good	No	None Detected	
504-6-2-18	White 2'x4' CT	Lobby	2	Lobby vestibule by ceiling light	Good	No	None Detected	
504-7-2-19	White 2'x4' CT pin hole pot marks	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-7-2-20	White 2'x4' CT pin hole pot marks	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-7-2-21	White 2'x4' CT pin hole pot marks	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-8-2-22	White 2'x4' CT next to vent	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-8-2-23	White 2'x4' CT next to vent	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-8-2-24	White 2'x4' CT next to vent	Lobby	2	Lobby ceiling	Good	No	None Detected	
504-9-2-25	White 2'x4' CT	Break room	2	Break room	Good	No	None Detected	
504-9-2-26	White 2'x4' CT	Break room	2	Break room	Good	No	None Detected	
504-9-2-27	White 2'x4' CT	Break room	2	Break room	Good	No	None Detected	

TABLE 1C - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND SHEDS

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-10-2-28	Black window sealant	Break room	2	Vestibule interior window	Good	No	None Detected	
504-10-2-29	Black window sealant	Break room	2	Vestibule interior window	Good	No	None Detected	
504-10-2-30	Black window sealant	Break room	2	Vestibule interior window	Good	No	None Detected	
504-11-2-31	Black tar paper	Break room	2	Elevation cab under FT	Good	No	None Detected	
504-11-2-32	Black tar paper	Break room	2	Elevation cab under FT	Good	No	None Detected	
504-11-2-33	Black tar paper	Break room	2	Elevation cab under FT	Good	No	None Detected	
504-12-2-34	12"x12" FT with yellow mast	Break room	2	Elevator cab flooring	Good	No	***Mastic = 0.25% Chrysotile***	
504-12-2-35	12"x12" FT with yellow mast	Break room	2	Elevator cab flooring	Good	No	***Mastic = 0.25% Chrysotile***	
504-12-2-36	12"x12" FT with yellow mast	Break room	2	Elevator cab flooring	Good	No	***Mastic = 0.25% Chrysotile***	
504-13-2-37	Yellow carpet mast	Break room	2	Safety office under carpet	Good	No	None Detected	
504-13-2-38	Yellow carpet mast	Break room	2	Safety office under carpet	Good	No	None Detected	
504-13-2-39	Yellow carpet mast	Break room	2	Safety office under carpet	Good	No	None Detected	
504-14-2-40	White mudded elbow	Men's restroom	2	Under sink	Good	No	***10% Chrysotile 2% Crocidolite 3% Amosite***	*Approx. 30 fittings*
504-14-2-41	White mudded elbow	Men's restroom	2	Under sink	Good	No	***Positive Stop***	
504-14-2-42	White mudded elbow	Men's restroom	2	Under sink	Good	No	***Positive Stop***	
504-15-2-43	Tan cove base with yellow mast	Office	2	Office wall west of safety office	Good	No	None Detected	
504-15-2-44	Tan cove base with yellow mast	Office	2	Office wall west of safety office	Good	No	None Detected	
504-15-2-45	Tan cove base with yellow mast	Office	2	Office wall west of safety office	Good	No	None Detected	
504-16-2-46	Brown cove base with yellow mast	Lobby	2	Lobby east wall	Good	No	None Detected	
504-16-2-47	Brown cove base with yellow mast	Lobby	2	Lobby east wall	Good	No	None Detected	
504-16-2-48	Brown cove base with yellow mast	Lobby	2	Lobby east wall	Good	No	None Detected	
504-17-2-49	Tan cove base with brown mast	Elevator	2	Elevator wall	Good	No	None Detected	
504-17-2-50	Tan cove base with brown mast	Elevator	2	Elevator wall	Good	No	None Detected	
504-17-2-51	Tan cove base with brown mast	Elevator	2	Elevator wall	Good	No	None Detected	
504-18-2-52	Gray grout	Men's restroom	2	Floor	Good	No	***0.25% Chrysotile***	
504-18-1-53	Gray grout	Men's restroom	1	Floor	Good	No	***0.25% Chrysotile***	
504-18-1-54	Gray grout	Men's restroom	1	Floor	Good	No	***Trace Chrysotile***	
504-19-2-55	Ceramic FT paper backing	Men's restroom	2	Floor	Good	No	None Detected	

TABLE 1C - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND SHEDS

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-19-1-56	Ceramic FT paper backing	Woman's restroom	1	Floor	Good	No	None Detected	
504-19-1-57	Ceramic FT paper backing	Woman's restroom	1	Floor	Good	No	None Detected	
504-20-2-58	Black. Yellow duct lining	Office	2	Air duct	Good	No	None Detected	
504-20-2-59	Black. Yellow duct lining	Office	2	Air duct	Good	No	None Detected	
504-20-2-60	Black. Yellow duct lining	Office	2	Air duct	Good	No	None Detected	
504-21-2-61	Tan 12"x12" FT with black mast	Hall	2	West hall floor	Good	No	***Mastic = 2% Chrysotile***	9,431 SF Throughout First and Second Floor
504-21-1-62	Tan 12"x12" FT with black mast	Hall	1	East hall floor	Good	No	***Positive Stop***	
504-21-1-63	Tan 12"x12" FT with black mast	Hall	1	East hall floor	Good	No	***Positive Stop***	
504-22-2-64	DWTC with tape	Lobby	2	Lobby east wall	Good	No	None Detected	
504-22-2-65	DWTC with tape	Lobby	2	Lobby east wall	Good	No	None Detected	
504-22-2-66	DWTC with tape	Lobby	2	Lobby east wall	Good	No	None Detected	
504-23-2-67	Wall plaster	Lobby	2	Lobby wall	Good	No	None Detected	
504-23-2-68	Wall plaster	Lobby	2	Lobby wall	Good	No	None Detected	
504-23-2-69	Wall plaster	Lobby	2	Lobby wall	Good	No	None Detected	
504-24-1-70	Fire proofing	S. Mech	1	center ceiling	Good	Yes	None Detected	
504-24-1-71	Fire proofing	S. Mech	1	center ceiling	Good	No	None Detected	
504-24-1-72	Fire proofing	S. Mech	1	center ceiling	Good	No	None Detected	
504-25-1-73	Damper cloth	S. Mech	1	HVAC unit	Good	No	None Detected	
504-25-1-74	Damper cloth	S. Mech	1	HVAC unit	Good	No	None Detected	
504-25-1-75	Damper cloth	S. Mech	1	HVAC unit	Good	No	None Detected	
504-26-1-76	Pipe cloth wrap	S. Mech	1	North wall	Good	No	None Detected	
504-26-1-77	Pipe cloth wrap	S. Mech	1	North wall	Good	No	None Detected	
504-26-1-78	Pipe cloth wrap	N. Mech	1	North wall	Good	No	None Detected	
504-27-1-79	Pipe paper insulation	N. Mech	1	North wall	Good	No	None Detected	
504-27-1-80	Pipe paper insulation	N. Mech	1	North wall	Good	No	None Detected	
504-27-1-81	Pipe paper insulation	N. Mech	1	North wall	Good	No	None Detected	
504-28-1-82	HVAC duct insulation	N. Mech	1	HVAC unit	Good	No	None Detected	

TABLE 1C - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND SHEDS

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-28-1-83	HVAC duct insulation	N. Mech	1	HVAC unit	Good	No	None Detected	
504-28-1-84	HVAC duct insulation	S. Mech	1	HVAC duct	Good	No	None Detected	
504-29-1-85	White door frame caulk	S. Mech	B	Door frame	Good	No	None Detected	
504-29-1-86	White door frame caulk	S. Mech	B	Door frame	Good	No	None Detected	
504-29-1-87	White door frame caulk	N hall	B	Door frame	Good	No	None Detected	
504-30-1-88	Grey door caulk	E hall	B	Door frame	Good	No	None Detected	
504-30-2-89	Grey door caulk	W hall	2	Door frame	Good	No	None Detected	
504-30-1-90	Grey door caulk	N mech	B	Door frame	Good	No	None Detected	
504-31-E-91	Asphalt shingles	Roof	R	S shed	Good	No	None Detected	
504-31-E-92	Asphalt shingles	Roof	R	S shed	Good	No	None Detected	
504-31-E-93	Asphalt shingles	Roof	R	S shed	Good	No	None Detected	
504-32-E-94	Asphalt shingles	Roof	R	N shed	Good	No	None Detected	
504-32-E-95	Asphalt shingles	Roof	R	N shed	Good	No	None Detected	
504-32-E-96	Asphalt shingles	Roof	R	N shed	Good	No	None Detected	
504-33-R-97	White roof membrane	Roof	R	Garage roof	Good	No	None Detected	
504-33-R-98	White roof membrane	Roof	R	Garage roof	Good	No	None Detected	
504-33-R-99	White roof membrane	Roof	R	Main building roof	Good	No	None Detected	
504-34-R-100	White surfacing	Roof	R	Main building roof air vent	Good	No	None Detected	
504-34-R-101	White surfacing	Roof	R	Main building roof air vent	Good	No	None Detected	
504-34-R-102	White surfacing	Roof	R	Main building roof air vent	Good	No	None Detected	
504-35-R-103	White caulk	Roof	R	Garage roof air vent	Good	No	None Detected	
504-35-R-104	White caulk	Roof	R	Garage roof air vent	Good	No	None Detected	
504-35-R-105	White caulk	Roof	R	Garage roof air vent	Good	No	None Detected	
504-36-R-106	Grey caulk	Roof	R	On metal flashing	Good	No	None Detected	
504-36-R-107	Grey caulk	Roof	R	On metal flashing	Good	No	None Detected	
504-36-R-108	Grey caulk	Roof	R	On metal flashing	Good	No	None Detected	
504-37-R-109	Grey sealant	Roof	R	On metal flashing below window on garage roof	Good	No	None Detected	
504-37-R-110	Grey sealant	Roof	R	On metal flashing below window on garage roof	Good	No	None Detected	

TABLE 1C - ACM SAMPLE SUMMARY SHEET
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND SHEDS

SAMPLE ID	MATERIAL DESCRIPTION	ROOM/AREA	FLOOR	LOCATION	CONDITION	FRIABLE	Asbestos Content	Estimated Quantity
504-37-R-111	Grey sealant	Roof	R	On metal flashing below window on garage roof	Good	No	None Detected	
504-38-R-112	Grey sealant	Roof	R	Garage under window	Good	No	None Detected	
504-38-R-113	Grey sealant	Roof	R	Garage under window	Good	No	None Detected	
504-38-R-114	Grey sealant	Roof	R	Garage under window	Good	No	None Detected	
504-39-1-115	Black glue	Conf room	1	Behind wood paneling	Good	No	None Detected	
504-39-1-116	Black glue	Conf room	1	E. wall	Good	No	None Detected	
504-39-1-117	Black glue	Conf room	1	E. wall	Good	No	None Detected	

Exhibit A

TABLE 2A - XRF FIELD MEASUREMENTS
FORMER HIGHWAY PATROL CAMPUS
FIRING RANGE BUILDING

Sample No.	Color	Description/Component	Substrate Material	Analysis (mg/cm^2)	Positive/ Negative	Floor/ Area	Condition
Cal		Calibration Check			Pass		
LBP-1	Tan	South Wall	CMU	Non-detect	Negative	Interior	Intact
LBP-2	White	Closet - West Wall	CMU	Non-detect	Negative	Interior	Intact
LBP-3	Brown	Window Sill - South Wall	Metal	0.470	Negative	Interior	Intact
LBP-4	Brown	Window Frame - South Wall	Metal	Non-detect	Negative	Interior	Intact
LBP-5	Brown	Door - East Wall	Metal	Non-detect	Positive	Interior	Intact
LBP-6	Brown	Door Frame - East Wall	Metal	Non-detect	Negative	Interior	Intact
LBP-7	Brown	Window/Door Frame - Wall between office and range	Metal	4.060	Negative	Interior	Intact
LBP-8	Brown	Panel Under Window	Plywood	Non-detect	Negative	Interior	Intact
LBP-9	Tan	Office West Wall	Plywood	Non-detect	Negative	Interior	Intact
LBP-10	Brown	Varnish - Cabinet	Wood	Non-detect	Negative	Interior	Intact
LBP-11	White	Sink	Porcelain	0.002	Negative	Interior	Intact
LBP-12	Grey	Office Floor	Concrete	0.017	Negative	Interior	Intact
LBP-13	Light grey	Closet Floor	Concrete	0.076	Negative	Interior	Intact
LBP-14	Grey	Breaker Panel - Closet	Metal	0.580	Negative	Interior	Intact
LBP-15	Red	Ceiling Truss	Metal	Non-detect	Negative	Interior	Intact
LBP-16	White	Acoustic Panel	Fiber	0.460	Negative	Interior	Intact
LBP-17	White	Ceiling Tile Track	Metal	Non-detect	Negative	Interior	Intact
LBP-18	Tan	Acoustic Wall Frame at Floor	Metal	0.030	Negative	Interior	Intact
LBP-19	Grey	Range Floor	Concrete	0.265	Negative	Interior	Deteriorated
LBP-20	Black	East Wall at Trap	Metal	Non-detect	Negative	Interior	Intact
LBP-21	Tan	East Wall- Range	CMU	0.250	Negative	Interior	Intact
LBP-22	Grey	Ceiling Truss	Metal	0.074	Negative	Interior	Intact
LBP-23	Off white	East Wall- Range	CMU	Non-detect	Negative	Exterior	Intact
LBP-24	Brown	Door	Metal	Non-detect	Negative	Exterior	Intact
LBP-25	Off White	West Wall	CMU	Non-detect	Negative	Exterior	Deteriorated
LBP-26	Off White	Pipe	Metal	0.031	Negative	Exterior	Intact
LBP-27	Off White	Concrete Short Wall	Concrete	Non-detect	Negative	Exterior	Deteriorated
LBP-28	White	Gutter	Metal	Non-detect	Negative	Exterior	Intact
LBP-29	White	Flashing	Metal	Non-detect	Negative	Exterior	Intact
LBP-30	White	I-Beam of Roof HVAC Unit	Metal	Non-detect	Negative	Exterior	Deteriorated

Survey Date: March 31, 2025

Highlight=Positive for lead, concentration > 1.0 mg/cm^2

TABLE 2B - XRF FIELD MEASUREMENTS
FORMER HIGHWAY PATROL CAMPUS
COMMUNICATION BUILDING

Sample No.	Color	Description	Substrate Material	Analysis (mg/cm^2)	Positive/ Negative	Floor/ Area	Condition
LBP-31	Grey	Floor Cover Under Radio Control Cabinet	Wood	0.104	Negative	Interior	Intact
LBP-32	Brown	Door	Metal	Non-detect	Negative	Interior	Intact
LBP-33	Brown	Door Frame	Metal	Non-detect	Negative	Interior	Intact
LBP-34	Tan	Base Heater	Metal	0.072	Negative	Interior	Intact
LBP-35	Dark Grey	Radio Control Cabinet	Metal	Non-detect	Negative	Interior	Intact
LBP-36	White	Cabinet	Wood	Non-detect	Negative	Interior	Intact
LBP-37	Green	Generator	Metal	Non-detect	Negative	Interior	Intact
LBP-38	Orange	Tower Cable Anchor	Metal	>5.0	Positive	Interior	Deteriorated
LBP-39	Orange	Former Tower Piers	Concrete	3.810	Positive	Exterior	Deteriorated
LBP-40	Tan	East Wall	Brick	Non-detect	Negative	Exterior	Deteriorated
LBP-41	Red	Window lintel	Metal	1.970	Positive	Exterior	Deteriorated
LBP-42	Grey	Conduit	Plastic	0.002	Negative	Exterior	Intact
LBP-43	Brown	Door	Metal	Non-detect	Negative	Exterior	Intact
LBP-44	Tan	Window Panel above Window AC	Wood	Non-detect	Negative	Exterior	Deteriorated
LBP-45	White	Flashing	Metal	Non-detect	Negative	Exterior	Intact
LBP-46	White	Gutter	Metal	Non-detect	Negative	Exterior	Intact
LBP-47	Silver	Shelving Bracing/Frame in storage closet	Wood	1.250	Positive	Interior	Intact

Highlight=Positive for lead, concentration > 1.0 mg/cm^2

Survey Date: March 31, 2025

TABLE 2C - XRF FIELD MEASUREMENTS
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND EXTERIOR ITEMS

Sample No.	Color	Description	Substrate Material	Analysis (mg/cm^2)	Positive/ Negative	Floor/ Area	Condition
LBP-48	Yellow	Parking stripes	Concrete	1.620	Positive	Exterior	Deteriorated
LBP-49	Green	Transformer	Metal	4.560	Positive	Exterior	Intact
LBP-50	Brown	Light Post	Metal	Non-detect	Negative	Exterior	Intact
LBP-51	Brown	Light Pole Base - Gravel Lot	Metal	Non-detect	Negative	Exterior	Deteriorated
LBP-52	Yellow	Light Pole Base - Gravel Lot	Concrete	Non-detect	Negative	Exterior	Deteriorated
LBP-53	Yellow	Bollard - Southeast Drive	Metal	Non-detect	Negative	Exterior	Deteriorated
LBP-54	Grey	Front Stair Rail to Main Building	Metal	Non-detect	Negative	Exterior	Intact
LBP-55	Grey	Top of Stairs to Building	Concrete	Non-detect	Negative	Exterior	Intact
LBP-56	Off White	South Wall	Concrete	Non-detect	Negative	Exterior	Intact
LBP-57	Off White	HVAC Fresh Air Intake	Concrete	Non-detect	Negative	Exterior	Intact
LBP-58	Yellow	Curb on West Side of Building	Concrete	Non-detect	Negative	Exterior	Intact
LBP-59	Brown	West Door	Metal	Non-detect	Negative	Exterior	Intact
LBP-60	Brown	Door Frame	Metal	Non-detect	Negative	Exterior	Intact
LBP-61	White	Garage Door- West Side	Metal	Non-detect	Negative	Exterior	Intact
LBP-62	Off White	Garage Door Frame	Metal	0.250	Negative	Exterior	Intact
LBP-63	Grey	Used Oil Tank	Metal	Non-detect	Negative	Exterior	Deteriorated
LBP-64	Red	Tank Containment	Metal	Non-detect	Negative	Exterior	Deteriorated
LBP-65	Off White	Compressor Room Siding	Wood	Non-detect	Negative	Exterior	Intact
LBP-66	White	Handrail Outside of North Door to Garage	Metal	>5.0	Positive	Exterior	Intact
LBP-67	White	Garage Bollards	Metal	Non-detect	Negative	Exterior	Intact
LBP-68	White	Angle Iron on Garage Door Frame	Metal	0.010	Negative	Exterior	Intact
LBP-69	White	Lintel above Garage Door	Metal	Non-detect	Negative	Interior	Intact
LBP-70	Tan	Garage - North Wall	CMU	Non-detect	Negative	Interior	Intact
LBP-71	Tan	2x4 Ledge-West Wall of Garage	Wood	Non-detect	Negative	Interior	Deteriorated
LBP-72	Brown	Door - South Interior Wall of Garage	Metal	Non-detect	Negative	Interior	Intact
LBP-73	Tan	Pipe	Metal	Non-detect	Negative	Interior	Intact
LBP-74	Black	Water Fountain	Metal	0.140	Negative	Interior	Deteriorated
LBP-75	Brown	Walkthrough Frame	Metal	Non-detect	Negative	Interior	Intact
LBP-76	Tan	Radio Room- South Wall	Concrete	Non-detect	Negative	Interior	Intact
LBP-77	Grey	Cabinets- South Wall of Radio Room	Wood	Non-detect	Negative	Interior	Intact
LBP-78	Black	Ceiling Truss- Garage	Metal	Non-detect	Negative	Interior	Intact
LBP-79	Tan	Evidence Room- South wall	Drywall	Non-detect	Negative	First Floor	Intact
LBP-80	Brown	Metal Door into Evidence Room	Metal	Non-detect	Negative	First Floor	Intact

Survey Date: March 31, 2025

Highlight=Positive for lead, concentration > 1.0 mg/cm^2

TABLE 2C - XRF FIELD MEASUREMENTS
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND EXTERIOR ITEMS

Sample No.	Color	Description	Substrate Material	Analysis (mg/cm^2)	Positive/ Negative	Floor/ Area	Condition
LBP-81	Tan	Lobby	Drywall	Non-detect	Negative	First Floor	Intact
LBP-82	Tan	Column- North Wall of Lobby	Concrete	Non-detect	Negative	First Floor	Intact
LBP-83	Brown	Stair Riser- Lobby	Metal	Non-detect	Negative	First Floor	Intact
LBP-84	Green	Wall Tile- Lobby Stairs	Ceramic	Non-detect	Negative	First Floor	Intact
LBP-85	White	Ceiling Tile Track	Metal	Non-detect	Negative	First Floor	Intact
LBP-86	Tan	Wall Panel - East Wall-Training Room	Wood	Non-detect	Negative	First Floor	Intact
LBP-87	Blue	South Wall Training Room	Drywall	Non-detect	Negative	First Floor	Intact
LBP-88	Brown	Door Frame - East Hall	Metal	Non-detect	Negative	First Floor	Intact
LBP-89	Light Brown	North Wall - East Hall	Drywall	Non-detect	Negative	First Floor	Intact
LBP-90	White	South Wall - Office 1	Drywall	Non-detect	Negative	First Floor	Intact
LBP-91	White	Storage Room	Concrete	Non-detect	Negative	First Floor	Intact
LBP-92	Tan	Office 4- South Wall	Drywall	Non-detect	Negative	First Floor	Intact
LBP-93	Tan	Telephone Equipment Room - East Wall	Drywall	Non-detect	Negative	First Floor	Intact
LBP-94	Grey	Telephone Equipment Room- Floor	Concrete	Non-detect	Negative	First Floor	Intact
LBP-95	Tan	Motor Vehicle Inspection Office- West Wall	CMU	Non-detect	Negative	First Floor	Intact
LBP-96	Light Brown	Elevator Door	Metal	Non-detect	Negative	First Floor	Intact
LBP-97	Dark Brown	Elevator Door Frame	Metal	Non-detect	Negative	First Floor	Intact
LBP-98	White	West Wall - Elevator Equipment Room	Drywall	Non-detect	Negative	First Floor	Intact
LBP- 119	Brown	Door To Elevator Room	Metal	1.98	Positive	First Floor	Intact
LBP-100	Dark Brown	Door to Motor Inspection Room/Maint Room	Metal	1.9	Positive	First Floor	Intact
LBP-101	Dark Brown	Southwest Hall Door	Metal	Non-detect	Negative	First Floor	Intact
LBP-102	Brown	Door into Boiler Room	Metal	Non-detect	Negative	First Floor	Intact
LBP-103	Brown	Boiler Room Handrail	Metal	>5.0	Negative	First Floor	Intact
LBP-104	Grey	Stairs	Concrete	Non-detect	Negative	First Floor	Intact
LBP-105	Brown	Exterior Door of Boiler Room	Metal	>5.0	Negative	First Floor	Intact
LBP-106	Grey	Cabinet- Boiler Room	Wood	Non-detect	Negative	First Floor	Intact
LBP-107	Green	East Wall	Concrete	Non-detect	Negative	First Floor	Intact
LBP-108	Blue	Wall Tile - Men's Restroom	Ceramic	3.89	Positive	First Floor	Intact
LBP-109	White	Floor Tile - Men's Restroom	Ceramic	>1.0	Positive	First Floor	Intact
LBP-110	Blue	Stall Walls - Men's Restroom	Metal	Non-detect	Negative	First Floor	Intact
LBP-111	White	Urinal - Men's Restroom	Porcelain	Non-detect	Negative	First Floor	Intact
LBP-112	White	Sink - Men's Restroom	Porcelain	>1.0	Positive	First Floor	Intact
LBP-113	White	Toilet - Men's Restroom	Porcelain	>1.0	Positive	First Floor	Intact
LBP-114	Light Brown	North Hall- West Wall	Drywall	Non-detect	Negative	First Floor	Intact

Survey Date: March 31, 2025

Highlight=Positive for lead, concentration > 1.0 mg/cm^2

TABLE 2C - XRF FIELD MEASUREMENTS
FORMER HIGHWAY PATROL CAMPUS
MAIN BUILDING AND EXTERIOR ITEMS

Sample No.	Color	Description	Substrate Material	Analysis (mg/cm^2)	Positive/ Negative	Floor/ Area	Condition
LBP-115	Light Brown	Fountain Panel	Metal	Non-detect	Negative	First Floor	Intact
LBP-116	Peach	Wall Tile- Women's Restroom	Ceramic	>1.0	Positive	First Floor	Intact
LBP-117	Tan	North Wall - Office 7	Concrete	Non-detect	Negative	First Floor	Intact
LBP-118	Brown	Door to Exterior from West Hall	Metal	Non-detect	Negative	First Floor	Intact
LBP-119	Tan	North Hall Storage	CMU	1.23	Positive	First Floor	Intact
LBP-120	Brown	North hall storage	CMU	Non-detect	Negative	First Floor	Intact
LBP-121	Grey	North Hall Storage- West Wall	CMU	Non-detect	Negative	First Floor	Intact
LBP-122	Grey	North Hall Storage- South Wall	CMU	Non-detect	Negative	First Floor	Intact
LBP-123	White/Green	Northwest Storage - East Wall	CMU	1.7	Positive	First Floor	Intact
LBP-124	White/Green	Northwest storage- North Wall	Concrete	0.27	Negative	First Floor	Intact
LBP-125	White	Northwest Storage- South Wall	CMU	2.8	Positive	First Floor	Intact
LBP-126	White	Northwest Storage- West Wall	Concrete	Non-detect	Negative	First Floor	Intact
LBP-127	Brown	Northwest Storage- Door	Metal	Non-detect	Negative	First Floor	Intact
LBP-128	Green	Electrical Panel Northwest Storage	Metal	Non-detect	Negative	First Floor	Intact
LBP-129	Grey	Electrical Panel Northwest Storage	Metal	Non-detect	Negative	First Floor	Intact
LBP-130	Light Brown	Stairwell Concrete Beam	Concrete	Non-detect	Negative	Second	Intact
LBP-131	Light Brown	Lobby South Wall	Plaster	Non-detect	Negative	Second	Intact
LBP-132	Light Brown	Vestibule South Wall	Plaster	Non-detect	Negative	Second	Intact
LBP-133	Light Brown	Wood Trim- East Wall	Wood	Non-detect	Negative	Second	Intact
LBP-134	Grey	TV Mount Wall - Lobby	Drywall	Non-detect	Negative	Second	Intact
LBP-135	Varnish	Frame - Lobby	Wood	Non-detect	Negative	Second	Intact
LBP-136	Brown	Window Frame-To Dispatch Room	Metal	Non-detect	Negative	Second	Intact
LBP-137	Varnish	Door to Dispatch Room	Wood	Non-detect	Negative	Second	Intact
LBP-138	Brown	Door Frame to Dispatch Room	Metal	Non-detect	Negative	Second	Intact
LBP-139	Light Brown	Southeast Hall - North Wall	Drywall	Non-detect	Negative	Second	Intact
LBP-140	Light Brown	Room 8- West Wall	Drywall	Non-detect	Negative	Second	Intact
LBP-141	Light Brown	Room 11- East Wall	Drywall	Non-detect	Negative	Second	Intact
LBP-142	Light Brown	Room 12- North Wall Panel	Wood	Non-detect	Negative	Second	Intact
LBP-143	Light Brown	Column - Room 17	Concrete	Non-detect	Negative	Second	Intact
LBP-144	Light Brown	West Wall - Room 23	Drywall	Non-detect	Negative	Second	Intact
LBP-145	Light Brown	West Wall - Room 25	Drywall	Non-detect	Negative	Second	Intact
LBP-146	Brown	Varnish with Cabinets - Room 26	Wood	Non-detect	Negative	Second	Intact
LBP-147	Moss	South Wall - Room 26	Drywall	Non-detect	Negative	Second	Intact
LBP-148	Light Brown	North Wall - Room 35	Plaster	Non-detect	Negative	Second	Intact
LBP-149	White	East Wall - Room 40	Plaster	Non-detect	Negative	Second	Intact
LBP-150	White	East Wall - Room 31	Plaster	Non-detect	Negative	Second	Intact
LBP-151	Brown	Window Frame - Room 42	Metal	Non-detect	Negative	Second	Intact

Survey Date: March 31, 2025

Highlight=Positive for lead, concentration > 1.0 mg/cm^2

Exhibit A

TABLE 3
UNIVERSAL HAZARDOUS WASTE INVENTORY
FORMER HIGHWAY PATROL CAMPUS
APRIL 1, 2025

Area	Product/Item	Estimated Quantity
Main Building Throughout	Fire Extinguishers	15
Main Building Throughout	Fluorescent 4' Light Lamps	600
Main Building Throughout	Fluorescent 2' Light Lamps	87
Main Building Throughout	Single Fluorescent Lights (Bulbs)	24
Main Building Throughout	Ballasts (Assumed PCB Containing)	225
Main Building Throughout	Smoke Detectors	33
Main Building Throughout	Exit Signs	3
Main Building Bottom Floor	Cleaning/Disinfectant Products ((1) 20 oz spray bottle, (4) 1 gallon jugs)	5
Main Building Boiler Room	Compressor Oil (1 gal)	2
Main Building Boiler Room	Desiccant Container (2.5 gal)	1
Main Building Boiler Room	Box of Air Boiler Treatment Pellets	1
Main Building Garage	Exterior Paint Cans (1 gal and 5 gal)	2
Main Building Garage	Quickcrete Products (1 qt, 20 lb., (3) 20 lb.	5
Main Building Garage	Hydraulic Lift Oil ((2) 10 L)	2
Main Building Garage	Parts Washer Solvent (5 gal)	1
Boiler Room/ Garage	Uknown Containers	2
Main Building Garage	Cleaning Products (Windshield Wash 1 gal, Degreaser 1 gal)	2
Main Building Throughout	Rooftop AC Units	2
Main Building Throughout	Refrigerators	4
Main Building Throughout	TV's	5
Main Building Throughout	CPU Monitor	1
Main Building Throughout	Projector	1
SW Side of Main Building	Use Oil AST (500 gal)	1

Exhibit A

TABLE 3
UNIVERSAL HAZARDOUS WASTE INVENTORY
FORMER HIGHWAY PATROL CAMPUS
APRIL 1, 2025

Area	Product/Item	Estimated Quantity
SW Side of Main Building	Chiller Unit (containing refrigerant and oil)	1
West Side of Main Building	Gear Case Filler (2 gal)	1
Firing Range	Fluorescent 4' Light Lamps	52
Firing Range	Ballast (Assumed PCB Containing)	26
Firing Range	Fire Extinguishers	1
Communication Building	Fluorescent 4' Light Lamps	4
Communication Building	Ballast (Assumed PCB Containing)	2
Communication Building	Fire Extinguishers	1
Communication Building	Natural Gas Generator	1
Communication Building	Lead Acid 12V Batteries	3
Communication Building	Window Mounted AC Units	2

Table 4
Lead Dust Wipe Sampling Results
Missouri Highway Patrol Firing Range

Sample Number	Room	Sample Location	Area	Result (ug/ft^2)
1	Firing Range	Inside metal duct	1 sqft	**1,300**
2	Firing Range	Floor	1 sqft	**3,400**
3	Firing Range	Floor	1 sqft	**1,700**
4	Firing Range	Floor at firing lane	1 sqft	**1,100**
5	Firing Range	Floor	1 sqft	**940**
6	Firing Range	CMU block west wall	1 sqft	**5,000**
7	Firing Range	West accoustical wall panel	1 sqft	**480**
8	Firing Range	CMU block east wall	1 sqft	**7,400**
9	Firing Range	East accoustical wall panel	1 sqft	**550**
10	Firing Range	Metal ceiling truss/back of steel baffle	1 sqft	**18,000**
11	Firing Range	Blank	N/A	**44**

Exceeds EPA/HUD Clearance Levels for Floors (5 ug/ft^2)

Appendix C

Photographic Log

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #1

Photographer: MED

Date: April 01, 2025

Direction (facing): North

Description: Asbestos-containing 12" x 12" white floor tile and black mastic in the second-floor main building lobby. *Main Building Sample: 504-2-2-4*

Photo #2

Photographer: MED

Date: April 01, 2025

Direction (facing): East

Description: Asbestos-containing mudded fitting in the second-floor main building men's restroom. *Main Building Sample:504-14-2-40*

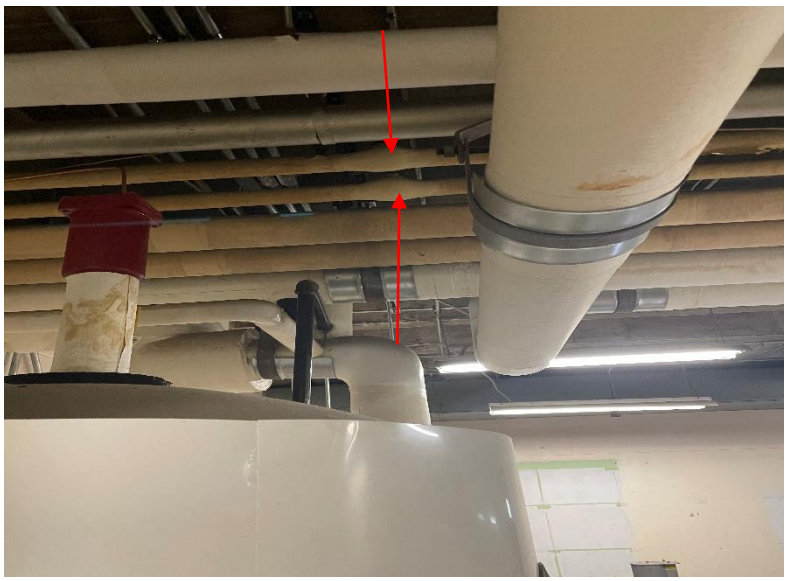


Photo #3

Photographer: MED

Date: April 01, 2025

Direction (facing): West

Description: Asbestos-containing mudded fittings in first floor main building storage room.

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #4

Photographer: MED

Date: April 01, 2025

Direction (facing): South

Description: Asbestos-containing mudded fittings on the main building garage south wall.

Photo #5

Photographer: MED

Date: April 01, 2025

Direction (facing): West

Description: Asbestos-containing mudded fittings on the main building garage center wall.

Photo #6

Photographer: BDR

Date: April 01, 2025

Direction (facing): North

Description: Assumed asbestos-containing electrical components located inside elevator electrical room.

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #7

Photographer: MED

Date: April 01, 2025

Direction (facing): South

Description: Trace asbestos-containing black mastic underneath the main building second floor elevator 12" x 12" tiles. *Main Building Sample: 504-12-2-34*

Photo #8

Photographer: JAO

Date: March 31, 2025

Direction (facing): NA

Description: Asbestos-containing brown glue dot mastic above firing range firing line. *Firing Range Sample: 504-8-1-22*

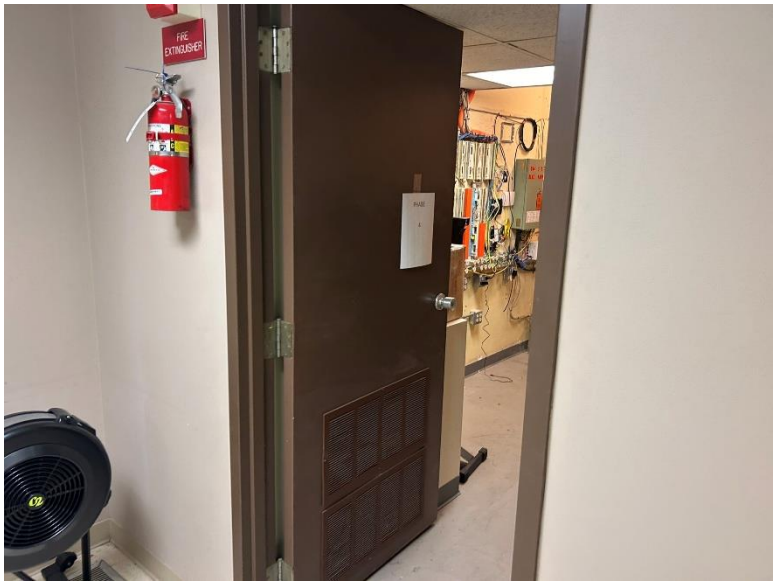
Photo #9

Photographer: BDR

Date: March 31, 2025

Direction (facing): South

Description: Typical assumed asbestos-containing fire metal door located inside Main Building.



ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #10

Photographer: JAO

Date: March 31, 2025

Direction (facing): South

Description: Lead Dust Wipe sample location inside metal duct above firing line. *Firing Range Lead Dust Sample #1*

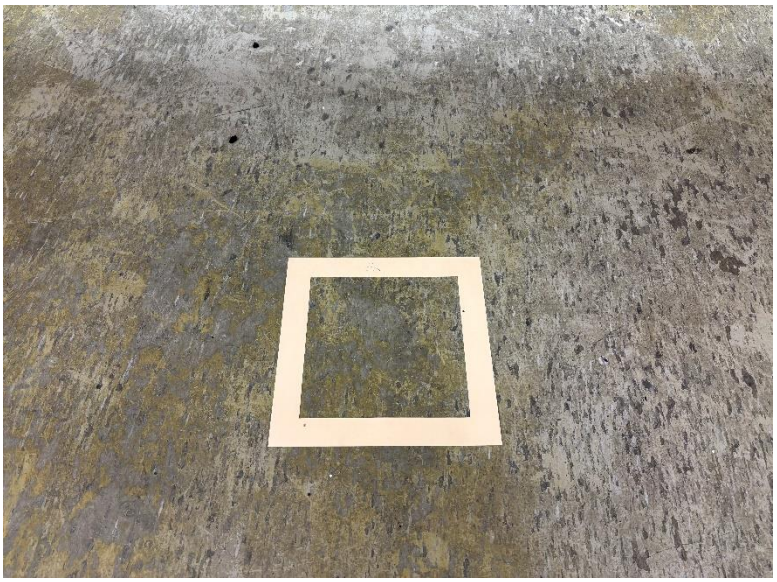


Photo #11

Photographer: JAO

Date: March 31, 2025

Direction (facing): North

Description: Lead Dust Wipe sample location on firing floor adjacent to rubber backstop. *Firing Range Lead Dust Sample #2*

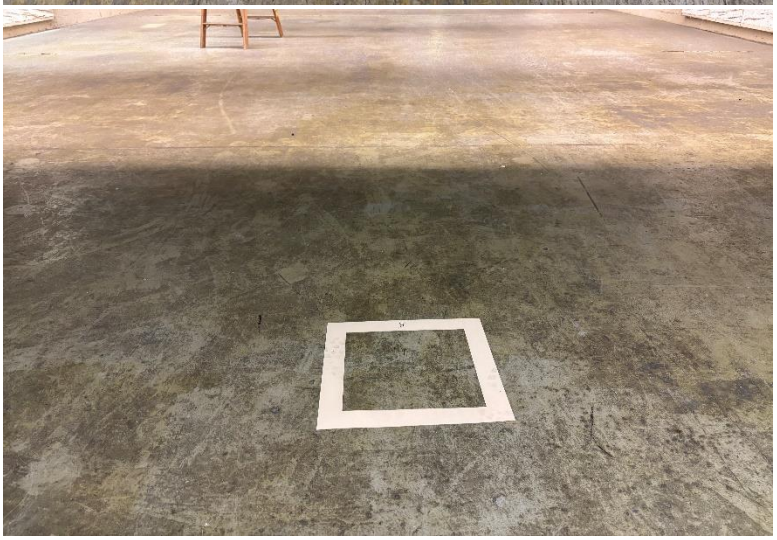


Photo #12

Photographer: Josh Olson

Date: March 31, 2025

Direction (facing): North

Description: Lead Dust Wipe sample location on firing floor adjacent to firing line. *Firing Range Lead Dust Sample #3*

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #13

Photographer: JAO

Date: March 31, 2025

Direction (facing): South

Description: Lead Dust Wipe sample location on firing line floor. *Firing Range Lead Dust Sample #4*

Photo #14

Photographer: JAO

Date: March 31, 2025

Direction (facing): North

Description: Lead Dust Wipe sample location on firing range office floor. *Firing Range Lead Dust Sample #5*

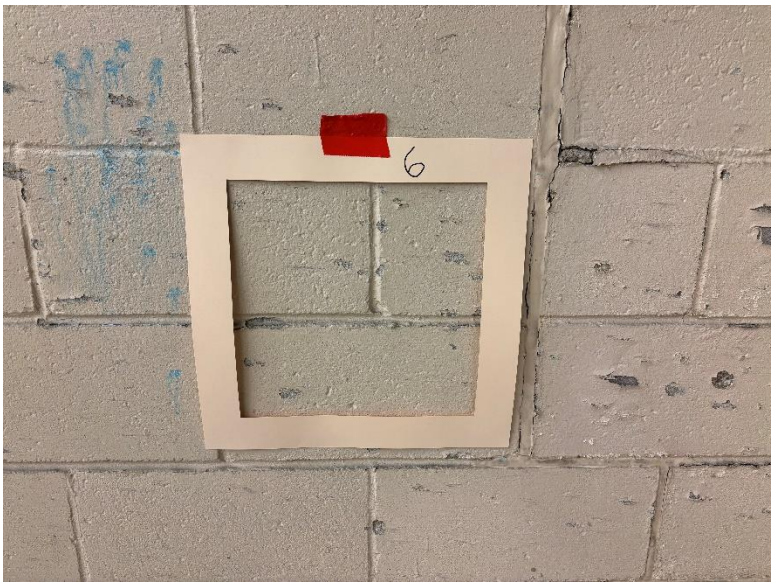
Photo #15

Photographer: JAO

Date: March 31, 2025

Direction (facing): West

Description: Lead Dust Wipe sample location on west CMU block wall. *Firing Range Lead Dust Sample #6*



ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #16

Photographer: JAO

Date: March 31, 2025

Direction (facing): West

Description: Lead Dust Wipe sample location on west acoustical wall panel. *Firing Range Lead Dust Sample #7*

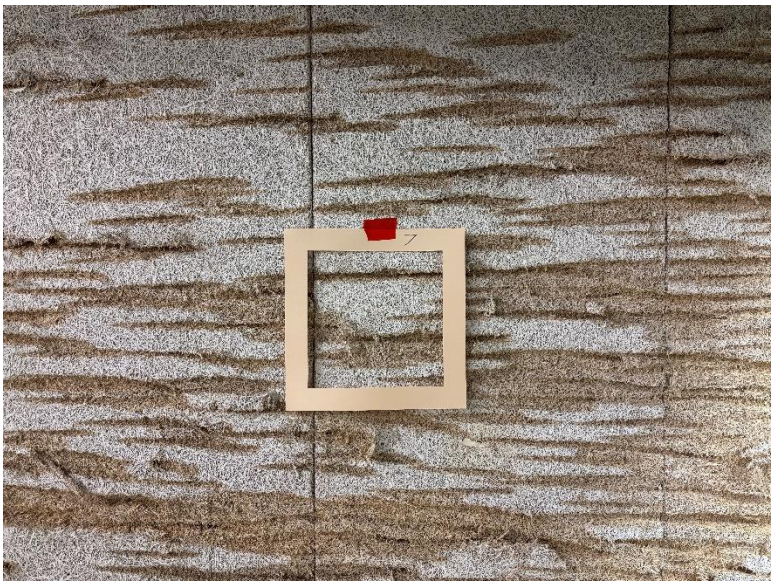


Photo #17

Photographer: JAO

Date: March 31, 2025

Direction (facing): East

Description: Lead Dust Wipe sample location on east CMU block wall. *Firing Range Lead Dust Sample #8*

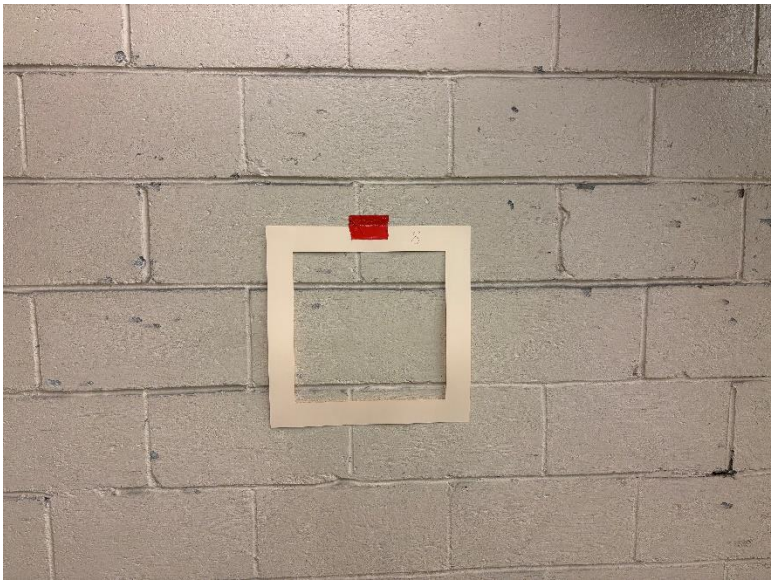


Photo #18

Photographer: JAO

Date: March 31, 2025

Direction (facing): East

Description: 1 SF Lead Dust Wipe sample location on east acoustical wall panel. *Firing Range Lead Dust Sample #9*

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #19

Photographer: JAO

Date: March 31, 2025

Direction (facing): North

Description: Lead Dust Wipe sample location on ceiling metal truss above firing floor. *Firing Range Lead Dust Sample #10*

Photo #20

Photographer: BDR

Date: March 31, 2025

Direction (facing): Northeast

Description: Brown lead-based paint on metal window and door framing located inside firing range building. *XRF Reading No.: LBP-7*

Photo #21

Photographer: BDR

Date: March 31, 2025

Direction (facing): NA

Description: Orange lead-based paint on former radio tower cable anchor located inside Communications Building.
XRF Reading No.: LBP-38

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #22

Photographer: BDR

Date: March 31, 2025

Direction (facing): North

Description: Orange lead-based paint on former radio tower pier. *XRF Reading No.: LBP-39*

Photo #23

Photographer: BDR

Date: March 31, 2025

Direction (facing): Northeast

Description: Lead-based paint on window lintel on exterior of the Communications Building.
XRF Reading No.: LBP-41

Photo #24

Photographer: BDR

Date: March 31, 2025

Direction (facing): NA

Description: Silver lead-based paint on wood framing inside storage room of the Communications Building.
XRF Reading No.: LBP-47

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #25

Photographer: BDR

Date: March 31, 2025

Direction (facing): North

Description: Yellow lead-based paint parking lot striping. *XRF Reading No.: LBP-47*

Photo #26

Photographer: BDR

Date: March 31, 2025

Direction (facing): Northeast

Description: Green lead-based paint on transformer. *XRF Reading No.: LBP-49*

Photo #27

Photographer: BDR

Date: March 31, 2025

Direction (facing): Southwest

Description: White lead-based paint on handrail located at the northeast corner of the service repair garage. *XRF Reading No.: LBP-66*

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

Photo #28

Photographer: BDR

Date: March 31, 2025

Direction (facing): North

Description: Typical door inside the Main Building with lead-based paint.
XRF Reading No.: LBP-119, 100, and 105

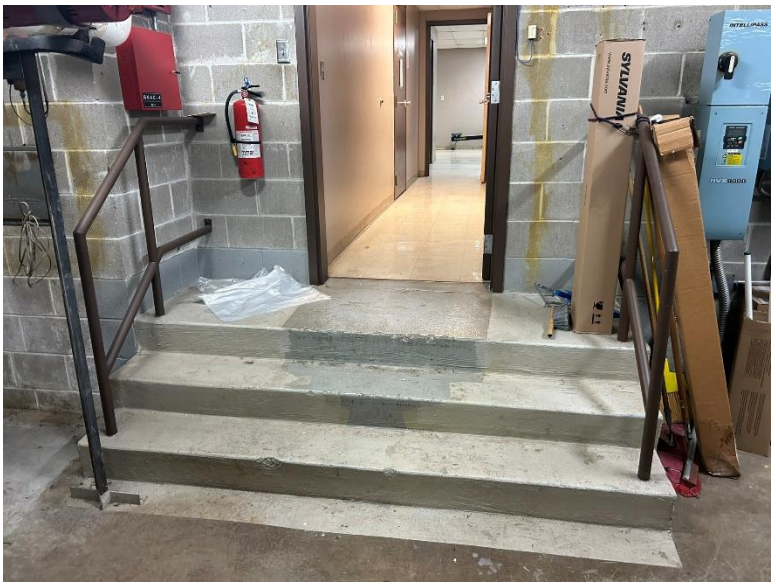


Photo #29

Photographer: BDR

Date: March 31, 2025

Direction (facing): Northeast

Description: Brown lead-based paint on handrails in southwest boiler/mechanical room of the Main Building. *XRF Reading No.: LBP-103*

Photo #30

Photographer: BDR

Date: March 31, 2025

Direction (facing): Southwest

Description: Lead glazing on men's restroom floor and wall tiles, sink, and toilet inside the Main Building. *XRF Reading No.: LBP-108, 109, 112, and 113.*

ACM, LBP, LCM, UHW Survey Report
Former Missouri Highway Patrol Campus
Lee's Summit, Missouri

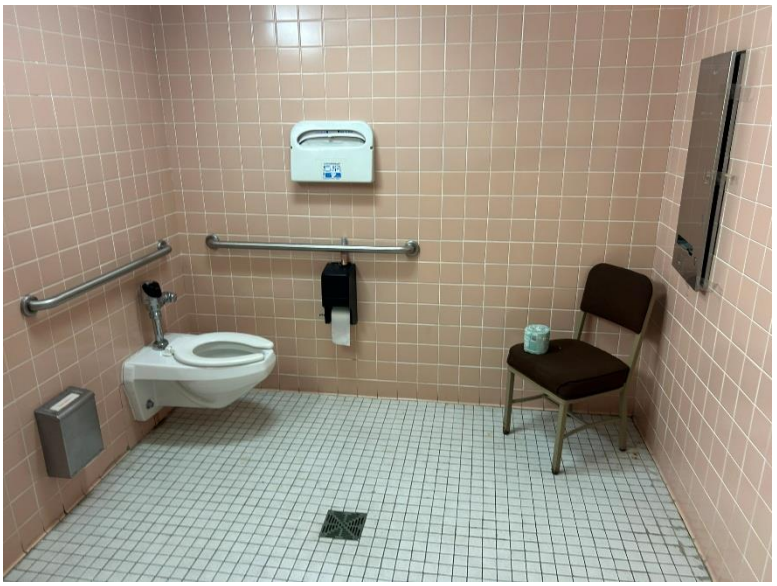


Photo #31

Photographer: BDR

Date: March 31, 2025

Direction (facing): North

Description: Lead glazing on women's restroom floor and wall tiles, sink, and toilet inside the Main Building. *XRF Reading No.: LBP-116*

Photo #32

Photographer: BDR

Date: March 31, 2025

Direction (facing): Northwest

Description: Tan lead-based paint on west wall of the first floor northwest hallway of the Main Building. *XRF Reading No.: LBP-119*

Photo #33

Photographer: BDR

Date: March 31, 2025

Direction (facing): Southwest

Description: White/green lead-based paint on east and south walls of the first floor northwest mechanical room of the Main Building. *XRF Reading No.: LBP-123 and 125.*

Appendix D

Laboratory Reports

ACM Analytical Reports

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross
Customer Project: 27225221.00, LS HWPT Com Building
Reference #: CAL25042391AS Date: 04/08/25

Analysis and Method

Summary of polarized light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of a stereomicroscope. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may contain trace amounts of actinolite/tremolite. When not detected by PLM, these samples should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may contain a regulated asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Since allowable variation in quantification of samples close to 1% is high, <1% may be reported. Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos or "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses or hold a degree in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one these disciplines is preferred, but not required. Extensive in-house training programs are used to augment the educational background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: 27225221.00, LS HWPT Com Building **CA Labs Project #:** CAL25042391AS

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

CA Labs
Dedicated to Quality

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT Com Building

Turnaround Time:
3 Days

CA Labs Project #:
CAL25042391AS

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28056	504-1-R-1		*1-1*	***Roof Vinyl**/ black sealant*	*y*	***None Detected***		100% qu,bi
28057	504-1-R-2		*2-1*	***Roof Vinyl**/ black sealant*	*y*	***None Detected***		100% qu,bi
28058	504-1-R-3		*3-1*	***Roof Vinyl**/ black sealant*	*y*	***None Detected***		100% qu,bi
28059	504-2-E-4		*4-1*	***Silicone Caulk**/ clear sealant*	*y*	***None Detected***		100% qu,bi
28060	504-2-E-5		*5-1*	***Silicone Caulk**/ clear sealant*	*y*	***None Detected***		100% qu,bi
28061	504-2-E-6		*6-1*	***Silicone Caulk**/ clear sealant*	*y*	***None Detected***		100% qu,bi
28062	504-3-I-7		*7-1*	***Ceiling Drywall**/ white drywall with brown paper*	*n*	***None Detected***	22% ce	78% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Robert Olivarez
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT Com Building

Turnaround Time:
3 Days

CA Labs Project #:
CAL25042391AS

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28063	504-3-I-8		*8-1*	***Ceiling Drywall**/ white drywall with brown paper*	*n*	***None Detected***	22% ce	78% qu,gy
28064	504-3-I-9		*9-1*	***Ceiling Drywall**/ white drywall with brown paper*	*n*	***None Detected***	22% ce	78% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Robert Olivarez
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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2. Fire Damage no significant fiber damages effecting fibrous percentages
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
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Phone 225-751-5632
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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross
Customer Project: 27225221.00, LS HWPT - Firing Range
Reference #: CAL25042392AS Date: 04/08/25

Analysis and Method

Summary of polarized light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of a stereomicroscope. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may contain trace amounts of actinolite/tremolite. When not detected by PLM, these samples should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may contain a regulated asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Since allowable variation in quantification of samples close to 1% is high, <1% may be reported. Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos or "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses or hold a degree in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one these disciplines is preferred, but not required. Extensive in-house training programs are used to augment the educational background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: 27225221.00, LS HWPT - Firing Range **CA Labs Project #:** CAL25042392AS

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
28077	504-5-1-13	*13-1*	***Drywall Joint Compound**/ tan surfaced tan and pink compound*	***2% Chrysotile***	***tan surfaced tan and pink compound composite of layers 1 and 2 brown mastic***
28077		*13-3*	*composite of layers 1 and 2*	***<1% Chrysotile***	
28086	504-8-1-22	*22-1*	***Ceiling Glue Dot**/ brown mastic*	***<1% Chrysotile***	
28087	504-8-1-23	*23-1*	***Ceiling Glue Dot**/ brown mastic*	***<1% Chrysotile***	
28088	504-8-1-24	*24-1*	***Ceiling Glue Dot**/ brown mastic*	***<1% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT - Firing Range

Turnaround Time:
3 Days

CA Labs Project #:
CAL25042392AS

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28065	504-1-1-1		*1-1*	***CT**/ white surfacing*	*y*	***None Detected***		100% qu,bi
28065			*1-2*	*tan ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28066	504-1-1-2		*2-1*	***CT**/ white surfacing*	*y*	***None Detected***		100% qu,bi
28066			*2-2*	*tan ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28067	504-1-1-3		*3-1*	***CT**/ white surfacing*	*y*	***None Detected***		100% qu,bi
28067			*3-2*	*tan ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28068	504-2-1-4		*4-1*	***Mastic**/ brown baseboard*	*y*	***None Detected***		100% gy,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT - Firing Range
Turnaround Time:
3 Days

CA Labs Project #:
CAL25042392AS

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28068			*4-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28068			*4-3*	*white compound*	*y*	***None Detected***		100% qu,ca
28069	504-2-1-5		*5-1*	***Mastic**/ brown baseboard*	*y*	***None Detected***		100% gy,ma
28069			*5-2*	*tan and brown mastic*	*n*	***None Detected***		100% gy,bi
28069			*5-3*	*white compound*	*y*	***None Detected***		100% qu,ca
28070	504-2-1-6		*6-1*	***Mastic**/ brown baseboard*	*y*	***None Detected***		100% gy,ma
28070			*6-2*	*tan and brown mastic*	*n*	***None Detected***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT - Firing Range
Turnaround Time:
3 Days

CA Labs Project #:
CAL25042392AS

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Date Of Sampling: None Given
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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28071	504-3-1-7		*7-1*	***Window Glazing**/ black woven covering*	*y*	***None Detected***	100% ce	
28071			*7-2*	*black sealant*	*y*	***None Detected***		100% qu,bi
28072	504-3-1-8		*8-1*	***Window Glazing**/ black woven covering*	*y*	***None Detected***	100% ce	
28072			*8-2*	*black sealant*	*y*	***None Detected***		100% qu,bi
28073	504-3-1-9		*9-1*	***Window Glazing**/ black woven covering*	*y*	***None Detected***	100% ce	
28073			*9-2*	*black sealant*	*y*	***None Detected***		100% qu,bi
28074	504-4-1-10		*10-1*	***Joint Cloth**/ black vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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CAL25042392AS

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Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28075	504-4-1-11		*11-1*	***Joint Cloth**/ black vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma
28076	504-4-1-12		*12-1*	***Joint Cloth**/ black vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma
28077	504-5-1-13		*13-1*	***Drywall Joint Compound**/ tan surfaced tan and pink compound*	*n*	***2% Chrysotile***		98% qu,bi,ca
28077			*13-2*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
28077			*13-3*	*composite of layers 1 and 2*	*n*	***<1% Chrysotile***	10% ce	90% qu,gy,bi,ca
28078	504-5-1-14		*14-1*	***Drywall Joint Compound**/ tan surfaced tan and pink compound*		*Positive Stop*		
28078			*14-2*	*white drywall with brown paper*		*Not Analyzed*		

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28079	504-5-1-15		*15-1*	***Drywall Joint Compound**/ tan surfaced tan and pink compound*		*Positive Stop*		
28079			*15-2*	*white drywall with brown paper*		*Not Analyzed*		
28080	504-6-1-16		*16-1*	***CT**/ brown surfacing*	*y*	***None Detected***		100% qu,bi
28080			*16-2*	*brown ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28081	504-6-1-17		*17-1*	***CT**/ white surfacing*	*y*	***None Detected***		100% qu,bi
28081			*17-2*	*brown ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28082	504-6-1-18		*18-1*	***CT**/ brown surfacing*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28082			*18-2*	*brown ceiling tile*	*y*	***None Detected***	40% fg 30% ce	30% qu,pe,ca
28083	504-7-1-19		*19-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***None Detected***		100% gy,bi
28084	504-7-1-20		*20-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***None Detected***		100% gy,bi
28085	504-7-1-21		*21-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***None Detected***		100% gy,bi
28086	504-8-1-22		*22-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***<1% Chrysotile***		100% gy,bi
28087	504-8-1-23		*23-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***<1% Chrysotile***		100% gy,bi
28088	504-8-1-24		*24-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***<1% Chrysotile***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28089	504-9-1-25		*25-1*	***Acoustical Wall Board**/ tan wooden fragments*	*y*	***None Detected***	100% ce	
28090	504-9-1-26		*26-1*	***Acoustical Wall Board**/ tan wooden fragments*	*y*	***None Detected***	100% ce	
28091	504-9-1-27		*27-1*	***Acoustical Wall Board**/ tan wooden fragments*	*y*	***None Detected***	100% ce	
28092	504-10-E-28		*28-1*	***Block Filler**/ tan surfaced off-white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
28093	504-10-E-29		*29-1*	***Block Filler**/ tan surfaced off-white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
28094	504-10-E-30		*30-1*	***Block Filler**/ tan surfaced off-white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
28095	504-11-E-31		*31-1*	***Window Caulk**/ white sealant*	*y*	***None Detected***		100% qu,gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28096	504-11-E-32		*32-1*	***Window Caulk**/ white sealant*	*y*	***None Detected***		100% qu,gy,bi
28097	504-11-E-33		*33-1*	***Window Caulk**/ white sealant*	*y*	***None Detected***		100% qu,gy,bi
28098	504-12-E-34		*34-1*	***Window Glazing**/ white caulking*	*y*	***None Detected***		100% qu,bi,ca
28099	504-12-E-35		*35-1*	***Window Glazing**/ white caulking*	*y*	***None Detected***		100% qu,bi,ca
28100	504-12-E-36		*36-1*	***Window Glazing**/ white caulking*	*y*	***None Detected***		100% qu,bi,ca
28101	504-13-R-37		*37-1*	***Caulk**/ gray sealant*	*y*	***None Detected***		100% qu,gy,bi
28102	504-13-R-38		*38-1*	***Caulk**/ gray sealant*	*y*	***None Detected***		100% qu,gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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28103	504-13-R-39		*39-1*	***Caulk**/ gray sealant*	*y*	***None Detected***		100% qu,gy,bi
28104	504-14-R-40		*40-1*	***Roofing Membrane**/ gray and white vinyl covering*	*y*	***None Detected***	10% fg	90% qu,ma
28105	504-14-R-41		*41-1*	***Roofing Membrane**/ gray and white vinyl covering*	*y*	***None Detected***	12% fg	88% qu,ma
28106	504-14-R-42		*42-1*	***Roofing Membrane**/ gray and white vinyl covering*	*y*	***None Detected***	10% fg	90% qu,ma
28107	504-15-R-43		*43-1*	***Joint Cloth**/ yellow vinyl covering*	*y*	***None Detected***	10% fg	90% qu,ma
28108	504-15-R-44		*44-1*	***Joint Cloth**/ yellow vinyl covering*	*y*	***None Detected***	12% fg	88% qu,ma
28109	504-15-R-45		*45-1*	***Joint Cloth**/ yellow vinyl covering*	*y*	***None Detected***	12% fg	88% qu,ma

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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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Phone 225-751-5632
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Origional asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one of these disciplines is preferred, but not required. Extensive in-house training programs are used to augment education background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP accreditation. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT - Firing Range

Turnaround Time:
3 Days

CA Labs Project #:
CAL25042392AS

Date: 04/08/25
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	*Layer #*	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
28086	504-8-1-22	*22-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***0.50% Chrysotile***
28087	504-8-1-23	*23-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***0.75% Chrysotile***
28088	504-8-1-24	*24-1*	***Ceiling Glue Dot**/ brown mastic*	*y*	***1.00% Chrysotile***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Approved Signatories:

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross
Customer Project: 27225221.00, LS HWPT- Main Building
Reference #: CAL25042393AG Date: 04/08/25

Analysis and Method

Summary of polarized light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of a stereomicroscope. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may contain trace amounts of actinolite/tremolite. When not detected by PLM, these samples should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may contain a regulated asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Since allowable variation in quantification of samples close to 1% is high, <1% may be reported. Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos or "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

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Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

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Overview of Project Sample Material Containing Asbestos

Customer Project: 27225221.00, LS HWPT- Main Building **CA Labs Project #:** CAL25042393AG

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
28113	4	*4-1*	*off-white floor tile*	***2% Chrysotile***	***off-white floor tile***
28113		*4-2*	*black mastic*	***3% Chrysotile***	***black mastic***
28143	34	*34-2*	*tan and black mastic*	***<1% Chrysotile***	***tan and black mastic***
28144	35	*35-2*	*tan and black mastic*	***<1% Chrysotile***	***white insulation***
28145	36	*36-2*	*tan and black mastic*	***<1% Chrysotile***	***gray grouting***
28149	40	*40-1*	*white insulation*	***10% Chrysotile*** ***2% Crocidolite*** ***3% Amosite***	
28161	52	*52-1*	*gray grouting*	***<1% Chrysotile***	
28162	53	*53-1*	*gray grouting*	***<1% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Overview of Project Sample Material Containing Asbestos

Customer Project: 27225221.00, LS HWPT- Main Building **CA Labs Project #:** CAL25042393AG

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
28163	54	*54-1*	*gray grouting*	***<1% Chrysotile***	
28170	61	*61-2*	*black mastic*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

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or - organic
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mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
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ka - kaolin (clay)
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Polarized Light Asbestiform Materials Characterization

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SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28110	1		*1-1*	*brown floor tile*	*y*	***None Detected***		100% qu,ca
28110			*1-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28111	2		*2-1*	*brown floor tile*	*y*	***None Detected***		100% qu,ca
28111			*2-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28112	3		*3-1*	*brown floor tile*	*y*	***None Detected***		100% qu,ca
28112			*3-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28113	4		*4-1*	*off-white floor tile*	*y*	***2% Chrysotile***		98% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute, Analyst
Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager Tanner Rasmussen
Senior Analyst Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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SCS Engineers
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Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28113			*4-2*	*black mastic*	*y*	***3% Chrysotile***		97% gy,bi
28114	5		*5-1*	*off-white floor tile*		*Positive Stop*		
28114			*5-2*	*black mastic*		*Positive Stop*		
28115	6		*6-1*	*off-white floor tile*		*Positive Stop*		
28115			*6-2*	*black mastic*		*Positive Stop*		
28116	7		*7-1*	*white compound*	*y*	***None Detected***		100% qu,ca
28117	8		*8-1*	*white compound*	*y*	***None Detected***		100% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute, Analyst
Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager, Tanner Rasmussen
Senior Analyst, Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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SCS Engineers
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Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
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Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28118	9		*9-1*	*white compound*	*y*	***None Detected***		100% qu,ca
28119	10		*10-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28120	11		*11-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28121	12		*12-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28122	13		*13-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28122			*13-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28123	14		*14-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Robert Olivarez, Analyst
Technical Manager Tanner Rasmussen
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Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28123			*14-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28124	15		*15-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28124			*15-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28125	16		*16-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28125			*16-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28126	17		*17-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28126			*17-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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Turnaround Time:
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CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28127	18		*18-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28127			*18-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28128	19		*19-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28128			*19-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28129	20		*20-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28129			*20-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28130	21		*21-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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SCS Engineers
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Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28130			*21-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28131	22		*22-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28131			*22-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28132	23		*23-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28132			*23-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28133	24		*24-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28133			*24-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute, Analyst
Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager, Tanner Rasmussen
Senior Analyst, Julio Robles

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CA Labs
Dedicated to Quality

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Polarized Light Asbestiform Materials Characterization

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28134	25		*25-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28134			*25-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28135	26		*26-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28135			*26-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28136	27		*27-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
28136			*27-2*	*tan ceiling tile*	*y*	***None Detected***	35% ce 35% fg	30% qu,ca,pe
28137	28		*28-1*	*black sealant*	*y*	***None Detected***		100% qu,gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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28138	29		*29-1*	*black sealant*	*y*	***None Detected***		100% qu,gy,bi
28139	30		*30-1*	*black sealant*	*y*	***None Detected***		100% qu,gy,bi
28140	31		*31-1*	*black felt*	*y*	***None Detected***	60% ce	40% qu,bi
28140			*31-2*	*tan sealant*	*y*	***None Detected***		100% qu,bi
28141	32		*32-1*	*black felt*	*y*	***None Detected***	60% ce	40% qu,bi
28141			*32-2*	*tan sealant*	*y*	***None Detected***		100% qu,bi
28142	33		*33-1*	*black felt*	*y*	***None Detected***	60% ce	40% qu,bi

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28142			*33-2*	*tan sealant*	*y*	***None Detected***		100% qu,bi
28143	34		*34-1*	*off-white vinyl flooring*	*y*	***None Detected***		100% qu,ma
28143			*34-2*	*tan and black mastic*	*n*	***<1% Chrysotile***		100% gy,bi
28144	35		*35-1*	*off-white vinyl flooring*	*y*	***None Detected***		100% qu,ma
28144			*35-2*	*tan and black mastic*	*n*	***<1% Chrysotile***		100% gy,bi
28145	36		*36-1*	*off-white vinyl flooring*	*y*	***None Detected***		100% qu,ma
28145			*36-2*	*tan and black mastic*	*n*	***<1% Chrysotile***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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28146	37		*37-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28147	38		*38-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28148	39		*39-1*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28149	40		*40-1*	*white insulation*	*y*	***10% Chrysotile 2% Crocidolite 3% Amosite***		85% qu,ca
28150	41		*41-1*	*white insulation*		*Positive Stop*		
28151	42		*42-1*	*white insulation*		*Positive Stop*		
28152	43		*43-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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28152			*43-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28153	44		*44-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma
28153			*44-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28154	45		*45-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma
28154			*45-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28155	46		*46-1*	*brown baseboard*	*y*	***None Detected***		100% gy,ma
28155			*46-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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28156	47		*47-1*	*brown baseboard*	*y*	***None Detected***		100% gy,ma
28156			*47-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28157	48		*48-1*	*brown baseboard*	*y*	***None Detected***		100% gy,ma
28157			*48-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
28158	49		*49-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma
28158			*49-2*	*brown mastic*	*y*	***None Detected***		100% qu,bi
28159	50		*50-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma

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28159			*50-2*	*brown mastic*	*y*	***None Detected***		100% qu,bi
28160	51		*51-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma
28160			*51-2*	*brown mastic*	*y*	***None Detected***		100% qu,bi
28161	52		*52-1*	*gray grouting*	*y*	***<1% Chrysotile***		100% qu,ca
28162	53		*53-1*	*gray grouting*	*y*	***<1% Chrysotile***		100% qu,ca
28163	54		*54-1*	*gray grouting*	*y*	***<1% Chrysotile***		100% qu,ca
28164	55		*55-1*	*tan mastic with tan paper*	*n*	***None Detected***	80% ce	20% gy,bi

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CAL25042393AG

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Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28165	56		*56-1*	*white ceramic tile*	*y*	***None Detected***		100% qu,ot
28165			*56-2*	*tan mastic with tan paper*	*n*	***None Detected***	80% ce	20% gy,bi
28166	57		*57-1*	*tan mastic with tan paper*	*n*	***None Detected***	80% ce	20% gy,bi
28167	58		*58-1*	*tan insulation with black sealant*	*n*	***None Detected***	80% fg	20% qu,bi
28168	59		*59-1*	*tan insulation with black sealant*	*n*	***None Detected***	80% fg	20% qu,bi
28169	60		*60-1*	*tan insulation with black sealant*	*n*	***None Detected***	80% fg	20% qu,bi
28170	61		*61-1*	*off-white floor tile*	*y*	***None Detected***		100% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute, Analyst
Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager Tanner Rasmussen
Senior Analyst Julio Robles

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28170			*61-2*	*black mastic*	*y*	***2% Chrysotile***		98% gy,bi
28171	62		*62-1*	*off-white floor tile*		*Not Analyzed*		
28171			*62-2*	*tan mastic*		*Not Analyzed*		
28171			*62-3*	*gray leveling compound*		*Not Analyzed*		
28172	63		*63-1*	*off-white floor tile*		*Not Analyzed*		
28172			*63-2*	*tan mastic*		*Not Analyzed*		
28172			*63-3*	*gray leveling compound*		*Not Analyzed*		

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28173	64		*64-1*	*tan surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
28173			*64-2*	*white compound (beneath tape)*	*y*	***None Detected***		100% mi,qu,ca
28173			*64-3*	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% qu,gy
28174	65		*65-1*	*tan surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
28174			*65-2*	*white compound (beneath tape)*	*y*	***None Detected***		100% mi,qu,ca
28174			*65-3*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
28175	66		*66-1*	*tan surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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28175			*66-2*	*white compound (beneath tape)*	*y*	***None Detected***		100% mi,qu,ca
28175			*66-3*	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% qu,gy
28176	67		*67-1*	*white finishing compound*	*y*	***None Detected***		100% qu,bi,ca
28176			*67-2*	*tan plaster*	*y*	***None Detected***		100% qu,ca
28177	68		*68-1*	*tan surfaced white finishing compound*	*n*	***None Detected***		100% qu,bi,ca
28177			*68-2*	*tan plaster*	*y*	***None Detected***		100% qu,ca
28178	69		*69-1*	*tan surfaced white finishing compound*	*n*	***None Detected***		100% qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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Robert Olivarez, Analyst
Tanner Rasmussen, Technical Manager
Julio Robles, Senior Analyst

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Turnaround Time:
3 days

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CAL25042393AG

Date: 4/8/2025
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Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28178			*69-2*	*tan plaster*	*y*	***None Detected***		100% qu,ca
28179	70		*70-1*	*gray fireproofing*	*y*	***None Detected***	10% fg	90% qu,pe,ca
28180	71		*71-1*	*gray fireproofing*	*y*	***None Detected***	12% fg	88% qu,pe,ca
28181	72		*72-1*	*gray fireproofing*	*y*	***None Detected***	10% fg	90% qu,pe,ca
28182	73		*73-1*	*black woven covering*	*y*	***None Detected***	15% fg	85% qu,ma
28183	74		*74-1*	*black woven covering*	*y*	***None Detected***	18% fg	82% qu,ma
28184	75		*75-1*	*black woven covering*	*y*	***None Detected***	15% fg	85% qu,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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CA Labs Project #:
CAL25042393AG

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Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28185	76		*76-1*	*green surfaced tan woven covering*	*n*	***None Detected***	85% ce	15% qu,bi
28186	77		*77-1*	*green surfaced tan woven covering*	*n*	***None Detected***	85% ce	15% qu,bi
28187	78		*78-1*	*tan woven covering*	*y*	***None Detected***	100% ce	
28188	79		*79-1*	*off-white sealant*	*y*	***None Detected***		100% qu,gy,bi
28188			*79-2*	*brown paper with silver foil*	*n*	***None Detected***	80% ce	20% ot
28189	80		*80-1*	*brown paper with silver foil*	*n*	***None Detected***	85% ce	15% ot
28190	81		*81-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM *TDSHS 30-0235*

AIHA LAP, LLC Laboratory #102929

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28190			*81-2*	*brown paper with silver foil*	*n*	***None Detected***	85% ce	15% ot
28191	82		*82-1*	*tan sealant*	*y*	***None Detected***		100% qu,gy,bi
28191			*82-2*	*brown paper with silver foil*	*n*	***None Detected***	80% ce	20% ot
28192	83		*83-1*	*brown paper with silver foil*	*n*	***None Detected***	85% ce	15% ot
28192			*83-2*	*tan insulation*	*y*	***None Detected***	100% fg	
28193	84		*84-1*	*pink insulation with brown paper and silver foil*	*n*	***None Detected***	65% fg 15% ce	20% ot
28194	85		*85-1*	*gray sealant*	*y*	***None Detected***		100% qu,gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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28195	86		*86-1*	*gray sealant*	*y*	***None Detected***		100% qu,gy,bi
28196	87		*87-1*	*gray sealant*	*y*	***None Detected***		100% qu,gy,bi
28197	88		*88-1*	*gray sealant*	*y*	***None Detected***	2% ce	98% qu,gy,bi
28198	89		*89-1*	*gray sealant*	*y*	***None Detected***	2% ce	98% qu,gy,bi
28199	90		*90-1*	*gray sealant*	*y*	***None Detected***	2% ce	98% qu,gy,bi
28200	91		*91-1*	*black roofing shingle with black gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi
28201	92		*92-1*	*black roofing shingle with black gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28202	93		*93-1*	*black roofing shingle with black gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi
28203	94		*94-1*	*black roofing shingle with gray gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi
28203			*94-2*	*black tar*	*y*	***None Detected***		100% qu,bi
28204	95		*95-1*	*black roofing shingle with gray gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi
28204			*95-2*	*black tar*	*y*	***None Detected***		100% qu,bi
28205	96		*96-1*	*black roofing shingle with gray gravel*	*y*	***None Detected***	15% ce 10% fg	75% qu,bi
28205			*96-2*	*black tar*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM *TDSHS 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Justin Cox
Analyst

Josh Strange
Analyst

Robert Olivarez
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
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Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28206	97		*97-1*	*white rubber covering*	*y*	***None Detected***		100% qu,ma
28207	98		*98-1*	*white rubber covering*	*y*	***None Detected***		100% qu,ma
28208	99		*99-1*	*white rubber covering*	*y*	***None Detected***		100% qu,ma
28209	100		*100-1*	*white sealant*	*y*	***None Detected***		100% qu,bi
28210	101		*101-1*	*white sealant*	*y*	***None Detected***		100% qu,bi
28211	102		*102-1*	*white sealant*	*y*	***None Detected***		100% qu,bi
28212	103		*103-1*	*white surfaced white caulking*	*n*	***None Detected***		100% qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute, Analyst
Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager, Tanner Rasmussen
Senior Analyst, Julio Robles

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Polarized Light Asbestiform Materials Characterization

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Phone # 913-775-2716
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Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28213	104		*104-1*	*white surfaced white caulking*	*n*	***None Detected***		100% qu,bi,ca
28214	105		*105-1*	*white surfaced white caulking*	*n*	***None Detected***		100% qu,bi,ca
28215	106		*106-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
28216	107		*107-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
28217	108		*108-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
28218	109		*109-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
28219	110		*110-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager Tanner Rasmussen
Senior Analyst Julio Robles

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Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 4/8/2025
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28220	111		*111-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
28221	112		*112-1*	*tan surfaced gray sealant*	*n*	***None Detected***		100% qu,bi
28222	113		*113-1*	*tan surfaced gray sealant*	*n*	***None Detected***		100% qu,bi
28223	114		*114-1*	*tan surfaced gray sealant*	*n*	***None Detected***		100% qu,bi
28224	115		*115-1*	*black sealant*	*y*	***None Detected***	2% ta	98% qu,bi
28225	116		*116-1*	*black sealant*	*y*	***None Detected***	2% ta	98% qu,bi
28226	117		*117-1*	*black sealant*	*y*	***None Detected***	2% ta	98% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

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Justin Cox, Analyst
Josh Strange, Analyst
Robert Olivarez, Analyst
Technical Manager, Tanner Rasmussen
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10. TEM analysis suggested

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Origional asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one of these disciplines is preferred, but not required. Extensive in-house training programs are used to augment education background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP accreditation. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Customer Info:
SCS Engineers
8575 W. 110th St, Ste 100
Overland Park, KS 66210

Attn: Bryan Ross

Phone # 913-775-2716
Fax #

Customer Project:
27225221.00, LS HWPT- Main Building

Turnaround Time:
3 days

CA Labs Project #:
CAL25042393AG

Date: 04/08/25
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	*Layer #*	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
28143	34	*34-2*	*tan and black mastic*	*n*	***0.25% Chrysotile***
28144	35	*35-2*	*tan and black mastic*	*n*	***0.25% Chrysotile***
28145	36	*36-2*	*tan and black mastic*	*n*	***0.25% Chrysotile***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Approved Signatories:

Robert Olivarez
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

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CA Labs Project #:
CAL25042393AG

Date: 04/08/25
Samples Rec'd: 4/3/25 10:30AM
Date Of Sampling: None Given
Purchase Order #:

Laboratory Sample ID	Sample #	*Layer #*	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
28161	52	*52-1*	*gray grouting*	*y*	***0.25% Chrysotile***
28162	53	*53-1*	*gray grouting*	*y*	***0.25% Chrysotile***
28163	54	*54-1*	*gray grouting*	*y*	***Trace Chrysotile***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Approved Signatories:

Robert Olivarez
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

Firing Range Lead Dust Analytical Report

EMSL Analytical, Inc.

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

Exhibit A

EMSL Order ID: 012515824
LIMS Reference ID: AD15824
EMSL Customer ID: AQUA78

Attention: Mike Dustman
SCS Engineers [AQUA78]
8575 West 110th Street, Suite 100
Overland Park, KS 66210
(913) 681-0030
Mdustman@scsengineers.com

Project Name: Lees Summit Highway Patrol (Firing Range)
272225221.00

Customer PO: 272225221.00
EMSL Sales Rep: Josh Silverman
Received: 04/04/2025 10:00
Reported: 04/08/2025 16:11

Analytical Results

Analyte	Results	RL	Area(in²)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: 1/Inside Metal Duct									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-01**
Lead	1300 µg/ft²	40 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	5
Sample Comments:									
Client Sample ID: 2/Floor									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-02**
Lead	3400 µg/ft²	80 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	10
Sample Comments:									
Client Sample ID: 3/Floor									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-03**
Lead	1700 µg/ft²	40 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	5
Sample Comments:									
Client Sample ID: 4/Floor at Firing Line									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-04**
Lead	1100 µg/ft²	40 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	5
Sample Comments:									
Client Sample ID: 5/Floor									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-05**
Lead	940 µg/ft²	40 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	5
Sample Comments:									
Client Sample ID: 6/West CMU Block Wall									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-06**
Lead	5000 µg/ft²	200 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	25
Sample Comments:									
Client Sample ID: 7/West Acoustic Wall Panel									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-07**
Lead	480 µg/ft²	8.0 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B		1
Sample Comments:									
Client Sample ID: 8/East CMU Block Wall									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-08**
Lead	7400 µg/ft²	200 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	25
Sample Comments:									
Client Sample ID: 9/East Acoustic Wall Panel									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-09**
Lead	550 µg/ft²	40 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	5
Sample Comments:									

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Exhibit A

EMSL Order ID: 012515824
LIMS Reference ID: AD15824
EMSL Customer ID: AQUA78

Attention: Mike Dustman
SCS Engineers [AQUA78]
8575 West 110th Street, Suite 100
Overland Park, KS 66210
(913) 681-0030
Mdustman@scsengineers.com

Project Name: Lees Summit Highway Patrol (Firing Range)
272225221.00

Customer PO: 272225221.00
EMSL Sales Rep: Josh Silverman
Received: 04/04/2025 10:00
Reported: 04/08/2025 16:11

Analytical Results (Continued)

Analyte	Results	RL	Area(in²)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: 10/Metal Ceiling Truss/Back of Steel Baffle									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-10**
Lead	18000 µg/ft²	800 µg/ft²	144	04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B	D	100
Sample Comments:									
Client Sample ID: 11/Blank									**Date Sampled: 03/31/25**
Matrix: Wipe									**LIMS Reference ID: AD15824-11**
Lead	44 ug/wipe	8.0 ug/wipe		04/07/25 CZX	SW-846 3050B	04/08/25 SD	SW846-7000B		1
Sample Comments:									

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Customer PO: 272225221.00
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Certified Analyses included in this Report

Analyte	Certifications
SW846-7000B in Wipe	
Lead	AIHA LAP

List of Certifications

Code	Description	Number	Expires
NJDEP	New Jersey Department of Environmental Protection	03036	06/30/2025
AIHA LAP	EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-ELLAP Accredited	100194	05/01/2025
NYSDOH	New York State Department of Health ELAP	10872	04/01/2025
California ELAP	California Water Boards	1877	06/30/2025
A2LA	A2LA Environmental Certificate	2845.01	07/31/2026
PADEP	Pennsylvania Department of Environmental Protection	2845.25	11/30/2025
MADEP	Massachusetts Department of Environmental Protection	M-NJ337	06/30/2025
CTDPH	Connecticut Department of Public Health	PH-0270	06/23/2026

Please see the specific Field of Testing (FOT) on www.emsl.com <http://www.emsl.com> for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
D	Analyte was reported from a dilution run.
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the detection limit.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit For paint chips, the RL is 0.008% by wt. (equiv. to 80 mg/kg, or ppm) based upon a minimum sample weight of 0.25 grams. For soils, the RL is 40 mg/kg (ppm) based upon a minimum sample weight of 0.5 grams. For dust wipes, the RL is 10 µg/wipe; reporting units of µg/sq. ft. are not validated by the lab based upon data provided by non-lab personnel.
Wet	Sample is not dry weight corrected.

Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.

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Customer PO: 272225221.00
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Received: 04/04/2025 10:00
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Owen McKenna Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. QC sample results are within quality control criteria and met method specifications unless otherwise noted. All results for soil samples are reported on a dry weight basis, unless otherwise noted.

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 8 µg/wipe and is not responsible for any result or reporting limit provided in µg/ft2 since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.

Exhibit A

Lead Chain of Custody

EMSL Order Number / Lab Use Only: AD15824

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnaminsonLeadLab@emsl.com

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Customer ID: ~~SCSE78~~ AQUA78		Billing ID:	
Company Name: SCS Engineers		Company Name:	
Contact Name: Mike Dustman		Billing Contact:	
Street Address: 8575 W 110th Street Suite 100		Street Address:	
City, State, Zip: Overland Park, KS 66018	Country: USA	City, State, Zip:	Country:
Phone: 816-935-2929		Phone:	
Email(s) for Report: mdustman@scsengineers.com		Email(s) for Invoice:	

Project Information

Project Name/No: Lee's Summit Highway Patrol (Firing Range), 272225221.00		Purchase Order:
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected: MO	State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-Taxable)
Sampled By Name: Josh Olson	Sampled By Signature:	No. of Samples in Shipment

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS ☐ % by wt. ☐ ppm (mg/kg) ☐ mg/cm² *Chips reporting Limit based on a minimum 0.25g sample weight. Not appropriate for Ceramic Tiles - XRF is recommended. *Sample Area Required below for mg/cm²	SW 846-7000B	Flame Atomic Absorption	*Please select reporting on left - 0.0064% - 64 ppm - mg/cm2 - RL is Variable	☐
	SW 846-6010D	ICP-OES	*Please select reporting on left - 0.0004% - 4 ppm - mg/cm2 - RL is Variable	☐
AIR	NIOSH 7082	Flame Atomic Absorption	3.2 µg/filter	☐
	NIOSH 7303M	ICP-OES	1.0µ g/filter	☐
	NIOSH 7303M	ICP-MS	0.05 µg/filter	☐
WIPE ☐ ASTM ☑ NON-ASTM	SW 846-7000B*	Flame Atomic Absorption	8 µg/wipe	☒
*If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D*	ICP-OES	1.0 µg/wipe	~~☐~~ NO
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO3 ☐ PH<2	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	EPA 200.7 / 6010D	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO3 ☐ PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
		ICP-MS	0.6 µg/filter	☐
Other:				

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
1	Inside Metal Duct	1 SF	3/31/25, 1400
2	Floor	1 SF	3/31/25, 1400
3	Floor	1 SF	3/31/25, 1400
4	Floor at Firing Line	1 SF	3/31/25, 1400
5	Floor	1 SF	3/31/25, 1400

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 4/2/25	Received by:	Date/Time: 4-4-25 AA
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document COC-25 Lead R22 03/28/2025

*6010C Available Upon Request

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

11SD

Exhibit A

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only

AB15824

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnaminsonLeadLab@emsl.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
6	West CMU Block Wall	1 SF	3/31/25, 1400
7	West Acoustic Wall Panel	1 SF	3/31/25, 1400
8	East CMU Block Wall	1 SF	3/31/25, 1400
9	East Acoustic Wall Panel	1 SF	3/31/25, 1400
10	Metal Ceiling Truss/Back of Steel Baffle	1 SF	3/31/25, 1400
11	Blank	N/A	3/31/25, 1400

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 4/2/25	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document COC-25 Lead R22 03/28/2025

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

TCLP Analytical Report

Teklab, Inc.
Environmental Laboratory

http://www.teklabinc.com/

April 07, 2025

Bryan Ross
SCS Engineers
8575 West 110th Street, Suite 100
Overland Park, KS 66210
TEL: (913) 749-0735
FAX: (913) 681-0012

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: 27225221.00 LSHWPT **WorkOrder:** 25040443

Dear Bryan Ross:

TEKLAB, INC received 2 samples on 4/3/2025 12:15:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Paul Schultz
Project Manager

Pschultz@teklabinc.com

Report Contents

Client: SCS Engineers
Client Project: 27225221.00 LSHWPT

Work Order: 25040443
Report Date: 07-Apr-25

This reporting package includes the following:

Definitions

Client: SCS Engineers **Work Order:** 25040443

Client Project: 27225221.00 LSHWPT **Report Date:** 07-Apr-25

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: SCS Engineers **Work Order:** 25040443

Client Project: 27225221.00 LSHWPT **Report Date:** 07-Apr-25

Qualifiers

- # - Unknown hydrocarbon
- B - Analyte detected in associated Method Blank
- C - RL shown is a Client Requested Quantitation Limit
- E - Value above quantitation range
- H - Holding times exceeded
- I - Associated internal standard was outside method criteria
- J - Analyte detected below quantitation limits
- M - Manual Integration used to determine area response
- ND - Not Detected at the Reporting Limit
- R - RPD outside accepted recovery limits
- S - Spike Recovery outside recovery limits
- T - TIC(Tentatively identified compound)
- X - Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: SCS Engineers
Client Project: 27225221.00 LSHWPT

Work Order: 25040443
Report Date: 07-Apr-25

Cooler Receipt Temp: na °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Accreditations

Client: SCS Engineers **Work Order:** 25040443

Client Project: 27225221.00 LSHWPT **Report Date:** 07-Apr-25

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2026	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2026	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2025	Collinsville
Arkansas	ADEQ	88-0966		3/14/2026	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	KWLCP	KY98050		12/31/2025	Collinsville
Kentucky	KWLCP	KY98006		12/31/2025	Collinsville
Kentucky	UST	0073		1/31/2026	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2028	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Laboratory Results

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

Client: SCS Engineers
Work Order: 25040443
Client Project: 27225221.00 LSHWPT
Report Date: 07-Apr-25
Lab ID: 25040443-001
Client Sample ID: Backstop Media
Matrix: SOLID
Collection Date: 03/31/2025 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Lead	NELAP	0.400	X	**224**	mg/L	1	04/07/2025 13:49	237147

Laboratory Results

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

Client: SCS Engineers
Work Order: 25040443
Client Project: 27225221.00 LSHWPT
Report Date: 07-Apr-25
Lab ID: 25040443-002
Client Sample ID: Building Debris
Matrix: SOLID
Collection Date: 03/31/2025 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Arsenic	NELAP	0.250		**< 0.250**	mg/L	1	04/07/2025 13:51	237147
Barium	NELAP	0.450		**< 0.450**	mg/L	1	04/07/2025 13:51	237147
Cadmium	NELAP	0.0200		**< 0.0200**	mg/L	1	04/07/2025 13:51	237147
Chromium	NELAP	0.100		**< 0.100**	mg/L	1	04/07/2025 13:51	237147
Lead	NELAP	0.400		**< 0.400**	mg/L	1	04/07/2025 13:51	237147
Selenium	NELAP	0.500		**< 0.500**	mg/L	1	04/07/2025 13:51	237147
Silver	NELAP	0.0700		**< 0.0700**	mg/L	1	04/07/2025 13:51	237147
SW-846 1311, 7470A IN TCLP EXTRACT								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/07/2025 11:26	237150

Exhibit A

Receiving Check List

http://www.teklabinc.com/

Client: SCS Engineers
Client Project: 27225221.00 LSHWPT

Work Order: 25040443
Report Date: 07-Apr-25

Carrier: Crossroads
Received By: NR

Completed by: Laura E Henson
On: 03-Apr-25

Reviewed by: Ellie Hopkins
On: 03-Apr-25

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C na
Type of thermal preservation?	None ☑	Ice ☐	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

Any No responses must be detailed below or on the COC.

Custody seal(s) intact on shipping container/cooler. - lhenson - 4/3/2025 2:13:21 PM

☐ Downers Grove, IL ☐ Lenexa, KS
☐ Springfield, IL ☐ Collinsville, IL

Exhibit A

CHAIN OF CUSTODY

Pg __ of __ Workorder # 25040443

TEKLAB INC, 5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Client: SCS Engineers
Address: 8575 W 110th Street, Suite 100
City/State/Zip: Overland Park, KS 66210
Contact: Bryan Ross Phone: 913-775-2716
Email: bross@scsengineers.com Fax:

Samples on: ☐ ICE ☐ BLUE ICE ☒ NO ICE N/A °C LTG# ____
Preserved in: ☐ LAB ☐ FIELD **FOR LAB USE ONLY**
LAB NOTES:

Client Comments: Backstop Sample contains lead fragments
Custody seal intact on cooler. 4/3
Report QC LVL: ____

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☑ No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section: ☐ Yes ☑ No

Project Name / Number: 272252 1.00 LS ITWPT
Sample Collector's Name: Mike Dustman

Results Requested (call for PFAS TAT and surcharges)
☐ Standard ☐ 1-2 Day (100% Surcharge)
☐ Date ____ ☑ 3 Day (50% Surcharge)

Billing Inst. / PO#

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: TCLP LEAD	TCLP RCRA 8 +
25040443-001	Backstop Media	3/31/2025	Solid										✓	
002	Building Materials Debris	3/31/2025	Solid											✓

3 DAY

Relinquished By	Date/Time	Received By	Date/Time
	4/2/25 1200		4/2/25 1429
	4/2/25 1600	Mike Reed	4/2/25 1215
		Crossroads shipment	

*The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

CoC Rev D Oct 2024 4/3

Appendix E

Inspector Certifications

Exhibit A

CERTIFICATION NUMBER:

7011110724MOIR14246

THIS CERTIFIES

Bryan D. Ross

HAS COMPLETED THE CERTIFICATION REQUIREMENTS FOR

Inspector

PROVED: **01/22/2025**

PIRES: **11/07/2025**

TRAINING DATE: **11/07/2024**

Director of Air Pollution Control Program

Exhibit A

Missouri Department of Health and Senior Services

Lead Occupation License ID Badge

License Number:
140714-300004534

Lead Inspector

Bryan
Ross

Expiration Date: **June 25, 2026**

Exhibit A

CERTIFICATION NUMBER:

7011091124MOII23773

THIS CERTIFIES

Joshua Olson

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Inspector

APPROVED: 09/23/2024

EXPIRES: 09/23/2025

TRAINING DATE: 09/11/2024

Director of Air Pollution Control Program

Exhibit A

CERTIFICATION NUMBER:

7011110724MOIR10770

THIS CERTIFIES

Michael E Dustman

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Inspector

PROVED: **01/22/2025**

PIRES: **11/07/2025**

TRAINING DATE: **11/07/2024**

Director of Air Pollution Control Program

CERTIFICATION NUMBER:

7011110624MOPDR10770

THIS CERTIFIES

Michael E Dustman

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Project Designer

PROVED: **01/22/2025**

PIRES: **11/06/2025**

TRAINING DATE: **11/06/2024**

Director of Air Pollution Control Program

CERTIFICATION NUMBER:

7011110724MOMPR10770

THIS CERTIFIES

Michael E Dustman

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Management Planner

PROVED: **01/22/2025**

PIRES: **11/07/2025**

TRAINING DATE: **11/07/2024**

Director of Air Pollution Control Program

APPENDIX B

ABATEMENT FLOOR PLANS

Exhibit A

LEGEND

- POSITIVE LEAD-BASED PAINT XRF READING

40 0 40 80

SCALE FEET

Image Source: Google Earth 8/5/2022

NO.	REVISION	DATE
△		
△		
△		
△		
△		

SHEET TITLE: **EXTERIOR SAMPLE LOCATIONS**

PROJECT TITLE: **FORMER MO HIGHWAY PATROL CAMPUS**

CLIENT: **MISSOURI HIGHWAY PATROL PROPERTY**
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

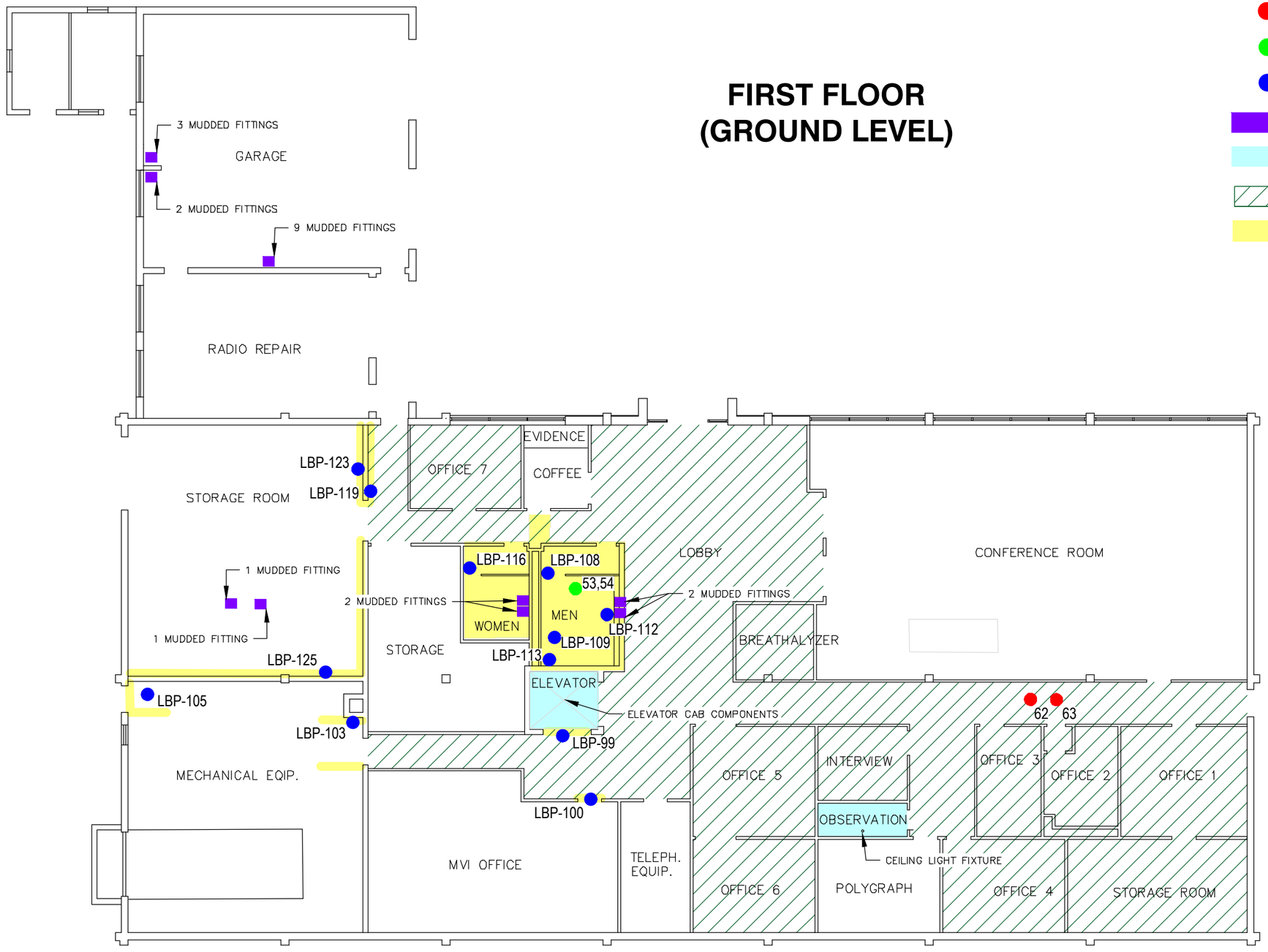
PROJ. NO.	DSN. BY:	QA/QC BY:
PROJ. #	LAS	BDR
DSN. BY:	CK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE: 4/24/25

FIGURE NO. **1**

Exhibit A

FIRST FLOOR (GROUND LEVEL)



LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING MUDDED ELBOWS
- ASSUMED ACM MATERIALS
- ASBESTOS CONTAINING FLOOR TILES AND MASTIC
- LEAD-BASED PAINT/GLAZING

NO. | REVISION | DATE

SHEET TITLE: MAIN BUILDING SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

PROJ. NO. PROJ # | DSN. BY: LAS | DRAWN BY: BDR | PROJ. MGR BDR
REV. BY: BDR | CHK. BY: BDR

DATE: 4/24/25

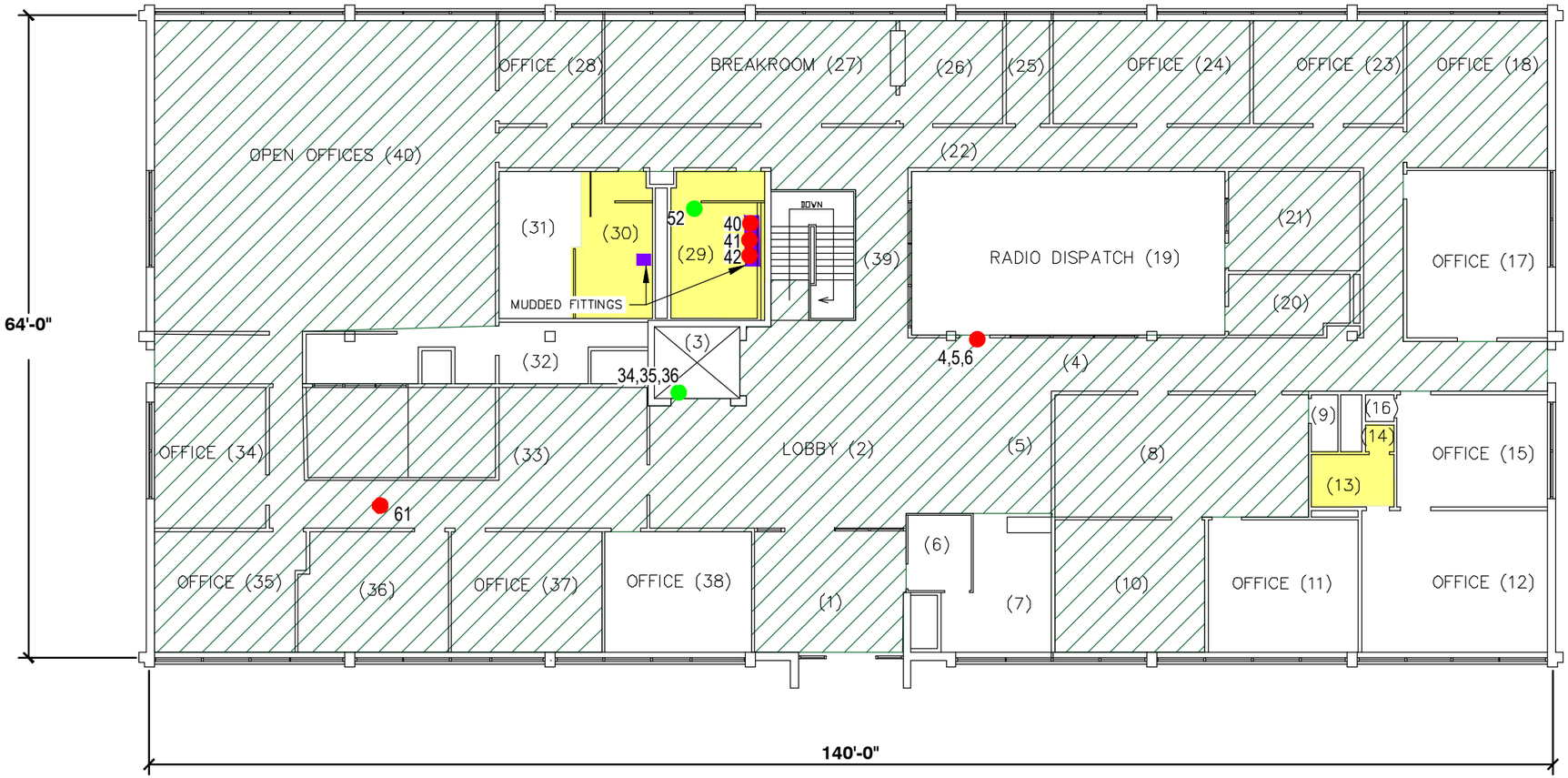
FIGURE NO. 2

T:\27225221.00\Data and Calculations\Figures\CAD\Main Building.dwg; Apr 24, 2025 - 12:07pm; Layout Name: 1; By: ischocke

SECOND FLOOR
(UPPER LEVEL)

LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING MUDDED ELBOWS
- ASSUMED ACM MATERIALS
- ASBESTOS CONTAINING FLOOR TILES AND MASTIC
- LEAD-BASED PAIN/GLAZING



T:\27225221.00\Data and Calculations\Figures\CAD\Main Building.dwg; Apr 24, 2025 - 12:08pm; Layout Name: 2; By: lschocke

NO.	REVISION	DATE

SHEET TITLE: MAIN BUILDING SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

PROJ. NO.	DES. BY:	DRAWN BY:
PROJ. #	LAS	BDR
	CHK. BY:	PROJ. MGR
DSN. BY:	BDR	BDR
BDR		

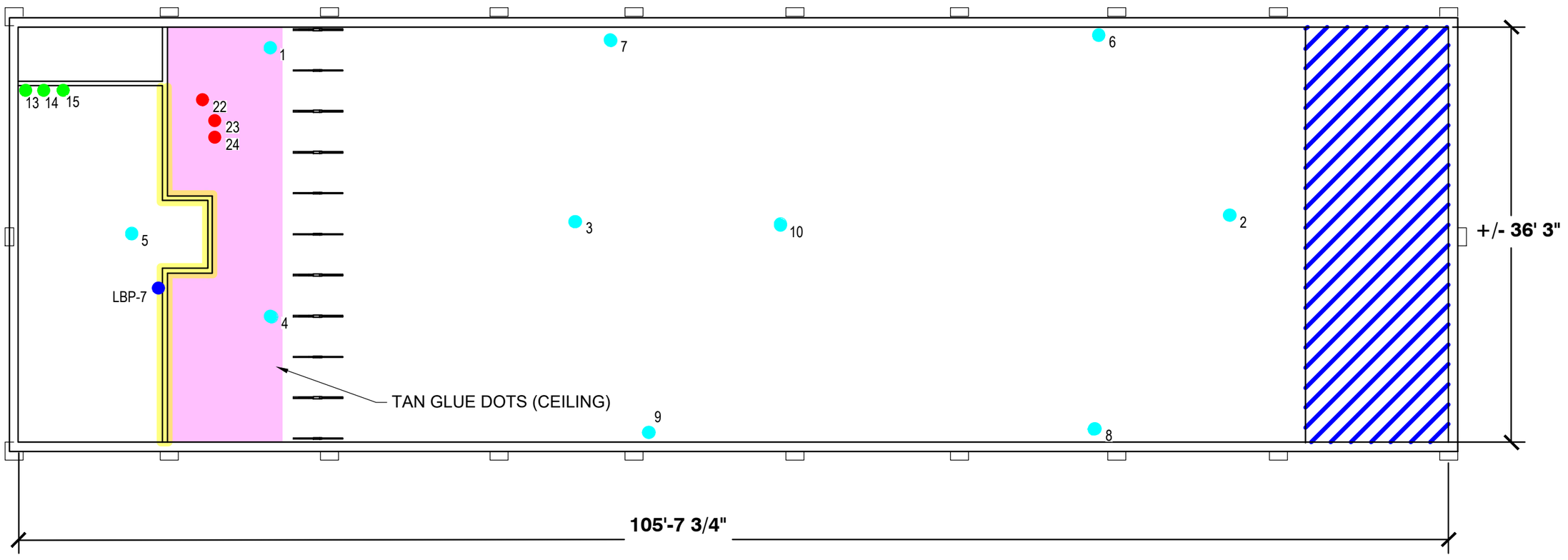
DATE: 4/24/25

FIGURE NO. 3

Exhibit A

LEGEND

- POSITIVE ASBESTOS SAMPLE LOCATION
- TRACE ASBESTOS SAMPLE LOCATION
- LEAD SHOT/CHIPPED RUBBER BACKSTOP
- LEAD DUST WIPE SAMPLE LOCATION
- POSITIVE LEAD-BASED PAINT XRF READING
- ASBESTOS-CONTAINING GLUE DOTS
- LEAD-BASED PAINT/GLAZING



NO.	REVISION	DATE

SHEET TITLE: FIRINNG RANGE SAMPLE LOCATIONS

PROJECT TITLE: FORMER MO HIGHWAY PATROL CAMPUS

CLIENT: MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

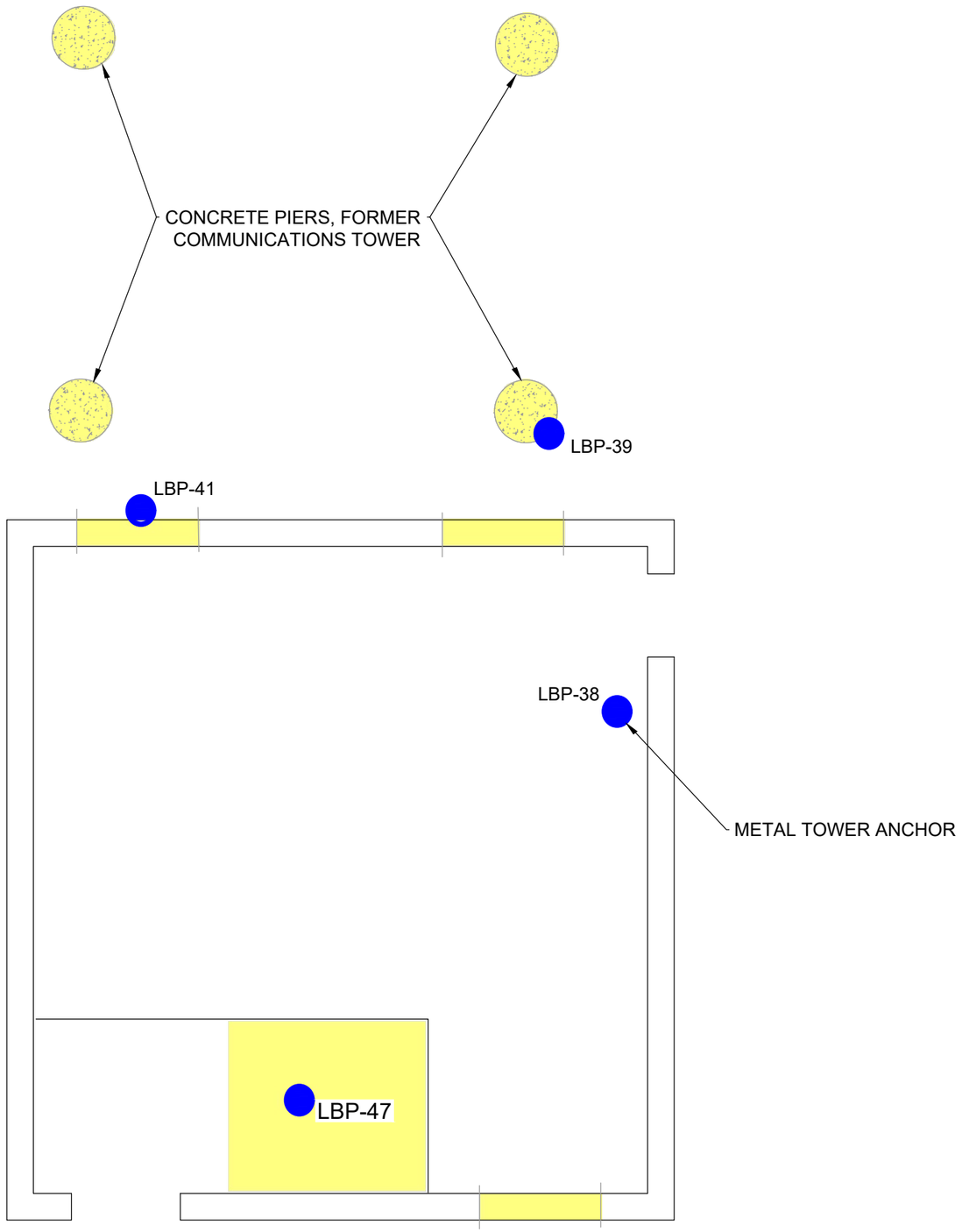
PROJ. NO.	DRN. BY:	DRAWN BY:
PROJ. #	LAS	BDR
DSN. BY:	CHK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE: 4/24/25

FIGURE NO. 4

T:\27225221.00\Data and Calculations\Figures\CAD\Pistol Range.dwg; Apr 24, 2025 - 12:05pm; Layout Name: 1; By: lschocke

Exhibit A



LEGEND

POSITIVE LEAD-BASED PAINT XRF READING

LEAD-BASED PAIN/GLAZING

NOTE:
NO ASBESTOS-CONTAINING MATERIALS IDENTIFIED.

N

NO.	REVISION	DATE
1		
2		
3		
4		
5		

SHEET TITLE
COMMUNICATIONS BUILDING SAMPLE LOCATIONS

PROJECT TITLE
FORMER MO HIGHWAY PATROL CAMPUS

CLIENT:
MISSOURI HIGHWAY PATROL PROPERTY
504 SE BLUE PARKWAY
LEE'S SUMMIT, MISSOURI

SCS ENGINEERS
8575 WEST 110TH STREET, SUITE 100
OVERLAND PARK, KANSAS 66210
PH. (913) 681-0030 FAX (913) 681-0012

PROJ. NO.	DSN. BY:	CK'K WW BY:
PROJ #	LAS	BDR
DSN. BY:	CHK. BY:	PROJ. MGR
BDR	BDR	BDR

DATE:
4/24/25

FIGURE NO.
5

APPENDIX C

STATEMENT OF BIDDERS QUALIFICATIONS

STATEMENT OF BIDDERS QUALIFICATIONS

STATE OF Missouri)
) SS
COUNTY OF Jackson)

Before me, the undersigned authority, personally appeared, who, being by me duly sworn deposed as follows:

I am authorized to make this affidavit on behalf of the named Bidder. I am of sound mind, capable of making this affidavit, and personally acquainted with the facts herein stated:

The following information must be submitted with the Bid. **All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. This statement must be completed for bidder and all subcontractors.** If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

1. Name of Bidder and/or DBA:

AT Abatement Services, Inc.

2. Permanent main office address, including City, State, and Zip Code.

4915 Stillwell Kansas City, MO 64120

3. When organized?

1985

4. If a corporation, where incorporated?

Missouri

5. How many years have you been engaged in asbestos/lead remediation work under your present firm or trade name?

40 years

6. Please list the general character of asbestos and lead work performed by your company.

Residential, Commercial, and Industrial from $10,000.00 to $5 Million Dollars
Asbestos/Lead Paint Abatement, Mold Removal, Hazardous Material Removal
Demolition, Select Demolition Facility Decommissioning

7. Have you ever failed to complete any asbestos or lead remediation work awarded to you? If so, when, for whom, and why?

NO

8. How many years have you been engaged in demolition work under your present firm or trade name?

25 years

9. Have you ever defaulted on a contract? If so, when, for whom and why?

NO

10. Have you ever had any business or professional license revoked or suspended (or been debarred from performing work for a governmental jurisdiction)? If so, when, for whom and why?

NO

11. Please list your major operable equipment **available for this project, if any.**

350 Excavator with Processor — Skidsteer

300 Excavator with Bucket/Thumb — Track Loader

245 Excavator with Bucket/Thumb

12. Please provide three project summaries, completed within the past five years, project contact information, showing experience in projects involving asbestos and lead remediation and interior demolition. Abatement Contractor's, all project summaries must include projects involving removal of asbestos-containing fireproofing within occupied buildings on a multi-employer worksite. A follow-up phone conversation will be placed with the contact information you provide.

1. Maryville School District Glen Stach 816-564-5707 Select Demo, Building Demo and Abatement
2. Lee's Summit Farmers Market McCown Gordon Tyler Stotler 816-564-0622 Bldg Demo and Abatement
3. FORD Claycomo Plant Alberici Glen Murphy 816-215-2930 Select Demo, Asbestos/Lead Abatement

13. Please list **any and all** citations issued by Federal, State or local regulatory agencies relating to safety and asbestos and lead abatement activity since January 1, 2009. Include projects, dates, and resolutions.

2014 OSHA Citation Serious Closed Please See Attachment

2023 OSHA Citation Other Than Serious Closed Please See Attachment

14. Please list all monetary penalties incurred through non-compliance with project specifications including, but not limited to: liquidated damages, overruns in project schedule, time limitations and resolutions for any project in the last five years.

None

15. Please list situations in which a contract has been terminated, including projects, dates and reasons for termination.

None

16. Please list any legal proceedings/claims in which the your company (or employees scheduled to participate in this project) has participated or is currently involved. Include descriptions of role, issuer and resolution to date.

None

17. By submitting a bid, the Contractor acknowledges and agrees to perform all work in accordance with the prepared Remedial Plans & Specifications document set forth for this project.

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

By: _____
(Signature)

Name: Craig Jackson
(Print Name)

Title: Project Manager

Date: 8/08/2025

NOTARY

Subscribed and sworn to before me this 8th day of August, 2025.

My Commission Expires: 6/30/26.

By: _____
(Notary Signature)

WENDI CURTIS
Notary Public-Notary Seal
STATE OF MISSOURI
Jackson County
My Commission Expires June 30, 2026
Commission # 11512794

Inspection Detail

Case Status: CLOSED

Inspection: 964925.015 - At Abatement Services

Inspection Information - Office: Kansas City

Nr: 964925.015 Report ID: 0728500 Open Date: 03/25/2014

At Abatement Services
108 W. South Street
Warrensburg, MO 64093
Union Status: Union
SIC:
NAICS: 238910/Site Preparation Contractors
Mailing: 4915 Stillwell , Kansas City, MO 64120

Inspection Type:	Planned		
Scope:	Complete	Advanced Notice:	N
Ownership:	Private		
Safety/Health:	Safety	Close Conference:	03/25/2014
Emphasis:	L:Xfallelec	Close Case:	08/14/2014

Case Status: CLOSED

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	1					1
Current Violations	1					1
Initial Penalty	$2,800					$2,800
Current Penalty	$1,400					$1,400
FTA Amount						

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr$	Init$	Fta$	Contest	LastEvent
1.	**01001**	Serious	19260501 B03	04/16/2014		$1,400	$2,800	$0		I - Informal Settlement

Exhibit A

Violation Detail

Standard Cited: 19260501 B03 Duty to have fall protection.

Violation Items

Nr: 964925.015	Citation: 01001	Issuance: 04/16/2014		ReportingID: 0728500	
Viol Type:	Serious	NrInstances:	1	Contest Date:	
Abatement Date:	3	Nr Exposed:	1	Final Order:	08/14/2014
Initial Penalty:	$2,800.00	REC:		Emphasis:	
Current Penalty:	$1,400.00	Gravity:	10	Haz Category:	

Penalty and Failure to Abate Event History

Type	Event	Date	Penalty	Abatement	Type	FTA Insp
Penalty	Z: Issued	04/16/2014	$2,800.00		Serious	
Penalty	I: Informal Settlement	08/14/2014	$1,400.00		Serious	

U.S. DEPARTMENT OF LABOR

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In the Matter of: AT Abatement Services, INC.

OSHA No.: INSPECTION #1659975

INFORMAL SETTLEMENT AGREEMENT

The undersigned Employer and the undersigned Occupational Safety and Health Administration (OSHA), in settlement of the above citations and penalties which were issued on September 15, 2023, hereby agree as follows:

1. The Employer agrees to correct the violations as cited in the above citations or as amended below.

2. The Employer agrees to pay the proposed penalties, if any, as issued with the above citations, or, if amended by this agreement, as amended below.

3. The Employer and OSHA agree that the following citations and penalties, if any, are not being amended:

~~Citation 1, Item 1~~

~~Citation 1, Item 2~~

~~Citation 1, Item 3~~

~~Citation 1, Item 4~~

4. OSHA agrees that the following citations and penalties are being amended as shown below, and that amended penalties are due **within 15 working days of the date this Informal Settlement is signed or in accordance with the penalty payment plan**:

Citation 1, Item 1	Reduced 20%; Reclassified to Other-than-Serious; $7,500.80
Citation 1, Item 2	Reduced 20% Reclassified to Other-than-Serious; $7,500.80
Citation 1, Item 3	Reduced 20% Reclassified to Other-than-Serious; $7,500.80

Citation 1, Item 4 Withdrawn.

Total Penalty: $22,502.40

5. The employer, by signing this informal settlement agreement, hereby waives its rights to contest the above citation(s) and penalties, as amended in paragraph 4 of this agreement.

6. The employer agrees to immediately post a copy of this Settlement Agreement in a prominent place at or near the location of the violation(s) referred to in paragraph 4 above. This Settlement Agreement must remain posted until the violations cited have been corrected, or for 3 working days (excluding weekends and Federal Holidays), whichever is longer.

7. The employer agrees to continue to comply with the applicable provisions of the Occupational Safety and Health Act of 1970, and the applicable safety and health standards promulgated pursuant to the Act.

8. The employer shall comply with Section 11(c) of the OSH Act, 29 U.S.C. § 660(c), and shall not discharge or in any manner discriminate against any employee because the employee has exercised (or intends to exercise), on behalf of himself or others, any right afforded by the Act, including but not limited to filing an OSHA complaint, instituting a proceeding under or related to the Act, or testifying in a proceeding under or related to the Act.

9. Each party agrees to bear its own fees and other expenses incurred by such party in connection with any stage of this proceeding.

Except for subsequent proceedings under the Act, Employer's execution of this Informal Settlement Agreement, the payment of any penalty, the taking of any proposed actions set forth herein, and any order of the Occupational Safety and Health Review Commission entered pursuant to this Informal Settlement Agreement shall not be construed in any way that Employer violated the Act or any standard promulgated thereunder. Employer's agreement to take any of the proposed actions set forth herein, its payment of any proposed penalty, its execution of this Informal Settlement Agreement, and any pleadings filed by either party in this action shall not be deemed to be admissions by Employer of any fault or liability or that Employer caused or contributed to the injury, illness or death of any person or damage to any property in any claim or proceeding which now exists or may arise by any person, agency, or entity provided however, that nothing in the Agreement shall affect the entry of the Final Order in this case or the utilization and introduction of the Final Order in subsequent proceedings under the Act.

Item 1 – The employer agrees to purchase facial hair kits for supervisors vehicles.

Item 2 – The employer agrees to the retraining of start to finish on asbestos removal for all employees, provide 30 days to complete, to include proper signage for asbestos removal, due November 13, 2023.

Item 3 – The employer agrees to the retraining for all foreman, managers, superintendents on disciplinary program, enforcement of said program, and what authority each has while working on jobsites.

Item 4 – The employer agrees to the retraining of all employees on what to expect during an OSHA inspection, 30 days, due November 13, 2023.

for Kimberly Robinson 10-12-2023

For the Occupational Safety and Health Administration

(signature and date)

10/12/23

For the Employer

(signature and date)

APPENDIX D

BID FORM

Bid Tab					
	Description	**Quantity**	**Units (SF, LF, LS, Ea.)**	**Price**	**Notes/Comments**
1	Mobilization	1	LS	$ 2,500.00 -	
2	Construction Management		LS	$ 3,500.00 -	
3	Erosion Control		LS	$ 5,394.00 -	
4	Construction Fencing		LS	$ 9,783.00 -	
5	Gate		LS	$ 975.00 -	
6	Asbestos Abatement - Main Building		LS	$ 70.326.00 -	
7	Asbestos Abatement - Firing Range Building		LS	$ 18,306.00 -	
8	Lead Abatement - Main Building		LS	$ 21,825.00 -	
9	Lead Abatement - Firing Range Building		LS	$ 83,586.00 -	
10	Lead Abatement - Comm. Building		LS	$ 9,477.00 -	
11	Universal and Hazardous Waste Abatement - Main Building		LS	$ 29,630.00 -	
12	Universal and Hazardous Waste Abatement - Firing Range Building		LS	$ 5,259.00 -	
13	Universal and Hazardous Waste Abatement - Comm. Building		LS	$ 3,707.00 -	
14	Abandon utilities to all buildings		LS	$ 37,500.00 -	
15	Demolish Main Building		LS	$ 232,417.00 -	
16	Demolish Firing Range Building		LS	$ 37,243.00 -	
17	Demolish Comm. Building		LS	$ 10,152.00 -	
18	Demolish Two Wooden Sheds		LS	$ 3,200.00 -	
19	Demolish all paved surfaces		LS	$ 77,231.00 -	
20	Removal of Lighting, Lighted Bollards, Flag Pole		LS	$ 32,650.00	
21	Removal of Existing Aboveground Site Improvements		LS	$ 18,256.00	
22	Off-site waste disposal - general construction debris		Included in Demo	$ Included in Demo -	
23	Site Restoration (seeding)		LS	$ 66,927.00 -	Grade level with existing topography and seed. Contractor to guarantee germination and growth.
Total				**$** 779,844.00 **-**	

Unit Notes:
SF = Square Feet
LF = Linear Feet
LS = Lump Sum
Ea. = Each

APPENDIX E

CONSTRUCTION SWPPP

Stormwater Pollution Prevention Plan (SWPPP)

Highway Patrol Facility Demolition
504 SE Blue Parkway
Lee's Summit, MO 64063

SWPPP Prepared For:

City of Lee's Summit, Public Works Department
Craig Kohler, P.E.
220 SE Green Street, Lee's Summit MO, 64063
816-969-1800

SWPPP Prepared By:

City of Lee's Summit, Public Works Department
Kara Starlin, CFM
220 SE Green Street, Lee's Summit, MO 64063
816-969-1800

SWPPP Preparation Date:

July 10, 2025

Estimated Project Dates:

Start Date: August 2025
Completion Date: November 2025

Contents

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Highway Patrol Facility Demolition

Project Street/Location: 504 SE Blue Parkway

City: Lee's Summit **State:** MO **ZIP Code:** 64063

County or Similar Subdivision: Jackson

Latitude/Longitude (Use one of three possible formats, and specify method):

Latitude	Longitude
38º 54' 14.562" N	94º 21' 49.817'' W
(degrees, minutes, seconds)	*(degrees, minutes, seconds)*

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): latlong.net

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." _____

Is this project considered part of a federal facility? ☐ Yes ☒ No

NPDES project or permit tracking number*: MOR04C029 (City of Lee's Summit NPDES Permit)

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate NPDES construction general permit.)*

1.2 Contact Information/Responsible Parties

Operator(s):

Company Name:
Name:
Address:
City, State, Zip Code:
Cell Phone:
Office Phone:
email:

Emergency 24-Hour Contact: (Pending Award of Construction Contract)

Company Name:
Name:
Phone:

Project Manager(s) or Site Supervisor(s):

Lee's Summit Public Works Department, Engineering Division
Craig Kohler, P.E.
220 SE Green Street, Lee's Summit, MO 64063
(816) 969-1800

SWPPP Contact(s):

Company Name:
Name:
Address:
Phone:
Email:

1.3 Nature and Sequence of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:

Demolish the former Highway Patrol facility, including all associated structures (main building, mechanic shop, firing rage, sheds, etc., and parking lots.

What is the function of the construction activity?

☐ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility
☒ Other (please specify): Municipal Capital Improvement Project

Estimated Project Start Date: August 2025
Estimated Project Completion Date: November 2025

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s): Asphalt or concrete pavement, silt loams, and silty clay loams.

Slopes: Typically 2 percent or less. The site work is not expected to change existing slopes.

Drainage Patterns: Primarily north toward high school parking lot; however, SW corner of property drains to the southwest toward a roadside ditch.

Vegetation: Includes native turf and turf sod.

1.5 Construction Site Estimates

Provide the following the construction site estimates:

Total project area:	4.0 acres
Construction site area to be disturbed:	2.5 acres
Percentage impervious area before construction:	43 %
Runoff coefficient before construction:	0.88
Percentage impervious area after construction:	0 %
Runoff coefficient after construction	0.74

1.6 Receiving Waters

Description of receiving waters: unnamed intermittent drainage channels to public storm drainage system.

Description of storm drainage systems: Open channel and enclosed public storm drainage pipes are currently in place in the area.

Description of impaired waters or waters subject to TMDLs: No.

1.7 Site Features and Sensitive Areas to be Protected

Inlet protection devices, silt fence, and any other measures needed to protect drainage from the site will be installed. Highly chlorinated water, if encountered, shall be discharged to a sanitary sewer or be dechlorinated before being discharged to a storm sewer.

1.8 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:
Sediment could result from disturbed areas during construction.
Potential pollutants and sources, other than sediment, to stormwater runoff:
Lead from firing range, chemicals from mechanic shop, and land disturbance in general could be sources of pollution.

1.9 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☒ Yes ☐ No

Describe how this determination was made:

Determination was made after performing a site-specific search on the US Fish and Wildlife Service IPAC website.

If yes, describe the species and/or critical habitat:

Three mammal species (Indiana Bat, Gray Bat, Tricolored Bat) and one insect species (monarch butterfly) are identified as endangered in the vicinity of the project area.

Very few butterfly-attracting flowers/bushes are present on-site. If any of the site is used by the identified bats, it is most likely for foraging rather than roosting. To avoid potential impacts with these bats, any trees that may need to be removed should be removed between October 15 and March 31.

1.10 Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

Describe how this determination was made: The project area is owned by the State and is located within City and State public rights-of-way or utility easements that were acquired during the mid-1960s or earlier.

1.11 Applicable Federal, Tribal, State or Local Programs

Erosion control and stormwater management practices are governed by the City's federal NPDES permit, the MDNR, the City of Lee's Summit erosion and sediment control standards, and the contract documents of this project.

1.12 Maps

The general location map is included in Appendix A, along with:

- USGS Lake Jacomo Quadrangle Map
- FEMA FIRM Map Number 29095C0438G (Jan. 20, 2017)

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 Erosion and Sediment Control General Notes

Disturbed areas where construction activities will be limited are defined as shown on the project plans. Erosion and sediment control measures shall be in place prior to removal of vegetation and remain in place until permanent vegetation is re-established. Placing sod shall comply with the contract documents.

2.2 Phase Construction Activity

This project may include removal of existing trees, but those trees are not suitable bat habitat. The project also includes the removal of existing structures, pavement, and site restoration. BMPs associated with construction are shown in the project contract documents and include, but are not limited to, inlet protection, silt fence, temporary construction entrance, if needed, and maintenance of these items. No temporary stabilization is anticipated. If used, work will comply with project specifications. Permanent stabilization consists of re-establishing permanent vegetation with sod or seed.

2.3 Vehicle Tracking

In accordance with City ordinances and the project contract documents, all streets shall be kept free of mud, dirt and rock tracked from the site for the duration of the project.

2.4 Dust Control

In accordance with City ordinances and the project contract documents, if the site becomes excessively dry, the site shall be watered as necessary to prevent sediment from blowing from the site. Watering should be enough to settle dust but not saturate the soils.

2.5 Protect Storm Drain Inlets

Contractor shall place inlet protection to prevent sediment from entering the storm drainage system. The contractor shall be responsible for maintaining inlet protection for the entire duration of the project. Contractor shall inspect inlet protection devices within 24 hours of a significant rain event.

2.6 Establish Perimeter Controls and Sediment Barriers

Contractor shall place silt fence to prevent sediments from being washed from the construction site. The contractor shall be responsible for maintaining silt fences for the entire duration of the project. Contractor shall inspect silt fences within 24 hours of a significant rain event.

2.7 Establish Stabilized Construction Exits

If needed, Contractor shall install a temporary construction entrance to prevent sediments from being washed from the construction site. The contractor shall be responsible for maintaining temporary construction entrances for the entire duration of the project.

2.8 Permanent Soil Stabilization

Sod or seed shall be placed to provide permanent soil stabilization. The Contractor shall install and maintain sod or seed according to the contract documents.

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Material Handling and Waste Management

- Designate a waste collection area on the site that does not receive a substantial amount of runoff and does not carry sediment or other pollutants off site.
- Ensure that containers have lids so they can be covered before periods of rain and keep containers in a covered area whenever possible.
- Schedule waste collection removal to prevent waste containers from overfilling.
- Clean up spills immediately using dry cleanup methods only. For hazardous materials, follow cleanup instructions on the package. Use absorbent material such as oil dry to contain the spill.
    - During the demolition phase of construction, provide extra containers for waste construction materials and/or schedule more frequent pickups.
    - Collect, remove, and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.
- Install portable latrines on site in a location that does not allow direct discharge or spillage into storm sewer or ditch in case of spill or leak. Service latrines regularly by a

licensed sanitary waste management contractor and ensure latrines are properly anchored to prevent tipping.

3.2 Establish Proper Building Material Staging Areas

- Designate equipment and material staging areas on site. Select a location so that there is no direct discharge or spillage into storm sewer or ditch in case of spill or leak.
- Material expected to be stored on site includes, but is not limited to, the following: construction equipment, fuel, demolition debris.

3.3 Designate Washout Areas

Concrete is not anticipated to be needed for this project. However, should it be needed, washout areas should be within 50 feet of storm drains, open ditches, or water bodies. Gravel or rock should cover paths to any concrete washout areas. These areas should be far enough away from other construction traffic to reduce the likelihood of accidental damage and spills, yet easily accessible to construction traffic.

Check all concrete washout areas daily to determine if they have been filled to 75 percent capacity, which is when materials need to be removed. Both above- and below- ground self-installed washouts should be inspected daily to ensure that plastic linings are intact and sidewalls have not been damaged by construction activities. Prefabricated washout containers should be inspected daily as well to ensure the container is not leaking or nearing 75 percent capacity. Inspectors should also note whether the washout areas are being used regularly. If drivers have washed out their chutes or hoppers in other locations, more education, additional signage, or additional washouts in more convenient locations may be needed.

Concrete washouts are designed to promote evaporation where feasible. However, if stored liquids have not evaporated and the washout is nearing capacity, vacuum and dispose of them in an approved manner - check with the local sanitary sewer authority to determine if there are special disposal requirements for concrete wash water. Remove liquids or cover the structures before predicted rainstorms to prevent overflows. Companies that offer prefabricated and watertight washout containers generally offer a vacuum service to remove the liquid material.

When materials are removed from the concrete washout, build a new structure or, if the previous structure is still intact, inspect the structure for signs of weakening or damage and make any necessary repairs. Line the structure with new plastic that is free of holes or tears and replace signage if necessary. It is very important that new plastic is used after every cleaning because pumps and concrete removal equipment can damage the existing liner.

3.4 Hazardous Materials

Any hazardous material and waste will be stored and disposed of in the manner specified by local or state regulation and the manufacturer. Site personnel will be instructed of these procedures and the Contractor's superintendent will be responsible for implementing these practices.

3.5 Allowable Non-Stormwater Discharge Management

The City's NPDES Permit allows the following non-stormwater discharges on this construction site, provided City staff has not determined these sources to be substantial contributors of pollutants to the City's stormwater drainage system:

- Periodic water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising groundwater and springs
- Uncontaminated groundwater infiltration to the storm drainage system
- Discharges from potable water sources
- Foundation or footing drains and crawl space pumps
- Flows from riparian habitat and wetlands
- Street and sidewalk wash water, used to control dust, that is detergent-free
- Discharges or flows from emergency firefighting activities

SECTION 4: INSPECTIONS

4.1 Inspections

In accordance with the project contract documents, the Contractor shall conduct inspections of the controls required in this SWPPP and in the project contract documents at a minimum of every seven (7) days and within 24 hours following each rainfall event of 0.5 inches or more.

The Contractor shall also comply with the City's erosion control inspection policies and procedures set forth in the contract documents.

4.2 Maintenance of Controls

Erosion and sediment control maintenance needs should be acknowledged by the contractor by the end of the business day in which the contractor is made aware of maintenance needs and should be implemented no later than 7 calendar days after the contractor is made aware of maintenance needs. Controls shall be maintained as follows:

Temporary Construction Entrance: Immediately remove mud or sediment tracked or washed onto public road and add additional rock to temporary construction entrance, as needed, to ensure track-out onto the road does not happen. Repair any broken road pavement immediately.

Sediment Control Berms: Re-establish any berms that sag or wash away and remove any silt deposits that exceed 6-inches in depth or are causing the berm to fail.

Inlet Protection: Remove mud, sediment, or silt deposits that exceed half the height of the inlet protection. Replace inlet protection if weeds are growing through or on the inlet protection. Ensure that a concrete block or similar restriction is placed between the inlet protection and the inlet to allow water to flow properly. Ensure that inlet protection extends fully from one end of the inlet to another.

Silt Fence: Remove mud, sediment, or silt deposits that exceed 6-inches in depth; replace any broken stakes and ensure that all stakes are standing upright; replace any fabric that has been torn, re-secure any fabric that has come loose from stakes and ensure that fabric is stretched tightly, and ensure that all fabric extends down into the ground surface.

Temporary and Permanent Soil Stabilization: If any areas of temporary or permanent stabilization fail, those areas shall be re-stabilized in accordance with City Code requirements.

Concrete Washout Areas: Refer to Section 3.3 above.

4.3 Record Keeping

The following list of records the Contractor should keep at the project site available for inspection and review:

- Approved MDNR Land Disturbance permit
- Dates of grading, construction activity, and stabilization measures in place
- Inspection Reports
- Corrective Action Log
- A log of changes to the SWPPP, if any

SWPPP APPENDICES

The following documents are attached to this SWPPP:

Appendix A – Maps

Appendix B – Inspection Reports

Appendix C– Corrective Action Log

Appendix D – SWPPP Amendment Log

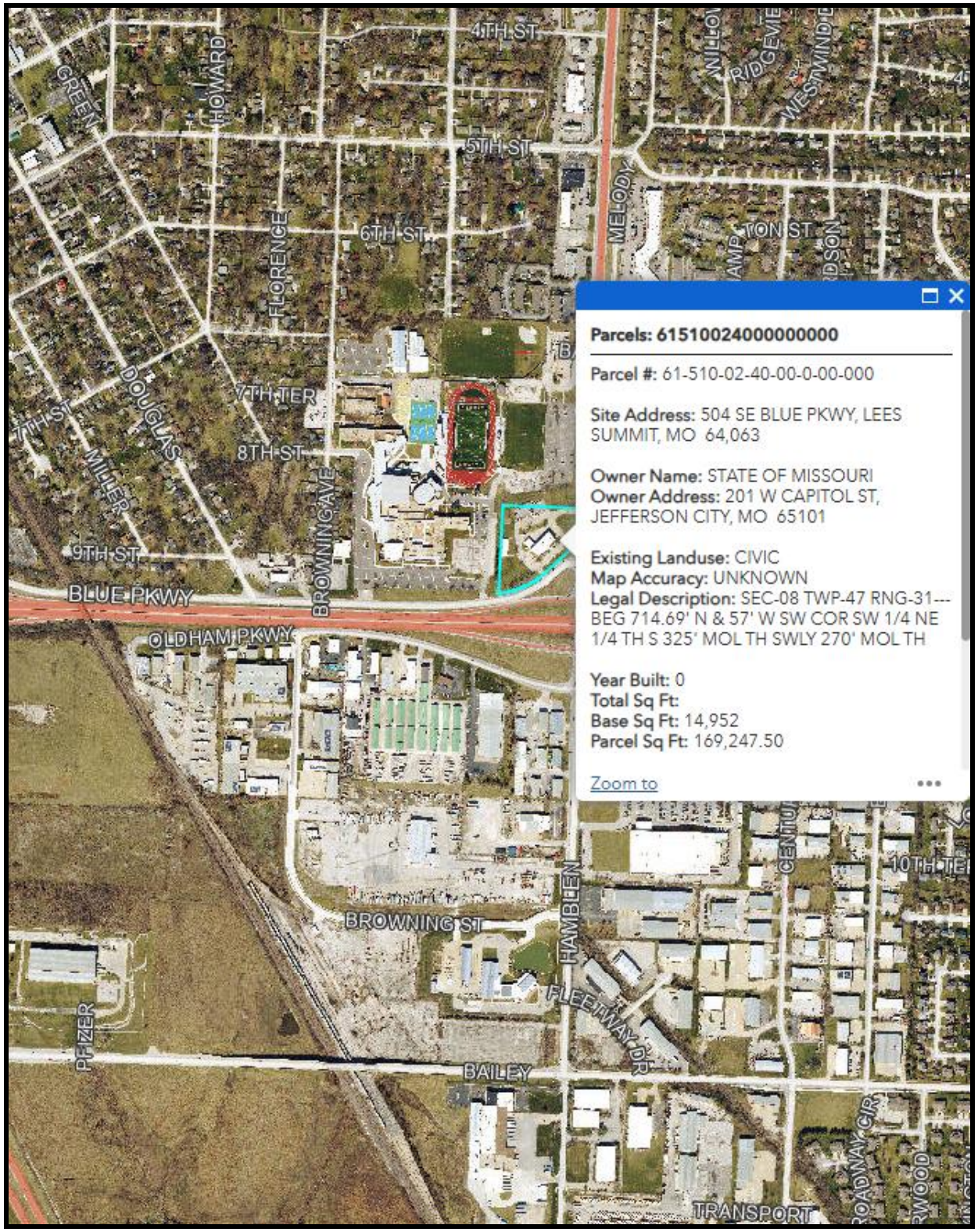
Appendix E – Grading and Stabilization Activities Log

APPENDIX A – MAPS

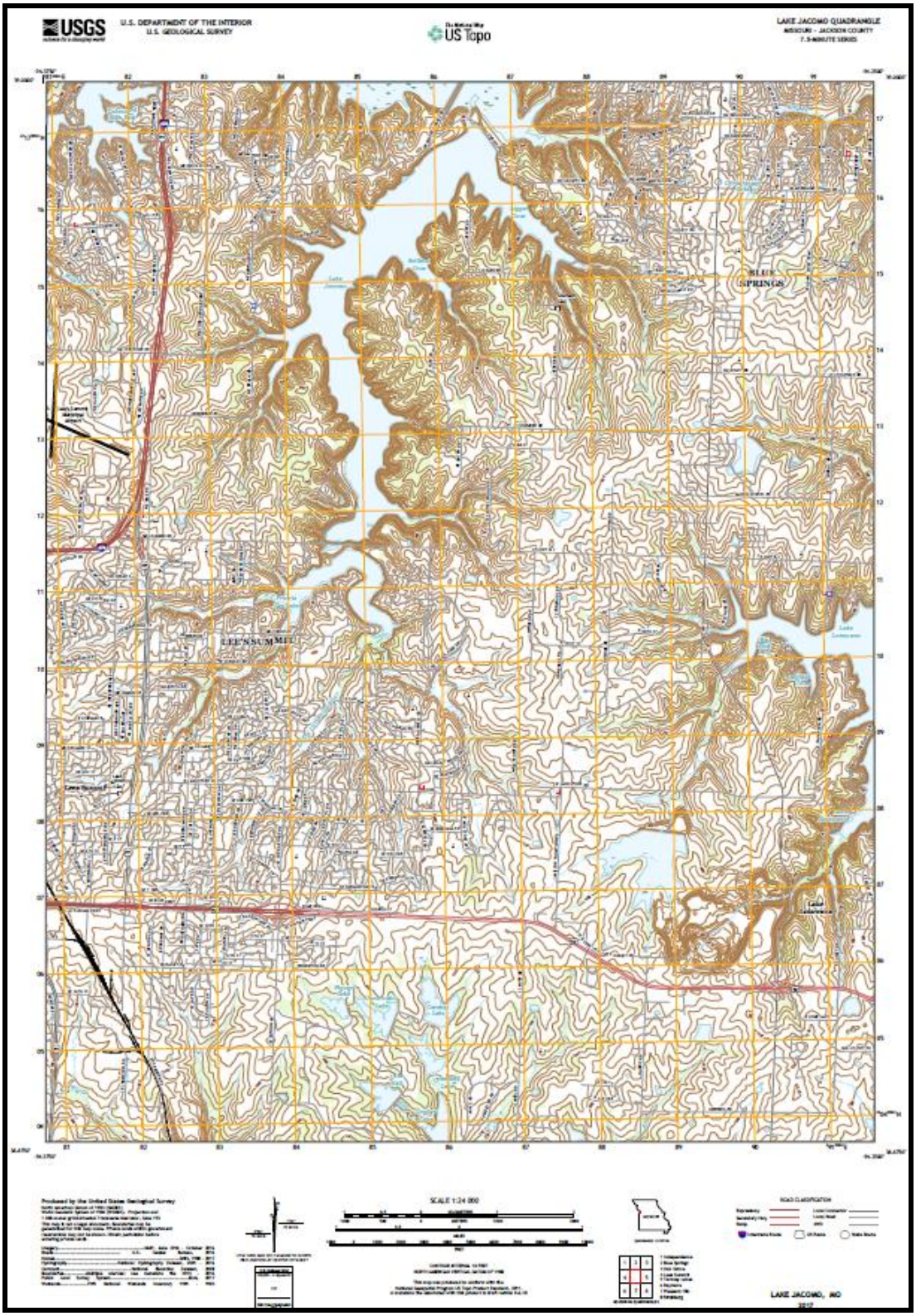
General Location Map

USGS Lake Jacomo Quadrangle Map

FEMA FIRM Map Number 29095C0438G (Jan. 20, 2017)



General Location Map



USGS Lake Jacomo Quadrangle Map

FEMA FIRM Map Number 29095C0438G (Jan. 20, 2017)

Appendix B – Inspection Reports

Project Name: Highway Patrol Facility Demolition **Date of Inspection:** _____
Contractor Inspector: _____
Type of Inspection: _____**Weekly** _____**Rain Event** _____**Other**

Measure & Control	Location of Device	Complies with Design Standards	Effective Pollutant Control Practice
Temporary Construction Entrance		Yes / No	Yes / No
Sediment Fence		Yes / No	Yes / No
Inlet Protection		Yes / No	Yes / No
Soil Stabilization		Yes / No	Yes / No
Stockpiles		Yes / No	Yes / No
Solid Waste Disposal		Yes / No	Yes / No
Sanitary Waste Disposal		Yes / No	Yes / No
Fueling site / storage		Yes / No	Yes / No
Hazardous Material Storage		Yes / No	Yes / No
Hazardous Waste		Yes / No	Yes / No
Construction Material		Yes / No	Yes / No
Cleanout Areas		Yes / No	Yes / No

Appendix C – Corrective Action Log

Project Name: Highway Patrol Facility Demolition
Contractor SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix D –SWPPP Amendment Log

Project Name: Highway Patrol Facility Demolition
Contractor SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix E – Grading and Stabilization Activities Log

Project Name: Highway Patrol Facility Demolition
Contractor SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location