



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division

CONSTRUCTION BID ADDENDUM NO. 2

This form identifies an Addendum to Bidding Documents, and incorporates interpretations or clarifications, modifications, acceptance of proposed “or equal” materials, and other information into the Bidding Documents. Addenda will be numbered by the Professional and distributed through www.michigan.gov/SIGMAVSS as an attachment.

TO: ALL BIDDERS		DATE ISSUED 2/27/2025
PROJECT NAME Cadillac Place – UIA Lobby Redesign		FILE NUMBER 186/23271.MNB
PROFESSIONAL DS Architects, Inc.	PROJECT DIRECTOR Chris Bahjet	BID OPENING DATE: 3/5/2025

This Addendum is issued for the purpose of modifying and/or clarifying the original Contract Documents and shall take precedence over them.

All work included herein shall be in accordance with the original drawings and specifications except as specifically noted herein. All incidental items required to provide the following modifications shall be included even though not specifically described.

This addendum is being sent to all bidders receiving plans and specifications. **Receipt of this Addendum shall be noted on the Proposal Form in the appropriate location.**

Attachments:

1. Revised “Schedule of Unit Prices or Contingent Change Order Prices” (page #4) from the specifications.
2. Addendum Drawings dated 2-19-25.
3. “Asbestos Abatement Specifications (Revised)” report dated 2-20-25.

General Notes:

1. The “Asbestos Abatement Specifications (Revised)” dated 2-20-25 indicates that there is no asbestos abatement included in the base scope of work, however, unit pricing as indicated in Appendix B is required. See the revised “Schedule of Unit Prices or Contingent Change Order Prices” (page #4) from the specifications attached, to fill out these unit prices.

Questions:

1. “You have a spec for room identification panel signage which is keynote 10 looks like only one is shown for the bathroom. Can you provide a detail for the sign so we can price accordingly.”

Answer: Please see detail #4 on sheet A-201 in addendum #1 drawings and specification section 101423.16 in the bid specs.

2. "It looks like the owner is handling removal of existing flooring can you confirm if they are also handling any abatement associated with the flooring."

Answer: see general note #1 answer above.

3. "Do you know of any electrical and mechanical contractors that work regularly at Cadillac Place and would be interested in bidding?"

Answer: No, we do not know of any electrical and mechanical contractors that work regularly at Cadillac Place.

4. How many fire extinguishers should we include?

Answer: 3 fire extinguishers.

Changes to Drawings:

1. Sheet A-101.0: Modified notes #4, #5, #8, #14 and added note #15.
2. Sheet A-101.1: Modified note #10.
3. Sheet A-101.3: Modified finishes in Elec. Clos. #109, Elec. #110, Stor. #112, and Jan. Clos. #113.
4. Sheet A-201: Added detail #4.

ACKNOWLEDGEMENT: This Addendum must be acknowledged by the Bidder in the space provided in the Bid Summary and Bid Form. Failing to acknowledge Addenda may be cause for the Bid to be rejected. Addenda will become part of the Contract Documents.

PROFESSIONAL: DS Architects, Inc.

DATE: 2/27/2025

APPROVED BY:

DATE: Click to enter date

PROJECT DIRECTOR:

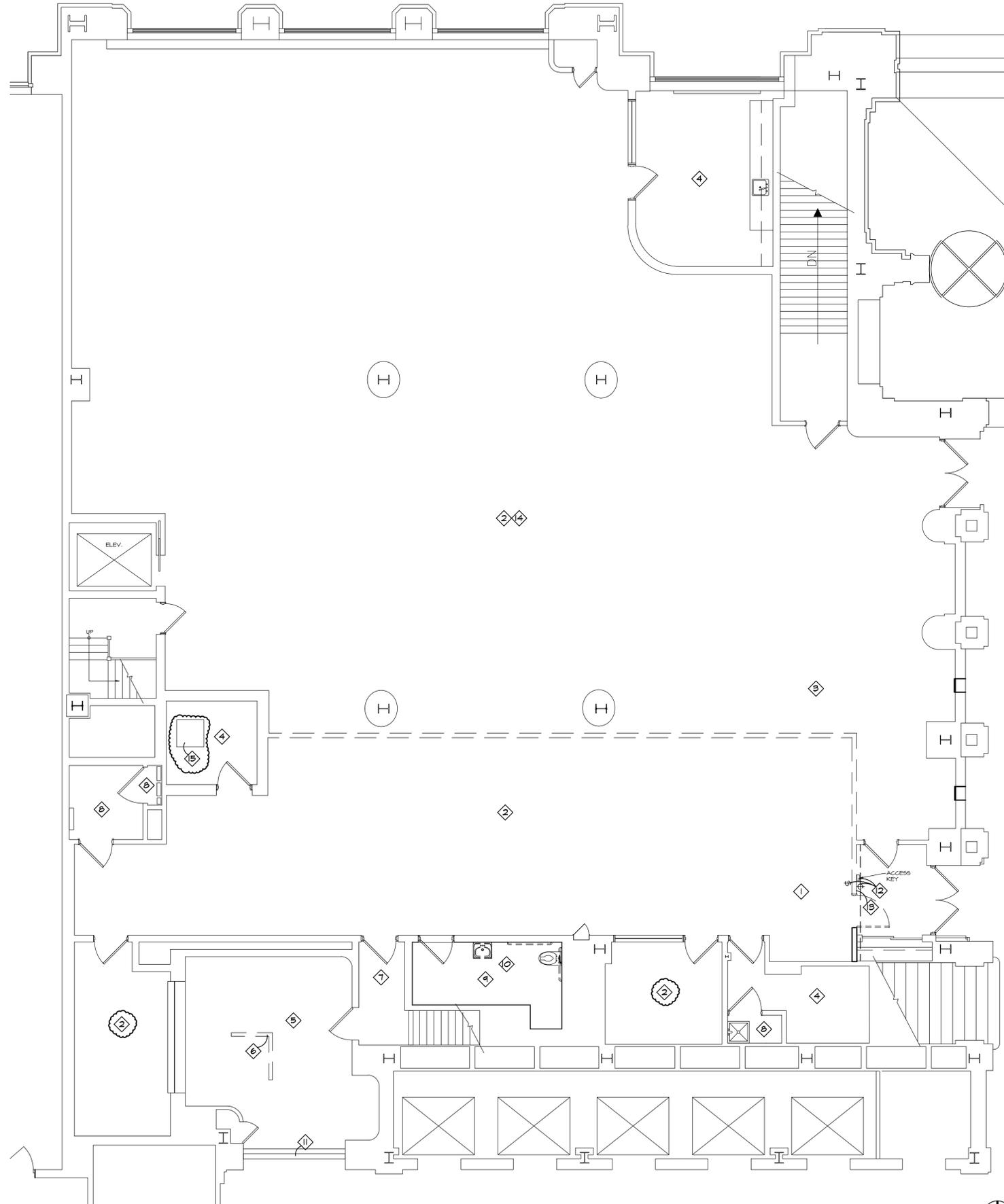
Schedule of Alternates - The Bidder will complete (or deduct from the Contract) the parts of the Work designated by the Alternates that follow and accept in full payment (or allow in full credit) for those parts of the Work the following Item Bid Prices:

Alternate Item No.	Bid Quantity	Description	Unit Price	Item Bid Price
N/A	N/A	N/A	N/A	N/A

The Bidder further acknowledges and agrees that the separate prices bid on this "Schedule of Alternates," where they are applicable and deemed acceptable by the **Owner**, will be used if incorporated into the Contract when the **Owner** issues the Notice of Award.

Schedule of Unit Prices or Contingent Change Order Prices - The Bidder shall use this "Schedule" to quote unit prices identified in the bid documents or propose other contingent Change Order prices. The proposed Unit Prices or contingent Change Order prices set forth in this schedule, at the sole discretion of the **Owner**, may, or may not be incorporated into the Contract Documents. The **Owner** reserves the right to negotiate Unit Prices or contingent Change Order prices set forth herein prior to their possible incorporation into the Contract Documents.

Item No.	Bid Quantity	Description	Unit Price	Item Bid Price
1	1	Floor Tile (9"x9" or 12"x 12")	/S.F.	
2	1	Floor Tile (9"x9" or 12"x12") & mastic by grinding	/S.F.	
3	1	Mastic by grinding (includes all labor, materials, and disposal)	/S.F.	
4	1	Fire Door (single doorway)	/Door	
5	1	Spray Applied Fire Proofing	/S.F.	
6	1	Mobilization fee (each)	/mobilization	



DEMOLITION NOTES

- 1 REMOVE, STORE AND PROTECT FOR LATER POSSIBLE RE-USE ALL EXISTING DOORS, FRAMES AND HARDWARE ON ANY WALL TO BE DEMOLISHED (TYPICAL THROUGHOUT). ANY OF THE ABOVE NOT REINSTALLED ARE TO BE RETURNED TO BUILDING SURPLUS LOCATION.
- 2 REMOVE AND DISPOSE OF ALL EXISTING CARPET AND RELATED BASE THROUGHOUT ENTIRE SUITE. WORK SHALL BE DONE BY TENANT'S FLOORING FINISHES CONTRACTOR (UNLESS NOTED OTHERWISE).
- 3 REMOVE AND SALVAGE ANY EXISTING INSULATION IN DEMOLISHED WALLS FOR POSSIBLE REUSE.
- 4 EXISTING TO REMAIN EXISTING VINYL COMPOSITION TILE AND RELATED BASE THROUGHOUT INDICATED ROOM/AREA.
- 5 REMOVE ALL EXISTING QUARRY TILE FLOORING AND RELATED BASE THROUGHOUT INDICATED ROOM/AREA.
- 6 REMOVE AND RETURN TO TENANT EXISTING STANCHIONS.
- 7 INDICATED ROOM/AREA IS WITHIN TENANT'S LEASE SPACE, HOWEVER INDICATED ROOM/AREA IS EXCLUDED FROM THIS PROJECT AND NO WORK IS TAKING PLACE WITHIN INDICATED ROOM/AREA.
- 8 EXISTING TO REMAIN MOSAIC TILE FLOORING AND RELATED BASE THROUGHOUT INDICATED ROOM/AREA.
- 9 EXISTING TO REMAIN PORCELAIN TILE FLOORING AND RELATED BASE THROUGHOUT INDICATED ROOM/AREA.
- 10 ALL RESTROOM ITEMS ARE TO BE INSTALLED PER ANSI A117.1-2009. REMOVE AND REINSTALL EXISTING WALL HUNG SINK, MIRROR AND GRAB BARS AS REQUIRED. SEE DETAIL NO. 9 ON SHEET A-501.
- 11 EXISTING TO REMAIN CEILING RECESSED ROLL UP DOOR.
- 12 INDICATED LIGHT SWITCHES AND ACCESS CARD READER TO BE REMOVED, SALVAGED AND REINSTALLED IN NEW WALL PARTITION AS REQUIRED.
- 13 EXISTING AUDIO HEADSET JACK (NOT SHOWN) IS TO BE REMOVED AND DISPOSED OF.
- 14 PROVIDE FLOORING PROTECTION AS REQUIRED OVER ALL PUBLIC AREAS/SPACES FOR DEMOLITION REMOVED ITEMS ROUTE TO DUMPSTER.
- 15 EXISTING TO REMAIN VAULT SAFE.

ARCHITECTS
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 FAX 248.626.2030
 WEB DSARCHITECTS.COM

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STATE OF MICHIGAN
 DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
 STATE FACILITIES ADMINISTRATION
 DESIGN AND CONSTRUCTION DIVISION
 ADAMP. LACH, RA, NCARB, DIRECTOR

2/19/2025	ADDENDUM NO. 2		
1/16/2025	BID		
5/30/2024	PERMIT		
5/06/2024	PHASE 500 100%		
	DATE		REVIEW

PROJECT DESCRIPTION
**CADILLAC PLACE - UJA LOBBY
 REDESIGN**

DEMOLITION PLAN

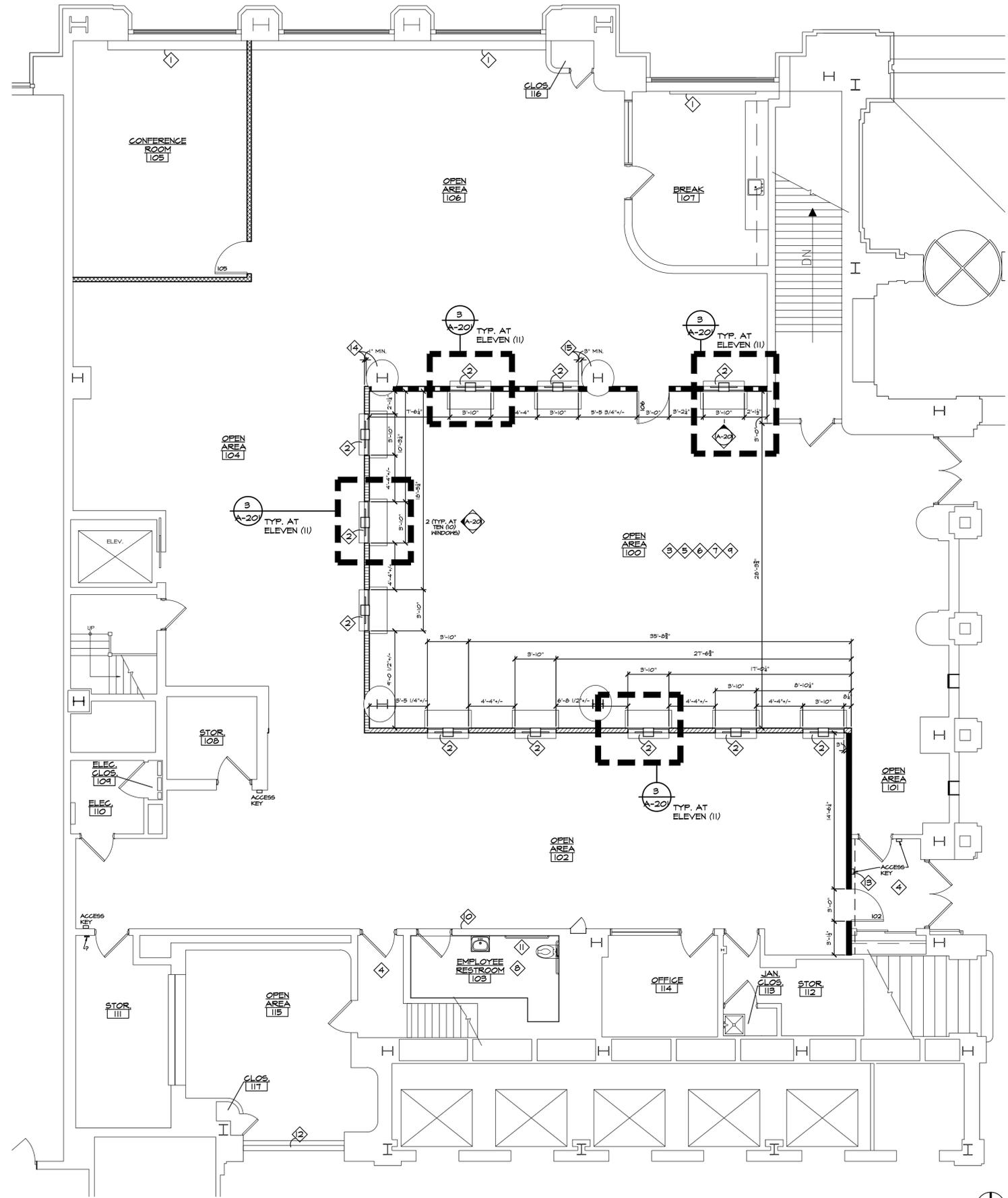
PROJECT NO. 186/23271.MNB	DJS
INDEX	BKO
PCA	DJS
DRAWN BY	
DESIGNED BY	
JCIENG BY	



Drew Shaw

DEMOLITION PLAN
 3/16" = 1'-0"
 NORTH

A-101.0



FLOOR PLAN
3/16" = 1'-0"



CONSTRUCTION NOTES

- 1 EXISTING TO REMAIN BASE BOARD HEAT REGISTER.
- 2 PROVIDE TYPICAL NEW WINDOW WHERE SHOWN. SEE ELEVATION AND DETAIL.
- 3 PREPARE ALL EXISTING WALLS FOR NEW FINISH.
- 4 INDICATED ROOM/AREA IS WITHIN TENANT'S LEASE SPACE, HOWEVER INDICATED ROOM/AREA IS EXCLUDED FROM THIS PROJECT AND NO WORK IS TAKING PLACE WITHIN INDICATED ROOM/AREA.
- 5 PROVIDE PROPER CONSTRUCTION WORK DUST CONTROL IN ALL AREAS OF CONSTRUCTION WORK.
- 6 CONTRACTORS SHALL USE JANITORS SINK DURING CONSTRUCTION. PUBLIC MENS ROOM SINK IS OFF LIMITS FOR CONSTRUCTION NEEDS.
- 7 CONTRACTORS TO SUBMIT THREE (3) SUBMITTALS OF EACH OF THE FOLLOWING ITEMS TO DS ARCHITECTS, INC. FOR REVIEW:
 VINYL BASE
 REDUCER STRIP
 LUXURY VINYL TILE
 PAINT
 LIGHT FIXTURES
 EXIT SIGNS
 EMERGENCY LIGHTS
 SWITCHES
 GRAB BARS
 DOORS, FRAMES AND HARDWARE
 CEILING GRID AND TILES
- 8 ALL RESTROOM ITEMS ARE TO BE INSTALLED PER ANSI A117.1-2009. REMOVE AND REINSTALL EXISTING WALL HUNG SINK, MIRROR AND GRAB BARS AS REQUIRED. SEE DETAIL NO. 4 ON SHEET A-501.
- 9 VERIFY LOCATION OF ALL FIRE EXTINGUISHERS WITH TENANT PRIOR TO INSTALLATION TO AVOID FURNITURE CONFLICTS.
- 10 PROVIDE NEW TACTILE SIGNAGE AS REQUIRED COMPLYING WITH ANSI A117.1-2009 AT 48" - 60" A.F.F. AT BASELINE OF LETTERS TO BUILDING AND LARGE SIDE OF DOOR. SEE DETAIL NO. 4 ON SHEET A-201.
- 11 PROVIDE NEW GRAB BAR BY 'BOBRICK' 18" #B-6806X18.
- 12 EXISTING TO REMAIN CEILING RECESSED ROLL UP DOOR.
- 13 REINSTALL SALVAGED ACCESS CARD READER AS REQUIRED.
- 14 INDICATED DIMENSION IS REQUIRED TO NOT HAVE A COLLISION WITH INDICATED COLUMN AND TENANT'S FURNITURE (NOT SHOWN) IN OPEN AREA #104.
- 15 INDICATED DIMENSION IS REQUIRED TO NOT HAVE A COLLISION WITH INDICATED COLUMN AND TENANT'S EMPLOYEE TRANSACTION-TOP (DUE TO FORTHCOMING TENANT'S FURNITURE PANEL (NOT SHOWN) IN OPEN AREA #106.

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 ADAMP. LACH, RA, NCARB, DIRECTOR

2/19/2025	ADDENDUM NO. 2	DATE
1/16/2025	BID	DATE
5/30/2024	PERMIT	DATE
5/09/2024	PHASE 500 100%	DATE
	REVIEW	DATE

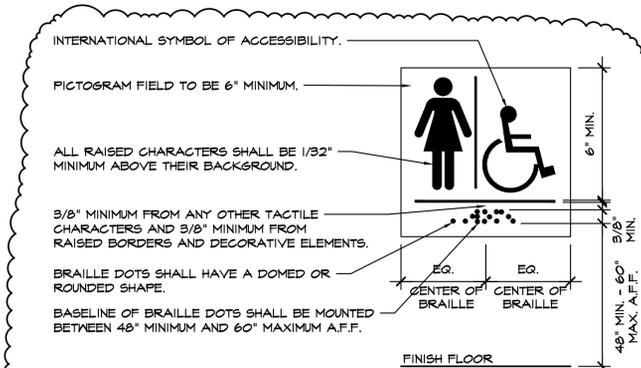
PROJECT DESCRIPTION
**CADILLAC PLACE - UJA LOBBY
 REDESIGN**

FLOOR PLAN

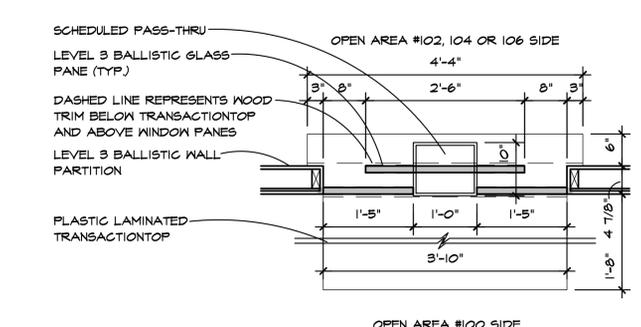
PROJECT NO. 186/23271.MNB
 INDEX
 PCA
 DRAWN BY BKO
 DESIGNED BY DJS
 JCI/ENG BY

Derek S. Shaw

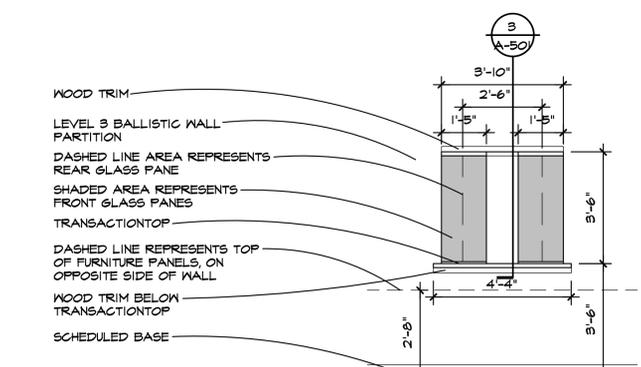
A-101.1



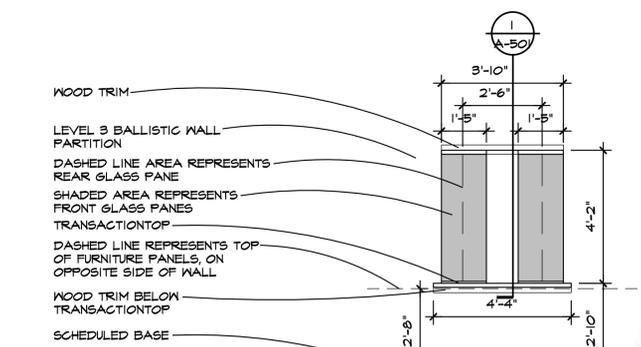
4 TYPICAL ADA RESTROOM SIGNAGE
 A-101.1 6" = 1'-0"



3 TRANSACTIONTOP PLAN
 A-101.1 3/4" = 1'-0"



2 OPEN AREA #100 - NORTH VIEW
 A-101.1 3/8" = 1'-0"



1 OPEN AREA #100 (BARRIER FREE) - WEST VIEW
 A-101.1 3/8" = 1'-0"

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 MEET PROJECT No. 2205200

STATE OF MICHIGAN
 DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
 STATE FACILITIES ADMINISTRATION
 DESIGN AND CONSTRUCTION DIVISION
 ADAMP. LACH, RA, NCARB, DIRECTOR

ADDENDUM NO. 2	BID	REVIEW
2/19/2025	5/30/2024	5/06/2024
1/16/2025	PERMIT	PHASE 500 100%
DATE	DATE	DATE

PROJECT DESCRIPTION
CADILLAC PLACE - UJA LOBBY REDESIGN

ELEVATIONS AND PLAN

PROJECT NO. 186/23271.MNB	D/S
INDEX	BKO
PCA	D/S
DRAWN BY	D/S
DESIGNED BY	D/S
JCIENG BY	D/S

A-201



Drawn S.M.W.

ASBESTOS ABATEMENT

SPECIFICATIONS

(REVISED)

FOR

DS ARCHITECTS INC.
7300 Dixie Hwy. Suite 600
Clarkston, MI 48346

AT

CADILLAC PLACE – UIA LOBBY REDESIGN
3044 W Grand Blvd.
Detroit, MI 48202

February 20, 2025

Prepared By:

Atlas Technical LLC.

46555 Humboldt Drive, Suite 100

Novi, MI 48377

TABLE OF CONTENTS

	<u>Pages</u>
Technical Specifications for Asbestos Abatement	Tech 1-22
I. Initial Requirements	
1. General Terms	Tech 1-2
2. Contractor Responsibility	Tech 2
3. Pre-Start Meeting.....	Tech 2-4
4. Log Book/On-Site Required Documentation	Tech 4
5. Submittals to Owner’s Representative/Consultant	Tech 4
6. Notification Procedures	Tech 5-6
II. Asbestos Abatement Requirements	
7. Worker’s Dress & Safety Equipment	Tech 7
8. Respiratory Protection	Tech 7-8
9. Emergency Planning.....	Tech 8
10. Methods of Asbestos Abatement	Tech 8-10
11. Preparation of Regulated Area for Asbestos Abatement.....	Tech 10-11
12. Friable Asbestos-Containing Materials	Tech 12
13. 3-Stage Decontamination and Waste Load-Out Chambers	Tech 12-14
14. Glove Bag Technique	Tech 14-15
15. Non Friable Asbestos-Containing Materials	Tech 16-18
16. Post Abatement Clean-Up	Tech 18
17. Acceptance Criteria for Area Re-Occupancy	Tech 18-19
18. Disposal of Asbestos-Containing Material and Related Debris	Tech 19-20
19. Submittal Prior to Contractor Release and Final Payment	Tech 20
III Work/Conduct Requirements	
20. Supervision, Personnel & Misconduct	Tech 20
21. Site Security/Site Cleanliness	Tech 20-21
22. Stop Work Orders	Tech 21
IV Air Monitoring	
23. Sampling Requirements.....	Tech 21-22
24. Sampling Types	Tech 22
Abatement Contractor’s Acknowledgement Form	Appendix A
Asbestos Abatement Bid Pricing	Appendix B
Asbestos Abatement Scope of Work	Appendix C
Building Layout for Asbestos Abatement	Appendix D
Supplemental Asbestos Survey Reports	Appendix E
Asbestos Survey Report (MTC)	Appendix F

I. INITIAL REQUIREMENTS

1. General Terms

- 1.1 By submittal of a price quote and agreeing to perform abatement activities at a given Site, the Contractor acknowledges that they have investigated and satisfied themselves as to:
 - 1.1.1 The conditions affecting the work, including but not limited to the physical conditions of the site which may bear upon site access, handling and storage of tools and materials, access to water, electricity or other utilities that otherwise may affect performance of required activities.
 - 1.1.2 The character and quantity of all surface and sub-surface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Building Owner or a designated Consultant, as well as information presented in site drawings and job specific specifications. Any failure by the Contractor to acquaint himself with available information will not relieve him of the responsibility of determining properly the difficulty, safety concerns or cost of successfully performing the work. The Building Owner, it's Architect, and/or the Owner's Consultant are **NOT** responsible for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Building Owner and/or the Owner's Consultant.
 - 1.1.3 The methods and procedures detailed within the technical specifications of this document are merely illustrative of the procedures to be utilized on the asbestos abatement projects for the Owner. Other procedures, which are the equivalent of those described, are encouraged at the option of the Contractor but are always subject to the Owner and/or the Owner's Consultant approval.
- 1.2 The Contractor shall furnish all labor, materials, services, insurance, and equipment necessary to perform the asbestos abatement activities contemplated by this specification.
- 1.3 The Contractor shall defend, indemnify, hold harmless and exempt the Owner, its officers, agents, servants and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses, and attorney fees incident to any work done in the performance of this contract; provided, however, the Contractor shall not be liable for any claims, demands, damages, cost, expenses, and attorneys fees arising out of an act or omission of the Owner, its officers, agents, servants, and employees.
- 1.4 Additional work in the form of change orders, written or verbal agreements must also be completed in accordance within this Technical Specifications for Asbestos Abatement Activities.
- 1.5 This project is not tax exempt from State Sales Tax and/or Use Tax. All material and supplies incorporated and used in construction and becoming a permanent part of this project will not be exempt form State Sales Tax and/or Use Tax.
- 1.6 **Workers Rights-** The Contractor shall comply with the Michigan Civil Rights Act which states that Contractors shall not discriminate in hiring or in its terms and conditions of employment on the basis of race, religion, creed, national origin, color, sex, marital status, age, height or weight, nor on bona fide job requirements. Neither shall a Contractor discriminate in the sales of products or the rendering of services pursuant to this contract on the basis of any of those categories.

2. Contractor Responsibility

- 2.1 The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all the damages to persons or property either on or off the site, which occur as a result of its fault or negligence in connection with the prosecution of work. The safety provisions of applicable laws and OSHA standards shall be observed and the Contractor shall take or have cause to be taken such additional safety and health measures as the Owner, Owner's Architect or the Owner's Representative may determine to be reasonably necessary.
- 2.2 Neither the final certificate nor final payments, nor any provision in the contract documents shall relieve the Contractor of responsibility for defects in workmanship or faulty work or materials. The Contractor shall correct any defects due to faulty work or materials and pay for the damage to other work resulting therefrom, which shall appear within a period of one year from the date of completion unless otherwise stated in this document. The Owner shall notify the Contractor of observed defects with reasonable promptness.
- 2.3 The Contractor shall furnish the Owner with a written guarantee to remedy any defects due to faulty materials or workmanship which appear in the work within one year from the date of final acceptance by the Owner.
- 2.4 It is the intent of the Owner to award the contract to Contractors fully capable, both financially and with regards to experience, to perform and complete the work in a satisfactory manner.
- 2.5 The Contractor shall have a representative available for all meetings, presentations and public relation appearances deemed necessary by the Owner. The Contractor will be made available for such activities for one year following the signed contract.
- 2.6 **Photograph Identification Requirements-** The Contractor shall provide to all their on-site employees photograph identification badges stating the company's name and employee's name. This badge shall be visible and worn at all times the worker is present at each site.

3. Pre-Start Meeting

- 3.1 Prior to commencement of work, the Contractor shall meet with the Owner, Architect and the Owner's Consultant to present and review the items listed below. At that time, the Contractor shall designate at least one "competent" (as described by OSHA 1926.1101{o}) individual who shall be on-site throughout the project with full authority to act on the Contractor's behalf and this person shall attend the pre-start job meeting. This meeting is arranged to discuss and set procedures to be followed throughout the performance of the contract. At this meeting **and to be included in the logbook**, the Contractor shall provide:
 - 3.1.1 Proof of Contractor licensing to conduct asbestos abatement activities in the State of Michigan in accordance with Act 135 P.A. 1986, as amended, (Asbestos Abatement Licensing Act) and any subsequent State of Michigan Acts.
 - 3.1.2 A list of all employees who will participate in the project, including delineation of experience and assigned responsibilities (including subcontractor's employees who may enter the work area).
 - 3.1.3 Proof that the "competent person" to be responsible for the execution of this project has had training in accordance with 29 CFR, 1926.1101 and the Michigan

Department of Labor & Regulatory Affairs. THIS PERSON SHALL BE ON SITE AT ALL TIMES.

- 3.1.4 Proof that those employees who will work on this project have had a minimum of twenty-four (24) hours of training in accordance with 40 CFR, Part 763, Subpart E.
- 3.1.5 Proof that employees who work on this project have had proper medical screening as required by OSHA 29 CFR, Part 1926.1101 (M) (1) (2) (3) (4) and (N) (3) and 29 CFR 1910.20.
- 3.1.6 Proof that all employees who work on this project have had proper respirator fit testing in accordance with federal and NIOSH standards.
- 3.1.7 Copies of all Contractor workers' Michigan State Accreditation "Cards" must be provided to the Owner's Consultant prior to being allowed within the project area. For any employee(s) who has approval but does not yet have cards in their possession; the Contractor must provide a signed statement (on company letterhead) stating that state approval has been given to that/those employee(s). This statement must include the name of the state employee who granted verbal approval. In addition to this letter, the Contractor must provide a copy of the employee's training certificate, appropriate fit test(s) and doctor's written opinion.
- 3.1.8 Signed "Acknowledgement and Agreement to Conform to Technical Specifications for Asbestos Abatement Activities" form provided by Testing Engineers & Consultants at the end of this specification.
- 3.1.9 Emergency Planning Procedures (see Section 8.0 of these specifications).
- 3.1.10 Name and address of the landfill to be used.
- 3.1.11 Copy of all State Notification(s). Most recent shall be posted on the Job Site.
- 3.1.12 A sequence of work and performance schedule including start and end dates of project.
- 3.2 At this pre-start meeting the Contractor, Architect, Owner and Owner's Representative shall agree on the existing conditions of the work area and the areas immediately surrounding this area. Also, final Scope of Work and Schedule will be finalized.
- 3.3 A proposed work schedule shall be submitted by the Contractor and subject to approval by the Owner, Architect and/or the Owner's Representative. A 48-hour advance notice of any schedule changes is required by the Contractor. Phasing work activities will be scheduled as-needed. Dates are subject to change by the Owner.
- 3.4 All projects will be considered complete for schedule purposes when the project site has passed clearance testing, the Contractor has completed removal of all supplies and equipment and the Contractor has returned the work areas to the Owner in a condition that satisfies the Owner, Architect and Owner's Representative.

4. Log Book/ On-Site Required Documentation

- 4.1 The Contractor shall have the following items in view at the job site at all times. These items must be kept in a log book (three (3) ring binder) as described in the "Pre-Start Meeting" section and include all items stated above in 1.1.
 - 4.1.1 Contractor's License, Competent Person and Asbestos Worker training certification, state card, fit test and physical exam copies.
 - 4.1.2 A complete set of this Technical Specification detailing Asbestos Abatement Procedures to be followed on the Job Site.
 - 4.1.3 Project Specific Scope of Work approved by Owner, Architect and Owner's Consultant.

- 4.1.4 Emergency Planning Procedures and Emergency Phone Numbers (these also need to be posted in view near the decontamination chamber entrance).
 - 4.1.5 Most current State Notification(s) copies.
 - 4.1.6 Daily Contractor Sign-In Sheets of all employees in containment and/or on the Job Site (current day's sign-in sheet should be posted at containment entrance).
 - 4.1.7 OSHA Regulation 29 CFR, Part 1926.1101.
 - 4.1.8 Environmental Protection Agency 40 CFR, Part 61 Subpart M: (National Emission Standard for Hazardous Air Pollutants).
 - 4.1.9 Environmental Protection Agency 40 CFR, Part 763.
 - 4.1.10 Appropriate Material Safety Data Sheets (MSDSs) for any products brought onto Owner's premises. Materials should be approved by Owner and/or Owner's Representative's prior to start of job.
- 4.2 Whenever during the course of this contract the Contractor, his subcontractor or his employees encounter asbestos, the Contractor shall handle, remove, and dispose of the asbestos strictly in accordance with the rules, guidelines, and regulations specified by EPA, OSHA, the Michigan Department of Licensing and Regulatory Affairs, the Department of Environmental Quality, and all other applicable regulatory agencies. The most recent edition or revision of any relevant regulation, standard and/or document code shall be controlling. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be utilized.

5. Submittals to Owner's Representative/Consultant

- 5.1 The following (See Item 2.1.1) shall be submitted for all employees who will participate in the project, to the Owner's Representative before project begins:
 - 5.1.1 Copy of Contractors' State Asbestos License (past 5 years)
 - 5.1.2 Copy of Employee Training Certificates
 - 5.1.3 Copy of State Accreditation Cards
 - 5.1.4 Copy of dated respirator fit test
 - 5.1.5 Copy of doctors' written opinion

6. Notification Procedures

- 6.1 The Contractor will make ALL necessary notifications to the appropriate federal, state and local agencies including but not limited to MDLARA and MDEQ as described below:
 - 6.1.1 Contractors performing friable asbestos removal or encapsulation work in Michigan must provide project notifications indicating the starting/ending dates and other job-related information to the MDLARA Asbestos Program within a specified time frame. The MDLARA Asbestos Program Section 220(1)(c) of Act 135 of the Public Acts of 1986, as amended, requires project notification ten (10) *calendar* days prior to any non-emergency asbestos abatement project exceeding 10 linear feet or 15 square feet, or both, of friable asbestos-containing materials. A one-percent (1%) project notification fee must also be included. Emergency asbestos abatement projects require notification by phone, fax, or mail prior to starting the projects. Please call MDLARA for approval and instructions on what can be considered emergency situations.
 - 6.1.2 Also, The National Emission Standards for Hazardous Air Pollutants (NESHAP), Asbestos Regulation 40 CFR 61, Subpart M, requires that in a facility being renovated, if the combined amount of regulated asbestos-containing materials (RACM) being removed is at least 80 linear meters (260 linear feet) on pipes or

at least 15 square meters (160 square feet) on other facility components, or is at least 1 cubic meter (35 cubic feet) off of facility components where the length or area could not be measured previously, a ten (10) *working* day notification must be submitted to the Michigan Department of Environmental Quality (MDEQ) Asbestos NESHAP Program.

- 6.1.3 All other agency notifications must be made on a timely basis as deemed necessary by those agencies.
- 6.2 Payments of all applicable regulatory required fees and/or charges are the sole responsibility of the Contractor.
- 6.3 The requirements of a complete notification(s) include but are not limited to the following:
 - 6.3.1 An indication of whether notice is an original or a revised notification.
 - 6.3.2 Name, address, and telephone number of the facility Owner and Operator and the Owner or Operator of the asbestos removal firm.
 - 6.3.3 Type of operation: demolition or renovation.
 - 6.3.4 Facility description including at least the following:
 - 6.3.4.1 Size (square meters or square feet) and number of floors.
 - 6.3.4.2 Year Built (Age).
 - 6.3.4.3 Present and prior uses.
 - 6.3.4.4 Procedure, including analytical methods, employed to detect the presence of asbestos-containing materials.
 - 6.3.4.5 Estimate of the approximate amount of regulated asbestos-containing material (RACM) using the approximate units, either linear meters or linear feet for pipes, square meters or square feet for other facility components, or cubic meters (cubic feet), if the asbestos-containing material will be stripped from the facility components without being measured.
 - 6.3.4.6 Estimate of the amount of Category I and Category II non-friable asbestos-containing materials in the affected part of the facility that will not be removed prior to demolition.
 - 6.3.4.7 Location and address, including building number or name and floor or room number, if appropriate, street address, city, county, and state of the facility being demolished or renovated.
 - 6.3.4.8 Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos-containing material) in demolition (with the exception of government ordered demolitions) or renovation, and scheduled starting and completion dates of the demolition or renovation.
 - 6.3.5 The beginning and ending dates of the report period for planned renovation operations involving individual non-scheduled operations.
 - 6.3.6 Description of planned demolition or renovation work including the demolition and renovation techniques to be used and description of the affected facility components.
 - 6.3.7 Description of work practices and engineering controls to be used to comply with the requirements of this standard.
 - 6.3.8 Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.
 - 6.3.9 Certification that only persons trained as required in paragraph (C) (8) will supervise the stripping and removal of asbestos-containing material (effective one (1) year after promulgation).

- 6.3.10 Description of procedures for handling the finding of unexpected regulated asbestos containing material (RACM) or Category II non-friable asbestos-containing material that has been crumbled, pulverized, or reduced to powder.
- 6.3.11 For government ordered demolitions, include the name, title, and authority of the government representative ordering the demolition, the date the order was issued, and the date the demolition was ordered to begin by the State or local government representative. Attach a copy of the order to the notification.
- 6.3.12 For emergency renovations, include the date and hour the emergency occurred, a description of the event and an explanation of how the event has caused unsafe conditions or would cause equipment damage or unreasonable financial burden.
- 6.3.13 Name, address, and telephone number of the waste transporter.

II. ASBESTOS ABATEMENT REQUIREMENTS

This section details the removal requirements that the awarded Contractor must follow during the course of all asbestos abatement projects performed involving Testing Engineers & Consultants, Inc. **The Contractor is responsible for returning the work area to the Owner in a condition that satisfies the Owner, Architect and Owner's Representative(s).**

The Contractor shall tour the work area(s) and familiarize themselves with the work contemplated in the contract. All figures and/or diagrams referencing sizes, or amounts, or materials are estimates. The Contractor is solely responsible for its' own measurements.

7. Worker's Dress and Safety Equipment

- 7.1 The Contractor as required by current OSHA regulations shall provide worker's clothing. Rips and tears in the coveralls shall be repaired, or else the coveralls shall be replaced.
- 7.2 The Contractor shall provide protective clothing for the Owner's Consultant, and inspection personnel.
- 7.3 Worker's clothing shall consist of disposable full body coveralls (coveralls should be of Tyvek material – disposable paper), underwear, head covers, gloves, and boots. The Contractor shall supply whatever safety gear is necessary to protect those people authorized to enter the work site, including if necessary, hard hats and eye protection. OSHA approved footwear is mandatory while at the project site (inside and outside of the enclosure). No street clothing shall be worn under coveralls.
- 7.4 The Contractor shall have an appropriately rated fire extinguisher in the dirty room and clean room of each enclosure.
- 7.5 The Contractor shall adhere to all OSHA and other regulatory agency requirements regarding the safety of the employees, including but not limited to:
 - 7.5.1 Fire Safety
 - 7.5.2 Ladders
 - 7.5.3 Scaffolding
 - 7.5.4 Confined Spaces
 - 7.5.5 Lock-Out/Tag-Out
 - 7.5.6 Electrical Safety

8. Respiratory Protection

- 8.1 The Contractor as required by current OSHA regulations shall provide respirator protection for workers.

- 8.2 Respiratory protection consisting of powered air-purifying respirators (P.A.P.R.) with full-face piece and HEPA filters will be provided and used by ALL asbestos abatement workers on ALL projects involving removal of friable surfacing materials or at the discretion of the Owner's representative on other projects. Half-face cartridge respirators may be used with the approval and/or at the discretion of the Owner's representative.
- 8.3 Workers will always wear a respirator when inside the work area. While wearing the respirator, workers will not pull the respirator away from his/her face to talk, smoke, eat, or drink.
- 8.4 No workers will be permitted to wear a half-face respirator unless clean-shaven. A qualitative fit test for each employee engaged in this work must be completed. These fit tests must be completed in accordance with OSHA regulations.
- 8.5 Combination cartridges (Asbestos and Organic vapor) are required during the removal of mastic materials.
- 8.6 An adequate supply of cartridges and respirators must be on-site and available for workers (regardless of respirator type).

9. Emergency Planning

- 9.1 Emergency planning shall be developed prior to abatement initiation and agreed to by the Contractor and the Owner or Owner's Representative. All plans must be detailed in writing and posted at the job site (in view near the decontamination chamber entrance).
- 9.2 Emergency planning shall include written procedures for the following emergencies:
 - 9.2.1 The Contractor must explain his contingency plan for the possibility of the negative air filtration devices blowing a fuse, tripping a circuit breaker, or losing power.
 - 9.2.2 The Contractor must explain his contingency plan for the possibility that disposal bag(s) may break or leak.
 - 9.2.3 The Contractor must explain his contingency plan for the possibility of an injury.
 - 9.2.4 For non-life threatening situations, employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the work place to obtain proper medical treatment.
 - 9.2.5 For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove him/her from the work place and secure proper medical treatment.
- 9.3 The Contractor shall take all necessary precautions and actions to protect his employees, subcontractors, Owner's Representatives, Owner's Consultants, government inspectors, general public, and the building and structure from exposure to asbestos.

10. Methods of Asbestos Abatement

- 10.1 **NOTE:** The use of supplies, equipment, tools, etc., owned, rented or otherwise in the possession of the Building Owner is strictly prohibited.
- 10.2 The asbestos material will be sprayed with either removal encapsulant or "amended water" (which contains an additive to enhance penetration). A fine spray of either solution will be applied to prevent fiber disturbance preceding the removal of the asbestos material. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the OSHA standards referenced in these specifications.
- 10.3 The Contractor shall not, however, allow excessive water accumulate in the work area.

- 10.4 If removal encapsulant is not used, surrounding areas will be periodically sprayed and kept wet to facilitate removal with minimum fiber release.
- 10.5 A high humidity will be maintained in the work area to assist in fiber settling.
- 10.6 If at any time the Owner's Consultant determines the material is not kept adequately wet, misters and/or sprinklers will be mandatory.
- 10.7 Removal of asbestos material will be done in manageable sections with two-person teams (if needed). Material will be removed as intact sections or components whenever possible and carefully lowered to the floor.
- 10.8 The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.
- 10.9 Large components removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.
- 10.10 When removal of building materials (electrical, lighting, duct work, etc.) is necessary, the Contractor shall develop drawings indicating existing materials and their exact locations.
- 10.11 Personnel knowledgeable and experienced in electrical work must be used when installing or making connections to any electrical components within the facility, as well as when removing and/or replacing lights.
- 10.12 All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metals lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.
- 10.13 No bags shall be thrown or dropped at any time.
- 10.14 All containerized asbestos waste that is stored on-site (if allowed) shall be properly labeled and placed in a locked or secured location until ready for final disposal. Labels shall be of sufficient size and contrast to be readily visible and legible. The sign shall read:
 - “Danger Contains Asbestos Fibers
 - Avoid Creating Dust
 - Cancer and Lung Disease Hazard”
- 10.15 All asbestos abatement projects conducted inside a facility will be completed with the use of HEPA air filtration devices.
 - 10.15.1 Each unit must have three filters, including a HEPA filter capable of removing minute asbestos fibers.
 - 10.15.2 Each unit has ducts that must be exhausted to the outside air.
 - 10.15.3 Inlet and outlet ports of the air filtration devices must be covered with tape and 4-mil polyethylene sheeting when not in use.
 - 10.15.4 HEPA air filtration devices will be set up so that the air in the enclosure is drawn away from the abatement worker.
 - 10.15.5 Removal and cleaning operations will always move towards the air filtration devices.
 - 10.15.6 HEPA air filtration devices will be run until the completion of the project.
- 10.16 The Contractor will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is

subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.

- 10.16.1 A minimum reading of -0.020 inches of water on a differential pressure gauge shall be maintained at all parts of the enclosure.
- 10.16.2 Sufficient negative pressure will be maintained in the enclosure to evacuate the air once every 15 minutes (minimum).
- 10.16.3 Smoke tubes shall be used daily by the Contractor to test for leaks and breeches in the containment.
- 10.17 All air filtration devices must be ducted to the outside of the building from a position that is securable. Flexible duct will be used and placed at a location approved by the Owner's Representative.
- 10.18 All gross amounts of asbestos debris shall be cleaned up, bagged, and sealed at the end of each working day.
- 10.19 The Contractor shall transport materials to the ground via leak-tight chutes or other such containers if the material is being removed or stripped more than 50 feet above ground level and not removed as units or in sections.
- 10.20 A thick encapsulant such as "VIAC" shall be applied to any exposed pipe insulation ends leading away from the enclosure area, regardless of material make-up.
- 10.21 Only vacuums and air filtration devices (AFDs) with "HEPA" filters will be allowed. No "shop-vacs", homemade hybrid vacuums or air filtration devices will be allowed on site.

11. Preparation of Regulated Area for Asbestos Abatement

- 11.1 The Owner shall attempt to furnish utility services for the Contractor's use, including electrical outlets (25 ampere) and water taps in or adjacent to the work area in sufficient quantities and located such that the Contractor can use them for equipment and abatement/decontamination practices. However, should such utility access not be available, the Contractor is solely responsible for the provision of the same. In the event of a power failure (regardless of fault), the Contractor is responsible for continuing work using adequate generator power.
- 11.2 The Contractor shall provide lighting if necessary.
- 11.3 Danger signs will be posted at a distance sufficiently far enough from the asbestos abatement work area to permit an employee to read the sign and take necessary protective measures to avoid exposure. Signs shall be in accordance with EPA and OSHA regulations. All possible entrances to the work area shall be posted. Additional signs will be placed at areas designated by the Owner's Consultant.
- 11.4 The building personnel shall attempt to shut down and lock out all heating, cooling, and air conditioning system components that are in, supply, or pass through the work areas. Should building personnel be unavailable or unable to do so, it is the sole responsibility of the Contractor to do so. The Contractor will seal all intake vents and exhaust vents in the work area with tape and 6-mil polyethylene, as well as any seams in system components that pass through the work area. All affected heating, ventilation and air conditioning system filters will be removed and placed in 6-mil polyethylene bags for disposal as asbestos waste.
- 11.5 The Contractor may be required to Pre-clean all movable objects within the work area using a HEPA filtered vacuum and/or wet cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or the Owner's Consultant. After cleaning, these objects shall be removed from the work area by the Contractor and carefully stored in an uncontaminated location as designated by the

- Owner's Consultant. Carpeting, drapes, clothing, furniture, and other fabric items contaminated with asbestos may be required to be disposed of as asbestos contaminated waste.
- 11.6 The Contractor may be required to Pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or Owner's Consultant. The extent of the Pre-cleaning will be determined by, but not limited to the following factors: the particulate application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.
 - 11.7 Where doors or other such building fixtures are removed by the Contractor prior to abatement activities, the Contractor is responsible for replacing doors and/or fixtures upon completion of the abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by the Contractor to insure replacement in the proper location.
 - 11.8 The Contractor shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at minimum, 4-mil polyethylene sheeting.
 - 11.9 Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and the Contractor shall comply with the method chosen.
 - 11.10 Floors shall be covered with at least three layers of 6-mil polyethylene sheeting. Porous flooring, such as carpeting, remaining in place during asbestos removal shall be covered with plywood and/or rubber leak proof mats then covered with at least three layers of 6-mil polyethylene sheeting. The Owner or the Owner's Consultant will advise the method deemed most appropriate and the Contractor shall comply with the method chosen.
 - 11.11 Non-waterproof tape may NOT be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used for this purpose.
 - 11.12 The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that the Contractor will use for the movement of supplies and personnel.
 - 11.13 No open top dumpsters shall be allowed on the work site. Six (6) sided, locked and properly labeled dumpsters only shall be used.
 - 11.14 The dumpster(s) shall be removed within two (2) days from completion date.
 - 11.15 Equipment storage, bathroom usage designation, foreman's office and designated break areas (if available) will be determined by the Owner or the Owner's Consultant. Only projects areas and designated areas are to be used.
 - 11.16 No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.

12. Friable Asbestos-Containing Materials

- 12.1 Materials that are either friable or will become friable are to be removed in negative pressure containments in accordance with all local, state and federal regulations.
- 12.2 The Contractor will be required to construct enclosures that satisfy all the requirements of Appendix F of OSHA 1926.1101 "Work Practices and Engineering Controls for Major Asbestos Removal, Renovation and Demolition Operations."

- 12.3 The Owner and the Owner's Consultant must approve the decontamination chamber location(s), bag-out location(s), Air Filtration Devices (AFDs) placement and dumpster(s) location. Complete decontamination chamber(s) with shower shall be constructed (see 3-Stage Decontamination and Waste Load-Out Chambers section in this technical specification outlining requirements).
- 12.4 During friable removal, the Contractor shall supply a manometer and will be required to maintain a minimum negative pressure of 0.02 inches of water equivalent. In addition, the Contractor must smoke test the enclosure daily at minimum.
- 12.5 Glovebag removal of pipe insulation is acceptable where appropriate. Owner and the Owner's Consultant shall determine when the glove bag technique to be used is acceptable.
- 12.6 Friable Asbestos-Containing Mastic Removal:
 - 12.6.1 Removal of asbestos-containing floor mastic by mechanical means shall be abated in a full negative pressure enclosure with a three stage decontamination chamber. Walls (2 layers) and ceilings (1 layer) shall be constructed of 4 mil polyethylene and shall be utilized during abatement.
 - 12.6.2 Mastic shall be removed using mechanical means. Residual mastic along walls and in corners shall be removed to a thin film of no more than 1/4" width from wall/corner using hand tools and/or grinders.

13. 3-Stage Decontamination and Waste Load-Out Chambers

- 13.1 The Contractor will construct decontamination facilities in a pre-designated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered system with shower facilities in its central chamber.
 - 13.1.1 The dimensions of these chambers will be adequate for the number of men needed for the project.
 - 13.1.2 At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers.
 - 13.1.3 The walls, floor, and ceiling covering all of the airlock construction will be seamed to each other in a fashion making them air and water tight.
 - 13.1.4 One end of this construction will exit to the clean area outside the containment barrier walls.
 - 13.1.5 All three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of the polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. If air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure.

- 13.1.6 The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers.
- 13.1.7 A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste.
- 13.1.8 Black polyethylene sheeting may be used for privacy on the decontamination facility.
- 13.2 The contractor may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit.
 - 13.2.1 The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility.
 - 13.2.2 As each bag is filled, it will be set into the first room for temporary storage.
 - 13.2.3 Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle. Airlocks must exist between each room, as in the main decontamination facility.
 - 13.2.4 If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process.
 - 13.2.5 If a separate decontamination facility is constructed it shall be sealed while not in use.
- 13.3 All workers, without exception, will change out of street clothes in designated areas (clean room) prior to the start of each days work. Lockers or acceptable substitutes will be provided by the Contractor for the street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.
- 13.4 At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. The Contractor shall provide hot water, towels, soap and hygienic conditions.
- 13.5 Adequate toilet facilities may be located outside of the work area and decontamination for this purpose will be employed. Where such facilities do not exist, the Contractor will provide portable services.
- 13.6 No smoking, eating or drinking is to take place in the work area. Prior to smoking, eating, drinking or using toilet facilities, workers will fully decontaminate by showering. A new coverall will then be used to re-enter the work area.
- 13.7 Procedures developed for evacuation of injured workers (see Emergency Planning section) will be used. Aid for a seriously injured worker will not be delayed for reason of decontamination.
- 13.8 Worker's footwear will remain inside the regulated area until the completion of the job.
- 13.9 All waste water must be passed through a HEPA filter or collected in an air tight container and disposed of as asbestos waste.

- 13.10 Contractor's tools and supplies, including large items such as ladders and scaffolding must be properly decontaminated when removing them from the regulated area.
- 13.11 A remote 3-stage decontamination chamber with shower shall be constructed as close to the work area as feasible when glovebags are utilized for removal of greater than or equal to 25 linear feet or 25 square feet of asbestos-containing materials.

14. Glove Bag Technique

- 14.1 When feasible asbestos-containing Thermal Systems Insulation (TSI) and in some cases other ACMs should be removed utilizing glovebag methods. The circumstances that will allow such removal will be determined by and at the sole discretion of the Owner and/or the Owner's Representative. The following procedures for removal of friable asbestos-containing materials by glovebag method shall be strictly adhered to:
 - 14.1.1 A solution of amended water shall be prepared (according to manufacturer's instructions) for the airless sprayer.
 - 14.1.2 The glove bag should be fitted to the size of the pipe by cutting the top and the top sides of the glove bag. A polyethylene drop cloth shall be placed under the glove bag work area.
 - 14.1.3 The following tools and supplies at a minimum shall be placed inside the glove bag in the tool pouch: utility knife, wire brush, rags, container with thick encapsulate (such as Chilter's VIAC). Additional items or tools shall be placed inside dependent on the particular job.
 - 14.1.4 The glove bag is then attached to the pipe by folding the open edges together (making a top seam above the pipe) and securely sealing them with duct tape, as well as sealing both cut sides around the pipe.
 - 14.1.5 The bottom seam of the glove bag should be sealed with duct tape to prevent any leakage from a defective bag.
 - 14.1.6 Insert the wand of the airless sprayer through the glove bag by making a small hole in a location that allows the wand to move freely in the bag, and tape the polyethylene tightly. There may be a prefabricated hole, especially for the sprayer.
 - 14.1.7 Insert the nozzle of the HEPA vacuum through the appropriate opening (prefabricated hole) and tape the polyethylene tightly around the nozzle. The vacuum (turned on), in association with a flap, will be used throughout the duration of the glove bag removal project in order to establish proper negative pressure within the glove bag.
 - 14.1.8 Place arms into the glove bag appendages and thoroughly wet the pipe insulation.
 - 14.1.9 Using the knife, cut through the asbestos at each end of the section to be removed. The section to be removed is then slit from end to end (keeping material wet while cutting).
 - 14.1.10 The insulation is then lifted off the pipe and lowered carefully to the bottom of the glove bag.
 - 14.1.11 Using the wire brush, towels and water, the pipe shall be thoroughly cleaned.
 - 14.1.12 Wet the entire inside of the bag with specific attention to the polyethylene around the pipe and the arms and sockets.
 - 14.1.13 Following a visual by the Owner's Consultant, the exposed end of the insulation remaining on the pipe shall be encapsulated, as well as the bare pipe.
 - 14.1.14 Put all tools and supplies into wet cleaned arm socket by pulling socket inside out.

- 14.1.15 Tape the flap and collapse the bag by sucking all of the air out of the bag using the HEPA vacuum.
- 14.1.16 Tape the arm close to the tools (tape it in two locations with a one-inch space between the taped spots). Cut between the taped spots and put the enclosed tools into a bucket of water.
- 14.1.17 Remove the sprayer wand and seal the opening.
- 14.1.18 Remove the vacuum nozzle and seal the opening.
- 14.1.19 The glove bag should be squeezed tightly (as close to the top as possible) twisted, and sealed with duct tape.
- 14.1.20 Cut the bag off the pipe above the taped area and put the glove bag and drop cloth into an asbestos disposal bag, as well as the remaining portion of the bag on the pipe.
- 14.1.21 Clean the tools in the bucket of water and dispose of the water and glove bag remains in the asbestos disposal bag. The clean tools should be placed inside a polyethylene bag for future use.
- 14.1.22 Glove bags shall NOT be slid down the length of the pipe. Only insulation within the dimensions of the glove bag may be removed.
- 14.1.23 A remote 3-stage decontamination chamber with shower shall be constructed as close to the work area as feasible when glovebags are utilized for removal of greater than or equal to 25 linear feet or 25 square feet of asbestos-containing materials.
- 14.1.24 If unacceptable glovebag techniques are observed by the Owner or Owner's Consultant it will result in the immediate issuance of a stop work order and the removal of said employee of the Contractor.
- 14.1.25 The Owner's Consultant shall determine when the glove bag technique to be used is acceptable.

15. Non-Friable Asbestos-Containing Materials

- 15.1 Under certain circumstances, asbestos-containing materials in good condition may be removed intact and in a non-friable manner. The circumstances that will allow such removal will be determined by and at the sole discretion of the Owner and/or the Owner's Representative.
- 15.2 The following procedures for removal of non-friable asbestos-containing materials located inside a facility (such as but not limited to floor tile, mastic, adhesive on chalkboards, and glue pods on ceiling tiles) shall be strictly adhered to:
 - 15.2.1 A Regulated Area with critical barriers will be established with a minimum of one (1) layer of 4 mil polyethylene sheeting over all vents, doors or other openings between the work area and other areas of the facility.
 - 15.2.2 The removal will be conducted with the use of HEPA air filtration devices (AFDs). Each unit must have three filters including a HEPA filter. Each unit shall be exhausted to the outside air. Inlet and outlet ducts of the air filtration devices must be covered with tape and at least 4-mil polyethylene when not in use. The HEPA air filtration devices will be activated prior to any removal operations being commenced and will remain running 24 hours per day until the completion of the project.
 - 15.2.3 All air filtration devices (AFDs) must be ducted to the outside of the building. The area where the duct leaves the building must be made so as to be secure and protected from vandalism and the elements. Flexible ductwork will be used and shall be placed at locations approved by the Owner and/or the Owner's Representative.

- 15.2.4 The Contractor is responsible for the provision of charged and suitably rated fire extinguishers within the work area(s). The number necessary shall be determined in part by the size of the work area. The Owner and/or the Owner's Representatives may require additional extinguishers at their sole discretion.
- 15.2.5 Materials will be carefully removed utilizing hand tools, wet methods, HEPA vacuums and other such methods as necessary. Special care should be taken so as to be sure that the material is removed in whole pieces. The material must remain in an intact, non-friable state at all times.
- 15.2.6 Non-friable mastic removal includes the use of a low odor chemical mastic remover. Mechanical means renders the removal friable and requires state notifications and removal inside containment.
- 15.2.7 Materials will be properly containerized and/or double-bagged, sealed and labeled prior to removal from the regulated area.
- 15.2.8 Each waste bag and/or barrel shall be sealed, labeled and disposed of in strict compliance with all applicable federal, state and local requirements and as set forth in these Technical Specifications.
- 15.3 Non-friable asbestos-containing materials located on the exterior of a facility (such as but not limited to transite, window caulk/glazing and fire doors) may be removed at times utilizing, at a minimum, the following procedures. The circumstances under which such removal will be allowed shall be determined by and at the sole discretion of the Owner and/or the Owner's Representative. The following procedures for removal of non-friable asbestos-containing materials located outside a facility shall be strictly adhered to:
 - 15.3.1 The material must remain in a non-friable state throughout the removal process. Special care must be utilized when removing the material from either the underlying substrate or from whatever type of frame is holding the material.
 - 15.3.2 The material should be wetted thoroughly. Special care should be taken with the edges and/or other protrusions through the material (i.e. screw holes, nail holes, etc.) as soon as they are exposed. The wetting process needs to be repeated as necessary to maintain the wetted condition and to prevent fibers from being released.
 - 15.3.3 The Contractor shall establish a regulated area utilizing asbestos banner tape and asbestos warning signs. Polyethylene drop cloths must be utilized to enable material to be more easily cleaned.
 - 15.3.4 Should the removal of the material be conducted on the interior a facility, critical barriers may have to be established over all vents, doors or other openings between the work area and other areas of the facility.
 - 15.3.5 Other items removed from the material shall be disposed of as asbestos waste. Such items would include but not limited to screws, nails and other such fasteners.
 - 15.3.6 Materials will be carefully removed utilizing hand tools, wet methods, HEPA vacuums and other such methods as necessary. Special care should be taken so as to be sure that the material is removed in whole pieces. The material must remain in an intact, non-friable state at all times.
 - 15.3.7 Contractor shall hand scrape any excess caulking or glazing material from remaining surfaces.
 - 15.3.8 The material shall be wrapped in 6-mil plastic and securely sealed with waterproofed duct tape. This wrapped "package" shall then be wrapped again and securely sealed.
 - 15.3.9 Certain materials may be more economically wrapped by utilizing 6-mil polyethylene asbestos disposal bags. In such instances, the material shall be

double-bagged with each bag being sealed individually with high quality duct tape.

- 15.3.10 Any polyethylene drop cloths or other plastic shall be wrapped and sealed as asbestos contaminated waste as indicated in these Technical Specifications.
- 15.3.11 The Contractor shall ensure that its employees strictly comply with these Technical Specifications regarding worker protection, respiratory protection, and emergency planning. Should additional steps need to be taken so as to prevent the exposure to asbestos fibers for the facility, facility occupants or other workers at the site, the Contractor shall promptly comply with the requests of the Owner and/or the Owner's Representative.
- 15.3.12 Materials will be properly containerized and/or double-bagged, sealed and labeled prior to removal from the regulated area.
- 15.3.13 Each waste bag and/or barrel shall be sealed, labeled and disposed of in strict compliance with all applicable federal, state and local requirements and as set forth in these Technical Specifications.
- 15.3.14 Any exterior openings created with exposure between the outside and inside of the facility shall be sealed by plywood and wood framing or such other material so as to secure the building from both the elements and vandalism. The Contractor shall be responsible for the security of the area where the work was performed or is being performed.

16. Post Abatement Clean-Up

- 16.1 After completion of all removal and stripping, all surfaces within the work area will be wire-brushed and/or wet-wiped to remove all visible residues.
- 16.2 All visible accumulations of asbestos-containing materials and asbestos-contaminated debris will be removed and containerized. Durable plastic shovels must be used in place of metal shovels in order to minimize damage to floor sheeting.
- 16.3 Tools will be decontaminated by removing any gross amounts of asbestos from them in the work area. Following this, they will be wiped off in the dirty room and then sprayed down with water in the shower area. All hand tools will then be sealed in plastic bags. Workers will wear protective equipment throughout this process. Where space allows, a separate equipment room will be built inside the enclosure. This will eliminate the accumulation of gross asbestos on tools and equipment and will facilitate decontamination of these items. No tools or equipment will be allowed to leave the work area without being decontaminated.
- 16.4 Following the clean up of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.
- 16.5 Following the clean up of visible accumulations of asbestos waste, the entire area will be wet-wiped. During settling/drying periods no entry, activity, or ventilation into the work area will be allowed. However, the HEPA air filtration devices will continue to operate.
- 16.6 All removed polyethylene, tape, cleaning material, and contaminated clothing will be placed in 6-mil polyethylene bags or polyethylene lined drums, sealed and labeled as described above for disposal as asbestos waste material.
- 16.7 Only clear drying encapsulants and amended solutions may be used.
- 16.8 Prior to final clearance sampling, all items will be removed from the dirty room.

17. Acceptance Criteria for Area Re-Occupancy

- 17.1 The Contractor will clean all work area surfaces in a proper manner with appropriate equipment in accordance with these technical specifications.
- 17.2 No tape residue shall remain on any surface. The Contractor shall ensure all surfaces are washed and cleaned before demobilizing off site.
- 17.3 After completion of the cleaning operations, the following activities shall be performed:
 - 17.3.1 A complete visual inspection to insure dust free conditions. The Owner's Consultant(s) and/or Third Party Air Monitoring Personnel and the Contractor shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany the Contractor during the inspection and determine if additional cleaning is necessary.
 - 17.3.2 A clear drying encapsulant will be used to seal all surfaces of the work area. Non-clear drying encapsulants can only be used upon approval by the Owner and/or Owner's Consultant.
 - 17.3.3 Air samples will be collected following completion of all cleaning operations, encapsulation and after the work area is completely dry as specified in these technical specifications.
- 17.4 Post-Abatement air samples collected shall be analyzed using Phase Contrast Microscopy (PCM).
 - 17.4.1 Phase Contrast Microscopy (PCM) Clearance:

When the work site has become completely dry, the Owner's Consultant and/or Third Party Air Monitoring Personnel shall collect post-abatement air samples according to federal and state regulations (including but not limited to State of Michigan Public Act 135 of 1986) and analyzed utilizing the NIOSH 7400 Method. These samples shall be taken inside the abatement work area. A minimum of 1,200 liters per air sample shall be collected using aggressive sampling techniques. If the post-abatement test reveals fiber levels in excess of 0.05 fibers per cubic centimeter (f/cc) then cleaning and measurement operations specified in these specifications will be repeated until the area is in compliance.
- 17.5 After the work area is found to be in compliance, all entrances and exits are unsealed, and the polyethylene sheeting, tape and any other trash and debris shall be double-bagged and sealed in polyethylene bags (6-mil minimum) or barrels lined with one polyethylene bag (6-mil minimum), and properly labeled and disposed of in accordance with all federal, state and local regulations.

18. Disposal of Asbestos-Containing Material and Related Debris

- 18.1 All asbestos-containing materials and miscellaneous debris in properly labeled polyethylene bags (double-bagged) or other containers will be transported to the pre-designated disposal site in accordance with the guidelines of the U.S. Environmental Protection Agency and the Department of Environmental Quality. Asbestos disposal forms will be completed to document proper disposal of asbestos waste. The final waste manifest signed by the landfill must be submitted to the Owner's Representative before final payment will be made.

- 18.2 All asbestos-containing containers, waste bags or wrapped materials shall be labeled with the name and address at which the waste was generated, prior to materials being transported off the facility site.
- 18.3 Workers unloading the polyethylene bags and machinery operators will wear respirators when handling material at the disposal site.
- 18.4 All pertinent DOT rules and regulations will be followed when transporting asbestos.
- 18.5 All containers or wrapped materials shall be posted with Class 9 hazardous waste signs.
- 18.6 All asbestos-containing materials shall be transported in covered vehicles.
- 18.7 All dumpsters, trucks or other containers used to transport asbestos-containing materials shall be properly labeled during the loading and unloading of waste.

19. Submittals Prior To Contractor Release & Final Payment

- 19.1 Damages: The Contractor shall promptly repair any and all damages caused to facilities at no cost to the Owner.
- 19.2 The following must be submitted prior to final payment:
 - 19.2.1 Copies of Disposal receipts including final waste manifest signed by the landfill of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation.
 - 19.2.2 All documentation requested in Submittals to Owner's Representative found in Section II of this Technical Specification.

III. WORK/CONDUCT REQUIREMENTS

20. Supervision, Personnel and Misconduct

- 20.1 A "competent person" as defined in 29 CFR 1926.1101 must be on-site at all times throughout the duration of the project(s). This competent person, as designated prior to the start of said project(s) must remain the same throughout the duration of the project(s).
- 20.2 The Owner's Consultant IS NOT THE CONTRACTOR'S OUT-MAN. The Contractor must provide one out-man for each enclosure (unless the decontamination chambers are within "talking" distance of each other). The Contractor out-man must always remain within talking distance of the enclosure they are assigned to.
- 20.3 A Foreman with competent-person training must remain within the enclosure at all times during the project.
- 20.4 Contractor's employees are subject to immediate dismissal from the job Site if any of the following occurs including, but not limited to:
 - 20.4.1 Failure to follow proper abatement procedures, including but not limited to respiratory protection and the throwing of asbestos disposal bags outside of the enclosure.
 - 20.4.2 Physical threats and violence to the Owner's Consultant or any other person.
 - 20.4.3 Property damage or theft.
 - 20.4.4 Reckless driving on Owner's Property
 - 20.4.5 Discourteous and ill-mannered statements made to the Owner, Owner's employees or Owner's Consultant.
 - 20.4.6 Consumption of alcohol on Owner's premises.
 - 20.4.7 Any conduct or act deemed inappropriate or unprofessional at the sole discretion of the Owner or Owner's Consultant.

21. Site Security/Site Cleanliness

- 21.1 The work area is restricted to only authorized, trained and protected personnel. These personnel may include the Contractor's employees, employees of subcontractors, Owner's employees and Representatives, state and local inspectors, and any other designated individuals. The list of employees who will participate in the project as defined in these specifications will be the only employees allowed to enter the work area. Additional employees assigned to this project must be cleared through the Owner or the Owner's Consultant. Documentation of all training, medical, and other pertinent requirements are needed before the employee's participation.
- 21.2 An employee shall not remain on the Owner's premises if he/she is prohibited from participating in the project as a result of insufficient paperwork or if the Owner's Consultant determines the employee, in any manner, is detrimental to the safe completion of the project.
- 21.3 The Contractor shall record the names and social security numbers of all people on a sign-in sheet who enter the work-site, and maintain this record for thirty years.
- 21.4 Entry into the work area by unauthorized individuals shall be strictly prohibited.
- 21.5 Access to the work area shall be through a single worker decontamination system. All other means of access (doors, windows, hall ways, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exceptions for this rule are the waste pass-out airlock which shall be sealed except during the removal of containerized asbestos waste from the work area, and emergency exits in case of fire or accident. Emergency exits shall not be locked from the inside; instead, they shall be sealed with polyethylene sheeting tape until needed.
- 21.6 The Contractor shall designate one worker to remain outside each enclosure throughout the duration of the project in order to regulate ingress and egress to the work areas as well as to provide needed supplies and equipment. The worker outside the enclosure will be within hearing range at all times. At least one person, at all times, inside the enclosure must have had "competent person" training.
- 21.7 All areas occupied or used in any way by the Contractor (all employees), outside the enclosure(s) but within the building shall be kept in an acceptable condition and thoroughly cleaned at the end of each day, to the satisfaction of the Owner's Consultant. If at any time, food containers or debris is found not properly disposed of, eating on premises shall be terminated.
- 21.8 The Contractor is responsible for maintaining areas outside the building in a condition acceptable to the Owner or the Owner's Consultant. This includes but is not limited to: sanitation, supplies and equipment, and employee driving and substance abuse.

22. Stop Work Orders

- 22.1 If at any time, the Owner or the Owner's Consultant decide that work practices are in violation of the contract specifications or endangering workers, he/she or they will immediately notify the Contractor's on-site Representative of such and operations are to cease until corrective action is taken.
- 22.2 The Contractor shall cooperate fully with the Owner and Owner's Consultant.

IV. AIR MONITORING

23. Sampling Requirements

- 23.1 The Owner's Consultant and/or Third Party Air Monitoring Personnel shall conduct all air sampling for the Owner throughout all phases of the contract.
- 23.2 All air samples shall be analyzed using the NIOSH 7400 Method.

24. Sampling Types

- 24.1 Throughout the abatement and cleaning operations, air sampling will be conducted to ensure that the Contractor is complying with all codes, regulations and ordinances. The following are representative sampling which shall take place at the discretion of the Owner and the Owner's Consultant by the Third Party Air Monitoring Personnel.
 - 24.1.1 Baseline-Collected in various locations prior to abatement to determine ambient interior fiber levels.
 - 24.1.2 Outside Work Area-Collected in various locations outside of the work area in order to detect elevated fiber levels during abatement activities.
 - 24.1.3 Inside Work Area-Collected in various locations inside the work area to insure compliance with proper procedures and specifications.
 - 24.1.4 Personal-Collected in the breathing zone of the asbestos abatement personnel according to 1926.1101, Appendix A, as amended, of the OSHA regulations. These samples will be placed on employees who are exposed to representative concentrations of airborne asbestos fibers. Personal sampling will ensure that the workmen performing the asbestos abatement activities are not exposed to asbestos contamination exceeding STEL (short term excursion limit) requirements and levels which exceed their respirator protection or otherwise endanger their health. Personal air samples will be collected on individuals as designated by the Owner's Consultant.
 - 24.1.5 Post Abatement/Clearance-Collected inside and/or outside the work area after the project is completed and the area has been cleaned and dried. This will determine if the job has been done correctly and whether the cleanup process must be repeated. Quantities are determined by all applicable regulations.
 - 24.1.6 Field Banks-Fields blanks are collected to ensure that contamination of cassettes has not occurred. Each set of samples collected will include ten percent (10%) blanks or a minimum of two blanks.
- 24.2 **Post Abatement PCM Clearance Testing:**

Post Abatement PCM Clearance Samples will be collected, analyzed and results verbally expressed to the Owner and to the Contractor within twenty-four (24) hours, with the time period beginning at the completion of lock down activities.

 - 24.2.1 PCM Clearance level criteria shall be 0.05 f/cc (fibers per cubic centimeter).
 - 24.2.2 It will be in the judgment of the Owner's Representative and/or Third Party Air Monitoring Personnel as to when Post Abatement PCM Clearance Samples will be collected.
 - 24.2.3 All Post Abatement PCM Clearance Samples will be analyzed on-site.
 - 24.2.4 PCM Clearance Samples may not be collected on the same day as visual inspection and lockdown.
- 24.3 **Failure of Air Clearance Samples:** Should results from analysis of final clearance air samples not meet the specified criteria the Contractor shall be responsible for the payment of all costs, including consultant's time for subsequent air sampling.

Abatement Contractor's Acknowledgement Form
Appendix A

**ABATEMENT CONTRACTOR'S ACKNOWLEDGEMENT FORM
APPENDIX A**

CONTRACTOR'S AGREEMENT AND CERTIFICATION

The undersigned, having familiarized themselves with the local conditions to be encountered affecting the cost of the work and examined the technical Asbestos Abatement & Hazardous Materials Removal Specifications for DS ARCHITECTS INC's CADILLAC PLACE – UIA LOBBY REDESIGN provided by and project designed by Atlas Technical along with all other attached information, does hereby propose to complete everything required to be performed and to furnish all of the labor, materials, tools, equipment, and services necessary to conduct the **Asbestos Abatement Services** required in connection with the above referenced project.

All bidders must attend the Pre-Bid Examination and all bidders must tour the buildings, and familiarize themselves with the work contemplated in the contract. The submission of a bid for this/these projects(s) shall be deemed conclusive evidence that the bidder has thoroughly examined all documents constituting this specification, has familiarized himself with the work and requirements contemplated by this contract and shall constitute a waiver by each of all claims of error in bid, withdrawal of bid, or payment of extras, or combination thereof, under the executed Contract, or any revision thereof. All figures set forth in the above bid(s) referencing sizes, amounts, or materials are estimates only and are provided for the convenience of the bidder. ***The bidder is solely and completely responsible for his/her own measurements and his/her own determination regarding the scope of the project(s).***

These specifications have attempted to detail and address all aspects of the project(s) being performed for the Owner. Nonetheless, the successful completion of the project(s) in a safe manner and in compliance with all applicable regulations remains as the foremost concern of the Owner. To insure that this goal is met, it is expressly agreed by and between the parties to the contract, hereinafter to be signed between the Owner and the Contractor, that the Owner and/or it's Representative has complete control over the manner in which the project(s) shall proceed and may in their sole discretion waive provisions of these specifications or require and enforce more stringent or different provision should they, in their discretion, determine that such changes will or may more fully protect the Owner, the Contractor, their subcontractors, agents, servants or others under their control or direction or the general public from any risks and/or situations associated with said projects(s). This provision in no way constitutes a waiver by the Contractor of his/her responsibilities to conduct said project(s) in accordance with all applicable regulations and in accordance with these specifications. This provision is set forth and is intended to provide the Owner and/or it's Representative with the power to require additional steps to be taken to ensure that this project proceeds in a manner to fully, to the utmost extent possible, protect the Owner and/or it's Representative as well as the general public from risks and liability associated with such project(s).

Accepted by:

Abatement Contractor (Name of Company)

Abatement Contractor Authorized Signature

Authorized Name (Typed or Printed)

Title

Date

Asbestos Abatement Bid Pricing
Appendix B

ASBESTOS ABATEMENT BID PRICING (REVISED)
APPENDIX B

Unit Pricing

The following unit pricing shall apply to additions or deductions to the scope of work and quantities of materials uncovered during destructive investigations and/or demolition activities. Each unit pricing shall be all-inclusive for set-up, removal and disposal of each material. **Any additions or deductions to the scope of work will require verification and approval by the Client and/or Client's Representative prior to commencement of work activities.**

Floor Tile (9"x9" or 12"x12")	\$ _____/Square Foot
Floor Tile (9"x9" or 12"x12") & Mastic by Grinding	\$ _____/Square Foot
Mastic by Grinding (Includes all labor, materials and disposal)	\$ _____/Square Foot
Fire Door (single doorway,)	\$ _____/Door
Spray Applied Fire Proofing	\$ _____/Square Foot
Mobilization Fee (each)	\$ _____/mobilization

The bidder proposes the above stated unit costs to include all charge for all wages, overtime, materials, supplies, equipment, sampling costs, disposal costs, disposal documentation, close-out reports, general conditions, supervision, taxes, insurance, overhead, profit and incidental expenses.

PRINT COMPANY NAME _____

PRINT NAME _____

TITLE _____

SIGNATURE _____

Asbestos Abatement Scope of Work (Revised)
Appendix C

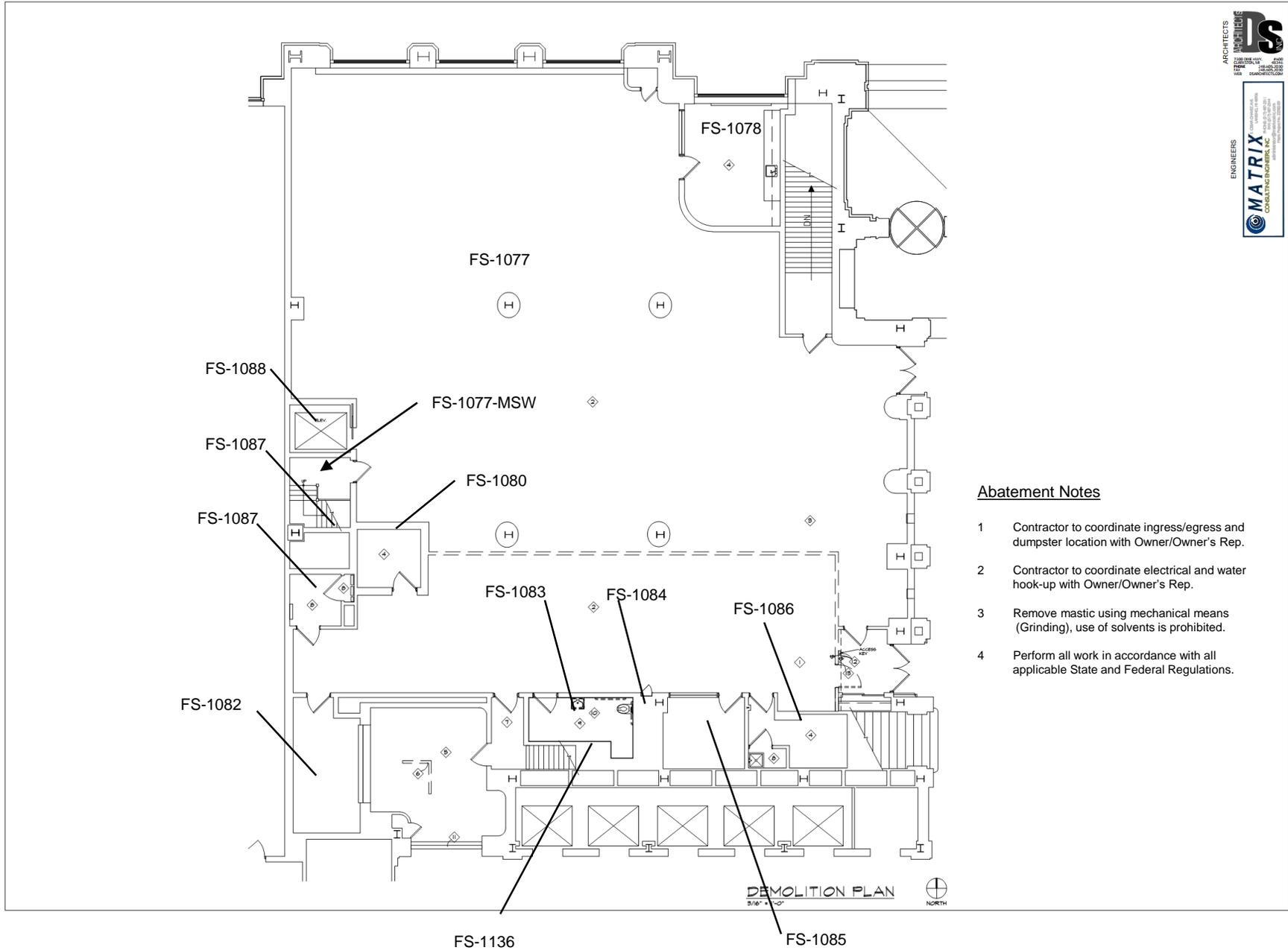
ASBESTOS ABATEMENT SCOPE OF WORK (REVISED)
APPENDIX C

Sample ID/HA	Location of Materials	Material	Estimated Quantity	Asbestos Content
No asbestos abatement is included in base Scope of Work. If asbestos abatement is required Unit Rates provided by Bidder in Appendix B are proposed.				

Abatement Notes:

- See attached Building Layout in Appendix D
- Contractor shall adhere to all federal, state and local regulations as well as requirements of this technical specification throughout the abatement activities and disposal process.
- Working Hours – Business hours
- Contractor will coordinate ingress/egress, working hours and dumpster location with Owner, Architect and Owners Representative.

Functional Space Designation Drawing (REVISED)
Appendix D



Abatement Notes

- 1 Contractor to coordinate ingress/egress and dumpster location with Owner/Owner's Rep.
- 2 Contractor to coordinate electrical and water hook-up with Owner/Owner's Rep.
- 3 Remove mastic using mechanical means (Grinding), use of solvents is prohibited.
- 4 Perform all work in accordance with all applicable State and Federal Regulations.



STATE OF MICHIGAN
 DEPARTMENT OF TREASURY
 STATE FACILITIES ADMINISTRATION
 DESIGN AND CONSTRUCTION DIVISION
 ADAM P. LACH, BA, NCARB, DIRECTOR

5/6/2024	PHASE 500 100%	DATE
4/30/2024	PHASE 500 100%	DATE
3/1/2024	PHASE 500 100%	DATE
11/20/23	PHASE 500 100%	DATE
	PHASE 500 100%	DATE

PROJECT DESCRIPTION:
**CADILLAC PLACE - UIA LOBBY
 REDESIGN**

DEMOLITION PLAN

PROJECT NO. 1862271.MKS	DATE
INDEX	DATE
PKA	DATE
DRAWN BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE

A-101.0



Functional Space Designations (REVISED)
 Cadillac Place –UIA Lobby Redesign
 3024 W Grand Blvd, Detroit, MI 48202

MKG	11/15/24
46555 Humboldt Drive, Suite 100 Novi, Michigan 48377 Ph: (248) 669-5140 - Fax: (248) 669-5147	

Supplemental Asbestos Survey Report (Revised)
Appendix E



46555 Humboldt Dr. Ste. 100
Novi, MI 48377
(248) 669-5140 | oneatlas.com

February 13, 2025

Derek Slupka, AIA LEED AP
President
DS Architects INC
7300 Dixie Hwy. Suite 600
Clarkston, MI 48346

SUBJECT: Limited Asbestos Sampling Report (REVISED)
UIA Office Renovation
Cadillac Place
Detroit, Michigan

Dear Mr. Slupka,

Atlas Technical Consultants (Atlas) is pleased to provide this bulk sampling report to supplement the Materials Testing Consultants (MTC) asbestos survey report date March 26, 2013. Atlas surveyed the UIA Office area located on the 1st floor of Cadillac Place. The purpose of this survey was to identify and collect samples of suspect asbestos containing building materials (ACBM's) not previously sampled by MTC, and/or to collect additional samples of specific materials that were previously sampled by MTC to verify the results in the UIA Office area.

Background

DS Architects Inc. provided Atlas with demolition drawings for the planned renovation, and a partial copy of the MTC Asbestos Survey report dated March 26, 2013. Atlas reviewed the demolition drawing, existing asbestos survey (prepared by MTC) and conducted a site visit of the renovation area at the Cadillac Place to assess if additional suspect materials not previously identified or sampled were present.

The limited asbestos sampling was conducted August 28th through August 30th, 2024, by Atlas Asbestos Inspector, Mr. Robert Hinojosa, a State of Michigan certified asbestos inspector and on February 12, 2025 by Atlas Asbestos Inspector, Mr. Ryan Rae, a State of Michigan certified asbestos inspector. The sampling was conducted in accordance with sampling criteria specified in the Occupational Safety and Health Administration's (OSHA) Asbestos Construction Industry Standard (29 CFR 1926.1101), and the Asbestos Hazard and Emergency Response Act of 1987 (AHERA).

SUMMARY OF ACM SURVEY ACTIVITIES AND SURVEY FINDINGS

Atlas arrived at the UIA office within Cadillac Place to sample suspect asbestos not previously sampled by MTC or to verify previous results. A total of 53 bulk samples were collected and submitted for analysis by Polarized Light Microscopy (PLM). Of the 53 samples submitted, 80 sample layers were analyzed for asbestos content. The description, location and type of material sampled can be found in Table 1 along with the results of analysis. A Sample Location Map is provided in Attachment A, a Photo Log of suspect materials is provided in Attachment B, and analytical data sheets and chain-of-custody information for the collected samples are provided in Attachment C.

LIMITATIONS

This report is prepared for the express use and benefit of the DS Architects Inc, its agents and employees. The information in this report or portions thereof may be required to be included in notifications to employees, contractors or other visitors to the buildings. This report is not intended to be used by the owner or its agents as a specification or work plan for any of the work suggested or recommended in the report. This report is based upon conditions observed at the property and information made available to the surveyor on the above-mentioned date. This report does not intend to identify all hazards, nor to indicate that other hazards do not exist at the premises. Atlas made their best effort to determine the location of inaccessible ACBM's. Atlas shall not be responsible for identifying all ACBM's located behind walls and/or columns, beneath flooring, above solid ceilings, underground or any other inaccessible areas. If material is found during the course of renovations that is not listed in this asbestos report the material should be assumed as asbestos containing until it can be sampled by a licensed building inspector and analyzed at a laboratory.

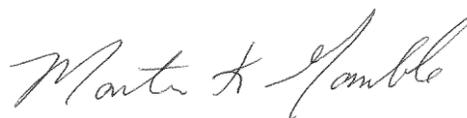
Atlas is pleased to be of service to the SOM and we look forward to continuing working with you in the future. If you have any questions or comments regarding the information in this report, please contact us at 249-669-5140.

Sincerely,

Atlas Technical Consultants



Robert Hinjosa
Project Manager



Martin Gamble
Senior Project Manager

Attachments:

Table 1
UIA Office
Cadillac Place
Detroit, Michigan

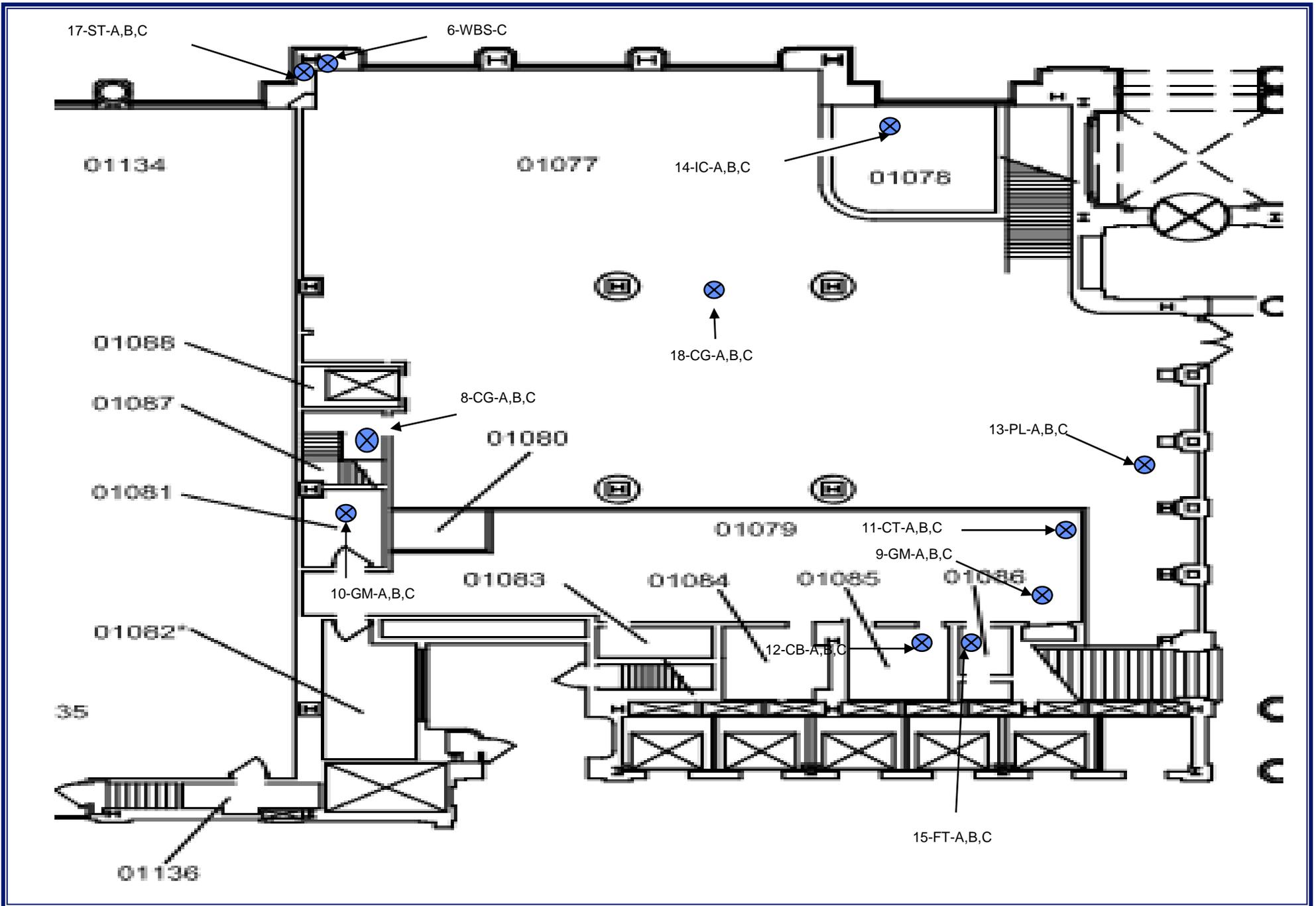
Sample ID	Material Description	Functional Space	% Asbestos Content	Quantity
1-PL-A,B,C,D,E,F,G	Plaster	1086	ND	NA
2-GP-A,B,C	Glue Pods	1084	ND	NA
3-FT-A,B,C	Floor Tile (9x9 light brown with grout pattern-Kitchen area)	1086	ND	NA
4-GM-A,B,C	Grout Mortar (walls and floors of men's and women's bathroom)	1086	ND	NA
5-DS-A,B,C	Duct Sealant (Gray)	1079	ND	NA
6-WBS-A,B,C	Wall Board System	1077,1078,1079,1080,1081,1084,1085,1086	ND	NA
7-IC-A,B,C	Interior Caulk (red fire stop)	1086	ND	NA
8-CG-A,B,C	Residual black mastic beneath carpet glue (under blue carpet squares)	1077-MSW (Stairwell leading up to Mezzanine)	4% Chrysotile	8 SF
9-GM-A,B,C	Grout Mortar (mosiac tile under carpet squares)	1079 1086 1085 1084 1083	ND	NA
10-GM-A,B,C	Grout Mortar (inside of switch room)	1081	ND	NA
11-CT-A,B,C	Ceiling Tile (non-directional pinholes, 2x4 square design)	1077,1078,1079,1080,1084,1085	ND	NA
12-CB-A,B,C	Cove Base (gray)	1077,1078,1079,1080,1083,1085,1086	ND	NA
13-PL-A	Plaster (decorative)	1077, 1078	ND	NA
14-IC-A,B,C	Interior Caulk (gray; around window frames)	1078 1077	ND	NA
15-FT-A,B,C	Floor Tile (12x12; blue with light and dark blue splotches)	1078, 1080, 1083, 1086	ND	NA
16-FP-A,B,C	Spray on Fire Proofing	M1073	3% Chrysotile	8000 SF
17-ST-A,B,C	Vinyl Stair tread (tan with brown)	1083, 1087	ND	NA
18-CG-A,B,C	Carpet glue brown to clear (under blue carpet squares)	1077	ND	NA

Table 1 Key:
 PL=Plaster
 CP=Ceiling Panel
 FT= Floor Tile

ND=No Asbestos Detected
 NA=Not Applicable
 CT=Ceiling Tile

SF=Square Feet
 LF=Linear Feet
 DI=Duct Insulation

Attachment A
Sample Location Maps



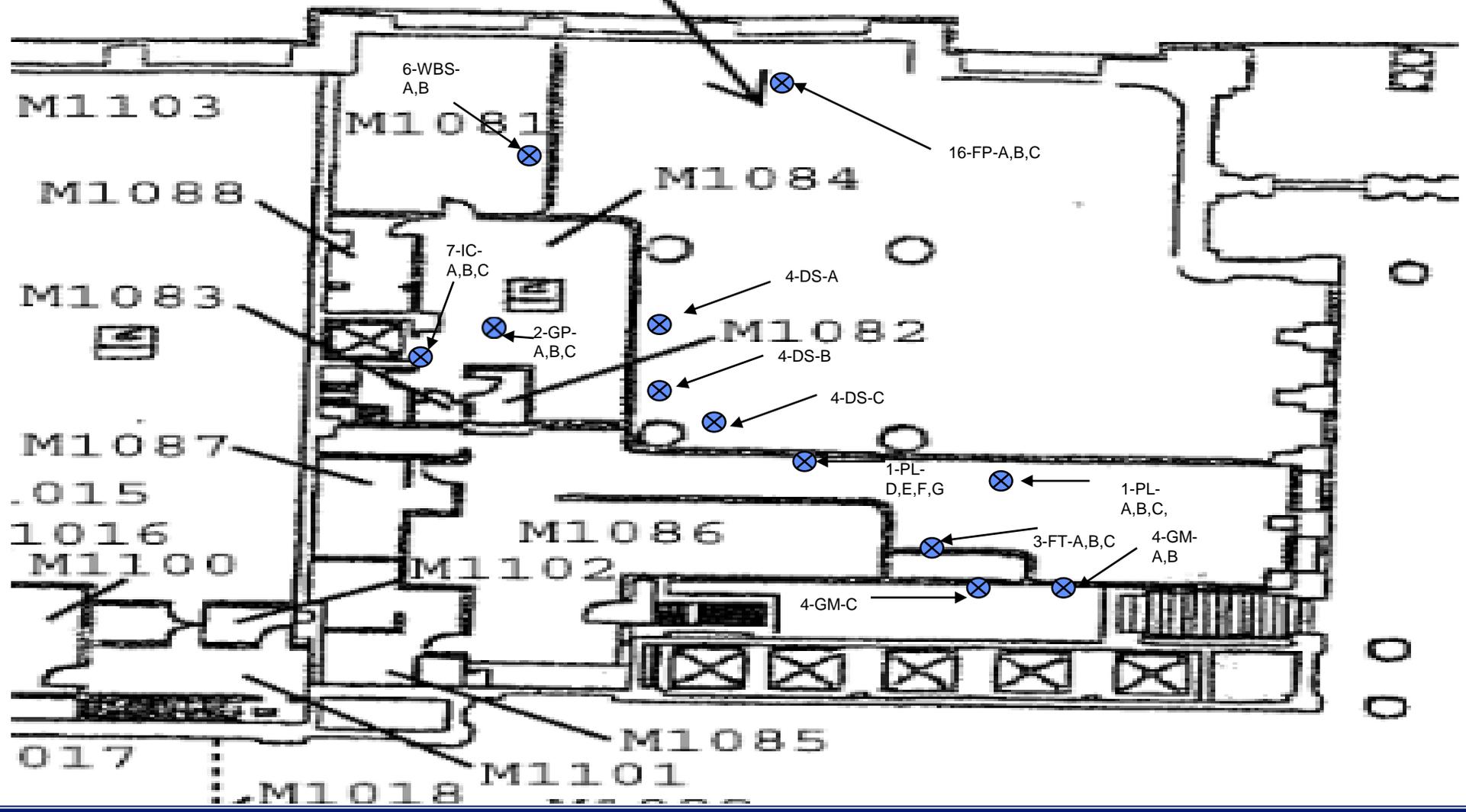
Cadillac Place UIA Suite 1st floor

Sample Locations (REVISED)

PROJECT NUMBER:	FIGURE: 1
Date:	
46555 Humboldt Drive, Suite 100 Novi, Michigan 48377 Ph: (248) 669-5140 ~ Fax: (248) 669-5147	

M1073 (Crawlspace Above)
Above)

M:



Cadillac Place UIA Suite Mezzanine level

Sample Locations

PROJECT NUMBER:	FIGURE: 1
Date: 8/31/24	
46555 Humboldt Drive, Suite 100 Novi, Michigan 48377 Ph: (248) 669-5140 ~ Fax: (248) 669-5147	

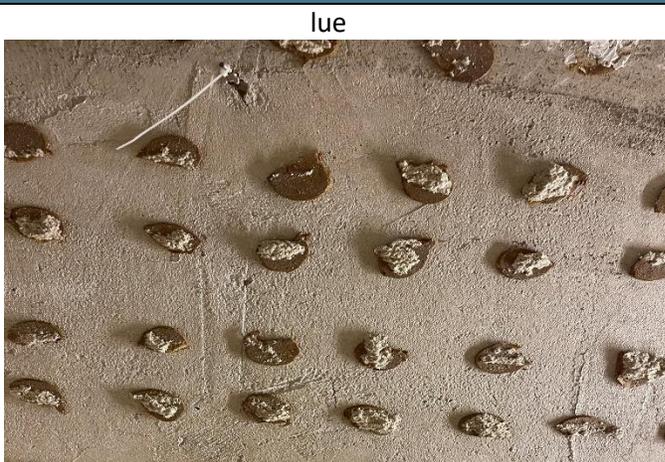
Attachment B
Photo Log

Photograph #1



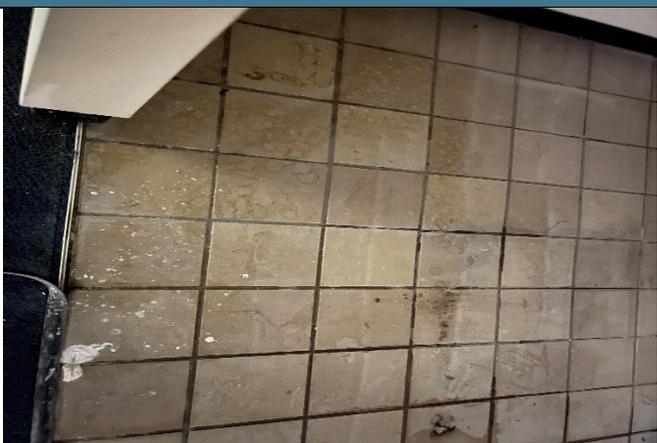
Homogenous Material Description
HA-1: Plaster
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
6500 SF
Additional Notes

Photograph #2



Homogenous Material Description
HA-2: Glue Pods
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
325 SF
Additional Notes

Photograph #3



Homogenous Material Description
HA-3: Floor Tile
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
100 SF
Additional Notes

Photograph #4



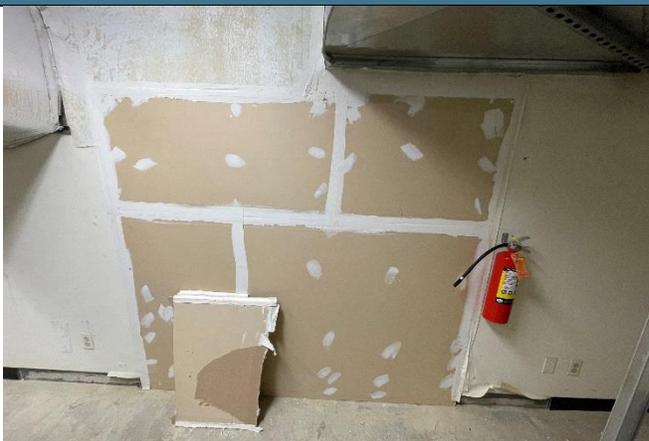
Homogenous Material Description
HA-4: Grout Mortar
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
350 SF
Additional Notes

Photograph #5



Homogenous Material Description
HA-5: Duct Caulk
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
2000 LF
Additional Notes

Photograph #6



Homogenous Material Description
HA-6: Dry Wall
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
8000 SF
Additional Notes

Photograph #7

No Photo was taken	Homogenous Material Description
	HA-7: Interior Caulk (red fire stop)
	Asbestos Present (Yes/No/Assumed)
	Total Quantity Present
	20 LF
	Additional Notes

Photograph #8

No Photo was taken	Homogenous Material Description
	HA-8: Carpet Glue under blue carpet squares
	Asbestos Present (Yes/No/Assumed)
	Total Quantity Present
	5500 SF
	Additional Notes

Photograph #9

	Homogenous Material Description
	HA-9: Grout Mortar
	Asbestos Present (Yes/No/Assumed)
	Total Quantity Present
	2175 SF
	Additional Notes

Photograph #10



Homogenous Material Description

HA-10: Grout Mortar

Asbestos Present (Yes/No/Assumed)

Total Quantity Present

75 SF

Additional Notes

Photograph #11



Homogenous Material Description

HA-11: Ceiling Tiles

Asbestos Present (Yes/No/Assumed)

Total Quantity Present

7500 SF

Additional Notes

Photograph #12



Homogenous Material Description

HA-12: Cove Base

Asbestos Present (Yes/No/Assumed)

Total Quantity Present

2500 SF

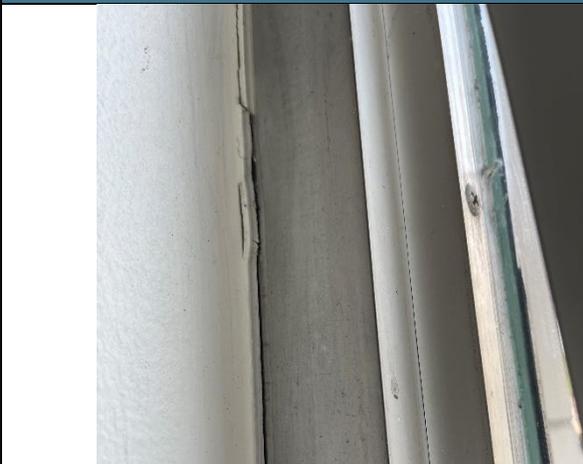
Additional Notes

Photograph #13



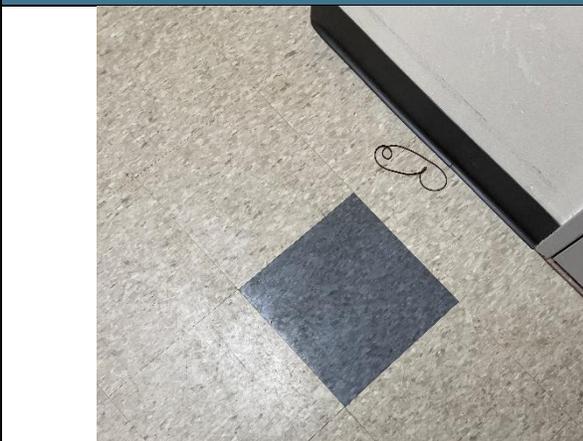
Homogenous Material Description
HA-13: Plaster (decorative)
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
5000 SF
Additional Notes

Photograph #14



Homogenous Material Description
HA-14: Interior Caulk
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
200 LF
Additional Notes

Photograph #15



Homogenous Material Description
HA-15: Floor Tile
Asbestos Present (Yes/No/Assumed)
Total Quantity Present
100 SF
Additional Notes

Photograph #16



Homogenous Material Description

HA-16: Spray On fire proofing

Asbestos Present (Yes/No/Assumed)

Total Quantity Present

Additional Notes

Photograph #17



Homogenous Material Description

HA-17: Vinyl Stair Tread

Asbestos Present (Yes/No/Assumed)

Total Quantity Present

Additional Notes

Attachment C
Chain of Custody Forms and Analytical Data Sheets



REVISED REPORT

To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 272086
Client Project: N/A

Attention: Robert Smith
Project Location: Cadillac Place
UIA

Lab Sample Number	Client Sample Number	Sample Type	Completed
1699689	1-PL-A	Asbestos	09/04/2024
1699690	1-PL-B	Asbestos	09/04/2024
1699691	1-PL-C	Asbestos	09/04/2024
1699692	1-PL-D	Asbestos	09/04/2024
1699693	1-PL-E	Asbestos	09/04/2024
1699694	1-PL-F	Asbestos	09/04/2024
1699695	1-PL-G	Asbestos	09/04/2024
1699696	2-GP-A	Asbestos	09/04/2024
1699697	2-GP-B	Asbestos	09/04/2024
1699698	2-GP-C	Asbestos	09/04/2024
1699699	3-FT-A	Asbestos	09/04/2024
1699700	3-FT-B	Asbestos	09/04/2024
1699701	3-FT-C	Asbestos	09/04/2024
1699702	4-GM-A	Asbestos	09/04/2024
1699703	4-GM-B	Asbestos	09/04/2024
1699704	4-GM-C	Asbestos	09/04/2024

Lab Sample Number	Client Sample Number	Sample Type	Completed
1699705	5-DS-A	Asbestos	09/04/2024
1699706	5-DS-B	Asbestos	09/04/2024
1699707	5-DS-C	Asbestos	09/04/2024
1699708	6-WBS-A	Asbestos	09/04/2024
1699709	6-WBS-B	Asbestos	09/04/2024
1699710	6-WBS-C	Asbestos	09/04/2024
1699711	7-IC-A	Asbestos	09/04/2024
1699712	7-IC-B	Asbestos	09/04/2024
1699713	7-IC-C	Asbestos	09/04/2024
1699714	8-CG-A	Asbestos	09/04/2024
1699715	8-CG-B	Asbestos	09/04/2024
1699716	8-CG-C	Asbestos	09/04/2024
1699717	9-GM-A	Asbestos	09/04/2024
1699718	9-GM-B	Asbestos	09/04/2024
1699719	9-GM-C	Asbestos	09/04/2024
1699720	10-GM-A	Asbestos	09/04/2024
1699721	10-GM-B	Asbestos	09/04/2024
1699722	10-GM-C	Asbestos	09/04/2024
1699723	11-CT-A	Asbestos	09/04/2024
1699724	11-CT-B	Asbestos	09/04/2024
1699725	11-CT-C	Asbestos	09/04/2024
1699726	12-CB-A	Asbestos	09/04/2024
1699727	12-CB-B	Asbestos	09/04/2024
1699728	12-CB-C	Asbestos	09/04/2024
1699729	13-PL-A	Asbestos	09/04/2024
1699730	13-PL-B	Asbestos	09/04/2024

Lab Sample Number	Client Sample Number	Sample Type	Completed
1699731	13-PL-C	Asbestos	09/04/2024
1699732	14-IC-A	Asbestos	09/04/2024
1699733	14-IC-B	Asbestos	09/04/2024
1699734	14-IC-C	Asbestos	09/04/2024
1699735	15-FT-A	Asbestos	09/04/2024
1699736	15-FT-B	Asbestos	09/04/2024
1699737	15-FT-C	Asbestos	09/04/2024
1699738	16-FP-A	Asbestos	09/06/2024
1699739	16-FP-B	Asbestos	09/06/2024
1699740	16-FP-C	Asbestos	09/06/2024
1699741	17-ST-A	Asbestos	09/04/2024
1699742	17-ST-B	Asbestos	09/04/2024
1699743	17-ST-C	Asbestos	09/04/2024

Reviewed by: 
Emily Schroeder

Summary

Method	Sample	Layer	Mastic
PLM	69	8	
Point Count	1		

Revision History

Revised Date	Revised By	Revision Comment
09/06/2024	Bella Rossi	Revisions Made Per Client Request

This report is intended for use solely by the individual or entity to which it is addressed. This report may not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. It may contain information that is privileged, confidential and otherwise exempt by law from disclosure. If the reader of this information is not the intended recipient or an employee of its intended recipient, you are herewith notified that any dissemination, distribution or copying of this information is strictly prohibited. If you have received this information in error, please notify ETL immediately. Thank you.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699689 1-PL-A	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699690 1-PL-B	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699691 1-PL-C	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699692 1-PL-D	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699693 1-PL-E	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699693 1-PL-E	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Location : Cadillac Place
 UIA

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699694 1-PL-F	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699695 1-PL-G	Plaster	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699696 2-GP-A	Glue Pod	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699697 2-GP-B	Glue Pod	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699698 2-GP-C	Glue Pod	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Location : Cadillac Place
 UIA

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699699 3-FT-A	Floor Tile	Light Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699699 3-FT-A	Floor Tile	Dark Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699699 3-FT-A	Mastic	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699700 3-FT-B	Floor Tile	Light Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699700 3-FT-B	Floor Tile	Dark Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699700 3-FT-B	Mastic	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Location : Cadillac Place
 UIA

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699701 3-FT-C	Floor Tile	Light Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699701 3-FT-C	Floor Tile	Dark Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699701 3-FT-C	Mastic	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699702 4-GM-A	Grout	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699702 4-GM-A	Mortar	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699702 4-GM-A	Ceramic Tile	Beige Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699703 4-GM-B	Grout	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699703 4-GM-B	Mortar	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699703 4-GM-B	Ceramic Tile	Beige Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699704 4-GM-C	Grout	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699704 4-GM-C	Mortar	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699704 4-GM-C	Ceramic Tile	Beige Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-3 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699705 5-DS-A	Duct Sealant	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699706 5-DS-B	Duct Sealant	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699707 5-DS-C	Duct Sealant	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699708 6-WBS-A	Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699708 6-WBS-A	Tape	White Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699709 6-WBS-B	Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699709 6-WBS-B	Tape	White Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699710 6-WBS-C	Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699710 6-WBS-C	Tape	White Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699711 7-IC-A	Interior Caulk	Red Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699711 7-IC-A	Brittle Material	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

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 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699712 7-IC-B	Interior Caulk	Red Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699712 7-IC-B		Layer Missing			
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					
1699713 7-IC-C	Interior Caulk	Red Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699713 7-IC-C		Layer Missing			
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					
1699714 8-CG-A	Carpet Glue	Brown Non-Fibrous Homogenous		PLM 96% Other	PLM 4% Chrysotile
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699715 8-CG-B		Positive Stop			
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					

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 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699716 8-CG-C		Positive Stop			
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					
1699717 9-GM-A	Grout Mortar	White Fibrous Non-Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024 With Tacky Material					
1699718 9-GM-B	Grout Mortar	White Fibrous Non-Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024 With Tacky Material					
1699719 9-GM-C	Grout Mortar	White Fibrous Non-Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024 With Tacky Material					
1699720 10-GM-A	Grout Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699720 10-GM-A	Ceramic Tile	White Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699721 10-GM-B	Grout Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699721 10-GM-B	Ceramic Tile	White Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699722 10-GM-C	Grout Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699722 10-GM-C	Ceramic Tile	White Non-Fibrous Homogenous		PLM 90% Ceramic PLM 10% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699723 11-CT-A	Ceiling Tile	White Fibrous Homogenous	PLM 30% Cellulose PLM 30% Fiberglass	PLM 40% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699724 11-CT-B	Ceiling Tile	White Fibrous Homogenous	PLM 30% Cellulose PLM 30% Fiberglass	PLM 40% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Location : Cadillac Place
 UIA

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699725 11-CT-C	Ceiling Tile	White Fibrous Homogenous	PLM 30% Cellulose PLM 30% Fiberglass	PLM 40% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699726 12-CB-A	Cove Base	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699726 12-CB-A	Adhesive	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699727 12-CB-B	Cove Base	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699727 12-CB-B	Adhesive	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699728 12-CB-C	Cove Base	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699728 12-CB-C	Adhesive	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699729 13-PL-A	Plaster	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699730 13-PL-B	Plaster	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699731 13-PL-C	Plaster	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699732 14-IC-A	Interior Caulk	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699733 14-IC-B	Interior Caulk	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699734 14-IC-C	Interior Caulk	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699735 15-FT-A	Floor Tile	Blue Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699736 15-FT-B	Floor Tile	Blue Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699737 15-FT-C	Floor Tile	Blue Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699738 16-FP-A	Spray on Fire Proofing	Brown Fibrous Homogenous		PC 97% Other	PC 3% Chrysotile
Layer-1 Analyst: Chris Canilao Date Analyzed : 09/06/2024					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

Location : Cadillac Place
 UIA

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699739 16-FP-B	Spray on Fire Proofing	Brown Fibrous Homogenous		PLM 97% Other	PLM 3% Chrysotile
Layer-1 Analyst: Chris Canilao Date Analyzed : 09/06/2024					
1699740 16-FP-C	Spray on Fire Proofing	Brown Fibrous Homogenous		PLM 97% Other	PLM 3% Chrysotile
Layer-1 Analyst: Chris Canilao Date Analyzed : 09/06/2024					
1699741 17-ST-A	Vinyl Stair Tread	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699741 17-ST-A	Adhesive	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699742 17-ST-B	Vinyl Stair Tread	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699742 17-ST-B		Layer Missing			
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					

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Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 272086
Client Project : N/A
Date Collected : 08/28/2024
Date Received : 09/03/2024

Location : Cadillac Place
 UIA

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1699743 17-ST-C	Vinyl Stair Tread	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Tia Ray Date Analyzed : 09/04/2024					
1699743 17-ST-C		Layer Missing			
Layer-2 Analyst: Tia Ray Date Analyzed : 09/04/2024 Layer Not Analyzed					


 Lab Supervisor/Other Signatory

Analyst:



Chris Canilao



Tia Ray

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

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ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 272086

Client: Atlas Technical Consultants	Contact: Rob Smith Phone: 248-669-5140	Project Location/name: Cadillac Place UIA
Address: 46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147 E-mail:	Client Project #:
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Date Sampled: 8/28/24-8/30/24

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions
(Check all that apply)

<input checked="" type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive - Clearly mark Homogenous Group
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

* Additional charge and turnaround may be required

Lab ID	Sample ID	Material Description	Sample Location	Quantity
689	1-PL-A	Plaster	1086	
690	1-PL-B	Plaster	1086	
691	1-PL-C	Plaster	1086	
692	1-PL-D	Plaster	1086	
693	1-PL-E	Plaster	1086	
694	1-PL-F	Plaster	1086	
695	1-PL-G	Plaster	1086	
696	2-GP-A	Glue Pod (brown)	1084	
697	2-GP-B	Glue Pod (brown)	1084	
698	2-GP-C	Glue Pod (brown)	1084	
699	3-FT-A	Floor Tile (9x9 light brown with grout pattern-Kitchen area)	1086	
700	3-FT-B	Floor Tile (9x9 light brown with grout pattern-Kitchen area)	1086	

	Date	Time
Relinquished (Name/Organization):	9-3-24	12:53 am/pm
Received (Name/ETL):	9/3/24	12:53 am/pm
Sample Login (Name/ETL):	9/3/24	5:15 am/pm
Stereoscopic/Sample Analysis (Name/ETL):	9/4/24	1:25 am/pm
Results (Name/ETL):	9/4/24	1:25 am/pm
QA/QC Review (Name/ETL):	9/5/24	11:24 am/pm

<p>Special Instructions: • 1st Positive Stop; • Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; • Point Count ALL PLASTER samples Trace to 3% asbestos content • Point Count ALL SAMPLES Trace to 1% asbestos content</p>	Remarks
---	----------------

****IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF**

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
www.2etil.com

**Bulk Asbestos
 Chain of Custody**

ETL Project #: 272086

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Lab ID	Sample ID	Material Description	Sample Location	Quantity
701	3-FT-C	Floor Tile (9x9 light brown with grout pattern-Kitchen area)	1086	
702	4-GM-A	Grout Mortar (walls and floors of mens and womens bathroom)	1086	
703	4-GM-B	Grout Mortar (walls and floors of mens and womens bathroom)	1086	
704	4-GM-C	Grout Mortar (walls and floors of mens and womens bathroom)	1086	
705	5-DS-A	Duct Sealant (Gray)	1079	
706	5-DS-B	Duct Sealant (Gray)	1079	
707	5-DS-C	Duct Sealant (gray)	1079	
708	6-WBS-A	Dry Wall	1077,1078,1079,1080, 1081,1084,1085,1086	
709	6-WBS-B	Dry Wall	1077,1078,1079,1080, 1081,1084,1085,1086	
710	6-WBS-C	Dry Wall	1077,1078,1079,1080, 1081,1084,1085,1086	
711	7-IC-A	Interior Caulk (red fire stop)	1086	
712	7-IC-B	Interior Caulk (red fire stop)	1086	
713	7-IC-C	Interior Caulk (red fire stop)	1086	
714	8-CG-A	Carpet glue (under blue carpet squares)	1077	
715	8-CG-B	Carpet glue (under blue carpet squares)	1077	
716	8-CG-C	Carpet glue (under blue carpet squares)	1077	
717	9-GM-A	Grout Mortar (mosiac tile under carpet squares)	1079 1086 1085 1084 1083	
718	9-GM-B	Grout Mortar (mosiac tile under carpet squares)	1079 1086 1085 1084 1083	
719	9-GM-C	Grout Mortar (mosiac tile under carpet squares)	1079 1086 1085 1084 1083	
720	10-GM-A	Grout Mortar (inside of switch room)	1081	
721	10-GM-B	Grout Mortar (inside of switch room)	1081	
722	10-GM-C	Grout Mortar (inside of switch room)	1081	
723	11-CT-A	Ceiling Tile (non-directional pinholes, 2x4 square design)	1077,1078,1079,1080, 1084,1085	
724	11-CT-B	Ceiling Tile (non-directional pinholes, 2x4 square design)	1077,1078,1079,1080, 1084,1085	
725	11-CT-C	Ceiling Tile (non-directional pinholes, 2x4 square design)	1077,1078,1079,1080, 1084,1085	
726	12-CB-A	Cove Base (gray)	1077,1078,1079,1080, 1083,1085,1086	
727	12-CB-B	Cove Base (gray)	1077,1078,1079,1080, 1083,1085,1086	



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

37575 W HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604

To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 276485
Client Project: 188BS24529

Attention: Martin Gamble
Project Location: UIA Office
Cadillac Place

Lab Sample Number	Client Sample Number	Sample Type	Completed
1756048	18-CG-A	Asbestos	02/13/2025
1756049	18-CG-B	Asbestos	02/13/2025
1756050	18-CG-C	Asbestos	02/13/2025

Reviewed by: 
Dawson Bradley

Summary

Method	Sample	Layer	Mastic
PLM	3		

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETL Job : 276485
Client Project : 188BS24529
Date Collected : 02/12/2025
Date Received : 02/13/2025

Location : UIA Office
 Cadillac Place

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1756048 18-CG-A	Carpet Adhesive	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 02/13/2025					
1756049 18-CG-B	Carpet Adhesive	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 02/13/2025					
1756050 18-CG-C	Carpet Adhesive	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 02/13/2025					

Emily Schroeder

Lab Supervisor/Other Signatory

Analyst:



James Farinas

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

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Client: ATLAS		Contact: M Gambler	ETL Project #: 276485
Address:		Phone: 248.896.7800	Project Location/Name: CADILLAC PLACE UIA OFFICE
Please Provide Results: <input type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Fax:	Client Project #: 188BS 24529
		E-mail: MARTIN.GAMBLER@ONKATLAS.COM	Date Sampled: 2/12/25

Turnaround Time (TAT): RUSH (2 hrs) Same Day 24 hrs 48 hrs 72 hrs Standard (5 days)
 (If not checked, standard turnaround will be assumed) TAT Based on Business Hours Monday-Friday

Sample Type (Check Only One)

Asbestos: Bulk (PLM) Bulk (TEM) Dust Air (PCM) Air (TEM) Mold: Tape Bulk Air-O-Cell Air (Other) Nuisance Dust

Asbestos Analysis Information (Check all that Apply)

Stop at 1st Positive: Yes / No
 (Clearly mark each homogeneous area) Point Counting: Yes / No **400** Points *1000 Points

*Gravimetric Reduction *Soil or Vermiculite Analysis Point Counting Criteria: **≤ 3%**

* Additional charge and turnaround may be required

1750

Lab ID	Sample ID	Sample Location	Material or Sample Description	Air Samples Only		
				Start	Stop	Volume
048	BCC-A	UIA OFFICE FS 1077	CARPET ADHESIVE - ^{Bm}			
049	BCC-B	UIA OFFICE FS 1077	CARPET ADHESIVE - ^{Bm}			
050	BCC-C	UIA OFFICE FS 1077	CARPET ADHESIVE - ^{Bm}			

Relinquished (Name/Organization): M. Gambler / Atlas	Date: 2/12/25	Time: _____
Received (Name/ETL):	Date: 2/12/25	Time: 8:57 AM / PM <input checked="" type="checkbox"/>
Stereoscopical/Sample Analysis (NA):	Remarks:	
Special Instructions:	Remarks:	

MTC Asbestos Survey Report (Volume 1&2)
Appendix F