TEM ENVIRONMENTAL, INC.
ENVIRONMENTAL SCIENTISTS | INDUSTRIAL HYGIENISTS

REQUEST FOR PROPOSAL

ASBESTOS ABATEMENT WORK
FOR 2023-2024 MECHANICAL UPGRADE PROJECT

AT

Joliet Junior College
C, E & G Buildings Mechanical Rooms
1215 Houbolt Rd.
Joliet, Illinois 60436

For

Joliet Junior College
1215 Houbolt Rd.
Joliet, Illinois 60436

TEM Project No. 70692

TEM Environmental, Inc.
174 North Brandon Drive
Glendale Heights, Illinois 60139

Date: October 17, 2023

TEM ENVIRONMENTAL, INC.
ENVIRONMENTAL SCIENTISTS | INDUSTRIAL HYGIENISTS

Asbestos Abatement
for
Joliet Junior College
C, E & G Mechanical Rooms
James Tuinenga, CIH
Asbestos Project Designer

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Drawings:

ASB01, ASB02, ASB03, ASB04, ASB05	Abatement Plan – Joliet Junior College C, E & G Buildings Mechanical Rooms
ALT01	Abatement Plan – Joliet Junior College Alternate #1 Corridor J0040 Area

Asbestos Abatement
Joliet Junior College
C, E & G Buildings Mechanical Rooms

Section 01010 – Proposal Form

1. **Scope of Work**
    a. Removal of asbestos containing materials as specified in this document.
    b. Contractor shall have Criminal Background Checks performed on ALL employees assigned to the site. All costs shall be borne by the Contractor. No employee may work at the site until the background check is complete and a hard copy of the report is submitted to the School.
2. **Work Procedures**
    a. All work shall be performed as specified in the attached Technical Specification 02080 Asbestos Abatement.
3. **Clearance Air Sampling**
    a. Clearance air sampling will be conducted following all work and results shall not exceed the AHERA/IDPH clearance criteria.

Section 01040 - Project Coordination

1. GENERAL

1.01. DUTIES OF CONTRACTOR

A. Coordinate work of all subcontractors.

B. Establish on-site lines of authority and communication; schedule and conduct project meetings among:

1. Owner's Representative.

2. Asbestos Project Designer.

3. Other Contractors.

C. Administer processing of:

1. Shop drawings, product data and samples.

2. Field drawings.

3. Coordination drawings.

D. Maintain Reports and Records at Job Site:

1. Daily log of progress of work, available to Asbestos Project Designer and Owner.

2. Verify that all contractors maintain record documents on a current basis.

3. At completion of Project, assemble record documents from all contractors and deliver to the Asbestos Project Designer.

4. Assemble documentation for handling of claims and disputes.

E. Verify that specified cleaning is done:

1. During progress of work.

2. At completion of each Contract.

F. Start-Up:

1. Direct and check-out of utilities, operational systems and equipment.

2. Record dates of start of operation of systems and equipment.

G. Substantial Completion:

1. Upon Contractor's determination of Substantial Completion of work or portion thereof, prepare, or cause to be prepared for Asbestos Project Designer, a list of incomplete or unsatisfactory items.

2. Upon Asbestos Project Designer's Certification of Date of Substantial Completion, supervise

Contractor correction and completion of work.

H. Final Completion:

1. Upon Contractor's determination that Work is finally complete:

a) Submit written notice to Asbestos Project Designer and Owner, that Work is ready for final inspection.

b) Secure and transmit to Asbestos Project Designer required closeout submittals.

2. Turn over to Owner:

a) Warranties and Bonds.

b) Extra stock.

END 01040.

Section 01060 - Regulatory Requirements

1. GENERAL

1.01. REQUIREMENTS INCLUDE

A. Comply with all laws, rules and regulations applicable to the work.

1. When contractor observes that contract documents are at variance with specified codes, notify Asbestos Project Designer in writing immediately. Asbestos Project Designer will issue all changes in accord with General Conditions.

2. When contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Asbestos Project Designer/Engineer, Contractor shall pay all costs arising therefrom. However, it will not be the Contractor's primary responsibility to make certain that the contract documents are in accordance with such laws, rules and regulations.

1.02. RELATED REQUIREMENTS

A. Specified elsewhere.

1. 01010 - Project Summary.

1.03. DEFINITIONS AND ABBREVIATIONS

A. Definitions:

1. Codes: Codes are rules, regulations or statutory requirements of government agencies.

2. Standards: Standards are requirements set by authorities, custom or general consent and established as accepted criteria.

B. Abbreviations:

1. AHERA Asbestos Hazard Emergency Response Act.
2. ANSI American National Standards Institute.
3. ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers.
4. CDB Capital Development Board.
5. CPSC Consumer Product Safety Commission (Federal).
6. IDOL Illinois Department of Labor.
7. IDPH Illinois Department of Public Health.
8. IEPA Illinois Environmental Protection Agency.
9. ISBE Illinois State Board of Education.
10. NFPA National Fire Protection Association.
11. UL Underwriters Laboratories, Inc.

1.04. REGULATORY REQUIREMENTS

A. Source and requirements, including current amendments:

1. IDPH: Illinois Plumbing Code, 1983, Cir. 4.201.

2. IDPH:

a) Commercial and Public Buildings Asbestos Abatement Act (Illinois Revised Statutes,

(225ILCS207.)

b) Rules and Regulations for the Asbestos Abatement Act - Title 77, Ch. I, Subch. P. Part 855.

3. IEPA: (Current editions at date of bidding documents.)

a) Air Pollution Standards.
b) Noise Pollution Standards.
c) Water Pollution Standards.
d) Public Water Supplies.
e) Solid Waste Standards.

4. Illinois Purchasing Act, as amended (Illinois Revised Statutes, Ch. 127, Par. 132.1 et seq.)

5. OSFM:

a) Gasoline and Volatile Oils (Illinois Revised Statutes, Ch. 17 1/2, Par. 31 et seq.).
b) Liquefied Petroleum Gases (Illinois Revised Statutes, Ch. 104, Par. 119 et seq.).
c) Liquefied Petroleum Gas Containers (Illinois Revised Statutes, Ch. 104, Par. 113 et seq.).
d) Illinois Rules and Regulations for Fire Prevention and Safety, as amended 24 DEC 73. (Except IOE.).
e) Illinois Fire Prevention and Safety Laws and Fire Protection District Laws.

6. STANDARDS:

a) NFPA: National Fire Codes, 1987.

1) No. 70-87, National Electrical Code.
2) No. 101-81, Life Safety Code, Chapter 15.

8. USEPA:

a) CFR Part 763, and as amended (AHERA).
b) CFR Part 61, and as amended (NESHAP).

B. The Asbestos Project Designer may reference other codes or standards throughout the Project Manual when deemed appropriate for proper compliance with regulatory requirements. See Section 020814 for codes and regulations which apply specifically to asbestos work.

END 01060.

Section 01410 - Testing Laboratory Services

1. GENERAL

1.01. REQUIREMENTS INCLUDE

A. Owner will employ and pay for, an independent Environmental Consultant (EC) to perform specified services.

B. Employment of an Environmental Consultant will in no way relieve Contractor's obligations to perform work in accordance with the Contract.

C. The Owner will assign an Asbestos Project Manager and Air Sampling Professional on-site at all times when abatement activities are in progress including, but not limited to, site preparation, containment construction, abatement, cleaning, clearance activities, tear down and disposal activities.

D. The completion schedule shall be based on the use of one (1) Asbestos Project Manager during the entire contract period. All project areas will be available to the Contractor twenty four hours per day, seven days per week.

1.02. LABORATORY DUTIES - LIMITS OF AUTHORITY

A. General:

1. Throughout the entire removal and cleaning operations, air monitoring shall be conducted by the Owner's Environmental Consultant to ensure that the Contractor is complying with EPA and OSHA regulations and any applicable state and local government regulations. Air monitoring will be conducted according to the method prescribed by 29 CFR 1926.1101, Appendix A or applicable state or local regulations.

B. Monitoring Prior to Actual Removal:

1. The Environmental Consultant will provide area monitoring and establish the reference baseline ambient fiber concentration levels one day prior to the masking and sealing operations for each removal site. One sample minimum per site or per 50,000 cubic feet of airspace.

C. Monitoring During Asbestos Removal:

1. The Environmental Consultant will provide quality control personal and air monitoring during exposure to airborne concentrations of asbestos. Thereafter, providing the same type of work is being performed, the Environmental Consultant will provide area monitoring once every four hours during the work shift inside the asbestos control area, once every eight hours outside the entrance to the asbestos control area, and once every eight hours near the discharge of the local exhaust system.

D. Monitoring Results:

1. PCM fiber counting shall be completed and results reviewed by the Environmental Consultant within 24 hours, and have a 12-hour turn-around time for final compliance monitoring. The Environmental Consultant shall notify the Contractor and the Owner immediately of any exposures to asbestos fibers in excess of the acceptable limits.

E. AHERA Clearance Monitoring:

1. Final air monitoring for functional spaces per CFR 763.90 having more than 160 square feet or

260 linear feet of asbestos-containing building material (ACBM) shall be conducted in compliance with EPA criteria. Clearance Air monitoring shall utilize TEM laboratory analysis for establishing fiber levels, based on a 24 hour turnaround.

F. Environmental Consultant is not authorized to:

1. Release, revoke, alter or enlarge on, contract requirements.
2. Approve or accept any portion of work.
3. Perform any duties of the Contractor.

1.03. CONTRACTOR'S RESPONSIBILITIES

A. The Contractor shall be responsible for providing personal monitoring of his employees as per OSHA 1926.1101.

B. AHERA Compliance - Functional Space:

1. The number of functional spaces as defined by 40 CFR 763.90 having more than 160 square feet or 260 linear feet of asbestos-containing building material (ACBM) for a given project shall be determined by the Designer.
2. Contractor coordinate work this number of functional spaces. Any additional air monitoring that is a result of the Contractor exceeding this number shall be the responsibility of the Contractor.

C. Furnish casual labor and facilities:

1. To provide access to work to be tested.
2. To obtain and handle samples at site.
3. To facilitate inspections and tests.
4. For the ENVIRONMENTAL CONSULTANT’s exclusive use for staging of test samples.

D. Notify Environmental Consultant sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.

E. Correct work which is defective or which fails to conform to the contract documents in accordance with the General Conditions. Corrective work shall not delay the project schedule or the work of other contractors.

F. Pay all costs of retesting when test results indicate noncompliance with contract requirements.

END 01410.

Section 01710 - Final Cleaning

I. GENERAL

1.01. REQUIREMENTS INCLUDE

A. Provide final cleaning in addition to asbestos abatement cleaning requirements:

1. At completion of work, or at such other times as necessary, remove all waste, debris, rubbish, tools, equipment, machinery and surplus materials. Clean all sight exposed surfaces; leave work clean and ready for occupancy.

1.02. RELATED REQUIREMENTS

A. Specified elsewhere:

1. - Contract Closeout.

2. Respective specification sections - cleaning for specific products or work.

3. - Asbestos Abatement.

1.03. SAFETY REQUIREMENTS

A. Standards: Maintain project in accord with following safety and insurance standards:

1. Federal and state regulations.

2. National Fire Protection Association (NFPA).

B. Hazards Control:

1. Store volatile wastes in covered metal containers and remove from premises daily.

2. Prevent accumulation of wastes which create hazardous conditions.

3. Provide adequate ventilation during use of volatile or noxious substances.

C. Conduct cleaning and disposal operations to comply with Federal and State anti-pollution laws.

1. Do not burn or bury rubbish and waste materials on project site.

2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.

3. Do not dispose of wastes into streams or waterways.

1.04. SUBMITTALS

A. Manufacturer's recommendations for cleaning specified products.

B. Proposed cleaning products for products where manufacturer's recommendations are not specified.

2. PRODUCTS

2.01. MATERIALS

A. Select and use all cleaning materials and equipment with care to avoid scratching, marring, defacing, staining or discoloring surfaces cleaned.

B. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

3. EXECUTION

3.01. FINAL CLEANING

A. Employ experienced workmen or professional cleaners for final cleaning.

B. Remove grease, dust, dirt, stains, labels, fingerprints, protection and other foreign materials from sight-exposed surfaces.

1. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed surfaces, and of concealed spaces to insure performance.

C. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.

D. Maintain finally cleaned areas until project, or designated portion thereof, is accepted by Owner.

END 01710.

Section 02080 - Asbestos Abatement

1. GENERAL

1.01. WORK INCLUDES

A. Removal of Asbestos Containing drywall joint compound.

1. See contract drawings.

B. All applicable Rules and Regulations of EPA and OSHA shall be included in the required scope of work.

C. All Rules and Regulations of the Illinois Department of Public Health shall be included in the required scope of work.

D. Abatement Contractor provide all labor, materials, and equipment required to remove all indicated materials.

1. Asbestos Abatement Contractor provide:

a. Certified supervision of all asbestos work.
b. Reports, notices and signs.
c. Protection of persons and property.
d. Worker Protection.
e. Work area preparation.
f. Complete removal of all asbestos-containing materials.
g. Clean up and disposal of asbestos-containing materials.
h. Clean up and disposal of non-ACM materials and waste.
i. Repair/restoration of work areas and HVAC system.

E. The abatement work comprises the clean-up and removal of asbestos containing materials. Asbestos presents a serious health risk to humans. The work is governed by local, state and federal rules,-regulations and laws. The Contractor agrees by accepting the contract that he has full responsibility for the health and safety of his staff and all people who come in contact with the work site.

1.02. DEFINITIONS

"**ABATEMENT**" means procedures to control fiber release from asbestos containing materials. This includes removal, encapsulation, enclosure, and repair.

"**AGGRESSIVE SAMPLING**" means a method of sampling where the person collecting the air sample creates activity during the sampling period to stir up settled dust and simulate activity of that area of the building.

"**AHERA**" means Asbestos Hazard Emergency Response Act which is a Federally mandated rule that requires Local Education Agencies, (LEA's) to identify friable and non-friable asbestos-containing material (ACM) in public and private elementary and secondary schools by visually inspecting school buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques. The rule also requires the LEA's to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete the implementation of the plans in a timely fashion. In addition, LEA's are required to use persons who have been accredited to conduct inspections, re-inspections, develop management plans, or perform response actions. The rule also includes record keeping requirements. LEA's may contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties.

"**AIHA**" means the American Industrial Hygiene Association

"**AIRLOCK**" means a system for permitting entrance and exit with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

"**AIR SAMPLING**" means the process of measuring the fiber content of a known volume of air collected during a specified period of time. The procedure utilized for asbestos may follow the NIOSH Standard Analytical Method for Asbestos Method 7400 or transmission electron microscopy (TEM) methods in accordance with the requirements established by AHERA.

"**AIR SAMPLING PROFESSIONAL**" means the professional contracted or employed to supervise air monitoring and analysis schemes. This individual is also responsible for recognition of technical deficiencies in worker protection equipment and procedures during both planning and onsite phases of an abatement project. This individual shall be certified or core certified in the Comprehensive Practice of Industrial Hygiene and completed NIOSH Course No. 582 "Sampling and Evaluating Airborne Asbestos Dust".

"**AMENDED WATER**" means water to which surfactant has been added.

"**ANSI**" means the American National Standards Institute

"**Asbestos Project Designer**" means the person, whether an architect, engineer, designer, consultant or other person, who designed the project.

"**AREA AIR SAMPLING**" means any form of air sampling where the sampling device is placed at some stationary location. Area air sampling is conducted each day during an asbestos abatement project. Sampling locations include inside the work area, outside the work area, and outside the building.

"**ASBESTOS-CONTAINING MATERIAL (ACM)**" means material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or non-fibrous materials.

"**ASBESTOS-CONTAINING WASTE MATERIAL**" means asbestos containing material or asbestos contaminated objects requiring disposal.

"**ASBESTOS WORKER**" means an individual who cleans, removes, encapsulates, hauls or disposed of asbestos material.

"**ASTM**" means the American Society for Testing and Materials

"**AUTHORIZED VISITOR**" means any representative of a regulatory or other agency having jurisdiction over the project.

"**BACKGROUND LEVEL MONITORING**" means a method used to determine airborne asbestos fiber concentrations inside or outside a building prior to starting an asbestos abatement project.

"**CLEAN ROOM**" means an uncontaminated area or room which is a part of the worker decontamination enclosure with provisions for storage of workers' street cloths and protective equipment.

"**CLEARANCE AIR MONITORING**" means the employment of aggressive sampling techniques, with a volume of air collected to determine the airborne concentration of residual fibers upon conclusion of an asbestos abatement project.

"**CURTAINED DOORWAY**" means a device which consists of overlapping sheets of plastic over an existing or temporarily framed doorway.

"**DECONTAMINATION ENCLOSURE SYSTEM**" means a series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, materials, and equipment.

"**ENCAPSULANT (SEALANT)**" means a liquid material which can be applied to asbestos-containing material and which temporarily controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant).

"**EPA**" means the Environmental Protection Agency

"**EQUIPMENT DECONTAMINATION ENCLOSURE**" means that portion of a decontamination enclosure system designed for the controlled transfer of materials and equipment, consisting of a washroom and a holding area.

"**EQUIPMENT ROOM**" means a contaminated area or room which is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.

"**FIXED OBJECT**" means a unit of equipment in the work area which cannot be removed from the work area.

"**HEPA FILTER**" means a high efficiency particulate absolute air filter capable of trapping and retaining 99.97% of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

"**HEPA VACUUM EQUIPMENT**" means vacuuming equipment with a high efficiency particulate absolute air filter system.

"**HOLDING AREA**" means a chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.

"**HOMOGENEOUS WORK AREA**" means a site within the abatement work area which contains one type of asbestos-containing material and where one type of abatement is used.

"**MOVABLE OBJECT**" means a unit of equipment or furniture in the work area which can be removed from the work area.

"**NEGATIVE AIR PRESSURE EQUIPMENT**" means a portable local exhaust system equipped with HEPA filtration. The system shall be capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated area, creating a negative pressure differential between the outside and inside of the work area.

"**NESHAPS**" means the National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

"**NIOSH**" means National Institute for Occupational Safety and Health

"**OSHA**" means the Occupational Safety and Health Administration

"**OUTSIDE AIR**" means the air outside buildings and structures.

"**PCM**" means phase contract microscopy which is an optical microscopic technique used for the counting of fibers in air samples, but which does not distinguish fiber types.

"**PERSONAL AIR MONITORING**" means a method used to determine employees' exposure to airborne fibers. The sample is collected outside the respirator in the worker's breathing zone. This form of sampling is required by the OSHA asbestos standards (29 CFR 1926.1101).

"**PLASTICIZ**E" means to cover floors and walls with plastic sheeting as herein specified or by using spray plastics as recommended by the department.

"**REMOVAL**" means the stripping of any asbestos-containing materials from surfaces or components of a facility.

"**SHALL**" means the stated provision is mandatory.

"**SHOWER ROOM**" means a room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and suitably arranged for complete showering during decontamination.

"**STAGING AREA**" means the area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

"**STRUCTURAL MEMBER**" means any load-supporting member for a facility, such as beams and load-supporting walls or any non-load supporting member, such as ceilings and non-load-supporting walls.

"**SURFACTANT**" means a chemical wetting agent added to water to improve penetration.

"**SUPERVISOR**" means the Contractor or person designated as the Contractor's representative and responsible for the on-site supervision of the removal, encapsulation, or enclosure of asbestos-containing material in a facility.

"**TEM**" means transmission electron microscopy which is used to analyze clearance air samples in buildings regulated by AHERA. TEM is the only analytical method for determining airborne fiber concentration that distinguishes between asbestos and non-asbestos fibers.

"**VISIBLE EMISSIONS**" means any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

"**WASHROOM**" means a room between the work area and the holding area in the equipment decontamination enclosure system where equipment and waste containers are wet-cleaned and/or HEPA vacuumed prior to disposal.

"**WET CLEANING**" means the process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterward disposing of these cleaning tools as asbestos contaminated waste.

"**WORK AREA**" means designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or such may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized or equipped with a decontamination enclosure system.

"**WORKER DECONTAMINATION ENCLOSURE SYSTEM**" means that portion of a decontamination enclosure system designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room, a shower room and an equipment room separated from each other and from the work area by airlocks, and curtained doorways.

1.03. QUALITY ASSURANCE

A. Abatement Contractor Qualifications:

1. IDPH Registration
2. Experience in asbestos abatement products of similar complexity.
3. Other relevant qualifications.
4. Submit a written description of abatement experience in the state of Illinois.

B. Asbestos Abatement Contractor provide personnel with the following minimum qualifications; in accordance with IDPH Rules and Regulations:

1. Asbestos Project Supervisor:

a. IDPH Licensed asbestos worker.
b. Minimum two years' experience in supervising projects of similar complexity.
c. OSHA Certified competent person 1926.11012.

2. Asbestos Workers:

a. IDPH Licensed Asbestos Worker.

C. The Owner will employ a full time Asbestos Project Manager/Air Sampling Professional on the site at all times during the performance of all asbestos work. The duties and responsibilities of the APM/ASP shall be as specified in the IDPH Rules and Regulations.

1.04. INCORPORATION BY REFERENCE-FEDERAL REGULATIONS AND OTHER STANDARDS

A. All citations to Federal regulations in this Part concern the specified regulation in the current Code of Federal Regulations, unless another date is specified.

B. All incorporations by reference of Federal regulations and the standards of nationally recognized organizations refer to the regulations and standards on the date specified and any additions or deletions subsequent to the date specified.

C. The Contractor shall comply with the following Federal and State regulations and referenced standards:

1. Title 40, Code of Federal Regulations, Part 763, Asbestos-Containing Materials in Schools; U.S. Environmental Protection Agency (1987).
2. Rules & Regulations for the Asbestos Abatement Act, as amended (77 Illinois Administrative Code, ch. I: Department of Public Health (IDPH) Subchapter p: Hazardous and Poisonous

Substance, Part 855, Asbestos Abatement for Public and Private Schools in Illinois.

3. Ill. Adm. Code Parts 175 and 185.

4. Title 29, Code of Federal Regulations, Section 1926.1101 Occupational Safety and Health Administration (OSHA), U.S. Department of Labor (1987).

5. Title 29, Code of Federal Regulations, Section 1910.134, General Industry Standard for Respiratory Protection (1985).

6. Title 40, Code of Federal Regulations, Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS), U.S. Environmental Protection Agency (EPA) (1990).

7. Guidance for Controlling Asbestos-Containing Materials in Buildings, EPA Report No. 560/5-83-002 (1985).

8. National Electric Code, 1984 Ed., National Fire Protection Association, Quincy, MA 02157.

9. Compressed Gas Association Commodity Specification, G-7.1 (1966).

10. American National Standard Practices for Respiratory Protection, ANSI Z88.2 (1980).

11. American National Standard Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI Z29.2 (1971).

12. National Institute of Occupational Safety and Health, Manual of Analytical Methods (Method 7400) (1987).

13. Environmental Protection Agency, Electron Microscope Measurement of Airborne Asbestos Concentrations, Report No. 600/2-77-178 (1977).

14. Environmental Protection Agency, Methodology for the Measurement of Airborne Asbestos by Electron Microscopy, Contract No. 68-02-3266 (1984).

1.05. SUBMITTALS AND NOTICES

A. In accordance with Section 855.350 of the Illinois Asbestos Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. All notifications shall be received two weeks (10 working days or 14 calendar days) prior to commencement of the work. The contractor shall submit the following items to the Asbestos Project Manager, the U.S. and Illinois Environmental Protection Agencies and the Illinois Department of Public Health:

1. A copy of the Notice of Asbestos Abatement Form provided by the Illinois Department of Public Health for all projects in K-12 schools, or a copy of the notification form provided by the Illinois Department of Public Health for projects in public and commercial buildings.

2. A copy of the demolition/renovation notice shall be submitted as required by Title 40, Code of Federal Regulations, Part 61, Subparts A and M, National Emission Standard for Asbestos (40 CFR Part 61).

3. Written permission from the building Owner confirming the authorization for the commencement of abatement according to IDPH regulations shall be attached to the notification. (Not required for work in public and commercial buildings.)

4. Written verification that notification of all buildings occupants and users has been made pursuant to section 855 prior to commencement of the project. (Not required for work in public and commercial buildings.)

C. Ten days prior to commencement of work, the Contractor shall submit the following items to the Asbestos Project Manager:

1. Documentation that arrangements for the transport and disposal of asbestos-containing or contaminated materials and supplies have been made. The name and location of the disposal site, a copy of handling procedures, and a list of protective equipment utilized for asbestos disposal at the landfill, prepared and signed by the landfill owner, shall be obtained and submitted.

2. Documentation that each asbestos worker has an asbestos worker license.

3. Documentation that the Supervisor is accredited by the Illinois Department of Public Health.

4. Documentation from a physician that all employees or agents who may be exposed to airborne asbestos in excess of background levels have been provided with an opportunity to be medically monitored to determine if physically capable of working while wearing the required respiratory equipment without suffering adverse health effects. In addition, documentation that personnel have received medical monitoring as required in OSHA 29 CFR 1926.1101 shall be submitted. The Contractor shall provide information to the examining physician about conditions in the work place environment (e.g. high temperatures, humidity, chemical contaminants).

5. Drawings for layout and construction of decontamination enclosure systems and barriers for isolation of the work area.

6. A list of NIOSH approvals for all respiratory protective devices utilized on site. In addition, manufacturer certification of HEPA filtration capabilities for all cartridges and filters shall be submitted.

7. Documentation that all of the Contractor's employees and agents who must enter the work area have passed respirator fit tests and have been assigned respirators which fit. This fit testing shall be in accordance with qualitative procedures as detailed in the OSHA Standard 29 CFR 1926.1101 Appendix C Qualitative Fit Test Protocol. 1926.1101.

8. Manufacturer's certification that HEPA vacuums, negative air pressure equipment, and other local exhaust ventilation equipment conform to ANSI Z 9.2-79.

9. When rental equipment is to be used in removal area or to transport waste materials, a copy of the written notification to inform the rental company of the nature of use of the rented equipment.

10. Results of materials testing as conducted before the abatement for purposes of utilization during abatement activities (e.g., testing of encapsulant for depth of penetration, testing of substitute materials for adherence to encapsulated surfaces).

D. During abatement activities the Contractor shall submit the following items to the Asbestos Project Manager:

1. Submit Daily, job progress reports detailing abatement activities, including a review of progress with respect to previously established milestones and schedules, major problems and actions taken, injury reports, property damage and equipment breakdowns.

2. Submit upon occurrence, copies of all transport manifests, trip tickets and disposal receipts for all asbestos waste materials removed from the work area during the abatement process.

3. Submit daily, copies of work site entry log books with information on worker and visitor access.

4. Submit daily, logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls.

5. Submit daily, OSHA compliance air monitoring results.

E. Prior to commencement of work the Asbestos Project Manager shall:

1. Notify occupants of work areas that may be disrupted by the abatement of project dates and requirements for relocation. Arrangements must be made prior to start for relocating of desks, files, equipment and personal possessions to avoid unauthorized access into the work area.

2. Submit to the Contractor results of background level air sampling including sampling location, name of the Air Sampling Professional, equipment utilized and method of analysis.

3. Document that the Owner's employees who are required to enter the work area during abatement have received training equal to or exceeding the Illinois Department of Public Health requirements.

4. Provide to the Contractor information concerning access, shutdown, and protection requirements of equipment and systems in the work area.

1.06. PROTECTION

A. Provide protection for personnel and building as described herein and as required by regulatory agencies.

1. Abatement Contractor shall provide full containment with continuous negative air pressure.

2. Asbestos fiber levels in areas adjacent to the work area shall not exceed 0.01 fibers per cubic centimeter of air (f/cc) or background levels, whichever is higher, as determined by phase contract microscopy. Work shall immediately cease in any work area causing or contributing to such condition. Remedial-action shall be taken to reduce such levels to acceptable limits.

3. The contractor shall be responsible for clean-up of any adjacent areas which become contaminated as a result of the asbestos removal activities.

B. Personnel Protection:

1. All respiratory protection shall be provided to workers in conjunction with a written respiratory protection program which shall meet the requirements of OSHA regulation, 29 CFR 1926.1101(h). This program shall be posted at the work site.

a. Workers shall be provided with personally issued and marked respiratory equipment approved by the National Institute for Occupational Safety and Health (NIOSH).

b. Abatement Contractor shall be fully and solely responsible for insuring that respiratory protection shall be worn by all persons potentially exposed to asbestos from the initiation of

the asbestos abatement project until all areas have been given final clearance.

2. Schedule of minimum acceptable respiratory protection.

   a. In addition to NIOSH, OSHA and IDPH regulations.

   b. Should any condition, be encountered where the exposure level, after application of the appropriate protection factor of the respiratory equipment in use, exceeds 0.01 f/cc, respiratory equipment with protection factors which reduce worker exposure levels below 0.01 f/cc shall be used.

   c. Pre-cleaning/Wet Wiping of Area: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   d. Containment Construction: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   e. Asbestos Removal and Clean-Up: MSHA/NIOSH Type "C", grade "D" air supplied respirators, unless changed by a variance granted by the IDPH.

   f. Asbestos Removal Glove Bag: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   g. Non-friable floor tile and mastic removal: MSHA/NIOSH half-faced dual cartridge respirators equipped with HEPA cartridges.

   h. Containment Removal: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   i. Loading Waste Material on Truck (outside work area): MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   j. Unloading Bags at Landfill: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.

   k. Provide authorized visitors with suitable respirators with fresh cartridges or a Type "C" respirator, depending on phase of operation, whenever they are required to enter the work area.

   3. Protective Clothing and Equipment.

      a. Provide workers with sufficient sets of disposable protective full-body clothing. Such clothing shall consist of full-body coveralls, footwear, and head gear as manufactured by Kimberly Clark "Kleenguard", one-piece coveralls or equal. Provide eye protection and hard hats as required by applicable safety regulations. Disposable clothing shall be disposed of as contaminated waste.

      b. Provide authorized visitors with suitable protective clothing, headgear, footwear, and gloves as described above whenever they are required to enter the work area.

      c. The contractor shall post all required notification at the work site including but not limited to:

         I. "Caution - Asbestos Hazard" signs in accordance with OSHA Regulation 29 CFR

1926.1101 shall be posted at all internal doorways which provide access to the area in which the work will take place. The purpose of these signs is to inform persons entering an area where asbestos contamination may be present.

II. Department of Labor - OSHA poster Number 3038 shall be hung in place clearly visible to workmen each day prior to entering contaminated areas. This poster details the detrimental effects of airborne asbestos fibers on human health and emphasizes the importance of respirators and protective clothing.

III. A copy of the U.S. Environmental Protection Agency Regulations for Asbestos,-40 CFR Part 61, Subparts A and M and a copy of U.S. Department of Labor - OSHA Asbestos Regulations, 29 CFR 1926.1101, shall be posted in the clean room.

IV. A project directory of telephone numbers for local hospital and/or emergency squad, local fire department, a representative of the Owner, who may be reach 24 hours a day, the contractor's headquarters and other professional consultants directly involved in the project, shall be posted in the clean room.

1.07. DELIVERY STORAGE AND HANDLING

A. Protection:

1. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.

2. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

3. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of in accordance with applicable regulations.

2. PRODUCTS

2.01. MATERIALS

A. In accordance with Section 855.390 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Plastic Sheeting:

1. Polyethylene

2. Mil. thickness.

3. Clear and opaque as indicated.

4. Flame retardant.

C. Tape:

1. Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under

both dry and wet conditions, including use of amended water.

D. Adhesives:

1. Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.

E. Surfactant:

1. Polyoxyethylene ether and 50% of polyoxyethylene ester, or equivalent, and shall be mixed with water to provide a concentration of one ounce of surfactant to 5 gallons of water.

F. Encapsulant:

1. Capable of eliminating fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the asbestos containing material.

G. Impermeable Containers:

1. Air tight.

2. Water tight.

3. Capable of receiving and retaining any asbestos containing or contaminated materials for storage and transport to a disposal site.

4. Labeled in accordance with:

   a. OSHA Regulation 29 CFR 1926.1101.

   b. Department of Transportation Rule 49 CFR Parts 171 and 172, Hazardous Substances.

   c. Environmental Protection Agency 40 CFR Part 61, (NESHAPS).

5. Plastic bags shall be 6-mil in thickness and shall be in accordance with State and Federal Regulations.

6. Labels shall carry the following warnings:

   a. OSHA: DANGER
   CONTAINS ASBESTOS FIBERS
   AVOID CREATING DUST
   CANCER AND LUNG DISEASE HAZARD

   b. DOT: RQ HAZARDOUS SUBSTANCE
   SOLID, NOS,
   ORM-E, NA 9188
   (ASBESTOS)

   c. NESHAPS: Name of waste generator and the location at which the waste was generated.

7. Disposal Drums:

    a. Metal or fiberboard with locking ring tops.

H. Incidental Materials:

1. Plywood: New, 5/8" thickness.

2. Wood Furring: New, 1" x 3" nominal thickness.

3. Fasteners: As required to securely join components to each other and substrates.

I. Latex Leveling Compound: SikaTop 122 as manufactured by Sika Corporation, Lyndhurst, New Jersey or approved equal.

J. Floor tile mastic remover

1. Low odor, non-toxic, non-hazardous, high flash point similar to:

    a. Amerisafe SAFE 200+ No Odor Mastic Remover
    b. Sentinel 747 Low Odor Mastic Remover
    c. Graying Control Low Odor Mastic Remover

2.02. EQUIPMENT

A. In accordance with Section 855.390 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Water Sprayer: Airless or pressure type.

C. Negative Air Pressure Equipment.

1. Contractor shall monitor pressure differentials across decontamination unit with a differential pressure meter equipped with a strip chart recorder. Meter shall be equipped with a warning buzzer which will sound if pressure differential drops below 0.01" of water.

2. Negative Air Machines

    a. General: Contractor shall supply the required number of asbestos air filtration units to the site in accordance with these specifications. Each unit shall include the following:

        1) Cabinet: Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Cabinet shall be factory sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.

        2) Fans: Contractor shall rate capacity of fan according to usable air moving capacity under actual operating conditions. Contractor shall use centrifugal type fan.

        3) HEPA Filters: The final filter shall be the HEPA type. The filter media (folded into closely pleated panels) must be completely sealed on all edges with a structurally rigid frame.

a) A continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.

b) Each filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles. Testing shall be in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Each filter shall bear a UL586 label to indicate ability to perform under specified conditions.

c) Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.

4) Pre-filters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of pre-filtration are required. The first stage pre-filter shall be a low efficiency type (e.g., for particles 10 um and larger). The second stage (or intermediate) filter shall have a medium efficiency (e.g., effective for particles down to 5 um). Pre-filters and intermediate filters shall be installed either on or in the intake grid of the unit and held in place with special housing or clamps.

5) Instrumentation: Each unit shall be equipped with a Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed. A table indicating the usable air-handling capacity for various static pressure reading on the Magnehelic gauge shall be affixed near the gauge for reference, or the Magnehelic reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point. Provide units equipped with an elapsed time meter show the total accumulated hours of operation.

6) Safety and Warning Devices: The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter. Units shall be equipped with automatic shutdown system to stop fan in the event of a major rupture in the HEAP filter or blocked air discharge. Warning lights are required to indicate normal operation, too high a pressure drop across the filter (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).

7) Electrical components shall be approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.

D. Vacuums: HEPA filtration, UL listed, NEMA approved.

3. EXECUTION

3.01. CONDITION OF SURFACES

A. Examine all surfaces including those concealed above the suspended ceiling.

B. Verify condition of existing wall and floor finishes.

3.02. WORKPLACE ENTRY AND EXIT PROCEDURES

A. In accordance with Section 855.370 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. All the following procedures shall be posted in the clean room and equipment room.

C. These procedures shall be followed throughout the abatement project until clearance air monitoring has been performed and documented to the satisfaction of the Asbestos Project Manager.

1. All workers and authorized personnel shall enter the work area through the worker decontamination enclosure system

2. All personnel who enter the work area shall sign the entry log, located in the clean room, upon entry and exit.

3. All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection requirements (including work place entry and exit procedures) and emergency procedures. A sign-off sheet shall be used to acknowledge that these have been reviewed and understood by all personnel prior to entry.

4. All personnel shall proceed first to the clean room, remove all clothing and put on respiratory protection, disposable coveralls, head covering and foot covering. Hard hats, eye protection, and gloves shall also be utilized if required. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.

    a) During projects that involve only the use of non-friable methods to remove floor tile and mastic, workers may wear street cloths under disposable coveralls at the contractor's discretion.

5. Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower room and equipment room to the main work area.

6. Before leaving the work area, all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures. (Small HEPA vacuums with brush attachments may be utilized for this purpose as larger machines may tear the suits.) Each person shall clean bottoms of protective footwear in a walk-off plan immediately prior to entering the equipment room.

7. Personnel shall proceed to the equipment room where all protective equipment except respirators shall be removed. Disposable clothing shall be deposited into appropriately labeled containers for disposal.

8. Reusable, contaminated footwear shall be stored in the equipment room when not in use in the work area and shall be disposed of as asbestos contaminated at the completion of the abatement for reuse.

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

    a) During projects that involve only the use of non-friable methods to remove floor tile and mastic showers are not mandatory at the contractor's discretion.

10. After showering and drying, personnel shall proceed to the clean room and dress in clean disposable clothing if returning to the work area or street clothes at the end of the work shift.

3.03. EQUIPMENT AND WASTE CONTAINER REMOVAL PROCEDURES

A. In accordance with Section 855.460 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois and the following requirements.

B. External surfaces of contaminated containers and equipment shall be cleaned by wet sponging and/or HEPA vacuuming before moving such items into the equipment decontamination enclosure system washroom for the final cleaning.

C. Once in the equipment decontamination enclosure system, external surfaces of contaminated containers and equipment shall be wet cleaned a second time by wet sponging before moving such items into the holding area pending removal to uncontaminated areas.

D. Containers and equipment shall be removed from the holding area by workers who have entered from uncontaminated areas dressed in clean disposable coveralls and respiratory protection as described in Section 1.06. Drums shall be enclosed in clean, labeled, 6-mil polyethylene bags and removed to the outside.

E. The Contractor shall **solidify** solvent residues and residues from strippers and place solidified wastes in drums made out of a material that cannot be dissolved or corroded by the chemicals.

F. The exit from the equipment decontamination enclosure system shall be secured to prevent unauthorized entry. At no time is a worker from an uncontaminated area to enter the enclosure when a removal worker is inside.

3.04. BUILDING PROTECTION

A. In accordance with Section 855.380 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

3.05. WORK AREA PREPARATION

A. In accordance with Section 855.400 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Before disturbing, handling or disposing of any contaminated product, fixture or material, or if air monitoring tests indicate a fiber count in excess of .01 fibers per cubic centimeter in or around the work area, or if the proposed work area is known to be or suspected of being contaminated at the time work commences, a personnel decontamination unit shall be in place and utilized, and all workers and other personnel in or around the work area shall wear protective clothing and respirators as previously specified while performing the work of this section of the specifications.

C. Post caution signs meeting the specifications of OSHA 29 CFR 1926.1101 at any location and approaches to a location where airborne concentrations of asbestos may exceed ambient background levels. Signs shall be posted at a distance sufficiently far enough away from the work area to permit a person to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of work place enclosure barriers.

1. The signs shall be 20" x 14" vertical format manufactured signs with lettering sizes as specified in OSHA regulations. The spacing between lines shall be at least equal to the height of the upper of

any two lines.

2. The warning signs shall bear the following information:

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

D. Erect critical barriers over all air vents and entrances into non-abatement areas.

E. Entrance and egress into the work area will be through a decontamination unit.

F. Protection of floor and wall surfaces for non-friable floor tile and mastic removal shall be limited to covering walls and equipment adjacent to mastic removal locations a minimum of four feet up walls and equipment.

G. Protection of floor and wall surfaces for non-IDPH projects shall be limited to that required by EPA and OSHA regulations.

3.06. PERSONNEL DECONTAMINATION ENCLOSURE SYSTEM

A. In accordance with Section 855.410 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Provide approved self-contained trailer unit.

C. Personnel decontamination units are not required for non-friable floor tile and mastic projects.

3.07. EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM

A. In accordance with Section 855.425 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Equipment decontamination units (EDU) shall be utilized for non-friable floor tile removal for areas greater than 100 square feet. EDUs shall be constructed at the entrance to each area where non-friable work is to occur. If a series of rooms/areas in a contiguous area are involved, a separate EDU shall be constructed at the entrance to each room/area and at the entrance to the contiguous area. Equipment decontamination units are not required for non-friable floor tile and mastic projects under one hundred square feet. Contractor shall install a curtained doorway at entrance to work area.

C. Equipment decontamination units are not required for non-friable floor tile and mastic projects under one hundred square feet. Contractor to install a curtained doorway at entrance to work area.

3.08. CONSTRUCTION AND MAINTENANCE OF DECONTAMINATION ENCLOSURE SYSTEMS AND WORKPLACE BARRIERS

A. In accordance with Sections 855.430 and 855.440 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois

B. For non-friable floor tile projects construct and maintain separation barriers as described in Section 844.430 and 855.440 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois to separate and isolate the work area from the remained

of the building and as indicated on the project drawings.

3.09. CONTAINED GROSS REMOVAL

A. CONTAINED GROSS REMOVAL
   1. In accordance with Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois:

      a) Section 855.450: Commencement of Work
      b) Section 855.460: Removal Procedures
      c) Section 855.500: Encapsulation

B. NON-FRIABLE REMOVAL OF FLOOR TILE AND MASTIC
   1. In accordance with Illinois Rules and Regulations for Asbestos Abatement in Public and Private Schools and Commercial and Public Buildings in Illinois:

      a) Section 844.40 Commencement of Work
      b) Removal Procedures

         1) Floor tile and mastic shall be removed using non-friable methods using infra-red heaters or other devices or methods that allow the tile to be removed without breakage.

         2) If tile cannot be removed without breaking, all work shall stop and gross removal methods hall be utilized.

      c) Floor tile mastic shall be removed using non-toxic, low odor solvents or removers, solvents shall not be allowed to become dry during use.

C. GLOVEBAG REMOVAL OF THERMAL SYSTEM INSULATION
   1. In accordance with Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois:

      a) Section 855.450: Commencement of Work
      b) Section 855.480: Glovebag Procedures
      c) Section 855.500: Encapsulation

3.10. CLEANUP PROCEDURES

A. In accordance with Section 855.465 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Following the removal workers shall perform clean-up in accordance with all IDPH rules and regulations and with the following procedures:

   1. First Clean: Wet wipe all visible residue from walls and floor. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent. Poly on walls may be removed and discarded as contaminated waste. After 12-hour settling time, workers may begin second clean.

   2. Second Clean: Wet wipe all surfaces and HEPA Vacuum all objects in work area. Remove all equipment from work area. After a 12-hour settling time, workers may begin third clean. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent.

3. Third Clean: Wet wipe all surfaces and HEPA Vacuum all objects in work area. Remove all equipment from work area. After a 12-hour settling time, workers may schedule final visual inspection. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent.

C. Following non-friable removal of floor tile and mastic, all floors shall be cleaned twice as described in paragraph 3.10 (B)(1), first clean, in addition to the other work specified in Paragraph 3.10 (B)(1).

D. Following non-IDPH projects, clean-up shall include the cleaning specified in paragraph 3.10 (B)(1), first clean, of the specifications, plus an additional cleaning of the floors using detergent, grease removal product, or cleaner specified by the manufacture of the mastic removal solvent

E. The work shall require clearance air sample analysis taken by transmission electron microscopy (TEM). Upon satisfaction of the Project Manager air sampling will begin. Air Sampling Professional will follow the Illinois Department of Public Health air sampling protocol.

3.11. CLEARANCE AIR MONITORING

A. In accordance with Section 855.470 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. Clearance air monitoring shall be conducted and analyzed according to Phase Contrast Microscopy or Transmission Electron Microscopy methods.

C. The Contractor remains fully responsible for the health and safety of all persons coming into contact with the affected areas and testing required to assure same.

D. The Contractor shall provide all OSHA required personal samples.

E. Contractor shall be responsible for securing air clearance test result from air sampling professional.

1. Results of sample analyses shall be available:

a. Within 24 hours for samples collected during removal.

b. Within 48 hours for the post-removal clean check samples. If the Contractor desires faster turnaround time for sample results, the additional cost shall be borne by the Contractor.

c. If air sampling does not indicate satisfactory completion, cleaning shall be repeated, supplemented by the appropriate additional cleaning procedures as necessary until satisfactory completion is achieved. The cost for these additional cleanings, as well as all costs for the air sampling professional, asbestos project manager and air sampling analysis, related to additional cleaning and clearance testing, shall be borne by the Contractor.

3.12. DISPOSAL PROCEDURES

A. In accordance with Section 855.475 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. The Asbestos Project Manager reserves the right to accompany the transporter to the landfill.

C. As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos-containing waste shall be moved and transported to the prearranged disposal

location.

D. If the Contractor uses chemical solvents, chemical remover, or any combination of chemical products, the Contractor shall provide the owner with written documentation that the wastes generated from the use of said chemical products were disposed of in compliance with all local, county, state and federal regulations.

   If the waste generated through the use of chemical solvents, chemical remover or any combination of chemical products is disposed of as a non-hazardous waste (as defined in 40 CFC 261) the Contractor shall provide the Owner with substantial proof that the wastes were in fact non-hazardous.

E. The Contractor shall **solidify** solvent residues and residues from strippers and place solidified wastes in drums made out of material that cannot be dissolved or corroded by the chemicals.

F. Disposal shall occur at an authorized site in accordance with regulatory requirements of NESHAP and applicable state and local guidelines and regulations.

G. All dump receipts, trip tickets, transportation manifests and/or other documents of disposal shall be delivered to the Owner for his records. A record keeping format utilizing a chain-of-custody form shall include the names and addresses of the Owner, Contractor, pickup site, disposal site, the estimated quantity of the asbestos waste and the type and number of containers used. The form shall be signed by the Owner, the Contractor, and the Disposal Site Operator, as the material changes custody. If a separate hauler is employed, his name, address, telephone number and signature shall also appear on the form.

H. The Contractor shall transport asbestos materials in accordance with the following procedures:

   1. Drums, bags and wrapped components that have been removed from the work area shall be loaded into an enclosed truck for transportation.

   2. The enclosed cargo area of the truck shall be free of debris and lined with 6-mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the side walls. Wall sheeting shall overlap by six (6) inches and be taped into place.

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

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

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

   6. Large metal dumpsters used for asbestos waste disposal shall have doors or tops that can be closed and locked to prevent vandalism, wind dispersion of asbestos fibers, or other disturbance of bagged asbestos debris. Unbagged material and non-asbestos waste shall not be placed in these containers. Bags shall be placed, not thrown, into these containers to avoid splitting.

   7. Asbestos-containing materials shall be transported directly to the landfill. Temporary storage at a location other than the abatement project shall not be permitted.

I. The Contractor shall dispose of asbestos materials in accordance with the following procedures:

1. Upon reaching the landfill, trucks shall approach the dump location as closely as possible for unloading of the asbestos-containing waste.

2. Bags, drums and components shall be inspected when off-loaded at the disposal site. Material in damaged containers shall be repacked in empty drums or bags.

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

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

5. Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet method. Polyethylene sheeting shall be removed and discarded in bags or drums along with contaminated cleaning materials and protective clothing once daily.

3.13. REESTABLISHMENT OF WORK AREA

A. In accordance with Section 855.520 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

B. The Contractor shall repair all areas of damage that occurred as a result of abatement activities.

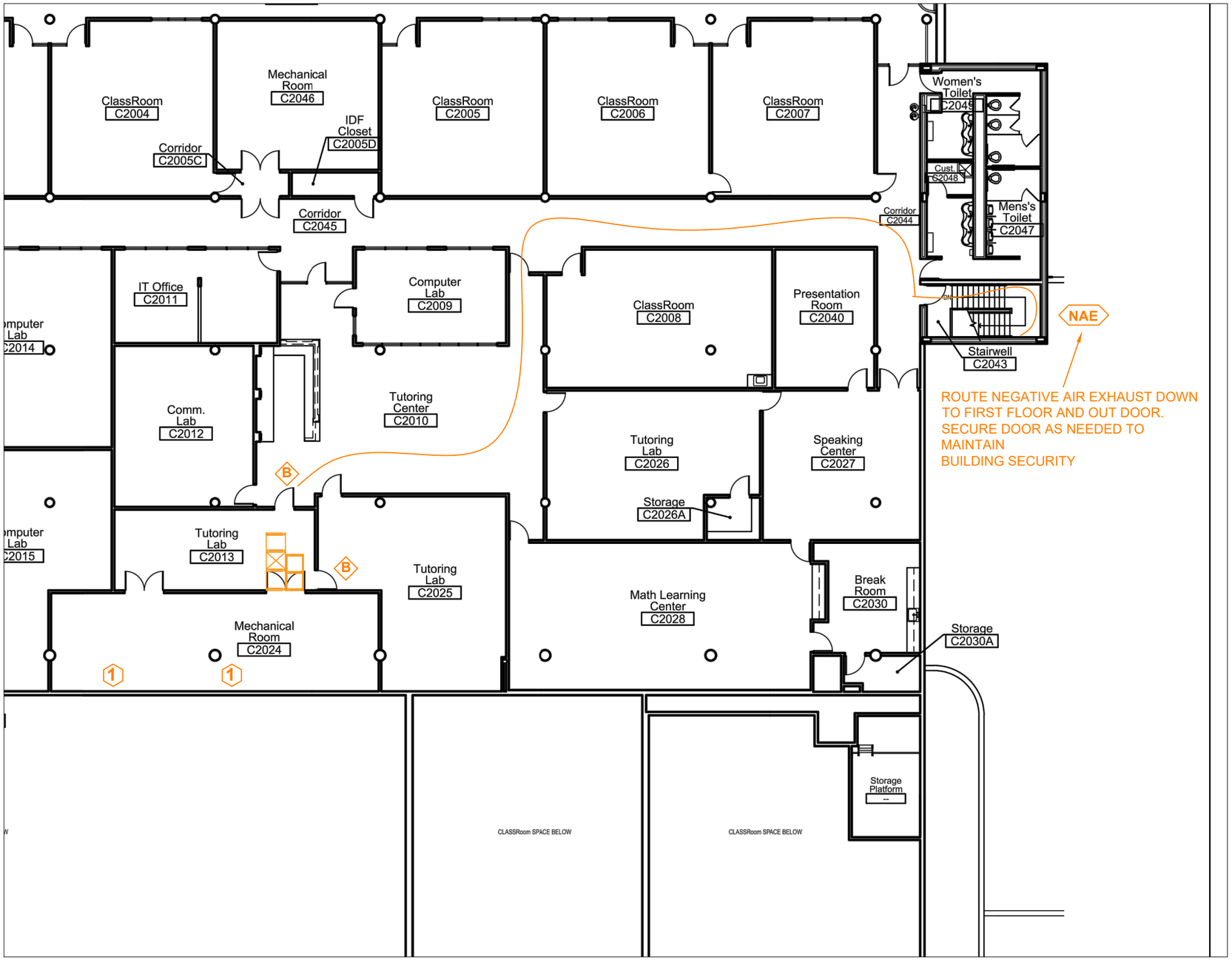
C. Upon completion of the work, the Contractor provide:

1. Written certification that all work was done in complete conformance with all applicable IDPH, OSHA, EPA and all other applicable regulations.

2. Written certification that all asbestos containing material has been removed from the site and legally disposed of in an approved waste disposal site.

3. Written certification that areas have had all specified asbestos removed from the work area.

END 02080



1 ASB01 **C BUILDING SECOND FLOOR PARTIAL ABATEMENT PLAN**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION SYSTEM WITH LOCKABLE DOOR.
- INDICATES LOCATION OF TWO (2) CHAMBER WASTE DECONTAMINATION ENCLOSURE SYSTEM WITH LOCKABLE DOOR.
- NAE — INDICATES LOCATION OF HEPA FILTERED NEGATIVE AIR EXHAUST.
- A — INDICATES LOCATION OF CONTAINMENT SEPARATION BARRIER PER IDPH SECTION 855.430(a) REQUIREMENTS.
- B — INDICATES LOCATION OF CONSTRUCTION SEPARATION BARRIER PER IDPH SECTION 855.430(b) REQUIREMENTS.
- C — INDICATES CONTRACTOR TO SECURE DOORWAY AND CONTROL ACCESS TO ABATEMENT ACTIVITIES.

ABATEMENT KEY NOTES

1	REMOVE NON-ACM DRYWALL AND ACM DRYWALL JOINT COMPOUND INSIDE NEGATIVE PRESSURE WORK AREA. REMOVE DRYWALL/JOINT COMPOUND ON THE MECHANICAL ROOM SIDE OF THE WALL FRAME ONLY. LEAVE CLEAN STRAIGHT EDGE WITH NO EXPOSED JOINT COMPOUND. AREA OF REMOVAL TO BE MARKED BY OTHERS.
2	ALTERNATIVE NO. 1: REMOVE ASBESTOS CONTAINING FLOOR AND MASTIC USING NON-FRIABLE METHODS.

GENERAL NOTES

- COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.
- ABATEMENT CONTRACTOR RESPONSIBLE FOR THE SECURITY OF WORK AREAS DURING ALL ABATEMENT ACTIVITIES.
- THE SCOPE OF WORK IS THE REMOVAL OF ALL DRYWALL AND DRYWALL JOINT COMPOUND WITHIN THE PROJECT LIMITS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXTENT OF WORK AND BRINGING ANY QUESTIONS OR DISCREPANCIES TO THE ENVIRONMENTAL CONSULTANT BEFORE SUBMITTING PRICE FOR THE WORK.
- IN ALL LOCATIONS THE DRYWALL BOARD AND THE DRYWALL JOINT COMPOUND ON THE OUTSIDE WALLS OF THE MECHANICAL ROOMS WALLS HAS BEEN CONFIRMED NON-ASBESTOS.

TEM ENVIRONMENTAL, INC.
174 NORTH BRANDON
GLENDALE HEIGHTS, IL 60139
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IDPH 100-00349

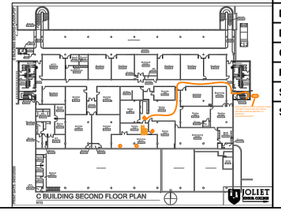
JOLIET JUNIOR COLLEGE
2023 HVAC REPLACEMENT PROJECT
ASBESTOS ABATEMENT

ISSUE/REVISION:

REV.	DATE	DESCRIPTION
1	10/12/23	50% DD REVIEW

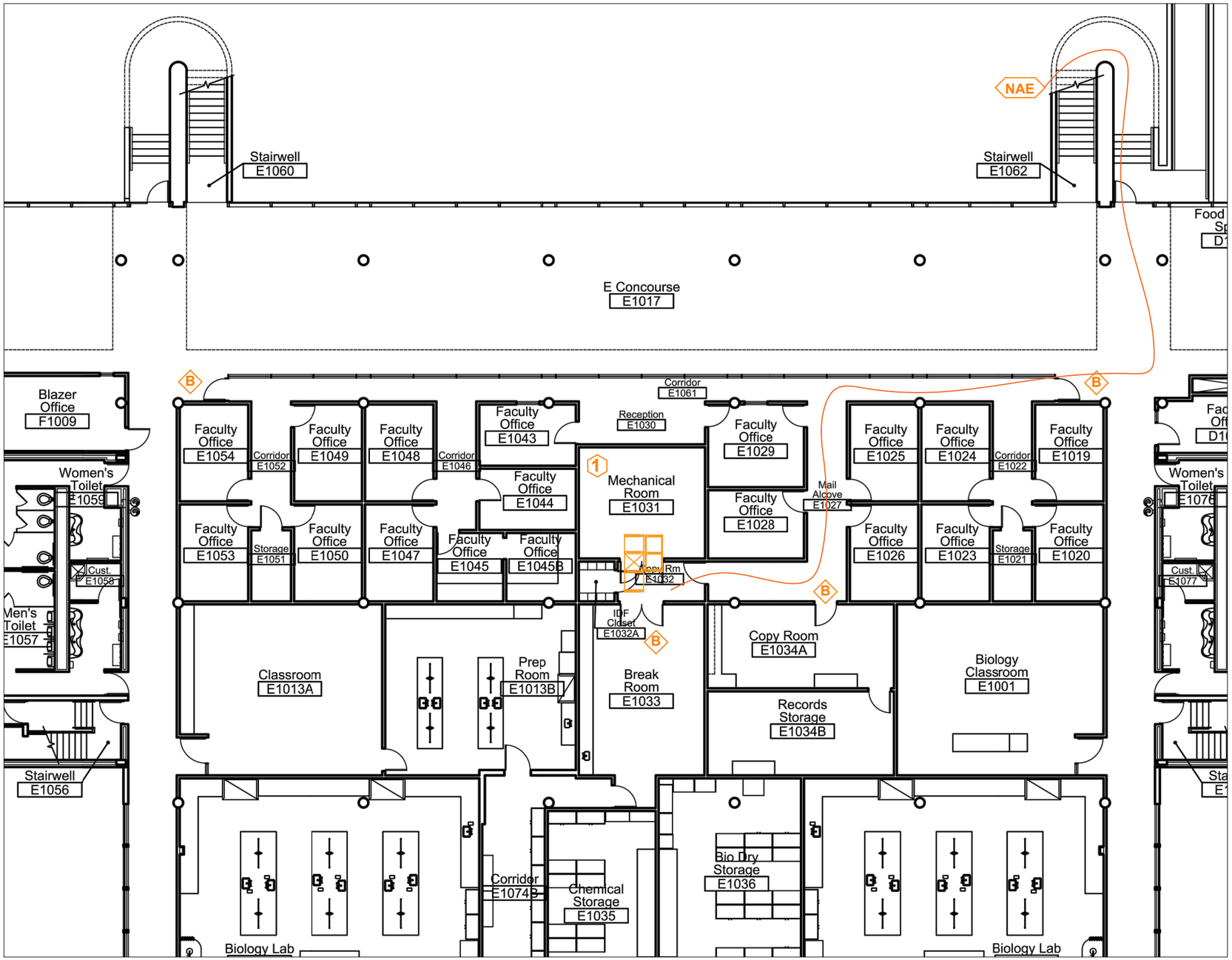
PROJECT:
JOLIET JUNIOR COLLEGE
2023 HVAC REPLACEMENT PROJECT

DRAWING TITLE:
ABATEMENT PLAN
C BUILDING SECOND FLOOR



DESIGNED BY: J TUINENGA CIH
DRAWN BY: J. TUINENGA, CIH
CHECKED BY: J.O'BRIEN
PROJECT NO: 70692 .
SCALE: NOT TO SCALE
SHEET NO.

ASB01



1 ASB02 **E BUILDING FIRST FLOOR PARTIAL ABATEMENT PLAN**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION SYSTEM WITH LOCKABLE DOOR.
- INDICATES LOCATION OF TWO (2) CHAMBER WASTE DECONTAMINATION ENCLOSURE SYSTEM WITH LOCKABLE DOOR.
- NAE — INDICATES LOCATION OF HEPA FILTERED NEGATIVE AIR EXHAUST.
- A — INDICATES LOCATION OF CONTAINMENT SEPARATION BARRIER PER IDPH SECTION 855.430(a) REQUIREMENTS.
- B — INDICATES LOCATION OF CONSTRUCTION SEPARATION BARRIER PER IDPH SECTION 855.430(b) REQUIREMENTS.
- C — INDICATES CONTRACTOR TO SECURE DOORWAY AND CONTROL ACCESS TO ABATEMENT ACTIVITIES.

ABATEMENT KEY NOTES

1	REMOVE NON-ACM DRYWALL AND ACM DRYWALL JOINT COMPOUND INSIDE NEGATIVE PRESSURE WORK AREA. REMOVE DRYWALL/JOINT COMPOUND ON THE MECHANICAL ROOM SIDE OF THE WALL FRAME ONLY. LEAVE CLEAN STRAIGHT EDGE WITH NO EXPOSED JOINT COMPOUND. AREA OF REMOVAL TO BE MARKED BY OTHERS.
2	ALTERNATIVE NO. 1: REMOVE ASBESTOS CONTAINING FLOOR AND MASTIC USING NON-FRIABLE METHODS.

GENERAL NOTES

- COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.
- ABATEMENT CONTRACTOR RESPONSIBLE FOR THE SECURITY OF WORK AREAS DURING ALL ABATEMENT ACTIVITIES.
- THE SCOPE OF WORK IS THE REMOVAL OF ALL DRYWALL AND DRYWALL JOINT COMPOUND WITHIN THE PROJECT LIMITS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXTENT OF WORK AND BRINGING ANY QUESTIONS OR DISCREPANCIES TO THE ENVIRONMENTAL CONSULTANT BEFORE SUBMITTING PRICE FOR THE WORK.
- IN ALL LOCATIONS THE DRYWALL BOARD AND THE DRYWALL JOINT COMPOUND ON THE OUTSIDE WALLS OF THE MECHANICAL ROOMS WALLS HAS BEEN CONFIRMED NON-ASBESTOS.

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2023 HVAC REPLACEMENT PROJECT
ASBESTOS ABATEMENT

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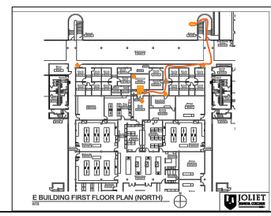
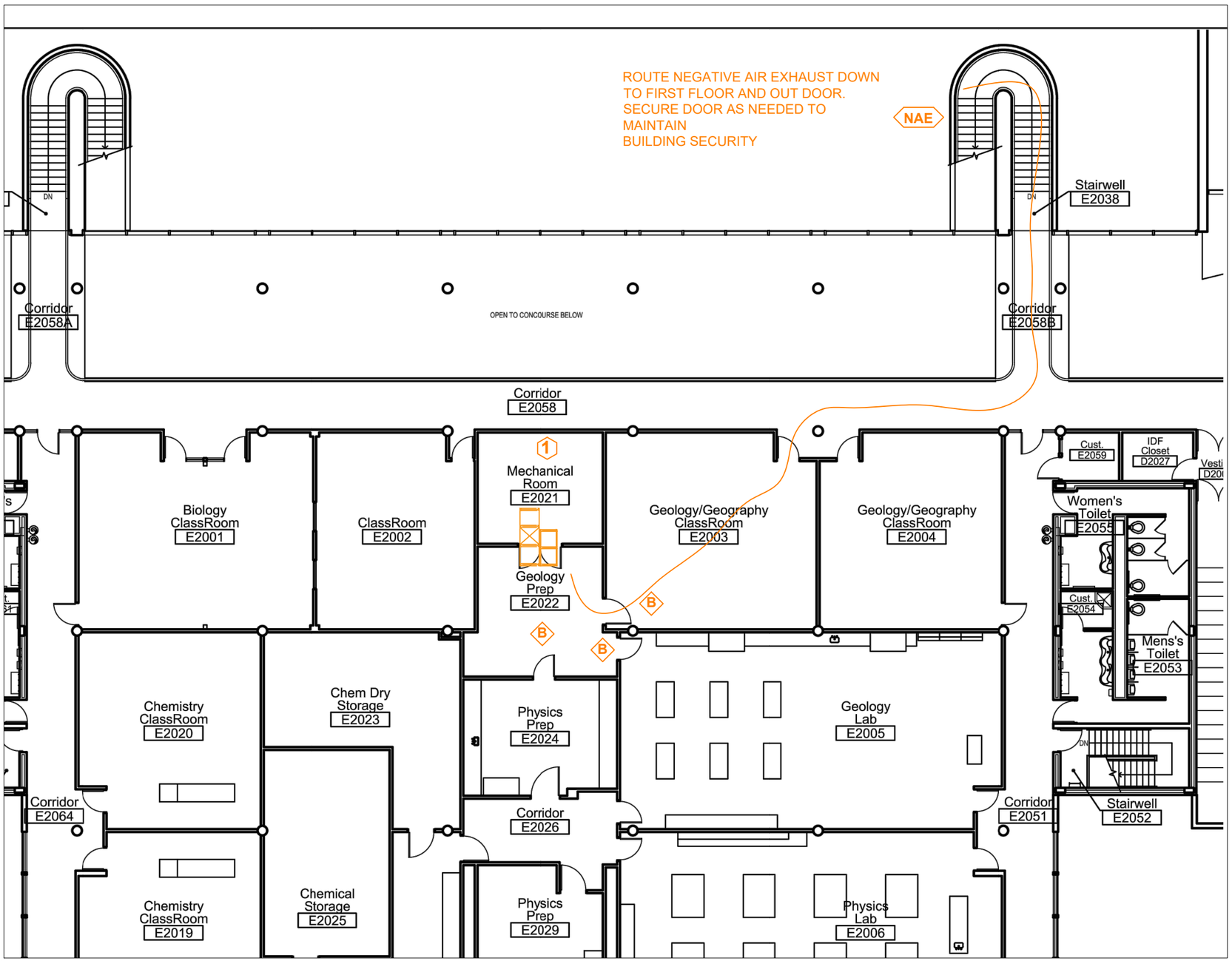
PROJECT:
JOLIET JUNIOR COLLEGE
2023 HVAC REPLACEMENT PROJECT

DRAWING TITLE:
ABATEMENT PLAN
E BUILDING FIRST FLOOR



DESIGNED BY: J TUINENGA CIH
DRAWN BY: J. TUINENGA, CIH
CHECKED BY: J.O'BRIEN
PROJECT NO: 70692 .
SCALE: NOT TO SCALE
SHEET NO.
ASB02



1 ASB03 **E BUILDING SECOND FLOOR (NORTH) ABATEMENT PLAN**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION SYSTEM WITH LOCKABLE DOOR.
- INDICATES LOCATION OF TWO (2) CHAMBER WASTE DECONTAMINATION ENCLOSURE SYSTEM WITH LOCKABLE DOOR.
- NAE — INDICATES LOCATION OF HEPA FILTERED NEGATIVE AIR EXHAUST.
- A — INDICATES LOCATION OF CONTAINMENT SEPARATION BARRIER PER IDPH SECTION 855.430(a) REQUIREMENTS.
- B — INDICATES LOCATION OF CONSTRUCTION SEPARATION BARRIER PER IDPH SECTION 855.430(b) REQUIREMENTS.
- C — INDICATES CONTRACTOR TO SECURE DOORWAY AND CONTROL ACCESS TO ABATEMENT ACTIVITIES.

ABATEMENT KEY NOTES

1	REMOVE NON-ACM DRYWALL AND ACM DRYWALL JOINT COMPOUND INSIDE NEGATIVE PRESSURE WORK AREA. REMOVE DRYWALL/JOINT COMPOUND ON THE MECHANICAL ROOM SIDE OF THE WALL FRAME ONLY. LEAVE CLEAN STRAIGHT EDGE WITH NO EXPOSED JOINT COMPOUND. AREA OF REMOVAL TO BE MARKED BY OTHERS.
2	ALTERNATIVE NO. 1: REMOVE ASBESTOS CONTAINING FLOOR AND MASTIC USING NON-FRIABLE METHODS.

GENERAL NOTES

- COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.
- ABATEMENT CONTRACTOR RESPONSIBLE FOR THE SECURITY OF WORK AREAS DURING ALL ABATEMENT ACTIVITIES.
- THE SCOPE OF WORK IS THE REMOVAL OF ALL DRYWALL AND DRYWALL JOINT COMPOUND WITHIN THE PROJECT LIMITS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXTENT OF WORK AND BRINGING ANY QUESTIONS OR DISCREPANCIES TO THE ENVIRONMENTAL CONSULTANT BEFORE SUBMITTING PRICE FOR THE WORK.
- IN ALL LOCATIONS THE DRYWALL BOARD AND THE DRYWALL JOINT COMPOUND ON THE OUTSIDE WALLS OF THE MECHANICAL ROOMS WALLS HAS BEEN CONFIRMED NON-ASBESTOS.

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2023 HVAC REPLACEMENT PROJECT
ASBESTOS ABATEMENT

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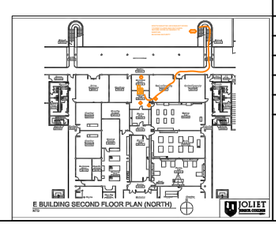
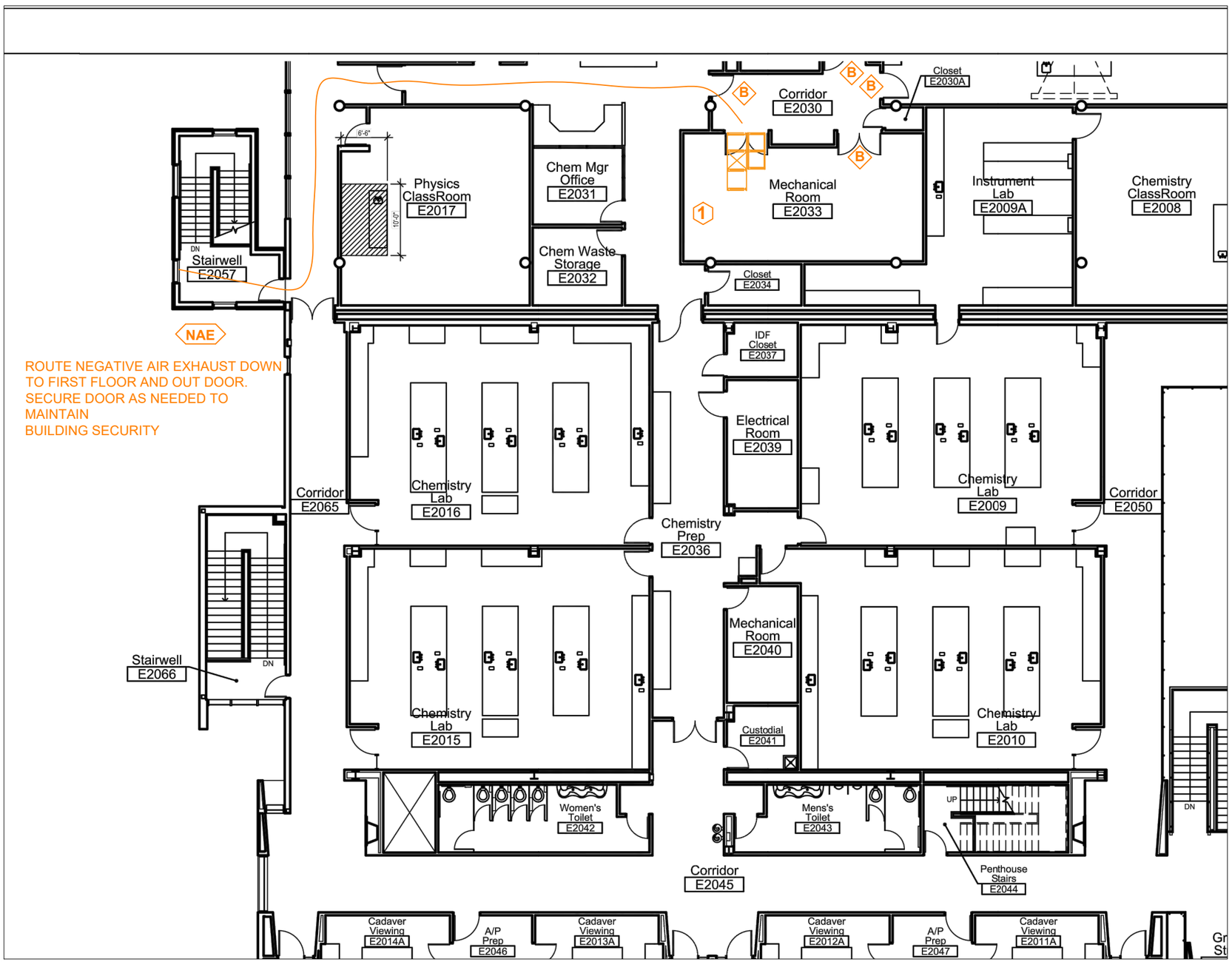
JOLIET JUNIOR COLLEGE
2023 HVAC REPLACEMENT PROJECT

DRAWING TITLE:
ABATEMENT PLAN
E BUILDING SECOND FLOOR (NORTH)

DESIGNED BY: J TUINENGA CIH
DRAWN BY: J. TUINENGA, CIH
CHECKED BY: J.O'BRIEN
PROJECT NO: 70692 .
SCALE: NOT TO SCALE
SHEET NO.
ASB03





1 ASB04 **E BUILDING SECOND FLOOR (SOUTH) ABATEMENT PLAN**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION SYSTEM WITH LOCKABLE DOOR.
- INDICATES LOCATION OF TWO (2) CHAMBER WASTE DECONTAMINATION ENCLOSURE SYSTEM WITH LOCKABLE DOOR.
- NAE — INDICATES LOCATION OF HEPA FILTERED NEGATIVE AIR EXHAUST.
- A — INDICATES LOCATION OF CONTAINMENT SEPARATION BARRIER PER IDPH SECTION 855.430(a) REQUIREMENTS.
- B — INDICATES LOCATION OF CONSTRUCTION SEPARATION BARRIER PER IDPH SECTION 855.430(b) REQUIREMENTS.
- C — INDICATES CONTRACTOR TO SECURE DOORWAY AND CONTROL ACCESS TO ABATEMENT ACTIVITIES.

ABATEMENT KEY NOTES

X	
1	REMOVE NON-ACM DRYWALL AND ACM DRYWALL JOINT COMPOUND INSIDE NEGATIVE PRESSURE WORK AREA. REMOVE DRYWALL/JOINT COMPOUND ON THE MECHANICAL ROOM SIDE OF THE WALL FRAME ONLY. LEAVE CLEAN STRAIGHT EDGE WITH NO EXPOSED JOINT COMPOUND. AREA OF REMOVAL TO BE MARKED BY OTHERS.
2	ALTERNATIVE NO. 1: REMOVE ASBESTOS CONTAINING FLOOR AND MASTIC USING NON-FRIABLE METHODS.

GENERAL NOTES

- COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.
- ABATEMENT CONTRACTOR RESPONSIBLE FOR THE SECURITY OF WORK AREAS DURING ALL ABATEMENT ACTIVITIES.
- THE SCOPE OF WORK IS THE REMOVAL OF ALL DRYWALL AND DRYWALL JOINT COMPOUND WITHIN THE PROJECT LIMITS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXTENT OF WORK AND BRINGING ANY QUESTIONS OR DISCREPANCIES TO THE ENVIRONMENTAL CONSULTANT BEFORE SUBMITTING PRICE FOR THE WORK.
- IN ALL LOCATIONS THE DRYWALL BOARD AND THE DRYWALL JOINT COMPOUND ON THE OUTSIDE WALLS OF THE MECHANICAL ROOMS WALLS HAS BEEN CONFIRMED NON-ASBESTOS.

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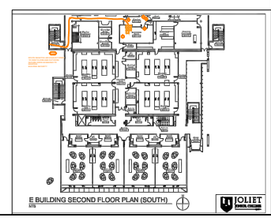
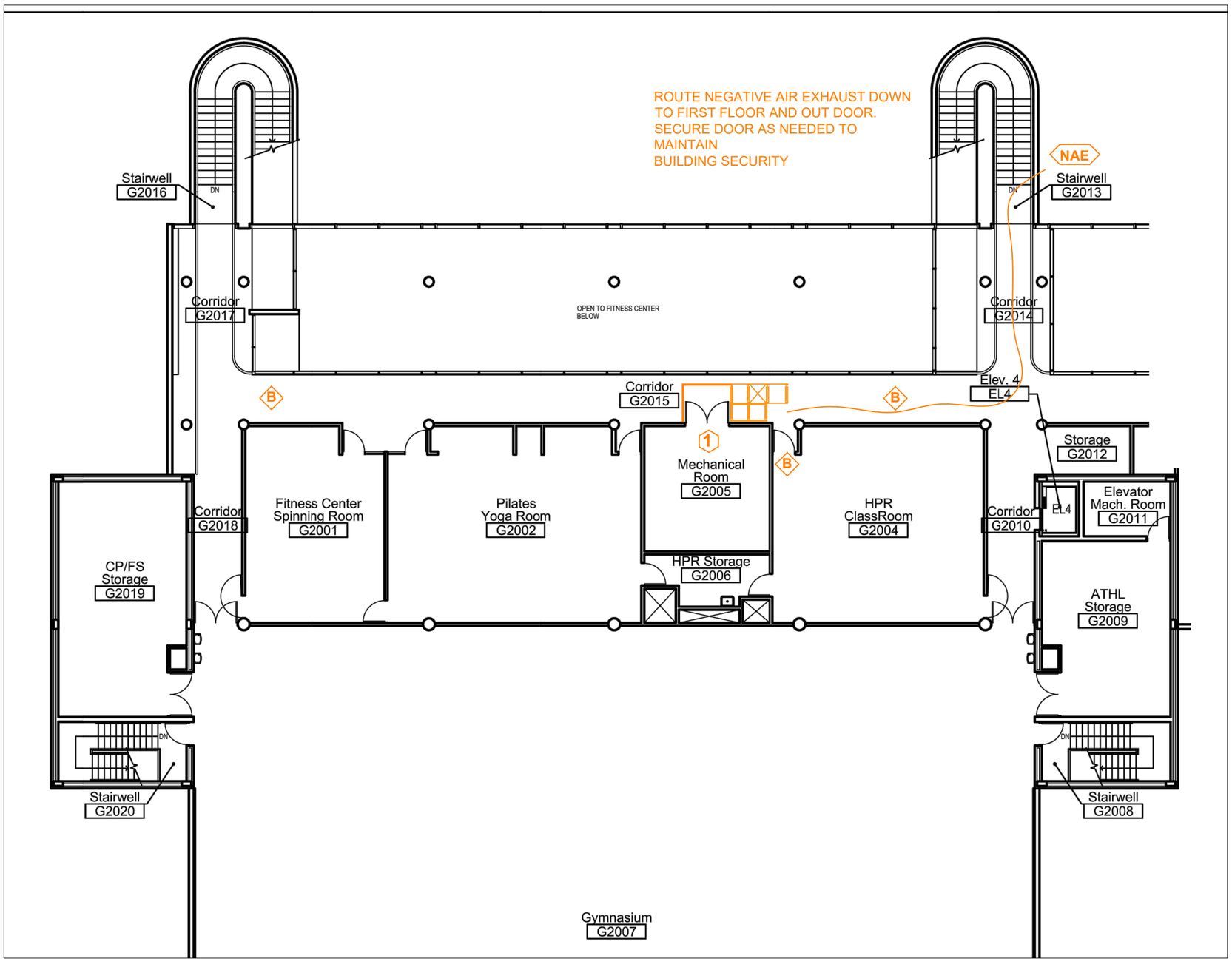
PROJECT:
JOLIET JUNIOR COLLEGE
2023 HVAC REPLACEMENT PROJECT

DRAWING TITLE:
ABATEMENT PLAN
E BUILDING SECOND FLOOR (SOUTH)

DESIGNED BY: J TUINENGA CIH
DRAWN BY: J. TUINENGA, CIH
CHECKED BY: J.O'BRIEN
PROJECT NO: 70692 .
SCALE: NOT TO SCALE
SHEET NO.
ASB04





1 ASB05 **G BUILDING SECOND FLOOR ABATEMENT PLAN**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION SYSTEM WITH LOCKABLE DOOR.
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- NAE — INDICATES LOCATION OF HEPA FILTERED NEGATIVE AIR EXHAUST.
- A — INDICATES LOCATION OF CONTAINMENT SEPARATION BARRIER PER IDPH SECTION 855.430(a) REQUIREMENTS.
- B — INDICATES LOCATION OF CONSTRUCTION SEPARATION BARRIER PER IDPH SECTION 855.430(b) REQUIREMENTS.
- C — INDICATES CONTRACTOR TO SECURE DOORWAY AND CONTROL ACCESS TO ABATEMENT ACTIVITIES.

ABATEMENT KEY NOTES

X	
1	REMOVE NON-ACM DRYWALL AND ACM DRYWALL JOINT COMPOUND INSIDE NEGATIVE PRESSURE WORK AREA. REMOVE DRYWALL/JOINT COMPOUND ON THE MECHANICAL ROOM SIDE OF THE WALL FRAME ONLY. LEAVE CLEAN STRAIGHT EDGE WITH NO EXPOSED JOINT COMPOUND. AREA OF REMOVAL TO BE MARKED BY OTHERS.
2	ALTERNATIVE NO. 1: REMOVE ASBESTOS CONTAINING FLOOR AND MASTIC USING NON-FRIABLE METHODS.

GENERAL NOTES

- COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.
- ABATEMENT CONTRACTOR RESPONSIBLE FOR THE SECURITY OF WORK AREAS DURING ALL ABATEMENT ACTIVITIES.
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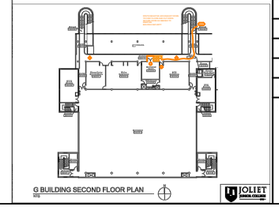
DRAWING TITLE:
ABATEMENT PLAN
G BUILDING SECOND FLOOR



DESIGNED BY: J TUINENGA CIH
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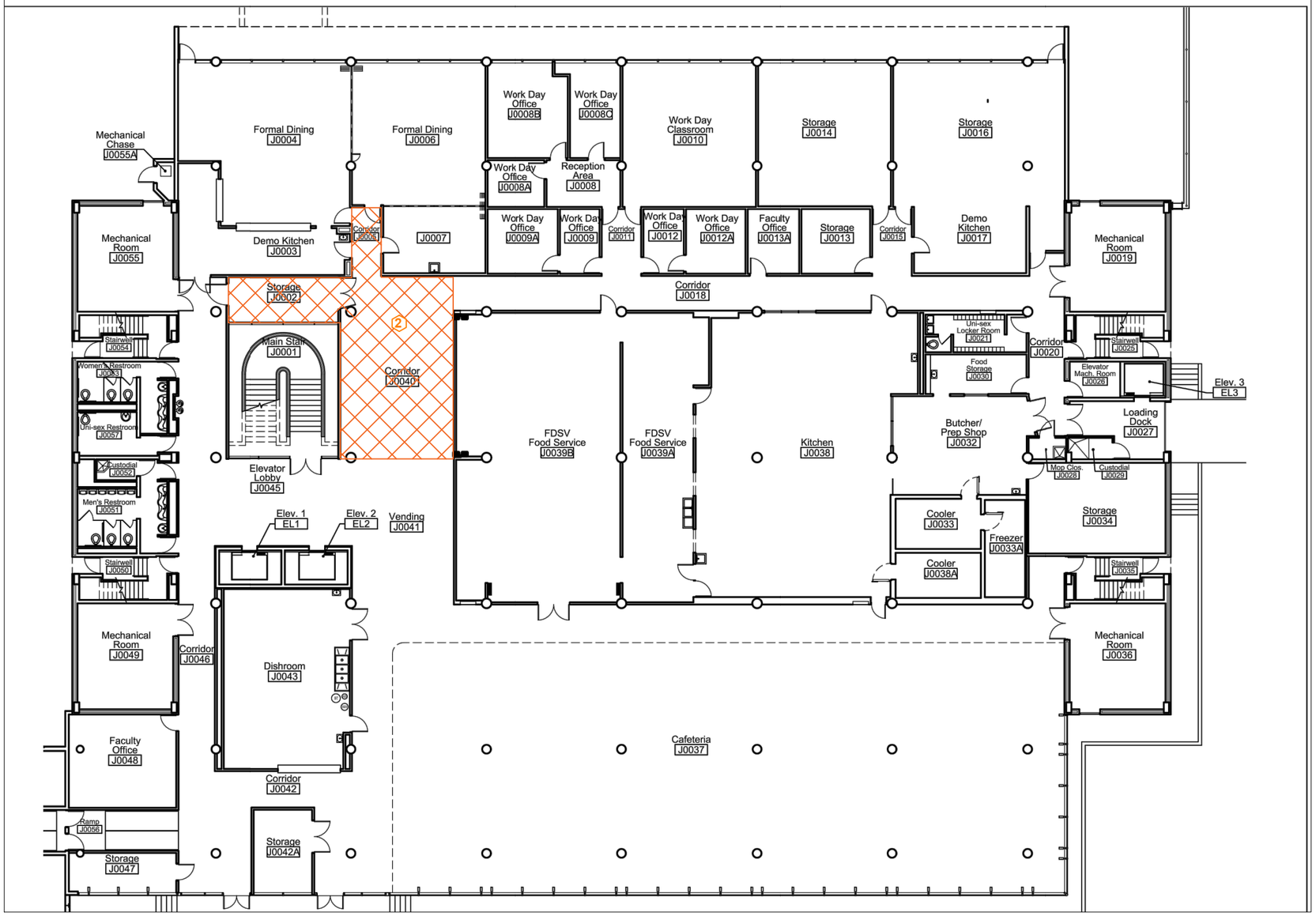
CHECKED BY: J.O'BRIEN
PROJECT NO: 70692 .
SCALE: NOT TO SCALE
SHEET NO.
ASB05



1 ALT-1 **J BBUILDING GROUND FLOOR ALTERNATE NO. 1**
NOT TO SCALE

SCOPE OF WORK

ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials per specification section 02080 and applicable IDPH, IEPA and OSHA rules and regulations.

ABATEMENT SYMBOLS:

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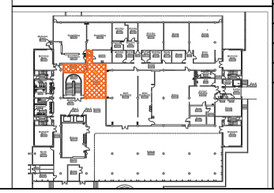
J BUILDING GROUND FLOOR ALTERNATE NO. 1



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DRAWN BY: J. TUINENGA, CIH
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ALT-01