PROJECT MANUAL

SPECIFICATIONS FOR ASBESTOS ABATEMENT
Request For Bid (RFB) Contract AB-2026-06-01P

Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

Prepared for:

City of Waterloo
715 Mulberry Street
Waterloo, Iowa 50703

Prepared by:

Eocene Environmental Group
5930 Grand Avenue
West Des Moines, Iowa 50266

Report date:

June 2, 2026

Report funded by:

United States Environmental Protection Agency (EPA) Multipurpose Grant BF-96705401

CERTIFICATIONS PAGE

PROJECT MANUAL

for
Specifications for Asbestos Abatement

Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

Specifications Prepared By:

Jon Reis
Eocene Environmental Group
Accredited by the State of Iowa for Asbestos Project Design
License #26-14276 Expires 01-04-2027

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ASBESTOS ABATEMENT
RATH BUILDINGS
1442 SYCAMORE STREET, WATERLOO, IOWA 50703

SECTION I

NOTICE OF REQUEST FOR BID

1.0 Receipt and Opening of Bid

The City of Waterloo is seeking sealed bids for the abatement, removal, and disposal of asbestos containing materials of the **Rath Buildings** located at **1442 Sycamore Street, Waterloo, Iowa 50703.**

All bids must be received in a sealed envelope in the City Clerk's Office, Waterloo City Hall, 715 Mulberry Street, Waterloo, Iowa 50703 (date and time stamped) by Thursday, July 9, 2026, at 1:00 p.m. (our clock), Central Time, in order to be considered. City Hall is located at 715 Mulberry Street, Waterloo, Iowa. Bids sent electronically or via facsimile will not be accepted. The mailing container should be marked as noted below and include the name of the company submitting the bid.

1.1 RFB Timeline

Name of the Bid: Asbestos Abatement Contract AB-2026-06-01P

Notice of RFB Date: June 2, 2026

Mandatory Walk Thru Date: **There will be a mandatory walk through on Thursday, June 11, 2026, at 9:00 a.m.** Bidders that do not have a representative in attendance at this walk through are **NOT** eligible to bid on this contract. See Section 4.5 for additional details. It is recommended Bidder representatives have a respirator available for use.

Deadline for Bid Submittal: **Thursday, July 9, 2026, at 1:00 p.m., Central Time**

Submit Sealed Bid to: Address exactly as stated:
SEALED RFB FOR ASBESTOS ABATEMENT SERVICES - CONTRACT AB-2026-06-01P

City Hall
City Clerk's Office
715 Mulberry Street
Waterloo, IA 50703

Method of Submittal: Mail or Overnight Delivery, In Person (**No** Electronic or Fax Submittals)

Contact Persons, Title:	Aric Schroeder, City Planner/Project Manager (City's Representative) Jon Reis, Eocene Environmental Group Project Manager (City Consultant Representative)
E-mail Addresses:	aric.schroeder@waterloo-ia.org jreis@eocene.com
Phone:	319-291-4366 (City's Representative) 515-473-6256 (City Consultant Representative)

1.2 The City reserves the right to accept or reject any or all bids and to waive any informalities or irregularities in bids if such waiver does not substantially change the offer or provide a competitive advantage to any Bidder. The City reserves the right to defer acceptance of any bid for a period not to exceed ninety (90) calendar days from the date of the deadline for receiving bids.

1.3 The City is not responsible for delays occasioned by the U.S. Postal Service, the internal mail delivery system of the City, or any other means of delivery employed by the Bidder. Similarly, the City is not responsible for, and will not open, any bid responses that are received later than the date and time stated above. Late bids will be retained in the RFB file, unopened. No responsibility will be attached to any person for premature opening of a bid not properly identified.

1.4 **Bids will be opened on Thursday, July 9, 2026, at 1:00 pm (our clock) Central Time in the second floor Council Chambers and will be streamed live on the City of Waterloo's YouTube Channel.** The main purpose of this opening is to reveal the name(s) of the Bidder(s), not to serve as a forum for determining the award. **The awarding of the Contract is anticipated to be within 90 days of the bid opening.** The Waterloo City Council will conduct a public hearing on the proposed plans, specifications, form of contract, and estimate of cost for the project at 5:30 p.m. on Monday, July 20, 2026, in the Harold E. Getty Council Chambers in City Hall, 715 Mulberry Street. Any person interested may file written objection thereto with the City Clerk before the date set for said hearing, or appear and make objection thereto with the City Clerk before the date set for said hearing, or appear and make objection at the hearing. Contact the City Clerk's Office at 319-291-4323 or clerks@waterloo-ia.org with questions about speaking at a public hearing.

1.5 Bids will be evaluated promptly after opening. After an award is made, a bid summary will be sent to all companies who submitted a bid. Bids may be withdrawn anytime prior to the scheduled closing time for receipt of bids; no bid may be modified or withdrawn for a period of ninety (90) calendar days thereafter.

*****END OF SECTION*****

SECTION II

INSTRUCTIONS TO BIDDERS

2.0 The Bid shall include the attached signature page (Exhibit "A"), properly completed. A company representative who is authorized to bind the company will sign on behalf of the company to indicate to the City that you have read all provisions of the RFB and agree to all terms and conditions, except as provided in paragraph 2.4 below. By making a Bid, the Bidder represents that they have examined the subject property. Any questions about the meaning or intent of the specifications must be submitted no later than seven days prior to the Deadline for Bid Submittal listed above. The City of Waterloo reserves the right to reject any or all bids, and to accept in whole or in part, the bid, which, in the judgment of the bid evaluators, is the most responsive and responsible bid, that offers the greatest value to the City with regard to the criteria detailed and the specifications set forth herein. The City will select a Bidder based on knowledge of experience and qualifications, and past experience with Bidder, cost will not be the sole determining factor. A Bidder's submittal of a bid constitutes its acceptance of this evaluation technique and its recognition and acceptance that subjective judgments will be used in the evaluation. Evaluation criteria may include, but are not limited to:

i. Satisfactory experience in the timely completion of work;
ii. Bidder's reputation and financial status;
iii. Past experience and service provided by the Bidder;
iv. Bidder's ability to meet the insurance and bonding requirements; and
v. Bidders ability to immediately fully staff the project with certified, licensed staff.

2.1 General Liability Insurance with limits of liability of at least $1,000,000 per occurrence and $2,000,000 general aggregate combined single limit, for Person Injury, Bodily Injury and Property Damage is required. At a minimum, coverage for Premises, Operations, Products and Completed Operations shall be included. This coverage shall protect the public or any person from injury or property damages sustained by reason of the Contractor or its employees carrying out their work. The Contractor shall provide certificate of insurance having the City of Waterloo as additional insured. Also required is Pollution Liability Insurance, which shall be True Occurrence, not Claims Made. The insurance shall cover all asbestos and hazardous materials liability aspects of the project, including the project site, during transportation from the project site to the disposal site, and during unloading operations at the disposal site. Additionally, coverage shall include all costs of the cleanup of any releases to the environment of any asbestos-containing materials or hazardous materials during project abatement, and transportation for disposal. Such coverage shall have limits of no less than $1,000,000 per occurrence and $2,000,000 per project aggregate.

2.1.1 The City reserves the right to require increased liability limits, not to exceed Fifteen Million Dollars ($15,000,000) from bidders, should the project represent an elevated hazard level to the City as determined by the Insurance Committee.

2.1.2 Commercial General Liability Insurance Policy, including but not limited to, insurance for premises construction operations (when applicable), contractual

liability, completed operations with respect to liability arising out of the ownership, use, occupancy or maintenance of the premises and all areas appurtenant thereto, to afford protection with respect to bodily injury, personal injury, death or property damage of not less than One Million Dollars ($1,000,000) per occurrence combined single limit/Two Million Dollars ($2,000,000) general aggregate.

2.1.3 Comprehensive Automobile Liability Insurance Policy with limits for each occurrence of not less than One Million Dollars ($1,000,000) Combined Single Limit with respect to bodily injury, property damage or death.

2.1.4 Workers Compensation Insurance Policy or similar insurance in form and amounts required by law.

2.1.5 Coverage must be maintained by a financially stable carrier with a minimum AM Best rating of A- or above. It will be the outside party's responsibility to provide proof of their carriers rating.

2.1.6 The City of Waterloo, Iowa will be named as an additional insured with respect to all casualty insurance policies.

2.1.7 Certificate of insurance will be submitted to the City Clerk prior to commencement of the Contract/agreement and shall include a thirty-day notice of cancellation provision.

2.1.8 If the outside party fails to perform any of its obligations under the City's Insurance and Policy Requirements, Waterloo reserves the right to either purchase the required insurance coverage and assess the cost directly to the outside party, or to declare the outside party's bid invalid.

2.2 A bid guarantee from each Bidder equivalent to five percent (5%) of the bid price is required. The bid guarantee shall consist of a firm commitment, such as a bid bond, certified check, or other negotiable instrument acceptable to the City, as assurance that the Bidder will, upon acceptance of its bid, execute such contractual documents as may be required within the time specified.

The successful Bidder will be required to furnish a bond in an amount equal to one hundred percent (100%) of the Contract price and shall be issued by a responsible surety acceptable to the City. The bond shall guarantee the faithful performance of the Contract and the terms and conditions therein contained, shall guarantee the prompt payment of all materials and labor and protect and save harmless the City from claims and damages of any kind arising out of the performance of the Contract.

2.3 This Request for Bid does not commit the City to make an award, nor will the City pay any costs incurred in the preparation and submission of bids, or costs incurred in making necessary studies for the preparation of bids.

2.4 Important Exceptions to Contract Documents - The Bidder shall clearly state in the submitted bid any exceptions to, or deviations from, the minimum bid requirements, and any exceptions to the terms and conditions of this RFB. Such exceptions or deviations will be considered in evaluating the bids. Any exceptions should be noted on the Signature Page. Companies are cautioned that exceptions taken to this RFB may cause their bid to be rejected. No additional exceptions shall be allowed after submittal of a bid.

2.5 Incomplete Information - Failure to complete or provide any of the information requested in this RFB, including references, and/or additional information as indicated, may result in disqualification by reason of "non responsiveness".

2.6 The Bidder hereby agrees to conform with all provisions of the Federal Civil Rights Act; The Code of Iowa, Chapter 216 Civil Rights Commissions rules and regulations; and conform to provisions set for in Iowa Code 692A.11. The Bidder certifies that they are permitted by the Iowa Workforce Development to conduct asbestos abatement in the State of Iowa. The Bidder hereby agrees that they will comply with all federal and state affirmative action/equal employment opportunity requirements concerning fair employment and will not discriminate between or among by reason of race, color, religion, sex, national origin, or physical handicap. The Bidder hereby agrees that they will make any and all supervisors and workers assigned to duties on the project for which this bid has been submitted aware of their duties under the Contract Documents, including these Project Specifications, and other documents presented as part of this project and all federal, state, and local laws and regulations.

2.7 The Bidder shall call to the City’s attention, prior to signing a contract, any omissions or errors noted in the Specifications or Scope of Work that are at odds with the intent of the bid documents, the project, or any federal, state, or local laws or regulations. The Bidder, by submitting a bid and bid security, acknowledges that they forfeit the bid security upon failure to enter into such contract.

******END OF SECTION******

SECTION III

SPECIAL TERMS AND CONDITIONS

3.0 Term of Contract

3.0.1 The initial term of the Contract shall be for approximately thirty (30) weeks, anticipated to be from July 21, 2206 to February 17, 2027.

3.0.2 The City and the Contractor may renew the original Contract for one (1) week time periods by mutual agreement. Two (2) week's notice must be given to renew the Contract for additional increments. City's Project Manager may administratively approve up to four (4) one (1) week time period renewals. Further renewals will require approval of the City Council as an amendment to the Contract.

3.0.3 A Contract, approved by the City Council and signed by the Mayor, shall become the document that authorizes the Contract to begin, assuming the insurance and bond requirements have been met. Each section contained herein, any addenda and the response (Bid) from the successful bidder, and all exhibits to the RFB shall also be incorporated by reference into the resulting Contract.

3.0.4 No price escalation will be allowed during the initial term of the Contract. If it is mutually decided to renew beyond the initial period and the Contractor requests a price increase, the Contractor shall provide documentation on the requested increase. The City reserves the right to accept or reject price increases, to negotiate more favorable terms, or to terminate (or allow to expire) without cost, the future performance of the Contract.

3.0.5 The total actual expenses shall not exceed the amount allowed by the project Contract, including any renewal extensions thereof, unless amended by written agreement (change order).

3.1 Agreement Forms

3.1.1 After award, the Bidder will be required to enter into a written contract with the City that is substantially in the form attached hereto as Exhibit "C".

3.1.2. Termination for Cause. In the event that Contractor defaults in the performance or observance of any covenant, agreement or obligation set forth in the Contract, and if such default remains uncured for a period of seven (7) days after notice thereof shall have been given by City to Contractor (or for a period of fourteen (14) days after such notice if such default is curable but requires acts to be done or conditions to be remedied which, by their nature, cannot be done or remedied within such 14-day period and thereafter Contractor fails to diligently and continuously prosecute the same to completion within such 14-day period), then City may declare that Contractor is in default under the Contract.

3.1.3 Termination for Convenience. The Contract may be terminated at any time, in whole or in part, upon the mutual written agreement of the parties. City may also choose

to terminate the Contract at any time by delivering to Contractor 10-days' advance written notice of intent to terminate.

3.1.4 Remedies. If Contractor is in default of the Contract and has not cured said default as set forth in Section 3.1.2 above, the City may take any one or more of the following steps, at its option:

3.1.4.1 by mandamus or other suit, action or proceeding at law or in equity, require Contractor to perform its obligations and covenants under the Contract, or enjoin any acts or things which may be unlawful or in violation of the rights of the City under the Contract, or obtain damages caused to the City by any such default;

3.1.4.2 have access to and inspect, examine and make copies of all books and records of Contractor which pertain to the project;

3.1.4.3 declare a default of the Contract, make no further disbursements, and demand immediate repayment from Contractor of any funds previously disbursed under the Contract;

3.1.4.4 terminate the Contract by delivering to Contractor a written notice of termination; and/or

3.1.4.5 take whatever other action at law or in equity may be necessary or desirable to enforce the obligations and covenants of Contractor under the Contract, including but not limited to the recovery of funds.

3.1.4.6 No delay in enforcing the provisions hereof as to any breach or violation shall impair, damage or waive the right of City to enforce the same or to obtain relief against or recover for the continuation or repetition of such breach or violation or any similar breach or violation thereof at any later time or times. In the event that City prevails against Contractor in a suit or other enforcement action under the Contract, Contractor agrees to pay the reasonable attorneys' fees and expenses incurred by City.

3.2 Terms of Payment

3.2.1 Invoices for services authorized under this Contract shall be submitted as "lump sum" after services are delivered and accepted, although the City may, at the City's sole option, provide partial payment for partial work completed.

3.2.2 For accounting purposes, all invoices shall contain a sufficient level of detail regarding all services provided and allowable expenses incurred, and be submitted to Eocene Environmental Group with supporting documentation by e-mail or US mail to: **Attn: Eocene Environmental Group; c/o Jon Reis, 5930 Grand Avenue, West Des Moines, Iowa 50266**.

3.2.3 City has the right, at its discretion, to deny payment for any work by any Contractor if the total actual expenses exceed the amount allowed by the project Contract, including any renewal extensions thereof. The Contractor is not obligated to continue performance of services under this Agreement or otherwise incur costs in excess of the total actual expense allowed unless an amendment to the Contract is approved, and the City notifies the Contractor, in a written amendment, of the City's acceptance of the revised total actual expense allowed.

3.2.4 All work is to be done in strict compliance with this RFB. The City may withhold payment for reasons including, but not limited to, the following: unsatisfactory job performance or progress, defective work, disputed work, failure to comply with material provisions of the Contract, third party claims filed or reasonable evidence that a claim will be filed or other reasonable cause.

******END OF SECTION******

SECTION IV

SERVICE REQUIREMENTS

4.0 Background

The City of Waterloo, Iowa, is seeking bids for asbestos abatement services for: **1442 Sycamore Street (Rath Buildings).**

4.1 Scope of Work

The City of Waterloo is seeking a qualified asbestos abatement contractor or contractors to remove asbestos containing material (ACM). Bidder shall be responsible to familiarize itself with the specifications included in this RFB and to make a personal examination of the job site(s) and the physical conditions that may affect its bidding and performance under the Contract.

The services to be performed under this Contract shall consist of the following:

4.1.1 All services must be performed in accordance with all applicable codes and ordinances of the City of Waterloo, Iowa, accepted professional standards and best practices, as well as all applicable Federal and State regulations, including but not limited to asbestos Statutes and Rules (published by the Iowa Department of Inspections, Appeals, & Licensing), 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP), as well as applicable State regulations of the Iowa Department of Natural Resources (Iowa DNR), and requirements of the Occupational Safety and Health Administration (OSHA). The Contractor shall hold and maintain an asbestos permit issued by the Iowa Department of Inspections, Appeals, & Licensing, and all personnel who perform work on the Project shall hold and maintain an Iowa asbestos Contractor/Supervisor or Worker license issued by the Iowa Department of Inspections, Appeals, & Licensing.

4.1.2 Remove ACM as identified in the asbestos surveys included in Exhibit “F”. Assess and reasonably ascertain if there is any ACM that was not identified in the asbestos surveys included in Exhibit “F”. Removal of any non-identified ACM will be done by change order amendment to the Contract. Costs associated with this Contract shall be “lump sum”. If the abatement Contractor requires additional inspection and testing, if it is based on it being missed by the survey contractor or not sufficiently identified by the survey contractor (as determined by the City’s Representative), then the costs associated with the additional inspection and testing shall not be the responsibility of the abatement Contractor. However, if the re-inspection(s) and testing are required for failure of the asbestos abatement Contractor to remove all ACM, and missed ACM was clearly identified in the survey (as determined by the City’s Representative), the abatement Contractor shall be responsible for payment to the survey contractor for any reinspection and testing fees as part of the “lump sum” costs of this Contract.

4.1.3 Document amounts of ACM removed from the structure.

4.1.4 Document ACM disposal at the Black Hawk County Landfill through the use of landfill tickets and provide copies to the project manager upon request.

4.1.5 At the request of the City given with reasonable advance notice, attend meetings of the City relative to the work set forth in this Agreement.

4.1.6 Provide other services as requested by the City as may be necessary to implement the asbestos abatement project.

4.1.7 Provide clearance certification that the structure(s) are clear of ACM and ready for demolition.

The Contractor shall investigate the environmental condition, including the presence, location, and condition of ACM. Any failure of the Contractor to acquaint themselves with available information will not relieve them from the responsibility for determining the difficulty or cost of successfully performing the work. No increase in Contract cost will be considered due to the Bidder's failure to physically verify all site attributes affecting the work, or other materials specified by the Contract Documents. The City is not responsible for any conclusions or interpretations made by the Bidder on the basis of the information made available by the City. The Contractor may have to demolish materials to gain access to some ACM. These items may include, but are not limited to interior walls (consisting of wood paneling, tile, block, drywall, plaster, brick, non-structural concrete, etc.), ceiling and floor demolition (acoustical ceiling tile, grid, electrical wiring, piping, glue pods and/or glued on ceiling tiles, floor tiles or other flooring, mechanical items, etc.); cabinets, shelves, dividers/cubicles/desks, furniture, piping, utilities, base boards, built-up roofing, etc.

4.2 Silence of Specifications – Commercially accepted practices shall apply to any detail not covered in this specification and to any omission of this specification. Any omission or question of interpretation of the specification that affects the performance or integrity of the service being offered shall be addressed in writing and submitted with the Bid.

4.3 The contractor that conducted asbestos surveys is not eligible to perform asbestos abatement on the same properties, and therefore is not eligible to bid on this RFB.

4.4 The Contractor shall complete the Project in an expeditious manner and shall commence work within ten (10) days after being notified by the City with a Notice to Proceed on any given property or properties. All work shall be completed and necessary reports and documentation provided within **the Contract Term** (anticipated to be approximately 30 weeks). If Contractor is prevented from timely completing the work because of circumstances beyond the Contractor's reasonable control as determined by the City, the time for completion of the work will be tolled for a period of time equivalent to the stoppage resulting from such circumstances. The Contractor does hereby expressly acknowledge and agree that **time is of the essence** of this Contract, and, thus, failure by the Contractor to timely render and perform services hereunder shall constitute a material breach of the Contract.

4.5 A mandatory walk thru will be required for 1442 Sycamore Street on Thursday, June 11, 2026 at 9:00 a.m. Bidders that do not have a representative in attendance at this walk thru are NOT eligible to bid on this contract. 1442 Sycamore Street is an abandoned commercial property, and has a sizable amount of debris in the building, and significant amounts of ACM to be abated. The building is multiple stories (as many as 7 stories in some locations) with approximately 900,000 square feet of floor area. It is expected that the walk thru will take a significant amount of time. A lunch break will be planned at noon with the walk thru continuing at 1pm. Additionally, there are two bid options: A) asbestos abatement of the entire structure, and B) asbestos abatement by area. There are three distinct areas for option B and they are shown on the Property Location Map in Exhibit "D". Asbestos sample location maps separated by area are included in Exhibit "G".

Please Note: Due to the amount of asbestos debris in some locations, it is recommended Bidder representatives have a respirator available to use. Additionally, the Property is not currently secure and accessing all areas may require careful methods (such as an extension ladder or lift). Use caution when entering the property.

******END OF SECTION******

SECTION V

METHOD OF EVAULATION

5.0 Contract Award - Any Contract award(s) made by the City of Waterloo is subject to prior approval by the City of Waterloo City Council.

5.0.1 Award of Contract shall be made to the most responsible and responsive bid from a Company or Companies whose bid offers the greatest value to the City with regard to the criteria detailed and the specifications set forth herein. The City may select a Bidder or Bidders based on an “all or none” bid, on individual responses, or as is otherwise deemed to be in the best interest of the City.

5.1 Financial Terms will not be the sole determining factor in the award. To determine the award, the City will award a contract to the Bidder or Bidders offering services and experience that best represents the overall value to the City.

5.2 Bid Evaluation Procedures

5.2.1 Each bid will be evaluated based on experience and the evaluators’ judgment of how well the bid addresses the City’s requirements. Each prospective company is assured that any bid submitted will be evaluated using the best available information and without any forgone conclusions.

5.2.2 Consideration will also be given to solicited written clarification provided during the evaluation process and input from staff or other persons judged to have useful expertise that should be considered in a responsible, fair assessment of the relative merits of each bid.

5.3 A Bidder’s submission of a bid constitutes its acceptance of this evaluation technique and its recognition and acceptance that subjective judgments will be used by the evaluators in the evaluation.

5.4 Following the evaluation process, the award process is as follows:

5.4.1 The evaluators shall determine which Bidder or Bidders have submitted the best bid using the criteria set forth above, and make its recommendation to the City Council.

5.4.2 The City Council considers a resolution awarding the Contract or Contracts and authorizing the Mayor to execute the Contract(s) on behalf of the City. **Note**, no Contract shall be deemed to be created and exist unless and until the City Council adopts a resolution awarding the Contract and authorizes the Mayor to sign the Contract.

5.4.3 The Mayor executes the Contract(s).

SECTION VI

GENERAL TERMS AND CONDITIONS

1. **LANGUAGE, WORDS USED INTERCHANGEABLY** - The word CITY refers to the CITY OF WATERLOO, IOWA throughout these Instructions and Terms and Conditions. Similarly, PROPOSER refers to the person or company submitting an offer to sell its goods or services to the CITY, and CONTRACTOR refers to the successful bidder.

2. **PROPOSER QUALIFICATIONS** - No Proposal shall be accepted from, and no Contract will be awarded to, any person, firm or corporation that is in arrears to the City upon debt or Contract, that is a defaulter, as surety or otherwise, upon any obligation to the City, or that is deemed irresponsible or unreliable by the City. If requested, Proposers shall be required to submit satisfactory evidence that they have a practical knowledge of the particular supply/service proposal and that they have the necessary financial resources to provide the proposed supply/service as described in this Request for Proposal.

3. **SPECIFICATION DEVIATIONS BY THE PROPOSER/ OFFEROR** - Any deviation from this specification MUST be noted in detail, and submitted in writing in the Proposal. Completed specifications should be attached for any substitutions offered, or when amplifications are desirable or necessary. The absence of the specification deviation statement and accompanying specifications will hold the Proposer strictly accountable to the specifications as written herein. Failure to submit this document of specification deviation, if applicable, shall be grounds for rejection of the item when offered for delivery. If specifications or descriptive papers are submitted with Proposals, the Proposer's name should be clearly shown on each document.

4. **COLLUSIVE PROPOSAL** - The Proposer certifies that the proposal submitted by said Proposer is done so without any previous understanding, agreement or connection with any person, firm, or corporation making a proposal for the same Contract, without prior knowledge of competitive prices, and it is, in all respects, fair, without outside control, collusion, fraud or otherwise illegal action.

5. **SPECIFICATION CHANGES, ADDITIONS AND DELETIONS** - All changes in Proposal documents shall be through written addendum. Verbal information obtained otherwise will **NOT** be considered in awarding of Proposals.

6. **PROPOSAL CHANGES** - Proposals, amendments thereto, or withdrawal requests received after the time advertised for Proposal opening, will be void regardless of when they were mailed.

7. **HOLD HARMLESS AGREEMENT** - The Contractor agrees to protect, defend, indemnify and hold harmless the City of Waterloo, its officers and employees, their agencies and agents, from any and all claims and damages of every kind and nature made, rendered or incurred by or in behalf of every person or corporation whatsoever, including the parties hereto and their employees that may arise, occur, or grow out of any acts, actions, work or other activity done by the Contractor, its employees, subcontractors or any independent contractors working under the direction of either the Contractor or subcontractor in the performance of this Contract.

8. **PROPOSAL REJECTION OR PARTIAL ACCEPTANCE** - The City reserves the right to reject any or all Proposals. The City further reserves the right to waive technicalities and formalities in Proposals, as well as to accept in whole or in part such Proposals where it is deemed advisable in protection of the best interests of the City.

9. **PROPOSAL CURRENCY/LANGUAGE** - All proposal prices shall be shown in US Dollars ($). All prices must remain firm for the duration of the Contract regardless of the exchange rate. All proposal responses must be submitted in English.

10. **PAYMENTS** - Payments will be made for all goods/services delivered, inspected and accepted within 45 days and on receipt of an original invoice and all necessary supporting documentation.

11. **MODIFICATION, ADDENDA & INTERPRETATIONS** - Any apparent inconsistencies, or any matter requiring explanation or interpretation, must be inquired into by the Proposer in writing at least one (1) week prior to the time set for the Proposal opening. Any and all such interpretations or modifications will be in the form of written addenda. All addenda shall become part of the Contract documents and shall be acknowledged and dated on the signature page.

12. **LAWS AND REGULATIONS** - All applicable State of Iowa and federal laws, ordinances, licenses and regulations of a governmental body having jurisdiction shall apply to the award throughout as the case may be, and are incorporated here by reference.

13. **SUBCONTRACTING** - No portion of this Proposal may be subcontracted without the prior written approval by the City.

14. **ELECTRONIC SUBMITTAL** - Telegraphic and/or proposal offers sent by electronic devices (e.g. facsimile machines) are not acceptable and will be rejected upon receipt. Proposing firms will be expected to allow adequate time for delivery of their proposal either by airfreight, postal service, or other means.

15. **CANCELLATION** - Either party may cancel the award in the event that a petition, either voluntary or involuntary, is

filed to declare the other party bankrupt or insolvent or in the event that such party makes an assignment for the benefit of creditors.

16. **ASSIGNMENT** - Proposer shall not assign this order or any monies to become due hereunder without the prior written consent of the City. Any assignment or attempt at assignment made without such consent of the City shall be void.

17. **EQUAL OPPORTUNITY** - The successful firm agrees not to refuse to hire, discharge, promote, demote, or to otherwise discriminate in matters of compensation against any person otherwise qualified solely because of age, race, color, religion, sex, sexual orientation, gender identity, marital status, national origin, citizenship status, disability, or veteran status.

18. **TAXES** - The City of Waterloo is exempt from sales tax and certain other use taxes. Any charges for taxes from which the City is exempt will be deducted from invoices before payment is made.

19. **PROPOSAL INFORMATION IS PUBLIC** – All documents submitted with any proposal and the proposal shall become public documents and subject to Iowa Code Chapter 22, which is otherwise known as the "Iowa Open Records Law". By submitting any document to the City of Waterloo in connection with a proposal, the submitting party recognized this and waives any claim against the City of Waterloo and any of its officers and employees relating to the release of any document or information submitted.

    Each submitting party shall hold the City of Waterloo and its officers and employees harmless from any claims arising from the release of any document or information made available to the City of Waterloo arising from any proposal opportunity.

******END OF SECTION******

SECTION 00 73 19

HEALTH AND SAFETY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Health and Safety requirements.

1.02 MEASUREMENT AND PAYMENT

A. Work specified in this section is included in the Contract price.

1.03 DESCRIPTION

A. Contractor is responsible for implementation and enforcement of safe work practices including, but not limited to, personnel exposure to refuse, hazardous materials; use of trenching, sheeting, and shoring; scaffolding; materials handling; operation of equipment; and safety of public during progress of work.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements:

1. Contractor shall plan for and ensure personnel comply with basic provisions of OSHA Safety and Health Standards (29 CFR 1910), and General Construction Standards (29 CFR 1926) as appropriate.
2. Comply with applicable laws and regulations of any public body having jurisdiction for safety of persons or property.

1.05 OPERATIONS AND EQUIPMENT SAFETY

A. Contractor is responsible for initiating, maintaining, and supervising safety precautions and programs in connection with work. Contractor shall take necessary precautions for safety of employees on project site and other persons and organizations who may be affected by project.

B. Contractor’s duties and responsibilities for safety in connection with work shall continue until such time as work is complete as applicable under the Contract.

1.06 HEALTH AND SAFETY

A. Contractor is responsible for implementation and enforcement of health and safety requirements, as well as compliance with all applicable state and federal laws, and will take necessary precautions and provide protection for following.

1. Personnel working on or visiting Project site, irrespective of employer.
2. Work and materials or equipment to be incorporated in work area on- or off-site.
3. Other property at or adjacent to Project site.

4. Public exposed to job related operations or potential release of toxic or hazardous materials.

B. Contractor shall prepare site-specific health and safety plan (HASP) following the requirements of 29-CFR 1910.120, and 29-CFR 1910.146. Such plan shall include appropriate measures for confined space entry as project conditions warrant. If Contractor does not have capability to prepare HASP, Contractor shall employ consultants with appropriate capabilities. Contractor is solely responsible for adequacy of HASP's preparation, monitoring, management, and enforcement. At minimum, Contractor's HASP shall address following.

1. Site description and history.
2. Project activities, including coordination with other Contractors.
3. Hazard evaluation.
4. On-site safety responsibilities.
5. Work zones.
6. Personnel training.
7. Medical monitoring.
8. Atmospheric monitoring.
9. Personal protection, clothing, and equipment.
10. Decontamination procedures.
11. Emergency procedures.

1.07 CONSULTANT'S RESPONSIBILITIES

A. When Consultant is required to be present on Project site to perform consulting services, Consultant will comply with Contractor's safety plans, programs, and procedures.

B. If Consultant determines Contractor's safety plans, programs, and procedures do not provide adequate protection for Consultant, Consultant may direct its employees to leave Project site or implement additional safeguards for Consultant's employees. If taken, these actions will be in furtherance of Consultant's responsibility to its own employees only, and Consultant will not assume responsibility for protection of any other persons affected by work.

C. If Consultant observes situations which appear to have potential for immediate and serious injury to persons, Consultant may warn persons who appear to be affected by such situations and shall advise Contractor and City of its actions. Such warnings, if issued, shall be given based on general humanitarian concerns, and Consultant will not, by issuance of any such warning, assume responsibility to issue future warnings or any general responsibility for protection of persons affected by work.

1.08 SUBMITTALS

A. Submit copies of Health and Safety Plan (HASP) to City and Consultant within 10 days after Notice to Proceed. Work on-site shall not proceed until HASP has been submitted.

1. Submittal of Contractor's HASP to Consultant is to inform Consultant and City so they can comply with HASP during performance of their on-site responsibilities as described in Contract Documents.
2. Submittal of Contractor's HASP shall neither impose on Consultant or City responsibility for adequacy of HASP nor relieve Contractor from full responsibility, therefore.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

****END OF SECTION****

SECTION 01 00 00

GENERAL REQUIREMENTS

ASBESTOS ABATEMENT
RATH BUILDINGS
1442 SYCAMORE STREET, WATERLOO, IOWA 50703

1. DEFINITION AND INTENT
2. GENERAL PROVISIONS AND COVENANTS
3. WORK REQUIRED
4. SALVAGE OF MATERIALS AND EQUIPMENT
5. PLANS AND SPECIFICATIONS
6. CONSTRUCTION FACILITIES
7. SUBMITTALS
8. STANDARDS AND CODES
9. DEFINITIONS
10. RIGHT-OF-WAYS
11. EMPLOYMENT PRACTICES
12. WORK HOURS
13. DUST ABATEMENT
14. QUANTITIES
15. MAINTENANCE BOND AND WARRANTY PERIODS (if required)
16. MEASUREMENT AND PAYMENT
17. INCIDENTAL CONTRACT ITEMS
18. EXISTING UTILITIES
19. PROJECT SUPERVISION
20. COORDINATION WITH OTHERS
21. CONSTRUCTION LIMITS
22. CONSTRUCTION SCHEDULE
23. DISPOSAL
24. TEMPORARY FENCES
25. RESPONSIBILITY OF CONTRACTOR
26. DAVIS-BACON WAGES
27. BUILD AMERICA, BUY AMERICA

1. DEFINITION AND INTENT

A. The Technical Specifications that apply to the materials and construction practices for this project are defined as follows:

1. Omissions of words or phrases such as “the Contractor shall”, “in accordance with”, “shall be”, “as noted on the Plans”, “according to the Plans”, “a”, “an”, “the” and “all” are unintentional; supply omitted words or phrases by inference.
2. “City” or “Jurisdiction” shall mean the City of Waterloo (City), or contracting agent.
3. “Person” shall mean any individual, partnership, limited partnership, joint venture, society, association, joint stock company, corporation, limited liability company, estate, receiver, trustee, assignee, or referee, whether appointed by a court or otherwise, and any combination of individuals.
4. “Consultant” shall mean City or designated agent.
5. The intent of the Technical Specifications is to describe the abatement desired, performance requirements, and standards of materials and abatement.
6. “Work” shall mean the work to be done and the equipment, supplies, and materials to be furnished under the Contract unless some other meaning is indicated by the context.
7. “Or equal” shall follow manufacturers names used to establish standards and, if not stated, is implied.

B. Consultant: Eocene Environmental Group, Inc., 5930 Grand Avenue, West Des Moines, Iowa 50266, (515) 473-6256.

2. GENERAL PROVISIONS AND COVENANTS

A. Procedures outlined herein are not intended to fully cover all special abatement procedures but are offered as an aid to the Contractor in planning work.

B. Cooperate with the City to minimize inconvenience to property owners, other jurisdictions and motorists and to prevent delays in abatement and interruption to continuous operation of utility services and site access.

C. The Contractor is expected to provide adequate personnel and equipment to perform work within specified time of abatement.

D. Install and maintain temporary fencing as required by OSHA or as needed to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage during construction operations. The fencing shall be located in an area approved by the City. Such fence shall be at least six feet high, consistently restrictive from top to grade, and without horizontal or vertical openings wider than four inches. The fence shall be of chain link material or similar material approved by the City. The fence must be maintained for the duration of the Work.

E. Access to the property will be, by agreement, via parcels owned by others. Contractor to work with private property owner and City and comply with agreement procedures regarding access. Access locations are shown on the Property Access and Staging Map in Exhibit “E”.

F. Staging areas will be on parcels owned by others by agreement. Contractor to work with private property owner and City and comply with agreement procedures regarding staging. Staging areas are shown on the Property Access and Staging Map in Exhibit “E”.

3. WORK REQUIRED

A. Work under this Contract includes all materials, equipment, transportation, labor, disposal and associated work for the asbestos abatement project.

B. This project may consist of one contract for all Work described, or may consist of multiple contracts for portions of Work described.

4. SALVAGE OF MATERIALS AND EQUIPMENT

A. No salvage of materials or equipment by the Contractor is allowed.

5. PLANS AND SPECIFICATIONS

A. Upon request, the Consultant will furnish 1 set of the Project Manual to the Contractor after award of the Contract.

6. CONSTRUCTION FACILITIES

A. Provide telephone numbers where Contractor's representative can be reached during workdays and on nights and weekends in event of emergency.

B. Power and water are disconnected and must be supplied by the Contractor.

C. Provide and maintain suitable sanitary facilities for abatement personnel for duration of Work; remove upon completion of Work.

D. Do not store abatement equipment, employee's vehicles, or materials on streets open to traffic. Location for storage of equipment by Contractors is subject to approval of City.

E. The Contractor shall provide suitable storage facilities necessary for proper storage of materials and equipment.

F. The Contractor will be required to make arrangements for all services required during the abatement period and pay for such services at no additional cost to the City.

7. SUBMITTALS

A. Provide abatement schedule showing dates of starting and completing various portions of Work. Abatement is to begin after execution of the contract (anticipated to be July 21, 2026, and must be completed on/by February 17, 2027.

B. Include all other submittals:

1. Copy of Iowa DNR 10-Day Notification (see Exhibit “I” – within 10 business days after Notice of Award)
2. Waste Manifests (no later than one (1) week after completion date)
3. Site-specific Health and Safety Plan (HASP) (within 10 business days after Notice of Award)
4. Certificate of Insurance (within 10 business days after Notice of Award)
5. Performance and Payment Bond (within 10 business days after Notice of Award)

6. Daily field reports (Monday following each work week)
7. Sign-in logs (Monday following each work week)
8. Davis-Bacon Payroll certifications for Contractor and subcontractor(s) (within one week following each week of Work)

8. STANDARDS AND CODES

A. Construct improvements with best present-day abatement practices and equipment.

B. Conform with and test in accordance with applicable sections of the following standards and codes.

1. Title 29 Code of Federal Regulations Section 1910.1001, General Industry Standard for Asbestos.
2. Title 29 Code of Federal Regulations Section 1926.1101, Construction Industry Standard for Asbestos.
3. Title 29 Code of Federal Regulations Section 1910.134, General Industry Standard for Respiratory Protection.
4. Title 29 Code of Federal Regulations Section 1910.2, Access to Employee Exposure and Medical Records.
5. Title 29 Code of Federal Regulations Section 1910.1200, Hazard Communication Rule.
6. Title 40 Code of Federal Regulations Part 61 Subpart A and Subpart M (revised Subpart B), National Emissions Standard for Hazardous Air Pollutants.
7. Iowa Administrative Code Section 875 Chapter 155, Asbestos Removal & Encapsulation.
8. Title 49 Code of Federal Regulations Part 171 - 180, Department of Transportation, Transportation of Hazardous Waste.

C. The following standards, regulations, codes and other applicable documents are additional requirements of asbestos abatement projects.

1. E.P.A. Guidance Document: Asbestos Waste Management Guidance (Blue Book).

D. The most recent edition of any relevant regulation, standard, document or code shall be in effect. Where conflict among the requirements or with these Specifications exists, the most stringent requirements shall be utilized.

9. DEFINITIONS

ABATEMENT: Procedures to control fiber release from asbestos containing materials. Includes removal, encapsulation, enclosure, and repair.

ACBM: Asbestos Containing Building Material.

ACM: Asbestos Containing Material

ACCREDITED: Refers to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Toxic Substance Control Act.

ADDENDA: are written or graphic instruments issued by the City prior to the execution of the Contract which modify or interpret the Bidding Documents by addition, deletions, clarifications or corrections.

ACGIH: American Conference of Governmental Industrial Hygienists, 3640 Park 42 Drive, Cincinnati, OH 45241.

AGGRESSIVE METHOD: Removal or disturbance of building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact ACM.

AHERA: Asbestos Hazard Emergency Response Act.

AIHA: American Industrial Hygiene Association, 3120 Fairview Park Drive, Suite 360, Falls Church, VA 22042.

AIR LOCK: A system for permitting passage with minimal air movement between a contaminated and an uncontaminated area.

ALTERNATE BID: (or alternate) is an amount stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the alternate bid.

AMENDED WATER: Water to which a surfactant has been added.

ANSI: American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036.

ASBESTOS CONTAINING WASTE MATERIAL: Asbestos containing material or asbestos contaminated objects requiring disposal.

ASTM: American Society for Testing and Materials, 100 Barr Harbour Drive, PO Box C700, West Conshohocken, PA 19428.

AUTHORIZED VISITOR: The City (and any designated representatives) and any representatives of a regulatory or other agency having jurisdiction over the project.

BASE BID: is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base bid.

BID: is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.

BIDDER: A person or entity who submits a bid.

BIDDING DOCUMENTS: Include the Instructions to Bidders, the bid form, other sample bidding and Contract forms, and the proposed Contract Documents including Addenda issued prior to receipt of bids.

BRAND METHOD: A differential pressure containment system that does not infringe on the patent rights of GPAC, Inc's Reduced Pressurization and Filtration System.

BUILDING OWNER: The City, or an authorized representative, is considered the building owner for the purposes of this Contract.

CEILING CONCENTRATION: The concentration of an airborne substance that shall not be exceeded.

CLASS I ASBESTOS WORK: Activities involving the removal of TSI and Surfacing ACM and PACM.

CLASS II ASBESTOS WORK: Activities involving the removal of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

CLASS III ASBESTOS WORK: Repair and maintenance operations, where ACM, including TSI and surfacing material is likely to be disturbed.

CLASS IV ASBESTOS WORK: Maintenance and custodial activities during which employees contact ACM and PACM, and activities to clean up waste and debris containing ACM and PACM.

CLEAN ROOM: An uncontaminated area which is a part of the worker decontamination containment system with provisions for storage of workers' street clothes and clean protective equipment.

COMPETENT PERSON: One who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them. In addition, for Class I and Class II work who is specially trained in a training course which meet the criteria of EPA's Model Accreditation Plan for project designer or supervisor, or its equivalent and, for Class III and Class IV work, who is trained in an Operations & Maintenance (O&M) course developed by EPA.

CONSULTANT: Eocene Environmental Group, Inc., 5930 Grand Avenue, West Des Moines, Iowa 50266.

CONTRACTOR: The individual(s) and/or business(es) that the City arranges to perform the asbestos abatement.

CURTAINED DOORWAY: A device to allow passage from one room to another while permitting minimal air movement between the rooms, by placing two overlapping sheets of plastic in doorway with both secured at top and opposite vertical edges. This doorway is to be used only by GPAC, Inc. approved licensees.

DECONTAMINATION CONTAINMENT SYSTEM: A series of connected rooms separated from the Work area and from each other by airlocks, for the decontamination of workers and equipment.

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

DISTURBANCE: Contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM or PACM, no greater than the amount which can be

contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained on one glove bag or waste bag which shall not exceed 60 inches in length and width.

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.

ENCLOSURE: An airtight, impermeable barrier made of enclosure material to control release of asbestos fibers from contaminated building surfaces.

ENCLOSURE MATERIAL: Polyethylene sheeting or spray applied water-based strippable coating.

EQUIPMENT ROOM: A contaminated area which is part of the worker decontamination containment system with provisions for storage of contaminated clothing and equipment.

EPA: U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460.

FRIABLE ASBESTOS: Asbestos containing material which can be crumbled to dust (when dry) under hand pressure.

HVAC: Heating, ventilation and air conditioning system.

HEPA FILTER: A High Efficiency Particulate Air filter capable of removing particles .3 microns in diameter with 99.97% efficiency.

HEPA VACUUM: A vacuum system equipped with HEPA filtration.

HOMOGENEOUS AREA: An area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

LEAD-BASED PAINT: Any paint or surface coating that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm2) or 0.5% by weight.

NEGATIVE EXPOSURE ASSESSMENT: A demonstration by the employer, that the employee exposure during an operation is expected to be consistently below the PEL's.

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

NIOSH: The National Institute for Occupational Safety and Health, CDC-NIOSH, Building J. N.E. Room 3007, Atlanta, GA 30033.

NIST: National Institute of Standards and Technology.

NPE: Negative Pressure Enclosure

OSHA: The Occupational Safety and Health Administration, 200 Constitution Avenue, Washington, D.C. 20210.

OWNER'S REPRESENTATIVE: Eocene Environmental Group, Inc., 5930 Grand Avenue, West Des Moines, Iowa 50266.

PACM: Presumed asbestos containing material.

PAT PROGRAM: Proficiency Analytical Testing Program.

PEL: Permissible Exposure Limit, for asbestos currently 0.1 f/cc for an 8-hour TWA.

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.

REMOVAL: The stripping of any asbestos containing material from surfaces or components of a facility.

REPAIR: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM attached to structures or substrates.

SHOWER ROOM: A room between the clean room and the equipment room in the worker decontamination containment with hot and cold or warm running water controllable at the top and suitably arranged for complete showering during decontamination.

STAGING AREA: Either the holding area or some area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the Work area.

STRIP: To take off friable asbestos materials from any part of the facility.

SURFACTANT: A chemical wetting agent added to water to improve penetration.

SUBCONTRACTOR: A individual or business that the Contractor has hired to complete a portion of the work on behalf of the Contractor. Contractor shall notify City of all intended subcontractors as part of bid proposal. All subcontractors shall also provide the required certificate of insurance. Any subcontractor must not be listed on the Federal list of excluded individual and entities and must be a registered contractor in the State of Iowa. Subcontractors not submitted as part of the Contractor’s bid must be approved by the City.

SUB-SUBCONTRACTOR: A individual or business that the Contractor or subcontractor has hired to complete a portion of the work on behalf of the subcontractor. Contractor shall notify City of all intended sub-subcontractors as part of bid proposal. All sub-subcontractors shall also provide the required certificate of insurance. Any sub-subcontractor must not be listed on the Federal list of excluded individual and entities and must be a registered contractor in the State of Iowa. Sub-subcontractors not submitted as part of the Contractor’s bid must be approved by the City.

TEM: Transmission electron microscope.

TIME WEIGHTED AVERAGE (TWA): The average concentration of a contaminant in air during a specific time period.

TSI: Thermal System Insulation.

UNIT PRICE: is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed Contract Documents.

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

WASTE GENERATOR: The individual and/or business who performs the asbestos abatement.

WASTE TRANSFER AIRLOCK: A decontamination system utilized for transferring containerized waste from inside to outside of the Work area.

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 water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

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

10. RIGHT-OF-WAYS

A. The project location is on public property. None of the Work will be within City right-of-way, though equipment may need to work from the right-of-way.

11. EMPLOYMENT PRACTICES

A. Neither the Contractor nor the Contractor's Subcontractors shall employ any person whose physical or mental condition is such that this employment will endanger the health and safety of anyone employed on the Project.

B. The Contractor shall not commit any of the following employment practices and agrees to include the following clauses in any Subcontracts:

1. To discharge from employment or refuse to hire any individual because of sex, race, color, religion, national origin, sexual orientation, marital status, age, or disability unless such disability is related to job performance of such person or employee.

2. To discriminate against any individual in terms, conditions, or privileges or employment because of sex, race, color, creed, religion, national origin, sexual orientation, gender identify, age, or disability unless such disability is related to job performance of such person or employee.

12. WORK HOURS

A. The Contractor will be required to limit the Contractor's Work hours on the Project from 7:00 a.m. to 6:00 p.m. Monday through Friday, unless otherwise directed by the Consultant. Contractor to specify work hours to the City and Consultant. Notice to work on weekends and Holidays must be presented to the City and Consultant at least 48 hours in advance and requires written permission from the City.

13. DUST ABATEMENT

A. The Contractor shall make all reasonable efforts to control dust and assure dust does not become a problem. Anytime ACM debris is disturbed, Contractor is required, at a minimum, to mist the area to minimize airborne fibers and ensure no visible emissions. The Consultant reserves the right to stop Contractor's operations whenever dust becomes a problem on the project and direct the Contractor to submit a revised operations plan to solve the dust problem.

14. QUANTITIES

A. The Contractor is to realize some of the quantities on this Project are best estimates and may vary from actual conditions at time of abatement of the Project. Quantities must be regarded as approximate only, and are given as a guide to the Bidder and for comparison of Bids. No additions to the Contract will be allowed for additional ACMs discovered that amount to less than 10% of the quantities identified in Exhibit "B". If additional amounts greater than 10% are identified, Contractor is to stop Work and notify the City and Consultant immediately.

15. MAINTENANCE BOND AND WARRANTY PERIODS (IF REQUIRED)

A. The requirements of the Performance and Payment Bond warranty period are modified as follows:

    1. To remedy any and all defects that may develop in or result from Work to be performed under the Contract within two years from the date of acceptance of the Work under the Contract, by reason of defects in workmanship or materials used in construction of said work.

16. MEASUREMENT AND PAYMENT

A. Contract unit or lump sum prices are full compensation for furnishing all materials, equipment, tools, transportation, and labor necessary to construct and complete each item of Work as specified. No separate payment will be made for Work included in this project. All additional Work not included in this project must be in writing as a detailed change order signed by the City.

17. INCIDENTAL CONTRACT ITEMS

A. The following list includes, but is not limited to, major items that are incidental to the project and will not be paid for as separate bid items. Other items may be designated as incidental under certain bid items.

- Capping any utilities
- Construction fencing
- Construction staging & phasing
- Coordination and cooperation with affected property owners

- Coordination and cooperation with the City
- Coordination and cooperation with other Contractors
- Coordination and cooperation with other projects in the area
- Coordination and cooperation with utility companies
- Dewatering and handling storm water flow during construction
- Dust control measures
- Excavation, verification and protection of existing utilities
- Monitoring weather conditions
- Protection of existing hydrant(s) and valve(s)
- Protection of existing trees and plantings to be left in place
- Protection of existing utilities and light poles
- Protection of historical and existing building elements to be left in place
- Removing and reinstalling existing signs
- Removal means and methods of hazardous materials (including slow unmanned elevator operations)
- Site cleanup/restoration
- Temporary safety closures
- Temporary street closure

18. EXISTING UTILITIES

A. Prior to construction, contact all utility companies and have all utility lines and services located. The Contractor is responsible for exposing utilities in order to confirm their locations ahead of the Work.

B. Contractor is solely responsible for damage to utilities or private or public property due to utility disruption.

C. The Contractor shall notify utility company immediately if utility infrastructure is damaged during abatement.

D. Contractor will contact and work with utility companies to relocate utility infrastructure in direct conflict with line and grade of the work during abatement. Support and protect all utilities that are not moved.

E. Protect and maintain services during abatement. Notify City and Consultant 48 hours prior to any planned utility service interruptions.

F. If utility Work does occur during the abatement period, Work schedules from the Contractor and from the utility companies will be submitted to the Consultant for coordination to obtain mutual acceptable schedules, if possible.

G. No claims for additional compensation or time extension will be allowed to the Contractor for interference or delay caused by utility companies.

19. PROJECT SUPERVISION

A. The Contractor shall be represented in person at the abatement site at all times that abatement operations are proceeding by a qualified supervisor or other designated, qualified representative capable of providing adequate supervision. The supervisor or representative must be duly authorized to receive and execute instructions, notices and written orders from the City or Consultant.

B. Issues that arise during abatement relating to traffic control and abatement staging, etc. are the responsibility of the Contractor.

C. Bi-weekly progress meetings, if specified at the preconstruction meeting, with the Contractor and Consultant will be held at the project site to review the updated project schedule and progress, coordinate activities, resolve conflicts and coordinate the abatement Work. The day and time for this meeting will be set at the preconstruction meeting.

20. COORDINATION WITH OTHERS

A. Cooperate and coordinate abatement with City, Consultant, utility companies, affected property Jurisdictions and other contractors working in vicinity of this project.

B. It is the Contractor′s responsibility to schedule and coordinate Work to minimize abatement delays and conflicts.

C. Coordinate with property owners prior to beginning Work that will affect their parcel.

21. CONSTRUCTION LIMITS

A. To the extent possible confine the construction operations within the property boundary.

B. Do not store equipment, vehicles or materials within the right-of-way of any streets open to traffic or on temporary access roads at any time.

C. Areas disturbed outside of abatement limits shall be restored at the Contractor’s expense to the satisfaction of the City.

D. Contractor shall park all vehicles, trailers and storage containers in designated areas only during the project.

22. CONSTRUCTION SCHEDULE

A. The Contractor will prepare and submit to the Consultant for approval a project schedule that will assure the completion of the project within the time specified.

B. Adequate equipment and forces shall be made available by the Contractor to start Work immediately upon receipt of the Notice to Proceed.

C. Submit abatement schedule at the preconstruction meeting and periodically update it as requested by the Consultant.

D. The Contractor shall be required to meet the final completion date as specified in the written Notice to Proceed.

E. If sidewalks are to be closed during abatement, submit a sidewalk closure plan that meets the ADA requirements to the Waterloo Engineering Department 48 hours prior to the scheduled closure. Contractor shall install necessary signing and barricades according to the approved closure plan.

F. Notify the City and property owners at least 48 hours prior to any street closures.

1. Notify all property owners, residential and business, affected by the street closures by written notice placed on the front door. Include the following items in the notice:

    a. The street name, location and proposed date of street closure

    b. The estimated schedule for completion of Work

c. The estimated date for reopening of the street

d. Procedure for garbage collection, recycling and postal service

23. DISPOSAL

A. Dispose of materials in accordance with applicable laws and ordinances. ACM must be disposed of at the Black Hawk County Landfill.

1. Burning of brush and other debris is not permitted.
2. Cooperate with all applicable county, state and federal agencies concerning disposal of materials.
3. The City has the first right to any excess materials from abatement.
4. No salvage of materials or equipment by the Contractor is allowed.

24. TEMPORARY FENCES

A. Contractor to install and maintain temporary fencing as required by OSHA or as needed to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations. The fencing shall be located in an area approved by the City. Such fence shall be at least six feet high, consistently restrictive from top to grade, and without horizontal or vertical openings wider than four inches. The fence shall be of chain link material or similar material approved by the City. The fence must be maintained for the duration of the Work.

25. RESPONSIBILITY OF CONTRACTOR

A. Supervision of the Work.

B. Protection of all property from injury or loss resulting from abatement operations.

C. Replace or repair objects sustaining any such damage, injury or loss to satisfaction of City.

D. Cooperate with City, Consultant, and representatives of utilities in locating utility lines and structures. Incorrect, inaccurate or inadequate information concerning location of utilities or structures shall not relieve the Contractor of responsibility for damage thereto caused by abatement operations. Contractor shall field verify all utility locations.

E. Keep cleanup current with abatement operations.

F. Comply with all federal, State of Iowa, and the City of Waterloo, Iowa laws and ordinances.

26. DAVIS-BACON WAGES

A. For the purposes of this Contract, the City of Waterloo has determined that all construction, alternation, and repair activity involving the remediation of hazardous substances is subject to Davis-Bacon Prevailing Wage Term and Condition. Davis-Bacon information is included in Exhibit “J”.

27. BUILD AMERICA, BUY AMERICAN

A. This project will utilize federal funding, and as such is a federal air project and subject to additional requirements and Contract provisions. The Build America, Buy American Act will apply.

******END OF SECTION******

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.01 PROJECT DESCRIPTION

A. Project: Rath Buildings
Asbestos Abatement
1442 Sycamore Street
Waterloo, Iowa 50703

B. City: City of Waterloo
Address: 715 Mulberry Street
Contact: Aric Schroeder
Phone: 319-291-4366
Email: aric.schroder@waterloo-ia.org

Consultant: Eocene Environmental Group, Inc.
Contact: Jon Reis
Address: 5930 Grand Avenue, West Des Moines, Iowa 50266
Phone: 515-473-6256
Email: jreis@eocene.com

C. The work includes removal and disposal of Asbestos Containing Materials (ACMs) from the former Rath Buildings located at 1442 Sycamore Street, Waterloo, Iowa 50703. The buildings are slated for demolition. Specifications for asbestos removal includes both friable and nonfriable ACMs. All ACMs removed from the property must be disposed of at the Black Hawk County Landfill. All materials removed from the property shall be done in accordance with local, state, and federal regulations. There are two bid options for the abatement: A) asbestos abatement of the entire structure, and B) asbestos abatement by area. There are threee distinct areas for Option B and they are shown on the Property Location Map in Exhibit “D”. Asbestos sample location maps separated by area are included in Exhibit “G”. The bid options are included in Exhibit “A”.

1.02 CONTRACTS

A. Perform Work under a lump sum cost contract with the City. Contractor may subcontract a portion or portions of Work as provided in these specifications to fulfill the terms of the Contract. A list of subcontractors and sub-subcontractors shall be submitted as part of the Contractor’s bid. Subcontractors and sub-subcontractors not submitted as part of the Contractor’s bid must be approved by the City. Under no circumstances does the subcontracted Work relieve the Contractor from fulfilling the terms of the Contract.

1.03 COMMENCEMENT OF THE WORK

A. The Contractor shall not commence Work nor allow Subcontractors or Sub-subcontractors to commence Work until:

1. The Agreement has been fully executed.
2. The City has approved the Contractor's Performance and Payment Bond, if required.
3. The City has approved evidence of the Contractor's Liability Insurance and other insurance required to be purchased by the Contractor (and any subcontractors). A complete description of the policy is required in addition to the City being listed as an additional insured.
4. The City has issued a Notice to Proceed.
5. The City has the right to postpone abatement or delay the construction schedule as it relates to the abatement.

1.04 COMPLETION TIME

A. Work under the proposed Contract Documents shall commence immediately after receipt of the Notice to Proceed and shall be completed and ready for use or operation, subject to any extension of time which may be granted by the City, as agreed upon with the City, as defined in the Contract as completed on/by February 17, 2027.

1.05 OWNER OCCUPANCY

A. The City shall have the right to take possession of and use any completed or partially completed portions of the building upon completion of clearance air testing, although it is not anticipated that the City would so occupy.

1.06 CONTRACTOR USE OF SITE AND PREMISES

A. General: Contractor shall have full use of premises for abatement operations, including use of project site, during the abatement period. Contractor's use of premises is limited only by City's right to perform Work or to retain other contractors on portions of project.

B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

C. Driveways and Entrances: Keep driveways, access easements, and entrances serving premises clear and available at all times. Do not use these areas for parking or storage of materials.

1.07 WORKING HOURS

A. The Contractor's hours of operations are as indicated in the General Requirements.

B. The Contractor must request to the City and Consultant, in writing, 48 hours in advance of any deviation to these hours, such as outside of specified Work hours, weekend, or Holiday Work. The Contractor is responsible for all additional expenses due to weekend or Holiday Work hours. This includes, but is not limited to: City's Consultant, Testing Laboratory personnel, etc. Such additional charges shall be a subsidiary obligation of Contractor. With the exception of additional charges incurred by the Consultant (which

the Contractor shall reimburse the City for), no extra payment shall be made by City on account of such overtime Work.

C. Contractor shall secure the site when not working or working after standard working hours.

1.08 WORK RESTRICTIONS

A. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by adjacent owners, tenants, or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated.

1. Notify City and utility service not less than 48-hours in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without utility service and City's written permission.

B. Haul Routes:

1. Notify City of all haul routes to disposal sites.
2. In accordance with Section 02 81 00 – Transportation and Disposal of Hazardous Materials.

1.09 WORK SEQUENCE

A. Coordinate abatement schedule and operations with City and Consultant.

1.10 PERMITS, FEES AND NOTICES

A. The Contractor shall secure and pay for all permits and governmental fees, licenses and inspections for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which were legally required at the time bids were received.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

******END OF SECTION******

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Materials Survey.
2. Meetings.
3. Submittals.

1.02 MEASUREMENT AND PAYMENT

A. Work specified in this section is included in the Contract price.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 MATERIALS SURVEY

A. Project is based on known items and quantities as of the time and date of this project manual. The Contractor is to verify all quantities identified within Exhibit “B” of the Project Manual. Costs for additional survey services shall be the responsibility of the Contractor.

3.02 PRECONSTRUCTION MEETING

A. City or Consultant will schedule a meeting after Notice of Award.

B. Attendance Required:

1. City.
2. Consultant.
3. Contractor – the Supervisor overseeing the project must attend.
4. Major Subcontractors.

C. Agenda:

1. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
2. Designation of personnel representing the parties in Contract and the Consultant.
3. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.

4. Use of premises by City and Contractor.
5. City's Requirements.
6. Facilities and controls provided by City.
7. Temporary utilities provided by City/Contractor.
8. Security and housekeeping procedures.
9. Scheduling.
10. Procedures for maintaining record documents.

D. Consultant shall record minutes and distribute copies within seven days after meeting to participants, with copies to City, participants, and those affected by decisions made.

3.03 NEIGHBORHOOD MEETING

A. Contractor will be required to attend a neighborhood meeting with City and Consultant after Notice of Award and prior to beginning Work.

3.04 PROGRESS MEETINGS

A. Contractor to schedule and administer meetings throughout progress of the Work on weekly intervals.

B. Contractor to make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies within seven days to Consultant, City, participants, and those affected by decisions made.

C. Attendance Required: Job superintendent, major Subcontractors and suppliers, City, Consultant, as appropriate to agenda topics for each meeting.

D. Agenda:

1. Review minutes of previous meetings.
2. Address public concerns and complaints.
3. Review of Work progress.
4. Field observations, problems, and decisions.
5. Identification of problems which impede planned progress.
6. Review of submittals schedule and status of submittals.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding Work period.
10. Coordination of projected progress.
11. Maintenance of quality and Work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

14. Schedule next meeting.

E. Contractor shall record minutes and distribute copies within seven days after meeting to participants, with copies to Consultant, City, participants, and those affected by decisions made.

3.05 SUBMITTALS

A. Required submittals are specified in individual sections.

3.06 NUMBER OF COPIES OF SUBMITTALS

A. Documents for Review:

1. Submit the number of copies which the Contractor requires, plus one copy which will be retained by the Consultant.

B. Documents for Information: Submit one copy.

3.07 SUBMITTAL PROCEDURES

A. Transmit each submittal with Contractor's standard submittal form, if provided.

B. Schedule submittals to expedite the project and deliver. Coordinate submission of related items.

3.08 RE-SUBMITTALS

A. Re-submittals will be handled in the same manner as first submittals. On re-submittals, direct specific attention, in writing on the transmittal letter and on re-submitted shop drawings by use of revision triangles or other similar methods, to revisions other than the corrections requested by the Consultant, on previous submissions. Any such revisions which are not clearly identified shall be made at the risk of the Contractor. Make corrections to any Work done because of this type revision that is not in accordance to the Contract Documents as may be required by the Consultant.

******END OF SECTION******

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Temporary abatement facilities for Consultant and Contractor including telephone, water, sanitary, security, temporary fencing, parking and field office.
2. Requirements to minimize pollution of air, water, or land, control of noise, and the disposal of solid waste materials.
    a. Solid waste disposal.
    b. Control of chemical waste.
    c. Control of dust.
    d. Control of noise.
    e. Protection of roadways.

1.02 MEASUREMENT AND PAYMENT

A. Work specified in this section is included in the Contract price.

1.03 QUALITY ASSURANCE

A. Items provided under this section shall be listed and labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term “NRTL” shall be as defined in OSHA Regulation 1910.7.
2. Terms “listed” and “labeled” shall be as defined in National Electrical Code, Article 100.

B. Comply with federal, state, and local codes and regulations, and with utility company requirements.

1.04 SUBMITTALS

A. Submit in accordance with Section 01 30 00 – Administrative Requirements.

PART 2 PRODUCTS

2.01 TEMPORARY UTILITIES

A. Contractor shall provide and pay for all electrical power and lighting required for abatement purposes unless otherwise notified by Consultant.

2.02 TEMPORARY TELEPHONE SERVICE

A. A cellular phone shall be acceptable as temporary phone service. Provide telephone number(s) at which responsible representatives of Contractor can be reached evenings, weekends and holidays.

2.03 TEMPORARY WATER SERVICE

A. Contractor shall provide and pay for water service and all water used unless otherwise notified by Consultant.

2.04 TEMPORARY SANITARY FACILITIES

A. Contractor to provide and maintain temporary toilet facilities and enclosures for Contractor's workers, Consultant's personnel, and City's personnel working at project site. Provide at time of project mobilization and maintain until project completion.

B. Portable toilets with hand sanitizer shall be acceptable. Comply with all applicable codes and regulations. Arrange for regular cleaning and/or replacement of portable toilets.

C. Maintain daily in clean and sanitary condition.

2.05 TEMPORARY FENCE AND GATES

A. Provide temporary fencing as required by OSHA or as needed to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

B. The fencing shall be located in an area approved by the City. Such fence shall be at least six feet high, consistently restrictive from top to grade, and without horizontal or vertical openings wider than four inches. The fence shall be of chain link material or similar material approved by the City. The fence must be maintained for the duration of the Work.

2.06 FIELD OFFICES AND BUILDINGS

A. If desired by Contractor, erect where designated by Consultant, and maintain in good condition, temporary field office, tool, and storage building(s) for Contractor's use. Buildings are not required and cost is incidental to the project.

1. Tool storage building(s) shall be of ample size to provide space for tools and equipment.

2. Building(s) shall be neat and well-constructed, surfaced with plywood, drop siding, Masonite or other similar material, well painted and void of advertisements.

PART 3 EXECUTION

3.01 GENERAL

A. Employ and utilize environmental protection methods, obtain all necessary permits, and fully observe all local, state, and federal regulations. Contractor shall be responsible for any and all fines imposed by any regulatory agency due to the Contractors activities.

3.02 WATER CONTROL

A. Conform to the regulations and requirements of legally authorized surface water management agencies.

B. Protect site from puddling or running water. Provide water barriers as required to protect property from water damage.

C. Water utilized for asbestos removal must me containerized and properly disposed of at a permitted facility unless field filtered in accordance with local, state and federal regulations.

3.03 SOLID WASTE DISPOSAL

A. Contractor Generated:

1. Collect solid waste on a daily basis.
2. Solid waste generated off-site shall not be brought onto or accepted at the site as part of this Contract.
3. Refer to individual specification sections for disposal requirements for other solid waste, debris, and ACM.

3.04 CONTROL OF DUST

A. The control of dust shall mean that no abatement activity shall take place without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne so that it remains visible beyond the limits of abatement.

B. Utilize methods and practices of abatement to eliminate dust in full observance of agency regulations.

C. The Consultant will determine the effectiveness of the dust control program and may request the Contractor to provide additional measures, at no additional cost to City.

3.05 PROTECTION OF AIR QUALITY

A. Minimize air pollution by requiring use of properly operating combustion emission control devices on abatement vehicles and equipment and encourage shutdown of motorized equipment not in use.

B. Do not burn trash or waste at Project site.

3.06 CONTROL OF NOISE

A. There is an existing noise ordinance (City Code of Waterloo Iowa, Title 4, Chapter 5, Noise Control). No operation of tools or equipment between 11:00 p.m. and 7:00 a.m. or on Sundays or Holidays without written permission of the City. Work hours on the Project are limited to between 7:00 a.m. to 6:00 p.m. Monday through Friday, unless otherwise directed by the Consultant.

B. Conduct operations to cause least annoyance to residents in vicinity of Work and comply with applicable local ordinances.

C. Equip compressors, hoists, and other apparatus with mechanical devices necessary to minimize noise and dust. Equip compressors with silencers on intake lines.

D. Equip gasoline or oil-operated equipment with silencers or mufflers on intake and exhaust lines.

E. Route vehicles carrying soil, debris, or other material over such streets as will cause least annoyance to public and do not operate on public streets outside of times specified in General Requirements.

3.07 PROTECTION OF ROADWAYS & PARKING AREAS

A. Contractor is responsible for maintenance and restoration of public roads used for hauling of materials and equipment to and from the site.

B. Contractor shall clean debris resulting from operations on the haul roads on a daily basis, or as instructed by the Consultant.

C. The Contractor shall not utilize local storm sewer inlets to wash and remove debris from the haul roads.

D. All hauling operations on- and off-site shall be completed in a manner that minimizes deposition of litter and debris on adjacent roadways.

3.08 SECURITY

A. Contractor must leave the property secured to protect Work, existing facilities, and City's operations from unauthorized entry, vandalism, or theft. City is not responsible for vandalism or theft to Contractor's property.

B. Coordinate with City's police department and fire department.

3.09 CLEAN UP

A. Building:

1. Contractor is to remove any debris generated from the abatement on daily basis and may not stockpile job related materials in common areas of the building during the project.

3.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities and materials prior to Final Application for Payment inspection.

B. Clean and repair damage caused by installation or use of temporary Work.

3.11 COMPLETION OF WORK

A. Upon completion of Work, leave area in a clean, natural looking condition.

B. Remove all signs of temporary construction and activities incidental to construction of required permanent Work.

****END OF SECTION****

SECTION 02 81 00

TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Requirements for the transportation and disposal of materials generated during this project which require off-site disposal and/or treatment. Materials that will or may be found on-site requiring off-site recycling or disposal include:

   a. Rubbish, trash, and miscellaneous garbage.

   b. Asbestos containing materials (ACM).

   c. Miscellaneous building debris and rubble.

B. Furnish all labor, equipment, materials and incidentals required to transport all materials required to be recycled or disposed of off-site.

1.02 MEASUREMENT AND PAYMENT

A. Work specified in this section is included in the Contract price.

1.03 SUBMITTALS

A. Within 10 days after Notice to Proceed:

1. Names and locations of all facilities proposed to be used for the disposal of materials off-site.

2. Acceptance criteria, if any for each type of waste stream at each facility proposed.

3. Sampling and analytical criteria, if any, for each type of waste stream at each facility proposed.

4. Any other restrictions which may be imposed by each of the proposed facilities.

5. Proposed transportation routes and alternate transportation routes to each disposal facility.

B. As the Work proceeds:

1. Blank sample of shipping documents and disposal manifests for each type of waste stream a minimum of three days prior to their proposed date of use.

2. Copies of all waste profile forms, waste disposal manifests, and bills of lading required by the disposal facilities.

3. Copies of certificates of disposal, destruction, treatment, recycling as applicable and as issued by the disposal facility following acceptance and final disposition of the various waste streams.

C. At Contract Closeout:

1. Summary spreadsheet of all waste hauled from the site, quantities, and identification of the disposal facility.

1.04 QUALITY ASSURANCE

A. Ensure each facility possess all necessary permits required for accepting and disposing of wastes and that these permits are current.

B. Use only disposal facilities previously approved by City for performance of Work.

C. Contractor shall have responsibility to meet requirements of these Specifications, and acceptance of bid does not constitute nor imply approval of proposed off-site waste disposal facility(ies). City shall have right to deny approval of any/all facility(ies) that does not comply with these Specifications.

D. City may schedule inspections of disposal facility, as appropriate, to assess compliance status.

E. In event that identified and approved facility ceases to accept stated waste materials or facility ceases operations, it is Contractor's responsibility to locate alternate approved and permitted facility for accepting waste materials. Contractor is responsible for making necessary arrangements to utilize facility, and alternate facility must be approved by City in same manner and with same information as for original facility.

F. Originate, maintain, and provide City or Consultant with copies of waste shipment manifest records for all waste materials transported off-site. Contractor shall verify nature and quantity of wastes shipped on each load. Manifest forms and records shall be consistent with requirements of RCRA, U.S. DOT regulations, and state requirements. City shall be designated generator for purposes of transport manifest.

1. Provide City with written documentation verifying receipt of each load at designated treatment or disposal facility and verification of proper treatment or disposal.

2. Notify City immediately if Contractor fails to receive "Notification of Receipt" of any waste shipment within reasonable time frame approved by City or Consultant. Contractor shall undertake whatever actions are necessary to determine status of shipment and remedy situation.

1.05 REFERENCE STANDARDS

A. Comply with all applicable federal, state and local laws, codes and ordinances which govern or regulate waste transportation and disposal. Regulations regarding transportation and final disposal of wastes at minimum include but are not limited to the following:

B. United States Federal Government – Code of Federal Regulations (CFR)

1. 29 CFR Occupational Safety and Health Standards
2. 49 CFR 387 (46 CFR 30874, 47073)
3. Department of Transportation DOT-E 8876
4. 40 CFR 136 Guidelines Establishing Test Procedures for Analysis of Pollutants

5. 40 CFR 261 Identification and Listing of Hazardous Waste
6. 40 CFR 262 Standards Applicable to Generators of Hazardous Waste
7. 40 CFR 263 Standards Applicable to Transporters of Hazardous Waste
8. 40 CFR 264 Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
9. 40 CFR 265 Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal
10. 40 CFR 266 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
11. 40 CFR 268 Subparts (C) and (D) Land Disposal Restrictions
12. 40 CFR 279 Standards for the Management of Used Oil
13. 49 CFR 107 Hazardous Materials Program Procedures
14. 49 CFR 171 General Information, Regulations and Definitions
15. 49 CFR 172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information and Training Requirements
16. 49 CFR 173 Shippers – General Requirements for Shipments and Packaging
17. 49 CFR 177 Carriage by Highway
18. 49 CFR 178 Specifications for Packaging

PART 2 PRODUCTS

2.01 PACKING MATERIALS

A. Provide all of the materials and equipment required for packaging, labeling, placarding and transportation of waste streams from the site in conformance with department of transportation, federal, state and local regulations.

PART 3 EXECUTION

3.01 NOTIFICATION

A. Notify all applicable federal, state and local representatives, or any other authority which has jurisdiction over the mode and route of transport, in advance of commencing waste stream transport. Obtain all required approvals from those parties having jurisdiction over the transport.

3.02 MANIFESTING

A. Provide and prepare manifests as required for the transportation and disposal of the waste streams from the site. Waste manifests shall be completed in a form acceptable

to the state and federal regulatory agencies. After completion by the Contractor, all waste manifests shall be signed by the City or Consultant.

3.03 LABELING

A. Upon removal of all contaminated materials, properly label all containers or transports prior to transporting these materials for disposal. Contractor shall be responsible for labeling all containers and transports in accordance with applicable federal and state regulations.

3.04 TRANSPORTATION AND ENTRY/EXIT REQUIREMENTS

A. Transport all waste streams from the site in conformance with department of transportation, federal, state and local regulations governing the type of waste stream being transported. This includes, but not limited to, requirements for operator training and requirements for packaging, labeling, marking, placarding of various waste shipments.

B. All waste streams shall be transported directly to the disposal facility from the site. Neither the route nor the mode of transportation shall deviate from the routes submitted to the City without prior written approval from the City or Consultant.

C. Inspect existing roadways immediately adjacent to the site and document their condition prior to project start-up. Any/all repairs or improvements, including permits and/or approvals, to accommodate off-site transportation of wastes shall be responsibility of Contractor. Provide documentation to City or Consultant prior to any hauling operations.

D. Document all entry/exit procedures for transports in Off-Site Transportation and Disposal Plan and shall instruct and provide written instructions to all transporters as to these procedures. Contractor shall see that all personnel are provided with adequate protective equipment in accordance with Contractor’s health and safety plan.

3.05 LOADING OF MATERIALS INTO TRANSPORT CONTAINERS

A. Waste streams will be loaded into transport containers in a manner which minimizes the spilling of materials. Materials which have been segregated on site shall not be mixed in transport containers unless characterized as same waste type. Waste streams shall be secured in transport containers in accordance with the regulations which govern the transportation of these materials. At a minimum, each load of excavated material must be covered prior to leaving the site. Materials shall be loaded into transport containers in manner which does not damage any polyethylene sheeting or other protective liner installed. Transport vehicles shall not be driven over waste streams stockpiled on site or contaminated material which will be excavated during the completion of the Work.

B. Furnish, install, and maintain any on-site temporary loading facilities as required.

C. Provide equipment, personnel, and on-site facilities necessary to handle and load waste materials designated for off-site transport.

D. Ensure that all waste materials loaded for off-site transportation have been accurately identified and are in compliance with appropriate state and federal regulations.

E. Each container shall be visually inspected upon loading to ensure it is properly sealed and there are no signs of spillage or leakage. All vehicles hauling bulk wastes from the site shall be inspected by the Contractor prior to leaving the site. Contractor shall certify proper containerization for each transporter leaving the site.

F. Containers found to be leaking or bulk transports found leaking shall not be loaded until source of leaking is located and source contained. Area where leaking occurred, and any contaminated equipment shall be decontaminated.

G. Contractor shall be responsible for any and all cleanup activities involving waste spilled in transit or during loading operations and shall be at the Contractor's expense.

H. Contractor shall be responsible for verifying appropriate container sizes for off-site disposal in accordance with Federal Department of Transportation (DOT), state, and local regulations. Any requirements and expenses for oversize load are Contractor's responsibility.

3.06 HAULING REQUIREMENTS

A. Implement hauling or transport schedule which minimizes congestion on and around site.

B. Obtain and prepare manifest forms, obtain waste code numbers, and complete waste shipment records as required by State of Iowa and 40 CFR 261 for verifying waste type and quantity of each load transported off-site. Manifest form shall be verified by City or Consultant and copies of each manifest retained by City or Consultant following shipment.

C. City or Consultant will provide hazardous waste generator identification number and/or EPA identification number (for hazardous waste only) pursuant to 40 CFR 261 for use on manifest, if required.

D. City or Consultant will sign hazardous waste manifest as generator.

E. Transport waste from site only to those facilities listed on manifest.

F. Routes and timing must be coordinated with City and appropriate state regulatory agencies. All highway and road restrictions shall be adhered to by Contractor.

G. Use transporter(s) approved by City. Any use of substitute or additional transporters shall have previous approval of the City.

3.07 VEHICLE DECONTAMINATION

A. Decontaminate transport vehicles and containers in a designated decontamination area prior to their leaving the site. Decontamination shall include the removal of material on the tires and axles of trucks and any other material on the vehicle as a result of loading operations.

3.08 OFF-SITE DISPOSAL

A. Dispose of ACM at the Black Hawk County Landfill. No change in disposal facility for any type of waste stream shall be allowed without prior written approval of the City or Consultant.

******END OF SECTION******

SECTION 02 82 00

ASBESTOS REMEDIATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Removal, Cleanup and Disposal of Asbestos Containing Material (ACM).
2. Applicable Standards and Guidelines.

1.02 MEASUREMENT AND PAYMENT

A. The asbestos quantities shown in Exhibit “B” are approximate only but are considered sufficiently adequate for the purpose of comparing bids. The Contractor is responsible for verification of all materials and quantities listed in Exhibit “B”. Asbestos abatement bids will be for all asbestos identified within Exhibit “B”. No additions to the Contract will be allowed for additional ACMs discovered that amount to less than 10% of each material listed below. If additional amounts greater than 10% are identified, Contractor is to stop Work and notify the City and Consultant immediately.

1.03 DESCRIPTION

A. The work includes removal and disposal of Asbestos Containing Materials (ACMs) from the former Rath Buildings located at 1442 Sycamore Street, Waterloo, Iowa 50703. The buildings are slated for demolition. Specifications for asbestos removal includes both friable and nonfriable ACMs. All ACMs removed from the property must be disposed of at the Black Hawk County Landfill. All materials removed from the property shall be done in accordance with local, state, and federal regulations. There are two bid options for the abatement: A) asbestos abatement of the entire structure, and B) asbestos abatement by area. There are threee distinct areas for Option B and they are shown on the Property Location Map in Exhibit “D”. Asbestos sample location maps separated by area are included in Exhibit “G”. The bid options are included in Exhibit “A”.

1. Contractor is responsible for verifying all quantities identified in Exhibit “B”.
2. No additional compensation will be made for materials not included in Contractor’s bid.

1.04 REFERENCE STANDARDS

A. Title 29, Code of Federal Regulations, Sections 1910.1001, 1910.134, 1910.2, 1910.1200 and 1926.58. Occupational Safety and Health Administration (OSHA), US Department of Labor.

B. Title 40, Code of Federal Regulations, Part 61, Subparts A and M, National Emission Standards for Hazardous Air Pollutants. U.S. Environmental Protection Agency.

C. Title 40, Code of Federal Regulations, Part 763, Subparts E and G, Asbestos Abatement Project.

D. Chapter 88B of the Code of Iowa, removal or Encapsulation of Asbestos.

E. Chapter 81 of the Iowa Administrative Code, Asbestos Control Procedures, Iowa Bureau of Labor.

F. Iowa Bureau of Labor Guidelines for removal of Asbestos, Chapter 155.

G. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

H. Title Code of Federal Regulations Part 763, Asbestos Containing Materials in Schools.

I. EPA Guidance Document: Asbestos Waste Management Guidance (Blue Book).

1.05 SUBMITTALS

A. Pre-Abatement – to be received within 10 business days after Notice of Award. City will not compensate for project start delays due to late submittals.

1. Provide City and Consultant with a copy of written notification to federal and state agencies (Iowa DNR 10-Day Notification).

2. Submit a list of all personnel who will be involved in the abatement activity including, supervisors, workers, and any other personnel or agent who may be responsible for any aspect of the abatement activities. The list shall include all personnel's Asbestos Abatement Certification numbers and expiration dates. No personnel may be on-site if not certified.

3. Submit a list of all subcontractor personnel who will be involved in the Work. The list shall include applicable required licenses/certifications.

4. Submit shop drawings for layout and construction of decontamination enclosure systems and barriers for isolation of the Work areas detailed in this Specification and required by applicable regulations if necessary.

B. Abatement activities:

1. Contractor shall submit, as required by the City, job progress reports detailing abatement activities.

2. Contractor shall keep daily copies of Work site entry logbooks with information on worker and visitor access. This must include the names and certification numbers and an outline of Work accomplished by those who enter. Daily field reports must be provided to the Consultant the Monday following each work week.

3. Contractor shall submit a copy of emergency procedures.

4. Contractor shall record a log of all personnel who enter the Work area which will be made available to the City or Consultant upon request. Sign-in logs to be provided to the Consultant the Monday following each work week.

5. Submit copies of all transport manifests, trip tickets and disposal receipts for all asbestos waste materials removed from the Work area during the abatement process to the Consultant within seven (7) calendar days of completion of project.
6. The Project will not be considered complete until all submittals are received by the City, which will affect payment for the project.

1.06 QUALITY ASSURANCE

A. Asbestos Firm Qualifications: An experienced firm that has specialized in asbestos abatement Work similar in size and scope to that indicated for this project.
   1. Asbestos abatement workers must be licensed by the Iowa Department of Inspections, Appeals, & Licensing for the purpose of removal, encapsulation, enclosure, demolition, and maintenance of structures or components covered by or composed of asbestos containing materials.

B. Regulatory Requirements: Comply with governing OSHA, Iowa DNR and U.S. EPA notification regulations before beginning renovation or demolition activities. Comply with hauling and disposal regulations of authorities having jurisdiction.

C. Preconstruction Meeting: Attend meeting at project site if required by City.

PART 2 PRODUCTS

2.01 MATERIALS

A. The Contractor shall provide all materials and supplies necessary to complete the project.

B. Store all materials so as to prevent damage or contamination.

C. Damaged or deteriorating materials shall not be used.

D. Containment materials shall be a minimum of six mil thick for walls and covering stationary objects. Containment materials for floors and other uses, including hauling, shall be at least six mil in thickness.

E. Disposal bags shall be a minimum of six mil in thickness, pre printed with labels as required by 40 CFR 61.22(j)(3)(i)(C) and 49 CFR Part 172.

F. Disposal drums shall be metal or fiberboard with locking ring tops. Stick on labels conforming to (E) shall be applied.

G. Warning signs as specified by OSHA 29 CFR 1910.1001(j)(1)(ii) shall be used.

H. Surfactant shall be a 50/50 mixture of polyoxyethyleneether and polyoxyethylene ester, or equivalent, mixed 1 fluid ounce to 5-gallon proportion, or as specified by the manufacturer.

2.02 EQUIPMENT

A. General

1. The Contractor shall supply all tools and equipment necessary to complete the project.
2. A sufficient quantity of HEPA filtered air filtration units must be utilized to maintain required air exchanges.
3. Full body disposable protective clothing impenetrable to asbestos shall be provided to authorize personnel as needed.
4. Approved safety equipment shall be provided as needed.
5. Equipment needed to complete the project such as scaffolds (may not be wood per the Fire Prevention Bureau (FPB) Policy 2011-3), ladders, and hand tools, and other tools shall be provided as needed.
6. HEPA filtered vacuums shall be available as needed during the project.

B. Respiratory Equipment

1. Respiratory protection in compliance with applicable OSHA regulations shall be provided.
2. For Class I work, the abatement workers and supervisors shall wear, at a minimum, powered air-purifying respirators with appropriate HEPA filters until such time that personal and short-term excursion limit samples show airborne asbestos levels of 0.3 f/cc or less. After these levels are achieved, the abatement workers and supervisors may switch to 1/2 face negative pressure respirators. If airborne asbestos levels reach a level of over 0.3 f/cc, PAPR's must again be utilized.

C. Protective Clothing

1. Disposable clothing, including head and foot protection, shall be provided by the Contractor in sufficient quantities and adequate sizes for all workers and authorized visitors.
2. Launderable clothing, if required, shall be provided by the Contractor in sufficient quantities and adequate sizes for all workers and authorized visitors.
3. Hard hats, 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.

PART 3 EXECUTION

3.01 EXAMINATION

A. Survey existing conditions and correlate with requirements indicated to determine extent of asbestos abatement required.

B. Contractor to verify all quantities of ACM identified in Exhibit “B”.

3.02 PREPARATION

A. The Contractor shall post signs at all entrances to the job site, or 20 feet from the Work area at 30-foot intervals around the perimeter of the job site. Contractor must leave the property secured to protect the Work area.

B. The Contractor will shut off and lock out all electric power feeding the job site. The Contractor will then provide temporary power together with ground fault circuit interrupters to supply the electrical needs of the project.

C. All alterations to the Work area for purposes of containment set up or removal shall be the responsibility of the Contractor unless agreed upon previously with the City.

D. The Contractor will shut down and lock out all HVAC systems that supply or pass through the Work area. Seal all vents with tape and two layers of six mil polyethylene (poly).

E. The Contractor will arrange for sanitary facilities for abatement personnel outside the Work area and maintain them in a sanitary condition.

F. The Contractor is responsible for providing water for project purposes.

G. The Contractor will preclean all movable objects in the Work area and remove them to an uncontaminated area.

H. The Contractor shall preclean all fixed objects and surfaces in the Work area. After precleaning, enclose fixed objects in at least six mil poly sheeting and seal securely with tape. Use the precleaning form in this specification to record the date, method, area, and identity of the supervisor.

I. The Contractor shall cover floors in the work area with two layers of six mil poly. Floor material shall extend at least 12 inches up side walls. Seams that may allow leakage will be minimized and staggered.

J. The Contractor shall cover walls in the work area with two layers of six mil poly. Wall material shall overlap floor materials by at least 12 inches.

K. The Contractor shall provide a worker decontamination system where workers will enter and exit the work area.

L. Any negative pressure containment must be smoke tested at the beginning of every shift and documented. Negative pressure containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water.

M. Asbestos diagrams and field forms are included in Exhibit “H”.

3.03 GENERAL PROCEDURES

A. Removal of ACM

1. Wet all asbestos containing material with water or an amended water solution using equipment capable of providing a fine spray mist, in order to reduce airborne fiber concentrations when the material is disturbed. Saturate the material, however, do not allow excessive water to accumulate in the Work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal. Wetting

procedures are not equally effective on all types of asbestos containing materials but shall be used in all cases.

2. Saturated asbestos containing material shall be removed in manageable sections. Removed material should be containerized before moving to a new location for continuance of Work. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up.
3. Material removed from each Work area shall not be dropped or thrown into disposal trucks or bins. Material should be removed as intact sections or components whenever possible and carefully lowered to the truck or bin container.
4. Area air sampling will be completed randomly during abatement. Following the completion of abatement and passing of a visual inspection, final clearance air monitoring samples will be collected from each containment area. All air samples will be analyzed using Phase Contrast Microscopy (PCM).
5. All Contractor staff working within a regulated area must have documentation of a negative exposure assessment for the type of work being performed from the previous 12 months. Personal air sampling may be completed by the Contactor in the absence of a negative exposure assessment. If a previous negative exposure assessment has not been completed, personal air sampling must be completed within seven days of beginning Work.
6. Each Work area shall be cleaned until it is free of ACM and/or contaminated debris or until approved by Consultant. Consultant will be on-site to conduct visual survey of each Work area that has been abated and will also collect PCM final clearance air monitoring samples. Should any visible reside remain, including nails or staples, it will be assumed to be asbestos and the Work area will be recleaned by the Contractor and reinspected. A visual inspection form will be signed by the Contractor and Consultant following passing of a visual inspection. If PCM air monitoring samples fail, Contractor will be responsible for recleaning the Work area and removing porous materials from Work area prior to a retesting.
7. Following passing of a visual inspection and PCM final clearance air samples, if collected – will be for interior containments, the containment material may be removed upon notification from the Consultant.

B. Disposal of ACM

1. As the Work progresses, to prevent exceeding available storage capacity on-site, sealed and labeled containers of asbestos containing waste shall be removed and transported to the prearranged disposal location.
2. Disposal must occur at an authorized site in accordance with regulatory requirements of NESHAPS and applicable state and local guidelines and regulations.
3. All Waste Shipment Records shall be delivered to the City. A recommended record keeping format utilizes the Waste Shipment Record (WSR) which includes the names and addresses of the Generator (City), Contractor, Transporter, and Disposal

Site, the estimated quantity of the asbestos waste and the type of containers used. The form should be signed by the Contractor, the Transporter and the Disposal Site Operator, as the responsibility for the material changes hands. Instructions can be found with the Waste Shipment Records.

4. The Contractor and Transporter should retain a copy of the WSR upon completing their portion of it. The Disposal Site Operator should retain a copy and return a completed copy to the Generator within 45 days of the ACM leaving the Project Area.
5. All ACM that is readied for transport must be labeled with the name of the waste generator and the location at which the waste was generated. The Contractor is responsible for providing the label.
6. Once debris have been removed from the Work area, they shall be loaded into a lined or enclosed truck for transportation.
7. The enclosed cargo area of the truck shall be free of debris and lined with six mil poly sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the side walls. Wall sheeting shall be overlapped and taped into place.
8. Any debris or residue observed on containers or surfaces outside of the Work area resulting from cleanup or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet methods as appropriate.

3.04 ABATEMENT PROCEDURES

A. Class I Work

1. Removal of Asbestos Containing Materials

a. The Contractor shall wet all asbestos materials with amended water and saturate it to the substrate. Saturate the asbestos material sufficiently so that at no time will there be fiber release from dry asbestos. Misting or spraying may be used to assist in fiber settling.

b. Immediately following removal, wet asbestos shall be packed into bags or drums. Seal containers and move them to the waste container airlock. Bags should not be overfilled. Asbestos waste with sharp components shall be contained in drums before removal from the Work area.

c. Asbestos material shall not be dropped or thrown to the floor. Material should be removed as intact sections or components whenever possible and carefully lowered to the floor If this cannot be done for materials greater than 50-feet above the floor, a dust-tight chute shall be constructed to transport the material to containers on the floor or the material may be containerized at elevated levels (e.g., on scaffolds) and carefully lowered to the ground by mechanical means. For materials between 15 and 50 feet above the ground, they may be containerized at elevated levels or dropped onto inclined chutes or scaffolding for subsequent collection and containerization.

d. Upon being lowered to the ground, unwrapped material shall be transferred to a closed receptable in such a manner as to preclude the dispersion of dust.

e. Bags of asbestos waste shall be removed from Work area at the end of each shift to prevent water leakage.

f. Surfaces from which asbestos was stripped shall be brushed or hand cleansed until no visible asbestos residue remains.

g. Special circumstances (e.g., live electrical equipment or live steam lines) may prohibit the adequate use of wet methods to reduce fiber concentrations. For these situations, a dry removal may be required. The Contractor will have to acquire special permits, different from those mentioned herein from the NESHAP enforcement agency.

h. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

2. Clean-up Procedures

a. Collect and containerize all visible accumulations of asbestos containing materials and debris.

b. Wet clean all surfaces in the Work area using rags, mops, or sponges, as appropriate.

c. Remove all containerized waste from the Work area and waste container airlock.

d. Decontaminate and remove all unnecessary tools and equipment.

e. Inspect the Work area for visible residue. If any accumulation of residue is observed, it will be assumed to asbestos and the Work area shall be recleaned.

f. Apply a thin coating of an encapsulating agent to all surfaces in the Work area to seal in non-visible residue. The Contractor shall verify the compatibility of any encapsulating agent with future replacement material.

B. Class II Asbestos Work - Flooring

1. Resilient flooring shall be removed by wetting the sharp point where the material will be cut and during delamination. Rip-up of resilient flooring is prohibited.

2. Mechanical chipping is prohibited unless performed in an NPE.

3. Tiles shall be removed intact unless the employer demonstrates that intact removal is not possible.

4. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

C. Class II Asbestos Work - Roofing

1. Roofing material shall be removed intact to the extent possible.

2. Cutting machines shall be continuously misted during use, unless misting substantially decreases worker safety.

3. All loose dust left from cutting operations must be immediately HEPA vacuumed.
4. Unwrapped or unbagged roofing material must immediately be lowered to the ground via covered, dust-tight chute, crane or hoist, or wrapped in plastic sheeting and lowered to the ground no later than the end of the Work shift.
5. Upon being lowered to the ground, unwrapped material shall be transferred to a closed receptacle in such a manner as to preclude the dispersion of dust.
6. Roof level heating and ventilation air intake sources shall be isolated or the ventilation system shall be shut down.
7. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

D. Class II Asbestos Work - Siding, shingles, or transite panels
1. Cutting, abrading, or breaking of these materials shall be prohibited unless the employer can demonstrate that other methods less likely to release asbestos fibers cannot be used.
2. Each panel or shingle shall be sprayed with amended water prior to removal.
3. Unwrapped or unbagged panels or shingles must immediately be lowered to the ground via covered, dust-tight chute, crane or hoist, or wrapped in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the Work shift.
4. Nails shall be removed intact. If determined they are not able to be removed intact, Contractor may cut with flat, sharp instruments.
5. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

E. Class II Asbestos Work - Gaskets
1. If a gasket is unlikely to be removed intact, removal shall be undertaken within a glovebag.
2. The gasket shall be thoroughly wetted with amended water prior to removal.
3. The wet gasket shall immediately be placed in a disposal container.
4. Any scraping to remove residue must be performed wet.
5. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

F. Class II Asbestos Work - Other
1. The material must be thoroughly wetted with amended water prior to removal.
2. The material shall be removed in an intact manner unless the employer demonstrates that intact removal is not possible.

3. Cutting, abrading, or breaking of these materials shall be prohibited unless the employer can demonstrate that other methods less likely to release asbestos fibers cannot be used.
4. ACM removed, shall be immediately bagged or wrapped, or kept wetted until transferred to a closed receptacle, no later than the end of the Work shift.
5. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

G. Class III Asbestos Work

1. Work shall be performed using wet methods.
2. To the extent feasible, the Work shall be performed using local exhaust ventilation.
3. Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of TSI or surfacing material, the employer shall use impermeable drop cloths, and shall isolate the area using mini-containments or glovebags.
4. The employer shall contain the area using impermeable drop cloths and plastic barriers or their equivalent, or shall build an NPE.
5. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

H. Class IV Asbestos Work

1. ACM or PACM debris will be promptly cleaned using wet methods and/or HEPA vacuuming.
2. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.
3. In areas where friable TSI or surfacing materials are located, waste and debris must be assumed to contain asbestos.

3.05 GLOVEBAG PROCEDURES

A. Glovebagging may not be performed on pipes whose temperature exceeds 150 degrees Fahrenheit.

B. The regulated areas are to be established and all removal workers are to wear appropriate respirators and protective clothing.

C. At least two persons shall perform the work on each individual glovebag.

D. A protective shroud of at least six mil poly shall be placed under the glovebag area. A plastic barrier shall be utilized if the glovebag area is occupied.

E. Loose and friable material adjacent to the glovebag is to be wrapped and sealed in two layers of six mil poly.

F. Glove bags must be installed so that they completely cover the pipe or other structure where asbestos removal work is to be done. Glove bags shall be installed by cutting the sides of the glove bag to fit the size of the pipe form which asbestos is to be removed.

The glove bag is attached to the pipe by folding the open edges together, stapling them, and securely sealing them with tape. All openings in the glove bag must be sealed with duct tape or equivalent to prevent any leakage from the bag.

G. Each glove bag is to be smoke tested after installation on the pipe prior to beginning removal. Smoke testing will be done by the Consultant or Contractor by inserting the smoke tube through a small hole in the glove bag. The glove bag is then filled with smoke, the tube is removed, and the hole patched with duct tape. The glove bag is then squeezed. If smoke escapes from the glove bag, the leak is to be sealed. Removal may begin after approval by Consultant or documentation of adequate smoke testing by the Contractor.

H. The employees who are performing the asbestos removal with the glove bag must don at least a half mask dual-cartridge HEPA filtered respirator and wear disposable protective clothing. Respirators should be worn by employees who are in close contact with the glove bag and who may thus be exposed as a result of small gaps in the seams of the bag or holes punched through the bag by a razor knife or a piece of wire mesh.

I. A HEPA filtered vacuum is to be inserted into the glovebag and left running continuously during the glovebag removal.

J. The material to be removed must be adequately wetted with a wetting agent prior to removal. The removed asbestos material from the pipe or other surface must be thoroughly wetted with a wetting agent (applied with a sprayer wand inserted through a small hole cut in the bag with an airtight seal).

K. A wetting agent must then be used to spray any layer of dry material that is exposed beneath the mesh, the surface of the stripped underlying structure, and the inside of the glove bag.

L. After removal of the layer of asbestos containing material, the pipe or surface from which asbestos has been removed must be thoroughly cleaned with a brush and wet wiped with a wetting agent until no traces of the asbestos containing material can be seen.

M. Any asbestos containing insulation edges that have been exposed as a result of the removal or maintenance activity must be encapsulated with bridging encapsulant to ensure that the edges do not release asbestos fibers to the atmosphere after the glove bag has been removed.

N. When the asbestos removal and encapsulation have been completed, the bag may be removed from the pipe and sealed with tape to keep the asbestos materials safely in the bottom of the bag. The glove bag must then be double bagged in a labeled six mil poly bag, sealed, and removed from the Work area to be disposed of properly.

3.06 SCOPE OF WORK

A. Adhesive Removal (Panel)

1. Remove the asbestos containing adhesive. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a

minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

The asbestos containing material is to be wetted before and during removal. The adhesive is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

B. Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper

1. Remove the asbestos containing asphalt shingles, ceiling covering, ceiling covering tar, and cork tar paper. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The asphalt shingles are to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

C. Caulk Removal (Exterior/Roof)

1. Remove the asbestos containing caulking. All asbestos removal Work is to be done as per this specification. The Contractor is to drape one layer of six mil poly on the ground around the perimeter of the building. The poly is to be draped in such a manner as to catch any asbestos debris that may be caused by the removal process.

   The asbestos containing material is to be wetted before and during removal. The caulking is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must

immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

D. Caulk Removal (Interior)

1. Remove the asbestos containing caulking. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The caulk is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

E. Cement Board/Transite Wall Panel Removal

1. Remove the asbestos containing cement board/transite wall paneling. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The cement board/transite wall paneling is to be removed intact to the extent possible. Nails or staples shall be removed intact. If determined they are not able to be removed intact then the Contractor may cut with flat, sharp instruments. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal

from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

F. Chalkboard Removal

1. Remove the asbestos containing chalkboards. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The chalkboards are to be removed intact to the extent possible. Nails or staples shall be removed intact. If determined they are not able to be removed intact then the Contractor may cut with flat, sharp instruments. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

G. Duct Sealant Removal

1. Remove the asbestos containing sealant. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The duct sealant is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil

poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

H. Elevator Equipment Removal

1. Remove the asbestos containing elevator equipment. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The elevator equipment is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

I. Expansion Joint Removal

1. Remove the asbestos containing expansion joint. All asbestos removal Work is to be done as per this specification. The Contractor is to drape one layer of six mil poly on the ground around the perimeter of the building. The poly is to be draped in such a manner as to catch any asbestos debris that may be caused by the removal process.

   The asbestos containing material is to be wetted before and during removal. The expansion joint is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

J. Felt & Felt-Wrapped Pipe Insulation Tar

1. Remove the asbestos containing felt & tar. All asbestos removal work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A full and functional three chamber decontamination unit must be

attached to the containment.

The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

The asbestos containing material is to be wetted before and during removal. The pipe where the felt & tar are in place is to be double wrapped in six mil poly. The pipe is then to be cut in areas where there is no felt or tar. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

K. Fire Door Removal

1. Remove the asbestos containing fire doors. All asbestos removal work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The asbestos containing material is to be wetted before and during removal. The fire doors are to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

L. Floor Debris Removal

1. Remove the asbestos containing floor debris – including pipe insulation, steamer insulation, aircell pipe insulation, and duct wrap. All asbestos removal is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A full and functional three chamber decontamination unit must be attached to the containment.

   The asbestos containing material is to be wetted before and during removal. The floor debris is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods,

HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

M. Floor Tile Mastic Removal

1. Remove the asbestos containing floor tile mastic. All asbestos removal is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The asbestos containing material is to be wetted before and during removal. The floor tile mastic is to be removed intact to the extent possible. If the asbestos containing floor tile mastic is located beneath carpet, all critical barriers and negative air enclosures must be operational prior to carpet removal. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

N. Floor Tile Removal

1. Remove the asbestos containing floor tile. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The asbestos containing material is to be wetted before and during removal. The floor tile is to be removed in an intact manner if possible. If the asbestos containing floor tile mastic is located beneath carpet, all critical barriers and negative air enclosures must be operational prior to carpet removal. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with

six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

O. Heater/Tank Insulation Removal

1. Remove the asbestos containing heater/tank insulation. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A full and functional three chamber decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The heater/tank insulation is to be removed in an intact manner if possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

P. Pipe Insulation/Duct Wrap Removal (Containment)

1. Remove the asbestos containing pipe insulation/duct wrap. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A full and functional three chamber decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The pipe where the insulation and duct wrap are in place is to be double wrapped in six mil poly. The pipe is then to be cut in areas where the is no insulation or wrap. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

Q. Pipe Insulation/Duct Wrap Removal (Glovebag)

1. Remove the asbestos containing pipe insulation/duct wrap. All asbestos removal Work is to be done using the glovebag removal method per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The Contractor is to drape one layer of six mil poly on the ground immediately underneath the removal area. If more than 20 linear feet of ACM pipe insulation is being removed in any one functional space, Contractor must place the area under negative pressure as described in this specification. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water A full and functional three chamber decontamination unit must be attached to the containment.

   Before beginning Work, each glovebag shall be inspected for breaches and smoke-tested for leaks, and any leaks sealed. The asbestos containing pipe insulation/duct wrap is to be removed intact to the extent possible. The asbestos pipe insulation/duct wrap is to be well wetted with amended water before disturbance and removal. During removal the asbestos containing pipe insulation should continue to be wetted with amended water to avoid visible emissions. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

R. Roofing Material Removal

1. Remove the asbestos containing roofing material. All asbestos removal Work is to be done as per this specification. The asbestos containing material is to be wetted before and during removal. The roofing material is to be removed intact to the extent possible. Roof level heating and ventilation air intake sources shall be isolated, or the ventilation system shall be shut down.

   Cutting machines shall be continuously misted during use, unless misting substantially decreases worker safety. All loose dust left from cutting operations must be immediately HEPA vacuumed. Unwrapped or unbagged roofing material must immediately be lowered to the ground via covered, dust-tight chute, crane or hoist, or wrapped in plastic sheeting and lowered to the ground no later than the end of the Work shift. Upon being lowered to the ground, unwrapped material shall be transferred to a closed receptacle in such a manner as to preclude the dispersion of dust.

   The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. All disposal containers must be cleaned prior to removal. If the Contractor is using barrels, barrels must be lined with

six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

S. Tar (Roof) Removal

1. Remove the asbestos containing roof tar. All asbestos removal Work is to be done as per this specification. The asbestos containing material is to be wetted before and during removal. The roof tar is to be removed intact to the extent possible. Roof level heating and ventilation air intake sources shall be isolated, or the ventilation system shall be shut down.

   Cutting machines shall be continuously misted during use, unless misting substantially decreases worker safety. All loose dust left from cutting operations must be immediately HEPA vacuumed. Unwrapped or unbagged roofing material must immediately be lowered to the ground via covered, dust-tight chute, crane or hoist, or wrapped in plastic sheeting and lowered to the ground no later than the end of the Work shift. Upon being lowered to the ground, unwrapped material shall be transferred to a closed receptacle in such a manner as to preclude the dispersion of dust.

   The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. All disposal containers must be cleaned prior to removal. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

T. Tar (Wall/Cork Insulation) Removal

1. Remove the asbestos containing tar. All asbestos removal Work is to be done as per this specification. The Contractor is to remove all movable objects in the containment area. All objects which must remain in the containment areas are to be sealed with a minimum of one layer of six mil poly. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A single cell decontamination unit must be attached to the containment.

   The floor(s) in the containment area are to have a minimum of two layers of six mil poly.

   The asbestos containing material is to be wetted before and during removal. The tar is to be removed intact to the extent possible. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

U. Transite Panel – Corrugated (Exterior) Removal

1. Remove the asbestos containing corrugated transite paneling. All asbestos removal Work is to be done as per this specification. The Contractor is to drape one layer of six mil poly on the ground around the perimeter of the building. The poly is to be draped in such a manner as to catch any asbestos debris that may be caused by the removal process.

   The asbestos containing material is to be wetted before and during removal. The corrugated transite paneling is to be removed intact to the extent possible. Nails or staples shall be removed intact, if determined they are not able to be removed intact than the Contractor may cut with flat, sharp instruments. The Contractor is responsible for cleaning up the ACM debris in the removal area by wet methods, HEPA-filtered vacuums, or a combination of each. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. All disposal containers must be cleaned prior to removal from the contained area. If the Contractor is using barrels, barrels must be lined with six mil poly and properly sealed and labeled. The asbestos containing material is to be disposed of at the Black Hawk County Landfill.

******END OF SECTION******

EXHIBIT A – Signature Page

EXHIBIT "A"

ASBESTOS ABATEMENT
RATH BUILDINGS
1442 SYCAMORE STREET, WATERLOO, IOWA 50703

SIGNATURE PAGE

The undersigned Proposer/Bidder, having examined these documents and having full knowledge of the condition under which the work described herein must be performed, hereby proposes that they will fulfill the obligations contained herein in accordance with all instructions, terms, conditions, and specifications set forth; and that they will furnish all required services and pay all incidental costs in strict conformity with these documents for the stated process as payment in full.

The City shall award one or more Contracts to the responsible Bidder(s) whose bid, conforming to the Specifications and without regard to whether the bid is made on a per-Option or a total basis, is most advantageous to the City of Waterloo, price and other factors considered. The City reserves the right to award a contract for any single Option, any combination of Options, or all Options together.

OPTION A: asbestos abatement and disposal of the entirety of the former Rath Buildings located at 1442 Sycamore Street:

> **Our bid, for asbestos abatement and disposal of the entirety of the former Rath Buildings located at 1442 Sycamore Street is, not to exceed:**
>
> **Total "lump sum" bid: $_____**

Total in written form: _____

OPTION B: asbestos abatement and disposal by area of the former Rath Buildings located at 1442 Sycamore Street:

> **Our bid, for asbestos abatement and disposal by area of the former Rath Buildings located at 1442 Sycamore Street is, not to exceed:**
>
> **Total "Area 1" bid: $_____**
> **Total "Area 2" bid: $_____**
> **Total "Area 3" bid: $_____**

Total for Area 1 in written form: _____

Total for Area 2in written form: _____

Total for Area 3 in written form: _____

Submitting Firm: _____

Address: _____

City: _____ State: _____ Zip: _____

Authorized Representative (print) _____

Authorized Representative Signature _____

Date : _____ Email: _____

Phone: _____ Fax: _____

EXCEPTIONS/DEVIATIONS to this Request for Bid shall be listed in writing on an attached document provided by the Bidder. Please be as specific as possible. Please check one:

____ Our company has **no** exceptions/deviations.
____ Our company **does** have exceptions/deviations which are listed on an attached document.

SUBCONTRACTORS AND SUB-CONTRACTORS to this Request for Bid shall be listed in writing on an attached document provided by the Bidder. Please be as specific as possible. Please check one:

____ Our company has **no** subcontractors or sub-subcontractors.
____ Our company **does** have subcontractors or sub-subcontractors which are listed on an attached document.

GENERAL INFORMATION. Freight and/or delivery charges, if any, shall be included in the price.

FIRM PRICING. Offered prices shall remain firm for a minimum of sixty (60) days after the due date of this solicitation unless indicated otherwise. Accepted prices shall remain firm for the duration of the Contract.

ADDENDA (It is the Bidder's responsibility to check for issuance of any addenda). The authorized representative herby acknowledges receipt of the following addenda:

Addenda Number _____ Date _____ Addenda Number _____ Date _____

☐ We choose not to bid at this time but would like to be considered for future requests for bid

EXHIBIT B – Bid Items and Quantities

EXHIBIT "B"

ASBESTOS ABATEMENT
RATH BUILDINGS
1442 SYCAMORE STREET, WATERLOO, IOWA 50703

BID ITEMS AND QUANTITIES

The Quantities shown below are approximate only but are considered sufficiently adequate for the purpose of the Project Manual and comparing bids. The Contractor is responsible for verification of all materials and quantities listed below. No additions to the Contract will be allowed for additional ACMs discovered that amount to less than ten percent (10%) of each material listed below. If additional amounts greater than ten percent (10%) are identified, Contractor is to stop work and notify the City and/or City's consultant immediately. No compensation for removal of suspect ACMs without prior authorization by City and/or City's consultant will be approved. All materials and quantities are subject to revision by the City. The first table is the list of ACM throughout the entire structure. The second table separates out the ACM by area to assist with bidding Option B.

ASBESTOS CONTAINING MATERIALS SAMPLE LIST (ENTIRE STRUCTURE)

Material Substance	Location	Asbestos Content	Est. Quantity
Pipe Insulation	Basement; 1st Floor; 2nd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile	Basement: 355 LF 1st Floor: 65 LF 2nd Floor: 255 LF 4th Floor: 655 LF 5th Floor: 665 LF 6th Floor: 910 LF 7th Floor: 295 LF Total: 3,200 LF
Heater Insulation	Basement	30% Chrysotile	25 SF
Felt-Wrapped Pipe Insulation Tar and Felt	Roof (& 5th Floor and 7th Floor)	30% Chrysotile	1,100 LF
Door Caulk	Elevator Doors – All Floors West Exterior Loading Dock SW Exterior Loading Dock	5% Chrysotile 10% Chrysotile 1.2% Chrysotile	Elevator: 280 LF West Loading Dock: 8 LF SW Loading Dock: 10 LF
Pipe Insulation Debris / Steamer Insulation Debris / Aircell Pipe Insulation Debris / Duct Wrap Debris	Basement; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	10% Amosite 20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile 20% Chrysotile 70% Chrysotile	Basement: 600 SF 2nd Floor: 1,500 SF 5th Floor: 2,500 SF 6th Floor: 650 SF 7th Floor: 5,500 SF Total: 10, 750 SF

Material Substance	Location	Asbestos Content	Est. Quantity
Transite Wall Panels	4th Floor; 6th Floor; 7th Floor	15% Chrysotile	4th Floor: 200 SF 6th Floor: 4,300 SF 7th Floor: 1,300 SF Total: 5,800 SF
Duct Sealant	6th Floor	2% Chrysotile	550 LF
Aircell Pipe Insulation	Basement; 1st Floor; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	20% Chrysotile 70% Chrysotile	Basement: 600 LF 1st Floor: 250 LF 2nd Floor: 40 LF 5th Floor: 540 LF 6th Floor: 200 LF 7th Floor: 55 LF Total: 1,685 LF
Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	Basement; 1st Floor; 2nd Floor; 3rd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	15% Chrysotile 10% Chrysotile 5% Chrysotile 2% Chrysotile 3.6% Chrysotile 8% Chrysotile 7% Chrysotile 3% Chrysotile	Basement: 35,200 SF 1st Floor: 13,850 SF 2nd Floor: 55,200SF 3rd Floor: 66,950 SF 4th Floor: 38,900 SF 5th Floor: 9,600 SF 6th Floor: 5,500 SF 7th Floor: 3,950 SF Total: 229,150 SF
Tank Insulation	2nd Floor	30% Chrysotile	100 SF
9” x 9” Green Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 5% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	4,500 SF
12” x 12” Brown Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 2% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	100 SF
Corrugated Transite Panels	Exterior	15% Chrysotile	Northwest Office Roof: 2,700 SF SW Rail Dock Wall: 300 SF
Old Caulk	Exterior – North Street Level Windows	15% Chrysotile	30 LF
Roofing Tar	All Roofs	8% Chrysotile	6,000 SF
Roofing Caulk	Roof A	5% Chrysotile	60 LF
Roofing Material	Roof E	10% Chrysotile	12,200 SF
Expansion Joint	Exterior – North A12 (Behind Vertical Metal Seams)	3% Chrysotile	400 LF
Chalkboard	6th Floor; 7th Floor	15% Chrysotile	6th Floor: 20 SF 7th Floor: 50 SF
Wall Tar	5th Floor – HVAC Crawl Space	10% Chrysotile	750 SF

Material Substance	Location	Asbestos Content	Est. Quantity
Panel Adhesive	Basement; 1st Floor; 2nd Floor; 3rd Floor	10% Chrysotile	Basement: 360 SF 1st Floor: 700 SF 2nd Floor: 500 SF 3rd Floor: 10,800 SF Total: 12,360 SF
Duct Wrap	Basement	80% Chrysotile 70% Chrysotile	500 LF
Cement Board	1st Floor – North Room, North Wall – Top Half	20% Chrysotile	750 SF
Cork Insulation Tar	7th Floor – Middle Room, South Portion Walls; 3rd Floor –Northeast Room Ceiling	3% Chrysotile 2% Chrysotile	7th Floor: 4,700 SF 3rd Floor: 17,100 SF Total: 21,800 SF
Possible Fire Doors (Assumed)	Throughout	N/A (Assumed)	70 Doors
Elevator Equipment (Assumed)	Throughout	N/A (Assumed)	6 Elevator

NOTE: IT IS UNDERSTOOD THAT THE QUANTITIES OF ACMS DOCUMENTED WITHIN THIS PROJECT MANUAL ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF BID.

_____

Bidder Name

ASBESTOS CONTAINING MATERIALS SAMPLE LIST (AREA 1)

Material Substance	Location	Asbestos Content	Eocene Estimated Quantity
Pipe Insulation	Basement; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile	Basement: 135 LF 2nd Floor: 10 LF 5th Floor: 665 LF 6th Floor: 465 LF 7th Floor: 140 LF Total: 1,415 LF
Heater Insulation	Basement	30% Chrysotile	Basement: 25 SF
Door Caulk	Elevator Doors – All Floors	5% Chrysotile	Elevator: 280 LF
Pipe Insulation Debris / Steamer Insulation Debris / Aircell Pipe Insulation Debris / Duct Wrap Debris	Basement; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	10% Amosite 20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile 20% Chrysotile 70% Chrysotile	Basement: 600 SF 2nd Floor: 1,500 SF 5th Floor: 2,500 SF 6th Floor: 570 SF 7th Floor: 5,500 SF Total: 10,670 SF
Aircell Pipe Insulation	Basement; 1st Floor; 5th Floor; 6th Floor; 7th Floor	20% Chrysotile 70% Chrysotile	Basement: 600 LF 1st Floor: 100 LF 5th Floor: 440 LF 6th Floor: 200 LF 7th Floor: 55 LF Total: 1,395 LF
Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	Basement; 1st Floor; 2nd Floor; 3rd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	15% Chrysotile 10% Chrysotile 5% Chrysotile 2% Chrysotile 3.6% Chrysotile 8% Chrysotile 7% Chrysotile 3% Chrysotile	Basement: 6,850 SF 1st Floor: 6,770 SF 2nd Floor: 19,980 SF 3rd Floor: 32,280 SF 4th Floor: 33,600 SF 5th Floor: 9,520 SF 6th Floor: 4,990 SF 7th Floor: 2,250 SF Total: 116,240 SF
9” x 9” Green Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 5% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	2nd Floor: 4,500 SF

Material Substance	Location	Asbestos Content	Eocene Estimated Quantity
12" x 12" Brown Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 2% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	2nd Floor: 100 SF
Old Caulk	Exterior – North Street Level Windows	15% Chrysotile	Exterior: 30 LF
Roofing Tar	All Roofs	8% Chrysotile	Roof: 2,000 SF
Chalkboard	7th Floor	15% Chrysotile	7th Floor: 50 SF
Panel Adhesive	1st Floor	10% Chrysotile	1st Floor: 700 SF
Duct Wrap	Basement	80% Chrysotile 70% Chrysotile	Basement: 500 LF
Cork Insulation Tar	3rd Floor – Northeast Room Ceiling	2% Chrysotile	3rd Floor: 17,100 SF
Possible Fire Doors (Assumed)	Throughout	N/A (Assumed)	70 Doors
Elevator Equipment (Assumed)	Throughout	N/A (Assumed)	6 Elevator

NOTE: IT IS UNDERSTOOD THAT THE QUANTITIES OF ACMS DOCUMENTED WITHIN THIS PROJECT MANUAL ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF BID.

_____

Bidder Name

ASBESTOS CONTAINING MATERIALS SAMPLE LIST (AREA 2)

Material Substance	Location	Asbestos Content	Eocene Estimated Quantity
Pipe Insulation	Basement; 1st Floor; 2nd Floor; 4th Floor; 6th Floor; 7th Floor	20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile	Basement: 45 LF 1st Floor: 65 LF 2nd Floor: 215 LF 4th Floor: 70 LF 6th Floor: 445 LF 7th Floor: 155 LF Total: 995 LF
Felt-Wrapped Pipe Insulation Tar and Felt	Roof (& 5th Floor and 7th Floor)	30% Chrysotile	Roof; 5th Floor; 7th Floor: 1,100 LF
Pipe Insulation Debris / Steamer Insulation Debris / Aircell Pipe Insulation Debris / Duct Wrap Debris	6th Floor	10% Amosite 20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile 20% Chrysotile 70% Chrysotile	6th Floor: 80 SF
Transite Wall Panels	4th Floor; 6th Floor; 7th Floor	15% Chrysotile	4th Floor: 200 SF 6th Floor: 4,300 SF 7th Floor: 1,300 SF Total: 5,800 SF
Duct Sealant	6th Floor	2% Chrysotile	6th Floor: 550 LF
Aircell Pipe Insulation	1st Floor; 2nd Floor; 5th Floor	20% Chrysotile 70% Chrysotile	1st Floor: 150 LF 2nd Floor: 40 LF 5th Floor: 100 LF Total: 290 LF
Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	Basement; 1st Floor; 2nd Floor; 3rd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	15% Chrysotile 10% Chrysotile 5% Chrysotile 2% Chrysotile 3.6% Chrysotile 8% Chrysotile 7% Chrysotile 3% Chrysotile	Basement: 1,230 SF 1st Floor: 1,560 SF 2nd Floor: 8,660 SF 3rd Floor: 18,175 SF 4th Floor: 5,300 SF 5th Floor:80 SF 6th Floor:840 SF 7th Floor: 1,700 SF Total: 37,545 SF
Tank Insulation	2nd Floor	30% Chrysotile	2nd Floor: 100 SF
Roofing Tar	All Roofs	8% Chrysotile	Roof: 2,000 SF
Roofing Material	Roof E	10% Chrysotile	Roof: 12,200 SF
Chalkboard	6th Floor	15% Chrysotile	6th Floor: 20 SF
Wall Tar	5th Floor – HVAC Crawl Space	10% Chrysotile	5th Floor: 750 SF
Panel Adhesive	3rd Floor	10% Chrysotile	3rd Floor: 630 SF

Material Substance	Location	Asbestos Content	Eocene Estimated Quantity
Cork Insulation Tar	7th Floor – Middle Room, South Portion Walls	3% Chrysotile	7th Floor: 4,700 SF
Possible Fire Doors (Assumed)	Throughout	N/A (Assumed)	70 Doors
Elevator Equipment (Assumed)	Throughout	N/A (Assumed)	6 Elevator

NOTE: IT IS UNDERSTOOD THAT THE QUANTITIES OF ACMS DOCUMENTED WITHIN THIS PROJECT MANUAL ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF BID.

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Bidder Name

ASBESTOS CONTAINING MATERIALS SAMPLE LIST (AREA 3)

Material Substance	Location	Asbestos Content	Eocene Estimated Quantity
Pipe Insulation	Basement; 2nd Floor; 4th Floor	20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile	Basement: 175 LF 2nd Floor: 30 LF 4th Floor: 590 LF Total: 795 LF
Door Caulk	West Exterior Loading Dock SW Exterior Loading Dock	10% Chrysotile 1.2% Chrysotile	West Loading Dock: 8 LF SW Loading Dock: 10 LF Total: 18 LF
Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	Basement; 1st Floor; 2nd Floor; 3rd Floor; 4th Floor	15% Chrysotile 10% Chrysotile 5% Chrysotile 2% Chrysotile 3.6% Chrysotile 8% Chrysotile 7% Chrysotile 3% Chrysotile	Basement: 27,120 SF 1st Floor: 5,520 SF 2nd Floor: 26,560 SF 3rd Floor: 23,495 SF 4th Floor: 38,900 SF Total: 82,695 SF
Corrugated Transite Panels	Exterior	15% Chrysotile	Northwest Office Roof: 2,700 SF SW Rail Dock Wall: 300 SF
Roofing Tar	All Roofs	8% Chrysotile	Roof: 2,000 SF
Roofing Caulk	Roof A	5% Chrysotile	Roof: 60 LF
Expansion Joint	Exterior – North A12 (Behind Vertical Metal Seams)	3% Chrysotile	Exterior: 400 LF
Panel Adhesive	Basement; 2nd Floor; 3rd Floor	10% Chrysotile	Basement: 360 SF 2nd Floor: 500 SF 3rd Floor: 10,170 SF Total: 11,030 SF
Cement Board	1st Floor – North Room, North Wall – Top Half	20% Chrysotile	1st Floor: 750 SF
Possible Fire Doors (Assumed)	Throughout	N/A (Assumed)	70 Doors
Elevator Equipment (Assumed)	Throughout	N/A (Assumed)	6 Elevator

NOTE: IT IS UNDERSTOOD THAT THE QUANTITIES OF ACMS DOCUMENTED WITHIN THIS PROJECT MANUAL ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF BID.

_____

Bidder Name

In the event of discovery of items or materials exceeding 10% of the approximate quantity or not identified within the specifications are located during abatement, contractor will be bound to the following pricing:

ITEM	Material Substance	Unit	Unit Price
1	Pipe Insulation	LF	$
2	Heater Insulation	SF	$
3	Felt-Wrapped Pipe Insulation Tar and Felt	LF	$
4	Door Caulk	LF	$
5	Pipe Insulation Debris / Steamer Insulation Debris / Aircell Pipe Insulation Debris / Duct Wrap Debris	SF	$
6	Transite Wall Panels	SF	$
7	Duct Sealant	LF	$
8	Aircell Pipe Insulation	LF	$
9	Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	SF	$
10	Tank Insulation	SF	$
11	9” x 9” Green Floor Tile and Black Mastic with Pipe Insulation Debris	SF	$
12	12” x 12” Brown Floor Tile and Black Mastic with Pipe Insulation Debris	SF	$
13	Corrugated Transite Panels	SF	$
14	Old Caulk	LF	$
15	Roofing Tar	SF	$
16	Roofing Caulk	LF	$
17	Roofing Material	SF	$
18	Expansion Joint	LF	$
19	Chalkboard	SF	$
20	Wall Tar	SF	$
21	Panel Adhesive	SF	$
22	Duct Wrap	LF	$
23	Cement Board	SF	$
24	Cork Insulation Tar	SF	$
25	Possible Fire Doors (Assumed)	EA	$
26	Elevator Equipment (Assumed)	EA	$

NOTE: IT IS UNDERSTOOD THAT THE QUANTITIES OF ACMS DOCUMENTED WITHIN THIS PROJECT MANUAL ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF BID.

_____

Bidder Name

EXHIBIT C – Contract for Asbestos Abatement Services

EXHIBIT "C"

ASBESTOS ABATEMENT
RATH BUILDINGS
1442 SYCAMORE STREET, WATERLOO, IOWA 50703

CONTRACT FOR ASBESTOS ABATEMENT SERVICES

This Contract for Asbestos Abatement and Disposal Services (the "Contract") is entered into as of July 21, 2026 by and between the City of Waterloo, Iowa ("City") and _____. ("Contractor").

In consideration of the mutual promises exchanged herein, the parties agree as follows:

1. Term and Services. For the period of July 21, 2026 thru February 17, 2027, subject to extension upon the mutual written agreement of the parties, the Contractor agrees to furnish all supervision, technical personnel, labor, materials, tools, machinery, services, and perform and substantially complete all work within the time period stated in the specifications after receipt of Notice to Proceed with respect to a given property or set of properties. Work to be performed includes all work described in the Contract Documents (defined below).

Contractor shall provide the above services at the cost set forth in Contractor's RFB response, except by written amendment as provided herein. Contractor's request for payment for services authorized under this Contract shall be submitted in accordance with the Contract Documents and will be paid within forty-five (45) days after receipt of an original invoice and after such services are delivered and accepted and all necessary supporting documentation is submitted. Contractor will be paid for all items satisfactorily completed. Such payment will be full compensation for all work performed, for all permits, licenses, inspections, for complying with all laws, rules, regulations and ordinances, including safety, and for furnishing all materials, equipment and labor to complete the work, in accordance with the specifications.

2. Contract Documents. The following documents (collectively, the "Contract Documents") are hereby incorporated by reference as though set forth herein in full:

a. Request for Bid
b. Addenda (if any)
c. Response (Bid) from Contractor
d. Specifications for Asbestos Abatement

In the event of conflict between the provisions of the Contract Documents and this Contract, the provisions of this Contract shall prevail.

2.1 Contract Limits. Total actual expenses allowed by the project Contract, including any renewal extensions of the Contract, shall not exceed $_____ as provided in the Bid Tabulation that is part of Contractor's RFB Response referenced in Section 2.c above, except by written amendment as provided herein.

3. Approval; Timing of Work. Contractor shall not begin work on any asbestos abatement until after the Contract has been approved by the city council and the Contractor has been issued a Notice to Proceed. The Contractor shall complete the Project in an expeditious manner and shall commence work in a timeline consistent with the term of the Contract. The Contractor shall be responsible for providing the City's Representative with a minimum of 24 hours advance notification prior to commencing asbestos abatement activity with respect to the property. The site shall be completely fenced, and secured when left unattended. If Contractor is prevented from timely completing the work because of circumstances beyond the Contractor's reasonable control as determined by the City, the time for completion of the work will be tolled for a period of time equivalent to the stoppage resulting from such circumstances. The Contractor does hereby expressly acknowledge and agree that time is of the essence of this Contact, and, thus, failure by the Contractor to timely render and perform services hereunder shall constitute a material breach of Contract.

4. Performance and Payment Bond. Contractor will be required to furnish bond in an amount equal to one hundred percent (100%) of the contract price and shall be issued by a responsible surety acceptable to the City. The bond shall guarantee the faithful performance of the Contract and the terms and conditions therein contained, shall guarantee the prompt payment of all materials and labor and protect and save harmless the City from claims and damages of any kind arising out of the performance of this Contract.

5. Indemnity. Except as to any negligence of City, its officials, officers, employees or agents, in the performance of any duty under this Contract, and to the extent not covered by insurance maintained by Contractor, Contractor agrees to defend and indemnify City, its officials, officers, employees and agents, and to hold same harmless, from and against any and all claims, demands, causes of action, losses, costs, or liabilities whatsoever, including but not limited to reasonable attorneys' fees and expenses, arising from or in connection with the acts or omissions of Contractor in providing the services contemplated by this Contract. This will include but is not limited to actions or suits based upon or alleging bodily injury, including death, or property damage rising out of or resulting from the Contractor's operation under this Contract, whether by itself or by any subcontractor or anyone directly or indirectly employed by any of them. Contractor is not and shall not be deemed an agent or employee of the City.

6. Property Damage. Contractor shall be responsible for all damage to public or private property. Contractor shall have one responsible person at the job site at all times when asbestos abatement activities are undertaken. Contractor shall keep a report of all damage. If public or private property is damaged by Contractor and is not repaired in a timely manner as determined by City, City has the option of having the damage repaired at the Contractor's expense, to be reimbursed to the City or withheld from future payments to Contractor hereunder.

7. Default; Termination for Cause. In the event that Contractor defaults in the performance or observance of any covenant, agreement or obligation set forth in this Contract, and if such default remains uncured for a period of seven (7) days after notice thereof shall have been given by City to Contractor (or for a period of fourteen (14) days after such notice if such default is curable but requires acts to be done or conditions to be remedied which, by their nature, cannot be done or remedied within such 14-day period and thereafter Contractor fails to diligently and continuously prosecute the same to completion within such 14-day period), then City may declare that Contractor is in default hereunder and may take any one or more of the following steps, at its option:

a. by mandamus or other suit, action or proceeding at law or in equity, require Contractor to perform its obligations and covenants hereunder, or enjoin any acts or things which may be unlawful or in violation of the rights of the City hereunder, or obtain damages caused to the City by any such default;

b. have access to and inspect, examine and make copies of all books and records of Contractor which pertain to the project;

c. declare a default of this Contract, make no further disbursements, and demand immediate repayment from Contractor of any funds previously disbursed under this Contract;

d. terminate this Contract by delivery to Contractor of written notice of termination; and/or

e. take whatever other action at law or in equity may be necessary or desirable to enforce the obligations and covenants of Contractor hereunder, including but not limited to the recovery of funds.

No delay in enforcing the provisions hereof as to any breach or violation shall impair, damage or waive the right of City to enforce the same or to obtain relief against or recover for the continuation or repetition of such breach or violation or any similar breach or violation thereof at any later time or times. In the event that City prevails against Contractor in a suit or other enforcement action hereunder, Contractor agrees to pay the reasonable attorneys' fees and expenses incurred by City.

8. Termination for Convenience. This Contract may be terminated at any time, in whole or in part, upon the mutual written agreement of the parties. City may also choose to terminate this Contract at any time by delivering to Contractor 10-days' advance written notice of intent to terminate.

9. Non-Assignable Duties. Contractor may not assign its duties hereunder without the prior written consent of City.

10. Independent Contractor. Contractor is an independent contractor and is not an employee, servant, agent, partner, or joint venture of City. Contractor has no power or authority to enter into contracts or agreements on behalf of City. City shall determine the work to be done by Contractor, but Contractor shall determine the legal means by which it performs the work specified by City. City is not responsible for withholding, and shall not withhold, FICA or taxes of any kind from any payments, which it owes Contractor. Neither Contractor nor its employees, if any, shall be entitled to receive any benefits which employees of City are entitled to receive and shall not be entitled to workers' compensation, unemployment compensation, medical insurance, life insurance, pension, or any benefits of any type or nature whatsoever on account of their work for City. Contractor shall be solely responsible for compensating its employees, if any.

11. Anti-Discrimination. During the performance of this Contract, Contractor, for itself, its assignees and successors in interest, agrees to comply with the anti-discrimination laws of the State of

Iowa, as contained in Sections 19B, 551.4 of the Code of Iowa, which are herein incorporated by reference and made a part of this Contract.

12. Severability. In the event any provision of this Contract, together with the Contract Documents, is held invalid, illegal, or unenforceable, whether in whole or in part, the remaining provisions of this Contract shall not be affected thereby and shall continue in full force and effect. If, for any reason, a court finds that any provision of this Contract is invalid, illegal, or unenforceable as written, but that by limiting such provision it would become valid, legal, and enforceable, then such provision shall be deemed to be written and shall be construed and enforced as so limited.

13. General Terms. This Contract, together with the Contract Documents, constitutes the entire agreement between the parties pertaining to the subject matter hereof. This Contract may not be modified or amended except pursuant to the mutual written agreement of the parties. This Contract is binding on the parties and the heirs, personal representatives, successor and assigns of each. Time is of the essence in the performance of the terms hereof.

This Contract is also subject to the following additional Contract requirements:

Domestic Preference for Procurement

As appropriate and to the extent consistent with law, the non-federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. The requirements of this section must be included in all sub awards including all contracts and purchase orders for work or products under this award.

PERSONNEL AND PARTICIPANT CONDITIONS

Civil Rights Compliance

The Contractor agrees to comply with Chapter 216 (State Civil Rights) of the Iowa Code and with Title VI of the Civil Rights Act of 1962 as amended Title VIII of the Civil Rights act of 1968 as amended, Section 104 (b) and Section 109 of Title I of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and Executive Order 11246 as amended by Executive Order 11375, 11478,12107,and 12086.

Nondiscrimination

The Contractor agrees to comply with the non- discrimination in employment and contracting opportunities laws, regulations and executive orders reference in 24 CFR 570.607, as revised by Executive Order 13279. The applicable non- discrimination provisions in Section 109 of the HCDA are still applicable.

Section 504

The Contractor agrees to comply with all Federal regulations pursuant to compliance with Section 504 of the Rehabilitation Act of 1973. (29 U.S.C. 794) which prohibits discrimination against individuals

with disabilities or handicaps in a federally assisted program. The Contractor confirms that no otherwise qualified individual with handicaps shall, solely by reason of his/her handicap, be excused from participation in, be denied benefits of or be subjected to discrimination. This does include, but is not limited to, housing, employment and the delivery of services and programs.

Affirmative Action

Affirmative Action Plan

The Contractor agrees that it shall be committed to carry out affirmative action marketing in keeping with the principles as provided in Presidents Executive Order 11246 of September 24, 1966.

No person shall be excluded from or denied benefits of the Contractors service on the basis of age, race, color, religion, creed, national origin, sex, marital status, disability or sexual orientation. All current and prospective project beneficiaries must, however be in need of the programs provided by the Contractor.

The Contractor shall comply with requirements set forth in 24 CFR 570.601.

Women and Minority Owned Business Based (WBE/MBE)

The Contractor will use its best efforts to afford small businesses, minority business enterprises and women's business enterprises the maximum practicable opportunity to participate in the performance of the Agreement. As used in this contract , the terms small business means a business that meets the criteria set forth in section 3(a) of the Small Business Act , as amended (15 U.S.C. 632) and minority and women's business enterprise means a business at least 51% owned and controlled by a minority group or women.

Equal Opportunity and Affirmative Action Statement

The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that it is an Equal Opportunity or Affirmative Action employer.

Subcontract Provisions

The Contractor will include the provisions of Civil Rights and Affirmative Action in every sub contract, so that such provisions will be binding upon each of its own sub-contractors.

Employment Restrictions

Prohibited Activity

The Contractor is prohibited from using funds proved herein or personnel employed in the administration of the program for political activities; inherently religious activities; lobbying; political patronage or nepotism activities.

Labor Standards

The Contractor agrees to comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.) and all other applicable Federal, state, and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this Agreement.

The Contractor agrees to comply with the Copeland Anti-Kick Back Act (18 U.S.C. 874 et seq.) and it's implementing regulations of the U.S. Department of Labor at 29 CFR 5.

The Contractor shall maintain documentation that demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the City for review upon request. The Contractor agrees that all contractors engaged under contracts in excess of $2,000.00 for construction, renovation, or repair work financed in whole or in part with assistance provided under this contract, shall comply with Federal requirements adopted by the City pertaining to such contracts and with the applicable requirements of the regulations of the Department of Labor, under 29 CFR 1, 3, 5 and 7 governing the payment of wages and ratio of apprentices and trainees to journey workers; provided that, if wage rates higher than those required under the regulations are imposed by state or local law, nothing hereunder is intended to relieve the Contractor of its obligation, if any, to require payment of the higher wage. The Contractor shall cause or require to be inserted in full, in all such contracts subject to such regulations, provisions meeting the requirements of this paragraph.

Assignability

The Contractor shall not assign or transfer any interest in this Agreement without the prior written approval of the City. Any assignment made without consent shall be void. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties hereto.

Hatch Act

The Contractor agrees that no funds provided, nor personnel employed under this Agreement, shall in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V of the U.S.C.

Conflict of Interest

The Contractor agrees to abide by the provisions of 2 CFR 200 and 570.611, which include (but are not limited to) the following:

The Contractor shall maintain a written code or standards of conduct that shall govern the performance of its officers, employees, or agents engaged in the award and administration of contracts supported by Federal funds.

No employee, officer, or agent of the Contractor shall participate in the selection, or in the award, or administration of, a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.

For purposes of this paragraph, a "covered person" includes any person who is an employee, agent, consultant, officer, or elected or appointed official of the City, the Contractor, or any designated public agency.

Lobbying

The Contractor hereby certifies that:

No member or delegate to the Congress of the United States, and no resident Commissioner, shall be admitted to any share or part of this Agreement, or to any benefit to arise therefrom.

No member of the governing body of the City, no officer, employee, official or agent of the City, or other local public official who exercises any functions or responsibilities in connection with review, approval, or carrying out of the Project to which this Agreement pertains, shall have any private interest, direct or indirect, in this Agreement, while in office and for one year after holding the position.

No federal funds appropriated under this Agreement shall be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence a member of Congress an officer or employee of Congress or any federal agency in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any federal contract , loan, grant or Agreement

Copyright

If this agreement results in any copyrightable material or inventions, the City reserves the right to royalty- free, nonexclusive and irrevocable license to reproduce, publish, or other wise use and to authorize others to use, the work or materials for governmental purposes.

Religious Activities

The Contractor agrees that funds provided under this Agreement will not utilized for inherently religious activities prohibited by 24 CFR 570.200(j), such as worship, religious instruction or proselytization.

ENVIRONMENTAL CONDITIONS

Air and Water

The Contractor agrees to comply with the following requirements insofar as they apply to the performance of this Agreement: Clean Air Act, 42 U.S.C., 7401, et seq.;

Federal Water Pollution Control Act, as amended, 33 U.S.C., 1251, et seq., as amended, 1318 relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder;

Environmental Protection Agency (EPA) regulations pursuant to 40 CFR 50, as amended.

SEVERABILITY

If one or more of the provisions contained in this Agreement are held to be invalid, illegal or unenforceable, the provisions of this Agreement shall be deemed severable and the remainder of the Agreement shall remain in full force and effect.

LIMITATIONS OF CITY LIABILITY - DISCLAIMER OF RELATIONSHIP

The City shall not be liable to the Contractor, or to any party, for completion of or failure to complete any improvements which are part of the Project. Nothing contained in this Agreement, nor any act or omission of the City or the Contractor, shall be construed to create any special duty, relationship, third-party beneficiary, respondent superior, limited or general partnership, joint venture, or any association by reason of the Contractor involvement with the City.

Build America, Buy America Act

The Contractor shall comply with the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (IIJA), Pub.L 177-58.

In general this states that all products must meet BABA requirements. The Contractor shall include Manufacturer's Certification for BABAA requirements with all applicable submittals. If a specific manufacture is used in the bidding, a statement that the manufacturer will comply with BABAA must be included in the bid submission.

Installation of materials or products that are not compliant with BABAA requirements shall be considered defective work. Contractor should ensure that all materials has an approved Manufacturer's Certification or waiver prior to items being delivered to the project site.

SECTION HEADINGS AND SUBHEADINGS

The section headings and subheadings contained in this Agreement are included for convenience only and shall not limit or otherwise affect the terms of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Contract for Asbestos Abatement and Disposal Services as of the date first set forth above.

CITY OF WATERLOO, IOWA

By: _____
Dave Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk

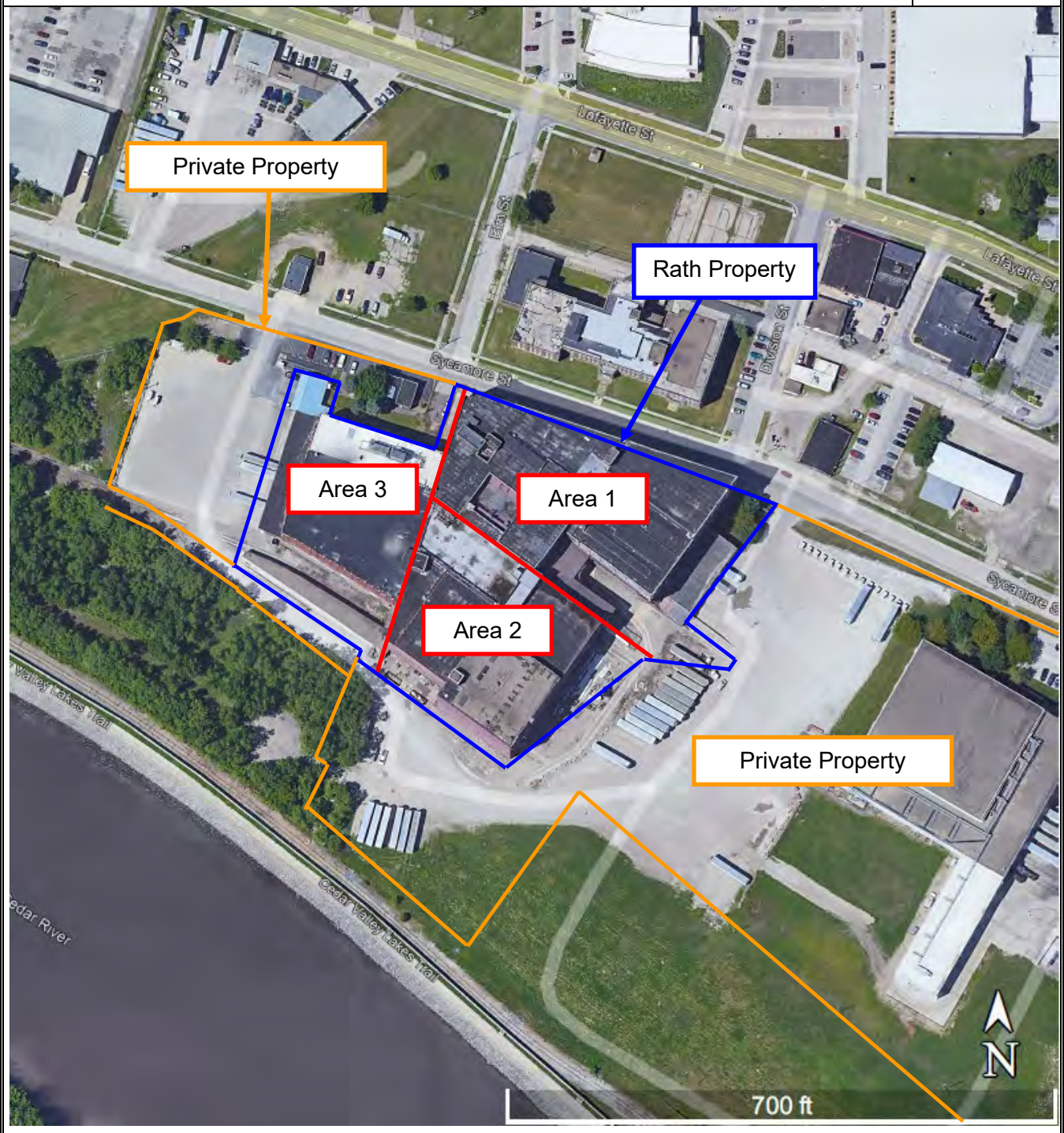
CONTRACTOR

_____
Authorized Representative

EXHIBIT D – Property Location Map

EXHIBIT D – PROPERTY LOCATION MAP

North



Property Location Map

City of Waterloo – Former Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

Eocene℠ Environmental Group

EXHIBIT E – Property Access and Staging Map

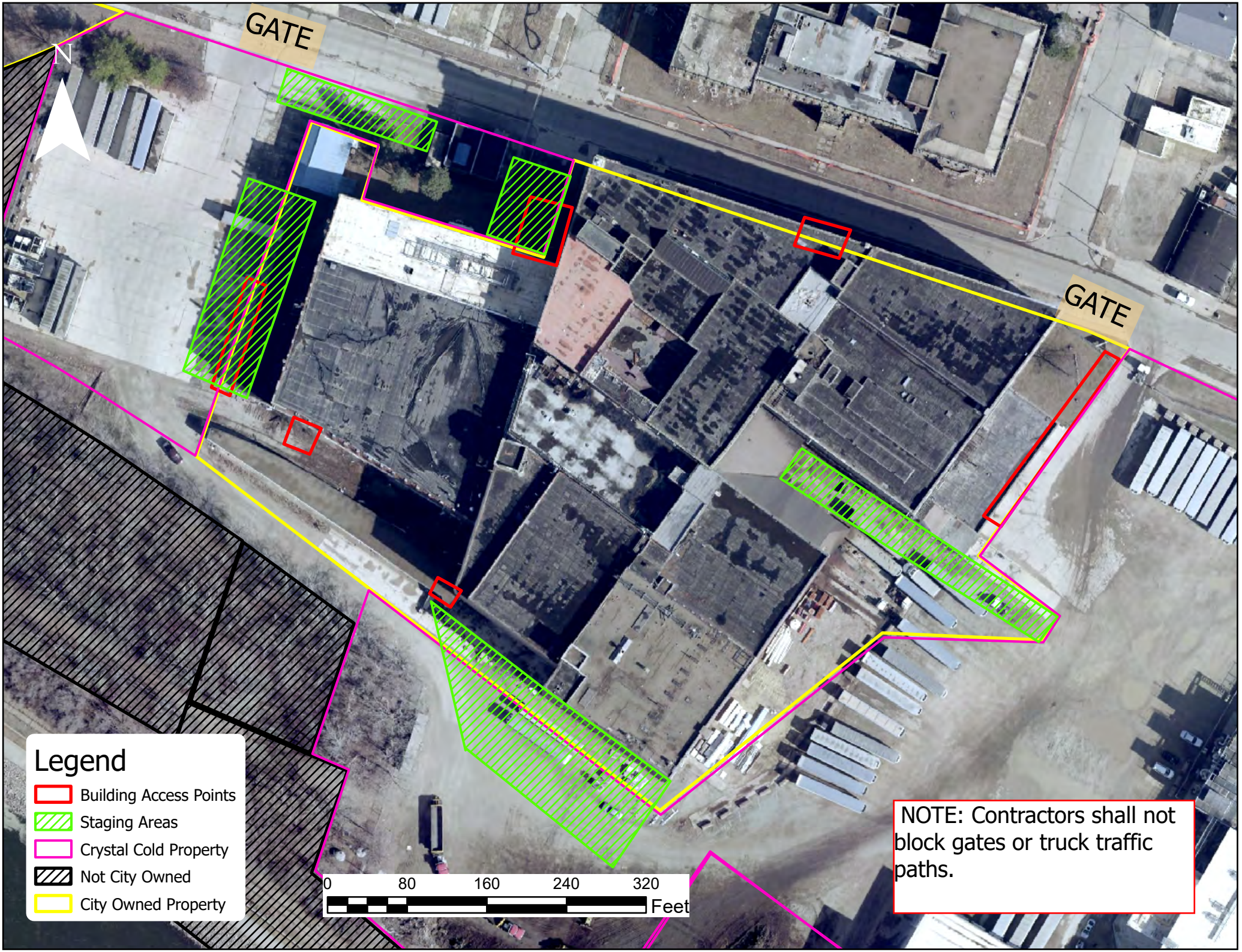

GATE
GATE
N
Legend
Building Access Points
Staging Areas
Crystal Cold Property
Not City Owned
City Owned Property
0
80
160
240
320
Feet
NOTE: Contractors shall not block gates or truck traffic paths.

EXHIBIT F – Asbestos Containing Materials Inspection Reports

ASBESTOS CONTAINING MATERIALS INSPECTION

Rath Buildings
1142 Sycamore Street
Waterloo, Iowa 50703

Prepared for:

City of Waterloo
715 Mulberry Street
Waterloo, Iowa 50703

Report date:

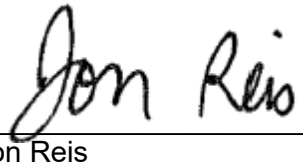
February 6, 2025

Revised July 11, 2025

ASBESTOS CONTAINING MATERIALS INSPECTION

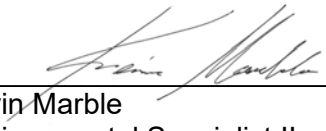
Rath Buildings
1142 Sycamore Street
Waterloo, Iowa 50703

Inspected and Prepared by:

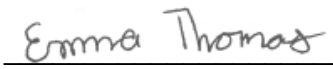


Jon Reis
Sr. Project Manager
Iowa Certified Asbestos Inspector: 25-12880I

Inspected by:

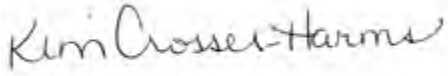


Kevin Marble
Environmental Specialist II
Iowa Certified Asbestos Inspector: 24-11230I



Emma Thomas
Environmental Specialist I
Iowa Certified Asbestos Inspector: 24-12154I

Reviewed by:



Kim Crosser-Harms
Sr. Project Manager
Iowa Certified Asbestos Inspector: 25-12883I

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APPENDICES

1.0 EXECUTIVE SUMMARY

Eocene Environmental Group, Inc. (Eocene) completed a supplemental Asbestos Containing Materials (ACM) Inspection on January 13, 14 and 22, 2025, and May 7, 2025 of the former Rath Building located at 1142 Sycamore Street, Waterloo, Iowa 50703 (Property). The purpose of this supplemental ACM Inspection is to confirm the sampling and quantification of materials documented by Toeroek Associates, Inc. (Toeroek) and identify and sample potential areas and materials omitted from previous sampling. The report will assist the building owner in facilitating renovation and/or demolition activities of the buildings.

Asbestos was detected in 23 of the 198 samples collected from various building components within the Property's interior and exterior by Toeroek. Asbestos was detected in 32 of the 80 samples collected from various building components within the Property's interior and exterior by Eocene. See Table 1 for additional information. ACMs include:

- Pipe Insulation
- Heater Insulation
- Felt-Wrapped Pipe Insulation Tar and Felt
- Door Caulk
- Boiler Insulation
- Transite Wall Panels
- Duct Sealant
- Aircell Pipe Insulation
- Asphalt Shingles/Ceiling Covering/Ceiling Covering Tar
- Tank Insulation
- 9" x 9" Vinyl Floor Tile
- 9" x 9" Vinyl Floor Tile Mastic
- 12" x 12" Vinyl Floor Tile
- 12" x 12" Vinyl Floor Tile Mastic
- Silver-Painted Pipe Insulation
- Corrugated Transite Panels
- Old Caulk
- Roofing Tar
- Roofing Caulk
- Roofing Material
- Expansion Joint
- Chalkboard
- Wall Tar
- Cork Tar Paper
- Panel Adhesive
- Duct Wrap
- Cement Board
- Cork Insulation Tar
- Fire Doors (Assumed)
- Elevator Equipment (Assumed)

All building materials similar in appearance, color, and/or texture to those determined to contain asbestos must be assumed to contain asbestos throughout the buildings.

Based on these results, the Property requires further action prior to any renovation or demolition activities. The following table provides a summary of the identified ACM, their location, and estimated quantities:

Table 1 – Asbestos Containing Materials Summary List

Material Substance	Location	Asbestos Content	Est. Quantity
Pipe Insulation	Basement; 1st Floor; 2nd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile	Basement: 355 LF 1st Floor: 65 LF 2nd Floor: 255 LF 4th Floor: 655 LF 5th Floor: 665 LF 6th Floor: 910 LF 7th Floor: 295 LF Total: 3,200 LF
Heater Insulation	Basement	30% Chrysotile	25 SF
Felt-Wrapped Pipe Insulation Tar and Felt	Roof (& 5th Floor and 7th Floor)	30% Chrysotile	1,100 LF
Door Caulk	Elevator Doors – All Floors West Exterior Loading Dock SW Exterior Loading Dock	5% Chrysotile 10% Chrysotile 1.2% Chrysotile	Elevator: 280 LF West Loading Dock: 8 LF SW Loading Dock: 10 LF
Pipe Insulation Debris / Steamer Insulation Debris / Aircell Pipe Insulation Debris / Duct Wrap Debris	Basement; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	10% Amosite 20% Amosite / 8% Chrysotile 25% Chrysotile 20% Amosite / 3% Chrysotile 5% Amosite / 15% Chrysotile 20% Chrysotile 60% Chrysotile 20% Chrysotile 70% Chrysotile	Basement: 600 SF 2nd Floor: 1,500 SF 5th Floor: 2,500 SF 6th Floor: 650 SF 7th Floor: 5,500 SF Total: 10, 750 SF
Transite Wall Panels	4th Floor; 6th Floor; 7th Floor	15% Chrysotile	4th Floor: 200 SF 6th Floor: 4,300 SF 7th Floor: 1,300 SF Total: 5,800 SF
Duct Sealant	6th Floor	2% Chrysotile	550 LF
Aircell Pipe Insulation	Basement; 1st Floor; 2nd Floor; 5th Floor; 6th Floor; 7th Floor	20% Chrysotile 70% Chrysotile	Basement: 600 LF 1st Floor: 250 LF 2nd Floor: 40 LF 5th Floor: 540 LF 6th Floor: 200 LF 7th Floor: 55 LF Total: 1,685 LF
Asphalt Shingles / Ceiling Covering / Ceiling Covering Tar / Cork Tar Paper	Basement; 1st Floor; 2nd Floor; 3rd Floor; 4th Floor; 5th Floor; 6th Floor; 7th Floor	15% Chrysotile 10% Chrysotile 5% Chrysotile 2% Chrysotile 3.6% Chrysotile 8% Chrysotile 7% Chrysotile 3% Chrysotile	Basement: 35,200 SF 1st Floor: 13,850 SF 2nd Floor: 55,200SF 3rd Floor: 66,950 SF 4th Floor: 38,900 SF 5th Floor: 9,600 SF 6th Floor: 5,500 SF 7th Floor: 3,950 SF Total: 229,150 SF
Tank Insulation	2nd Floor	30% Chrysotile	100 SF
9” x 9” Green Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 5% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	4,500 SF

Material Substance	Location	Asbestos Content	Est. Quantity
12” x 12” Brown Floor Tile and Black Mastic with Pipe Insulation Debris	2nd Floor	Floor Tile: 2% Chrysotile Mastic: 5% Chrysotile Pipe Insulation: 20% Amosite / 3% Chrysotile	100 SF
Corrugated Transite Panels	Exterior	15% Chrysotile	Northwest Office Roof: 2,700 SF SW Rail Dock Wall: 300 SF
Old Caulk	Exterior – North Street Level Windows	15% Chrysotile	30 LF
Roofing Tar	All Roofs	8% Chrysotile	6,000 SF
Roofing Caulk	Roof A	5% Chrysotile	60 LF
Roofing Material	Roof E	10% Chrysotile	12,200 SF
Expansion Joint	Exterior – North A12 (Behind Vertical Metal Seams)	3% Chrysotile	400 LF
Chalkboard	6th Floor; 7th Floor	15% Chrysotile	6th Floor: 20 SF 7th Floor: 50 SF
Wall Tar	5th Floor – HVAC Crawl Space	10% Chrysotile	750 SF
Panel Adhesive	Basement; 1st Floor; 2nd Floor; 3rd Floor	10% Chrysotile	Basement: 360 SF 1st Floor: 700 SF 2nd Floor: 500 SF 3rd Floor: 10,800 SF Total: 12,360 SF
Duct Wrap	Basement	80% Chrysotile 70% Chrysotile	500 LF
Cement Board	1st Floor – North Room, North Wall – Top Half	20% Chrysotile	750 SF
Cork Insulation Tar	7th Floor – Middle Room, South Portion Walls; 3rd Floor –Northeast Room Ceiling	3% Chrysotile 2% Chrysotile	7th Floor: 4,700 SF 3rd Floor: 17,100 SF Total: 21,800 SF
Possible Fire Doors (Assumed)	Throughout	N/A (Assumed)	70 Doors
Elevator Equipment (Assumed)	Throughout	N/A (Assumed)	6 Elevator

2.0 INTRODUCTION

A. Property Information

Location:

Rath Buildings
1142 Sycamore Street
Waterloo, Iowa 50703

Contact Person:

Aric Schroeder
City of Waterloo
715 Mulberry Street
Waterloo, Iowa 50703

B. Personnel

Inspector/Project Management: Jon Reis	State of Iowa License	25-12880I
QA/QC: Kim Crosser-Harms	State of Iowa License	25-12883I
Inspector: Kevin Marble	State of Iowa License	24-11230I
Inspector: Emma Thomas	State of Iowa License	24-12154I

C. Sampling Plan

The scope of this ACM Inspection included the interior and exterior of the buildings on the Property with the exception of the rooftops. The previously completed report inspected the rooftops and that information is included.

This ACM Inspection is in accordance with OSHA Regulation 1926.1101. All samples collected in the field were sent to EMSL Analytica, Inc., an NVLAP certified laboratory, for analysis. The samples were analyzed via the polarized light microscopy (PLM) method for asbestos content. If requested by Client, samples were further analyzed via the transmission electron microscopy (TEM) method or PLM 400 Point Count analysis method.

D. Regulation Review

The U.S. EPA qualifies asbestos containing materials (ACM) as materials with an asbestos content greater than 1%. According to Iowa OSHA, ACM is any material found to contain asbestos, regardless of its concentration, and shall be regulated as hazardous waste. The following definitions are taken from Section 61.141 of Subpart M, Part 61 of Title 40: Protection of Environment of the Code of Federal Regulations (CFR).

- "Category I nonfriable asbestos-containing material (ACM)" is defined as asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy (PLM).
- "Category II nonfriable ACM" is defined as any material, excluding Category I nonfriable ACM, containing more than 1% asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, PLM that, when dry, ***cannot*** be crumbled, pulverized, or reduced to powder by hand pressure.
- "Friable asbestos material" is defined as any material containing more than 1%

asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, PLM that when dry, ***can*** be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10% as determined by a method other than point counting by PLM, verify the asbestos content by point counting using PLM.

3.0 PROPERTY DESCRIPTION

The Property consists of four buildings, three of which have multiple additions. The buildings and additions total 900,657 square feet.

- Building 1 is a four-story solid brick structure with a basement constructed in 1936. The following were constructed in 1957: a three-story solid brick addition with a basement, a one-story solid brick addition with a basement, a one-story vinyl frame addition, and a one-story milled wood frame addition. Building 1 and associated additions total 156,129 square feet.
- Building 2 is a six-story solid brick structure with a basement constructed in 1938. The following were constructed in 1938: a five-story solid brick addition with a basement, a six-story brick on block addition with a basement, and two six-story solid brick additions with basements. Building 2 and associated additions total 302,448 square feet.
- Building 3 is a seven-story solid brick structure with a basement constructed in 1938. A six-story solid brick addition with a basement was constructed in 1938, a one-story solid brick addition was constructed in 1950, a one-story milled wood frame addition was constructed in 1990, and a three-story solid brick addition was constructed in 1938. Building 3 and associated additions total 189,680 square feet.
- Building 4 is a seven-story solid brick structure with a basement constructed in 1938. Building 4 totals 252,400 square feet.

4.0 INSPECTION LIMITATIONS

An Inspection limitation, for the purpose of this report, is any action or task that is limited from the original scope work. The overall reason for any limitation is the protection of Eocene personnel. Examples of limitations can range from a lack of accessibility to an area of the Property, unsafe work areas, collecting additional samples, etc.

- The purpose of this ACM inspection was to confirm sampling of suspect materials throughout the buildings and verify quantities.
- Due to potential safety concerns, rooftops were not included in this ACM Inspection.

5.0 INSPECTION ACTIVITIES

Iowa certified asbestos inspectors from Eocene collected 80 samples on January 13, 14, and 22, 2025, and May 7, 2025. Iowa certified asbestos inspectors collected 198 samples between June 13-17, 2022 as part of the Toeroek report. The samples were collected from accessible building components located throughout the Property. Upon completion of bulk sampling activities, samples were sent to EMSL Analytical, Inc., an NVLAP certified laboratory, for analysis.

Materials that are “suspected” to contain asbestos are divided into the following three categories:

1. **Surfacing materials** are materials that are sprayed or troweled on for acoustical, decorative, or fireproofing purposes. Examples are textured ceilings or drywall, exterior stucco and structural steel fireproofing;

2. **Thermal System Insulation (TSI)** is insulation used to inhibit heat transfer from pipes, boilers, tanks, ducts, and various other components of hot and cold-water systems and HVAC systems. Examples are hard cementitious “mud” type insulation on pipes, boilers and flues; and,

3. **Miscellaneous** materials are mostly non-friable products and materials such as floor tile, drywall, ceiling tile and roofing felt.

The following tables show samples positively identified by the laboratory to be asbestos containing materials (ACM) and samples that were analyzed as non-ACM. The complete analytical results can be found in Appendix B.

Table 2a – Asbestos Containing Materials Sample List (Toeroek)

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content	Est. Quantity
7	RB-TSI-01	Pipe Insulation (Various Sizes	TSI	Y	White	7=2; 8=4; 9=5	Throughout	20% Amosite 8% Chrysotile – Positive Stop	4,700 LF
8	RB-TSI-02								
9	RB-TSI-03								
19	RB-TSI3-01	Pipe Insulation	TSI	Y	Green (Gray)	7	C71, C72	25% Chrysotile – Positive Stop	300 LF
20	RB-TSI3-02								
21	RB-TSI3-03								
22	RB-INS-01	Heater Insulation	TSI	Y	Gray	7	5th and 7th Floors	10% Amosite 10% Chrysotile – Positive Stop	1,700 SF
23	RB-INS-02								
24	RB-INS-03								
26 27	RB-TSI4-02 RB-TSI4-03 (Tar and Felt)	Felt-Wrapped (Foam) Pipe Insulation (Tar and Felt)	TSI	N	Black	Roof	Roof, 7th Floor, and C51 – Layer 2	30% Chrysotile – Positive Stop	1,100 LF
28	RB-DC-01	Door Caulk	Misc	N	Black	6	Elevator Doors – All Floors	5% Chrysotile – Positive Stop	280 LF
29	RB-DC-02								
30	RB-DC-03								
31	RB-BI-01	Boiler Insulation (Scattered Pipe Insulation Debris)	TSI	Y	White	6	C64 Metal Boiler, C71, C72, B56, C51, G51	10% Amosite – Positive Stop	1,500 SF
32	RB-BI-02								
33	RB-BI-03								
37	RB-TRAN-01	Transite Wall Panels	Misc	N	Beige	6	6th Floor – H Area Walls, E61	15% Chrysotile – Positive Stop	4,450 SF
38	RB-TRAN-02								
39	RB-TRAN-03								
40	RB-DS-01	Duct Sealant	Misc	N	Black	6	6th Floor – G Area, A3, C64	15% Chrysotile – Positive Stop	300 SF
41	RB-DS-02								
42	RB-DS-03								
43	RB-TSI5-01	Aircell Pipe Insulation	TSI	Y	Beige	6	C51, E51, G22, Basement Boiler Room, East Abandoned Basement Bathroom	20% Chrysotile – Positive Stop	550 LF
44	RB-TSI5-02								
45	RB-TSI5-03								
50	RB-AS-01	Asphalt Shingles	Misc	N	Black	5	Upper Columns and Ceiling (B55), B53, C11	10% Chrysotile – Positive Stop	11,500 SF
51	RB-AS-02								
52	RB-AS-03								

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content	Est. Quantity
78	RB-TI-01	Tank Insulation	TSI	Y	White (Pink)	78, 79=2; 80=B	G22, CB1	30% Chrysotile – Positive Stop	100 SF
79	RB-TI-02								
80	RB-TI-03								
84 85 86	RB-VFT-01 RB-VFT-02 RB-VFT-03 (Floor Tile & Mastic)	9” x 9” Vinyl Floor Tile and Mastic	Misc	N	Green Floor Tile & Black Mastic	2	C22 – Lab Area	5% Chrysotile (Floor Tile) 5 % Chrysotile (Mastic) – Positive Stop	4,500 SF
93 94 95	RB-VFT2-01 RB-VFT2-02 RB-VFT2-03 (Floor Tile & Mastic)	12” x 12” Vinyl Floor Tile and Mastic	Misc	N	Brown Floor Tile & Black Mastic	2	C22 – Lab Hallway	2% Chrysotile (Floor Tile) 5 % Chrysotile (Mastic) – Positive Stop	120 SF
96 97 98	RB-TSI6-01 RB-TSI6-02 RB-TSI6-03 (Insulation)	Silver-Painted Pipe Insulation	TSI	F	White	2	C22 – Lab Area – Layer 2	20% Amosite 3% Chrysotile (Insulation) – Positive Stop	200 LF
123	RB-DC3-01	Door Caulk	Misc	N	White	Ext	West Exterior Loading Dock Door	10% Chrysotile – Positive Stop	8 LF
124	RB-DC3-02								
125	RB-DC3-03								
126	RB-TRAN2-01	Corrugated Transite Panels	Misc	N	White/Gray	Ext	Northwest Office Roof, Southwest Rail Dock Wall	15% Chrysotile – Positive Stop	2,500 SF
127	RB-TRAN2-02								
128	RB-TRAN2-03								
138	RB-WC2-01	Old Caulk	Misc	N	Grey	Ext	Exterior – North Street Level Windows	15% Chrysotile – Positive Stop	30 LF
139	RB-WC2-02								
140	RB-WC2-03								
150	RB-RT-01	Roofing Tar	Misc	N	Grey/Silver	Roof	All Roofs	8% Chrysotile – Positive Stop	6,000 SF
151	RB-RT-02								
152	RB-RT-03								
153	RB-RC-01	Roofing Caulk	Misc	N	White	Roof	Roof A	5% Chrysotile – Positive Stop	60 LF
154	RB-RC-02								
155	RB-RC-03								
177	RB-RM5-01	Roofing Material	Misc	N	Silver	Roof	Roof – E	10% Chrysotile – Positive Stop	12,200 SF
178	RB-RM5-02								
179	RB-RM5-03								

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content	Est. Quantity
180	RB-EJ3-01	Expansion Joint	Misc	N	White	Ext	Exterior – North A12 (Behind Metal Vertical Seams)	3% Chrysotile – Positive Stop	400 LF
181	RB-EJ3-02								
182	RB-EJ3-03								
ASSUMED ACM									
	N/A	Fire Doors	TSI	Y	White	Throughout	Throughout	N/A	25 Doors
	N/A	Elevator Equipment				Throughout	Elevator	N/A	6 Elevators

Material Type – Surf=Surfacing, TSI=Thermal System Insulation, Misc=Miscellaneous / **Est. Quantity** – SF=Square foot, LF=Linear foot, EA=Each
B=Basement, R=Roof, Mezz=Mezzanine, Ext=Exterior

Twenty-three (23) bulk material samples were analyzed greater than 1% asbestos. For those samples the laboratory identified as containing less than 1% asbestos, they were further analyzed via point count analysis. Samples determined to contain less than 1% asbestos via point count were included in Table 3a (non-asbestos containing material sample list). ACMs include pipe insulation(s), heater insulation, pipe insulation tar and felt, door caulk(s), boiler insulation, transite wall panels, duct sealant, aircell pipe insulation, asphalt shingles, tank insulation, 9” x 9” vinyl floor tile, floor tile mastic(s), 12” x 12” vinyl floor tile mastic, silver-painted pipe insulation, corrugated transite panels, old caulk, roofing tar, roofing caulk, roofing materials, and expansion joint compound. Additionally, two (2) materials were not sampled and assumed ACM. These materials include fire doors and elevator equipment. If during demolition or renovation activities additional areas of identified ACM are discovered, they should be abated accordingly. The Toeroek report and associated analytical reports are provided in Appendix E.

Asbestos Containing Material (ACM) is defined as any material containing greater than one percent (>1%) asbestos. Building materials containing equal to one percent (1%) or less than one percent (<1%) asbestos by **point count analysis** are not classified as Regulated Asbestos Containing Material (RACM) by the EPA. Although an asbestos abatement contractor is not required to remove materials containing 1% or less asbestos, these materials must be removed wet and promptly contained and disposed of in leak-tight containers. Materials containing 1% or less asbestos are not required to be disposed of at an approved landfill as asbestos waste material. Employers of those engaging in the disturbance of 1% or less asbestos are required to provide their workers with Asbestos Awareness training of at least two hours prior to disturbance of said materials. Further, those removing materials containing 1% or less asbestos must maintain documentation proving that breathing zone exposures do not exceed either OSHA’s permissible exposure limit or short-term excursion limit.

It is important to note that these are estimated quantities; therefore, the abatement contractors and the client representative should discern between the estimated quantity above and future exploration of the property at the pre-bid walk-through to determine the final quantity during abatement procedures.

Table 2b – Asbestos Containing Materials Sample List (Eocene)

Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content	Est. Quantity
R-3a	Aircell Pipe Insulation	TSI	Y	White	7	NW Room	70% Chrysotile	1,685 LF
R-3b	Aircell Pipe Insulation	TSI	Y	White	5	NE Room	70% Chrysotile	See above
R-3c	Aircell Pipe Insulation	TSI	Y	White	4	NW Room near Elevators	70% Chrysotile	See above
R-3d	Aircell Pipe Insulation	TSI	Y	White	2	S Mechanical Room	70% Chrysotile	See above
R-3e	Aircell Pipe Insulation	TSI	Y	White	B	Eastmost Hall	70% Chrysotile	See above
R-5	Chalkboard	Misc	N	Black	7	W Room	15% Chrysotile	60 SF
R-7a	Pipe Insulation	TSI	Y	White	6	NE Room	5% Amosite 15% Chrysotile	3,200 LF
R-9	Ceiling Covering	Misc	N	Silver	6	Center Room on Support Column	2% Chrysotile	229,150 SF
R-10	Duct Sealant	Misc	N	Brown/Gray	6	SW Room on Smokers	2% Chrysotile	550 LF
R-11	Transite Wall Panels	Misc	N	White	6	West Smoke Rooms	15% Chrysotile	5,800 SF
R-13	Ceiling Covering Tar	Misc	N	Black	5	Center Room	5% Chrysotile	See R-9
R-14	Ceiling Covering	Misc	N	Silver	5	Center Room	2% Chrysotile	See R-9
R-15	Wall Tar	Misc	N	Black	5	HVAC Crawl Space	10% Chrysotile	750 SF
R-24	Cork Tar Paper	Misc	N	Black	3	SE Room	3.6% Chrysotile (PC)	See R-9
R-25	Panel Adhesive	Misc	N	Gray	3	S Middle Room	10% Chrysotile	12,360 SF
R-28	Ceiling Covering	Misc	N	Black	2	NW Room	8.0% Chrysotile (PC)	See R-9
R-33a	Pipe Insulation	TSI	Y	White	2	SW Room	20% Chrysotile	See R7a
R-33b	Pipe Insulation	TSI	Y	White	2	SW Room	20% Chrysotile	See above
R-33c	Pipe Insulation	TSI	Y	White	2	SW Room	60% Chrysotile	See above
R-43	Pipe Insulation	TSI	Y	White	B	N Room	60% Chrysotile	See R-7a
R-45a	Duct Wrap	TSI	Y	White	B	East Hall	80% Chrysotile	500 LF
R-45b	Duct Wrap	TSI	Y	White	B	East Hall	80% Chrysotile	See above
R-45c	Duct Wrap	TSI	Y	White	B	East Hall	70% Chrysotile	See above

Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content	Est. Quantity
R-48	Cement Board	Misc	N	Gray	1	N Room - N Wall – Top Half	20% Chrysotile	750 SF
R-49	Duct Sealant	Misc	N	Black	6	W Central Room	2% Chrysotile	See R-10
R-51	Door Caulk	Misc	N	Gray	Ext	SW Dock Entrance Door	1.2% Chrysotile (PC)	10 LF
R-52	Ceiling Covering	Misc	N	Black	7	SE Room	7% Chrysotile	See R-9
R-53	Ceiling Covering	Misc	N	Black	7	SE Room	3% Chrysotile	See R-9
R-55	Cork Insulation Tar	Misc	N	Black	7	Middle Room, South Portion	3% Chrysotile	21,800 SF
R-56	Ceiling Covering	Misc	N	Black	4	NW Room	2% Chrysotile	See R-9
R-60	Ceiling Covering	Misc	N	Black	3	Main Room, W Side	2% Chrysotile	See R-9
R-61	Cork Insulation Tar	Misc	N	Black	3	NE Room	2% Chrysotile	See R-55
R-64	Ceiling Covering	Misc	N	Black	1	NE Room	0.5% Chrysotile (PC) *Assumed to be ACM	See R-9
R-67	Ceiling Covering	Misc	N	Black	B	NW Room	None Detected (PC) *Assumed to be ACM	See R-9

Material Type – Surf=Surfacing, TSI=Thermal System Insulation, Misc=Miscellaneous / **Location** – B=Basement, R=Roof, Mezz=Mezzanine, Ext=Exterior / **Asbestos Content** – PC=Point Count / **Est. Quantity** – SF=Square foot, LF=Linear foot, EA=Each

Thirty-two (32) bulk material samples were analyzed greater than 1% asbestos. Six (6) of the remaining building material samples (window glazing, cork insulation tar, and ceiling covering) were detected with a concentration of <1% asbestos and determined to contain <1% asbestos via point count analysis. Though two of the ceiling covering samples were determined to contain <1% asbestos via point count analysis, the materials are assumed to be ACM as similar, apparent homogenous materials from the other floors were determined to be ACM by laboratory analysis.

ACMs include aircell pipe insulation, chalkboards, pipe insulation, ceiling covering, duct sealant, transite wall panels, ceiling covering tar, wall tar, cork tar paper, panel adhesive, duct wrap, cement board, door caulk, and cork insulation tar. If during demolition or renovation activities additional areas of identified ACM are discovered, they should be abated accordingly. Laboratory analytical reports are provided in Appendix B.

Asbestos Containing Material (ACM) is defined as any material containing greater than one percent (>1%) asbestos. Building materials containing equal to one percent (1%) or less than one percent (<1%) asbestos by **point count analysis** are not classified as Regulated Asbestos Containing Material (RACM) by the EPA. Although an asbestos abatement contractor is not required to remove materials containing 1% or less asbestos, these materials must be removed wet and promptly contained and disposed of in leak-tight containers. Materials containing 1% or less asbestos are not required to be disposed of at an approved landfill as asbestos waste material. Employers of those engaging in the disturbance of 1% or less asbestos are required to provide their workers with Asbestos Awareness training of at least two hours prior to disturbance of said materials. Further, those removing materials containing 1% or less asbestos must maintain documentation proving that breathing zone exposures do not exceed either OSHA's permissible exposure limit or short-term excursion limit.

Additional testing was performed using the 400 Point Count procedure on four (4) bulk material samples that were originally reported to have less than one percent (<1%) asbestos by polarized microscopy. One (1) out of the four (4) bulk sample materials tested with concentrations of less than one percent (<1%) asbestos, therefore this one material is not regulated by the EPA. Iowa OSHA would consider disturbance of this one (1) material as unclassified asbestos work.

It is important to note that these are estimated quantities; therefore, the abatement contractors and the client representative should discern between the estimated quantity above and future exploration of the property at the pre-bid walk-through to determine the final quantity during abatement procedures.

Table 3a – Non-Asbestos Containing Material Sample List (Toeroek)

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
1	RB-WG-01	Window Glaze (Square Pane Windows)	Misc	N	Gray/Pink	7	6th and 7th Floor	<0.25% Chrysotile PC*
2	RB-WG-02							
3	RB-WG-03							
4	RB-BG-01	Wall Block Grout	Misc	N	Gray	7	Throughout	ND
5	RB-BG-02							
6	RB-BG-03							
9	RB-TSI-03	Insulation Wrap	Misc	N	Gray	5	Throughout	ND
10 11 12	RB-TS2-01 RB-TS2-02 RB-TS2-03 (Mastic)	8” – 24” Pipe Insulation (Mastic)	TSI	Y	Black	10=5; 11=3; 12=1	Throughout – Layer 1	ND
10 11 12	RB-TS2-01 RB-TS2-02 RB-TS2-03 (Insulation)	8” – 24” Pipe Insulation	TSI	Y	Brown	10=5; 11=3; 12=1	Throughout – Layer 2	ND
13	RB-PL-01	Plaster	Surf	N	Gray	13=3; 14=4; 15=5	Throughout	<0.25% Chrysotile PC*
14	RB-PL-02							
15	RB-PL-03							
16	RB-CI-01	Cork Insulation	TSI	N	Brown	16=1; 17, 18=3	Throughout – Behind Walls	ND
17	RB-CI-02							
18	RB-CI-03							
25 26 27	RB-TSI4-01 RB-TSI4-02 RB-TSI4-03 (Tar and Felt)	Felt-Wrapped (Foam) Pipe Insulation (Tar and Felt)	TSI	N	Black	Roof	Roof, 7th Floor, and C51 – Layer 1	ND
25	RB-TSI4-01 (Tar and Felt)	Felt-Wrapped (Foam) Pipe Insulation (Tar and Felt)	TSI	N	Black	Roof	Roof, 7th Floor, and C51 – Layer 2	ND
25 26 27	RB-TSI4-01 RB-TSI4-02 RB-TSI4-03 (Insulation)	Felt-Wrapped (Foam) Pipe Insulation (Insulation)	TSI	N	Gray	Roof	Roof, 7th Floor, and C51 – Layer 2 and Layer 3	ND
34	RB-T-01	Tar	Misc	N	Black	34=1; 35, 36=5	Throughout (Ceilings and Walls)	ND
35	RB-T-02							
36	RB-T-03							

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
46	RB-PL-04	Plaster	Surf	N	Gray	46=N/A; 47=6; 48, 49=2	Throughout	<0.25% Chrysotile PC*
47	RB-PL-05							
48	RB-PL-06							
49	RB-PL-07							
53	RB-DC2-01	Door Caulk	Misc	N	White	5	5th Floor – Northwest Elevator Doors	ND
54	RB-DC2-02							
55	RB-DC2-03							
56	RB-WC-01	Window Caulk	Misc	N	White	5	B56 (Interior Square Windows	ND
57	RB-WC-02							
58	RB-WC-03							
59	RB-FH-01	Fire Hose	Misc	N	Beige	6	6th Floor – E61	ND
60	RB-FH-02							
61	RB-FH-03							
62	RB-PW-01	Pipe Wrap	Misc	N	Black	5	F51	ND
63	RB-PW-02							
64	RB-PW-03							
68	RB-T2-01	Tar (Brick Walls)	Misc	N	Black	68, 70=4; 69=N/A	A41, A22	ND
69	RB-T2-02							
70	RB-T2-03							
71 72 73 74 75 76 77	RB-FWC-01 RB-FWC-02 RB-FWC-03 RB-FWC-04 RB-FWC-05 RB-FWC-06 RB-FWC-07 (Coating)	Freezer Wall Coating	Misc	N	White	71=1; 72, 73, 74=3; 75, 76, 77=4	Throughout Freezer Walls – Layer 1	ND
71 72 73 74 75 76 77	RB-FWC-01 RB-FWC-02 RB-FWC-03 RB-FWC-04 RB-FWC-05 RB-FWC-06 RB-FWC-07 (Insulation)	Freezer Wall Coating (Insulation)	Misc	N	White	71=1; 72, 73, 74=3; 75, 76, 77=4	Throughout Freezer Walls – Layer 2	ND
71 72	RB-FWC-01 RB-FWC-02 (Foam)	Freezer Wall Coating (Foam)	Misc	N	White	71=1; 72=3	Throughout Freezer Walls – Layer 3	ND

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
81 83	RB-CFT-01 RB-CFT-03 (Grout)	Ceramic Floor Tile Grout	Misc	N	Red	2	C22 – Lab Area – Layer 2	ND
82 83	RB-CFT-02 RB-CFT-03 (Ceramic Tile)	Ceramic Floor Tile Grout (Floor Tile)	Misc	N	Brown	2	C22 – Lab Area – Layer 1	ND
87 88 89	RB-CB-01 RB-CB-02 RB-CB-03 (Cove Base)	6” Cove Base	Misc	N	Black	2	C22 – Lab Area – Layer 1	ND
87 88 89	RB-CB-01 RB-CB-02 RB-CB-03 (Mastic)	6” Cove Base (Mastic)	Misc	N	Dark Brown	2	C22 – Lab Area – Layer 2	ND
90	RB-CT-01	Dot Pattern 1’ x 1’ Ceiling Tile	Misc	Y	Dark Brown	2	C22 – Lab Area	ND
91	RB-CT-02							
92	RB-CT-03							
96 97	RB-TSI6-01 RB-TSI6-02 (Coating)	Silver-Painted Pipe Insulation (Coating)	Misc	N	Silver	2	C22 – Lab Area – Layer 1	ND
98	RB-TSI6-03 (Wrap)	Silver-Painted Pipe Insulation (Wrap)	Misc	N	Gray	2	C22 – Lab Area – Layer 1	ND
99 100 101	RB-VFT3-01 RB-VFT3-02 RB-VFT3-03 (Floor Tile)	12” x 12” Vinyl Floor Tile	Misc	N	Grey	1	Loading Dock Office – Layer 1	ND
99 100 101	RB-VFT3-01 RB-VFT3-02 RB-VFT3-03 (Mastic)	12” x 12” Vinyl Floor Tile (Mastic)	Misc	N	Dark Brown	1	Loading Dock Office – Layer 2	ND
102	RB-CT2-01	White Fissure 2’ x 4’ Ceiling Tile	Misc	Y	White	1	Loading Dock Office	ND
103	RB-CT2-02							
104	RB-CT2-03							
105 106 107	RB-DWJC-01 RB-DWJC-02 RB-DWJC-03 (Texture)	Drywall Joint Compound (Texture)	Misc	N	White	1	Breakroom – Layer 1	ND

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
105 106	RB-DWJC-01 RB-DWJC-02 (Wallboard)	Drywall Joint Compound (Wallboard)	Misc	N	White	1	Breakroom – Layer 2 or Layer 4	ND
106	RB-DWJC-02 (Tape)	Drywall Joint Compound (Tape)	Misc	N	Beige	1	Breakroom – Layer 2	ND
106	RB-DWJC-02 (Joint Compound)	Drywall Joint Compound	Misc	N	White	1	Breakroom – Layer 3	ND
109 110	RB-CB2-02 RB-CB2-03 (Cove Base)	4” Cove Base	Misc	N	White	1	Breakroom Hallway – Layer 1	ND
108 109 110	RB-CB2-01 RB-CB2-02 RB-CB2-03 (Mastic)	4” Cove Base (Mastic)	Misc	N	Beige	1	Breakroom Hallway – Layer 2	ND
111 112 113	RB-SF-01 RB-SF-02 RB-SF-03 (Sheet Flooring)	Sheet Flooring	Misc	N	Brown	1	1st Floor Closet – Layer 1	ND
111 112 113	RB-SF-01 RB-SF-02 RB-SF-03 (Mastic)	Sheet Flooring (Mastic)	Misc	N	Yellow	1	1st Floor Closet – Layer 2	ND
114	RB-CRT-01	Countertop	Misc	N	Black	2	C22 – Lab Area	ND
115	RB-CRT-02							
116	RB-CRT-03							
117	RB-FP-01	Spray-On Fireproofing	Surf	N	Gray	B	AB2	ND
118	RB-FP-02							
119	RB-FP-03							
120	RB-C-01	Caulk	Misc	N	White	Ext	Exterior Foundation – South Docks	ND
121	RB-C-02							
122	RB-C-03							
129	RB-C2-01	Expansion Caulk	Misc	N	Grey	Ext	Exterior C13 – Southeast Corner, Northeast and North-Center C12, B11, and North A12	ND
130	RB-C2-02							
131	RB-C2-03							

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
132	RB-FS-01	Asphaltic Floor Seam	Misc	N	Black	Ext	Exterior – C13 Ramp	ND
133	RB-FS-02							
134	RB-FS-03							
135	RB-EJ-01	Expansion Joint (Soft)	Misc	N	White	Ext	Northeast and North-Center C12	ND
136	RB-EJ-02							
137	RB-EJ-03							
141	RB-EJ2-01	Expansion Joint	Misc	N	Grey	Ext	Northwest Ground Perimeter	ND
142	RB-EJ2-02							
143	RB-EJ2-03							
144 145 146	RB-RM-01 RB-RM-02 RB-RM-03 (Mastic Wrap)	Roofing Material (Mastic Wrap)	Misc	N	Black	Roof	Roof – G and F – Layer 1	ND
144 145 146	RB-RM-01 RB-RM-02 RB-RM-03 (Tar)	Roofing Material (Tar)	Misc	N	Black	Roof	Roof – G and F – Layer 2	ND
144 145 146	RB-RM-01 RB-RM-02 RB-RM-03 (Insulation)	Roofing Material (Insulation)	Misc	N	Yellow	Roof	Roof – G and F – Layer 3	ND
147 148 149	RB-RM2-01 RB-RM2-02 RB-RM2-03 (Membrane)	Roofing Material (Membrane)	Misc	N	Gray/Beige	Roof	Roof – A11 – Layer 1	ND
147 148 149	RB-RM2-01 RB-RM2-02 RB-RM2-03 (Foam Insulation)	Roofing Material (Foam Insulation)	Misc	N	Gray/Beige	Roof	Roof – A11 – Layer 2	ND
156	RB-RT2-01	Roofing Tar	Misc	N	Black	Roof	Roof – A (Vent)s	ND
157	RB-RT2-02							
158	RB-RT2-03							
159 160 161	RB-RM3-01 RB-RM3-02 RB-RM3-03 (Roofing Tars and Felts)	Roofing Material (Roofing Tars and Felts)	Misc	N	Black	Roof	Roof – B and C – Layer 1	ND

Figure Key	Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
159 160 161	RB-RM3-01 RB-RM3-02 RB-RM3-03 (Decking)	Roofing Material (Decking)	Misc	N	Brown	Roof	Roof – B and C – Layer 2	ND
162	RB-RT3-01	Roofing Tar	Misc	N	Black	Roof	All Roofs	ND
163	RB-RT3-02							
164	RB-RT3-03							
165	RB-WC3-01	Window Caulk	Misc	N	White	Roof	Roof – B (Skylight Windows)	ND
166	RB-WC3-02							
167	RB-WC3-03							
168 169 170	RB-AS2-01 RB-AS2-02 RB-AS2-03 (Shingle)	Asphalt Shingles	Misc	N	Black	Roof	Roof – B/C Transition – Layer 1	ND
168 169 170	RB-AS2-01 RB-AS2-02 RB-AS2-03 (Tar Paper)	Asphalt Shingles (Tar Paper)	Misc	N	Black	Roof	Roof – B/C Transition – Layer 2	ND
171 172 173	RB-RM4-01 RB-RM4-02 RB-RM4-03 (Roll Roofing)	Roofing Material (Roll Roofing)	Misc	N	Black	Roof	Roof – D and H – Layer 1	ND
171 172 173	RB-RM4-01 RB-RM4-02 RB-RM4-03 (Roofing Felt)	Roofing Material (Roofing Felt)	Misc	N	Black	Roof	Roof – D and H – Layer 2	ND
171 172 173	RB-RM4-01 RB-RM4-02 RB-RM4-03 (Foam Insulation)	Roofing Material (Foam Insulation)	Misc	N	Yellow	Roof	Roof – D and H – Layer 3	ND
174	RB-RC2-01	Caulk	Misc	N	Pink	Roof	Roof – H (South Wall)	ND
175	RB-RC2-02							
176	RB-RC2-03							

*Analyzed via point count and not classified as RACM by the EPA

Material Type – Surf=Surfacing, TSI=Thermal System Insulation, Misc=Miscellaneous / **Location** – B=Basement, R=Roof, Mezz=Mezzanine, Ext=Exterior / **Asbestos Content** – PC=Point Count, ND=None Detected / **Est. Quantity** – SF=Square foot, LF=Linear foot, EA=Each

Table 3b – Non-Asbestos Containing Material Sample List (Eocene)

Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
R-1	Plaster	Surf	N	White	7	NE Room	ND
R-2	Pipe Wrap	Misc	N	Black	7	SE Room	ND
R-4	Cork Insulation	Misc	Y	Brown	7	S Room	ND
R-6	Door Frame Caulk	Misc	N	Gray	7	W Room	ND
R-8	Window Glazing	Misc	Y	Gray	6	E Exterior Windows	0.25% Chrysotile (PC)*
R-12	Cork Insulation	Misc	Y	Brown	5	NE Room	ND
R-16	Wall Block Grout	Misc	N	Gray	5	HVAC Crawl Space	ND
R-17	Cork Insulation Adhesive Tar	Misc	N	Black	5	S Central Room	ND
R-18	Pipe Wrap	Misc	N	Black	5	SW Room	ND
R-19	Pipe Insulation	TSI	Y	Brown	5	SW Room	ND
R-20	Wall Tar	Misc	N	Black	4	W Room on Exterior Wall	ND
R-21a	Spray On Insulation	Surf	Y	White	4	NW Room	ND
R-21b	Spray On Insulation	Surf	Y	White	4	NW Room	ND
R-21c	Spray On Insulation	Surf	Y	White	4	NW Room	ND
R-21d	Spray On Insulation	Surf	Y	White	3	NW Room	ND
R-22	Door Caulk	Misc	N	Gray	4	NW Room Elevators	ND
R-23	Cork Insulation	Misc	Y	Brown	3	SE Room	ND
R-26	Pipe Wrap	Misc	N	Black	3	SW Side Room	ND
R-27	Wall Block Grout	Misc	N	Gray	3	N Stairwell Block	ND
R-29	Spray On Insulation	Surf	Y	White	2	NE Room	ND
R-30	Pipe Wrap	Misc	N	Black	2	Middle East Room	ND
R-31	Insulation Tar	Misc	N	Black	2	Middle East Room	ND
R-32	Door Caulk	Misc	N	Gray	2	SE Room	ND
R-34	Window Glazing	Misc	Y	Pink	2	Lab	ND

Sample #	Material Substance	Material Type (Surf/TSI/Misc)	Friable (Y or N)	Color	Floor	Location	Asbestos Content
R-35	12" x 24" Floor Tile	Misc	N	Black	1	SE Room Office	ND
R-36	Floor Tile Mastic	Misc	N	Black	1	SE Room Office	ND
R-37	Pipe Wrap	Misc	N	Black	1	SE Room	ND
R-38	Insulation Tar	Misc	N	Black	1	SE Room	ND
R-39	Caulk	Misc	N	White	1	S Room	ND
R-40	Spray On Insulation	Surf	Y	White	1	SE Room	ND
R-41	Caulk	Misc	N	White	1	SW Loading Dock	ND
R-42-Floor Tile	12" x 24" Floor Tile	Misc	N	Black	1	N Room	ND
R-42-Mastic	12" x 24" Floor Tile Mastic	Misc	N	Black	1	N Room	ND
R-44	Cork Insulation	Misc	Y	Brown	B	NE Room	ND
R-46	Linoleum	Misc	N	Brown	1	Tank Room	ND
R-47	Linoleum Adhesive	Misc	N	Yellow	1	Tank Room	ND
R-50	Expansion Joint Compound	Misc	N	White	Ext	S Side	ND
R-54	Cork Insulation Tar	Misc	N	Black	5	N Room	ND
R-57	Cork Insulation Tar	Misc	N	Black	4	NE Room	ND
R-58	Cork Insulation Tar	Misc	N	Black	4	Middle South Room	ND
R-59	Cork Insulation Tar	Misc	N	Black	4	E Room	0.5% Chrysotile (PC)*
R-62	Cork Insulation Tar	Misc	N	Black	3	SE Room	0.7% Chrysotile (PC)*
R-63	Cork Insulation Tar	Misc	N	Black	2	S Middle Room	ND
R-65	Cork Insulation Tar	Misc	N	Black	1	East Room	ND
R-66	Cork Insulation Tar	Misc	N	Black	1	South Middle Room	ND
R-68	Cork Insulation Tar	Misc	N	Black	B	S Middle Room	<0.25% Chrysotile (PC)*

*Analyzed via point count and not classified as RACM by the EPA

Material Type – Surf=Surfacing, TSI=Thermal System Insulation, Misc=Miscellaneous **/ Asbestos Content** – ND=None Detected, PC-Point Count
Location – B=Basement, R=Roof, Int=Interior, Ext=Exterior

6.0 CONCLUSIONS / RECOMMENDATIONS

The following conclusions and recommendations are summarized as follows:

Asbestos was detected in 23 of the 198 samples collected from various building components within the Property's interior and exterior by Toeroek. Asbestos was detected in 32 of the 80 additional samples collected from the Property's interior and exterior by Eocene. ACMs include:

- Pipe Insulation
- Heater Insulation
- Felt-Wrapped Pipe Insulation Tar and Felt
- Door Caulk
- Boiler Insulation
- Transite Wall Panels
- Duct Sealant
- Aircell Pipe Insulation
- Asphalt Shingles/Ceiling Covering/Ceiling Covering Tar
- Tank Insulation
- 9" x 9" Vinyl Floor Tile
- 9" x 9" Vinyl Floor Tile Mastic
- 12" x 12" Vinyl Floor Tile
- 12" x 12" Vinyl Floor Tile Mastic
- Silver-Painted Pipe Insulation
- Corrugated Transite Panels
- Old Caulk
- Roofing Tar
- Roofing Caulk
- Roofing Material
- Expansion Joint
- Chalkboard
- Wall Tar
- Cork Tar Paper
- Panel Adhesive
- Duct Wrap
- Cement Board
- Cork Insulation Tar
- Fire Doors (Assumed)
- Elevator Equipment (Assumed)

Based on the results of the data collected during the assessment, the buildings require further action prior to demolition or renovation. Eocene recommends the abatement of all ACM containing components located within the inspection area if those building materials are to be disturbed during any future renovation/demolition activities. All abatement work shall be completed in accordance with local, state, and federal regulations. A visual inspection is recommended upon completion of abatement work to document that all ACMs within the scope of abatement have been removed.

7.0 CONDITIONS & LIMITATIONS

The Iowa Department of Natural Resources' (IDNR) Air Quality Bureau and Occupational Safety and Health Bureau (OSHA) of the Iowa Division of Labor Services require notification of any renovation/demolition activities in non-residential projects if the combined regulated ACM meets or exceeds any of the following thresholds: 160 square feet of surfacing ACM, 260 linear feet of TSI, or 35 cubic feet of ACM debris.

Eocene has performed the tasks contained within this report in a thorough and professional manner consistent with commonly accepted standard industry practices. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the property. Eocene cannot guarantee, and does not warrant, that this report has identified all adverse environmental factors and/or conditions affecting the subject property. This report is not a bidding document or project specification as it does not contain the necessary components. Eocene cannot warrant

the work of any third party that may have aided in the completion of this report. This report has been prepared on behalf of and exclusively for use by the City of Waterloo for specific application to their project as discussed. Contractors, consultants or other third parties reviewing this report must draw their own conclusions regarding data contained within the report, further investigation or required remediation.

APPENDIX A

Qualifications

Certificate of Completion

KIM CROSSER-HARMS

DOB: 09-02-1967

Issued: 01-27-2025

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

Impact7G, Inc.

certifies that

Kim Crosser

License Type	Number	Expires
MANAGEMENT PLANNER	25-12884	12-13-2025
INSPECTOR	25-12883	12-13-2025
SUPERVISOR	24-12885	12-12-2025
PROJECT DESIGNER	24-11376	02-07-2025

IOWA

Asbestos

Larry Johnson, Jr.
Labor Commissioner

has successfully completed and passed the associated examination for the

Asbestos Inspector Annual Review

course accredited by the State of Missouri and conducted in accordance with the requirements of 40 CFR 763. The person receiving this certificate has completed the required training for asbestos certification under TSCA Title II.

Course Date: December 13, 2024
Examination Date: December 13, 2024
Expiration Date: December 13, 2025
Course Location: 8951 Windsor Parkway, Johnston, Iowa
Certificate Number: 121324-INR-09

IMPACT7G

Instructor
8951 Windsor Parkway
Johnston, IA 50131
515-473-6256

JONATHAN REIS

DOB: 02-13-1984

Issued: 01-27-2025

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

License Type	Number	Expires
INSPECTOR	25-12880	12-13-2025
PROJECT DESIGNER	25-12881	01-13-2026
SUPERVISOR	24-11399	01-17-2025

IOWA

Asbestos

Larry Johnson, Jr.
Labor Commissioner

Certificate of Completion

KEVIN MARBLE

DOB: 03-03-1989

Issued: 01-31-2024

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

Impact7G, Inc.

certifies that

Kevin Marble

License Type	Number	Expires
INSPECTOR	24-11230	01-18-2025
SUPERVISOR	24-1131	01-17-2025

IOWA

Asbestos

Larry Johnson, Jr.
Labor Commissioner

has successfully completed and passed the associated examination for the

Asbestos Inspector Annual Review

course accredited by the State of Missouri and conducted in accordance with the requirements of 40 CFR 763. The person receiving this certificate has completed the required training for asbestos certification under TSCA Title II.

IMPACT7G

Course Date: January 18, 2024
Examination Date: January 18, 2024
Expiration Date: January 18, 2025
Course Location: 8951 Windsor Parkway, Johnston, Iowa
Certificate Number: 011824-INR-08

Instructor
8951 Windsor Parkway
Johnston, IA 50131
515-473-6256

M·E·T·A

Mayhew Environmental Training Associates

INCORPORATED

EMMA THOMAS

DOB: 07-30-2002

Issued: 07-18-2024

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

Certificate # DPC6DX11H3

License Type	Number	Expires
SUPERVISOR	24-12107	07-24-2025
INSPECTOR	24-12154	07-24-2025

IOWA

Asbestos

Larry Johnson, Jr.
Labor Commissioner

Emma Thomas

has on 7/24/2024, in Lawrence, KS completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646

Asbestos Inspector Initial

as approved by IA & the US EPA under 40 CFR 763 (AHERA)
on 7/22/2024 - 7/24/2024 and passed the associated exam on 7/24/2024 with a score of at least 70%

KANSAS MAYHEW INC. 1987 EST. 1985 ENVIRONMENTAL TRAINING ASSOCIATES SAFETY IN GOD ALONE

Russell Taylor Instructor

Thomas Mayhew
President

SSN: XXX-XX-0418
Expiration: 7/24/2025

P.O. Box 786 - Lawrence, KS. 66044 - 800.444.6382
www.metaenvironmental.net

APPENDIX B

Laboratory Reports & Chain of Custody Documentation

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order: 162500788
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/16/2025 8:05 AM
Analysis Date: 01/16/2025 - 01/17/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-1 *162500788-0001*	PLASTER, WHITE, 7, NE ROOM	Gray Non-Fibrous Homogeneous		20% Quartz 80.0% Non-fibrous (Other)	**None Detected**
R-2 *162500788-0002*	PIPE WRAP, BLACK, 7, SE ROOM	Black Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**
R-3A *162500788-0003*	AIRCELL PIPE INSULATION, WHITE, 7, NW ROOM	Gray Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-3B *162500788-0004*	AIRCELL PIPE INSULATION, WHITE, 5, NE ROOM	Gray/White Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-3C *162500788-0005*	AIRCELL PIPE INSULATION, WHITE, 4, NW ROOM NEAR ELEVATORS	Gray Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-3D *162500788-0006*	AIRCELL PIPE INSULATION, WHITE, 2, S MECHANICAL ROOM	Gray/White Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-3E *162500788-0007*	AIRCELL PIPE INSULATION, WHITE, B, EASTMOST HALL	Gray Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-4 *162500788-0008*	CORK INSULATION, BROWN, 7, S ROOM	Brown Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-5 *162500788-0009*	CHALKBOARD, BLACK, 7, W ROOM	Gray/Black Fibrous Homogeneous		85.0% Non-fibrous (Other)	**15% Chrysotile**

Initial report from: 01/17/2025 08:41:54

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Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-6 *162500788-0010*	DOOR FRAME CAULK, GRAY, 6, W ROOM	Gray Non-Fibrous Homogeneous		20% Quartz 80.0% Non-fibrous (Other)	**None Detected**
R-7A *162500788-0011*	PIPE INSULATION, WHITE, 6, NE ROOM	Tan Fibrous Homogeneous		80.0% Non-fibrous (Other)	**5% Amosite** **15% Chrysotile**
R-8 *162500788-0012*	WINDOW GLAZING, GRAY, 6, E EXTERIOR WINDOWS	Gray Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**
R-9 *162500788-0013*	CEILING COVERING, SILVER, 6, CENTER ROOM ON SUPPORT COLUMN	Black/Silver Non-Fibrous Homogeneous		20% Quartz 78.0% Non-fibrous (Other)	**2% Chrysotile**
R-10 *162500788-0014*	DUCT SEALANT, BROWN / GRAY, 6, SW ROOM ON SMOKERS	Brown Non-Fibrous Homogeneous		98.0% Non-fibrous (Other)	**2% Chrysotile**
R-11 *162500788-0015*	TRANSITE WALL PANELS, WHITE, 6, WEST SMOKE ROOMS	Tan Fibrous Homogeneous		85.0% Non-fibrous (Other)	**15% Chrysotile**
R-12 *162500788-0016*	CORK INSULATION, BROWN, 5, NE ROOM	Brown Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-13 *162500788-0017*	CEILING COVER TAR, BLACK, 5, CENTER ROOM	Black Non-Fibrous Homogeneous		95.0% Non-fibrous (Other)	**5% Chrysotile**
R-14 *162500788-0018*	CEILING COVER, SILVER, 5, CENTER ROOM	Black/Silver Non-Fibrous Homogeneous		20% Quartz 78.0% Non-fibrous (Other)	**2% Chrysotile**

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Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-15 *162500788-0019*	WALL TAR, BLACK, 5, HVAC CRAWL SPACE	Black Non-Fibrous Homogeneous		90.0% Non-fibrous (Other)	**10% Chrysotile**
R-16 *162500788-0020*	WALL BLOCK GROUT, GRAY, 5, HVAC CRAWL SPACE	Tan Non-Fibrous Homogeneous		20% Quartz 80.0% Non-fibrous (Other)	**None Detected**
R-17 *162500788-0021*	CORK INSULATION ADHESIVE TAR, BLACK, 5, S CENTRAL ROOM PIPE WRAP, BLACK, 5, SW ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-18 *162500788-0022*	PIPE WRAPM BLACK, 5, SW ROOM	Black Fibrous Homogeneous	50% Cellulose	50.0% Non-fibrous (Other)	**None Detected**
R-19 *162500788-0023*	PIPE INSULATION, BROWN, 5, SW ROOM	Brown/White Fibrous Homogeneous	95% Hair	5.0% Non-fibrous (Other)	**None Detected**
R-20 *162500788-0024*	WALL TAR, BLACK, 4, W ROOM ON EXTERIOR WALL	Black Fibrous Homogeneous	60% Cellulose	40.0% Non-fibrous (Other)	**None Detected**
R-21A *162500788-0025*	SPRAY ON INSULATION, WHITE, 4, NW ROOM	White Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**
R-21B *162500788-0026*	SPRAY ON INSULATION, WHITE, 4, NW ROOM	White Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**
R-21C *162500788-0027*	SPRAY ON INSULATION, WHITE, 4, NW ROOM	White Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**

Initial report from: 01/17/2025 08:41:54

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Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-21D *162500788-0028*	SPRAY ON INSULATION, WHITE, 4, NW ROOM	White Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**
R-22 *162500788-0029*	DOOR CAULK, GRAY, 4, NW ROOM ELEVATORS	Brown/Gray/Black Non-Fibrous Homogeneous		20% Quartz 80.0% Non-fibrous (Other)	**None Detected**
R-23 *162500788-0030*	CORK INSULATION, BROWN, 3, SE ROOM	Brown Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-24 *162500788-0031*	CORK TAR PAPER, BLACK, 3, SE ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**
R-25 *162500788-0032*	PANEL ADHESIVE, GRAY, 3, S MIDDLE ROOM	Gray/Clear Non-Fibrous Homogeneous		90.0% Non-fibrous (Other)	**10% Chrysotile**
R-26 *162500788-0033*	PIPE WRAP, BLACK, 3, SW SIDE ROOM	Black Fibrous Homogeneous	80% Cellulose	20.0% Non-fibrous (Other)	**None Detected**
R-27 *162500788-0034*	WALL BLOCK GROUT, GRAY, 3, N STAIRWELL BLOCK	Gray/White Non-Fibrous Homogeneous		20% Quartz 80.0% Non-fibrous (Other)	**None Detected**
R-28 *162500788-0035*	CEILING COVERING, BLACK, 2, NW ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**
R-29 *162500788-0036*	SPRAY ON INSULATION, WHITE, 2, NE ROOM	White Fibrous Homogeneous	20% Cellulose	80.0% Non-fibrous (Other)	**None Detected**

Initial report from: 01/17/2025 08:41:54

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order: 162500788
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/16/2025 8:05 AM
Analysis Date: 01/16/2025 - 01/17/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-30 *162500788-0037*	PIPE WRAP, BLACK, 2, MIDDLE EAST ROOM	Black Fibrous Heterogeneous	30% Cellulose	70.0% Non-fibrous (Other)	**None Detected**
R-31 *162500788-0038*	INSULATION TAR, BLACK, 2, MIDDLE EAST ROOM	Brown/Black Fibrous Homogeneous	5% Cellulose 20% Synthetic	75.0% Non-fibrous (Other)	**None Detected**
R-32 *162500788-0039*	DOOR CAULK, GRAY, 2, SE ROOM	Gray/Rust Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-33A *162500788-0040*	PIPE INSULATION, WHITE, 2, SW ROOM	Brown/White Fibrous Homogeneous		80.0% Non-fibrous (Other)	**20% Chrysotile**
R-33B *162500788-0041*	PIPE INSULATION, WHITE, 2, SW ROOM	Brown/White Fibrous Homogeneous		80.0% Non-fibrous (Other)	**20% Chrysotile**
R-33C *162500788-0042*	PIPE INSULATION, WHITE, 2, SW ROOM	Gray/Tan Fibrous Homogeneous	10% Cellulose	30.0% Non-fibrous (Other)	**60% Chrysotile**
R-34 *162500788-0043*	WINDOW GLAZING, PINK, 2, LAB	Pink Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-35 *162500788-0044*	12"X24" FLOOR TILE, BLACK, 1, SE ROOM OFFICE	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-36 *162500788-0045*	FLOOR TILE MASTIC, BLACK, 1, SE ROOM OFFICE	Black Non-Fibrous Homogeneous	10% Cellulose	90.0% Non-fibrous (Other)	**None Detected**

Initial report from: 01/17/2025 08:41:54

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EMSL Order: 162500788
Customer ID: IMPA25
Customer PO:
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Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/16/2025 8:05 AM
Analysis Date: 01/16/2025 - 01/17/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-37 *162500788-0046*	PIPE WRAP, BLACK, 1, SE ROOM	Black Fibrous Homogeneous	20% Cellulose	80.0% Non-fibrous (Other)	**None Detected**
R-38 *162500788-0047*	INSULATION TAR, BLACK, 1, SE ROOM	Black Fibrous Homogeneous	95% Cellulose	5.0% Non-fibrous (Other)	**None Detected**
R-39 *162500788-0048*	CAULK, WHITE, 1, S ROOM	White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-40 *162500788-0049*	SPRAY ON INSULATION, WHITE, 1, SE ROOM	White Fibrous Homogeneous	40% Cellulose	60.0% Non-fibrous (Other)	**None Detected**
R-41 *162500788-0050*	CAULK, WHITE, 1, SW LOADING DOCK	White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-42-Floor Tile *162500788-0051*	12"X24" FLOOR TILE, BLACK, 1, N ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-42-Mastic *162500788-0051A*	12"X24" FLOOR TILE, BLACK, 1, N ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-43 *162500788-0052*	PIPE INSULATION, WHITE, B, N ROOM	White Fibrous Homogeneous		40.0% Non-fibrous (Other)	**60% Chrysotile**
R-44 *162500788-0053*	CORK INSULATION, BROWN, B, NE ROOM	Brown/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**

Initial report from: 01/17/2025 08:41:54

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EMSL Order: 162500788
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/16/2025 8:05 AM
Analysis Date: 01/16/2025 - 01/17/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-45A *162500788-0054*	DUCT WRAP, WHITE, B, EAST HALL	Gray Fibrous Homogeneous		20.0% Non-fibrous (Other)	**80% Chrysotile**
R-45B *162500788-0055*	DUCT WRAP, WHITE, B, EAST HALL	Gray Fibrous Homogeneous		20.0% Non-fibrous (Other)	**80% Chrysotile**
R-45C *162500788-0056*	DUCT WRAP, WHITE, B, EAST HALL	Tan Fibrous Homogeneous		30.0% Non-fibrous (Other)	**70% Chrysotile**
R-46 *162500788-0057*	LINOLEUM, BROWN, 1, TANK ROOM	Gray/Tan Non-Fibrous Homogeneous	5% Cellulose	95.0% Non-fibrous (Other)	**None Detected**
R-47 *162500788-0058*	LINOLEUM ADHESIVE, YELLOW, 1, TANK ROOM	Gray/Yellow Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-48 *162500788-0059*	CEMENT BOARD, GRAY, 1, N ROOM - N WALL	Gray Fibrous Homogeneous		80.0% Non-fibrous (Other)	**20% Chrysotile**
R-49 *162500788-0060*	DUCT SEALANT, BLACK, 6, W CENTRAL ROOM	Black Non-Fibrous Homogeneous		98.0% Non-fibrous (Other)	**2% Chrysotile**
R-50 *162500788-0061*	EXPANSION JOINT COMPOUND, WHITE, EXT, S SIDE	Gray/White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-51 *162500788-0062*	DOOR CAULK, GRAY, EXT, SW DOCK ENTRANCE DOOR	Gray/Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**

Initial report from: 01/17/2025 08:41:54

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EMSL Order: 162500788
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/16/2025 8:05 AM
Analysis Date: 01/16/2025 - 01/17/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	01/16/2025	Sample Receipt Time:	8:05 AM
Analysis Completed Date:	01/17/2025	Analysis Completed Time:	8:23 AM

Analyst(s):

Paul Rihm PLM (26)

Ross Matlock PLM (25)

Sean O'Donnell PLM (12)

Samples Reviewed and approved by:

Asbestos Laboratory Manager
or other approved signatory

Initial report from: 01/17/2025 08:41:54

EMSL Analytical, Inc.

6340 CastlePlace Dr. Indianapolis, IN 46250
Phone/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162500788
Customer ID:	IMPA25
Customer PO:	
Project ID:	

Attention:	Jon Reis Eocene Environmental Group 5930 Grand Ave West Des Moines, IA 50266	**Phone:** **Fax:** **Received:** **Analysis Date:** **Collected:**	(515) 473-6256 (515) 528-8005 01/16/2025 8:05 AM 01/22/2025
Project:	20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25		

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-8 *162500788-0012*	WINDOW GLAZING, GRAY, 6, E EXTERIOR WINDOWS	Gray Non-Fibrous Homogeneous		99.75% Non-fibrous (Other)	**0.25%** **Chrysotile**

Analyst(s)

Maggie Hayden (1)

Asbestos Laboratory Manager
or other approved signatory

Initial report from: 01/22/2025 11:27:08

EMSL Analytical, Inc.
6340 CastlePlace Dr., Indianapolis, IN 46250
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http://www.EMSL.com indianapolislab@emsl.com

EMSL Order:	162500788
CustomerID:	IMPA25
CustomerPO:	
ProjectID:	

Attn: **Jon Reis**
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone:	(515) 473-6256
Fax:	(515) 528-8005
Received:	1/16/2025 08:05 AM
Analysis Date:	1/22/2025
Collected:	

Project: **20450452 CITY OF WATERLOO - RATH - ACM - 1/13/25-1/14/25**

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy with Gravimetric Reduction. Quantitation using 400 Point Count Procedure.

SAMPLE ID	DESCRIPTION	APPEARANCE	(%) Matrix Organic	Acid	NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
R-24 *162500788-0031*	CORK TAR PAPER, BLACK, 3, SE ROOM	Black Non-Fibrous Homogeneous	40.2	0.5		55.6 Non-fibrous (other)	3.6 Chrysotile
R-28 *162500788-0035*	CEILING COVERING, BLACK, 2, NW ROOM	Black Non-Fibrous Homogeneous	31.8	10.0		50.2 Non-fibrous (other)	8.0 Chrysotile
R-51 *162500788-0062*	DOOR CAULK, GRAY, EXT, SW DOCK ENTRANCE DOOR	Gray/Tan Non-Fibrous Homogeneous	20.0	74.5		4.3 Non-fibrous (other)	1.2 Chrysotile

Analyst(s)
Maggie Hayden (3)

Melissa Newkirk
Asbestos Laboratory Manager
or other approved signatory

Initial report from 01/22/2025 11:27:08

THIS IS THE LAST PAGE OF THE REPORT.

OrderID: 162500788

Ship Date:

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody EMSL Order Number

(Lab Use Only)

162500788

6340 Castleplace Dr.
Indianapolis, IN 46250
Phone: (317)803-2997
Fax: (317)803-3047

Company: Eocene Environmental Group		☑ **EMSL** – Bill to: **Same** *Third Party Billing requires written authorization from third party.*	
Street: **8951 Windsor Parkway**			
City: Johnston	**State:** IA	**Zip Code:** 50131	**Country:** USA
Report To: Jon Reis		**Phone:** 515-473-6256	**Fax:** 515-528-8005
Email Address: jreis@impact7g.com		**Please Provide results: EMAIL**	
Project Name: 20450452 City of Waterloo - Rath - ACM - 1/13/25-1/14/25			
US State Samples Taken: IA			

Turnaround Time (TAT) Options

☐ 3-Hour ☐ 6-Hour ☑ 24-Hour ☐ 32-Hour ☐ 48 -Hour ☐ 72-Hour ☐ 1 Week ☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 hr TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytic Price Guide.*

PLM – BULK (reporting limit)
☑ **PLM EPA 600/R-93/116 (<1%)**

TEM – Air ☐ **4-4.5hr TAT (AHERA only)**
☐ **AHERA 40 CFR, Part 763**

Sampler Names: Jon Reis **Sampler Signature:**

☐ **Check for Positive Stop – Clearly Identify Homogeneous Group**

Filter Pore Size (Air Samples): ☐0.8 µm ☐0.45 µm

Sample ID	Sample Material/Description	Color	Floor	Location	Sample Date
R-1	Plaster	White	7	NE Room	1/13/2025
R-2	Pipe Wrap	Black	7	SE Room	1/13/2025
R-3a	Aircell Pipe Insulation	White	7	NW Room	1/13/2025
R-3b	Aircell Pipe Insulation	White	5	NE Room	1/13/2025
R-3c	Aircell Pipe Insulation	White	4	NW Room near Elevators	1/13/2025
R-3d	Aircell Pipe Insulation	White	2	S Mechanical Room	1/14/2025
R-3e	Aircell Pipe Insulation	White	B	Eastmost Hall	1/14/2025
R-4	Cork Insulation	Brown	7	S Room	1/13/2025
R-5	Chalkboard	Black	7	W Room	1/13/2025
R-6	Door Frame Caulk	Gray	6	W Room	1/13/2025
R-7a	Pipe Insulation	White	6	NE Room	1/13/2025
R-8	Window Glazing	Gray	6	E Exterior Windows	1/13/2025
R-9	Ceiling Covering	Silver	6	Center Room on Support Column	1/13/2025
R-10	Duct Sealant	Brown / Gray	6	SW Room on Smokers	1/13/2025
R-11	Transite Wall Panels	White	6	West Smoke Rooms	1/13/2025
R-12	Cork Insulation	Brown	5	NE Room	1/13/2025
R-13	Ceiling Covering Tar	Black	5	Center Room	1/13/2025
R-14	Ceiling Covering	Silver	5	Center Room	1/13/2025
R-15	Wall Tar	Black	5	HVAC Crawl Space	1/13/2025
R-16	Wall Block Grout	Gray	5	HVAC Crawl Space	1/13/2025
R-17	Cork Insulation Adhesive Tar	Black	5	S Central Room	1/13/2025
R-18	Pipe Wrap	Black	5	SW Room	1/13/2025
R-19	Pipe Insulation	Brown	5	SW Room	1/13/2025
R-20	Wall Tar	Black	4	W Room on Exterior Wall	1/13/2025
R-21a	Spray On Insulation	White	4	NW Room	1/13/2025
R-21b	Spray On Insulation	White	4	NW Room	1/13/2025

Ship Date:

R-21c	Spray On Insulation	White	4	NW Room	1/13/2025
R-21d	Spray On Insulation	White	3	NW Room	1/13/2025
R-22	Door Caulk	Gray	4	NW Room Elevators	1/13/2025
R-23	Cork Insulation	Brown	3	SE Room	1/13/2025
R-24	Cork Tar Paper	Black	3	SE Room	1/13/2025
R-25	Panel Adhesive	Gray	3	S Middle Room	1/13/2025
R-26	Pipe Wrap	Black	3	SW Side Room	1/14/2025
R-27	Wall Block Grout	Gray	3	N Stairwell Block	1/14/2025
R-28	Ceiling Covering	Black	2	NW Room	1/14/2025
R-29	Spray On Insulation	White	2	NE Room	1/14/2025
R-30	Pipe Wrap	Black	2	Middle East Room	1/14/2025
R-31	Insulation Tar	Black	2	Middle East Room	1/14/2025
R-32	Door Caulk	Gray	2	SE Room	1/14/2025
R-33a	Pipe Insulation	White	2	SW Room	1/14/2025
R-33b	Pipe Insulation	White	2	SW Room	1/14/2025
R-33c	Pipe Insulation	White	2	SW Room	1/14/2025
R-34	Window Glazing	Pink	2	Lab	1/14/2025
R-35	12" x 24" Floor Tile	Black	1	SE Room Office	1/14/2025
R-36	Floor Tile Mastic	Black	1	SE Room Office	1/14/2025
R-37	Pipe Wrap	Black	1	SE Room	1/14/2025
R-38	Insulation Tar	Black	1	SE Room	1/14/2025
R-39	Caulk	White	1	S Room	1/14/2025
R-40	Spray On Insulation	White	1	SE Room	1/14/2025
R-41	Caulk	White	1	SW Loading Dock	1/14/2025
R-42	12" x 24" Floor Tile	Black	1	N Room	1/14/2025
R-43	Pipe Insulation	White	B	N Room	1/14/2025
R-44	Cork Insulation	Brown	B	NE Room	1/14/2025
R-45a	Duct Wrap	White	B	East Hall	1/14/2025
R-45b	Duct Wrap	White	B	East Hall	1/14/2025
R-45c	Duct Wrap	White	B	East Hall	1/14/2025
R-46	Linoleum	Brown	1	Tank Room	1/14/2025
R-47	Linoleum Adhesive	Yellow	1	Tank Room	1/14/2025
R-48	Cement Board	Gray	1	N Room - N Wall	1/14/2025
R-49	Duct Sealant	Black	6	W Central Room	1/14/2025
R-50	Expansion Joint Compound	White	Ext	S Side	1/14/2025
R-51	Door Caulk	Gray	Ext	SW Dock Entrance Door	1/14/2025

Client Sample # (s):	**R-1 through R-51**			**Total #:**	62
Relinquished (Client):	[signature]	**Date:**	1/15/25	**Time:**	12:00
Received (Lab):	[signature]	**Date:**	1-16-25	**Time:**	8:05 AM
Comments/Special Instructions:	Please analyze all layers.				

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order: 162501028
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 01/23/2025 9:32 AM
Analysis Date: 01/23/2025
Collected Date:

Project: 20450452 CITY OF WATERLOO - RATH - ACM - PROJECT ADRESS - 1/22/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-52 *162501028-0001*	CEILING COVERING, BLACK, 7, SE ROOM	Brown/Gray/Black Non-Fibrous Heterogeneous		93.0% Non-fibrous (Other)	**7% Chrysotile**
R-53 *162501028-0002*	CEILING COVERING, BLACK, 7, SE ROOM	Brown/Black Non-Fibrous Homogeneous		10% Quartz 87.0% Non-fibrous (Other)	**3% Chrysotile**
R-54 *162501028-0003*	CORK INSULATION TAR, BLACK, 5, N ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-55 *162501028-0004*	CORK INSULATION TAR, BLACK, 7, MIDDLE ROOM, SOUTH PORTION	Brown/Black Fibrous Heterogeneous	5% MinWool	92.0% Non-fibrous (Other)	**3% Chrysotile**

Report amended: 01/28/2025 06:49:21 Replaces initial report from: 01/23/2025 13:28:39 Reason Code: Client-Change to Appearance

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6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162501028
Customer ID:	IMPA25
Customer PO:	
Project ID:	

Attention:	Jon Reis Eocene Environmental Group 5930 Grand Ave West Des Moines, IA 50266	**Phone:** **Fax:** **Received Date:** **Analysis Date:** **Collected Date:**	(515) 473-6256 (515) 528-8005 01/23/2025 9:32 AM 01/23/2025

Project: 20450452 CITY OF WATERLOO - RATH - ACM - PROJECT ADRESS - 1/22/25

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	01/23/2025	Sample Receipt Time:	9:32 AM
Analysis Completed Date:	01/23/2025	Analysis Completed Time:	1:23 PM

Analyst(s):

Paul Rihm PLM (1)

Sean O'Donnell PLM (3)

Samples Reviewed and approved by:

Asbestos Laboratory Manager
or other approved signatory

Report amended: 01/28/2025 06:49:21 Replaces initial report from: 01/23/2025 13:28:39 Reason Code: Client-Change to Appearance

OrderID: 162501028

Ship Date:

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Asbestos Chain of Custody EMSL Order Number

(Lab Use Only)

162501028

6340 Castleplace Dr.
Indianapolis, IN 46250
Phone: (317)803-2997
Fax: (317)803-3047

Company: EOCENE		☑ **EMSL** – Bill to: **Same** *Third Party Billing requires written authorization from third party.*	
Street: **8951 Windsor Parkway**			
City: Johnston	**State:** IA	**Zip Code:** 50131	**Country:** USA
Report To: Jon Reis		**Phone:** 515-460-1124	**Fax:** 515-528-8005
Email Address: jreis@impact7g.com		**Please Provide results: ethomas@eocene.com**	
Project Name: 20450452 City of Waterloo – Rath – ACM- Project Adress – 1/22/25			
US State Samples Taken: IA			

Turnaround Time (TAT) Options

☐ 3-Hour	☐ 6-Hour	☑ 24-Hour	☐ 32-Hour	☐ 48 -Hour	☐ 72-Hour	☐ 1 Week	☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule *There is a premium charge for 3 hr TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytic Price Guide.*

PLM – BULK (reporting limit)	**TEM – Air** ☐ **4-4.5hr TAT (AHERA only)**
☑ **PLM EPA 600/R-93/116 (<1%)**	☐ **AHERA 40 CFR, Part 763**
Sampler Names: NAME	**Sampler Signature:**
☐ **Check for Positive Stop – Clearly Identify Homogeneous Group**	**Filter Pore Size (Air Samples):** ☐0.8 µm ☐0.45 µm

Sample ID	Sample Material/Description	Color	Floor	Location	Sample Date
R-52	Ceiling Covering	Black	7	SE Room	1/22/2025
R-53	Ceiling Covering	Black	7	SE Room	1/23/2025
R-54	Cork Insulation	Black	5	N Room	1/24/2025
R-55	Cork Insulation	Black	7	Middle Room, South Portion	1/25/2025

Client Sample # (s):	**R-52 through R-55**			**Total #:**	4
Relinquished (Client):	Emma Thomas	**Date:**	1/22/25	**Time:**	16:03
Received (Lab):	[signature]	**Date:**	1/23/25	**Time:**	9:32
Comments/Special Instructions:	**PLEASE SAMPLE ALL LAYERS, ADHESIVES, TEXTURES, ETC. Thanks!**				

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order: 162506053
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 05/09/2025 8:00 AM
Analysis Date: 05/12/2025
Collected Date:

Project: 20450212 WATERLOO - TASK 3 5/7/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-56 *162506053-0001*	CEILING COVERING, BLACK, 4, NW ROOM	Black/Silver Non-Fibrous Homogeneous		5% Quartz 93.0% Non-fibrous (Other)	**2% Chrysotile**
R-57 *162506053-0002*	CORK INSULATION TAR, BLACK, 4, NE ROOM	Brown/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-58 *162506053-0003*	CORK INSULATION TAR, BLACK, 4, MIDDLE SOUTH ROOM	Brown/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-59 *162506053-0004*	CORK INSULATION TAR, BLACK, 4, E ROOM	Black Non-Fibrous Homogeneous		5% Quartz 95.0% Non-fibrous (Other)	**<1% Chrysotile**
R-60 *162506053-0005*	CEILING COVERING, BLACK, 3, MAIN ROOM, W SIDE	Black/Silver Non-Fibrous Homogeneous		5% Quartz 93.0% Non-fibrous (Other)	**2% Chrysotile**
R-61 *162506053-0006*	CORK INSULATION TAR, BLACK, 3, NE ROOM	Brown/Black Non-Fibrous Homogeneous	<1% Cellulose	98.0% Non-fibrous (Other)	**2% Chrysotile**
R-62 *162506053-0007*	CORK INSULATION TAR, BLACK, 3, SE ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**
R-63 *162506053-0008*	CORK INSULATION TAR, BLACK, 2, S MIDDLE ROOM	Brown/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-64 *162506053-0009*	CEILING COVERING, BLACK, 1, NE ROOM	Brown/Black Non-Fibrous Homogeneous		5% Quartz 95.0% Non-fibrous (Other)	**<1% Chrysotile**

Initial report from: 05/13/2025 10:41:56

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order: 162506053
Customer ID: IMPA25
Customer PO:
Project ID:

Attention: Jon Reis
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone: (515) 473-6256
Fax: (515) 528-8005
Received Date: 05/09/2025 8:00 AM
Analysis Date: 05/12/2025
Collected Date:

Project: 20450212 WATERLOO - TASK 3 5/7/25

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
R-65 *162506053-0010*	CORK INSULATION TAR, BLACK, 1, E ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-66 *162506053-0011*	CORK INSULATION TAR, BLACK, 1, S MIDDLE ROOM	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
R-67 *162506053-0012*	CEILING COVERING, BLACK, B, NW ROOM	Brown/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**
R-68 *162506053-0013*	CORK INSULATION TAR, BLACK, B, S MIDDLE ROOM	Tan/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<1% Chrysotile**

Initial report from: 05/13/2025 10:41:56

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162506053
Customer ID:	IMPA25
Customer PO:	
Project ID:	

Attention:	Jon Reis Eocene Environmental Group 5930 Grand Ave West Des Moines, IA 50266	**Phone:** **Fax:** **Received Date:** **Analysis Date:** **Collected Date:**	(515) 473-6256 (515) 528-8005 05/09/2025 8:00 AM 05/12/2025
Project:	20450212 WATERLOO - TASK 3 5/7/25		

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	05/09/2025	Sample Receipt Time:	8:00 AM
Analysis Completed Date:	05/12/2025	Analysis Completed Time:	5:57 PM

Analyst(s):

Hilary Jarvis PLM (13)

Samples Reviewed and approved by:

Asbestos Laboratory Manager
or other approved signatory

Initial report from: 05/13/2025 10:41:56

EMSL Analytical, Inc.
6340 CastlePlace Dr., Indianapolis, IN 46250
Phone/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com indianapolislab@emsl.com

EMSL Order:	162506053
CustomerID:	IMPA25
CustomerPO:	
ProjectID:	

Attn: **Jon Reis**
Eocene Environmental Group
5930 Grand Ave
West Des Moines, IA 50266

Phone:	(515) 473-6256
Fax:	(515) 528-8005
Received:	5/9/2025 08:00 AM
Analysis Date:	5/19/2025
Collected:	

Project: **20450212 WATERLOO - TASK 3 5/7/25**

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy with Gravimetric Reduction. Quantitation using 400 Point Count Procedure.

SAMPLE ID	DESCRIPTION	APPEARANCE	(%) Matrix Organic	(%) Matrix Acid	NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
R-59 *162506053-0004*	CORK INSULATION TAR, BLACK, 4, E ROOM	Black Non-Fibrous Homogeneous	32.5	0.3		66.6 Non-fibrous (other)	0.5 Chrysotile
R-62 *162506053-0007*	CORK INSULATION TAR, BLACK, 3, SE ROOM	Black Non-Fibrous Homogeneous	86.4	8.5		4.4 Non-fibrous (other)	0.7 Chrysotile
R-64 *162506053-0009*	CEILING COVERING, BLACK, 1, NE ROOM	Brown/Black Non-Fibrous Homogeneous	32.7	0.4		66.3 Non-fibrous (other)	0.5 Chrysotile
R-67 *162506053-0012*	CEILING COVERING, BLACK, B, NW ROOM	Brown/Black Non-Fibrous Homogeneous	84.1	4.4		11.5 Non-fibrous (other)	None Detected
R-68 *162506053-0013*	CORK INSULATION TAR, BLACK, B, S MIDDLE ROOM	Tan/Black Non-Fibrous Homogeneous	90.0	6.0		4.0 Non-fibrous (other)	<0.25 Chrysotile

Analyst(s)
Sean O'Donnell (5)

Melissa Newkirk
Asbestos Laboratory Manager
or other approved signatory

Initial report from 05/19/2025 13:19:26

OrderID: 162506053

Ship Date:

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody EMSL Order Number

(Lab Use Only)

162506053

6340 Castleplace Dr.
Indianapolis, IN 46250
Phone: (317)803-2997
Fax: (317)803-3047

Company: EOCENE		☑ EMSL – Bill to: Same *Third Party Billing requires written authorization from third party.*	
Street: 8951 Windsor Parkway			
City: Johnston	State: IA	Zip Code: 50131	Country: USA
Report To: Jon Reis		Phone: 515-460-1124	Fax: 515-528-8005
Email Address: jreis@eocene.com		Please Provide results: jreis@eocene.com	
Project Name: 20450212 Waterloo – Task 3 5/7/25			
US State Samples Taken: IA			

Turnaround Time (TAT) Options

☐ 3-Hour ☐ 6-Hour ☐ 24-Hour ☐ 32-Hour ☑ 48 -Hour ☐ 72-Hour ☐ 1 Week ☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 hr TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytic Price Guide.*

PLM – BULK (reporting limit) ☑ PLM EPA 600/R-93/116 (<1%)	TEM – Air ☐ 4-4.5hr TAT (AHERA only) ☐ AHERA 40 CFR, Part 763
Sampler Names: NAME	Sampler Signature:
☐ Check for Positive Stop – Clearly Identify Homogeneous Group	Filter Pore Size (Air Samples): ☐0.8 µm ☐0.45 µm

Sample ID	Sample Material/Description	Color	Floor	Location	Sample Date
R-56	Ceiling Covering	Black	4	NW Room	5/7/2025
R-57	Cork Insulation Tar	Black	4	NE Room	5/7/2025
R-58	Cork Insulation Tar	Black	4	Middle South Room	5/7/2025
R-59	Cork Insulation Tar	Black	4	E Room	5/7/2025
R-60	Ceiling Covering	Black	3	Main Room, W Side	5/7/2025
R-61	Cork Insulation Tar	Black	3	NE Room	5/7/2025
R-62	Cork Insulation Tar	Black	3	SE Room	5/7/2025
R-63	Cork Insulation Tar	Black	2	S Middle Room	5/7/2025
R-64	Ceiling Covering	Black	1	NE Room	5/7/2025
R-65	Cork Insulation Tar	Black	1	E Room	5/7/2025
R-66	Cork Insulation Tar	Black	1	S Middle Room	5/7/2025
R-67	Ceiling Covering	Black	B	NW Room	5/7/2025
R-68	Cork Insulation Tar	Black	B	S Middle Room	5/7/2025

Client Sample # (s):	R-56 through R-68			Total #:	13
Relinquished (Client):	[signature] Bingham	Date:	5/8/25	Time:	9:15
Received (Lab):		Date:	5-9-25	Time:	8AM
Comments/Special Instructions:	PLEASE SAMPLE ALL LAYERS, ADHESIVES, TEXTURES, ETC. Thanks!				

APPENDIX C

ACM Photographs

Photograph table includes photos of all asbestos-containing materials.

1/13/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #1 **Description:** ACM White Aircell Pipe Insulation **Location:** 7th Floor, NW Room **Sample** R-3a	
Photo #2 **Description:** ACM White Aircell Pipe Insulation **Location:** 5th Floor, NE Room **Sample** R-3b	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 & 1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #3 **Description:** ACM White Aircell Pipe Insulation **Location:** 4th Floor, NW Room near elevator **Sample** R-3c	
Photo #4 **Description:** ACM White Aircell Pipe Insulation **Location:** 2nd Floor, S Mechanical Room **Sample** R-3d	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 & 1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #5 **Description:** ACM White Aircell Pipe Insulation **Location:** Basement, Eastmost Hall **Sample** R-3e	
Photo #6 **Description:** ACM Black Chalkboard **Location:** 7th Floor, W Room **Sample** R-5	

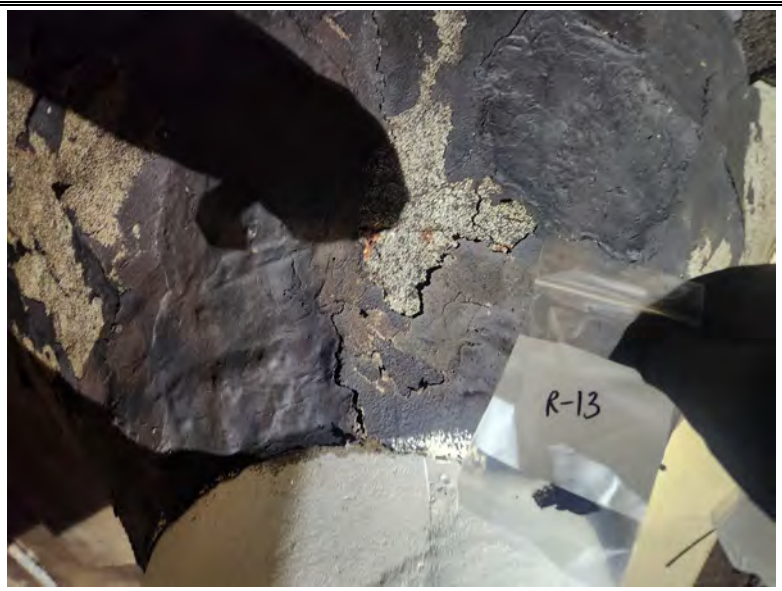
Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #7 **Description:** ACM White Pipe Insulation **Location:** 6th Floor, NE Room **Sample** R-7a	
Photo #8 **Description:** ACM Silver Ceiling Covering **Location:** 6th Floor, Center Room on Support Column **Sample** R-9	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #9 **Description:** ACM Brown/Gray Duct Sealant **Location:** 6th Floor, SW Room on Smokers **Sample** R-10	
Photo #10 **Description:** ACM White Transite Wall Panels **Location:** 6th Floor, West Smoker Rooms **Sample** R-11	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #11 **Description:** ACM Black Ceiling Covering Tar **Location:** 5th Floor, Center Room **Sample** R-13	
Photo #12 **Description:** ACM Silver Ceiling Covering **Location:** 5th Floor, Center Room **Sample** R-14	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #13 **Description:** ACM Black Wall Tar **Location:** 5th Floor, HVAC Crawl Space **Sample** R-15	
Photo #14 **Description:** ACM Black Cork Tar Paper **Location:** 3rd Floor, SE Room **Sample** R-24	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/13/2025 & 1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #15 **Description:** ACM Gray Panel Adhesive **Location:** 3rd Floor, S Middle Room **Sample** R-25	
Photo #16 **Description:** ACM Black Ceiling Covering **Location:** 2nd Floor, NW Room **Sample** R-28	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #17 **Description:** ACM White Pipe Insulation **Location:** 2nd Floor, SW Room **Sample** R-33a, R-33b, R-33c	
Photo #18 **Description:** ACM White Pipe Insulation **Location:** Basement, N Room **Sample** R-43	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #19 **Description:** ACM White Duct Wrap **Location:** Basement, East Hall **Sample** R-45a, R-45b, R-45c	
Photo #20 **Description:** ACM Gray Cement Board **Location:** 1st Floor, N Room – N Wall – Top Half **Sample** R-48	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/14/2025 **Photographer:** **Kevin Marble**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #21 **Description:** ACM Black Duct Sealant **Location:** 6th Floor, W Central Room **Sample** R-49	
Photo #22 **Description:** ACM Gray Door Caulk **Location:** Exterior, SW Dock Entrance Door **Sample** R-51	

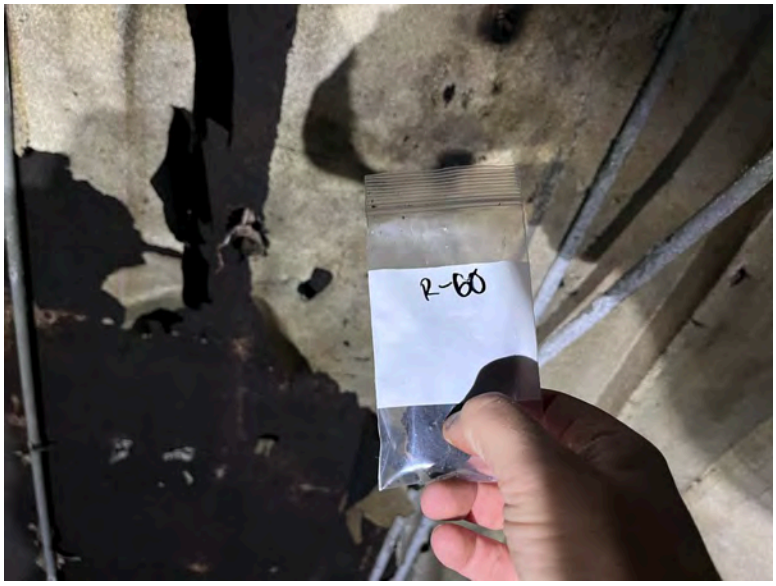
Photograph table includes photos of all asbestos-containing materials. (Continued)

1/22/2025 **Photographer:** **Emma Thomas**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #23 **Description:** ACM Black Ceiling Covering **Location:** 7th Floor, SE Room **Sample** R-52	
Photo #24 **Description:** ACM Black Ceiling Covering **Location:** 7th Floor, SE Room **Sample** R-53	

Photograph table includes photos of all asbestos-containing materials. (Continued)

1/22/2025 & 5/7/2025 **Photographer:** **Emma Thomas & Leon Johnson**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #25 **Description:** ACM Black Cork Insulation Tar **Location:** 7th Floor, Middle Room, South Portion **Sample** R-55	
Photo #26 **Description:** ACM Black Ceiling Covering **Location:** 4th Floor, NW Room **Sample** R-56	

Photograph table includes photos of all asbestos-containing materials. (Continued)

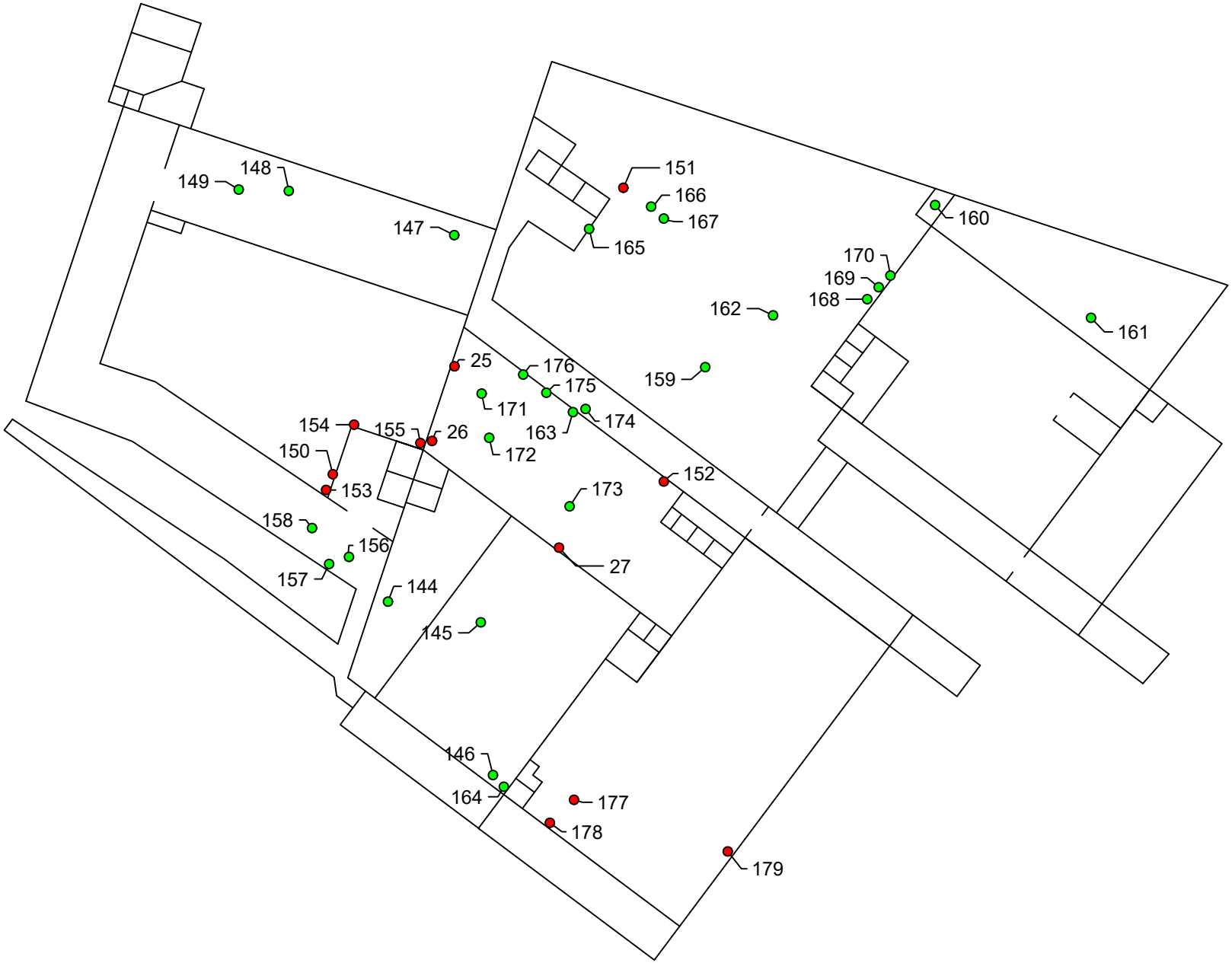
5/7/2025 **Photographer:** **Leon Johnson**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #27 **Description:** ACM Black Ceiling Covering **Location:** 3rd Floor, Main Room, West Side **Sample** R-60	
Photo #28 **Description:** ACM Black Cork Insulation Tar **Location:** 3rd Floor, NE Room **Sample** R-61	

Photograph table includes photos of all asbestos-containing materials. (Continued)

5/7/2025 **Photographer:** **Leon Johnson**	**Asbestos Containing Materials Inspection** **1442 Sycamore Street** **Waterloo, Iowa 50703**
Photo #29 **Description:** Assumed ACM Black Ceiling Covering **Location:** 1st Floor, NE Room **Sample** R-64	
Photo #30 **Description:** Assumed ACM Black Ceiling Covering **Location:** Basement, NW Room **Sample** R-67	

APPENDIX D

Sample Location Map(s)



Legend

- Positive ACM
- Negative ACM
- Pipe Insulation
- Caulk
- Possible Fire Door
- Inaccessible
- Panel Adhesive
- Transite Wall Panel
- 9x9in Green Floor Tile, Mastic, Pipe Insulation Debris
- 12x12in Brown Floor Tile, Mastic, Pipe Insulation Debris
- Duct Wrap
- Aircell Pipe Insulation
- Chalkboard
- Cork Insulation Tar
- Expansive Joint
- Duct Sealant
- Duct Wrap Debris
- Aircell/Pipe Insulation Debris
- Wall Tar
- Cement Board
- Corrugated Transite Panels
- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

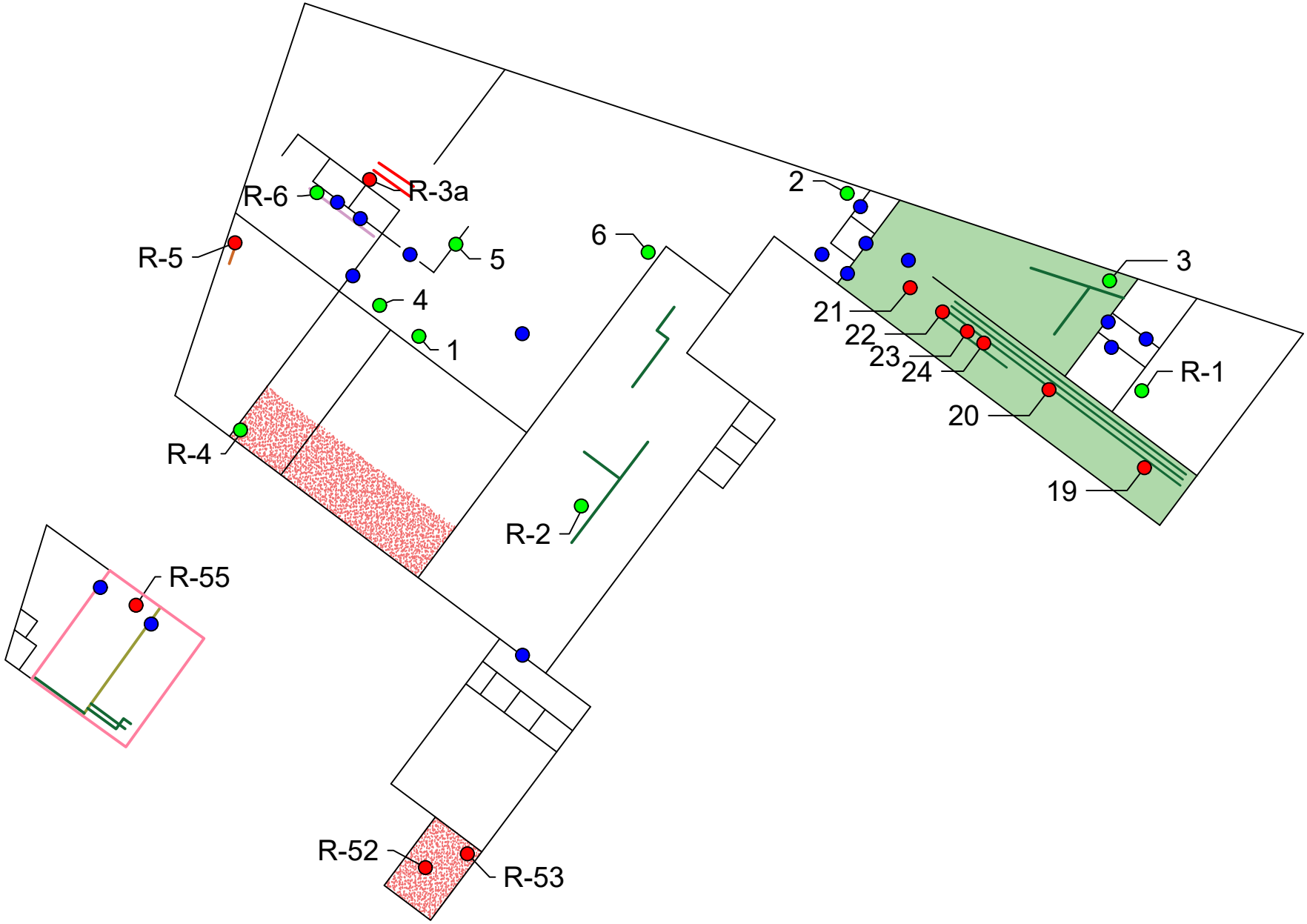
N W E S

DATE: 02/05/2025
DRAWN BY: JH
CHECKED BY: JR
SCALE: N/A
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
Roof

Eocene SM Environmental Group



Legend

- Positive ACM
- Negative ACM
- Pipe Insulation
- Caulk
- Possible Fire Door
- Inaccessible
- Panel Adhesive
- Transite Wall Panel
- 9x9in Green Floor Tile, Mastic, Pipe Insulation Debris
- 12x12in Brown Floor Tile, Mastic, Pipe Insulation Debris
- Duct Wrap
- Aircell Pipe Insulation
- Chalkboard
- Cork Insulation Tar
- Expansive Joint
- Duct Sealant
- Duct Wrap Debris
- Aircell/Pipe Insulation Debris
- Wall Tar
- Cement Board
- Corrugated Transite Panels
- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

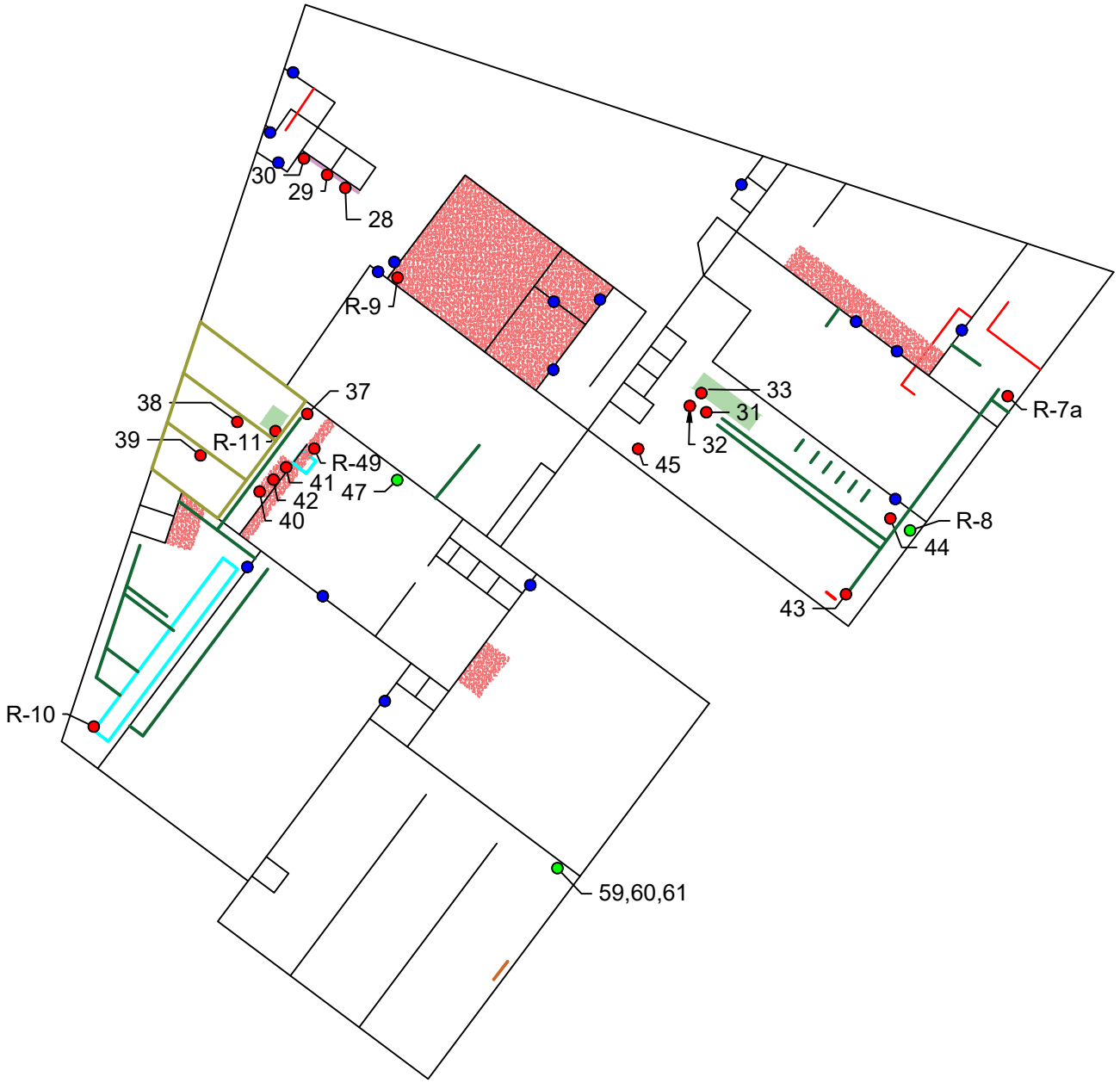
N W E S

DATE: 02/05/2025
DRAWN BY: JH
CHECKED BY: JR
SCALE: N/A
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
7th Floor

Eocene SM Environmental Group



Legend

- Positive ACM
- Negative ACM
- Pipe Insulation
- Caulk
- Possible Fire Door
- Inaccessible
- Panel Adhesive
- Transite Wall Panel
- 9x9in Green Floor Tile, Mastic, Pipe Insulation Debris
- 12x12in Brown Floor Tile, Mastic, Pipe Insulation Debris
- Duct Wrap
- Aircell Pipe Insulation
- Expansive Joint
- Chalkboard
- Cork Insulation Tar
- Duct Sealant
- Duct Wrap Debris
- Aircell/Pipe Insulation Debris
- Wall Tar
- Cement Board
- Corrugated Transite Panels
- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

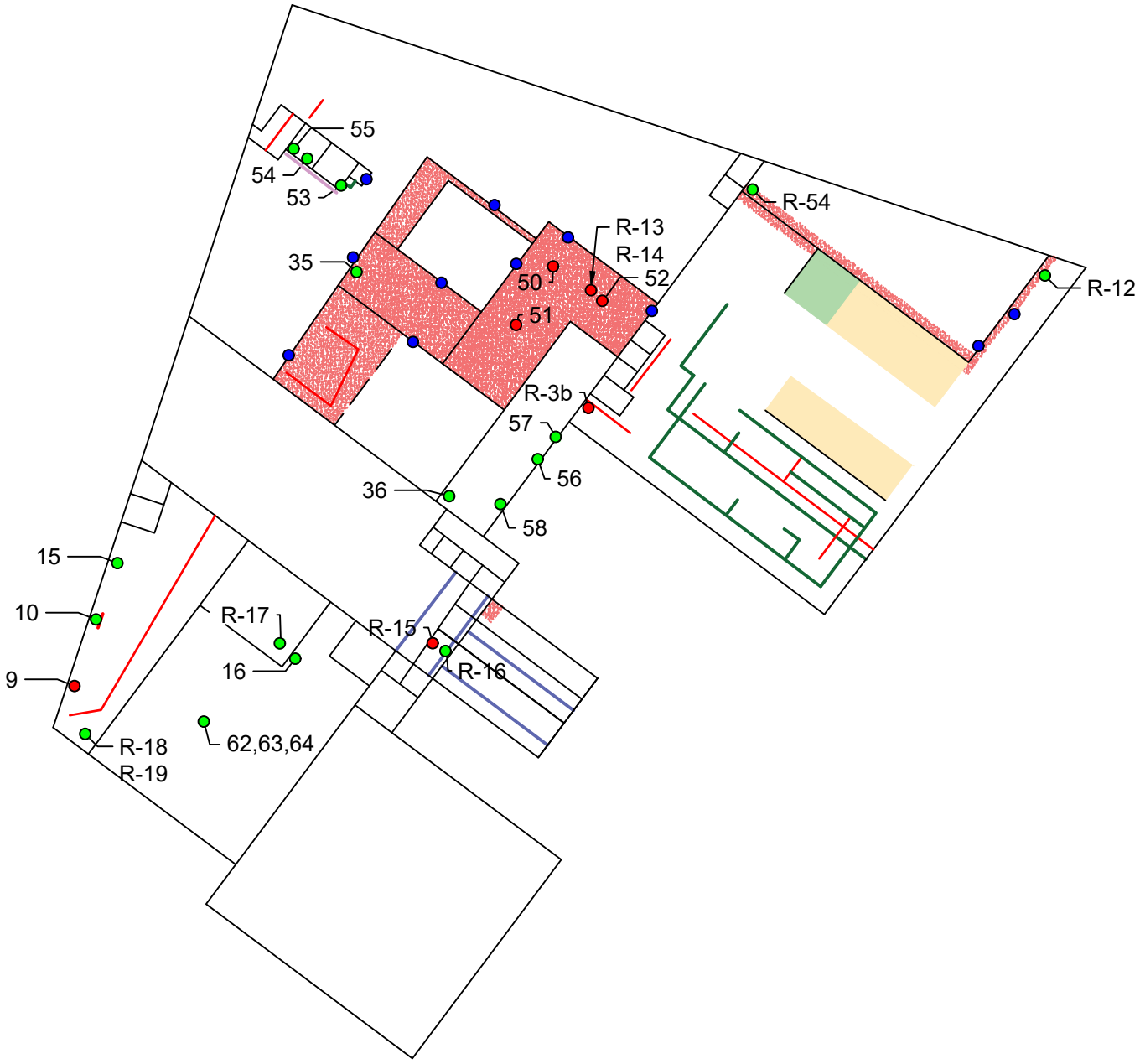
N W E S

DATE: 02/05/2025
DRAWN BY: JH
CHECKED BY: JR
SCALE: N/A
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
6th Floor

Eocene SM Environmental Group



Legend

- Positive ACM
- Negative ACM
- Pipe Insulation
- Caulk
- Possible Fire Door
- Inaccessible
- Panel Adhesive
- Transite Wall Panel
- 9x9in Green Floor Tile, Mastic, Pipe Insulation Debris
- 12x12in Brown Floor Tile, Mastic, Pipe Insulation Debris
- Duct Wrap
- Aircell Pipe Insulation
- Expansive Joint
- Wall Tar
- Cement Board
- Chalkboard
- Cork Insulation Tar
- Duct Sealant
- Duct Wrap Debris
- Aircell/Pipe Insulation Debris
- Corrugated Transite Panels
- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

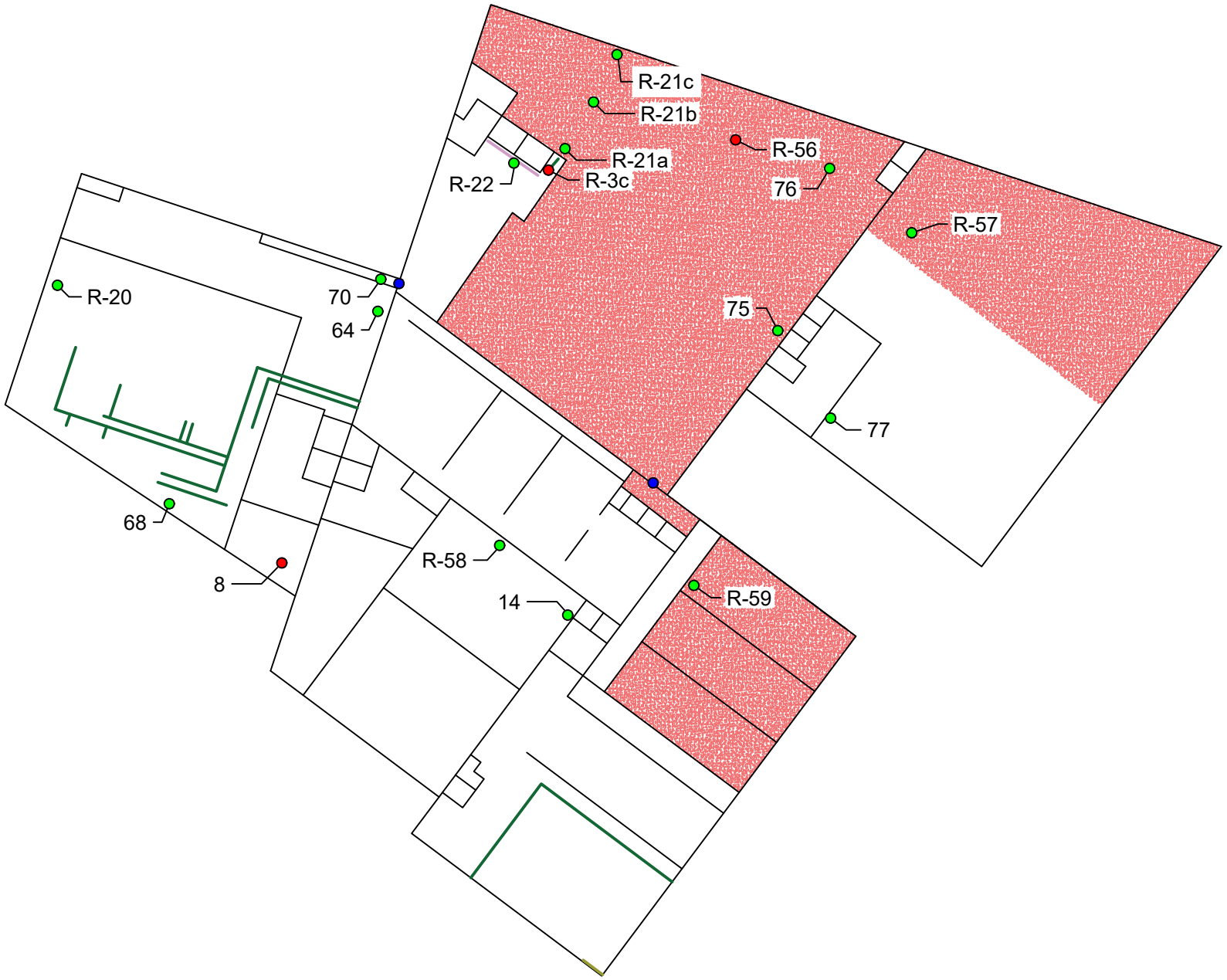
N W E S

DATE: 02/05/2025
DRAWN BY: JH
CHECKED BY: JR
SCALE: N/A
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
5th Floor

Eocene SM Environmental Group



Legend

- Positive ACM
- Negative ACM
- Pipe Insulation
- Caulk
- Possible Fire Door
- Inaccessible
- Panel Adhesive
- Transite Wall Panel
- 9x9in Green Floor Tile, Mastic, Pipe Insulation Debris
- 12x12in Brown Floor Tile, Mastic, Pipe Insulation Debris
- Duct Wrap
- Aircell Pipe Insulation
- Chalkboard
- Cork Insulation Tar
- Expansive Joint
- Duct Sealant
- Duct Wrap Debris
- Aircell/Pipe Insulation Debris
- Wall Tar
- Cement Board
- Corrugated Transite Panels
- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

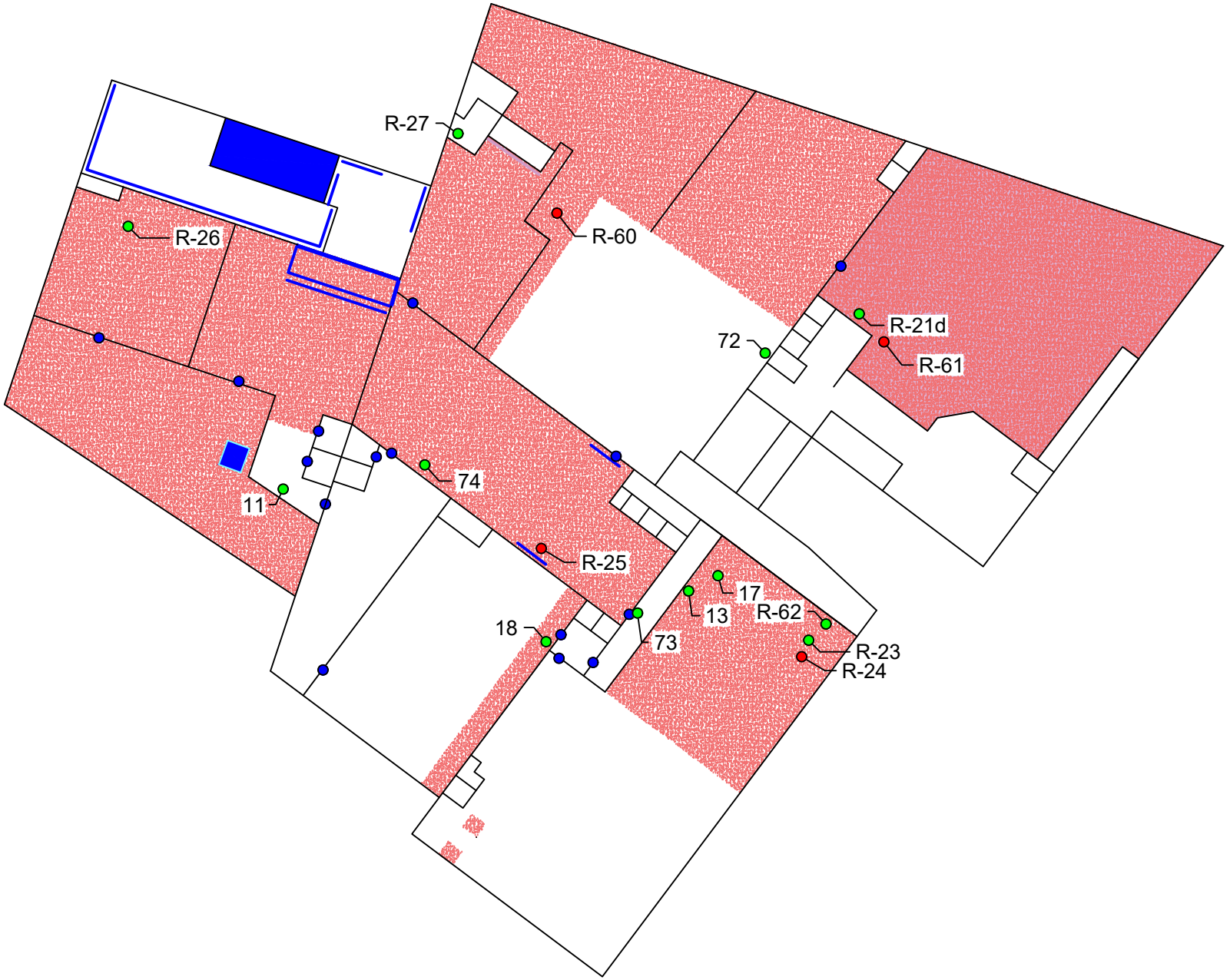
N W E S

DATE: 02/05/2025
DRAWN BY: JH
CHECKED BY: JR
SCALE: N/A
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
4th Floor

Eocene SM Environmental Group



Legend

- Positive ACM
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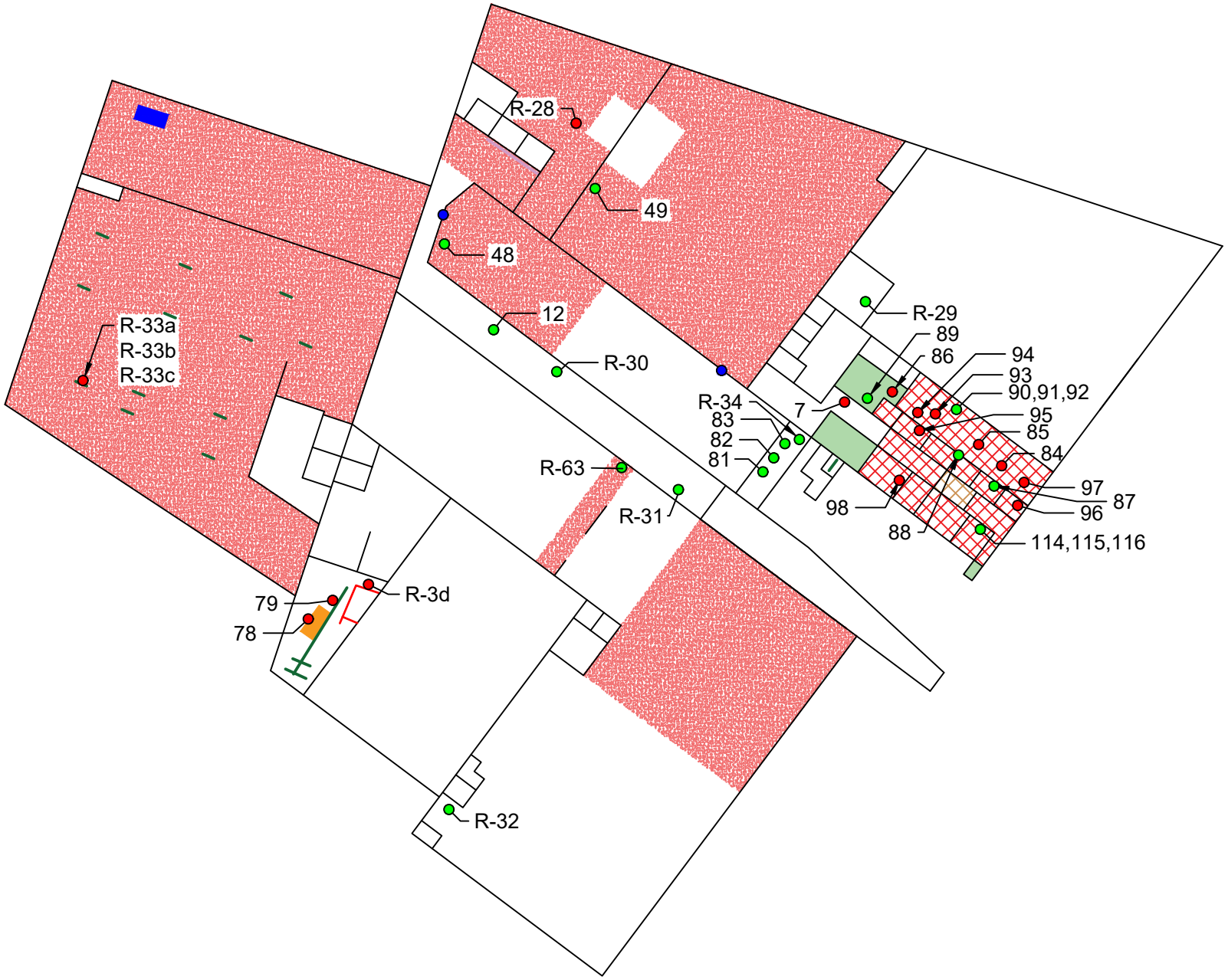
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
3rd Floor

Eocene SM Environmental Group



Legend

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N W E S

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SCALE: N/A
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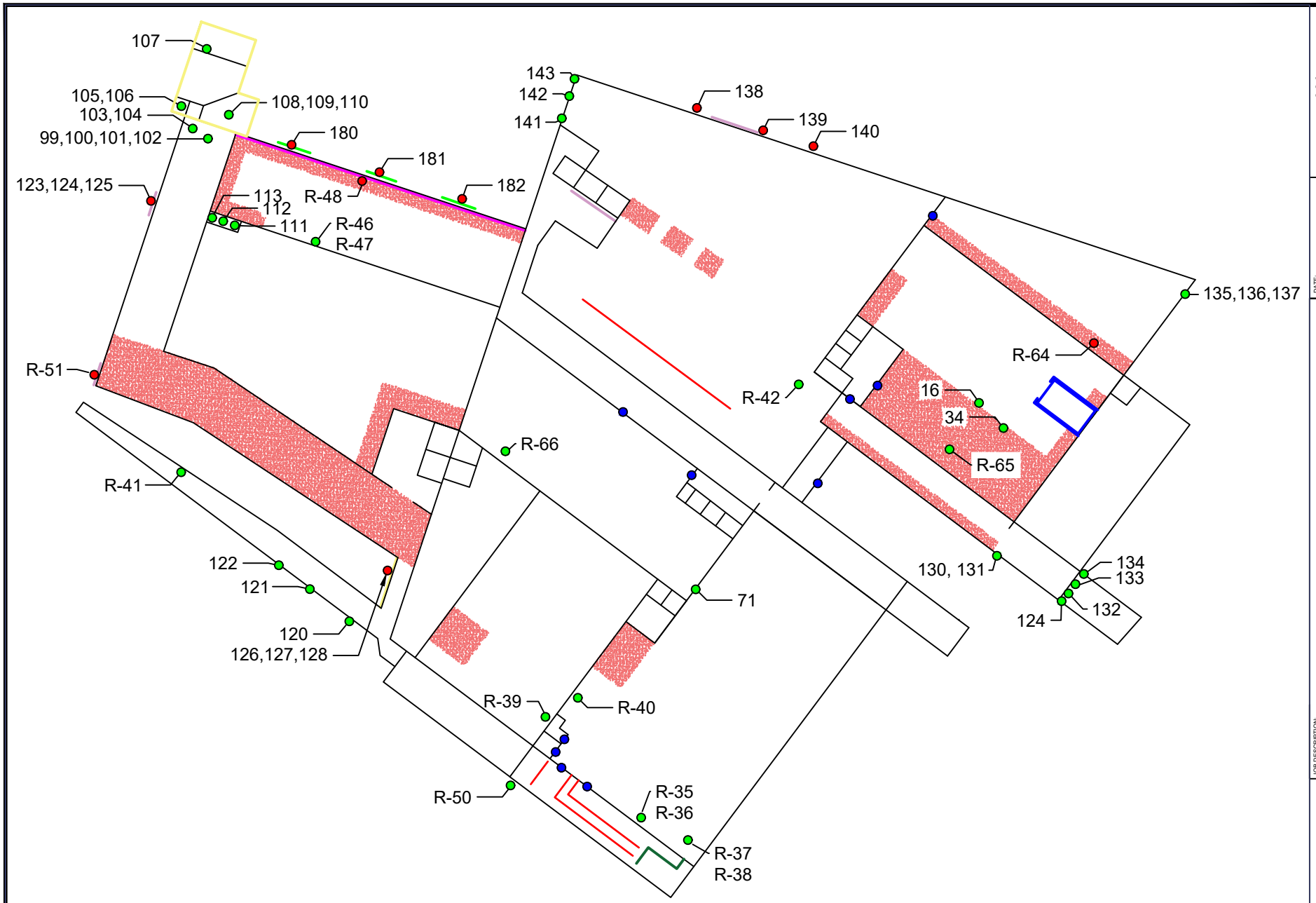
JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
2nd Floor

Eocene SM Environmental Group



Legend

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- Pipe Insulation
- Caulk
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- Tank Insulation
- Heater Insulation
- Ceiling Covering
- Steamer Insulation Debris
- Cork Insulation Tar

N W E S

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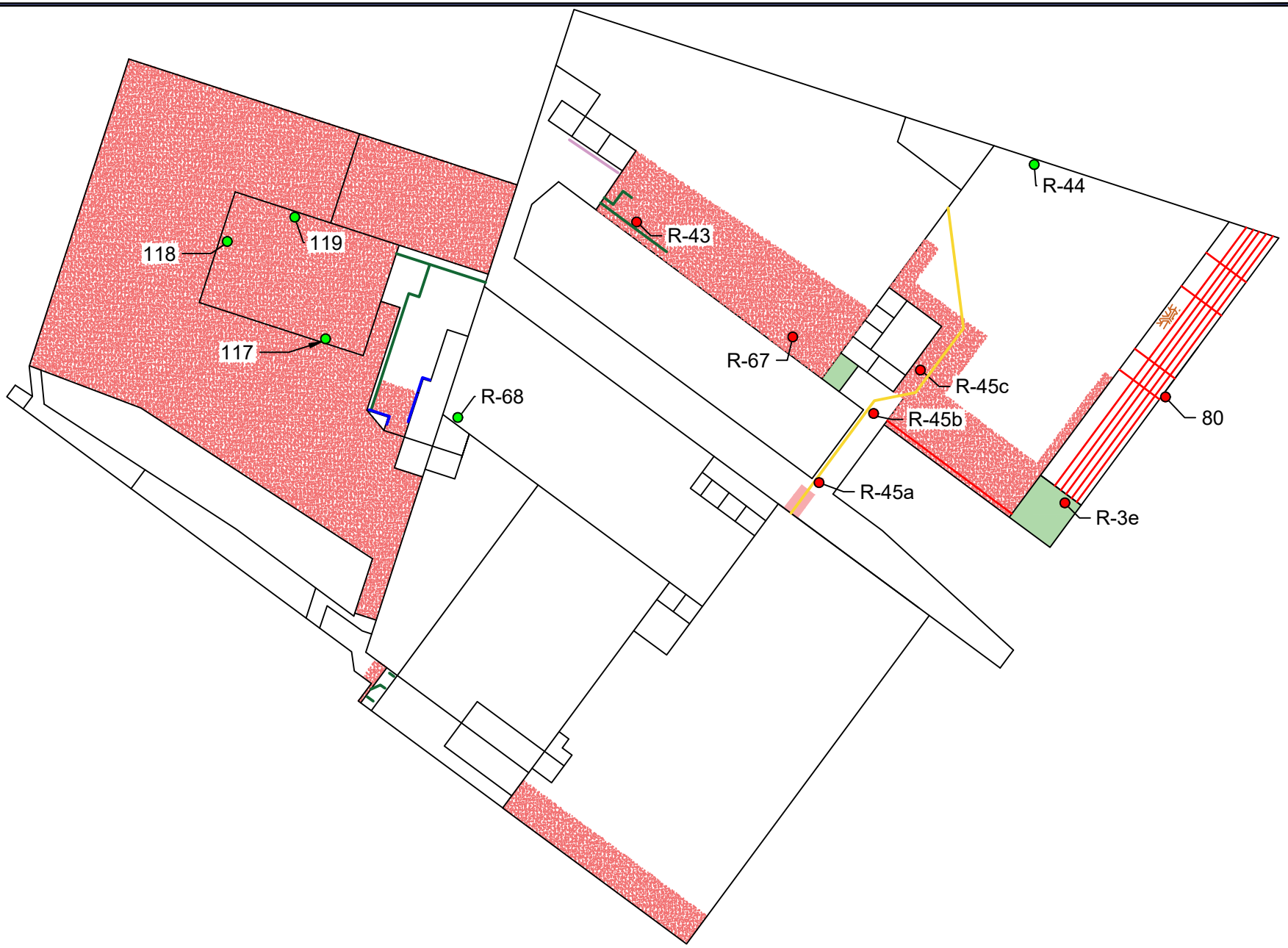
PROJECT NO: City of Waterloo

JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
1st Floor

Eocene SM Environmental Group



Legend

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JOB DESCRIPTION: ACM Inspection
Rath Buildings
1442 Sycamore Street
Waterloo, Iowa 50703

SHEET TITLE: Property Map
Basement Floor

Eocene SM Environmental Group