



MEMORANDUM

TO: ALL BIDDERS

FROM: Brian Kinlaw, Brasfield & Gorrie, L.L.C.

DATE: 8/9/2023

RE: City of Raleigh – East Civic Tower - ADDENDUM #1

All,

Enclosed in this distribution, please find contents distributed under Addendum #1. The bid date and time remain as Thursday, August 31, 2023 at 1:00 pm. For a summary of the enclosed, please reference the listing below and all enclosures/attachments.

- 01 - Amended scope sheet for Bid Package #02A – Abatement and Demolition: Scope sheet has been amended to include as reference the Asbestos Abatement Design document prepared by SynTerra Corporation dated June 27, 2023.

SUBCONTRACTOR:

CONTACT NAME:

GENERAL SCOPE OF WORK: 02A – ABATEMENT AND DEMOLITION

COST CODE:

START DATE:

SCHEDULE A

THE “WORK”

Please note: Work will not begin “on site” until all required Contract Documents are received and are correct and current. Required Contract Documents include the following:

- 1. Insurance Certificates**
- 2. Payment & Performance Bond**
- 3. Company Safety Manual**
- 4. Jobsite Specific Safety Plan**
- 5. Fall Protection Plan**
- 6. Hazardous Communication Program:**
 - A. Chemical List**
 - B. Material Safety Data Sheets**
 - C. Written Hazardous Communication Program**

Subcontractor shall perform all work necessary or incidental for completion of all ABATEMENT AND DEMOLITION Work in accordance with the Contract Documents. It is further understood and agreed that this subcontract specifically includes, but is not limited to the following items which are listed herein for further definition:

The purpose of this Schedule A is to further define and clarify “The Work” and other miscellaneous Articles of The Subcontract Agreement.

Provide labor, materials, tools, staging, hoisting, taxes, hauling, equipment and supervision required for the proper and complete performance of all ABATEMENT AND DEMOLITION Work referenced in the specification sections including - but not limited to - the following:

Division 01 - General Requirements
Section 024116 – Structure Demolition
Section 024119 – Selective Site Demolition

The separation of those documents into various sections is for convenience only and shall in no way limit the scope of this Agreement. Without limiting the generality, hereof, the work includes but is not necessarily limited to the following:

INTENT:

1. The Contract Documents indicate the general scope of the work in terms of design concept, the dimensions of the building, the type of architectural, structural, mechanical, electrical utility and other systems and the outline of the major elements of construction. The Contract Documents may not be 100% complete and may

not necessarily indicate or describe in complete detail all work required for the full performance and completion of Subcontractor's Work. Subcontractor understands and agrees that this Subcontractor is to furnish all items required for proper completion of this Subcontractor's Work without adjustment to the Subcontract price. It is intended that the Work be of sound quality and construction and that Subcontractor, for the Subcontract Price, shall be solely responsible for the inclusion of all items indicated, described or implied by the Contract Documents, and that Subcontractor's Work shall comply with applicable code requirements and the reasonable intent of the Architect/Engineer, and shall be 100% operable and functional in accordance with the intended purpose for this Work.

2. The following special considerations are intended to clarify and/or amplify specific requirements of this Subcontract and do not necessarily describe the full extent of the Subcontract work. This Subcontract includes all work indicated or reasonably inferred by the Contract Documents and as required to provide a complete and usable system or subsystem. Specific reference to drawings, details, specifications, etc. is included to illustrate the type of work only and does not address all of the work involved.

PLANS AND SPECIFICATIONS INCLUDED BY REFERENCE:

3. It is understood that the work of this Subcontract is based upon the drawings, specifications, addenda, bulletins and other miscellaneous documents identified in the attached "*Exhibit C – Contract Document List*"
4. This Subcontractor recognizes and acknowledges that while the documents are not complete in every detail, there is sufficient information to determine the requirements for a complete project and, as such, have included all work depicted and reasonably inferable to produce a complete project for their scope of work, consistent with the character and quality of the project.
5. This Subcontract includes by reference all Bid Manual Documents provided at time of bid including – but not limited to – Bid Packages, Minority and Women-Owned Business Enterprise Documentation, Exhibit A – Traffic Plan and Site Logistics Plan, Exhibit B – Project Schedule, Exhibit C – Contract Document List, Exhibit D – Project Statement, Exhibit E – Contract Record & Accounting Documents, Exhibit F – Joint Check Agreement, Exhibit H – Bond Forms, Exhibit I – Insurance Documents, Exhibit J – Safety Documents, Exhibit K – BIM Implementation Plan, Exhibit L – CMAR Contract General Conditions

SUBCONTRACT BID/AWARD:

6. Change Orders will not be processed for existing conditions clearly visible at time of bid. A site visit is required prior to submission of a bid. By submitting a proposal, the Subcontractor acknowledges that it has made a comprehensive site visit and reviewed all applicable Contract Documents.
7. Award of a Subcontract for this scope of work is subject to Owner's approval.
8. Voluntary alternative products/materials or unlisted "equals" are subject to the approval of the Architect, Engineer, and the Owner. If any of these parties rejects the proposed substituted product/material for any reason, the Subcontractor shall provide the specified materials at no additional cost.
9. All plans associated with the project are considered to be included in the subcontractor's scope of work. No consideration will be given to a subcontractor's claim that the subcontractor's work was not included on specific sheets of drawings or in specific sections of the specifications.

MINORITY AND WOMEN-OWNED BUSINESSES (MWBE):

10. The City and CMAR has a goal of 15% of the total contract amount to be performed by MWBE businesses on construction and repair projects of \$300,000 or more, and contracts of \$100,000 or more. All bids shall satisfy requirements of NCGS 143-128.2.

LEED REQUIREMENTS:

11. The project will be LEED Silver based on LEED Version 4 for Building Design and Construction. This will include, but not be limited to recycling project material (recycling dumpsters supplied by Brasfield & Gorrie), utilizing recycled materials as required, NO-SMOKING in the building during or after construction, using materials with a low VOC level, using materials that apply to achieving LEED certified credits where applicable, etc.... See Specification Section 01 81 13.14, Sustainable Design Requirements - LEED V4 BD+C: New Construction, for additional requirements.
12. This subcontractor shall also be responsible for the submission of all the required LEED submittals for their scope of work. These submittals shall be submitted at the same time the normal submittals are submitted.
13. This subcontractor understands that this project plans to exceed the waste material diversion requirements outlined in Specification Section 017419 – Construction Waste Management and Disposal by recycling all applicable material used for the construction of this project. The dumpsters required for recycling will be supplied by Brasfield & Gorrie, but it is the subcontractor's responsibility to ensure all waste generated from this project is disposed of in the correct collection dumpsters. Should this Subcontractor fail to properly dispose of waste, any costs resulting from these failures will be the responsibility of this Subcontractor.

COORDINATION AND SUBMITTALS:

14. Procore will be used for all RFI and submittal management on the project. Subcontractors are responsible for submitting and reviewing all returned RFI's and submittals through Procore.
15. As-built drawings shall be updated on a monthly basis and available to Brasfield & Gorrie, LLC, the Owner and the Architect or Engineers for their review. Failure to properly update the as-built drawings will result in a proportional withholding of the monthly requisition until such time as the as-built drawings have been updated.
16. Subcontractor shall attend coordination meetings. It is understood that the Architect will not be obligated to provide electronic copies of CAD drawings of the Contract Drawings for the Contractor's use in preparing submittals. All coordination drawings will be required to be on CAD.
17. Subcontractor is responsible for coordinating the layout and installation of its Work with all Contract Documents and the work of other trades in order to fit the several parts together without conflict. Subcontractor shall review and coordinate its Work, and provide coordination drawings with respect to reviewing existing conditions, and securing proper coordination/approval of finishes prior to executing its work.
18. Mandatory attendance at jobsite weekly meetings is required two (2) weeks prior to commencement of work (unless directed earlier by Brasfield & Gorrie, LLC.), while manning the jobsite and for specific coordination. Days and times to be established upon project commencement. Attendees shall be a representative of the Subcontractor, having authority to make work force, financial, and schedule commitments.
19. Subcontractor shall check and verify all site conditions, including locating existing service utilities on and off the site prior to trenching or digging.
20. All materials shown shall be installed as indicated in the Contract Documents. If the Contract Documents do not thoroughly describe the methods to be used, the Subcontractor shall follow the installation methods set forth by the manufacturer's published instructions and the authorities having jurisdiction.
21. This Subcontractor shall coordinate all layouts other scopes of work that is affected by this Subcontractor's work. Each trade shall provide coordination drawings for review with one another to confirm all portions of the work are properly coordinated.

MATERIAL STORAGE AND SITE LOGISTICS:

22. No onsite nor offsite parking will be provided by Contractor and Subcontractors must make its own accommodations or plans for transportation to the site.
23. No Maintenance of Traffic ("MOT") will be provided by Brasfield & Gorrie, LLC. Each Subcontractor shall provide maintenance of traffic plans, permits, signage, equipment, off-duty officers (if required by permit), etc. required for the performance of their work.
24. Construction equipment, personnel and material will not be allowed to occupy either public or private right-of-ways within or adjacent to the site without prior approval from local jurisdiction and Brasfield & Gorrie, LLC. Site Superintendent.
25. The Subcontractor shall cooperate with and provide access and equipment (lifts, ladders, etc.) for testing agencies and inspectors for all inspections, testing, etc., required to be performed by others in accordance with the specifications or by code. The Subcontractor will be responsible for all costs associated with retesting and inspections of items not properly installed by the Subcontractor. Some test and inspections are to be performed after normal working hours. The Subcontractor includes overtime as required for testing and inspections.
26. Storage of materials on the site is not allowed unless approved by Contractor's Superintendent. Subcontractor shall assume all responsibility for any additional structural reinforcing requirements due to Subcontractor's stockpiling of material and equipment. Any costs for the same shall be included in the Subcontract. The Subcontractor shall return all unused materials to the stockpiles at the end of each day and protect stored materials from theft, vandalism and weather conditions.
27. Unless specifically authorized by the Contractor, the Work must be conducted between the hours of 7:00 a.m. and 5:00p.m., Monday through Friday or as restricted by local jurisdiction.
28. The Subcontractor shall provide, maintain and remove all temporary trailers, offices, and toolboxes necessary for the completion of this Subcontract. Their location must be approved by Brasfield & Gorrie, LLC. and constructed in compliance with all applicable codes. It will be the Subcontractors responsibility to make the necessary arrangements for electrical, water, sanitary and telephone services. This Subcontractor will also be responsible for the utility consumption and service cost associated with these offices.
29. Provide fire watches (if necessary) in accordance with local jurisdiction requirements. The cost of the fire watch including supervisor(s) if required by local jurisdiction is by the Subcontractor.
30. This Subcontractor's Field Supervisor must have a 2-way communication device compatible with Brasfield & Gorrie, LLC.'s field personnel.
31. Breaks and lunches shall be at areas designated by the Brasfield & Gorrie, LLC. Superintendent. Trash bags and cleanup at these areas shall be the responsibility of the Subcontractor.
32. This Subcontractor, while working on site, shall fill out and submit the Daily Field Report to the Contractor's Project Superintendent on a daily basis by 9:00 a.m. the following workday. A description of work performed, workforce count, and significant deliveries shall be included at a minimum in each report.
33. Temporary toilets will be provided by Brasfield & Gorrie, LLC.
34. This Subcontractor is responsible for providing extension cords, sockets, lamps, motors and accessories required to perform the work.
35. All deliveries to the jobsite must be scheduled with the Brasfield & Gorrie, LLC Superintendent no less than **one (1) week** in advance of proposed delivery with respect to the date, time of delivery, duration for unloading, and storage location.

36. Subcontractor agrees that facilities for storage may not be available either at the job or within the building property or on the jobsite. It is the responsibility of the Subcontractor to make whatever arrangements that may be necessary for storage off site to ensure proper supply of materials to the job to meet progress requirements. All jobsite storage locations must have prior written approval of Brasfield & Gorrie, LLC. The Subcontractor is not guaranteed continued use of such storage location. Upon request by Brasfield & Gorrie, LLC, the Subcontractor will relocate, at his own expense, his material and equipment as required for building and site work requirements and progress.
37. Brasfield & Gorrie, LLC will provide for an adequate supply of an on-site non-potable water and power source, as may be further defined. Subcontractor to provide all tools, temporary generators (until such time that temporary power is available), drinking water, ice, labor, etc. necessary for completion of this scope of work.

LAYOUT AND SURVEYING:

38. This Subcontractor shall provide all required layout to properly complete this scope of work from four (4) control points and two (2) benchmarks at grade level supplied by others. Protect and maintain all surveying monuments, benchmarks, grade stakes, line stakes, corner stakes and all other surveying stakes and markings. Re-survey, relocate and restake any necessary survey points which are disturbed by this Subcontractor at no additional cost to Brasfield & Gorrie or the Owner.
39. This Subcontractor shall perform and prepare as-builts.

STAGING AND HOISTING REQUIREMENTS:

40. The Subcontractor is responsible for providing labor and equipment such as staging, scaffolding, planks, aerial work platforms, swing staging, scissor lifts, fork lifts, cranes, rigging, etc., as required for the complete performance of the Subcontract work.
41. Hoisting via a tower crane will be available as furnished under Bid Package 03A. Further, a buckhoist will be provided when permissible. Each Subcontractor shall incorporate or provide for its own hoisting including all required labor and materials to deliver, rig, unload and distribute its materials. All rigging shall be performed by certified a rigger.
42. This Subcontractor shall provide all slings, rigging, concrete buckets, tremies, skid pans, etc.

INVOICING/PAYMENTS/CHANGES:

43. The Owner may not allow for billing for shop drawings, mobilizations, or stored materials that are not job specific. Materials, which are job specific, may be billed when stored on site with proper insurance and transfer of title subject to the Owner's approval.
44. All Subcontractor's pay applications / invoices must be received by the 20th of the month, projected out through the 30th of the month, in order to be included in the progress payment invoice.
45. For any additional work authorized to be performed on a time and material basis, a formal, detailed daily ticket indicating all labor and material must be presented to Brasfield & Gorrie, LLC. Superintendent for signature within 1 business day of the work being performed. Should the documentation not be provided in accordance with this procedure, the ticket will not be considered for payment.
46. All change order requests shall include a detailed breakdown of man hours, hourly rates, fringe benefits, labor insurance, labor taxes, material quantities, material unit prices, equipment rates (hourly, daily, monthly), etc. All material and equipment costs shall be supported by quotations or paid invoices.

ENVIRONMENTAL:

47. This Subcontractor shall provide all dewatering of rainwater and runoff from all of this Subcontractor's work required to properly perform this scope of work in compliance with the City of Raleigh, NCDEQ, applicable codes and regulations of all local, county, state or federal authorities having jurisdiction, and/or as directed by Contractor.
48. This Subcontractor shall employ all dust control methods to control dust generated through the performance of this scope of work, as it is a strict condition of working in proximity to the public areas.
49. Cleaning of truck tires will be performed by others during normal construction hours. Any tire cleaning for vehicles associated with this scope of work outside of those hours shall be responsibility of this Subcontractor. In the event soil, mud, and/or other contaminants are tracked from site during off hours, this Subcontractor shall provide street sweeping/cleaning as required to keep streets clean and clear of debris generated through the performance of this scope of work.
50. This Subcontractor shall maintain and re-store any erosion controls measures (furnish and installed by others) disturbed by this Subcontractor during the performance of this scope of work.

GENERAL ITEMS:

51. The term "Contractor" noted in the Project Specifications(s) shall mean this Subcontractor. The term "Contractor" in the Schedule 'A' shall mean Brasfield & Gorrie, LLC.
52. The Subcontractor shall check and verify all site conditions, including all above-ground and underground utility locations prior to trenching or digging. This shall include notifying the all locate services, review of all municipality and public and private utility company as-builts. This subcontractor shall notify and acquire U.G. (Underground) locations as needed. Additionally, this subcontractor shall not rely on as-builts alone provided by anyone, but shall perform ground penetrating radar surveys as required to locate any and all underground utilities that are existing within the confines of this scope of work. All results of the ground penetrating surveys shall be formally transmitted to Brasfield & Gorrie once results are known.
53. This Subcontractor shall be responsible to receive, unload, distribute, handle, transport and protect their materials/work against damage until final acceptance. This Subcontractor shall put forth best effort to eliminate the potential of materials/work being damaged by others.
54. This Subcontractor shall designate and maintain a competent English-speaking Foreman and/or Project Manager on the job at all times.
55. This Subcontractor shall receive all direction from Brasfield & Gorrie, LLC, and shall not converse directly with the Architect, Engineer or Owner Agents unless directed in writing by Brasfield & Gorrie, LLC.
56. Provide core drilling as may be needed for all work required under this Subcontract. Core drilling of any structural elements requires specific prior written approval from Architect, Engineer and Contractor prior to proceeding.
57. Each Subcontractor shall be responsible to provide any materials built into other Subcontractor(s)' work, i.e. anchors, pipe sleeves, inserts, conduit pipes, lugs, clips, brackets, braces, hanger, bolts, miscellaneous metals, access panels and similar items. If the associated Subcontractor fails to supply the embedded item to the Subcontractor at the time of installing the rough work, all cutting, and patching will be the responsibility of that Subcontractor.
58. Brasfield & Gorrie, LLC will provide a dumpster. It is each subcontractor's responsibility to provide labor and equipment to clean the work area at each shift and transport the trash to the dumpster at each shift.

59. As applicable, Subcontractor must be Certified and/or Qualified by the Manufacturer for installation and service in its product and whose qualifications for installation are in accordance with the Contract Specifications.
60. During the on-site Project Orientation, this Subcontractor's employees shall receive an identification card/decals, which must be displayed at all times while the employee is working on the jobsite. Failure to wear such identification may result in removal from the jobsite.
61. If a Subcontractor must remove cables, barricades, or any other Safety related items in order to perform its work, it shall be the responsibility of that Subcontractor to replace those items and to guard the area until the safety item is replaced. The Subcontractor must get permission from the Contractor's Superintendent prior to removing any temporary rails or protection for any reason. This Subcontractor is responsible to reinstall any rails or protection temporarily removed by this Subcontractor, in a timely and safe manner and in strict accordance with OSHA requirements.
62. This Subcontractor shall provide any and all temporary task lighting required to complete this scope of work.

ABATEMENT AND DEMOLITION:

63. Provide complete Asbestos Abatement Scope of work in strict accordance with SynTerra Report dated June 27, 2023 and all reports in specifications.
64. Contractor will provide a pre-demolition survey and demolition plan. The demolition plan will need to be reviewed by a registered engineer licensed in the State of NC.]
65. When windows are abated/removed the openings must be immediately covered to a) prevent fall hazards, b) Prevent contaminated air from migrating outside of the building, and c) Prevent unauthorized persons from entering the building. Workers will need proper fall protection when removing, cleaning and closing up the exterior windows.
66. Building Demolition includes removal off all building elements including foundations, canopies, and stairs to grade. Electrical and Plumbing System will be disconnected and made safe by others but removal is by this contractor.
67. Proper evacuation of all refrigerants, oils, lubricants, and fluids in the existing building systems and equipment.
68. Removal from the site of all materials and debris. Hazardous items to be properly disposed of per applicable codes and standards. Chain of custody and proper documentation will be submitted to the CM at Risk.
69. Protection of existing structures/surfaces is included in this package for this scope of work.
70. Limits of demolition will be provided with Saw Cuts and Hand Demolition to prevent damage to adjoining surfaces.
71. This contractor will be responsible for cleaning of truck tires and keeping the streets clean during this contractors hauling activities.
72. Dust control is to be provided for all demolition activities

SCHEDULE:

152. In the event the Subcontractor does not maintain the progress with respect to the current project work schedule and the failure to maintain the progress is the fault of the Subcontractor, then the Subcontractor shall work a

six (6) day workweek and overtime when requested by Brasfield & Gorrie, LLC. Brasfield & Gorrie/Owner shall incur no additional cost because of this project requirement. The subcontractor is required to maintain the project schedule. In addition, this Subcontractor shall include Saturday as a "Rain Make-Up" day for the duration of the work.

153. This subcontractor acknowledges the following durations:

ALTERNATES:

SEE BID FORM – ALTERNATES. FILL OUT AND INCLUDE IN ENVELOPE.

ALLOWANCES:

154. The Subcontract Amount includes the following allowance(s). The allowances include the Subcontractor's mark-up for overhead, profit, taxes, insurance, bond, etc. Brasfield & Gorrie, LLC must approve use of these allowances in writing. Lack of written approval from the Brasfield & Gorrie, LLC will preclude the release of funds from these allowances. The allowances shall be audited by Brasfield & Gorrie, LLC upon completion of the work. Any remaining funds within the allowances will be deducted from the Subcontract at face value.

Item No.	Description	Quantity	Amount	U.O.M.
1.		500	\$_____	LF
2.		250	\$_____	CY

UNIT PRICES:

Unit Prices shall govern changes in the work, whether they are additions or deductions to the Subcontract Amount required during the course of the work. Unit Prices shall be total costs including the Subcontractor's labor burden, overhead, profit, taxes, insurance, bond, and delivery (F.O.B. jobsite) and all other costs for a complete and proper installation. Unit pricing to remain the same for the duration of the project.

Item No.	Description	Add	Deduct	U.O.M.
1.		\$_____	\$_____	LF
2.		\$_____	\$_____	LF
3.		\$_____	\$_____	EA
4.		\$_____	\$_____	EA
5.		\$_____	\$_____	CY
6.		\$_____	\$_____	EA

**** End of Schedule A ****



Science & Engineering Consultants

511 Keisler Dr # 102, Cary, NC 27518 | 919.858.9898

ASBESTOS ABATEMENT DESIGN

**FORMER CITY OF RALEIGH POLICE STATION
110 S. MCDOWELL STREET
RALEIGH, NORTH CAROLINA**

BY

**SYNTERRA CORPORATION
511 KEISLER DRIVE, SUITE 102
CARY, NORTH CAROLINA 27518**

DESIGNER:

A handwritten signature in black ink that reads "Dwight D. Weaver".

DATE: June 27, 2023

DWIGHT D. WEAVER

NC # 40448

TABLE OF CONTENTS

TECHNICAL SPECIFICATIONS

Division 1 - General Requirements

Page Number

01043 Project Coordination	01043-1
01092 Codes and Regulations	01092-1
01410 Air Monitoring - Industrial Hygiene Firm Services	01410-1
01503 Temporary Facilities	01503-1
01513 Negative Pressure System	01513-1
01526 Work Area Preparation	01526-1
01560 Worker Protection	01560-1
01562 Respiratory Protection	01562-1
01563 Decontamination Units	01563-1
01711 Project Decontamination	01711-1
01714 Work Area Clearance	01714-1

Division 2 - Site Work

02080 Asbestos Removal.....	02080-1
02084 Disposal of Asbestos-Containing Waste Material	02084-1

Appendices

Appendix A Pework Asbestos Inspection Checklist	Appendix A-1
Appendix B Decontamination Area Arrangement.....	Appendix B-1

Drawings

Asbestos Abatement Plan – 1 st Floor Window Detail	Figure 1
Asbestos Abatement Plan – 2 nd Floor Window Detail	Figure 2
Asbestos Abatement Plan – 3 rd Floor Window Detail	Figure 3
Asbestos Abatement Plan – 4 th Floor Window Detail	Figure 4

SECTION 01043

PROJECT COORDINATION

1.01 GENERAL

- A. All asbestos abatement contractors will be licensed general contractors in either the specialty interior, building, unclassified or asbestos categories by the North Carolina Licensing Board of General Contractors and limited for the bid amount.
- B. The contractor shall be responsible for inspecting the site prior to bidding to confirm the scope of the work. Any quantities listed by the designer in the plans, specifications or survey are done so as approximations. The actual quantities of asbestos-containing material to be encountered are the responsibility of the contractor.
- C. The contractor shall furnish and is responsible for all costs including, but not limited to: permit fees, containment preparation, labor, materials, services, insurance, bonding, and equipment necessary to carry out the abatement operations and disposal of all asbestos material in accordance with the plans and specifications, the EPA and OSHA regulations, and any applicable state and local government regulations.
- D. The contractor/employer has and assumes the responsibility of proceeding in such a manner that he offers his employees a workplace free of recognized hazards causing or likely to cause death or serious injury. The contractor shall be responsible for performing this abatement and disposal so that airborne asbestos fiber levels do not exceed established levels.
- E. The contractor will be responsible for all costs associated with employee monitoring to meet the OSHA requirements.
- F. The contractor is responsible for all costs, including additional visits, should the designer and/or the industrial hygiene firm determine that the contractor failed a final inspection. Notification and scheduling of the final inspection during the project is the responsibility of the contractor. The contractor will allow a minimum notice of 48 hours unless a different time frame is agreed upon by the designer and the contractor.
- G. The contractor must comply with the Construction Manager at Risks' Safety, health, and Environmental Management System (SHEMS), which will be published as a bid document. In addition, the contractor must comply with the Division 00 and 01 specifications prepared by the design team.

1.02 PERSONNEL

A. Supervisor

1. All supervisors shall be accredited by the Health Hazards Control Unit (HHCU).
2. All supervisors on the project shall have two years' experience in the administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc.
3. One supervisor shall be provided for every 10 workers inside the containment. A minimum of one supervisor shall be provided per project.
4. The contractor shall have at least one employee on the job site in either a foreman or supervisor's position who is bilingual in the appropriate languages when employing workers who do not speak fluent English.
5. A minimum of one supervisor per company shall have attended a 24-hour respiratory protection course.

B. Worker

1. All workers shall be accredited by the HHCU.

C. Competent Person

1. A competent person, as defined in the OSHA asbestos standard 29 CFR 1926.1101, employed by the contractor must be outside the work area at all times to monitor activity, ensure containment security, provide information to visitors, and provide access to the work area.

D. Employees

1. The contractor is responsible for the behavior of workers within his employment. If at any time during the contracted work, any of his employees are judged to exhibit behavior unfitting for the area or judged to be a nuisance by the owner or designer, the contractor shall remove them immediately from the project.
2. The contractor shall be responsible for compliance with the following concerning employee behavior:
 - a. Under no circumstances are alcohol, drugs or any other type of controlled substances permitted on the property.
 - b. All workers are restricted to the construction project site only.
 - c. All vehicles must be parked in areas prearranged with the owner.

- d. All workers must conform to the following basic dress code when in public areas of the project confines: long pants, shirts, no tank tops, no shorts, no bare backs.
 - e. The contractor is responsible for disposal of all trash brought on the property by his employees, including drink cans, bottles or other food containers and wrappers.
3. Failure to adhere to these rules could result in criminal prosecution and/or removal from the property.

1.03 MEETINGS

- A. A pre bid conference will be held. All contractors submitting a bid are encouraged to attend, visit the site, and ask questions concerning the plans and specifications.
- B. The designer will review the plans and specifications, present required techniques, and safeguards for the removal of the asbestos and identify locations of water, electrical sources, etc.
- C. Any minutes, new points or clarifications raised during the meeting will be issued by the designer in an addendum.

1.04 PRE-JOB SUBMITTALS

- A. Submit an electronic set of pre-job submittals to the designer at least 10 days prior to the start of work. Work is prohibited until submittal package has been reviewed and approved by designer. A copy of the approved submittals shall be kept in a three-ring binder (project log) by the contractor at the project site in the clean room or in the on-site office of the contractor.
 - 1. Notifications: Provide copies of Asbestos Permit Application and Notification for Demolition/Renovation (DEHNR 3768), which provide written notice to all required agencies, including North Carolina HHCU. Provide notification letters to local EMS, fire and police departments (as required).
 - 2. Employee List: Provide copies of lists of supervisors and workers, along with their accreditation and Social Security numbers, to be utilized on the project.
 - 3. Permits: Provide copies of approval of a waste disposal site in compliance with 40 CFR 61.154.
 - 4. Medical: Provide individually signed forms by each worker to be utilized on the project documenting that each is actively involved in a company employee medical surveillance program.
 - 5. Respirator Training: Copies of most recent fit testing records, individually signed for each worker to be utilized on the project.

6. Project Schedule: Time schedule for the project, outlining the proposed start, setup, clearances, etc. for the various phases of the project.
7. Initial Exposure Assessment: As required by the OSHA construction asbestos standard 29 CFR 1926.1101.
8. Any other programs or training as outlined by the OSHA and EPA standards.

1.05 POST-JOB SUBMITTALS

- A. Submit an electronic set of post-job submittals to the designer following the final completion of the work. Requests for final payment will not be approved until the submittal package has been reviewed and approved by the designer.
 1. Affidavits: Contractor's affidavit of payment of debts and claims, affidavit of release of liens, and consent of surety company to final payment
 2. Manifest: North Carolina Asbestos Waste Shipment Record (DEHNR 3787) receipt from landfill operator which acknowledges the contractor's delivery(s) of waste material. Include date, quantity of material delivered and signature of authorized representative of landfill. Also, include name of waste transporter. Include waste manifests for other hazardous materials detailed in Section 02085.
 3. Daily Log: A notarized copy of all daily logs showing the following: name, date, entering and leaving time, company or agency represented, reason for entry for all persons entering the work area, employee's daily air monitoring data as required by the OSHA standard and written comments by inspectors, industrial hygienists, designers and visitors.
 4. Medical: Copies of worker release forms, asbestos training certification forms and respirator training documentation of all new employees hired during the project.
 5. Special Reports: All documents generated under Section 01043.1.06.

1.06 SPECIAL REPORTS

- A. General: Except as otherwise indicated, submit special reports to designer within one day of occurrence requiring special report, with copies to others affected by occurrence. Also keep a copy in the project logbook.
- B. Reporting Unusual Events: When an event of unusual and significant nature occurs at site (examples: failure of negative pressure system, rupture of temporary enclosures), prepare and submit a special report to the designer immediately, listing chain of events, persons participating, response by contractor's personnel, evaluation of results or effects, and similar pertinent information. When such events are known or predictable in advance, advise designer in advance at earliest possible date.

- C. Reporting Accidents: Prepare and submit reports of significant accidents, at site and anywhere else work is in progress. Record and document date and actions; comply with industry standards for reporting accidents. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury.

1.07 CONTINGENCY PLAN

- A. Contingency Plan: Prepare a contingency plan for emergencies including fire, accident, power failure, negative pressure system failure, supplied air system failure (if applicable), evacuation of injured persons for both life threatening and non-life threatening, or any other event that may require modification or abridgment of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. Keep these plans in the on-site office.
- B. Post outside/in clean room of Personnel Decontamination Unit:
 - 1. Telephone numbers and locations of emergency services including but not limited to, fire, ambulance, doctor, hospital, police, power company, telephone company and the North Carolina HHCU.
 - 2. A copy of Material Safety Data Sheets (MSDS) for any chemicals used during the asbestos project.
 - 3. The contractor shall post asbestos signs in each appropriate language as per the OSHA 29 CFR 1926.1101 standard.

SECTION 01092

CODES AND REGULATIONS

1.01 REFERENCE SPECIFICATIONS

The contractor shall assume full responsibility and liability for compliance with all applicable federal, state and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

Unless modified by these project specifications, all specifications for stripping, removal, repair and disposal work shall conform to the following specifications and standards, as applicable, as if completely reproduced herein.

- A. The following regulations published by the Environmental Protection Agency (EPA):
 - 1. "National Emissions Standards for Hazardous Air Pollutants Asbestos," 40 CFR Part 61, Subpart M.
 - 2. "General Provisions," 40 CFR Part 61, Subpart A.
 - 3. "Guidance for Controlling Asbestos-Containing Materials in Buildings" June 1985. (EPA # 560/5-85-024).
 - 4. "Asbestos-Containing Materials in Schools," 40 CFR Part 763, Subpart E including appendices.
- B. The following regulations published by the U.S. Department of Labor, OSHA:
 - 1. "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules," Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations.
 - 2. "Respiratory Protection," Title 29, Part 1910, Section 134 of the Code of Federal Regulations.
 - 3. Construction Industry, Title 29, Part 1926, of the Code of Federal Regulations.
 - 4. "Access to Employee Exposure and Medical Records," Title 29, Part 1910, Section 20 of the Code of Federal Regulations.
 - 5. "Hazard Communication," Title 29, Part 1926, Section 59 of the Code of Federal Regulations.
 - 6. "Specifications for Accident Prevention Signs and Tags," Title 29, Part 1910, Section 145 of the Code of Federal Regulations.

- C. The following regulations published by North Carolina state agencies:
1. North Carolina Asbestos Hazard Management Program Rules as adopted by 15A NCAC 19C .0600.
 2. "North Carolina Occupational Safety and Health Standards for the Construction Industry," 29 CFR Part 1926 as adopted by T13 NCAC 07F .0201, and shipyard T13:07F.0500.
 3. North Carolina General Statutes, Chapter 95, 97, 130.
- D. The following documents published by the American National Standards Institute:
1. "Fundamentals Governing the Design and Operation of Local Exhaust Systems," Z9.2-1979.
 2. "American National Standard for Respiratory Protection Respiratory Use - Physical Qualifications for Personnel," Z88.6-1984.
 3. "Practices for Respiratory Protection," Z88.2-1992.

1.02 NOTICES

- A. The contractor shall notify the following offices in writing within the time frame specified by the NESHAP regulations prior to beginning any asbestos removal operations.
1. State Agencies

Health Hazards Control Unit
Occupational & Environmental Epidemiology Branch
N.C. Department of Health and Human Services
(Regular Mail)
1912 Mail Service Center
Raleigh, N.C. 27699-1912
Telephone: (919) 707-5900
Fax: (919) 870-4807

N.C. Department of Labor
Division of Occupational Safety and Health
1101 Mail Service Center
Raleigh, N.C. 27699-1101
Telephone: 1-800-NC-LABOR or (919) 625-2267
 2. Licenses

Maintain current licenses for contractor and accreditation for workers and supervisors as required by applicable State or local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the work of this contract.

SECTION 01410

AIR MONITORING - INDUSTRIAL HYGIENE FIRM

1.01 GENERAL

- A. The designer shall be responsible for the coordination of industrial hygiene firm. Services of the industrial hygiene firm will be paid by the owner.
- B. Air monitoring shall be done under the direct supervision of a North Carolina accredited supervising air monitor (SAM), except for sampling performed by the contractor to satisfy OSHA requirements.
- C. SAM shall be accredited per the Asbestos Hazard Management Program rules.
- D. Air monitor shall be accredited as per the Asbestos Hazard Management Program rules and work under the direct supervision of a SAM.
- E. The SAM representing each firm shall have taken a 24-hour respiratory protection course that is either NIOSH, AIHA or HHCU recognized.
- F. The industrial hygiene firm shall submit copies of their N.C. accreditations and documentation on respiratory protection training to the designer prior to the award of the contract.
- G. If specific project activities are assigned to an air monitor, the SAM is expected to be in direct control and responsible for industrial hygiene work completed on the project. The SAM shall approve and sign all air monitoring results performed by the air monitor. The SAM signature must be an original. No rubber stamp signature shall be accepted.
- H. Employees of the HHCU shall have right of entry into the project. The HHCU's SAM shall have final authority over the industrial hygiene firm on the project.

1.02 DESCRIPTION OF WORK

- A. The industrial hygiene firm shall offer expertise to the designer and contractor but is not directly responsible for the performance of the job.
- B. At the job site, the industrial hygiene firm is expected to observe, be aware, and comment on general work site conditions and activities as they relate to the specifications and profession of industrial hygiene and make recommendations in writing to the designer and contractor.
- C. The industrial hygiene firm is responsible for overseeing the protection of the environment from contamination, protection of persons in adjacent areas, and assurance that the areas are acceptable for occupancy.

- D. The industrial hygiene firm has the authority to direct the contractor relative to safety and environmental concerns. This includes stopping the work if necessary. All directions and comments made by the industrial hygiene firm to the contractor shall be written with a copy to the designer.
- E. The industrial hygiene firm shall furnish the contractor a copy of his field report within 24 hours of the visit. Copies of field notes and reports of observations shall be kept in project log book.
- F. The SAM shall review and make comments to the designer on the submittals listed in Section 01043.
- G. The SAM shall approve any change in contractor's respiratory protection. This includes a review of the historical data.
- H. The industrial hygiene firm is to conform to the contractor's schedule and shall respond to necessary changes, provided an advance notice is given as outlined in Section 01043.
- I. The industrial hygiene firm's project monitor shall furnish designer and contractor with a pager or mobile phone number where he can be reached quickly at all times.
- J. The industrial hygiene firm shall notify the designer and contractor, in writing, of any failed clearance visits.
- K. At the completion of the project, the industrial hygiene firm shall prepare a report describing the assessment of the project, all air monitoring data, acceptance letters, calibration records, and a description of the project as it proceeded to completion and submit four copies of the report to the designer.

1.03 AIR MONITORING

- A. Ambient Air Monitoring: The purpose of ambient air monitoring by the industrial hygiene firm will be to detect discrepancies in the work area:
 - 1. Contamination of outside of the work area with airborne asbestos fibers.
 - 2. Confirm the work practices established by the contractor and respiratory protection provided for employees are adequate.
- B. Work Area Clearance: Clearance air monitoring will not be required on this project as this will be component removal and scraping of non-friable materials from substrate.
- C. Supplemental air monitoring may be conducted inside and outside the work area by the HHCU. This supplemental sampling does not fulfill air monitoring responsibilities required by OSHA, EPA or this contract.

SECTION 01503

TEMPORARY FACILITIES

1.01 GENERAL

- A. Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work.
- B. Use qualified tradesmen for installation of temporary services and facilities. Locate, modify and extend temporary services and facilities where they will serve the project adequately and result in minimum interference with the performance of the work.
- C. In occupied buildings, the owner's maintenance personnel shall lock and tag out all electrical and HVAC equipment in the asbestos abatement area. The contractor shall verify that the power and HVAC have been locked and tagged out prior to beginning work.
- D. In unoccupied buildings, the contractor is responsible for the lock and tag out of all power sources and HVAC equipment.
- E. The owner shall move all furniture, books, computers, records, equipment, etc. prior to the contractor's arrival date as specified.

1.02 WATER SERVICE

- A. Water is not available at the building. Contractor bears all expense of providing, heating and getting water to the work and decontamination areas.
- B. Supply hot and cold water to the decontamination unit in accordance with Section 01563. Hot water shall be supplied at a minimum temperature of 100 degrees Fahrenheit.
- C. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment.

1.03 ELECTRICAL SERVICE

- A. General: Comply with applicable NEMA, NEC and UL standards and governing state and local regulations for materials and layout of temporary electric service.
- B. Ground Fault Protection: Provide receptacle outlets equipped with ground fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.
- C. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity and power characteristics to accommodate performance of work during the construction period.

- D. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every area of work.
- E. Provide services of an electrician, on a standby basis, to service electrical needs during the abatement process.
- F. Provide additional power service and distribution service, consisting of individual dedicated 15-amp 120-volt circuits to electrical drops with receptacle outlets equipped with ground fault interrupt protection, color coded for the exclusive use of the industrial hygiene firm.

1.04 FIRST AID

- A. A minimum of one first aid kit shall be located in the clean room. Additional first aid kits as the contractor feels is adequate or is required by law shall be located throughout the work area.

1.05 FIRE EXTINGUISHERS

- A. Comply with the applicable recommendations of NFPA Standard 10 - "Standard for Portable Fire Extinguishers." Locate fire extinguishers where they are most convenient and effective for their intended purpose but provide not less than one extinguisher in each work area equipment room and one in the clean room of the personnel decontamination unit.

1.06 TOILET FACILITIES

- A. Provide temporary toilet facilities to be used by contractor's employees. Use of the owner's existing toilet facilities will be at owner's discretion and these privileges may be revoked at any time.

1.07 PARKING

- A. Park only in areas designated by the owner.

1.08 BUILDING SECURITY

- A. Maintain personnel on-site at all times any portion of the work areas are open or not properly secured. Secure work areas completely at the end of each day.

1.09 STORAGE

- A. Supply temporary storage required for storage of equipment and materials for duration of project. Trailer and storage dumpsters will be maintained in areas designated by the owner.

SECTION 01513

NEGATIVE PRESSURE SYSTEM

1.01 GENERAL

- A. High efficiency particulate air (HEPA) filter exhaust systems are not required for this project as the work is to take place outside using methods that will not render the ACM friable.

SECTION 01526

WORK AREA PREPARATION

1.01 GENERAL

- A. Before work begins in an area, a remote decontamination unit must be in operation as outlined in Section 01563.
- B. Temporary facilities shall be addressed as outlined in Section 01503.
- C. The contractor shall set up a work area, load out, and decontamination area. Any variations must be approved by the designer. The decontamination facility outside of the work area shall consist of a change room, shower room and equipment room as described in Section 01563.
- D. The ground at the building exterior shall be covered with a minimum of 6-mil polyethylene sheeting to prevent contamination of the ground with ACM.
- E. Building surfaces that may become contaminated with asbestos, shall have additional protective preparation as the contractor sees appropriate, at his cost, to protect the original condition of the surfaces.
- F. Any costs associated with physical damage caused by water or securing polyethylene sheeting to areas inside or outside the abatement area shall be the contractor's responsibility.
- G. The contractor shall establish and mark emergency and fire exits from the work area. Emergency procedures shall have priority over established decontamination entry and exit procedures. Audible and visible fire and emergency evacuation alarms shall be installed so as to be heard and seen throughout the entire work area.
- H. After work area preparation, the contractor shall notify the designer verbally with written follow-up that he is ready for a prework inspection.
- I. Contractor shall ensure access is clear around the site for the use of aerial lifts.

SECTION 01560

WORKER PROTECTION

1.01 GENERAL

- A. Provide worker protection as required by OSHA, state and local standards applicable to the work. Contractor is solely responsible for enforcing worker protection requirements at least equal to those specified in this Section.
- B. Each time the work area is entered the contractor shall require all persons to put on disposable coveralls, head cover, and a clean respirator.
- C. Workers shall not eat, drink, smoke, chew gum or chew tobacco in the work area.

1.02 WORKER TRAINING

- A. Train all workers in accordance with 29 CFR 1926 and North Carolina state regulations regarding the dangers inherent in handling asbestos, breathing asbestos dust, proper work procedures and personal and area protective measures.

1.03 MEDICAL EXAMINATIONS

- A. Provide medical examinations for all workers. Examination shall as a minimum meet the OSHA requirements as set forth in 29 CFR 1926 and N.C.

1.04 PROTECTIVE CLOTHING

- A. Provide disposable full-body coveralls and disposable head covers and require that they be worn by all workers in the work area. Provide a sufficient number for all required changes, for all workers in the work area.
- B. Boots: Provide work boots with non-skid soles and, where required by OSHA, foot protection for all workers.
- C. Gloves: Provide work gloves to all workers and require that they be worn at the appropriate times. Do not remove gloves from work area. Dispose of work gloves as asbestos-contaminated waste at the completion of the project.

1.05 ADDITIONAL PROTECTIVE EQUIPMENT

- A. Disposable coveralls, head covers, and footwear covers shall be provided by the contractor for the owner, the designer, Industrial hygiene firm and other authorized representatives who may inspect the job site.

1.06 DECONTAMINATION PROCEDURES

- A. Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area:

1. Remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the work area.
2. Still wearing respirators, proceed to showers. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:
 - a. Thoroughly wet body including hair and face.
 - b. With respirator still in place thoroughly wash body, hair, respirator face piece, and all exterior parts of the respirator.
 - c. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face and respirator. While still holding breath, remove respirator and hold it away from face before starting to breathe.
 - d. Carefully wash face piece of respirator inside and out.
 - e. Shower completely with soap and water; rinse thoroughly.
 - f. Rinse shower room walls and floor prior to exit.
 - g. Proceed from shower to changing (clean) room and change into street clothes or new disposable work items.
3. Each employee shall inspect, clean and repair his respirator as needed. The respirator shall be dried, placed in a suitable storage bag and properly stored.

SECTION 01562

RESPIRATORY PROTECTION

1.01 DESCRIPTION OF WORK

- A. Instruct and train each worker involved in asbestos abatement in proper respirator use and require that each worker always wear a respirator, properly fitted on the face, in the work area from the start of any operation which may cause airborne asbestos fibers until the work area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the workplace or as required for other toxic or oxygen-deficient situations encountered.

1.02 GENERAL

- A. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and MSHA and suitable for the asbestos exposure level in the work areas according to OSHA Standard 29 CFR 1926.1101 and other possible contaminants employees might be exposed to during the project.
- B. Provide respiratory protection from the time the first operation involved in the project requires contact with asbestos-containing materials (including construction of decontamination units, construction of airtight barriers/barricades, and placing of plastic sheeting on walls) until acceptance of final air clearance test results by the industrial hygiene firm.
- C. The minimum respiratory protection for the project shall be half-face air purifying respirators (APR).
- D. Respirator fit testing shall be performed as a minimum at the beginning of the project, at any change in respiratory protection equipment, and at any time during the project if requested by the employee or SAM. Fit testing is to be performed by one of the methods listed in the 29 CFR 1926.1101, Appendix C.
- E. Do not allow the use of single-use, disposable or quarter-face respirators for any purpose.

SECTION 01563

DECONTAMINATION UNITS

1.01 DESCRIPTION OF WORK

- A. Provide remote personnel decontamination facility and equipment decontamination area.

1.02 GENERAL

- A. Remote Personnel Decontamination Unit
 - 1. Provide a remote personnel decontamination unit consisting of a serial arrangement of connected rooms or spaces, changing room, shower room, equipment room. Each shall be separated by a minimum of three curtain doorways.
 - 2. Provide temporary lighting within decontamination units as necessary to reach an adequate lighting level.
 - 3. Maintain floor of changing room dry and clean at all times. Do not allow the overflow water from the shower to escape the shower room.
 - 4. Damp wipe all surfaces twice after each shift change with a disinfectant solution.
 - 5. Provide hot and cold water, drainage and standard fixtures including an elevated shower head as necessary for a complete and operable shower. A water hose and bucket is not an acceptable shower.
 - 6. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
 - 7. Pump shower wastewater to drain. Provide 20 micron and 5-micron waste water filters in line to drain. Change filters daily or more often if necessary.
 - 8. Visual Barrier: Where the decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque plastic sheeting so that worker privacy is maintained, and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with wood or metal studs, max. 16 inches on center, covered with minimum 3/8-inch plywood.
- B. Equipment Decontamination Units:
 - 1. Provide an equipment decontamination area.

2. Washroom: Provide washroom for cleaning of bagged or drummed asbestos-containing waste materials passed from the work area.
3. Holding Area: Provide holding area as a drop location for sealed drums and bagged asbestos-containing materials passed from the washroom.
4. Clean Room: Provide clean room to isolate the holding area from the building exterior or occupied areas.
5. When passing contaminated equipment, sealed plastic bags, drums or containers into the decontamination area, keep all outside personnel clear of the equipment decontamination area.
6. Wet-clean the bags and/or equipment inside the decontamination area.
7. When cleaning is complete, insert bagged material into a clean bag/drum and store in the holding area.
8. Workers shall wear full protective clothing and respiratory protection as described in Section 01562.

C. Decontamination Unit Contamination:

1. If the air quality in the decontamination unit exceeds 0.01 fibers per cc analyzed by PCM or 70 structures per mm squared analyzed by TEM or its integrity is diminished through use as determined by the designer or industrial hygiene firm, no employee shall use the unit until corrective steps are taken and approved by the designer and industrial hygiene firm.

SECTION 01711

PROJECT DECONTAMINATION

1.01 GENERAL

- A. Carry out a first cleaning of all surfaces of the work area including plastic sheeting, tools, scaffolding, aerial lifts and/or staging by use of damp-cleaning and mopping and/or a high efficiency particulate air (HEPA) filter vacuum until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces. Do not perform dry-dusting or dry-sweeping.
- B. Equipment shall be cleaned, and all contaminated materials removed from the work area.
- C. The contractor shall replace all prefilters and clean the inside and outside of the HEPA exhaust units.
- D. The contractor shall wet-clean and/or HEPA vacuum all surfaces in work area.
- E. At the completion of the cleaning operation, the contractor's supervisor shall perform a complete visual inspection of the work area to ensure that the work area is dust- and fiber-free. If the supervisor believes he is ready for a final project decontamination inspection, he shall notify the designer.
- F. The designer shall contact the industrial hygiene firm and advise the firm of the final project decontamination inspection requested by the contractor.
- G. Final project decontamination inspection includes the visual inspection.
- H. The industrial hygiene firm shall perform the final visual inspection. Any discrepancies found shall be documented in the form of a punch list.
- I. If the industrial hygiene firm finds that the work area has not been adequately decontaminated, cleaning shall be repeated at the contractor's expense, including additional industrial hygiene fees, until the work area is in compliance.
- J. After the work area is found to be in compliance, all plastic sheeting, tape and any other trash and debris shall be disposed of in sealable plastic bags (6 mil minimum) and disposed of as outlined in Section 02084.
- K. After the industrial hygiene firm has approved the final project decontamination and the contractor has completed the tear down, the designer shall perform the project final inspection as outlined in the general conditions.
- L. Any residual asbestos that may be present shall be cleaned and cleared at the contractor's expense.

SECTION 01714

WORK AREA CLEARANCE

1.01 GENERAL

- A. Notification and scheduling of the final inspection during the project is the responsibility of the contractor.

1.02 FINAL CLEARANCE TESTING

- A. After the removal is complete and the work areas have been cleaned, the following procedure shall be performed:
 - 1. A final visual inspection shall be conducted by the industrial hygiene firm. The inspection shall be conducted following the guidelines set forth in the American Society for Testing and Materials, Standard Practices for Visual Inspection of Asbestos Abatement Projects, Designation: E1368.90. If the work area is found visibly clean, the area shall have passed clearance.
 - 2. Final clearance criteria shall be in accordance with AHMB Program Rules.
 - 3. The industrial hygiene firm shall immediately report the visual clearance results to the designer.

SECTION 02080

ASBESTOS REMOVAL

1.01 GENERAL

- A. Prior to starting asbestos removal, the contractor's equipment, work area and decontamination units will be inspected and approved by the designer.
- B. All loose asbestos material removed in the work area shall be adequately wet, bagged, sealed and labeled properly before personnel breaks or end of shift.
- C. All plastic sheeting, tape, cleaning material, clothing and all other disposable material or items used in the work area shall be packed into sealable plastic bags (6 mil minimum) and treated as contaminated material.
- D. All material shall be double-bagged or wrapped.
- E. All excess water (except shower water) shall be combined with removed material or other absorptive material and properly disposed of as per EPA regulations. Contractor shall not place water in storm drains, onto lawns, or into ditches, creeks, streams, rivers or oceans.

1.02. SCOPE OF WORK

**FORMER CITY OF RALEIGH POLICE STATION
110 S. MCDOWELL STREET
RALEIGH, NORTH CAROLINA**

Asbestos material to be removed:

Material	Sample #	Location	Asbestos Content	Quantity¹
Gray window glazing	105, 106	Windows on all floors	2%	471 windows
Black window mastic on panels and bricks	109, 110	False windows on all floors	2%	234 windows
Brown window caulk	111,112	False windows on all floors	2%	234 windows

¹ Quantities are estimates: SF = square feet, LF = linear feet.

Windows, false windows and select doors shall be removed intact in sections that are reasonably and safely manageable; and wrapped in minimum 6-mil polyethylene sheeting and disposed of as ACM. Exterior wall openings shall be cleaned to remove asbestos-containing caulks and mastics.

Once the exterior wall openings are cleaned, the contractor shall secure a minimum of 5/8" plywood to the building openings daily in a manner which will prevent access to the

interior of the building through wall/window openings. In addition, the contractor shall secure each opening daily to prevent both access into the building and falls from heights at the building openings.

A remote decon will be setup at the work area. The decon must be constructed to prevent unauthorized persons from entering the work site if the unit is located outside the building. All surfaces of the decon will be wet wiped as part of final cleaning.

Contractor must have a NC-HHCU accredited supervisor on site at all times and all workers must be accredited by HHCU.

Workers will be required to wear disposable suits, ½ face respirators, safety glasses and boots.

Contractor must follow OSHA guidelines and required to conduct personal air monitoring on workers and furnish the Designer and Owner results within 48 hours.

Final inspection will be visual and conducted by the Designer and Environmental Monitoring firm.

All asbestos materials will be properly wet, double bagged or wrapped, labeled, stored in a line trailer or container for shipping and disposal of in a State/EPA approved landfill.

All work practices, equipment, containment setup, and personal protective equipment must follow State, Federal and local agencies guidelines. All personnel shall be currently accredited by NC-HHCU.

Upon completion of work the contractor shall provide the following documentation: copies of accreditations, training certificates, and medical surveillance records for the project personnel, sign-in sheets and/or field logs, and waste disposal manifest.

SECTION 02084

DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL

1.01 GENERAL

- A. All asbestos materials and miscellaneous contaminated debris shall be properly sealed and protected, and the loadout vehicle/dumpster shall be locked, while located on the facility site and then transported to a predestinated disposal site in accordance with 40 CFR 61.150 and DOT 49 CFR Parts 100-399.
- B. An enclosed vehicle will be used to haul waste material to the disposal site. No rental vehicles or trailers shall be used. Vehicle selection, vehicle covers, and work practices shall assure that no asbestos becomes airborne during the loading, transport and unloading activity, and that material is placed in the waste site without breaking any seals.
- C. Waste disposal polyethylene bags (6 mil) and containers, non-porous (steel/plastic) drums or equivalent, with labels, appropriate for storing asbestos waste during transportation to the disposal site shall be used. In addition to the OSHA labeling requirements, all containers shall be labeled with the name of the waste generator and the location at which the waste was generated.
- D. The contractor shall transport the containers and bags of waste material to the approved waste disposal site. The sealed plastic bags shall be placed into the burial site unless the bags have been broken or damaged. Upon the landfill's approval damaged bags shall be left in the non-porous containers and the entire contaminated package shall be buried. Uncontaminated containers may be reused.
- E. Workers loading and unloading the asbestos will wear respirators and disposable clothing when handling material. Asbestos warning signs shall be posted during loading and unloading of asbestos waste.
- F. The contractor shall use the HHCU's Waste Shipment Record for disposal records as per 40 CFR 61.150 and distribute a copy of all waste shipment records to the designer after the completion of the project.

APPENDIX A

PREWORK ASBESTOS INSPECTION CHECKLIST

Name of Facility: _____

Project Name: _____

Project ID Number: _____

Date of Inspection: _____ Pass: _____ Fail: _____

A. DOCUMENTS

YES

NO

1. Asbestos Removal Permit/NESHAP Notification
2. Accreditation Documents for Workers & Supervisors
3. Asbestos Plans and Specifications
4. Air Monitoring Data
5. Waste Shipment Records
6. Sign-in Sheets and Bound Book for Comments
7. Calibration Record for Grade "D" Air
8. Items listed in Section 01043 of Specification

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

B. PPE SUPPLIES

1. Tyvek Clothing
2. Rubber Boots
3. Respirators with HEPA Filters

_____	_____
_____	_____
_____	_____

C. CLEAN ROOM

1. Entry Curtains
2. Emergency Phone Numbers Posted
3. First Aid Kit
4. Asbestos Signs
5. Decontamination Procedures Posted
6. Fire Extinguisher

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

D. SHOWER ROOM

1. Polyethylene Curtains
2. Hot/Cold Water & Operational
3. Soap & Towels
4. Waste Water Filter Pump Operational
5. Extra Five Micron Size Filters
6. Filtered Waste Water to Sanitary Sewer

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

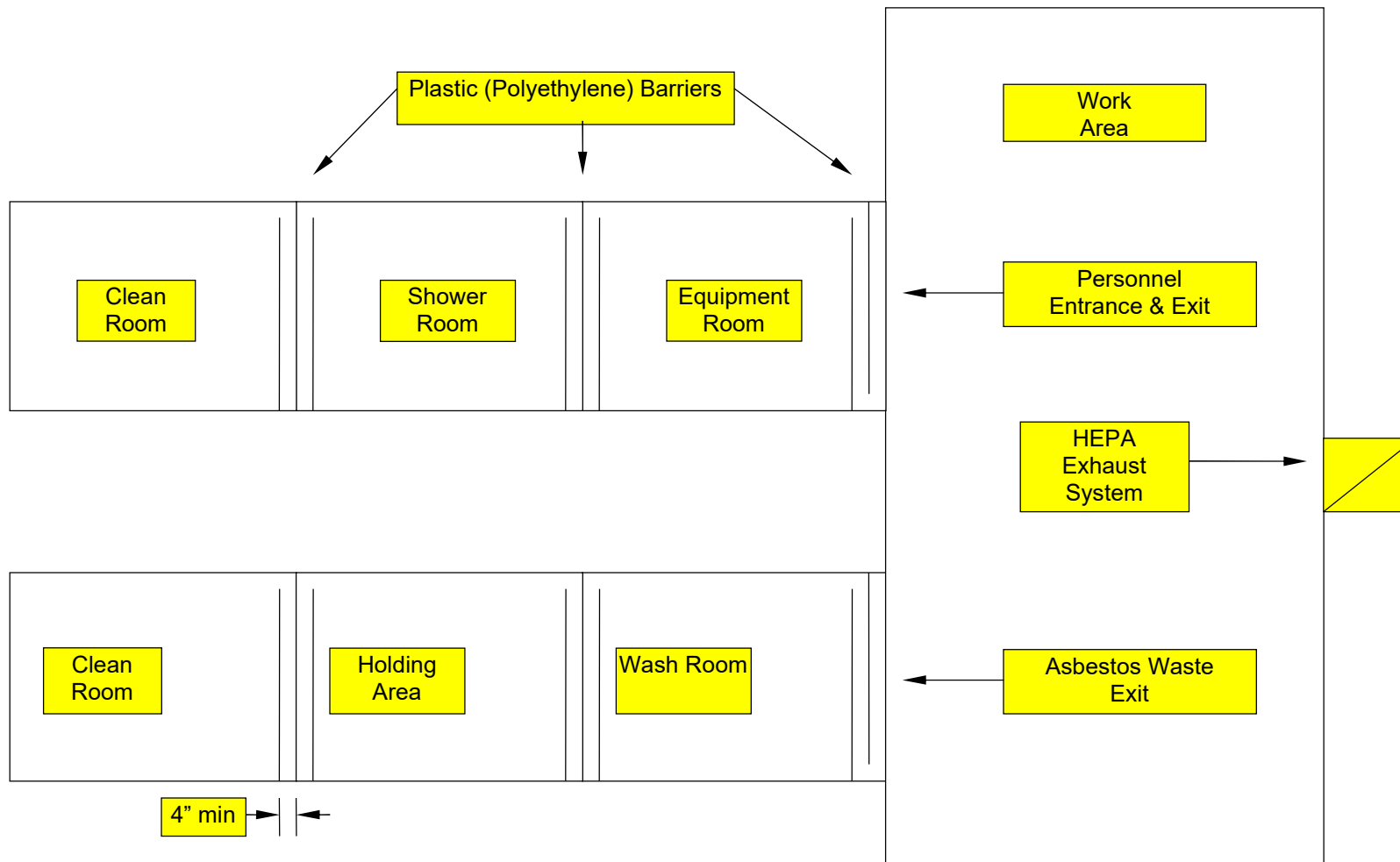
E. WORK AREA	YES	NO
1. Removable Items Out of Area	_____	_____
2. Non-removable Items Protected	_____	_____
3. Critical Barriers Installed	_____	_____
4. Polyethylene Curtains	_____	_____
5. Polyethylene on Walls/Floors as Specified	_____	_____
6. HVAC off	_____	_____
7. Air Filtration Devices in Place and Operational	_____	_____
8. Air Exhausted to Outside	_____	_____
9. Electricity Locked and Tagged Out	_____	_____
10. Temporary Power Installed with GFCI	_____	_____
11. Fire Extinguishers	_____	_____
12. Emergency and Fire Exits Marked	_____	_____
13. Audible Alarms Operational	_____	_____
14. Toilet Available	_____	_____
F. EQUIPMENT		
1. Safety Equipment	_____	_____
2. HEPA Vacuums	_____	_____
3. Waste Disposal Bags	_____	_____
4. Airless Sprayer with Water Source	_____	_____
5. Cleaning Equipment	_____	_____
6. Glove Bags	_____	_____
7. Emergency Power Generator (if required)	_____	_____
8. Temporary Lighting	_____	_____
G. OTHER		
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

Asbestos Design Consultant

Date

Asbestos Contractor's Representative

Date

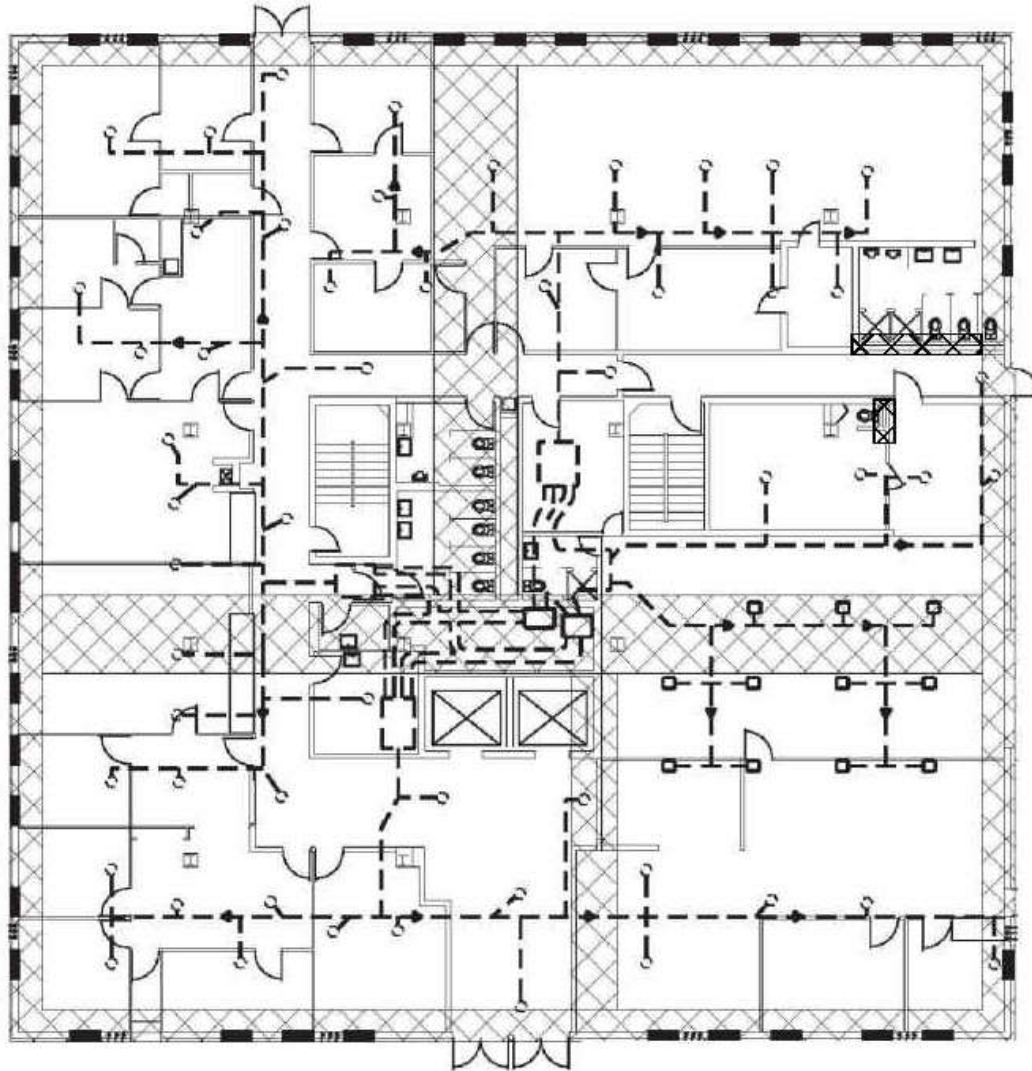


Decontamination Area Arrangement - Plan View

Drawn By:
GAD

Date:
01/02/96

N.C. Department of Administration
State Construction Office
Raleigh, N.C. 27601



LEGEND


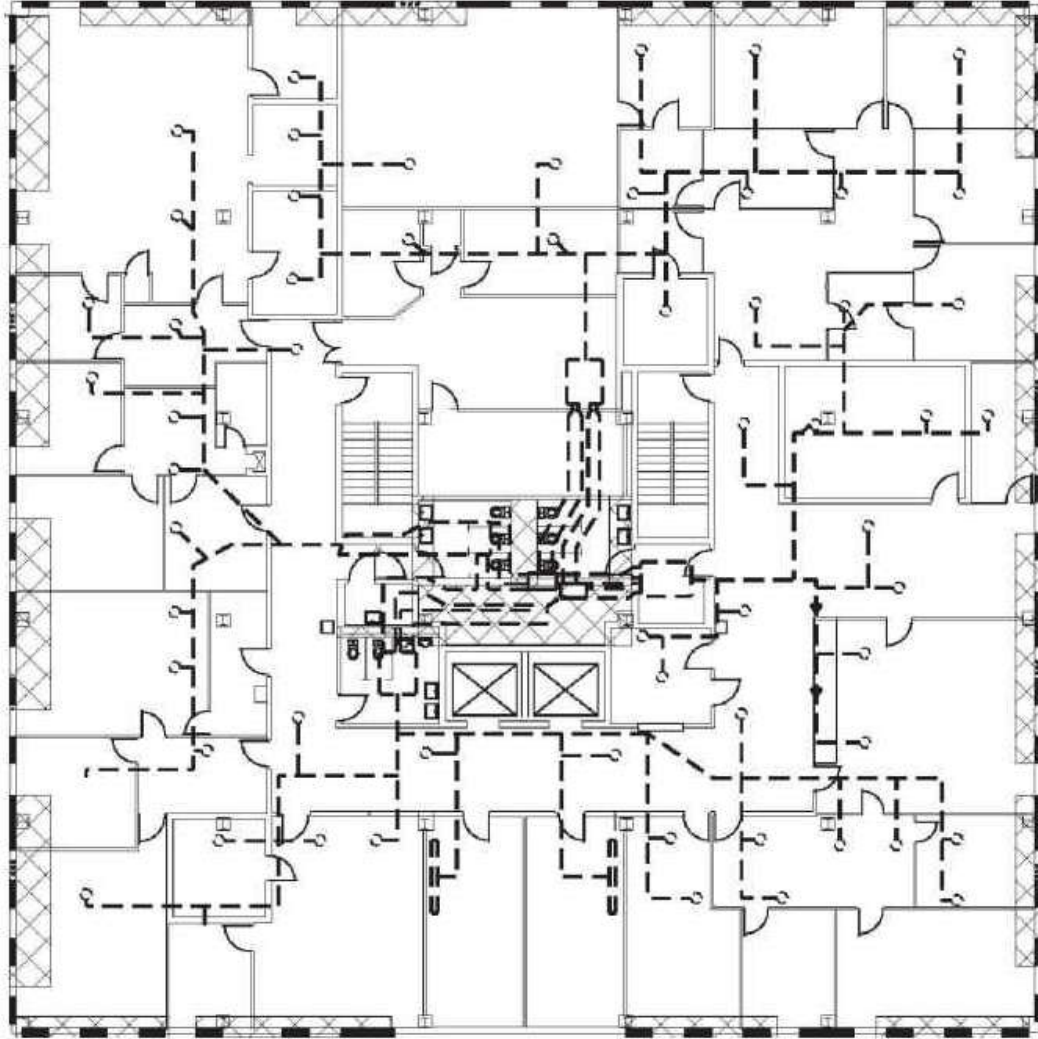
 = Location of ACM Window Glazing
 Window Caulk, and Mastic on Brick

Figure 1 – 1st Floor Window Detail

Former City of Raleigh Police Station
 110 S. McDowell Street
 Raleigh, North Carolina

NOT TO SCALE

SynTerra Project:
 00.2319.02



LEGEND


 = Location of ACM Window Glazing
 Window Caulk, and Mastic on Brick

Figure 2 – 2nd Floor Window Detail

Former City of Raleigh Police Station
 110 S. McDowell Street
 Raleigh, North Carolina

NOT TO SCALE


SynTerra Project:
 00.2319.02

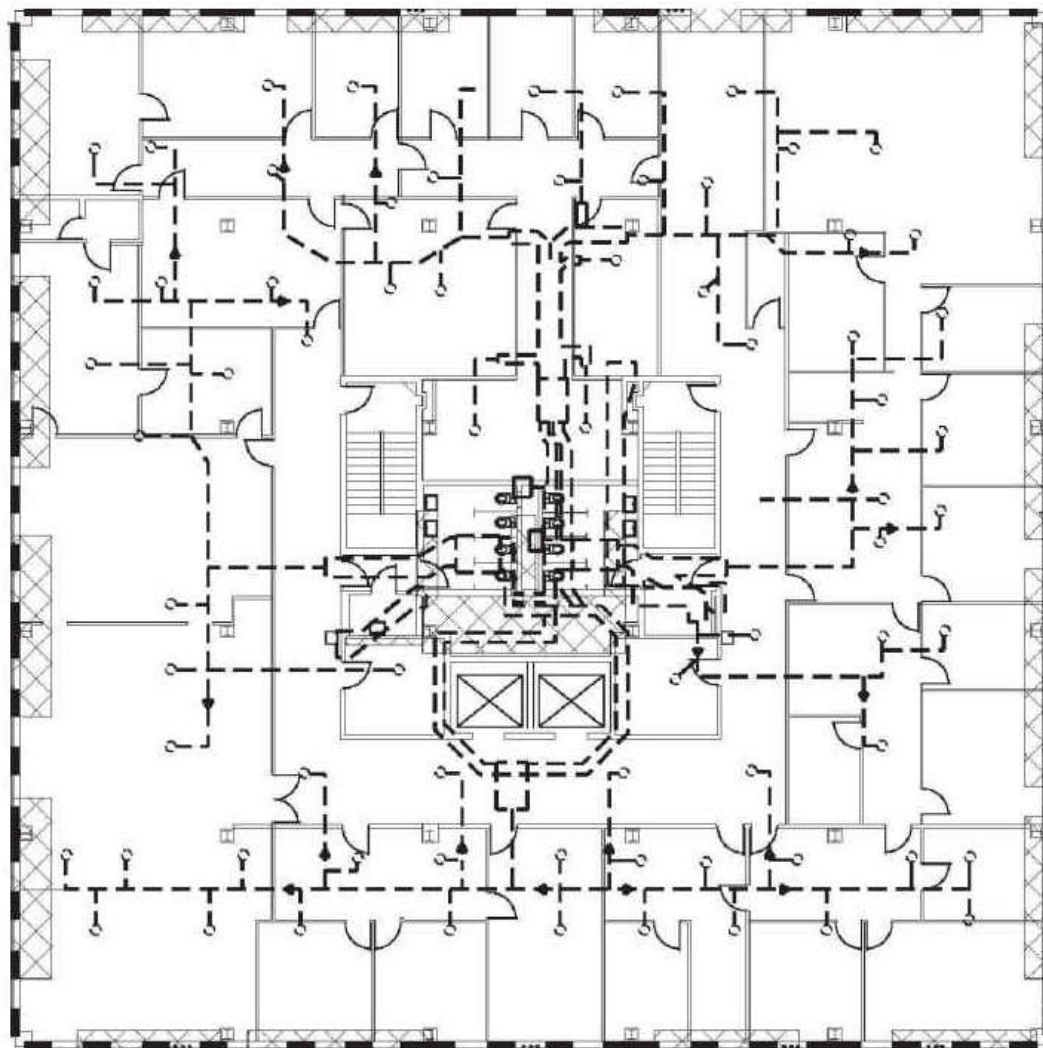
Figure 3 – 3rd Floor Window Detail

Former City of Raleigh Police Station
110 S. McDowell Street
Raleigh, North Carolina

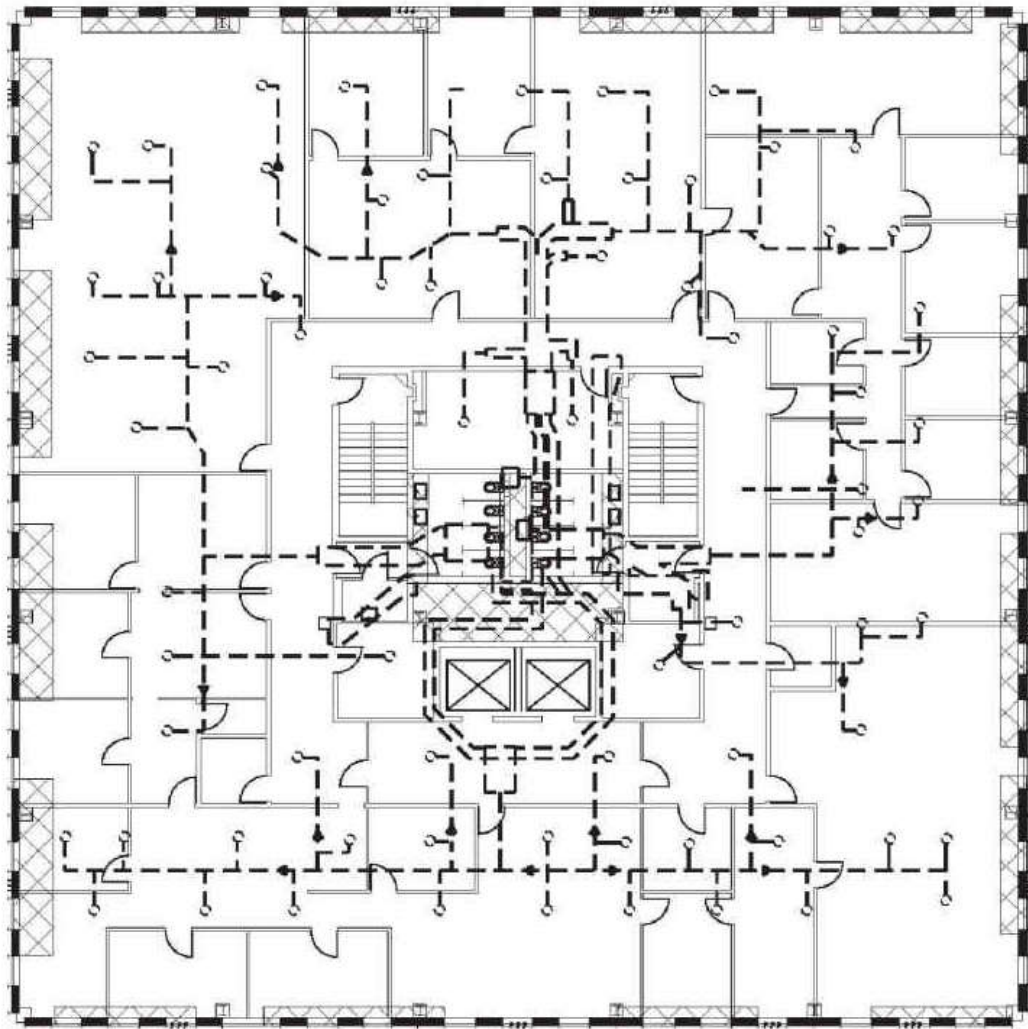
NOT TO SCALE

LEGEND

 = Location of ACM Window Glazing
Window Caulk, and Mastic on Brick



SynTerra Project:
00.2319.02



LEGEND


 = Location of ACM Window Glazing
 Window Caulk, and Mastic on Brick

Figure 4 – 4th Floor Window Detail

Former City of Raleigh Police Station
 110 S. McDowell Street
 Raleigh, North Carolina

NOT TO SCALE

SynTerra Project:
 00.2319.02