GS# 522-052, Thompson Lab PHIII

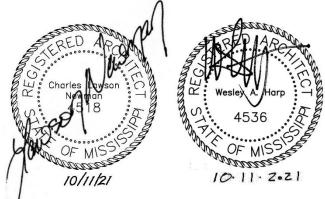
Mississippi State Department of Health

Bureau of Building, Grounds & Real Property Management

WFT Architects, P.A. 770 North State Street Jackson, MS 39202 (O) 601-352-4691 mail@wftarchitect.com

ADDENDUM NO. #5:

Date of Addendum: October 11, 2021



This addendum forms a part of the Bid Documents and modifies the original Drawings and Project Manual dated July 30, 2021.

ADVERTISEMENT

Item No. 1 Advertisement for Bids

Change: Change the first paragraph to read as follows:

"Sealed bids will be received electronically via MAGIC or physically delivered

to the office of the Bureau of Building, Grounds and Real Property

Management, 501 North West Street, Suite 1401 B, Jackson, Mississippi, 39201,

until 2:00:00 p.m. on Thursday, 10/21/2021..."

PROJECT MANUAL

Item No. 2 Project Manual – All Sections:

Clarify: All reference to Section 02 8500 – Mold Remediation shall refer to Section

02 8500 - Mold Remediation and Environmental Controls.

Item No. 3 Division 1, Section 01 8000, Special Requirements, Part 1 – Summary of Work

Revise: Supplement, 1.01 - Description of Work Sequence

Replace the current page number 24 in Section 01 8000, Special Requirements, Part 1

– Summary of Work Supplement, 1.01 Description of Work Sequence, with the

revised page number 24 included with this addendum as Attachment 1.

Item No. 4 Division 1, Section 01 8000, Special Requirements, Part 2 – Allowance

Supplement, 2.01 – Schedule of Allowances

Revise: Replace the page 24 included at Addendum 2, in Section 01 8000, Special

Requirements, Part 2 – Allowance Supplement, 2.01 Schedule of Allowances, with

the revised page number 24 included with this addendum as Attachment 1.

Item No. 5 Division 1, Section 01 8000, Special Requirements, Part 7 – Contractor's

Protection of Existing Materials: Supplement, 7.01 – Contractor's Protection of

the Interior:

Revise: Revise paragraph 7.0.1.C as follows:

"The Contractor shall be aware that the majority of spaces at the building are negatively pressurized in relation to the exterior, that the laboratory spaces contain equipment which is sensitive to humidity, dust, and other airborne contaminants; and that it is the Contractor's sole responsibility to protect the interior of the building from the weather, airborne dust and debris, humidity, or other contaminants. Contractor

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GS# 522-052, Thompson Lab PHIII

Mississippi State Department of Health Bureau of Building, Grounds & Real Property Management

shall provide services of a qualified containment specialist having experience providing engineering controls and mold remediation services on projects of similar scope to those required for this project. Contractor shall refer to Drawings at Sheets A0.1.1, A0.1.2, A0.1.3, and A0.1.4, which provide a general description of the access and containment barrier systems and pressurization required and to the requirements of Section 02 8500 – Mold Remediation and Environmental Controls. The Contractor shall submit, for approval by the Certified Industrial Hygienist, Architect, and Owner, shop drawings and other submittals describing the containment systems to be provided at each work area, as required at Section 02 8500 – Mold Remediation and Environmental Controls.

- .1 The Contractor shall coordinate the work of the containment construction and mold remediation specialty subcontractor with test and balance and controls modifications to be provided under separate contract and overseen by the Owner's mechanical engineer and laboratory.
- .2 The containment construction and mold remediation specialty subcontractor shall submit qualifications as required under Part 8 of this Section and as described at Section 02 8500.

Item No. 6

Division 1, Section 01 8000, Special Requirements, Part 8 – Contractor Qualifications Submittal:

Revise:

Revise paragraph 8.01.B as follows: Temporary Protection, Containment and Mold Remediation Specialty Subcontractor: Mold remediation and engineering controls for containments (including installation, maintenance, and removal) shall be provided by a specialty containment subcontractor meeting the minimum requirements of meeting the minimum requirements of Section 02 8500 in the Specifications.

Item No. 7 Add:

Division 2, Section 02 8500, Mold Remediation and Environmental Controls: ADD Section 02 8500 – Mold Remediation and Environmental Controls as included with this Addendum as Attachment 2.

DRAWINGS

Item No. 8

Drawings – All Sheets:

Clarify:

All reference to Section 02 8500 – Mold Remediation shall refer to Section 02 8500 – Mold Remediation and Environmental Controls.

Item No. 9

Sheets A0.0.1

Revise:

Replace the current sheets A0.0.1 with the revised sheet A0.0.1 included with this Addendum as Attachment 3.

Item No. 10

Sheets A0.1.1, A0.1.2, A0.1.3, A0.1.4

Revise:

Replace the current sheets A0.1.1, A0.1.2, A0.1.3, and A0.1.4. with the revised sheets A0.1.1, A0.1.2, A0.1.3, and A0.1.4 included with this Addendum as Attachments 4, 5, 6, and 7, respectively.

Item No. 11

Sheets A1.1.1, A1.1.2

Revise:

Replace the current sheets A1.1.1 and A1.1.2 with the revised sheets A1.1.1 and A1.1.2 included with this Addendum as Attachments 8 and 9 respectively.

END OF ADDENDUM NO. 5

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SPECIAL REQUIREMENTS SECTION 01 8000

PART 1 - SUMMARY OF WORK SUPPLEMENT

1.01 WORK SEQUENCE

- A. Within 48 hours following notice intent to award a Contract, the Contractor shall submit to the Architect a *Schedule of Values* as described at Section 01 2973. In addition to requirements outlined therein, the Contractor shall identify the following components individually and provide supporting data as requested by the Architect:
 - 1. The cost for masonry demolition required at the south stair tower, including preparation of the existing sheathing and flexible flashing substrates to receive new work.
 - 2. The cost for masonry demolition required at the east return, including preparation of the existing sheathing and flexible flashing substrates to receive new work.
- B. Upon notice to proceed, the Contractor shall begin submission of all required submittals, product information and shop drawings. Mobilization on site shall not begin until approval of submittals has been completed or until Owner and Architect have approved mobilization in writing. The Contractor shall coordinate the completion of required submittals and delivery times for material and fabrications such that the disturbance to the site can be minimized. The Contractor shall anticipate mobilization to begin work on-site no earler than December 1, 2021 and no later than February 1, 2022.
- C. Owner will occupy the building during construction, coordinate with Owner's Representative in scheduling work to vacate the areas as the Contractor requires.
- D. See Part 6 of this section for detailed requirements.

-A.	Schedule early completion of designated areas for Owner's usage prior to substantial completion of entire- Project as follows:
-B.	Owner will occupy the following areas throughout the Project or during portions of the Project as follows:
-C.	Prior to occupancy of any portion of the Project, a <i>Certificate of Substantial Completion</i> for designated areas—shall be executed establishing responsibilities of the Owner and Contractor for security, maintenance, heat,—utilities, damage to the Work and insurance for such portion of the Work.—
	-utilities, damage to the Work tild institutive for such portion of the Work.
	- PART 2 - ALLOWANCE SUPPLEMENT
	
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	-PART 2 - ALLOWANCE SUPPLEMENT

(Refer to Section

Division One

SECTION 02 8500 MOLD REMEDIATION AND ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.01 RELATED DOCUMENTS AND INFORMATION

- A. This specification was prepared by TRC Environmental Corporation (TRC), 140 South Village Avenue, Suite 130, Exton, Pennsylvania 19341 under separate contract with WFT Architects, P.A. (WFT), 770 N. State St., Jackson, Mississippi 39202.
- B. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. The intent of the section is to provide the requirements for the Temporary Protection, Containment, and Mold Remediation Specialty Contractor (Remediation Contractor.) The Remediation Contractor shall be responsible for the coordination and supervision of all labor, materials, tools and equipment necessary to meet the requirements of this section. The Remediation Contractor shall provide expertise specific to the techniques and engineering controls specified herein and shall documentation of projects of similar scope and complexity.
- B. The Remediation Contractor shall coordinate with the work of the Envelope Restoration Specialty Contractor, as required under Section 04 0100, to provide engineering controls throughout the implementation of the envelope repairs from the start of work through acceptance of the interior work areas.

1.03 WORK INCLUDED

- A. This Scope of Work is for the construction of pressurized containments and, as necessary, the remediation of fungal growth and/or fungal contamination at the Mississippi State Department of Health Thompson Lab (Thompson Lab) under controlled conditions by properly trained workers using safe work practices. Environmental (dust, etc.) control containments are required at all areas of Work. It should be anticipated that mold remediation work will need to be performed on floors 1, 2, 3 and 4 in nine (9) separate work areas.
- B. Furnish all labor, materials, facilities, equipment, services, employee training and testing, and permits necessary to perform the work required for dust control and mold remediation in accordance with these specifications.
- C. Each work area on each floor must use the containment barriers and engineering controls that are outlined in this section. Location of work areas on each floor are identified on the floor plans developed by the Architect.
- D. Cleaning of the air and surfaces inside each contained area must meet the requirements set forth in Section 3.13 Post Remediation Assessment and 3.14 Post Remediation Sampling of this specification.

1.04 RELATED REQUIREMENTS

- A. Carefully examine all of the Contract Documents for requirements which may affect the work of this section.
- B. Other specification sections which directly relate to the work of this section include, but are not limited to the following:
 - 1. Section 01 8000 Part 8 Contractor Qualifications Submittal
 - 2. Section 02 4100 Selective Demolition

3. Section 04 0100 - Envelope Restoration Specialty Contractor

1.05 QUALIFICATIONS

- A. Qualifications: See Section 01 8000 Part 8 Contractor Qualifications Submittal
- B. The work specified herein shall be performed by competent persons who are trained, knowledgeable and qualified in state-of-the-art construction of pressurized containments and mold remediation techniques, subsequent cleaning of mold contaminated areas and handling of mold contaminated waste.
- C. Contactor shall have primary experience in performing the work specified in this section and shall have successfully completed containment and mold remediation projects associated with envelope restoration projects of similar scope as qualified by referenced standards above.
 - Contractor shall confirm that all workers understand the job's requirements. Mechanics shall be
 fully supervised to ensure that the work is accomplished to meet or exceed the highest
 standards of the trades. The specialty sub-contractor shall provide one crew of mechanics for
 the duration of the project. Substitutions and additions of work force shall be permitted with
 consent only and if there is no adverse effect on quality or performance of work.
 - 2. In acceptance or rejection of the work of this specification, no allowances shall be made for lack of skill on the part of the mechanics performing the Work of this section.
- D. Examine all drawings and specifications for requirements affecting the work of this section. Any conflict between these specifications and the requirements or specifications of the manufacturers of adjacent or associated products, or any other pertinent specifications, shall be immediately brought to the attention of the Architect in writing. The Architect will issue a written clarification.
- E. Contractor Knowledge of the Work: It is understood that the specialty contractor involved in the work of this section has visited the Project with the Contractor prior to bidding, and that both the specialty contractor and Contractor are thoroughly familiar with field conditions that may impact the timely, successful, and cost-effective completion of the work described in this Section. The Contractor shall assess, prior to Bid, all existing conditions for and include cost for the complete implementation of these requirements in his bid.

1.06 SAFETY PROGRAM

A. Remediation/Environmental Control Contractor shall maintain a written employee safety program and submit a summary of the program to Architect. The Architect and their consultants is not responsible for contractor compliance or with any entities' environmental, safety, and health compliance of Codes and Standards, Interim Life Safety and Fire Protection Standards, and other regulations and laws.

1.07 NOTICE AND RECORD KEEPING

- A. General:
 - 1. Remediation Contractor shall keep necessary documentation in compliance with applicable federal, state, and/or local regulations and laws and the requirements of the Thompson Laboratory at the job site for inspection in preparation for and during the mold remediation work, as well as during the work following remediation efforts, until such time as the Work is designated as substantially complete and removal of containments is approved by the Architect. Documents required to be maintained at the job site include:
 - a. Documentation of respiratory protection program used during the remediation,
 - b. Copies of decontamination procedures, and
 - c. Other information which the United States Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and/or Mississippi State Department of Health (DOH) may require.

1.08 DEFINITIONS

- A. The following definitions apply throughout the Contract Documents:
 - 1. <u>AFD</u> Air filtration device equipped with HEPA filters (HEPA-AFD)
 - 2. AHU Air handling unit
 - 3. Airwash Filtration of air in work areas utilizing HEPA-AFD
 - 4. <u>Ante Room</u> An enclosed room with hard barriers under negative pressure directly outside the work area. Airflow shall be maintained from ante room into work area.
 - 5. <u>Authorized Visitor</u> a representative of Building Owner, or a representative of any regulatory or other agency having jurisdiction over the project
 - Buffer Room An enclosed room with hard barriers that is positively pressured utilizing a HEPA-AFD and is directly adjacent to the entrance for the ante room. Airflow shall be maintained from buffer room into ante room.
 - 7. Building Owner authorized representative for Thompson Lab
 - 8. <u>Building Owner's Representative</u> person designated by the Building Owner to be responsible representing the Building Owner throughout the work.
 - 9. <u>Cleaning</u> the process of reducing or eliminating fungal growth and contamination from surfaces and/or objects. A surface is accepted to be clean if its accumulation of dust, residue or debris cannot be further removed by either one of the following methods:
 - a. Wet Method: cleaning using a combination of cloths, mops, brushes, scour pads, steel wool pads, or other tools which have been dampened with a disinfectant or detergent solution
 - b. Dry Methods: cleaning using a HEPA-filtered vacuum cleaner with the proper attachments
 - 10. Containment or Contained Area Collectively the buffer room, ante room and work area
 - 11. <u>Detergent Solution</u> A surfactant soap and water solution, i.e. trisodium phosphate (TSP) cleaner and water
 - 12. <u>Disinfectant Solution</u> A product that is used on hard, non-porous surfaces to destroy or irreversibly inactivate fungi and bacteria, but not necessarily their spores
 - 13.EPA United States Environmental Protection Agency
 - 14. Environmental Consultant technical representative(s) for the Architect/Building Owner
 - 15. <u>HEPA Filter</u> a high efficiency particulate air (HEPA) filter capable of filter efficiency at 99.97% of test aerosol with an average particle size of three tenths (0.3) microns
 - 16. HEPA Vacuum vacuuming equipment with a HEPA filtration system
 - 17.MSDH Mississippi State Department of Health (MSDH)
 - 18. NIOSH National Institute of Occupational Safety and Health
 - 19.OSHA United States Occupational Safety and Health Administration
 - 20. <u>Visual Inspection</u> a visual inspection by the Environmental Consultant of the work area under adequate lighting to ensure that surfaces are free of visible dust and debris
 - 21. Wet Cleaning the removal of fungal structures from surfaces and objects using cloths, mops, or other cleaning tools that have been dampened with disinfectant or detergent solution
 - 22. Work Area Negatively pressurized contained rooms or areas of the project in which mold remediation and other work activities are to be undertaken or which may become contaminated or otherwise damaged as a result of such work. A contained work area is a work area that has been sealed, plasticized, and equipped with a negatively pressurized enclosure and monitoring system. The ventilation system for the building must either be shut down to the work area or physically isolated to prevent airflow from passing into or out of the work area

1.09 REGULATIONS AND STANDARDS

- A. The Contractor shall comply with applicable federal, state and local regulations including, but not limited to, the latest edition of the following standards:
 - 1. Federal Occupational Safety and Health Administration (OSHA):
 - a. 29 CFR Part 1910.1200 General Industry / Hazard Communication
 - b. 29 CFR Part 1910.134 Use of Respirators
 - c. 29 CFR Part 1910.145 Specifications for Accident Prevention Signs and Tag Titles
 - d. 29 CFR Part 1910.20 Access to Employee and Medical Records
 - e. 29 CFR Part 1926.450-454 Scaffolding
 - f. 29 CFR Part 1926.500-503 Fall Protection
 - g. 29 CFR Part 1926.59 Construction Industry / Hazard Communication

1.10 SUBMITTALS AND NOTICES

- A. See Section 01 3323 Shop Drawings, Product Data, and Samples, for submittal procedures.
- B. Temporary Protection, Containment, and Mold Remediation Specialty Subcontractor Qualifications: to be submitted under the requirements of Section 01 8000 Part 8 Contractor Qualifications Submittal:
 - 1. Company Information:
 - a. Company name, address, telephone number(s), and website (if applicable)
 - b. Documentation that the company has at least ten (10) years' experience in the coordination and oversight of containment and mold remediation of the specific types required and involving the scope of work described in this and related Sections.
 - 2. Key Personnel:
 - a. Resumes, References and Proposed Role(s) of company personnel who will be directly involved in the work of this section. At minimum, identify Project Manager and Project Superintendent/Foreman proposed. References shall include current telephone contact information.
 - b. Provide documentation of experience for each role on projects of similar type, scale and/or complexity of subject project. A minimum of ten (10) years of documented experience with the company is required for Project Manager and Project Superintendent/Foreman. Experience must include projects involving engineering controls and mold remediation projects of similar scope, scale, and complexity as the subject project.
 - c. Provide documentation that the superintendent/ foreman has at least five (5) years. experience in the specific types of containment and remediation controls described in this Section.
 - 3. Project Portfolio:
 - a. Include documentation of a minimum of ten (10) projects of similar type, scale and/or complexity of the subject project which have been successfully completed within the past fifteen (15) years.
 - b. Identify the involvement of proposed key personnel for subject project in each completed project.
 - c. Documentation shall include project name, location, completion date, client name/contact, architect name/contact, contract amount and a detailed description of company's work. Provide sufficient details concerning materials/methods involved to allow comparison between its scope and complexity and that of the subject project.
 - d. Include at least ten (10) high quality color images of each project illustrating company's work. Provide both images showing completed work and work in progress. Provide either

captioned images or a written summary keyed to images highlighting relevance to work of subject project.

- C. The Contractor shall submit the following documents to the Architect for review. All submittals are subject to review and approval by the Owner's Representative.
 - Remediation/establishment and maintenance of environmental controls schedule shall include the following:
 - a. <u>Detailed Work Plan</u>: This plan shall clearly describe the containment, microbial remediation preparations and procedures including establishing and maintaining negatively pressurized enclosure and monitoring systems, work area isolation procedures for mold remediation and follow up repair work activities, and decontamination procedures following mold remediation, and after completion of the work. Include a schedule that shows milestone dates for the following activities: on-site mobilization, work area preparation, pre-cleaning, demolition, detail cleaning, final clearance evaluations following mold remediation and completion of the repair work, and estimated completion dates for each work area.
 - 2. A written site-specific Health and Safety Plan.
 - Documentation indicating that all employees working within containment areas have had
 instruction on the hazards of microbiological agents, use and fitting of respirators, personal
 protective clothing, entry and exit from work areas, and all aspects of work procedures and
 protective measures.
 - 4. Documentation indicating that all employees scheduled to access controlled spaces as part of the remediation process have received appropriate medical examinations and have successfully passed a fit test for the respirator to be worn. As a minimum, medical exams must be consistent with requirements in OSHA regulation 29 CFR 1926.1101 and 1910.134.
 - 5. Safety Data Sheets (OSHA form 174 or equivalent) for <u>all chemicals</u> and products used during work performed under this section including Foster 40-80[™] disinfectant and Foster 40-20[™] antimicrobial encapsulant.
 - 6. A written description of plans for providing temporary power and usage of ground fault interrupters, as needed. All plans shall be established in cooperation and consultation with the Owner's Representative and appropriate building maintenance staff.
 - 7. Emergency action plan for dealing with:
 - a. a medical emergency
 - b. a fire inside or outside the work area
 - c. coordinate with the chemical hygiene officer regarding the laboratory's chemical hygiene plan and laboratory's emergency action plan

1.11 ENVIRONMENTAL CONSULTANT

- A. The Industrial Hygienist identified on the documents shall serve as Environmental Consultant to the Architect and Owner and shall advise in all matters pertaining to the work performed in accordance with these specifications and requirements.
- B. The Environmental Consultant will act as the Building Owner's liaison in technical matters involving microbial remediation. Maintenance of the environmental controls following remediation shall be the responsibility of the Contractor.
- C. The Architect shall only review submittals for general conformance with the containment construction and microbial remediation activities. Any action indicated during submittal review is subject to the requirements of the Specifications.
- D. The Architect (and their consultants) is/are authorized by the Building Owner to have free access to all work areas, to assist in interpretation of procedures, and to advise on all provisions of the contract documents pertaining to microbial remediation.
- E. The Architect will advise the Building Owner to stop work if in the course of performing their monitoring duties, they observe an instance of substantial non-conformance with the contract

- documents and/or situation presenting a health hazard to workers or building occupants. Work shall not resume until corrective measures have been carried out.
- F. The Architect/Environmental Consultant's role in advising the Building Owner on environmental health matters related to personnel does not relieve the Contractor's obligation to comply with all applicable health and safety regulations promulgated by federal, state, or local governments.

1.12 PERSONNEL PROTECTION

- A. Prior to the commencement of work, the workers shall be instructed and knowledgeable in the areas described in "Submittals and Notices" having to do with employees.
- B. The primary function of personal protective equipment (PPE) is to prevent or minimize the worker's potential exposure to fungal contamination and/or dust. The PPE is used to avoid inhaling fungal fragments, fungal spores, and dusts associated with demolition activities and to avoid contact with the skin or eyes and to avoid the spread of fungal fragments and spores outside of the contained work areas. Risks possible with exposure to high levels of airborne dust or mold include allergic respiratory disease, such as asthma or hypersensitivity pneumonitis, and infection for individuals who have pre-existing chronic disease with compromised immune systems.

C. Respiratory Protection:

- 1. The Contractor shall comply with OSHA 29 CFR 1910.134 and 29 CFR 1926.1101 (h) (Respiratory Protection).
- 2. Workers shall be fit tested (as discussed further below) and provided, as a minimum, with personally issued and marked respirators equipped with high efficiency particulate air (HEPA) filters (P100 filters/color-coded magenta) approved by NIOSH to be worn in the work area and/or whenever a potential exposure to fungal contamination exists. Sufficient filters shall be provided for replacement as required by the workers or applicable regulations. Disposable respirators shall not be used.
- 3. A sufficient supply of replacement parts and HEPA filter cartridges shall be provided to the workers.

D. Protective Clothing:

- Workers shall be provided with sufficient sets of protective full-body clothing to be worn in the
 designated work area and/or whenever a potential exposure to fungal growth or contamination
 exists. Such clothing shall include, but not be limited to, full body coveralls, headgear, feet
 protection, eye protection, and gloves. Disposable-type protective clothing including the head
 and feet must be provided.
- 2. <u>Protective Clothing:</u> Protective clothing shall not be worn in lieu of street clothing outside the work area. Non-disposable type protective clothing shall be left inside the work area until the end of the remediation work and placed in 6-mil polyethylene bags prior to being removed from the work.
- 3. Eye Protection: Eye protection shall be provided and worn as required by applicable safety regulations. Eye protection shall be worn at <u>all</u> times within the work areas during all phases of work including preparation, demolition, cleanup, encapsulation, waste handling, etc. If appropriate, based on regulatory mandates, a full-face piece respirator may be worn to satisfy this requirement. Equipment shall conform with ANSI Z87.1-2003.
- 4. <u>Foot Protection</u>: Nonskid footwear shall be provided to all remediation workers. Footwear shall conform to ANSI Z41- 1999.
- 5. Visitor Clothing: The Contractor shall provide authorized visitors with suitable protective clothing, eye protection, and footwear as described herein, whenever they enter the work area.
- E. Worker and Authorized Visitor Protection Procedures for Work Area Entry:
 - 1. Each worker and authorized visitor shall put on a respirator with filters and clean protective clothing before entering the work area, except workers intending to rewear contaminated protective clothing stored in the work area shall enter wearing only respirators.

- a. <u>Note</u>: Workers and authorized visitors can don protective clothing over street clothes or undergarments before entering the remediation work area.
- 2. The Contractor's employees shall perform a positive/negative pressure respirator fit test (on negative pressure respirators) each time prior to entering the work area. If leakage occurs, the respirator must be readjusted or replaced.
- 3. Workers and authorized visitors shall maintain their respirators. Condition of all respirator parts shall be checked daily, and they shall be replaced when necessary.
- 4. Workers or visitors leaving the work area shall HEPA vacuum all visible dust and debris from the outer layer of protective clothing. Remove outer layer of protective clothing inside the work and deposit the clothing in a 6-mil plastic bag or drum-type container. Do not remove the respirator. HEPA vacuum street clothes or undergarments. Use disinfectant wipes or towelettes to wipe dust or debris from around face and respirator. Respirator can be removed after exiting the work area.
- 5. Potentially contaminated work footwear shall be stored in plastic sealable bags when not in use in the work area. Store potentially contaminated protective clothing in the work area for reuse, or place in receptacles for disposal with other contaminated material.
- 6. Workers shall not eat, drink, smoke, chew gum or tobacco, or apply cosmetics in or near the work area or ante room except in areas designated by Thompson Lab. Smoking is prohibited in all areas of the building.
- 7. Workers shall be fully protected with respirators and protective clothing immediately prior to the first disturbance of mold contaminated materials and until final cleanup is completed and clearances obtained. Following mold remediation, workers within containment areas shall be required to don clean protective clothing as appropriate or required by MSDH or the Thompson Laboratory.

1.13 EQUIPMENT REMOVAL PROCEDURES

A. Clean all external surfaces of waste bags, containers and/or equipment thoroughly by HEPA-vacuuming and wet wiping before removing such items from the work area.

1.14 NEGATIVELY PRESSURIZED ENCLOSURE EXHAUST AIR

A. Exhaust air from each negatively pressurized enclosure shall only be vented to the exterior of the building unless otherwise approved Thompson Laboratory. Such outlets shall not be near or adjacent to other building intake vents or louvers or at entrances to building.

1.15 APPLICABLE PUBLICATIONS AND/OR REFERENCES

- A. In addition to federal, state and local regulations which govern this project, the following publications are listed and become part of this specification to the extent they are referenced in this document.
 - 1. American National Standards Institute (ANSI):

a. Z41- 1999 Men's Safety Toe Footwear

b. Z87.1-2003 Practice for Occupational and Educational Eye and Face Protection

c. Z89.1-2003 Requirements for Industrial Head Protection

- 2. Field Guide for the Determination of Biological Contaminants in Environmental Samples; American Industrial Hygiene Association Publications, Second Edition.
- 3. Guidelines for Environmental Infection Control in Health-Care Facilities; Centers for Disease Control and Prevention.
- 4. IICRC S500 Standard and Reference Guide for Professional Water Damage Restoration, Fourth Edition; Institute of Inspection Cleaning and Restoration Certification.

- 5. <u>IICRC S520 Standard and Reference Guide for Professional Mold Remediation</u>; Institute of Inspection Cleaning and Restoration Certification, Second Edition.
- 6. National Institute for Occupational Safety and Health (NIOSH): "Respiratory Protection A Guide for the Employee."
- 7. <u>Recognition, Evaluation, and Control of Indoor Mold</u> edited by Bradley Prezant, Donald Weekes, J. David Miller, American Industrial Hygiene Association Publications, Second Edition.

1.16 PRE-INSTALLATION MEETINGS

- A. Pre-installation meetings for convened to review requirements for coordination prior to start of work at each containment area.
- B. Coordinate with preinstallation meeting required under Section 04 0100 which require attendance of all installers falling under the responsibility of the envelope restoration specialty contractor.
 - 1. Attendees shall include, at a minimum:
 - a. Authorized representatives of the Owner, Architect, Contractor.
 - b. Envelope restoration specialty contractor, including field and shop foremen.
 - c. Representatives of each installer, including field and shop foremen.
 - d. Representative of system manufacturers as applicable.
 - e. Representative of containment and temporary protection specialty contractor.
 - f. Other trades directly affected by the work.
 - 2. Review all requirements and conditions necessary and incidental to the successful completion of the work described in this section. Review methods and procedures related to the modification of curtain wall system components required for the completion of associated work including but not limited to, the following:
 - a. Coordination of all trades directly affected by the work to ensure proper sequencing and construction with measures required to maintain the integrity of containment systems.
 - b. Emergency response measures.
 - c. Requirements and locations for Contractor-supported investigations.

1.17 SEQUENCING AND SCHEDULING

- A. Contractor shall schedule and sequence the work in a manner that will allow for efficient demolition, repair and re-assembly at each work area.
- B. Coordinate with subcontractors providing finish repairs at interior spaces to limit disturbance to the operation of the facility and provide for efficient turn-over of work areas.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Deliver all materials in original packages, containers, or bundles bearing the name of the manufacturer and the brand name.
- B. Store all materials off the ground, away from wet or damp surfaces, and under cover to prevent damage or contamination. Damaged or deteriorating materials shall not be used and shall be removed from the premises.
- C. Fire retardant polyethylene sheeting at least 6-mil in thickness shall be used.
- D. Tape shall be capable of sealing joints of adjacent sheets of polyethylene and for use in attachment of polyethylene sheet to finished or unfinished surfaces of similar materials and shall be capable of adhering under dry and wet conditions.

- E. Flame retardant, corrugated polypropylene Correx® boards (Protecta Board), or approved equal can be used for construction of the work area.
- F. Manometers shall be used to monitor the pressure differential between the work area and adjacent occupied spaces.
- G. 6-mil polyethylene bags shall be used for mold contaminated waste.
- H. Spray adhesive can be used for sealing polyethylene-to-polyethylene.
- I. Protective devices such as, but not limited to, disposable clothing, respirators, gloves, hard hats, shoes, etc., shall conform to ANSI standards where standards exist.
- J. Fire resistant sealants shall be compatible with concrete, metals, wood, cable jacketing, etc. Sealant shall prevent fire, smoke, water, and toxic fumes from penetrating through sealants. Sealant shall have a flame spread, smoke and fuel contribution of zero, and shall be ASTM and UL rated 3 hours for standard method of fire test for fire stop systems.
- K. Anti-microbial Disinfectant/Cleaner: Fosters 40-80, or approved equivalent.
- L. Anti-Microbial Encapsulant: Fosters 40-20, or approved equivalent.

2.02 TOOLS AND EQUIPMENT

- A. Provide suitable tools for removal of building materials containing fungal growth and contamination.
- B. Provide sufficient number of HEPA-filtered vacuum cleaners (dry/wet) equipped with wet pick-up adapters, floor wands, and/or crevice tools.
- C. AFDs shall utilize high efficiency particulate air (HEPA) filters.
- D. The Remediation Contractor shall provide several spare HEPA-AFDs of different sizes. As necessary, the spare units shall be kept on site to be used should active units fail.
- E. Transportation equipment, as required, shall be suitable for loading, temporary storage, and unloading of contaminated waste without exposure to persons or property.

PART 3 EXECUTION

3.01 GENERAL INFORMATION

- A. Pre-Startup Safety Meeting:
 - Prior to the beginning of on-site work, all Remediation Contractor employees and Contractor employees scheduled to work within the contained areas shall attend a pre-startup safety meeting conducted by the Remediation Contractor that addresses at least the following issues specific for this project:
 - a. fire/emergency procedures
 - b. internal administrative and inspection procedures
 - c. personal protective measures
 - d. respiratory protection program
 - e. safety and health hazards
 - f. specific mold remediation practices and procedures, and
 - g. waste handling practices and procedures

3.02 EXHAUST AIR

A. At locations indicated in the documents, install HEPA-AFDs to exhaust air through temporary panels located (and temporarily engaged within) window frames or as otherwise approved. Temporary panels installed in window frames must be designed to prevent rainwater from entering the work area. Exhaust air shall be HEPA filtered.

- 1. HEPA-AFDs shall operate 24 hours per day in order to maintain a negative pressure differential of not less than 0.01 inches of water between the ante room and work area.
- As necessary, contractor shall supply supplemental electrical service to maintain 24 hour per day operation of the HEPA-AFDs and coordinate with the laboratory's power emergency plan. Contractor shall provide and maintain independent standalone emergency power capability during the remediation work.
- B. HEPA-AFD exhaust units shall be operated in accordance with the manufacturer's recommendations.
- C. Contractor will maintain spare filters and HEPA-AFDs on site to ensure constant and uninterrupted negative pressurization of the work area.
- D. Contractor to advise the Thompson Laboratory when pressurization of work areas may be temporarily affected by the work and coordinate timing of all such occurrences.

3.03 ELECTRICAL AND/OR COMMUNICATION EQUIPMENT

A. As necessary, enclose deactivated electrical and/or communication equipment with two layers of 6-mil polyethylene sheeting sealed with tape.

3.04 INTERIM LIFE SAFETY MEASURES

A. In coordination with the Building Owner, Remediation Contractor shall comply with all Mississippi State Department of Health Thompson Lab Interim Life Safety and the Mississippi State Fire Marshall requirements.

3.05 PREPARATION OF CRITICAL BARRIERS AND BUILDING PROTECTION

- A. Critical barriers shall be constructed as follows:
 - Isolate the work area for the duration of the work by sealing all openings, including but not limited to, doorways, ducts, grilles, diffusers, pipe chases, drains, grates, and any other penetrations of the work areas, with 6-mil polyethylene sheeting sealed with tape. Pipe penetrations can be sealed with spray foam. Use caulking where necessary. Coordinate any adjustments required to HVAC equipment with building engineers.
 - 2. If damage occurs to the work barriers at any time during the remediation activities, work in the remediation area shall immediately stop. Repairs will then be made to barriers, and Remediation Contractor shall verify that the negative pressure differential between the work area and occupied areas of the building has been maintained and/or restored.

3.06 ENCLOSURE SYSTEM

- A. The enclosure system shall consist of a buffer room, ante room and work area using fire retardant Correx® sheeting and/or fire retardant polyethylene sheeting for each of the containment areas identified on the floor plans. There will be a total of nine (9) containment areas, 3 on the 1st floor, 2 on the 2nd floor, 2 on the 3rd floor and 2 on the 4th floor. The nine (9) containment areas are designated in the documents as 1S, 1SE and 1NE for the 1st floor, 2S and 2E for the 2nd floor, 3S and 3E for the 3rd floor and 4S and 4E for the 4th floor. Access to each work area shall only be through the buffer room. See floor plan indicating location of each buffer room, ante room and work area.
- B. Storm doors will be installed at the entrance to the buffer room, ante room and work area. Sticky mats on Masonite™ shall be taped to the floor outside the entrances to the ante room and work area. Doors shall have single acting lever type hardware approved by the fire marshal for emergency operation by building occupants.
- C. HEPA-AFDs will be installed to negatively pressurize the work area in relation to the ante room and adjacent occupied areas. A manometer shall be installed in the ante room to indicate that the work area is continuously maintained at a negative pressure of not less than 0.01 inches of water

- column in relation to the ante room. HEPA-AFDs will also be used to positively pressurize the buffer rooms relative to the corridors and ante rooms.
- D. The ante room must be kept in a clean/sanitary condition at all times. Accumulation of used materials, debris, and other non-sanitary conditions will not be permitted. A HEPA filtered vacuum and/or wet wipe methods shall be used to periodically clean accumulated dust or debris in the ante room at least once per week.
- E. Workers must follow decontamination procedures prior to exiting the ante room. With the exception of respirators, all protective clothing must be removed in the ante room. Disposable protective clothing not to be reused shall be placed in 6-mil polyethylene bags and disposed as mold contaminated waste. Utilize HEPA vacuum to remove dust or debris on clothing or skin in the ante room. Workers shall remove their respirators after exiting the work area.
- F. The approved enclosures shall be maintained following remediation until such time as the repair work of this project is complete and there is no threat of dust or other contaminates entering the building from the work area as approved by the Architect.

3.07 WORK AREA INSPECTIONS

- A. Work Area Preparation Inspection:
 - 1. After preparation of the work areas and enclosure system(s), the Environmental Consultant shall conduct an inspection to ensure completeness of the work area per the specification requirements. As necessary, the Environmental Consultant will use smoke tubes to determine if penetrations between the work area and adjacent areas have been properly sealed.
 - 2. Contractor shall maintain the integrity and pressurization of the contained areas until all dust generating activities and the envelope repairs have been completed.
 - 3. No mold remediation operations shall commence without the approval of the Environmental Consultant following a work area preparation inspection.
- B. Final Visual Inspection for Mold Remediation:
 - 1. After completion of the mold remediation operations, the Environmental Consultant shall inspect the work areas to verify the cleanliness of the areas. The work area must be free of mold growth, dust or debris.

3.08 DEMOLITION OF MOLD CONTAMINATED BUILDING MATERIALS

A. The documents identify the work areas on each floor where gypsum wallboard and possibly other building materials will need to be removed. As necessary, gypsum wallboard and possibly other building materials will need to be removed at least 1 foot beyond all sections containing visible mold growth.

3.09 REMEDIATION DEMOLITION PREPARATION AND SEQUENCE OF MOLD REMEDIATION

- A. Isolate remediation work areas as previously specified in Section 3.6.
- B. General Sequence of Work Area Preparation.
 - 1. Contractor will install a buffer room, ante room and work area at each location indicated in the documents. A storm door will be installed at the entrance to the buffer room, ante room and work area. Storm doors must be a minimum of 36 inches wide and operated by single-action lever handles with common and familiar operation such as current latch sets in the existing corridor doors. Before installing containments coordinate relocation of fire alarm devices, refer to Electrical Drawings. Remediation Contractor to coordinate with work of mechanical contractor to provide necessary relocation of HVAC components and/or adjustment of controls and relocation/modification of sprinkler heads within the work area. Coordinate all adjustments to the building HVAC with the Architect and Building Engineer.
 - 2. The contractor must maintain unobstructed egress to, though, and from the south stairs at all times, and the stair shaft doors must remain in-place and closed, at all times.

- 3. Hard barriers for containments are to be constructed using Correx™ board and aluminum or metal studs, and storm doors. Edges and openings are to be sealed with duct tape, 6 mil plastic sheeting and fire safe caulk as needed.
- 4. Where laboratory or office doors open into the proposed work area, ante-room, or buffer room, doors may be temporarily blocked providing that the maximum travel distance does not exceed 125 feet from the furthest point in the lab, through the next available door, to the stair door.
- 5. For containment area 1NE a second Correx[™] board barrier wall is required to be installed around the perimeter of the work area on the interior, and the space between the two barrier walls must be positively pressurized with a HEPA-AFD.
- 6. Establish negative pressure in each work area in relation to the ante room and adjacent occupied areas. A pressure differential of not less than 0.01 inches of water column shall be maintained between the work area and ante room and monitored utilizing a manometer.
- 7. Affix appropriate mold remediation warning signs and temporary egress signs at the entrance door to each work area.
- 8. Install sticky mats on Masonite™ by taping to the floor outside the entrance to the ante room and work area.
- 9. Contractor shall request and secure a work area preparation inspection from Environmental Consultant for each buffer room, ante room and work area.
- 10. Contractor is responsible for removing base cabinets and fixtures as required to facilitate containment construction, or to provide access to the work.
- 11.In the event that existing cabinetry inside a work area contains mold growth or is water damaged, the remediation contractor shall notify the Environmental Consultant to determine whether the cabinet can be cleaned and encapsulated with Foster 40-20™ or should be removed.
- 12. For containment areas with lay-in ceiling tiles, construct and properly pressurize the containment with ceiling grid and tiles in place. After proper pressurization remove the ceiling grid and ceiling tiles as necessary to extend the hard barriers to the ceiling decking. As necessary, contractor shall use dust control measures when constructing contained areas for work areas.
- 13. For containment areas with gypsum wallboard (GWB) ceilings, construct and properly pressurize the containment with the GWB ceiling in place. After proper pressurization remove sections of the GWB ceiling as necessary to extend the hard barriers to the decking.
- 14. In the event that visible mold growth is present on pipe insulation, remove pipe insulation at least 1 foot beyond section containing visible mold growth. Stained pipe insulation that does not show signs of visible mold growth can be cleaned and sealed with Foster 40-20™.
- 15. Remove sections of gypsum wallboard (including applied wall treatments) containing visible mold growth. Removed area should extend at least 1 foot beyond area or section containing visible mold growth.
- 16. Utilize HEPA vacuums to repeatedly clean all surfaces from ceiling-to-floor to remove visible dust or debris, and use wet wipe technique using Foster 40-80™ disinfectant to remove dust from all surfaces.
- 17. Request initial visual inspection. Re-clean as needed.
- 18. Request final visual inspection and post remediation assessment sampling in each work area.
- 19. Release work area(s).
- C. Dust barriers to facilitate soffit and slab edge repairs
 - 1. Set-up temporary containment using zip poles, 6-mil plastic sheeting, and zipper doors and install a HEPA-AFD at the locations of the soffit and slab edge repairs. As an option, use a moveable HEPA cart system as the temporary containment.

- 2. Remove lay-in ceiling tiles to install dust protection barrier made from 6-mil plastic sheeting and/or Correx™ board, duct tape and fire safe caulk as necessary from the ceiling mullion to deck on floors 1, 2 and 3.
 - a. Note: where rooms affected by the slab repair work have GWB ceilings, the GWB ceilings do not have to be removed.
- 3. Reinstall the lay-in ceiling tiles where removed, replace all damaged ceiling (and/or suspension system), with matching material.

3.10 REMEDIATION DEMOLITION

- A. The Contractor shall keep the site and work area free from accumulations of material or debris caused by the demolition activities and free from any flammable or ignitable materials that may present a fire hazard.
- B. All demolished materials will be treated as mold contaminated waste. The Remediation Contractor shall bag all demolished waste in 6-mil polyethylene bags and HEPA-vacuum and wet wipe the exterior of the bags to remove dust and/or contamination before removing the bagged waste from the work area. As bagged waste is removed from the work area, it must be immediately placed in a roll cart or container with a cover lid. Time of day and pathway that the roll cart or container is taken outside of the building shall be coordinated with Thompson Laboratory. Elevators are not to be used by the Contractor.
- C. In the event that materials are removed that create or expose openings through the walls or floor, the Remediation Contractor shall utilize either 6-mil polyethylene plastic or equivalent impermeable layer to immediately seal penetrations in order to maintain the work area at a negative pressure differential of not less than 0.01 inches of water in relation to the ante room and adjacent occupied areas.
- D. If any building sections or other areas adjacent to the enclosed project area becomes or are suspected of being contaminated with spores as a result of the Remediation Contractor's work that were not part of the original scope of work, the Remediation Contractor shall thoroughly and totally decontaminate (e.g. cleaning contaminated surfaces with HEPA-vacuums and performing HEPA-air washing, as necessary) the affected space(s). These areas shall be subject to detailed visual inspection and sampling at the Building Owner's Representative and/or Environmental Consultant's discretion.
- E. All work must immediately stop within the work area until the source or cause of the contamination outside of the enclosed work area is discovered and corrected.
- F. Surfaces to be cleaned should be wiped with damp rags, not soaking, using Foster 40-80™ disinfectant. Potable water and surfactant soap (detergent solution) can be used for general cleanup and removal of dust from surfaces. If water sprayers are utilized for dust suppression, the Remediation Contractor shall use either manually operated sprayers or airless sprayers. Rags shall be changed often to prevent spreading fungal contamination onto the surfaces being cleaned.
- G. The Contractor shall coordinate with the Thompson Laboratory during the removal and transport of containerized waste bags to the waste disposal truck or dumpster.

3.11 EQUIPMENT AND MATERIAL REMOVAL PROCEDURES

A. Thoroughly clean external surfaces of waste bags containing mold contaminated waste and materials and equipment by HEPA vacuuming and wet wiping prior to removing from the work area. After waste bags are removed from the work area, they must be immediately placed inside a roll cart or container with a cover lid. Equipment, materials and/or containers not being disposed shall be free of all visible debris and dust and placed in 6-mil bags or wrapped and sealed in 6-mil plastic. Transport of all materials outside of the building must be coordinated with the Thompson Laboratory. B. No items shall be removed from the work area without coordinating with Thompson Laboratory. All items shall be subject to inspection by the Environmental Consultant who will designate items requiring further cleaning of visible dust.

3.12 CLEAN-UP AFTER REMEDIATION DEMOLITION

- A. Repeated HEPA Vacuuming of Surfaces Initial: After demolition, the Remediation Contractor shall repeatedly HEPA-vacuum all surfaces, including but not limited to, beams, bar joists, pipes, suspended ceiling grid, walls and floors, horizontal surfaces, window framing, and ceilings, as necessary.
- B. <u>Wet Wiping of Surfaces Initial</u>: Cleaning of non-porous or metal surfaces should be performed by repeatedly wiping the surface with damp rags, not soaking, wetted with Foster 40-80[™] disinfectant. The solution and rags shall be changed often to prevent spreading fungal contamination onto the surfaces being cleaned.
 - 1. HEPA-Vacuuming of Surfaces Fine Cleaning:
 - a. After surfaces have been wiped clean of visible dust and/or debris with damp rags and detergent solution or tap water and thoroughly dried, the Contractor shall again repeatedly HEPA-vacuum all surfaces in the contained area, including but not limited to, walls and floors, soffit assemblies, window framing, and all horizontal surfaces.
 - 2. HEPA-Air Washing Fine Cleaning:
 - a. The Contractor shall provide and install HEPA-AFDs for airwashing in each work area in order to continuously remove airborne fungal contamination and dusts inside the work during the cleaning phase, and for a minimum of 8 hours after the remedial efforts have been completed before sampling. As necessary, pre-filters and/or HEPA filters for each HEPA-AFD shall be changed.

3.13 POST REMEDIATION ASSESSMENT

- A. When visual inspections and/or post remediation assessments are specified, the Contractor shall notify the Building Owner, Architect, and Environmental Consultant 5 days in advance of the day and time when the Contractor will be ready for such inspections or assessments.
- B. Post remediation assessment for each work area will consist of the following:
 - 1. Visual inspection for the presence of visible fungal growth and dust/dirt free conditions.
 - 2. Air samples for total spore counts will be collected in the work area and outdoors for comparison purposes. Air samples for total spore counts must meet post remediation assessment criteria detailed in Section 3.14.
 - 3. In the event that the air samples for total spore counts are not considered to be acceptable using the post remediation assessment criteria, Remediation Contractor shall be required to reclean all surfaces inside the work area and conduct HEPA airwashing for 8 hours. Steps 1 and 2 will subsequently be re-performed by the Environmental Consultant.
- C. Air samples for total spore counts will be sent via FedEx for overnight delivery to an American Industrial Hygiene Association (AIHA) Laboratory Accreditation Program, Environmental Microbiology Laboratory Accreditation Program accredited laboratory for same day analysis, if available, or 24 hour analysis turnaround time.
- D. Visual Inspection:
 - The Contractor shall notify the Architect/Environmental Consultant when final cleaning of all surfaces inside the work area has been completed. The Environmental Consultant will perform a visual inspection of the work area after the demolition and cleaning of all surfaces has been completed.
 - 2. If during the inspection any visible dust, debris, or fungal growth is observed, using the criteria stated herein, the Remediation Contractor shall re-clean the area. The Environmental Consultant shall provide in writing a punch list of items that do not meet final visual inspection criteria.

- 3. If the work area passes visual inspection, the Environmental Consultant will proceed with the post remediation sampling assessment.
 - a. During HEPA-airwashing operations, the Contractor shall seal the contained area and entry will be prohibited until the Environmental Consultant is prepared to collect post remediation air samples inside the work area. The Architect and Environmental Consultant will determine when the work barriers and enclosure can be removed after the post remediation assessment has met the requirements of this specification.

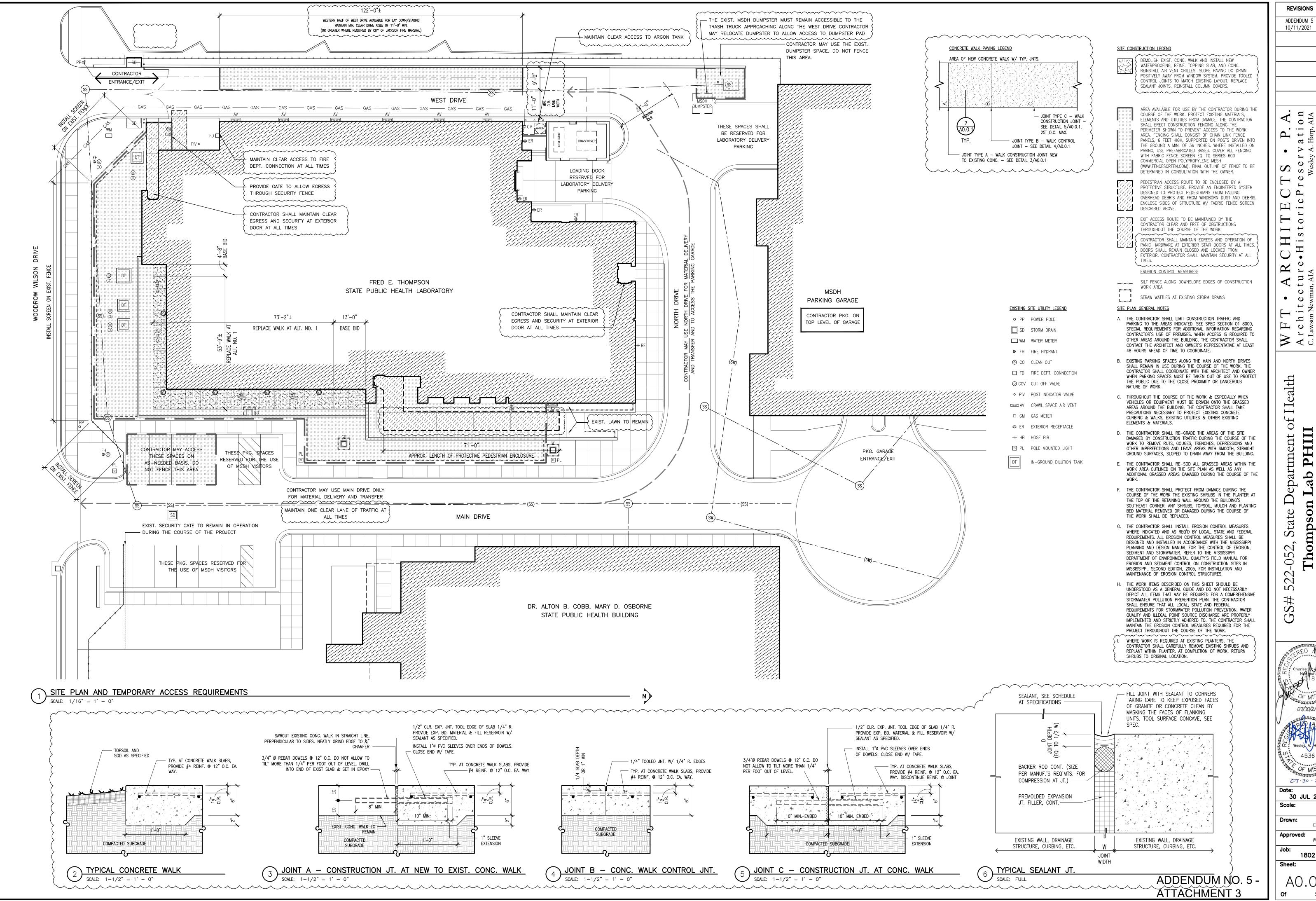
3.14 POST REMEDIATION SAMPLING

- A. Post Remediation Assessment Criteria:
 - 1. Air samples for total spore counts must meet the following assessment criteria:
 - a. Indoor/Outdoor Concentrations Total concentrations indoors should be less than outdoors.
 - b. Fungal structures characterized in the air samples for total spore counts collected in the contained area(s) must be less than and consistent with the rank order of the same fungal structure types characterized outdoors. Minor differences in spore types found indoors compared to outdoors are acceptable.
 - 2. If the air samples do not meet the above criteria, surfaces inside the containments shall be HEPA vacuumed and damp wiped and the HEPA-AFDs operated for 24 hours prior to resampling. All costs associated with additional testing will be borne by the Contractor.

3.15 HANDLING AND DISPOSAL OF MOLD CONTAMINATED WASTE

- A. Waste Material Removal and/or Packaging:
 - 1. All waste generated in the work area must be placed in 6-mil polyethylene bags and sealed. Prior to being removed from the work area, waste bags must be HEPA-vacuumed and wet wiped with a detergent solution to remove any visible dust on the outside of the bags. During waste load out, bags must be immediately placed in a roll cart or container that has a cover lid. The time of day and pathway by which the cart is taken out of the building must be coordinated with Thompson Laboratory.
 - 2. The Contractor shall utilize a lockable, roll-off type waste disposal container or truck with an enclosed bed to accept waste bags as they are removed each workday. As an option, the Remediation Contractor can use a work truck to remove the bagged waste from the site daily. If a dumpster is used, it is to be locked during non-work hours.

END OF SECTION



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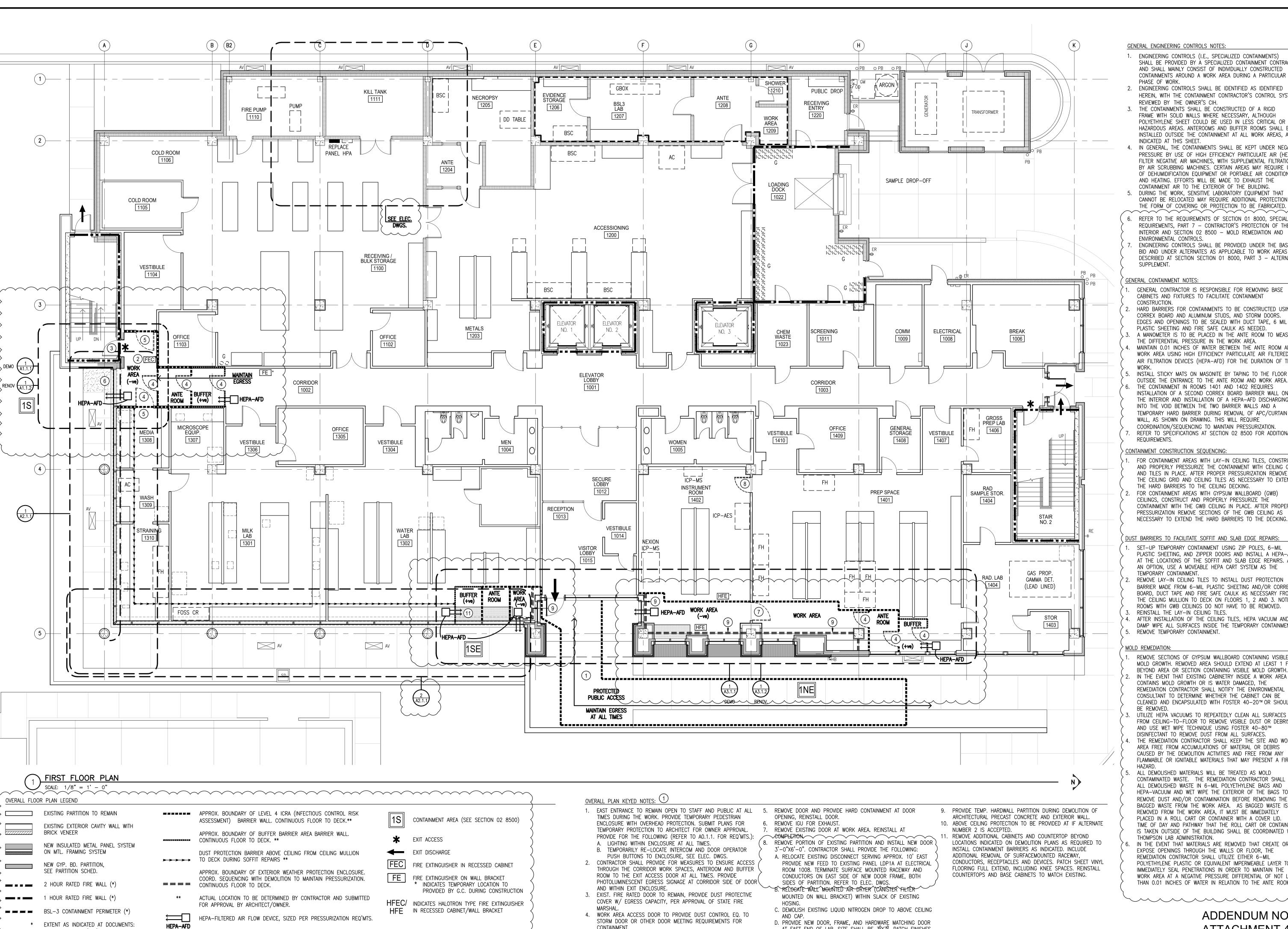
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CONTAINMENT.

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AT EAST END OF LAB, SIZE SHALL BE 3^{0} X 7^{0} . PATCH FINISHES.

GENERAL ENGINEERING CONTROLS NOTES:

- 1. ENGINEERING CONTROLS (I.E., SPECIALIZED CONTAINMENTS) SHALL BE PROVIDED BY A SPECIALIZED CONTAINMENT CONTRACTOR AND SHALL MAINLY CONSIST OF INDIVIDUALLY CONSTRUCTED CONTAINMENTS AROUND A WORK AREA DURING A PARTICULAR
- 2. ENGINEERING CONTROLS SHALL BE IDENTIFIED AS IDENTIFIED HEREIN, WITH THE CONTAINMENT CONTRACTOR'S CONTROL SYSTEMS
- 3. THE CONTAINMENTS SHALL BE CONSTRUCTED OF A RIGID FRAME WITH SOLID WALLS WHERE NECESSARY, ALTHOUGH POLYETHYLENE SHEET COULD BE USED IN LESS CRITICAL OR HAZARDOUS AREAS. ANTEROOMS AND BUFFER ROOMS SHALL BE INSTALLED OUTSIDE THE CONTAINMENT AT ALL WORK AREAS, AS INDICATED AT THIS SHEET.
- IN GENERAL, THE CONTAINMENTS SHALL BE KEPT UNDER NEGATIVE PRESSURE BY USE OF HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER NEGATIVE AIR MACHINES, WITH SUPPLEMENTAL FILTRATION BY AIR SCRUBBING MACHINES. CERTAIN AREAS MAY REQUIRE USE OF DEHUMIDIFICATION EQUIPMENT OR PORTABLE AIR CONDITIONING AND HEATING. EFFORTS WILL BE MADE TO EXHAUST THE
- CONTAINMENT AIR TO THE EXTERIOR OF THE BUILDING. DURING THE WORK, SENSITIVE LABORATORY EQUIPMENT THAT CANNOT BE RELOCATED MAY REQUIRE ADDITIONAL PROTECTION IN THE FORM OF COVERING OR PROTECTION TO BE FABRICATED.
- REFER TO THE REQUIREMENTS OF SECTION 01 8000, SPECIAL REQUIREMENTS, PART 7 - CONTRACTOR'S PROTECTION OF THE INTERIOR AND SECTION 02 8500 - MOLD REMEDIATION AND ENVIRONMENTAL CONTROLS.
- ENGINEERING CONTROLS SHALL BE PROVIDED UNDER THE BASE BID AND UNDER ALTERNATES AS APPLICABLE TO WORK AREAS DESCRIBED AT SECTION SECTION 01 8000, PART 3 - ALTERNATE SUPPLEMENT.

GENERAL CONTAINMENT NOTES:

GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING BASE CABINETS AND FIXTURES TO FACILITATE CONTAINMENT CONSTRUCTION.

HARD BARRIERS FOR CONTAINMENTS TO BE CONSTRUCTED USING CORREX BOARD AND ALUMINUM STUDS, AND STORM DOORS. EDGES AND OPENINGS TO BE SEALED WITH DUCT TAPE, 6 MIL PLASTIC SHEETING AND FIRE SAFE CAULK AS NEEDED. A MANOMETER IS TO BE PLACED IN THE ANTE ROOM TO MEASURE

THE DIFFERENTIAL PRESSURE IN THE WORK AREA. MAINTAIN 0.01 INCHES OF WATER BETWEEN THE ANTE ROOM AND WORK AREA USING HIGH EFFICIENCY PARTICULATE AIR FILTERED AIR FILTRATION DEVICES (HEPA-AFD) FOR THE DURATION OF THE INSTALL STICKY MATS ON MASONITE BY TAPING TO THE FLOOR

OUTSIDE THE ENTRANCE TO THE ANTE ROOM AND WORK AREA. THE CONTAINMENT IN ROOMS 1401 AND 1402 REQUIRES INSTALLATION OF A SECOND CORREX BOARD BARRIER WALL ON THE INTERIOR AND INSTALLATION OF A HEPA-AFD DISCHARGING INTO THE VOID BETWEEN THE TWO BARRIER WALLS AND A TEMPORARY HARD BARRIER DURING REMOVAL OF APC/CURTAIN WALL, AS SHOWN ON DRAWING. THIS WILL REQUIRE COORDINATION/SEQUENCING TO MAINTAIN PRESSURIZATION. REFER TO SPECIFICATIONS AT SECTION 02 8500 FOR ADDITIONAL

CONTAINMENT CONSTRUCTION SEQUENCING

- FOR CONTAINMENT AREAS WITH LAY-IN CEILING TILES, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH CEILING GRID AND TILES IN PLACE. AFTER PROPER PRESSURIZATION REMOVE THE CEILING GRID AND CEILING TILES AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE CEILING DECKING.
- FOR CONTAINMENT AREAS WITH GYPSUM WALLBOARD CEILINGS, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH THE GWB CEILING IN PLACE. AFTER PROPER PRESSURIZATION REMOVE SECTIONS OF THE GWB CEILING AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE DECKING.

DUST BARRIERS TO FACILITATE SOFFIT AND SLAB EDGE REPAIRS

SET-UP TEMPORARY CONTAINMENT USING ZIP POLES, 6-MIL PLASTIC SHEETING, AND ZIPPER DOORS AND INSTALL A HEPA-AFD AT THE LOCATIONS OF THE SOFFIT AND SLAB EDGE REPAIRS. AS AN OPTION, USE A MOVEABLE HEPA CART SYSTEM AS THE

TEMPORARY CONTAINMENT. REMOVE LAY-IN CEILING TILES TO INSTALL DUST PROTECTION BARRIER MADE FROM 6-MIL PLASTIC SHEETING AND/OR CORREX BOARD, DUCT TAPE AND FIRE SAFE CAULK AS NECESSARY FROM THE CEILING MULLION TO DECK ON FLOORS 1, 2 AND 3. NOTE: ROOMS WITH GWB CEILINGS DO NOT HAVE TO BE REMOVED. REINSTALL THE LAY-IN CEILING TILES.

AFTER INSTALLATION OF THE CEILING TILES. HEPA VACUUM AND DAMP WIPE ALL SURFACES INSIDE THE TEMPORARY CONTAINMENT. REMOVE TEMPORARY CONTAINMENT.

- REMOVE SECTIONS OF GYPSUM WALLBOARD CONTAINING VISIBLE MOLD GROWTH. REMOVED AREA SHOULD EXTEND AT LEAST 1 FOOT BEYOND AREA OR SECTION CONTAINING VISIBLE MOLD GROWTH. IN THE EVENT THAT EXISTING CABINETRY INSIDE A WORK AREA CONTAINS MOLD GROWTH OR IS WATER DAMAGED, THE REMEDIATION CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHETHER THE CABINET CAN BE CLEANED AND ENCAPSULATED WITH FOSTER 40-20™ OR SHOULD
- UTILIZE HEPA VACUUMS TO REPEATEDLY CLEAN ALL SURFACES FROM CEILING-TO-FLOOR TO REMOVE VISIBLE DUST OR DEBRIS, AND USE WET WIPE TECHNIQUE USING FOSTER 40-80™ DISINFECTANT TO REMOVE DUST FROM ALL SURFACES.
- THE REMEDIATION CONTRACTOR SHALL KEEP THE SITE AND WORK AREA FREE FROM ACCUMULATIONS OF MATERIAL OR DEBRIS CAUSED BY THE DEMOLITION ACTIVITIES AND FREE FROM ANY FLAMMABLE OR IGNITABLE MATERIALS THAT MAY PRESENT A FIRE
- ALL DEMOLISHED MATERIALS WILL BE TREATED AS MOLD CONTAMINATED WASTE. THE REMEDIATION CONTRACTOR SHALL BAG ALL DEMOLISHED WASTE IN 6-MIL POLYETHYLENE BAGS AND HEPA-VACUUM AND WET WIPE THE EXTERIOR OF THE BAGS TO REMOVE DUST AND/OR CONTAMINATION BEFORE REMOVING THE BAGGED WASTE FROM THE WORK AREA. AS BAGGED WASTE IS REMOVED FROM THE WORK AREA, IT MUST BE IMMEDIATELY PLACED IN A ROLL CART OR CONTAINER WITH A COVER LID. TIME OF DAY AND PATHWAY THAT THE ROLL CART OR CONTAINER
- IS TAKEN OUTSIDE OF THE BUILDING SHALL BE COORDINATED WITH THOMPSON LAB ADMINISTRATION. IN THE EVENT THAT MATERIALS ARE REMOVED THAT CREATE OR

EXPOSE OPENINGS THROUGH THE WALLS OR FLOOR, THE REMEDIATION CONTRACTOR SHALL UTILIZE EITHER 6-MIL POLYETHYLENE PLASTIC OR EQUIVALENT IMPERMEABLE LAYER TO IMMEDIATELY SEAL PENETRATIONS IN ORDER TO MAINTAIN THE WORK AREA AT A NEGATIVE PRESSURE DIFFERENTIAL OF NOT LESS THAN 0.01 INCHES OF WATER IN RELATION TO THE ANTE ROOM.

> ADDENDUM NO. 5 ATTACHMENT 4

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REVISIONS

ADDENDUM 2 8/26/2021

ADDENDUM 5

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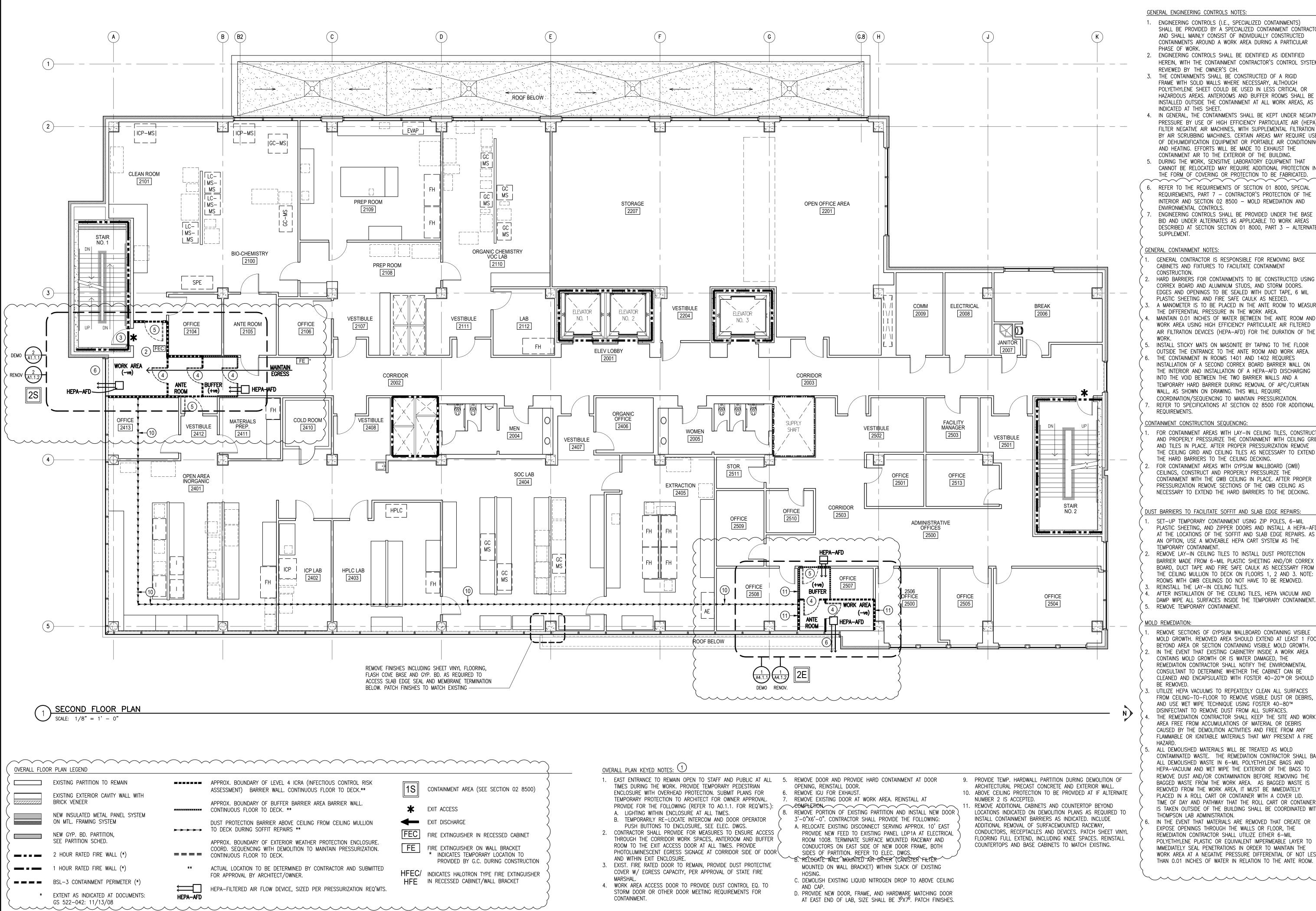
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- 1. ENGINEERING CONTROLS (I.E., SPECIALIZED CONTAINMENTS SHALL BE PROVIDED BY A SPECIALIZED CONTAINMENT CONTRACTOR AND SHALL MAINLY CONSIST OF INDIVIDUALLY CONSTRUCTED CONTAINMENTS AROUND A WORK AREA DURING A PARTICULAR
- PHASE OF WORK. 2. ENGINEERING CONTROLS SHALL BE IDENTIFIED AS IDENTIFIED HEREIN, WITH THE CONTAINMENT CONTRACTOR'S CONTROL SYSTEMS
- 3. THE CONTAINMENTS SHALL BE CONSTRUCTED OF A RIGID FRAME WITH SOLID WALLS WHERE NECESSARY, ALTHOUGH POLYETHYLENE SHEET COULD BE USED IN LESS CRITICAL OR HAZARDOUS AREAS. ANTEROOMS AND BUFFER ROOMS SHALL BE INSTALLED OUTSIDE THE CONTAINMENT AT ALL WORK AREAS, AS INDICATED AT THIS SHEET.
- 4. IN GENERAL, THE CONTAINMENTS SHALL BE KEPT UNDER NEGATIVE PRESSURE BY USE OF HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER NEGATIVE AIR MACHINES, WITH SUPPLEMENTAL FILTRATION BY AIR SCRUBBING MACHINES. CERTAIN AREAS MAY REQUIRE USE OF DEHUMIDIFICATION EQUIPMENT OR PORTABLE AIR CONDITIONING AND HEATING. EFFORTS WILL BE MADE TO EXHAUST THE CONTAINMENT AIR TO THE EXTERIOR OF THE BUILDING.
- 5. DURING THE WORK, SENSITIVE LABORATORY EQUIPMENT THAT CANNOT BE RELOCATED MAY REQUIRE ADDITIONAL PROTECTION IN THE FORM OF COVERING OR PROTECTION TO BE FABRICATED.
- REFER TO THE REQUIREMENTS OF SECTION 01 8000, SPECIAL REQUIREMENTS, PART 7 - CONTRACTOR'S PROTECTION OF THE INTERIOR AND SECTION 02 8500 - MOLD REMEDIATION AND ENVIRONMENTAL CONTROLS. ENGINEERING CONTROLS SHALL BE PROVIDED UNDER THE BASE
- BID AND UNDER ALTERNATES AS APPLICABLE TO WORK AREAS DESCRIBED AT SECTION SECTION 01 8000, PART 3 - ALTERNATE

GENERAL CONTAINMENT NOTES:

GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING BASE CABINETS AND FIXTURES TO FACILITATE CONTAINMENT

HARD BARRIERS FOR CONTAINMENTS TO BE CONSTRUCTED USING CORREX BOARD AND ALUMINUM STUDS, AND STORM DOORS. EDGES AND OPENINGS TO BE SEALED WITH DUCT TAPE, 6 MIL PLASTIC SHEETING AND FIRE SAFE CAULK AS NEEDED. A MANOMETER IS TO BE PLACED IN THE ANTE ROOM TO MEASURE THE DIFFERENTIAL PRESSURE IN THE WORK AREA. MAINTAIN 0.01 INCHES OF WATER BETWEEN THE ANTE ROOM AND

WORK AREA USING HIGH EFFICIENCY PARTICULATE AIR FILTERED AIR FILTRATION DEVICES (HEPA-AFD) FOR THE DURATION OF THE INSTALL STICKY MATS ON MASONITE BY TAPING TO THE FLOOR OUTSIDE THE ENTRANCE TO THE ANTE ROOM AND WORK AREA. THE CONTAINMENT IN ROOMS 1401 AND 1402 REQUIRES

THE INTERIOR AND INSTALLATION OF A HEPA-AFD DISCHARGING INTO THE VOID BETWEEN THE TWO BARRIER WALLS AND A TEMPORARY HARD BARRIER DURING REMOVAL OF APC/CURTAIN WALL, AS SHOWN ON DRAWING. THIS WILL REQUIRE COORDINATION/SEQUENCING TO MAINTAIN PRESSURIZATION. REFER TO SPECIFICATIONS AT SECTION 02 8500 FOR ADDITIONAL

CONTAINMENT CONSTRUCTION SEQUENCING:

FOR CONTAINMENT AREAS WITH LAY-IN CEILING TILES, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH CEILING GRID AND TILES IN PLACE. AFTER PROPER PRESSURIZATION REMOVE THE CEILING GRID AND CEILING TILES AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE CEILING DECKING. FOR CONTAINMENT AREAS WITH GYPSUM WALLBOARD (GWB) CEILINGS. CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH THE GWB CEILING IN PLACE. AFTER PROPER PRESSURIZATION REMOVE SECTIONS OF THE GWB CEILING AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE DECKING.

DUST BARRIERS TO FACILITATE SOFFIT AND SLAB EDGE REPAIRS

SET-UP TEMPORARY CONTAINMENT USING ZIP POLES. 6-MIL PLASTIC SHEETING, AND ZIPPER DOORS AND INSTALL A HEPA-AFD AT THE LOCATIONS OF THE SOFFIT AND SLAB EDGE REPAIRS. AS AN OPTION, USE A MOVEABLE HEPA CART SYSTEM AS THE TEMPORARY CONTAINMENT.

REMOVE LAY-IN CEILING TILES TO INSTALL DUST PROTECTION BARRIER MADE FROM 6-MIL PLASTIC SHEETING AND/OR CORREX BOARD. DUCT TAPE AND FIRE SAFE CAULK AS NECESSARY FROM THE CEILING MULLION TO DECK ON FLOORS 1, 2 AND 3. NOTE: ROOMS WITH GWB CEILINGS DO NOT HAVE TO BE REMOVED. REINSTALL THE LAY-IN CEILING TILES.

AFTER INSTALLATION OF THE CEILING TILES, HEPA VACUUM AND DAMP WIPE ALL SURFACES INSIDE THE TEMPORARY CONTAINMENT. REMOVE TEMPORARY CONTAINMENT.

REMOVE SECTIONS OF GYPSUM WALLBOARD CONTAINING VISIBLE MOLD GROWTH, REMOVED AREA SHOULD EXTEND AT LEAST 1 FOOT BEYOND AREA OR SECTION CONTAINING VISIBLE MOLD GROWTH. IN THE EVENT THAT EXISTING CABINETRY INSIDE A WORK AREA CONTAINS MOLD GROWTH OR IS WATER DAMAGED, THE REMEDIATION CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHETHER THE CABINET CAN BE CLEANED AND ENCAPSULATED WITH FOSTER 40-20™ OR SHOULD

UTILIZE HEPA VACUUMS TO REPEATEDLY CLEAN ALL SURFACES FROM CEILING-TO-FLOOR TO REMOVE VISIBLE DUST OR DEBRIS, AND USE WET WIPE TECHNIQUE USING FOSTER 40-80™ DISINFECTANT TO REMOVE DUST FROM ALL SURFACES. THE REMEDIATION CONTRACTOR SHALL KEEP THE SITE AND WORK AREA FREE FROM ACCUMULATIONS OF MATERIAL OR DEBRIS CAUSED BY THE DEMOLITION ACTIVITIES AND FREE FROM ANY FLAMMABLE OR IGNITABLE MATERIALS THAT MAY PRESENT A FIRE

ALL DEMOLISHED MATERIALS WILL BE TREATED AS MOLD CONTAMINATED WASTE. THE REMEDIATION CONTRACTOR SHALL BAG ALL DEMOLISHED WASTE IN 6-MIL POLYETHYLENE BAGS AND HEPA-VACUUM AND WET WIPE THE EXTERIOR OF THE BAGS TO REMOVE DUST AND/OR CONTAMINATION BEFORE REMOVING THE BAGGED WASTE FROM THE WORK AREA. AS BAGGED WASTE IS REMOVED FROM THE WORK AREA, IT MUST BE IMMEDIATELY PLACED IN A ROLL CART OR CONTAINER WITH A COVER LID. TIME OF DAY AND PATHWAY THAT THE ROLL CART OR CONTAINER IS TAKEN OUTSIDE OF THE BUILDING SHALL BE COORDINATED WITH

IN THE EVENT THAT MATERIALS ARE REMOVED THAT CREATE OR EXPOSE OPENINGS THROUGH THE WALLS OR FLOOR, THE REMEDIATION CONTRACTOR SHALL UTILIZE EITHER 6-MIL POLYETHYLENE PLASTIC OR EQUIVALENT IMPERMEABLE LAYER TO IMMEDIATELY SEAL PENETRATIONS IN ORDER TO MAINTAIN THE WORK AREA AT A NEGATIVE PRESSURE DIFFERENTIAL OF NOT LESS

ADDENDUM NO. 5

ATTACHMENT 5

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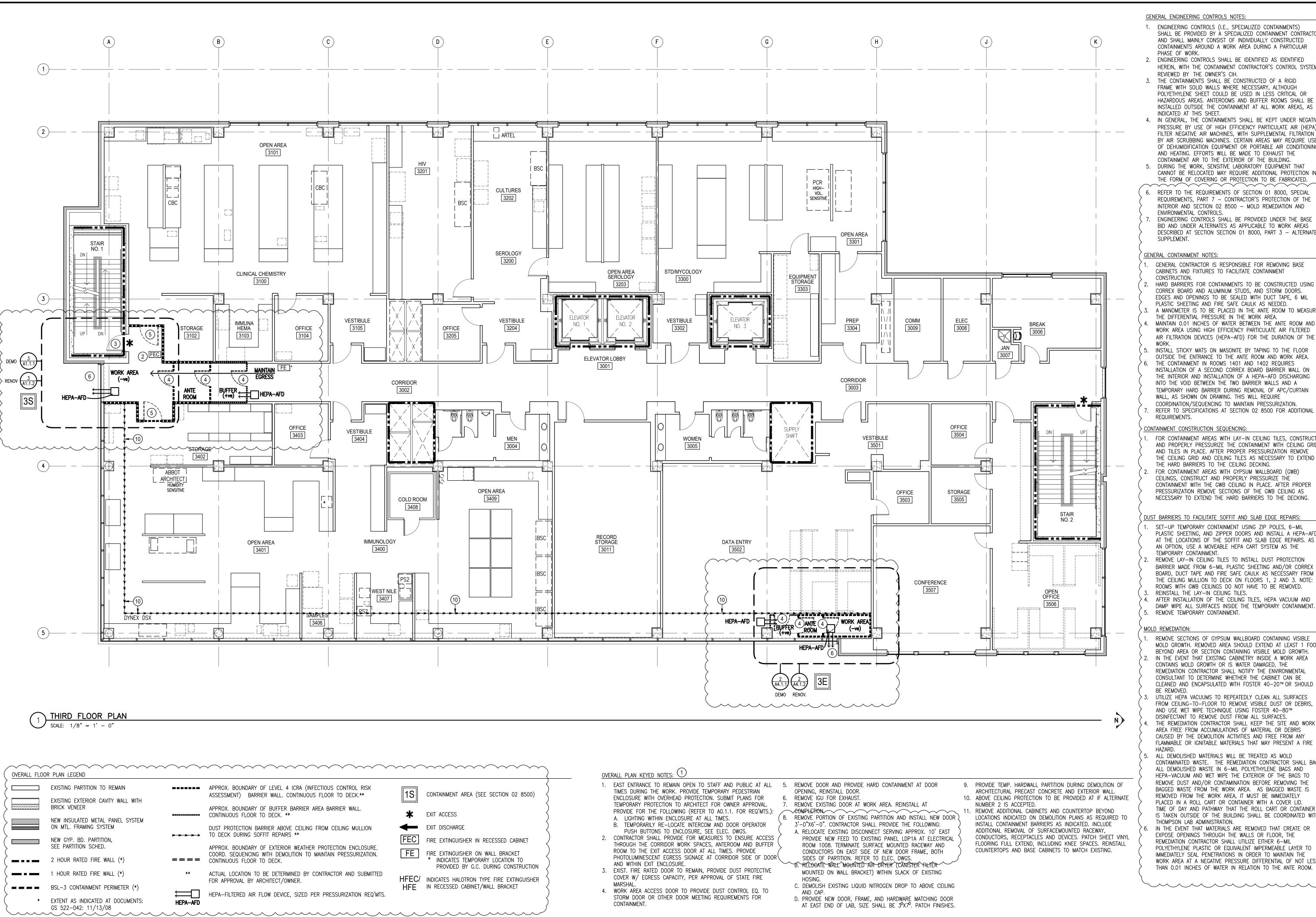
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GENERAL ENGINEERING CONTROLS NOTES:

1. ENGINEERING CONTROLS (I.E., SPECIALIZED CONTAINMENTS) SHALL BE PROVIDED BY A SPECIALIZED CONTAINMENT CONTRACTOR AND SHALL MAINLY CONSIST OF INDIVIDUALLY CONSTRUCTED CONTAINMENTS AROUND A WORK AREA DURING A PARTICULAR

2. ENGINEERING CONTROLS SHALL BE IDENTIFIED AS IDENTIFIED HEREIN, WITH THE CONTAINMENT CONTRACTOR'S CONTROL SYSTEMS

REVIEWED BY THE OWNER'S CIH. 3. THE CONTAINMENTS SHALL BE CONSTRUCTED OF A RIGID FRAME WITH SOLID WALLS WHERE NECESSARY, ALTHOUGH POLYETHYLENE SHEET COULD BE USED IN LESS CRITICAL OR HAZARDOUS AREAS. ANTEROOMS AND BUFFER ROOMS SHALL BE INSTALLED OUTSIDE THE CONTAINMENT AT ALL WORK AREAS, AS INDICATED AT THIS SHEET.

4. IN GENERAL, THE CONTAINMENTS SHALL BE KEPT UNDER NEGATIVE PRESSURE BY USE OF HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER NEGATIVE AIR MACHINES, WITH SUPPLEMENTAL FILTRATION BY AIR SCRUBBING MACHINES, CERTAIN AREAS MAY REQUIRE USE OF DEHUMIDIFICATION EQUIPMENT OR PORTABLE AIR CONDITIONING AND HEATING. EFFORTS WILL BE MADE TO EXHAUST THE CONTAINMENT AIR TO THE EXTERIOR OF THE BUILDING.

5. DURING THE WORK, SENSITIVE LABORATORY EQUIPMENT THAT CANNOT BE RELOCATED MAY REQUIRE ADDITIONAL PROTECTION IN THE FORM OF COVERING OR PROTECTION TO BE FABRICATED.

REFER TO THE REQUIREMENTS OF SECTION 01 8000, SPECIAL REQUIREMENTS, PART 7 - CONTRACTOR'S PROTECTION OF THE INTERIOR AND SECTION 02 8500 - MOLD REMEDIATION AND ENVIRONMENTAL CONTROLS.

ENGINEERING CONTROLS SHALL BE PROVIDED UNDER THE BASE BID AND UNDER ALTERNATES AS APPLICABLE TO WORK AREAS DESCRIBED AT SECTION SECTION 01 8000, PART 3 - ALTERNATE SUPPLEMENT.

GENERAL CONTAINMENT NOTES:

GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING BASE CABINETS AND FIXTURES TO FACILITATE CONTAINMENT

HARD BARRIERS FOR CONTAINMENTS TO BE CONSTRUCTED USING CORREX BOARD AND ALUMINUM STUDS, AND STORM DOORS. EDGES AND OPENINGS TO BE SEALED WITH DUCT TAPE, 6 MIL PLASTIC SHEETING AND FIRE SAFE CAULK AS NEEDED.

A MANOMETER IS TO BE PLACED IN THE ANTE ROOM TO MEASURE THE DIFFERENTIAL PRESSURE IN THE WORK AREA. MAINTAIN 0.01 INCHES OF WATER BETWEEN THE ANTE ROOM AND WORK AREA USING HIGH EFFICIENCY PARTICULATE AIR FILTERED AIR FILTRATION DEVICES (HEPA-AFD) FOR THE DURATION OF THE

INSTALL STICKY MATS ON MASONITE BY TAPING TO THE FLOOR OUTSIDE THE ENTRANCE TO THE ANTE ROOM AND WORK AREA. THE CONTAINMENT IN ROOMS 1401 AND 1402 REQUIRES INSTALLATION OF A SECOND CORREX BOARD BARRIER WALL ON THE INTERIOR AND INSTALLATION OF A HEPA-AFD DISCHARGING INTO THE VOID BETWEEN THE TWO BARRIER WALLS AND A TEMPORARY HARD BARRIER DURING REMOVAL OF APC/CURTAIN WALL, AS SHOWN ON DRAWING. THIS WILL REQUIRE COORDINATION/SEQUENCING TO MAINTAIN PRESSURIZATION. REFER TO SPECIFICATIONS AT SECTION 02 8500 FOR ADDITIONAL REQUIREMENTS.

CONTAINMENT CONSTRUCTION SEQUENCING

FOR CONTAINMENT AREAS WITH LAY-IN CEILING TILES, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH CEILING GRID AND TILES IN PLACE. AFTER PROPER PRESSURIZATION REMOVE THE CEILING GRID AND CEILING TILES AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE CEILING DECKING. FOR CONTAINMENT AREAS WITH GYPSUM WALLBOARD (GWB) CEILINGS. CONSTRUCT AND PROPERLY PRESSURIZE THE

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DUST BARRIERS TO FACILITATE SOFFIT AND SLAB EDGE REPAIRS

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AFTER INSTALLATION OF THE CEILING TILES. HEPA VACUUM AND DAMP WIPE ALL SURFACES INSIDE THE TEMPORARY CONTAINMENT. 5. REMOVE TEMPORARY CONTAINMENT.

MOLD REMEDIATION:

REMOVE SECTIONS OF GYPSUM WALLBOARD CONTAINING VISIBLE MOLD GROWTH. REMOVED AREA SHOULD EXTEND AT LEAST 1 FOOT BEYOND AREA OR SECTION CONTAINING VISIBLE MOLD GROWTH. IN THE EVENT THAT EXISTING CABINETRY INSIDE A WORK AREA CONTAINS MOLD GROWTH OR IS WATER DAMAGED, THE REMEDIATION CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHETHER THE CABINET CAN BE CLEANED AND ENCAPSULATED WITH FOSTER 40-20™ OR SHOULD BE REMOVED.

UTILIZE HEPA VACUUMS TO REPEATEDLY CLEAN ALL SURFACES FROM CEILING-TO-FLOOR TO REMOVE VISIBLE DUST OR DEBRIS, AND USE WET WIPE TECHNIQUE USING FOSTER 40-80™ DISINFECTANT TO REMOVE DUST FROM ALL SURFACES.

THE REMEDIATION CONTRACTOR SHALL KEEP THE SITE AND WORK AREA FREE FROM ACCUMULATIONS OF MATERIAL OR DEBRIS CAUSED BY THE DEMOLITION ACTIVITIES AND FREE FROM ANY FLAMMABLE OR IGNITABLE MATERIALS THAT MAY PRESENT A FIRE

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IN THE EVENT THAT MATERIALS ARE REMOVED THAT CREATE OR EXPOSE OPENINGS THROUGH THE WALLS OR FLOOR, THE REMEDIATION CONTRACTOR SHALL UTILIZE EITHER 6-MIL POLYETHYLENE PLASTIC OR EQUIVALENT IMPERMEABLE LAYER TO IMMEDIATELY SEAL PENETRATIONS IN ORDER TO MAINTAIN THE WORK AREA AT A NEGATIVE PRESSURE DIFFERENTIAL OF NOT LESS THAN 0.01 INCHES OF WATER IN RELATION TO THE ANTE ROOM.

> ADDENDUM NO. 5 -**ATTACHMENT 6**

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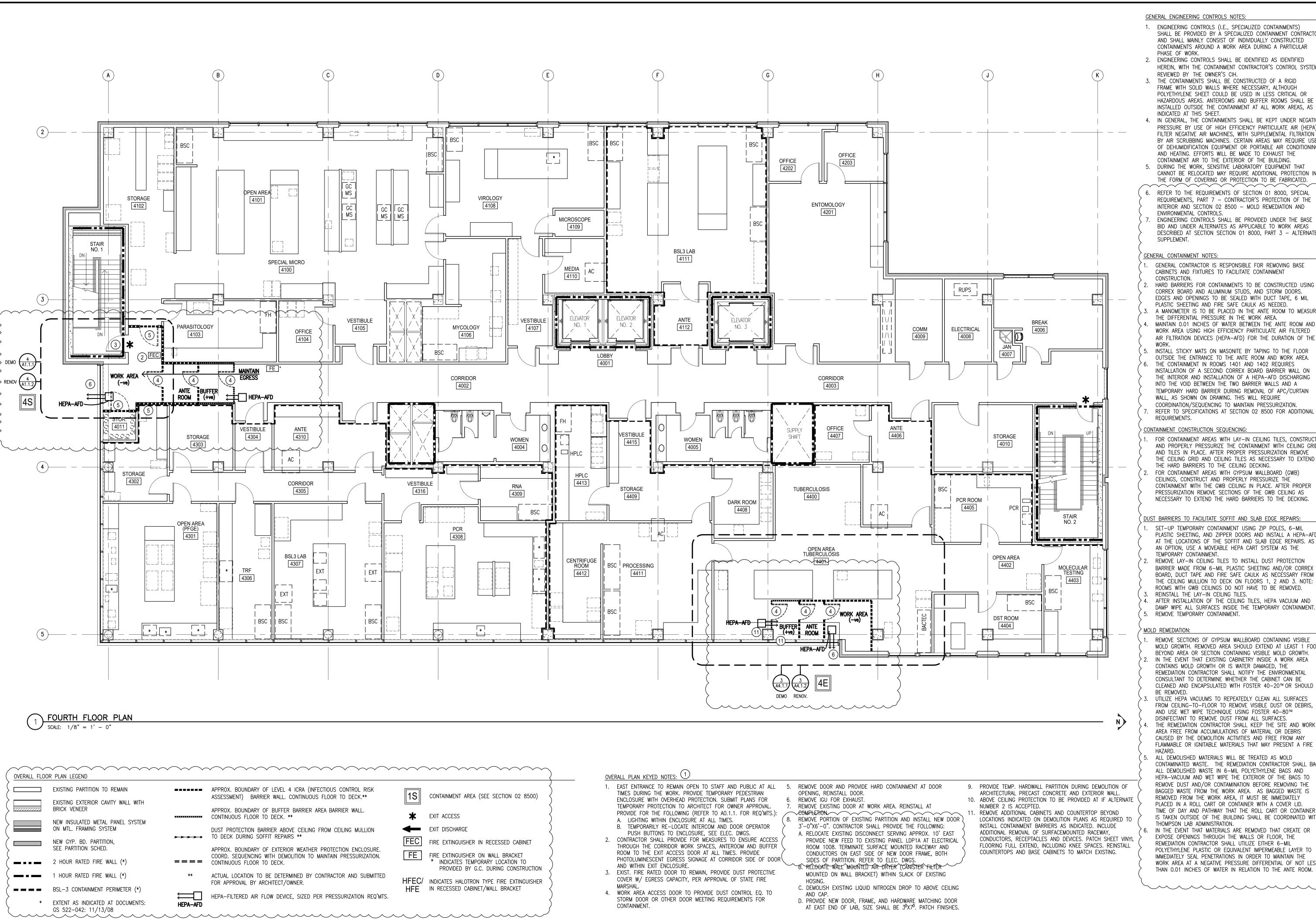
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GENERAL ENGINEERING CONTROLS NOTES:

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- 5. DURING THE WORK, SENSITIVE LABORATORY EQUIPMENT THAT CANNOT BE RELOCATED MAY REQUIRE ADDITIONAL PROTECTION IN THE FORM OF COVERING OR PROTECTION TO BE FABRICATED.
- REFER TO THE REQUIREMENTS OF SECTION 01 8000, SPECIAL REQUIREMENTS, PART 7 - CONTRACTOR'S PROTECTION OF THE INTERIOR AND SECTION 02 8500 - MOLD REMEDIATION AND ENVIRONMENTAL CONTROLS.
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FOR CONTAINMENT AREAS WITH LAY-IN CEILING TILES, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH CEILING GRID AND TILES IN PLACE. AFTER PROPER PRESSURIZATION REMOVE THE CEILING GRID AND CEILING TILES AS NECESSARY TO EXTEND THE HARD BARRIERS TO THE CEILING DECKING. FOR CONTAINMENT AREAS WITH GYPSUM WALLBOARD (GWB) CEILINGS, CONSTRUCT AND PROPERLY PRESSURIZE THE CONTAINMENT WITH THE GWB CEILING IN PLACE. AFTER PROPER

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REINSTALL THE LAY-IN CEILING TILES. AFTER INSTALLATION OF THE CEILING TILES, HEPA VACUUM AND DAMP WIPE ALL SURFACES INSIDE THE TEMPORARY CONTAINMENT. 5. REMOVE TEMPORARY CONTAINMENT.

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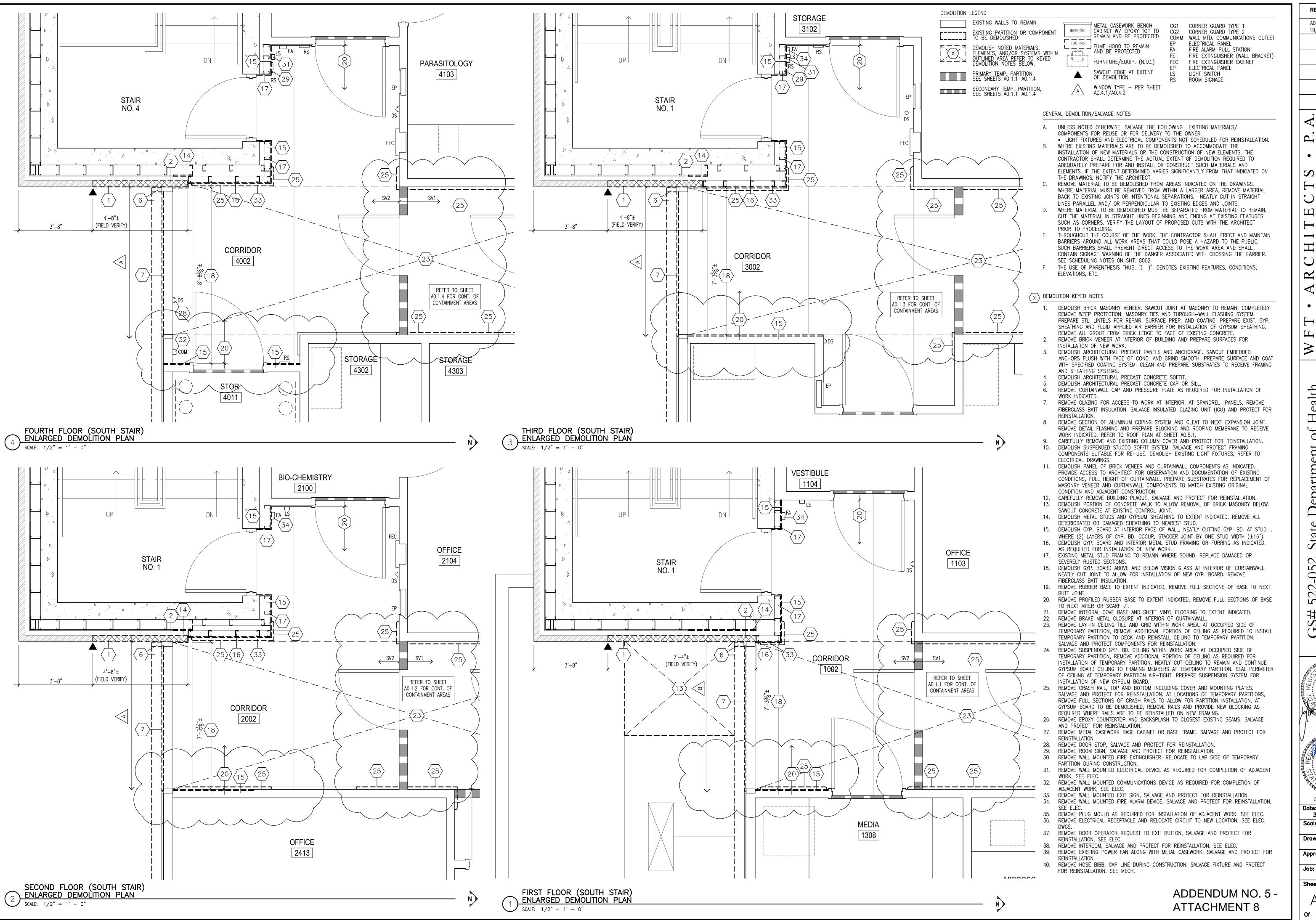
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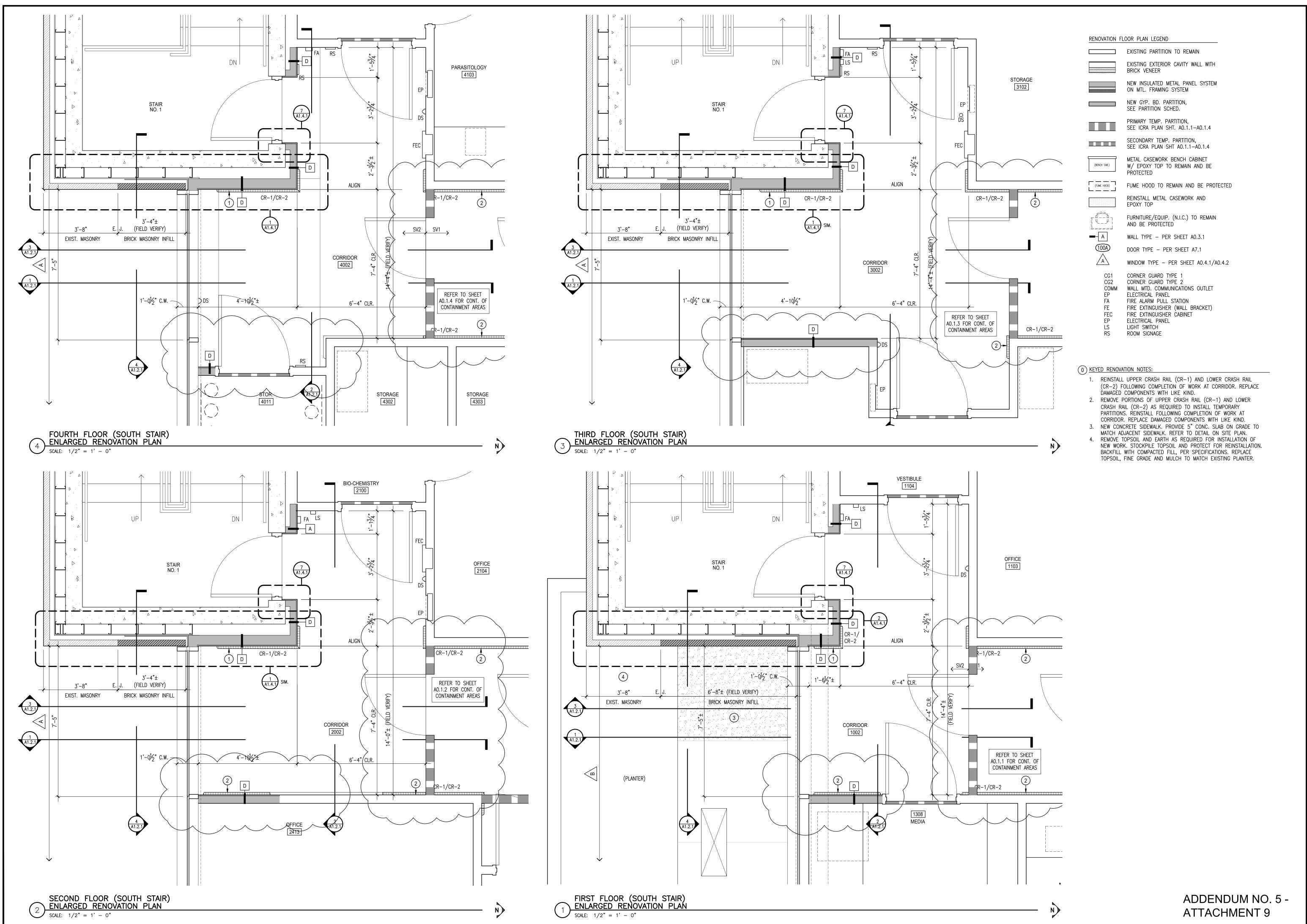
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