

GENERAL

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated January 2023, and consists of pages AD1-1. Specification Sections 00110, 011100, 015610, 028213.19, and Specs section appendix document A and Drawing Sheets A1-01, A1-02 and A2-01. The following changes, additions and/or deletions shall be made to the following documents; all other conditions shall remain the same.

ITEM NO. I – SPECIFICATIONS

1. Specification Section 00 11 0 Table of Contents
Table of contents updated to reflect the added 028213.19 and Appendix Millennium Hazardous Materials Report dated 12/29/2022.
2. Specification Section 01 11 00 Summary of Work
Replace section 011100 in its entirety with the attached new section. Subsection 1.02-D was updated to reflect the hazardous materials abatement requirement.
3. Specification Section 01 56 10 Airborne Contaminants Control
Replace section 01 56 10 in its entirety with the attached new section. The rooms list attached to the ICRA permits have been updated. An ICRA Form was added address the type IV containment which require abatement.
4. Specification Section 028213.19 Asbestos-Related Work
New section 028213.19 relating to the methods procedures and requirements related to the removal and disposal of asbestos related materials.
5. Specification Section Appendix Document A:
Millennium Hazardous Materials Report No. 21014.2008 dated 12/29/2022.

ITEM NO. II – DRAWINGS

1. SHEET A1-01 OVERALL MH GROUND & 4TH FLOOR PLANS (dated 01-30-23)
Replace Sheet A1-01 in its entirety with the attached. Keynote 3 was added to clarify abatement requirements.
2. SHEET A1-02 OVERALL MH 6TH & 7TH FLOOR PLANS (dated 01-30-23)
Replace Sheet A1-02 in its entirety with the attached. Keynote 3 was added to clarify abatement requirements.
3. SHEET A2-01 MAIN HOSPITAL - ENLARGED PLANS (dated 01-30-23)
Replace Sheet A1-02 in its entirety with the attached. Keynote 3 was added to clarify abatement requirements.

ITEM NO. III – CLARIFICATIONS (NOT USED)

DocuSigned by:



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Kim Lake – Project Manager
Facilities Design & Construction
UC Davis Health

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END OF SECTION 00110

SECTION 01 11 00
SUMMARY OF THE WORK

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Description of the Work
- B. **Contractor** Warrants
- C. Contract Document Intent and Relationships
- D. University Furnished/ **Contractor** Installed Products
- E. University Furnished/University Installed Products
- F. Concurrent Work Under Separate Contracts
- G. Site Condition Survey and Protection of Existing Improvements
- H. **Contractor** Use of Site and Premises
- I. University Beneficial Occupancy (if applicable)
- J. Project Phasing (if applicable)

1.02 DESCRIPTION OF THE WORK

- A. Project is titled: MAIN HOSP/DT/SESP PCS Carpet Removal
- B. University Project No.: M053094
- C. Project is located at 2315 Stockton Blvd., UC Davis Health, Sacramento, California, as shown on the vicinity map.
- D. Project consists of removing existing carpet and rubber base and replace with new resilient flooring and base. Project will involve set up of the infection control containment, demo of existing flooring and rubber base, floor preparation as required, installation of new flooring and base. Coordinate sequence of work with UCDH in advance. Abatement will be required at the defined areas, refer to hazardous materials report. Removal and reinstallation of furniture, equipment and appliances will be by UCDH. Because work occurs over various areas and departments, careful coordination of sequencing of contractor's work is imperative. Work areas must obtain final inspection and sign off for turn-over to end users, as work is completed.

A description of areas, types of construction and general nature of the Work are described on drawing G0.01.

- E. Special Constraints and Criteria:
 - 1. Refer to Section 011400 Work Restrictions for dates and hours when the building

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is occupied and operational, and work-shift hour requirements and restrictions.

2. Noise Mitigation shall be required when the building is occupied. Different areas / departments have various needs are requirements, coordinate work in advance prior to scheduling work.
3. Egress shall not be restricted or impacted unless scheduled when the building is not occupied.

1.03 CONTRACTOR WARRANTIES

- A. **Contractor** warrants that it is skilled and experienced in the use and interpretation of Contract Documents such as those included in the bid documents for this Contract. The **Contractor** further warrants that it has carefully reviewed the Contract Documents for this Work and has found them to be free of ambiguities and sufficient for bid purposes.
- B. **Contractor** warrants that it has inspected the Project Site and based on these observations, has satisfied itself as to the nature and location of the Work; and any special conditions likely to be encountered at the site which may affect the performance of the Work.
- C. **Contractor** warrants that its bid is based solely on the Contract Documents provided, its own observations, and written explanations and interpretations obtained from University's Representative and not on any explanation or interpretation, oral or written, from any other source.

1.04 CONTRACT DOCUMENT INTENT AND RELATIONSHIPS

- A. Contract Documents Intent: Provide all labor, material, equipment, tools, transportation, insurance, services, and all other requirements necessary to construct the project described in the Contract Documents.
- B. Relationship of Contract Documents: Drawings, Specifications and other Contract Documents in the Contract are intended to be complementary. What is required by one shall be as if required by all. What is shown or required, or may be reasonably inferred to be required, or which is usually and customarily provided for similar work, shall be included in the Work. For example, the drawings may not show every variation of an anchor clip that is required to support a curtain wall from its structural support; it can be reasonably inferred that variations of or additions to these clips are necessary to complete the installation of the working system and therefore all such clips are understood to be included in the Work.
- C. Discrepancies in Contract Documents: In the event of error, omission, ambiguity, or conflict in the Contract Documents, Contractor shall bring the matter to University's Representative's attention in a timely manner, for University's Consultant's determination and direction in accordance with provisions of the General Conditions of the Contract.
- D. Bidding and Contract requirements: Information for bidding, Conditions of the Contract and other Contract documents will be produced by University and may be included in the Contract Documents for convenience. Such documents are not Specifications. Specifications are found in Divisions 1 through 48 of the Contract, as listed in the Table of Contents of the Contract.
- E. Contract Drawings: The Drawings provided with and identified in the Contract are the Drawings referenced in the Agreement.

1. Drawings produced for this project may encompass Civil, Landscape, Architectural, Structural, HVAC, Plumbing, Piping, Fire Protection, and Electrical portions of the Work. Interior Design drawings may also be provided for product selection and installation information.
 2. The location, extent and configuration of the required construction and improvements are shown and noted on the Drawings. A list of Drawings is included in the Contract Documents.
 3. Drawings are arranged according to design discipline. Such organization and all references to trades, subcontractor, specialty contractor or supplier shall not control the **Contractor** in dividing the work among subcontractors or in establishing the extent of the work to be performed by any trade.
 4. Where the terms "as shown", "as indicated", "as noted", "as detailed", "as scheduled" or terms of like meaning, are used in the Drawings or Specifications, it shall be understood that reference is being made to the List of Drawings and the Specifications as bound in the Contract Documents.
 5. Where reference to the word "plans" is made anywhere in the Drawings, Specifications and related Contract Documents, it shall be understood to mean the Drawings listed in the List of Drawings.
- F. Contract Specifications: The Specifications provided as a part of the Contract Documents are the Specifications referenced in the Agreement.
1. The Specifications are organized by Division and Sections in accordance with recommended practice of the Construction Specifications Institute. Such organization shall not control the **Contractor** in dividing the work among subcontractors or in establishing the extent of the work to be performed by any trade.
 2. Specifications are included in the Contract, which also includes other Bidding and Contract Documents. Contents of the Contract are listed in the TABLE OF CONTENTS.
 3. Information for bidding, Conditions of the Contract and other Contract documents will be produced by University. Such documents are not Specifications. Specifications are found in Division 1 through 48 of the Contract.
- 1.05 UNIVERSITY-FURNISHED, CONTRACTOR-INSTALLED (UFCI) PRODUCTS (NOT USED)
- 1.06 UNIVERSITY-FURNISHED, UNIVERSITY-INSTALLED (UFUI) PRODUCTS (NOT USED)
- 1.07 CONCURRENT WORK UNDER SEPARATE CONTRACTS (NOT USED)
- 1.08 SITE CONDITION SURVEY & PROTECTION OF EXISTING IMPROVEMENTS
- A. Site Condition Survey: Prior to commencing work, the **Contractor**, University's Representative and other University representatives shall tour the Project site together to examine and record the existing condition of site, adjacent buildings, and improvements. This record shall serve as a basis for determination of damage (if any) due to the construction process. The record shall be signed by all parties participating in the tour.
 - B. Protection of Existing Improvements: Locate all known existing utilities prior to proceeding

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with construction. Existing utilities shall be kept in service where possible and protected by the **Contractor** from damage. If any structure or utility is damaged, take immediate action to ensure the safety of persons and University property and effect repair. If previously undiscovered structures or utilities are encountered, request University's Representative to provide direction on how to proceed with the work. Cracks, sags or damage to adjacent structures or improvements not noted in the original survey shall be reported to University's Representative.

- C. University does not normally charge for its shutdown support services. However, if poor planning or execution of a shutdown by **Contractor** causes excessive time and effort for University, University reserves the right to back charge **Contractor** for additional work.

1.09 CONTRACTOR USE OF SITE AND PREMISES

- A. Site Access: Limit access to site as indicated on the drawings. If routes and access points are not indicated, access shall be as directed or approved by University's Representative.
- B. Hours of Operation: Construction activities are limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Prior University approval is required for **Contractor** construction work at any other time or day.
- C. Construction Limit: Limit construction activities to areas indicated on Drawings as Project Area or, if not indicated, to areas immediately adjacent to buildings and as necessary for immediate construction or utility services and sitework, See Section 015100 - TEMPORARY UTILITIES for additional requirements.
- D. Utility Outages and Shutdowns: Schedule utility outages and shutdowns to times and dates acceptable to University's Representative. Duration of outages and shutdowns shall not hinder University normal business operations. Provide fourteen (14) calendar days' notice of all utility outages and shutdowns.

1.10 UNIVERSITY BENEFICIAL OCCUPANCY

- A. The following portions of the Work are designated for occupancy by University as indicated.
 - 1. Each individual room/space or group of rooms must be signed off by the University's Representative and turned over to UCDH for occupation as the work is completed.

1.11 PROJECT PHASING (NOT USED)

PART II - PRODUCTS – Not Applicable to this Section

PART III - EXECUTION – Not applicable to this Section

END OF SECTION 01 11 00

SECTION 01 56 10**AIRBORNE CONTAMINANTS CONTROL****PART I - GENERAL**

1.01 SUMMARY

- A. Section Includes: University airborne contaminants control policy procedures and an Infection Control Risk Assessment (ICRA) and plan.

1.02 POLICY

- A. Airborne contaminants control is critical in all hospital areas, as well as non-hospital areas. **Contractor** shall limit dissemination of airborne contaminants produced by construction-related activities, including dust, chalk, powders, aerosols, fumes, fibers and other similar materials, in order to provide protection of immuno-compromised and other patients, staff, diagnostic operations, or sensitive procedures or equipment, from possible undesirable effects of exposure to such contaminants.
1. Construction activities causing disturbance of existing dust, or creating new dust, or other airborne contaminants, must be conducted in tight enclosures cutting off any flow of particles into patient areas.
 2. Ceilings, walls in Protection Areas and other areas in patient care areas as indicated on drawings must be secure at all times.
- B. An Infection Control Risk Assessment (ICRA) and plan to mitigate dust is required for each project. The risk assessment identifies patient groups at risk for infection due to construction dust. The dust mitigation plan is designed to contain dust within the construction zone.
- C. If visible mold is found during construction, renovation, or repairs, any ICRA in-hand is invalid and risk assessment shall be performed to reevaluate ICRA levels and the work plan prior to restart of the work. Upon discovering, seal any openings, stop work and notify the University's Representative immediately. This includes projects that are already considered and operating under a Class IV.
- D. Related Sections:
1. Section 017300 – CUTTING AND PATCHING: Removal of debris may be outside of normal work hours and shall be in tightly covered containers.
 2. Section 013500 – SPECIAL PROCEDURES: Perform work in accordance with requirements of this section.
 3. Section 013900 - GREEN BUILDING POLICY IMPLEMENTATION
 4. Section 015100 – TEMPORARY UTILITIES: Provide high efficiency particulate air (HEPA) filters as specified in Section 015610, negative pressure ventilation, or special control of existing system as determined by University's Representative.

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5. Section 015600 – TEMPORARY BARRIERS, ENCLOSURES AND CONTROLS: Extend barriers above ceilings as required to seal off and contain airborne contaminants.
6. Section 015600 – TEMPORARY CONTROLS: Contain waste materials during removal; bagging, wrapping, and transporting.
7. Section 017400 – CLEANING: Use wet cleaning methods and HEPA filtered vacuum cleaners as required to minimize release of airborne contaminants. Contain waste materials, debris and rubbish as noted above. Disinfect Containment and Protection Areas as directed by University's Representative

E. Dust Mitigation Requirements

1. An ICRA Daily Inspection Log is attached at the end of this section under UC Davis Health Construction Dust Infection Prevention Best Practice Standard. The **Contractor** must complete this daily checklist and leave posted for the duration of the project at the outside of the containment. Any areas of non-compliance must be specifically listed and addressed for corrective measures when identified. A copy of the daily ICRA inspections shall be submitted to the University's Representative at an agreed upon time between the **Contractor** and the Project Manager.

F. UC Davis Health Construction Dust Infection Prevention Best Practice Standard

- a. The UC Davis Health Construction Dust Infection Prevention Best Practice Standard is attached at the end of this Section and augments information & requirements of Section 015610.
- b. Refer to the UC Davis Health Construction Dust Infection Prevention Best Practice Standard per requirements for.
 - 1) Responsibilities
 - 2) Procedures
 - 3) Training And Certifications
 - 4) Containment Design & Construction
 - 5) Materials And Equipment
 - 6) Cleaning Procedures
 - 7) Documentation
 - 8) Containment Verification
 - 9) Inspection Criteria
 - 10) And other Dust Infection Prevention Measures

1.03 SUBMITTALS

- A. Submit to Project Inspector or Post at Anteroom Daily ICRA Inspection Log.
- B. Schedules: Submit work areas and procedure schedules for containment of airborne contaminants. Include this work in the Project Schedule per 013200.
- C. Detailed Work Plan: Drawings including but not limited to Work Area/ Floor Plan, Path of Travel, Egress and Exiting, Rated Construction and details of construction of necessary temporary barriers, and description of procedures to be used to achieve and maintain control of construction-related airborne contaminants.
 - 1. As applicable, the drawing should include the following: location of ante room(s), location of manometer, location of negative air units exhausting outside the building including number of negative air units and sizes (cfm), and location of sealed blocked off areas of corridors. Any impacts to corridors will need to be approved via ILSM (see specification section 013500 for details).
 - 2. Identify the areas surrounding the project area, assessing potential impact of construction on the patient care area. Identify the specific uses (e.g., patient rooms, medication room, operating room, etc.)
 - 3. Identify the potential impacts including but not limited to.
 - a. HVAC, Ventilation (outages, air flow directions, clean to dirty, air intakes/exhausts, air balance, disruptions, etc.).
 - b. Plumbing (outages, hand-washing access, work area, flushing/draining systems, charging systems, disinfecting systems, etc.).
 - c. Electricity (outages for critical equipment, special ventilation areas, monitoring).
 - d. Identify Airborne infection isolation rooms and patient rooms with immuno-compromised conditions that will require High-efficiency Particulate Air (HEPA) filters.
 - 4. Identify containment measures including but not limited to types of barriers to be used. HEPA filtration to be used. Renovation/construction areas should be isolated from occupied areas during construction and provide clean-to-dirty airflow with respect to surrounding areas.
 - 5. Assess preventive maintenance requirements. Will the service/maintenance frequency and level of service of systems need to be modified during construction (e.g., ventilation filters, air intake system, potable water, plumbing, doors). Work Hours: Can or will the work be done during non-patient care hours?
 - 6. Include provisions for but not limited to traffic flow, entrance, egress, control, debris removal and housekeeping.
 - 7. Work Hours: Identify areas of work that will be done during non-patient care hours. Refer to Sections 011100 Summary of Work and Section 011400 Work Restrictions

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8. The Detailed Work Plan shall be reviewed and approved by the University's Representative prior to the start of Construction.
- D. Project Experience and Training: In order to be considered qualified to work with negative pressure containments; **Contractor's** must demonstrate experience by providing either of the following:
1. Previously completed, documented negative pressure containment work in a healthcare facility along with an owner reference. Minimum documentation shall include project descriptions and photographs or containment schematics.
 2. Documentation that the contactors' proposed foreman has successfully obtained one of the following from the American Society for Healthcare Engineering (ASHE):
 - a. Certified Healthcare Constructor (CHC) Certification
 - b. Health Care Construction (HCC) Certificate
 - c. Managing Infection Prevention During the Construction & Operation of Health Care Facilities Course Completion

1.04 QUALITY CONTROL

- A. Pre-construction Meeting: Before any construction on site begins, **Contractor's** Superintendent is required to attend a mandatory pre-construction orientation session held by University's Representative for a review on precautions to be taken.
- B. Review by PO&M HVAC staff for possibility to disconnect air supply and return into the project area. Negative air machines shall be connected to separate electrical circuits.
- C. Notification: A minimum of fourteen (14) calendar days written notification to University's Representative of possible construction activity causing airborne contaminants in Protection Areas.

1.05 DEFINITIONS

- A. Containment Areas: As determined by University's Representative and if shown. Includes all areas of construction activities, adjacent staging and storage areas, and passage areas for workers, supplies and waste. The containment area includes ceiling spaces above and adjacent to construction activities.
- B. Critical Openings – Include all potential paths for air and contaminants to move from the project area to outside of the project area and include: supply registers, return registers, exhaust registers, doors, windows, and other openings within the area where contaminants can escape. Sealing the critical openings can be accomplished with tape, plastic, hard barriers and a combination of these materials to seal airtight the critical opening.
- C. HEPA System DOP Testing – An ANSI / ASTM recognized method to test the integrity of a High Efficiency Particulate filter which filters out 99.97% of particles 0.3 micrometers or larger. DOP testing is performed by specialty **Contractor's**. The Health System requires that HEPA systems be tested to the ANSI / ASTM standard as delivered prior to their use onsite as further described in this Standard.

- D. ICRA (ICRA) Infection Control Risk Assessment - An evaluation of patient risk based on a matrix of the patient population health in the work area and the invasiveness of the project. This assessment ultimately generates a permit (ICRA permit) issued by Infection Prevention requiring compliance with one of four precaution levels. The ICRA program is documented in Hospital P&P 2120. ICRA's apply to patient care areas and their adjoining contiguous areas. All ICRA evaluations are the sole responsibility of the Health System Infection Prevention Department based on an application by the Project Manager. ICRA Permits expire and can be extended subject to approval by the Infection Prevention Department.

1.06 PERFORMANCE REQUIREMENTS

A. University's Representative's Responsibilities:

1. Determination of the Containment and Protection Areas, as well as, the standard of limitations of the **Contractor's** responsibilities, required for the project.
2. Statement of Requirements: Description in graphic and written form as required to communicate the above based on evaluation of the construction area and the impact of the project on patient care.
3. Coordinate any testing and monitoring as necessary with EH&S or a third party.

B. **Contractor** Responsibilities:

1. Provide specific means and methods of achieving and maintaining control of airborne contaminants during construction.
2. Implement all mitigation measures as listed in the UC Davis Health Construction Dust & Hazardous Materials Inspection Worksheet, which have been reviewed and approved by Infection Prevention and EH&S. The work shall be performed in accordance with the specific ICRA/Dust Mitigation Plan, Class II,III,IV and approved ICRA Permit. **Contractor** shall ensure that all workers are trained and adhere to the mitigation requirements including provisions indicated per UC Davis Health Construction Dust Infection Prevention Best Practice Standard attached at the end of this Section.
3. **Contractor** shall notify University's Representative in writing, a minimum of fourteen (14) calendar days prior to starting construction activity, which might be expected to produce excess levels of airborne contaminants in containment area so that additional precautions may be taken.
4. If project construction activities will occur beyond the expiration date identified in the ICRA Permit, **Contractor** shall coordinate with University's Representative to request extension of the ICRA Permit utilizing the ICRA Permit Extension Form attached ~~provided~~ at the end of in this section.

PART II - PRODUCTS

2.01 MATERIALS

- A. Polyethylene: Polyethylene used for critical barriers and for sealing walls, floors or ceiling systems shall be a minimum of 6 mil thickness and fire retardant type listed by Fire Underwriters Laboratories, Griffolyn #T55R with Griffolyn fire retardant tape, or equal.

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PART III - EXECUTION

3.01 PROJECT SPECIFIC REQUIREMENTS: The below criteria shall be applied on a case by case basis as outlined in the project specific requirements, ICRA Permit(s), and EH&S Worksheet(s)

- A. Review ICRA Permits attached to the end of this section, which includes room list each ICRA classification.
- B. THE BELOW LISTED CRITERIA ARE POSSIBLE STRATEGIES FOR CLASS 3 AND 4 CONTAINMENTS. NOT ALL OF THE STRATEGIES WILL BE ALLOWED OR REQUIRED. THE ICRA PERMIT AND EH&S WORKSHEET DEFINE WHAT IS ALLOWABLE. THINK OF THE ICRA PERMIT AND EH&S WORKSHEET AS A MENU. THE BELOW IS A DETAILED DESCRIPTION OF EACH ITEM ON THAT MENU.

3.02 CONTAINMENT CRITERIA

- A. The outside of the work containment shall have present: ICRA Permit, Interim Life Safety Measure (ILSM) Permit, Daily ICRA Inspection Forms, manometer, entry warning sign, Containment Entry Log (provided by the **Contractor**) that lists all persons who enter the containment regardless of affiliation, including all University employees, an emergency telephone number of person to call 24 hours a day in the event of a negative pressure alarm or other issue, and that an Environment of Care Incident Report under the category of "Construction Dust" must be filed by area nursing management in case of constant or annoying alarms.
- B. The interior of the containment area shall be cleaned on a continual basis daily. Hard surface floors in work area, adjacent hallways and passage areas require vacuuming with HEPA-filtered vacuum cleaners and frequent wet-mopping during demolition and construction; protect adjacent carpeted areas with plastic and plywood and vacuum with HEPA-filtered vacuum cleaners. Only an EPA Listed Germicide approved by the UC Davis Health Infection Prevention shall be used on the project site.
- C. Regardless of containment strategies, execute work by methods to minimize raising dust from construction operations. Water may be used to assist in controlling airborne dust.
- D. Full containment
 - 1. All surfaces in the containment area except surface where work is to occur must be covered in plastic unless they are non-porous, smooth, and accessible for cleaning.
 - 2. Sealing of Openings: Use tape or other impenetrable sealant to seal barrier wall seams, cracks around window and door frames, exhaust system ductwork, pipes, joints and ducts. Use of spray glue is not acceptable to be used inside of the building.
 - 3. **Contractor** must block off existing ventilation supply registers, return registers and exhaust registers in the construction area.
 - 4. All polyethylene and other materials used for temporary enclosures shall be at least 6 mil thickness and fire-retardant type. Zip poles or other easily removable supports shall be used for projects extending beyond one work shift. Temporary walls with metal stud framing may be required for long term projects and must be approved by the Project Manager. All doors leading into the containment area shall utilize zippered doors for control of the air flow and closing the plastic doors.

- E. Critical seal of areas
 - 1. Use tape or other impenetrable sealant to seal barrier wall seams, cracks around window and door frames, exhaust system ductwork, pipes, joints and ducts. Use of spray glue is not acceptable to be used inside of the building.
- F. Cubes
 - 1. Mini-containments (pop-up cubes) which are designed to have at most 1-2 people are means of control to access attic spaces, wall spaces and subfloor spaces usually at defined entry points such as access hatches or above a drop-in ceiling system. Cubes are reviewed and approved by the University's Representative on a case by case basis.
- G. Glove Boxes
 - 1. A glove box can be used for some work where a HEPA filtered vacuum is attached to the glove box when a small area of work is to be performed. A glove bag is attached to the box enclosure to allow the worker to make small openings by drilling or cutting within the negative pressure glove box. Glove boxes are reviewed and approved by the University's Representative on a case by case basis.
- H. Shrouded tools
 - 1. Shrouded tools can be used for some work. A HEPA (DOP Tested) filtered vacuum is attached to the shroud. Shrouded tools are reviewed and approved by the University's Representative on a case by case basis.

3.03 NEGATIVE AIR CRITERIA

- A. Under no circumstances shall the HEPA filtered air be discharged into existing HVAC returns, exhaust ducting or building plenum spaces.
- B. When the air from the HEPA filtered negative air unit exhaust cannot be directed outside of the building due to no windows in the vicinity of the work or if impractical, all HEPA filtered negative air units shall be exhausted to a location agreeable to the PM. Each HEPA unit shall be plugged into a separate electrical circuit to provide temporary redundancy should one unit fail or due loss of electrical power. The PO&M Electrical shop shall inspect and test each circuit connected to the HEPA negative air unit prior to use.
- C. When the air from the negative air units is exhausted inside of the building, the exhaust air from negative air unit shall be directed into a "diffusion cube" constructed of pleated filters to disperse the air in a manner that does not raise dust or blow air directly onto patients, staff or visitors. The **Contractor** shall consider and install charcoal filters in the negative air units to control smells/odors associated with the construction.
- D. Negative air units shall be positioned as far from the entry ante room containment as possible for distribution of air flow throughout the project area. The number of negative air units shall be to provide sufficient negative pressure and for a minimum of at least four (4) air changes per hour of the volume of the entire work containment.
- E. Dual HEPA Units operating in parallel may be required for redundancy in high-risk areas.

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F. DOP testing of HEPA equipment

1. Negative air units and HEPA filtered vacuums are to be challenge tested onsite by the DOP test method by a third party prior to being placed in service, after a HEPA filter change, when dropped or damaged or moved from the project site. Only HEPA systems that pass the challenge DOP testing can be used on the project. All HEPA equipment shall be tested per ANSI/ASME N510 Section 10 to ensure 99.97% efficiency at 0.3 micrometer mean aerodynamic diameter.
2. The entire piece of HEPA equipment shall be challenge tested, not just the filter media. The University's Consultant or EH&S shall witness the HEPA challenge testing procedure in entirety. Once the HEPA system passes the challenge testing and passes, the HEPA equipment may be used at the location tested for a period not to exceed one year. The testing label shall remain on the HEPA equipment and remain legible. Re-testing of the HEPA equipment is required annually, if the piece of equipment is transported out of the building to another building location on the campus, if dropped, or otherwise subjected to forces that might unseat the HEPA filter, damaged by water or laceration of the filter or if HEPA filter maintenance or adjustments are performed.
3. When utilizing HEPA Filtered Vacuums for glove boxes or shrouded tools these HEPA Vacuums must be DOP tested.

3.04 NEGATIVE AIR MONITORING CRITERIA

A. Fully Monitored Negative Air Maintaining -0.020" Water Column (in-WC)

1. Build containment with negative air machines capable of maintaining a pressure differential of -0.020 in-WC across all critical barriers
2. Demonstrate negative pressure is achieved continuously (24/7) by means of an electronic manometer sensitive to measure down to -0.020" wp. An Omniguard IV recording manometer is recommended as the standard instrument for containment pressure monitoring, but other electronic manufactured models with similar sensitivities at low pressures and recording capabilities are acceptable.

B. Hybrid Monitoring and Visual Verification

1. Build containment with negative air machines capable of maintaining a pressure differential of -0.020 in-WC across all critical barriers.
2. During the course of construction, the scope of work may dictate removal of work (e.g. Ceilings or drywall) that would make it difficult to maintain -0.02 in-WC of negative pressure. During working hours Visual Verification of negative pressure may be used in lieu of the -0.02 in-WC requirement with electronic monitoring.
3. At the end of shift all openings must be sealed to bring the containment back to the -0.020 in-WC requirement.

C. Visual Verification

1. The containment shall be visually inspected to verify the plastic is bowed inward to the project area. Tell tail ribbon may also be used to confirm negative pressurization. Visual Verification of negative pressure without the use of a manometer shall be performed upon first entry to the work area, during the course of the work, especially if there are any changes to the work space that may change the negative pressure, prior to taking any breaks and at the end of the work period.

3.05 ADDITIONAL CONTAINMENT CRITERIA

A. Ante Room

1. An ante room is a separate chamber attached to the containment area with zippered doors to allow entry and exit into the containment area. Entry into the containment area shall be only via the ante room. The ante room is commonly constructed of zip poles or equivalent, plastic and tape. The ante room is sized for each project to allow workers and equipment to be moved into and out of the containment area. A sticky mat is required in the ante room for workers and carts on wheels to use when existing the ante room from the containment area. The zippered doors are to remain closed or adjusted slightly open as necessary to allow negative pressure to be maintained at least -0.020 in-WC.
2. The ante room shall have a sticky mat present which is intended to remove any debris from the bottom of work shoes before leaving the ante room into the public area. The sticky mat is not intended to clean debris from the bottom of disposable coveralls or from booties. The sticky mat layers shall be replaced many times during a work shift when work involves movement of many workers and supplies out of the containment area. The **Contractor** is responsible for removing a dirty sticky mat and replacing it with a clean one when it is necessary.
3. Workers entering into the containment area will put on a full body disposable coverall with booties inside of the ante room before entering the containment area. Entry into the ante room requires one of the two zippered doors to be opened at one time to maintain the required negative pressure. After entering the ante room, the zipper shall be closed before leaving the ante room into the containment area.

B. Air Scrubbing

1. The **Contractor** shall place additional HEPA filtered fan units (negative air unit) inside of the project work area and operate them in recirculation mode or "scrub mode" near the final cleaning phase of the project to aide in additional particulate cleaning of the space. These units will circulate air internal to the containment area and scrub the air to reduce the total airborne particle concentrations inside of the containment area.

C. Disposable Coveralls and Booties

1. Disposable coveralls are required in all Class IV containment areas and selected to provide protection of street clothes from particulates generated inside of the containment area. Disposable coveralls shall be changed if they become ripped and are no longer serviceable.

PROJECT NO. M053094
MAIN HOSP/DT/SESP PCS Carpet Removal

2. Proper use of the disposable coveralls, booties and use of the sticky mat shall be followed at all times for all workers and UC Davis Health employees, when it is required by the ICRA Permit. At no time shall workers leave the containment area wearing disposable coveralls and booties. They are to be removed in the ante room or immediately in front of the ante room within the containment area if it is free and clean of debris. The workers shall remove all disposable coveralls and booties and place them in the plastic garbage bag and leave the ante room after walking on the sticky mat.

3.06 CONTAINMENT SET UP

- A. Notify University's Representative forty-eight (48) hours prior to containment set up.
- B. Build containment in compliance with ICRA, drawings and plans.
- C. Notify University's Representative and EH&S for inspection prior to start of work. Before any demolition or construction begins, all Protection Areas (infection control areas), control measures put in place and work plan by the **Contractor** will be inspected by the University's Environmental Health & Safety Personnel, or by a designated representative of the University. Work cannot begin until the containment area has been inspected and approved, meeting all of the provisions of the ICRA Permit.

3.07 REMOVAL OF CONTAINMENT

- A. Provide thorough cleaning of existing surfaces, which become exposed to dust, before leaving the containment area and before allowing staff and the public access to the project area.
- B. Final cleaning of the containment area requires diligent HEPA vacuuming of all horizontal surfaces and wet wiping all surfaces. Clean towels, sponges, cloth rags or other means shall be used with clean water to effectively clean all surfaces within the containment area. Use of a measured solution of an EPA Listed Germicide is required as part of the final detail cleaning.
- C. Additional HEPA filtered negative air units may be installed for scrubbing of particles (see 3.05 B).
- D. Coordinate with the University's Representative to call for a final visual inspection of the containment area. The final visual inspection will be made after the **Contractor** has thoroughly cleaned the entire containment area. The **Contractor** will be allowed to remove the containment barriers after the interior has passed the visual inspection for cleanliness.
- E. Particle count assessment may be made inside of the containment area by the University's Representative as part of the final visual inspection process in addition to the final visual inspection. Particle testing will include testing the airborne concentration of various particle sizes compared to the concentration outside of the containment area. If particle counts inside of the containment area are significantly greater than outside of the containment area, the **Contractor** shall continue to scrub the air inside of the project area with HEPA filtered negative air units and conduct additional surface cleaning until subsequent particle testing has demonstrated particle concentrations inside of the containment area are not significantly greater than particle concentrations immediately outside of the containment area.

3.08 ENTRY/EGRESS

- A. Entry into the project containment area shall be through the ante room. Entry into the ante room requires one of the two zippered doors to be opened at one time to maintain the required negative pressure. After entering the ante room, the zipper shall be closed before leaving the ante room into the containment area. Equipment and supplies brought into the containment area shall be in sealed leak tight containers inside of rolling covered carts. Equipment, tools and supplies brought into the building shall be clean and free of dust, debris, mold and other contaminants. Cardboard products shall not be brought into the containment area if they are water damaged or have suspect mold growth.
- B. All HEPA equipment when transported into and out of the containment area shall be cleaned of all debris on the surfaces and shall have the intake openings sealed with plastic and duct tape.
- C. All workers leaving the containment area shall leave in clean clothes. At no time shall disposable coveralls or booties be worn when leaving the containment area through the anteroom into the public area. The workers shall clean all gross particulate debris from the coveralls using a HEPA filtered vacuum. Disposable coveralls can be taken off after gross debris has been removed from the disposable coveralls. The worker shall remove the disposable coverall inside of the ante room by rolling the disposable coverall inside out and then place it into a garbage container (plastic bag) located inside of the ante room or just inside of the project work area.
- D. All equipment and supplies leaving the containment area shall be cleaned of all dust and debris before leaving the containment area. Removal of supplies, materials and waste debris from the containment area shall be using tightly covered containers/carts that contain the waste material. The wheels of carts shall be cleaned on a frequent schedule to minimize track-out of debris as they are removed from the containment area. All waste material shall be in sealed leak tight containers. If plastic bags are used, they shall be 6 mil thick at a minimum.

3.09 ENFORCEMENT

- A. Failure to maintain required containment will result in issuance of written warning; if situation is not corrected within eight (8) hours of receipt of warning, University will have cause to stop the work as provided in Article 2.1 (if Brief Form) or 2.3 (if Long Form) of the General Conditions. Any egregious violation of safety requirements shall be grounds for Immediate Work Stoppage.

3.10 Refer to the following Attachments

- A. Infection Control Risk Assessment (ICRA) with Matrix of Precautions for Construction & Renovation: 3 Pages.
- B. Infection Control Construction Permit: 1 Page.
- C. UCDH Construction Dust & Hazardous Materials Inspection Worksheet: 1 Page.
- D. ICRA Permit Extension Request and Instructions: 2 Pages.

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- E. UC Davis Health Construction Dust Infection Prevention Best Practice Standard: 23 Pages including.
 - 1. Appendix A: Inspection Documentation Form and Daily Inspection Log.
 - 2. Appendix B: Entry Warning Sign with Project Manager Contact.
 - 3. Appendix C: Staff Education Poster.

END OF SECTION 01 56 10

Infection Control Risk Assessment

ICRA Committee approval of an ICRA Permit is required for all Construction Activity

Fill-out form completely or indicate NA on individual items

Date: 11/30/22

Requested ICRA (See Steps 1, 2 and 3) **Construction Type** Type C
Risk Level Low Risk
Classification Class II

Submitted by: Seth Oberst

Dept/Firm: Vanir Construction Management

Cell Phone: 916-272-4532

Project Location/Address: 2315 Stockton Blvd, Sacramento, CA 95817

Building name, Floor, Suite/Room: Main Hospital, see attached list for room numbers and wing

FD&C Project Number or Other Identifying Number: M053094

Type of Patient Care within Area of Work: Multiple, see attached list and map

Type of Patient Care in Adjacent Areas: Multiple, see attached list and map

Project Scope Description:

Project is removing carpet from multiple rooms in different areas and wings and replace with vinyl plank.

Describe Work Plan:

Each room/area will be less than 30 days to start & complete, so temporary poly barriers will be utilized. Being type II containment negative pressure is not required. Sticky mats will be located within the work space when practical, they will be moved outside the workspace when work dictactes.

Required Documents

- Infection Control Risk Assessment
- Infection Control Construction Permit form
- UCDH Construction Dust & Hazardous Materials Inspection Worksheet form
- ICRA/Project Floor Plan (work area / floor plan, and path of travel plan)

Infection Control Risk Assessment

Matrix of Precautions for Construction & Renovation

STEP 1

Using the following table to *identify* the Construction Type A, B, C or D

| | |
|---------------|--|
| TYPE A | <p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet <i>f</i> painting (but not sanding) <i>f</i> wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection. |
| TYPE B | <p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> installation of telephone and computer cabling <i>f</i> access to chase spaces <i>f</i> cutting of walls or ceiling where dust migration can be controlled. |
| TYPE C | <p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> sanding of walls for painting or wall covering <i>f</i> removal of floorcoverings, ceiling tiles and casework <i>f</i> new wall construction <i>f</i> minor duct work or electrical work above ceilings <i>f</i> major cabling activities <i>f</i> any activity which cannot be completed within a single work shift. |
| TYPE D | <p>Major demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> activities which require consecutive work shifts <i>f</i> requires heavy demolition or removal of a complete cabling system <i>f</i> new construction. |

Step 1 - Construction Type:

STEP 2

Using the following table of **Patient Risk Groups**, identify the **Risk Level (Low, Medium, High, Highest)** posed by the project. Also provide further description of uses / risk groups as necessary that are not otherwise listed in the table. If more than one risk group will be affected, select the higher risk group:

| Low Risk | Medium Risk | High Risk | Highest Risk |
|--|--|--|--|
| f Office areas OTHER: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> | f Cardiology f Echocardiography f Endoscopy f Nuclear Medicine f Physical Therapy f Radiology/MRI f Respiratory Therapy OTHER: <div style="border: 1px solid black; height: 60px; width: 100%;"></div> | f CCU f Emergency Room f Labor & Delivery f Laboratories (specimen) f Medical Units f Newborn Nursery f Outpatient Surgery f Pediatrics f Pharmacy f Post Anesthesia Care Unit f Surgical Units OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> | f Any area caring for immunocompromised patients f Burn Unit f Cardiac Cath Lab f Central Sterile Supply f Intensive Care Units f Negative pressure isolation rooms f Oncology f Operating rooms including C-section rooms OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> |

Step 2 - Risk Level: Low Risk

STEP 3

Use the table below to determine the ICRA Classification.

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ... **Construction Project Type** (*A, B, C, D*) on the following matrix, to find the **Class of Precautions** (*I, II, III or IV*) or level of infection control activities required. **Class I-IV or Color-Coded Precautions** are delineated on the following page.

| PATIENT RISK GROUP | CONSTRUCTION PROJECT TYPE | | | |
|--------------------|---------------------------|--------|--------|--------|
| | TYPE A | TYPE B | TYPE C | TYPE D |
| LOW Risk Group | I | II | II | III/IV |
| MEDIUM Risk Group | I | II | III | IV |
| HIGH Risk Group | I | II | III/IV | IV |
| HIGHEST Risk Group | II | III/IV | III/IV | IV |

Step 3 – Classification Determination: Class II

Infection Control Construction Permit (Post At Job Site)

| | | | | | |
|--|-----------|--|--|-----------|-------------------------------------|
| ICRA Permit No: 22-199 | | | ICRA Class: II | | |
| Location of Construction: Main Hospital, multiple locations | | | Project Start Date: 1/20/23 | | |
| Project Coordinator: Seth Oberst w/ Vanir CM | | | Estimated Duration: 01/18/24 | | |
| Contractor Performing Work: TBD | | | Permit Expiration Date: 7/20/23 | | |
| Supervisor: TBD | | | Telephone: TBD | | |
| YES | NO | CONSTRUCTION ACTIVITY | YES | NO | INFECTION CONTROL RISK GROUP |
| | ✓ | TYPE A: Inspection, non-invasive activity | ✓ | | GROUP 1: Low Risk |
| | ✓ | TYPE B: Small scale, short duration, moderate to high | | ✓ | GROUP 2: Medium Risk |
| ✓ | | TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion | | ✓ | GROUP 3: Medium/High Risk |
| | ✓ | TYPE D: Major duration and construction activities requiring consecutive work shifts | | ✓ | GROUP 4: Highest Risk |
| CLASS I | | <ol style="list-style-type: none"> Execute work by methods to minimize raising dust from construction operations. Immediately replace any ceiling tile displaced for visual inspection. Clean work area upon completion of task | | | |
| CLASS II | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Place dust mat at entrance and exit of work area. Water mist work surfaces to control dust while cutting. Contain construction waste before transport in tightly covered containers Wipe surfaces with cleaner/disinfectant. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS III | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. Place dust mat at entrance and exit of work area. Maintain negative air pressure utilizing HEPA equipped air filtration units to control dust. Vacuum work with HEPA filtered vacuums. Wipe surfaces with cleaner/disinfectant. Contain construction waste before transport in tightly covered containers. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or its representative. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS IV | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. Place dust mat at entrance and exit of work area. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Construct anteroom and require all personnel to pass through room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site, or personnel can wear cloth or paper coveralls that are removed each time they leave the work site. All personnel entering work site are required to wear shoe covers. Contain construction waste before transport in tightly covered containers. Utilize tape coverings. Vacuum work area with HEPA filtered vacuums. Wipe surfaces with cleaner/disinfectant. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or their representative. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| Date _____ | | | | | |
| Initial _____ | | | | | |
| Additional Requirements: | | | | | |
| Permit Requested By: Seth Oberst with Vanir | | | Permit Authorized By: Colin McGlynn, E-SIG | | |
| Date: 11/29/22 | | | Date: 12/7/22 | | |

UCDH Construction Dust & Hazardous Materials Inspection Worksheet

| | |
|--|-------------------------------------|
| ICRA Permit Number 22-199 | ICRA Class II |
| Job # and Name M053094 - Main Hospital Carpet Removal | Project Manager Kim Lake |
| Estimated Start 1/20/23 | Estimated Completion 1/18/24 |

ACKNOWLEDGEMENT OF HAZARDOUS MATERIALS

| | |
|--|---|
| Does the project contact hazardous materials (e.g., asbestos, lead, mold, PCBs, mercury)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Verified How: (e.g., hazmat survey, personal knowledge) | Millennium Report |
| By Whom: (name & department) | |

CONTAINMENT STRATEGIES

| | |
|---|---|
| Enclosure Types [check all that apply] | |
| <input type="checkbox"/> | Full Containment (poly over all surfaces not in SOW) <input type="checkbox"/> Hard Barriers Required |
| <input checked="" type="checkbox"/> | Isolated Room – Critical Openings Only (seal doors, supply and return registers, etc) |
| <input type="checkbox"/> | Mini Containment Cube (only large enough for 1-2 people; aka pop up cube) |
| <input type="checkbox"/> | Shrouded Tool with HEPA filtered exhaust |
| <input type="checkbox"/> | Glove Box Containment with HEPA filtered exhaust |
| <input type="checkbox"/> | Other: |
| Negative Pressure Requirements [check all that apply] | |
| <input type="checkbox"/> | -0.020" wc at all times (24/7) as displayed on mounted manometer |
| <input type="checkbox"/> | -0.020" wc at setup with some negative pressure throughout project as displayed on manometer |
| <input type="checkbox"/> | Visual Verification of some negative room pressure throughout project |
| <input type="checkbox"/> | No negative room pressure required |
| <input type="checkbox"/> | Negative pressure in localized HEPA exhausted work area (e.g. shrouded tool, glove box) |
| <input type="checkbox"/> | Other: |
| Negative Pressure Equipment [check all that apply] | |
| <input type="checkbox"/> | Onsite Challenge Testing (DOP or particle counting) prior to setup |
| <input type="checkbox"/> | Challenge Tested within last 6 months; Equipment has remained onsite at UCDCM |
| <input type="checkbox"/> | Single HEPA Unit; exhausted to: <input type="checkbox"/> Outdoors <input checked="" type="checkbox"/> Diffusion Box/Chamber |
| <input type="checkbox"/> | Two HEPA Units in Parallel; exhausted to: <input type="checkbox"/> Outdoors <input type="checkbox"/> Diffusion Box/Chamber |
| <input type="checkbox"/> | Other: |
| Additional Containment Requirements [check all that apply] | |
| <input type="checkbox"/> | Ante Room <input type="checkbox"/> Masonite Floor Protection <input type="checkbox"/> Protective Clothing |
| <input checked="" type="checkbox"/> | Walk Off Mats <input type="checkbox"/> Shoe Covers <input type="checkbox"/> Air Scrubber |
| <input type="checkbox"/> | Other: |

VERIFICATION OF WORK

| Type(s) of Inspection Required | Responsible Party |
|-------------------------------------|--|
| <input type="checkbox"/> | HEPA Equipment Verification <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> | Pre-Work Approval Inspection <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Other: Millennium |
| <input checked="" type="checkbox"/> | Daily Onsite Oversight <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: General Contractor |
| <input type="checkbox"/> | Air Sampling Type: _____ Frequency: _____ <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> Other: |
| <input type="checkbox"/> | Post Demolition or Abatement Inspection <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: |
| <input type="checkbox"/> | ICRA Downgrade <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: Millennium |
| <input checked="" type="checkbox"/> | Final Visual Approval Containment Inspection <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: Millennium |

| Room # | Risk Group | Containment Class | Tower | Floor | Room Type |
|--------|------------|-------------------|-------|-------|--------------------|
| 3701 | Low | II | Davis | 3 | Conference |
| 3707 | Low | II | Davis | 3 | Services Patient |
| 3707A | Low | II | Davis | 3 | Office |
| 4701 | Low | II | Davis | 4 | Conference |
| 8706 | Low | II | Davis | 8 | Distribution Store |
| 8708 | Low | II | Davis | 8 | Office |
| 10703 | Low | II | Davis | 10 | Family Waiting |
| 11704 | Low | II | Davis | 11 | Conference |
| 12704 | Low | II | Davis | 12 | Office |
| 0625C | Low | II | MH | 0 | Break Room |
| O624 | Low | II | MH | 0 | Staff Staging |
| O625 | Low | II | MH | 0 | Office |
| O625A | Low | II | MH | 0 | Office |
| O625B | Low | II | MH | 0 | Office |
| 0P728 | Low | II | SESP | 0 | Office |
| 2P510 | Low | II | SESP | 2 | Corridor |
| 2P510A | Low | II | SESP | 2 | Break Room |
| 2P510B | Low | II | SESP | 2 | Open Office |
| 2P510C | Low | II | SESP | 2 | Conference |
| 2P511 | Low | II | SESP | 2 | Office |
| 2P512 | Low | II | SESP | 2 | Office |
| 2P513 | Low | II | SESP | 2 | Office |
| 2P514 | Low | II | SESP | 2 | Office |
| 2P516 | Low | II | SESP | 2 | Office |
| 2P517 | Low | II | SESP | 2 | Office |
| 2P518 | Low | II | SESP | 2 | Office |

Infection Control Risk Assessment

ICRA Committee approval of an ICRA Permit is required for all Construction Activity

Fill-out form completely or indicate NA on individual items

Date: 11/28/22

Requested ICRA (See Steps 1, 2 and 3) Construction Type Type C
Risk Level High Risk
Classification Class III

Submitted by: Seth Oberst

Dept/Firm: Vanir Construction Managment

Cell Phone: 916-272-4532

Project Location/Address: 2315 Stockton Blvd, Sacramento, CA 95817

Building name, Floor, Suite/Room: Main Hospital, see attached list for room numbers and wing

FD&C Project Number or Other Identifying Number: M053094

Type of Patient Care within Area of Work: Multiple, see attached list and map

Type of Patient Care in Adjacent Areas: Multiple, see attached list and map

Project Scope Description:

Project is removing carpet from multiple rooms in different areas and wings and replace with vinyl plank.

Describe Work Plan:

Each room/area will be less than 30 days to start & complete, so temporary poly barriers will be utilized. Being type III containment, in the more sensitive areas negative pressure containment will be utilized at anteroom. Sticky mats will be located within anteroom.

Required Documents

- Infection Control Risk Assessment
- Infection Control Construction Permit form
- UCDH Construction Dust & Hazardous Materials Inspection Worksheet form
- ICRA/Project Floor Plan (work area / floor plan, and path of travel plan)

Infection Control Risk Assessment

Matrix of Precautions for Construction & Renovation

STEP 1

Using the following table to *identify* the Construction Type A, B, C or D

| | |
|---------------|--|
| TYPE A | <p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet <i>f</i> painting (but not sanding) <i>f</i> wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection. |
| TYPE B | <p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> installation of telephone and computer cabling <i>f</i> access to chase spaces <i>f</i> cutting of walls or ceiling where dust migration can be controlled. |
| TYPE C | <p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> sanding of walls for painting or wall covering <i>f</i> removal of floorcoverings, ceiling tiles and casework <i>f</i> new wall construction <i>f</i> minor duct work or electrical work above ceilings <i>f</i> major cabling activities <i>f</i> any activity which cannot be completed within a single work shift. |
| TYPE D | <p>Major demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> activities which require consecutive work shifts <i>f</i> requires heavy demolition or removal of a complete cabling system <i>f</i> new construction. |

Step 1 - Construction Type:

STEP 2

Using the following table of **Patient Risk Groups**, identify the **Risk Level (Low, Medium, High, Highest)** posed by the project. Also provide further description of uses / risk groups as necessary that are not otherwise listed in the table. If more than one risk group will be affected, select the higher risk group:

| Low Risk | Medium Risk | High Risk | Highest Risk |
|---|---|---|--|
| <i>f</i> Office areas OTHER: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> | <i>f</i> Cardiology <i>f</i> Echocardiography <i>f</i> Endoscopy <i>f</i> Nuclear Medicine <i>f</i> Physical Therapy <i>f</i> Radiology/MRI <i>f</i> Respiratory Therapy OTHER: <div style="border: 1px solid black; height: 80px; width: 100%;"></div> | <i>f</i> CCU <i>f</i> Emergency Room <i>f</i> Labor & Delivery <i>f</i> Laboratories (specimen) <i>f</i> Medical Units <i>f</i> Newborn Nursery <i>f</i> Outpatient Surgery <i>f</i> Pediatrics <i>f</i> Pharmacy <i>f</i> Post Anesthesia Care Unit <i>f</i> Surgical Units OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> | <i>f</i> Any area caring for immunocompromised patients <i>f</i> Burn Unit <i>f</i> Cardiac Cath Lab <i>f</i> Central Sterile Supply <i>f</i> Intensive Care Units <i>f</i> Negative pressure isolation rooms <i>f</i> Oncology <i>f</i> Operating rooms including C-section rooms OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> |

Step 2 - Risk Level: High Risk

STEP 3

Use the table below to determine the ICRA Classification.

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ...
Construction Project Type (*A, B, C, D*) on the following matrix, to find the **Class of Precautions** (*I, II, III or IV*) or level of infection control activities required.
Class I-IV or Color-Coded Precautions are delineated on the following page.

| PATIENT RISK GROUP | CONSTRUCTION PROJECT TYPE | | | |
|--------------------|---------------------------|--------|--------|--------|
| | TYPE A | TYPE B | TYPE C | TYPE D |
| LOW Risk Group | I | II | II | III/IV |
| MEDIUM Risk Group | I | II | III | IV |
| HIGH Risk Group | I | II | III/IV | IV |
| HIGHEST Risk Group | II | III/IV | III/IV | IV |

Step 3 – Classification Determination: Class III

Infection Control Construction Permit (Post At Job Site)

| | | | | | |
|--|-----------|---|--|-----------|-------------------------------------|
| ICRA Permit No: 22-200 | | | ICRA Class: III | | |
| Location of Construction: Main Hospital, multiple locations | | | Project Start Date: 1/20/23 | | |
| Project Coordinator: Seth Oberst w/ Vanir CM | | | Estimated Duration: 01/18/24 | | |
| Contractor Performing Work: TBD | | | Permit Expiration Date: 7/20/23 | | |
| Supervisor: TBD | | | Telephone: TBD | | |
| YES | NO | CONSTRUCTION ACTIVITY | YES | NO | INFECTION CONTROL RISK GROUP |
| | ✓ | TYPE A: Inspection, non-invasive activity | | ✓ | GROUP 1: Low Risk |
| | ✓ | TYPE B: Small scale, short duration, moderate to high | | ✓ | GROUP 2: Medium Risk |
| ✓ | | TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion | ✓ | | GROUP 3: Medium/High Risk |
| | ✓ | TYPE D: Major duration and construction activities requiring consecutive work shifts | | ✓ | GROUP 4: Highest Risk |
| CLASS I | | <ol style="list-style-type: none"> 1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection. 3. Clean work area upon completion of task | | | |
| CLASS II | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. 3. Place dust mat at entrance and exit of work area. 4. Water mist work surfaces to control dust while cutting. 5. Contain construction waste before transport in tightly covered containers 6. Wipe surfaces with cleaner/disinfectant. 7. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS III | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. 3. Place dust mat at entrance and exit of work area. 4. Maintain negative air pressure utilizing HEPA equipped air filtration units to control dust. 5. Vacuum work with HEPA filtered vacuums. 6. Wipe surfaces with cleaner/disinfectant. 7. Contain construction waste before transport in tightly covered containers. 8. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or its representative. 9. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS IV | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. 3. Place dust mat at entrance and exit of work area. 4. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 5. Construct anteroom and require all personnel to pass through room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site, or personnel can wear cloth or paper coveralls that are removed each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers. 7. Contain construction waste before transport in tightly covered containers. Utilize tape coverings. 8. Vacuum work area with HEPA filtered vacuums. 9. Wipe surfaces with cleaner/disinfectant. 10. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or their representative. 11. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| Additional Requirements: | | | | | |
| Permit Requested By: Seth Oberst with Vanir | | | Permit Authorized By: Colin McGlynn, E-SIG | | |
| Date: 11/29/22 | | | Date: 12/7/22 | | |

UCDH Construction Dust & Hazardous Materials Inspection Worksheet

| | |
|--|-------------------------------------|
| ICRA Permit Number 22-200 | ICRA Class III |
| Job # and Name M053094 - Main Hospital Carpet Removal | Project Manager Kim Lake |
| Estimated Start 1/20/23 | Estimated Completion 1/18/24 |

ACKNOWLEDGEMENT OF HAZARDOUS MATERIALS

| | |
|---|---|
| Does the project contact hazardous materials (e.g., asbestos, lead, mold, PCBs, mercury)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Verified How: (e.g., hazmat survey, personal knowledge) | Millennium Report |
| By Whom: (name & department) | |

CONTAINMENT STRATEGIES

| | | | | | |
|--|--|--------------------------|---------------------------|--------------------------|---------------------|
| Enclosure Types [check all that apply] | | | | | |
| <input type="checkbox"/> | Full Containment (poly over all surfaces not in SOW) <input type="checkbox"/> Hard Barriers Required | | | | |
| <input checked="" type="checkbox"/> | Isolated Room – Critical Openings Only (seal doors, supply and return registers, etc) | | | | |
| <input type="checkbox"/> | Mini Containment Cube (only large enough for 1-2 people; aka pop up cube) | | | | |
| <input type="checkbox"/> | Shrouded Tool with HEPA filtered exhaust | | | | |
| <input type="checkbox"/> | Glove Box Containment with HEPA filtered exhaust | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Negative Pressure Requirements [check all that apply] | | | | | |
| <input checked="" type="checkbox"/> | -0.020" wc at all times (24/7) as displayed on mounted manometer | | | | |
| <input type="checkbox"/> | -0.020" wc at setup with some negative pressure throughout project as displayed on manometer | | | | |
| <input type="checkbox"/> | Visual Verification of some negative room pressure throughout project | | | | |
| <input type="checkbox"/> | No negative room pressure required | | | | |
| <input type="checkbox"/> | Negative pressure in localized HEPA exhausted work area (e.g. shrouded tool, glove box) | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Negative Pressure Equipment [check all that apply] | | | | | |
| <input type="checkbox"/> | Onsite Challenge Testing (DOP or particle counting) prior to setup | | | | |
| <input checked="" type="checkbox"/> | Challenge Tested within last 6 months; Equipment has remained onsite at UCDCM | | | | |
| <input checked="" type="checkbox"/> | Single HEPA Unit; exhausted to: <input checked="" type="checkbox"/> Outdoors <input checked="" type="checkbox"/> Diffusion Box/Chamber | | | | |
| <input type="checkbox"/> | Two HEPA Units in Parallel; exhausted to: <input type="checkbox"/> Outdoors <input type="checkbox"/> Diffusion Box/Chamber | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Additional Containment Requirements [check all that apply] | | | | | |
| <input checked="" type="checkbox"/> | Ante Room | <input type="checkbox"/> | Masonite Floor Protection | <input type="checkbox"/> | Protective Clothing |
| <input checked="" type="checkbox"/> | Walk Off Mats | <input type="checkbox"/> | Shoe Covers | <input type="checkbox"/> | Air Scrubber |
| <input type="checkbox"/> | Other: | | | | |

VERIFICATION OF WORK

| Type(s) of Inspection Required | Responsible Party |
|--|--|
| <input checked="" type="checkbox"/> HEPA Equipment Verification | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Pre-Work Approval Inspection | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Other: Millennium |
| <input checked="" type="checkbox"/> Daily Onsite Oversight | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: General Contractor |
| <input type="checkbox"/> Air Sampling Type: _____ Frequency: _____ | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> Other: |
| <input type="checkbox"/> Post Demolition or Abatement Inspection | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: |
| <input type="checkbox"/> ICRA Downgrade | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Final Visual Approval Containment Inspection | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: Millennium |

| Room # | Risk Group | Containment Class | Tower | Floor | Room Type |
|--------|------------|-------------------|-------|-------|----------------------|
| 12802B | High | III | Davis | 12 | Conference |
| 6717 | Medium | III | Davis | 6 | Nurse Manager Office |
| 6710A | Medium | III | Davis | 6 | Reception |
| 5703A | High | III | Davis | 5 | Conference |
| 5703B | High | III | Davis | 5 | Office |
| 3762 | High | III | Davis | 3 | Patient Bed |
| 3772 | High | III | Davis | 3 | Patient Bed |
| 3776 | High | III | Davis | 3 | Patient Bed |
| 3762A | High | III | Davis | 3 | Patient Bed |
| 14715 | High | III | Davis | 14 | Nurse Manager Office |
| 14717 | High | III | Davis | 14 | Office |
| 14802A | High | III | Davis | 14 | Conference |
| 14802B | High | III | Davis | 14 | Conference |
| 12715 | High | III | Davis | 12 | Nurse Manager Office |
| 12805 | High | III | Davis | 12 | Office |
| 12814 | High | III | Davis | 12 | Report Room |
| 12710A | High | III | Davis | 12 | Waiting Room |
| 12802A | High | III | Davis | 12 | Conference |
| 12803 | High | III | Davis | 12 | Work Room Office |
| 6793 | Medium | III | Davis | 6 | Day Room |
| 7607 | Medium | III | MH | 7 | Quiet Room |
| 7606A | High | III | MH | 7 | Conference |
| 7606B | High | III | MH | 7 | Conference |
| 7607A | Medium | III | MH | 7 | Store |
| 6123 | High | III | MH | 6 | Work Room Office |
| 4673 | High | III | MH | 4 | Office |
| 4680B | High | III | MH | 4 | Office |
| 1P100C | Low | III | SESP | 0 | Reception |

Infection Control Risk Assessment

ICRA Committee approval of an ICRA Permit is required for all Construction Activity

Fill-out form completely or indicate NA on individual items

Date: 11/30/22

Requested ICRA (See Steps 1, 2 and 3) Construction Type Type C
Risk Level Highest Risk
Classification Class IV

Submitted by: Seth Oberst

Dept/Firm: Vanir Construction Managment

Cell Phone: 916-272-4532

Project Location/Address: 2315 Stockton Blvd, Sacramento, CA 95817

Building name, Floor, Suite/Room: Main Hospital, see attached list for room numbers and wing

FD&C Project Number or Other Identifying Number: M053094

Type of Patient Care within Area of Work: Multiple, see attached list and map

Type of Patient Care in Adjacent Areas: Multiple, see attached list and map

Project Scope Description:

Project is removing carpet from multiple rooms in different areas and wings and replace with vinyl plank.

Describe Work Plan:

Each room/area will be less than 30 days to start & complete, so temporary poly barriers will be utilized. Being type III containment, negative containment will be utilized at anteroom. Sticky mats will be located within anteroom.

Required Documents

- Infection Control Risk Assessment
- Infection Control Construction Permit form
- UCDH Construction Dust & Hazardous Materials Inspection Worksheet form
- ICRA/Project Floor Plan (work area / floor plan, and path of travel plan)

Infection Control Risk Assessment

Matrix of Precautions for Construction & Renovation

STEP 1

Using the following table to *identify* the Construction Type A, B, C or D

| | |
|---------------|--|
| TYPE A | <p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet <i>f</i> painting (but not sanding) <i>f</i> wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection. |
| TYPE B | <p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> installation of telephone and computer cabling <i>f</i> access to chase spaces <i>f</i> cutting of walls or ceiling where dust migration can be controlled. |
| TYPE C | <p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> sanding of walls for painting or wall covering <i>f</i> removal of floorcoverings, ceiling tiles and casework <i>f</i> new wall construction <i>f</i> minor duct work or electrical work above ceilings <i>f</i> major cabling activities <i>f</i> any activity which cannot be completed within a single work shift. |
| TYPE D | <p>Major demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> activities which require consecutive work shifts <i>f</i> requires heavy demolition or removal of a complete cabling system <i>f</i> new construction. |

Step 1 - Construction Type:

STEP 2

Using the following table of **Patient Risk Groups**, identify the **Risk Level (Low, Medium, High, Highest)** posed by the project. Also provide further description of uses / risk groups as necessary that are not otherwise listed in the table. If more than one risk group will be affected, select the higher risk group:

| Low Risk | Medium Risk | High Risk | Highest Risk |
|--|--|--|--|
| f Office areas OTHER: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> | f Cardiology f Echocardiography f Endoscopy f Nuclear Medicine f Physical Therapy f Radiology/MRI f Respiratory Therapy OTHER: <div style="border: 1px solid black; height: 80px; width: 100%;"></div> | f CCU f Emergency Room f Labor & Delivery f Laboratories (specimen) f Medical Units f Newborn Nursery f Outpatient Surgery f Pediatrics f Pharmacy f Post Anesthesia Care Unit f Surgical Units OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> | f Any area caring for immunocompromised patients f Burn Unit f Cardiac Cath Lab f Central Sterile Supply f Intensive Care Units f Negative pressure isolation rooms f Oncology f Operating rooms including C-section rooms OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> |

Step 2 - Risk Level: Highest Risk

STEP 3

Use the table below to determine the ICRA Classification.

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ... **Construction Project Type** (*A, B, C, D*) on the following matrix, to find the **Class of Precautions** (*I, II, III or IV*) or level of infection control activities required. **Class I-IV or Color-Coded Precautions** are delineated on the following page.

| PATIENT RISK GROUP | CONSTRUCTION PROJECT TYPE | | | |
|--------------------|---------------------------|--------|--------|--------|
| | TYPE A | TYPE B | TYPE C | TYPE D |
| LOW Risk Group | I | II | II | III/IV |
| MEDIUM Risk Group | I | II | III | IV |
| HIGH Risk Group | I | II | III/IV | IV |
| HIGHEST Risk Group | II | III/IV | III/IV | IV |

Step 3 – Classification Determination: Class IV

Infection Control Construction Permit (Post At Job Site)

| | | | | | |
|--|-----------|---|--|-----------|-------------------------------------|
| ICRA Permit No: 22-201 | | | ICRA Class: IV | | |
| Location of Construction: Main Hospital, multiple locations | | | Project Start Date: 1/20/23 | | |
| Project Coordinator: Seth Oberst w/ Vanir CM | | | Estimated Duration: 01/18/24 | | |
| Contractor Performing Work: TBD | | | Permit Expiration Date: 7/20/23 | | |
| Supervisor: TBD | | | Telephone: TBD | | |
| YES | NO | CONSTRUCTION ACTIVITY | YES | NO | INFECTION CONTROL RISK GROUP |
| | ✓ | TYPE A: Inspection, non-invasive activity | | ✓ | GROUP 1: Low Risk |
| | ✓ | TYPE B: Small scale, short duration, moderate to high | | ✓ | GROUP 2: Medium Risk |
| ✓ | | TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion | | ✓ | GROUP 3: Medium/High Risk |
| | ✓ | TYPE D: Major duration and construction activities requiring consecutive work shifts | ✓ | | GROUP 4: Highest Risk |
| CLASS I | | <ol style="list-style-type: none"> 1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection. 3. Clean work area upon completion of task | | | |
| CLASS II | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. 3. Place dust mat at entrance and exit of work area. 4. Water mist work surfaces to control dust while cutting. 5. Contain construction waste before transport in tightly covered containers 6. Wipe surfaces with cleaner/disinfectant. 7. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS III | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. 3. Place dust mat at entrance and exit of work area. 4. Maintain negative air pressure utilizing HEPA equipped air filtration units to control dust. 5. Vacuum work with HEPA filtered vacuums. 6. Wipe surfaces with cleaner/disinfectant. 7. Contain construction waste before transport in tightly covered containers. 8. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or its representative. 9. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS IV | | <ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. 3. Place dust mat at entrance and exit of work area. 4. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 5. Construct anteroom and require all personnel to pass through room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site, or personnel can wear cloth or paper coveralls that are removed each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers. 7. Contain construction waste before transport in tightly covered containers. Utilize tape coverings. 8. Vacuum work area with HEPA filtered vacuums. 9. Wipe surfaces with cleaner/disinfectant. 10. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or their representative. 11. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| Date <hr style="border: 1px solid blue;"/> | | | | | |
| Initial <hr style="border: 1px solid blue;"/> | | | | | |
| Date 12/7/22 | | | | | |
| Initial CM | | | | | |
| Additional Requirements: | | | | | |
| Permit Requested By: Seth Oberst with Vanir | | | Permit Authorized By: Colin McGlynn, E-SIG | | |
| Date: 11/29/22 | | | Date: 12/7/22 | | |

UCDH Construction Dust & Hazardous Materials Inspection Worksheet

| | |
|--|-------------------------------------|
| ICRA Permit Number 22-201 | ICRA Class IV |
| Job # and Name M053094 - Main Hospital Carpet Removal | Project Manager Kim Lake |
| Estimated Start 1/20/23 | Estimated Completion 1/18/24 |

ACKNOWLEDGEMENT OF HAZARDOUS MATERIALS

| | |
|--|---|
| Does the project contact hazardous materials (e.g., asbestos, lead, mold, PCBs, mercury)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Verified How: (e.g., hazmat survey, personal knowledge) | Millennium Report |
| By Whom: (name & department) | |

CONTAINMENT STRATEGIES

| | | | | | |
|---|---|-------------------------------------|---------------------------|--------------------------|---------------------|
| Enclosure Types [check all that apply] | | | | | |
| <input type="checkbox"/> | Full Containment (poly over all surfaces not in SOW) <input type="checkbox"/> Hard Barriers Required | | | | |
| <input checked="" type="checkbox"/> | Isolated Room – Critical Openings Only (seal doors, supply and return registers, etc) | | | | |
| <input type="checkbox"/> | Mini Containment Cube (only large enough for 1-2 people; aka pop up cube) | | | | |
| <input type="checkbox"/> | Shrouded Tool with HEPA filtered exhaust | | | | |
| <input type="checkbox"/> | Glove Box Containment with HEPA filtered exhaust | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Negative Pressure Requirements [check all that apply] | | | | | |
| <input checked="" type="checkbox"/> | -0.020" wc at all times (24/7) as displayed on mounted manometer | | | | |
| <input type="checkbox"/> | -0.020" wc at setup with some negative pressure throughout project as displayed on manometer | | | | |
| <input type="checkbox"/> | Visual Verification of some negative room pressure throughout project | | | | |
| <input type="checkbox"/> | No negative room pressure required | | | | |
| <input type="checkbox"/> | Negative pressure in localized HEPA exhausted work area (e.g. shrouded tool, glove box) | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Negative Pressure Equipment [check all that apply] | | | | | |
| <input type="checkbox"/> | Onsite Challenge Testing (DOP or particle counting) prior to setup | | | | |
| <input checked="" type="checkbox"/> | Challenge Tested within last 6 months; Equipment has remained onsite at UCDCM | | | | |
| <input checked="" type="checkbox"/> | Single HEPA Unit; exhausted to: <input type="checkbox"/> Outdoors <input checked="" type="checkbox"/> Diffusion Box/Chamber | | | | |
| <input type="checkbox"/> | Two HEPA Units in Parallel; exhausted to: <input type="checkbox"/> Outdoors <input type="checkbox"/> Diffusion Box/Chamber | | | | |
| <input type="checkbox"/> | Other: | | | | |
| Additional Containment Requirements [check all that apply] | | | | | |
| <input checked="" type="checkbox"/> | Ante Room | <input type="checkbox"/> | Masonite Floor Protection | <input type="checkbox"/> | Protective Clothing |
| <input checked="" type="checkbox"/> | Walk Off Mats | <input checked="" type="checkbox"/> | Shoe Covers | <input type="checkbox"/> | Air Scrubber |
| <input type="checkbox"/> | Other: | | | | |

VERIFICATION OF WORK

| Type(s) of Inspection Required | Responsible Party |
|--|--|
| <input checked="" type="checkbox"/> HEPA Equipment Verification | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Pre-Work Approval Inspection | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Other: Millennium |
| <input checked="" type="checkbox"/> Daily Onsite Oversight | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: General Contractor |
| <input type="checkbox"/> Air Sampling Type: _____ Frequency: _____ | <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> Other: |
| <input type="checkbox"/> Post Demolition or Abatement Inspection | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: |
| <input type="checkbox"/> ICRA Downgrade | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input type="checkbox"/> Other: Millennium |
| <input checked="" type="checkbox"/> Final Visual Approval Containment Inspection | <input type="checkbox"/> PM <input type="checkbox"/> EH&S <input type="checkbox"/> Consultant <input type="checkbox"/> IOR <input checked="" type="checkbox"/> Other: Millennium |

| Room # | Risk Group | Containment Class | Tower | Floor | Room Type |
|--------|------------|-------------------|-------|-------|----------------------|
| 5811 | Highest | IV | Davis | 5 | Family Waiting |
| 5753A | Highest | IV | Davis | 5 | Office |
| 7814 | Highest | IV | Davis | 7 | Conference |
| 7710A | Highest | IV | Davis | 7 | Station Nurse |
| 10711 | Highest | IV | Davis | 10 | Women On-Call |
| 10712 | Highest | IV | Davis | 10 | Men On-Call |
| 10714 | Highest | IV | Davis | 10 | Office |
| 10723 | Highest | IV | Davis | 10 | Office |
| 10747 | Highest | IV | Davis | 10 | Conference |
| 10748 | Highest | IV | Davis | 10 | Conference |
| 10747A | Highest | IV | Davis | 10 | Conference |
| 11715 | Highest | IV | Davis | 11 | Nurse Manager Office |
| 11744 | Highest | IV | Davis | 11 | Consult Office |
| 11768 | Highest | IV | Davis | 11 | Office |
| 11793 | Highest | IV | Davis | 11 | Break Room |
| 7715 | Highest | IV | Davis | 7 | Family Waiting |
| 7717 | Highest | IV | Davis | 7 | Nurse Manager Office |
| 7817 | Highest | IV | Davis | 7 | Break Room |
| 8741 | Highest | IV | Davis | 8 | Office |
| 11814 | Highest | IV | Davis | 11 | Office |
| 11710A | Highest | IV | Davis | 11 | Reception |
| 11802A | Highest | IV | Davis | 11 | Conference |
| 11802B | Highest | IV | Davis | 11 | Conference |
| 8654 | Highest | IV | MH | 8 | Store |
| 7652 | Highest | IV | MH | 7 | Nurse Manager Office |
| 7676 | Highest | IV | MH | 7 | Nurse Manager Office |
| 6683 | Highest | IV | MH | 6 | Office |
| 2P426 | Highest | IV | SESP | 2 | Office |
| 2P428 | Highest | IV | SESP | 2 | Office |
| 2P432 | Highest | IV | SESP | 2 | Nurse Manager Office |
| 2P434 | Highest | IV | SESP | 2 | Office |
| 2P449 | Highest | IV | SESP | 2 | Nurse Manager Office |
| 1P676 | Highest | IV | SESP | 1 | DISH Plan |
| 2P401 | Highest | IV | SESP | 2 | Waiting Room |
| 2P422 | Highest | IV | SESP | 2 | Office |

Infection Control Risk Assessment

ICRA Committee approval of an ICRA Permit is required for all Construction Activity

Fill-out form completely or indicate NA on individual items

Date: 2/1/23

Requested ICRA (See Steps 1, 2 and 3) Construction Type Type D
Risk Level Highest Risk
Classification Class IV

Submitted by: Seth Oberst

Dept/Firm: Vanir Construction Managment

Cell Phone: 916-272-4532

Project Location/Address: 2315 Stockton Blvd, Sacramento, CA 95817

Building name, Floor, Suite/Room: Main Hospital, see attached list for room numbers and wing

FD&C Project Number or Other Identifying Number: M053094

Type of Patient Care within Area of Work: Multiple, see attached list and map

Type of Patient Care in Adjacent Areas: Multiple, see attached list and map

Project Scope Description:

Project is removing carpet from multiple rooms in different areas and wings and replace with vinyl plank.

Describe Work Plan:

Each room/area will be less than 30 days to start & complete, so temporary poly barriers will be utilized. Flooring abatement is required, appropriate measure will be taken during removal, with clearance from the environmental consultant after abatement is completed.

Required Documents

- Infection Control Risk Assessment
- Infection Control Construction Permit form
- UCDH Construction Dust & Hazardous Materials Inspection Worksheet form
- ICRA/Project Floor Plan (work area / floor plan, and path of travel plan)

Infection Control Risk Assessment

Matrix of Precautions for Construction & Renovation

STEP 1

Using the following table to *identify* the Construction Type A, B, C or D

| | |
|---------------|--|
| TYPE A | <p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet <i>f</i> painting (but not sanding) <i>f</i> wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection. |
| TYPE B | <p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> installation of telephone and computer cabling <i>f</i> access to chase spaces <i>f</i> cutting of walls or ceiling where dust migration can be controlled. |
| TYPE C | <p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> sanding of walls for painting or wall covering <i>f</i> removal of floorcoverings, ceiling tiles and casework <i>f</i> new wall construction <i>f</i> minor duct work or electrical work above ceilings <i>f</i> major cabling activities <i>f</i> any activity which cannot be completed within a single work shift. |
| TYPE D | <p>Major demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> <i>f</i> activities which require consecutive work shifts <i>f</i> requires heavy demolition or removal of a complete cabling system <i>f</i> new construction. |

Step 1 - Construction Type:

STEP 2

Using the following table of **Patient Risk Groups**, identify the **Risk Level (Low, Medium, High, Highest)** posed by the project. Also provide further description of uses / risk groups as necessary that are not otherwise listed in the table. If more than one risk group will be affected, select the higher risk group:

| Low Risk | Medium Risk | High Risk | Highest Risk |
|--|--|--|--|
| f Office areas OTHER: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> | f Cardiology f Echocardiography f Endoscopy f Nuclear Medicine f Physical Therapy f Radiology/MRI f Respiratory Therapy OTHER: <div style="border: 1px solid black; height: 80px; width: 100%;"></div> | f CCU f Emergency Room f Labor & Delivery f Laboratories (specimen) f Medical Units f Newborn Nursery f Outpatient Surgery f Pediatrics f Pharmacy f Post Anesthesia Care Unit f Surgical Units OTHER: <div style="border: 1px solid black; height: 40px; width: 100%;"></div> | f Any area caring for immunocompromised patients f Burn Unit f Cardiac Cath Lab f Central Sterile Supply f Intensive Care Units f Negative pressure isolation rooms f Oncology f Operating rooms including C-section rooms OTHER: <div style="border: 1px solid black; height: 60px; width: 100%;"></div> |

Step 2 - Risk Level: Highest Risk

STEP 3

Use the table below to determine the ICRA Classification.

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ... **Construction Project Type** (*A, B, C, D*) on the following matrix, to find the **Class of Precautions** (*I, II, III or IV*) or level of infection control activities required. **Class I-IV or Color-Coded Precautions** are delineated on the following page.

| PATIENT RISK GROUP | CONSTRUCTION PROJECT TYPE | | | |
|--------------------|---------------------------|--------|--------|--------|
| | TYPE A | TYPE B | TYPE C | TYPE D |
| LOW Risk Group | I | II | II | III/IV |
| MEDIUM Risk Group | I | II | III | IV |
| HIGH Risk Group | I | II | III/IV | IV |
| HIGHEST Risk Group | II | III/IV | III/IV | IV |

Step 3 – Classification Determination: Class IV

Infection Control Construction Permit (Post At Job Site)

| | | | | | |
|--|-----------|--|--|-----------|-------------------------------------|
| ICRA Permit No: M053094 | | | ICRA Class: IV | | |
| Location of Construction: Main Hospital, multiple locations | | | Project Start Date: 3/20/23 | | |
| Project Coordinator: Seth Oberst w/ Vanir CM | | | Estimated Duration: 03/20/24 | | |
| Contractor Performing Work: TBD | | | Permit Expiration Date: 7/20/23 | | |
| Supervisor: TBD | | | Telephone: TBD | | |
| YES | NO | CONSTRUCTION ACTIVITY | YES | NO | INFECTION CONTROL RISK GROUP |
| | ✓ | TYPE A: Inspection, non-invasive activity | | ✓ | GROUP 1: Low Risk |
| | ✓ | TYPE B: Small scale, short duration, moderate to high | | ✓ | GROUP 2: Medium Risk |
| | ✓ | TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion | | ✓ | GROUP 3: Medium/High Risk |
| ✓ | | TYPE D: Major duration and construction activities requiring consecutive work shifts | ✓ | | GROUP 4: Highest Risk |
| CLASS I | | <ol style="list-style-type: none"> Execute work by methods to minimize raising dust from construction operations. Immediately replace any ceiling tile displaced for visual inspection. Clean work area upon completion of task | | | |
| CLASS II | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Place dust mat at entrance and exit of work area. Water mist work surfaces to control dust while cutting. Contain construction waste before transport in tightly covered containers Wipe surfaces with cleaner/disinfectant. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS III | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. Place dust mat at entrance and exit of work area. Maintain negative air pressure utilizing HEPA equipped air filtration units to control dust. Vacuum work with HEPA filtered vacuums. Wipe surfaces with cleaner/disinfectant. Contain construction waste before transport in tightly covered containers. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or its representative. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| CLASS IV | | <ol style="list-style-type: none"> Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all critical barriers or implement control cube method before construction begins. Seal holes, pipes, conduits, and punctures appropriately. Place dust mat at entrance and exit of work area. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Construct anteroom and require all personnel to pass through room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site, or personnel can wear cloth or paper coveralls that are removed each time they leave the work site. All personnel entering work site are required to wear shoe covers. Contain construction waste before transport in tightly covered containers. Utilize tape coverings. Vacuum work area with HEPA filtered vacuums. Wipe surfaces with cleaner/disinfectant. Do not remove barriers from work area until complete project is clean and checked by Environmental Health and Safety or their representative. Remove barrier materials carefully to minimize spreading of dirt and debris. | | | |
| Date _____ | | | | | |
| Initial _____ | | | | | |
| Additional Requirements: | | | | | |
| Permit Requested By: Seth Oberst Vanir Construction Inc. | | | Permit Authorized By: | | |
| Date: 2/10/23 | | | Date: | | |

UCDH Construction Dust & Hazardous Materials Inspection Worksheet

| | |
|--|-------------------------------------|
| ICRA Permit Number | ICRA Class IV |
| Job # and Name M053094 - Main Hospital Carpet Removal | Project Manager Kim Lake |
| Estimated Start 1/20/23 | Estimated Completion 1/18/24 |

ACKNOWLEDGEMENT OF HAZARDOUS MATERIALS

| | |
|--|---|
| Does the project contact hazardous materials (e.g., asbestos, lead, mold, PCBs, mercury)? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Verified How: (e.g., hazmat survey, personal knowledge) | Millennium Report |
| By Whom: (name & department) | |

CONTAINMENT STRATEGIES

| | | | |
|---|---|-------------------------------------|---------------------------|
| Enclosure Types [check all that apply] | | | |
| <input checked="" type="checkbox"/> | Full Containment (poly over all surfaces not in SOW) | <input type="checkbox"/> | Hard Barriers Required |
| | Isolated Room – Critical Openings Only (seal doors, supply and return registers, etc) | | |
| | Mini Containment Cube (only large enough for 1-2 people; aka pop up cube) | | |
| | Shrouded Tool with HEPA filtered exhaust | | |
| | Glove Box Containment with HEPA filtered exhaust | | |
| | Other: | | |
| Negative Pressure Requirements [check all that apply] | | | |
| <input checked="" type="checkbox"/> | -0.020" wc at all times (24/7) as displayed on mounted manometer | | |
| | -0.020" wc at setup with some negative pressure throughout project as displayed on manometer | | |
| | Visual Verification of some negative room pressure throughout project | | |
| | No negative room pressure required | | |
| | Negative pressure in localized HEPA exhausted work area (e.g. shrouded tool, glove box) | | |
| | Other: | | |
| Negative Pressure Equipment [check all that apply] | | | |
| | Onsite Challenge Testing (DOP or particle counting) prior to setup | | |
| <input checked="" type="checkbox"/> | Challenge Tested within last 6 months; Equipment has remained onsite at UCDCM | | |
| <input checked="" type="checkbox"/> | Single HEPA Unit; exhausted to: <input type="checkbox"/> Outdoors <input checked="" type="checkbox"/> Diffusion Box/Chamber | | |
| | Two HEPA Units in Parallel; exhausted to: <input type="checkbox"/> Outdoors <input type="checkbox"/> Diffusion Box/Chamber | | |
| | Other: | | |
| Additional Containment Requirements [check all that apply] | | | |
| <input checked="" type="checkbox"/> | Ante Room | | Masonite Floor Protection |
| <input checked="" type="checkbox"/> | Walk Off Mats | <input checked="" type="checkbox"/> | Shoe Covers |
| <input checked="" type="checkbox"/> | | | Protective Clothing |
| <input checked="" type="checkbox"/> | | | Air Scrubber |
| | Other: | | |

VERIFICATION OF WORK

| Type(s) of Inspection Required | Responsible Party |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | HEPA Equipment Verification |
| <input checked="" type="checkbox"/> | Pre-Work Approval Inspection |
| <input checked="" type="checkbox"/> | Daily Onsite Oversight |
| <input checked="" type="checkbox"/> | Air Sampling Type: _____ Frequency: _____ |
| <input checked="" type="checkbox"/> | Post Demolition or Abatement Inspection |
| <input checked="" type="checkbox"/> | ICRA Downgrade |
| <input checked="" type="checkbox"/> | Final Visual Approval Containment Inspection |

EH&S Consultant Other:

EH&S Consultant Other: Millennium

PM EH&S Consultant IOR Other: General Contractor

EH&S Consultant Other: Millennium

PM EH&S Consultant IOR Other: Millennium

PM EH&S Consultant IOR Other: Millennium

PM EH&S Consultant IOR Other: Millennium

| Room # | Risk Group | Containment Class | Tower | Floor | Room Type |
|---------------|-------------------|--------------------------|--------------|--------------|------------------|
| 4132B | High | IV* | MH | 4 | Office |
| 6101 | High | IV* | MH | 6 | Work Room Office |
| 6102 | High | IV* | MH | 6 | Store |
| 6103 | High | IV* | MH | 6 | Office |

* Abatement required.

SECTION 02 82 13.19

ASBESTOS-RELATED WORK

PART 1 - GENERAL

1.1 SUMMARY

A. This section specifies the methods, procedures, and requirements related to the removal and disposal of Asbestos-Containing Material (ACM), Asbestos-Containing Construction Material (ACCM), and Asbestos-Containing Waste Material (ACWM) including, but not limited to:

- | | |
|---------------------------------|-------------------|
| 1. Regulatory requirements | 4. Execution |
| 2. Submittals | 5. Inspections |
| 3. Personal protective measures | 6. Waste handling |

B. Related Sections:

1. Asbestos-Related Sampling Report
2. UC Davis Project Manual: Plans and Specifications

1.2 SCOPE OF WORK

A. The Work of this section includes the provision for all labor, materials, equipment, and services necessary to affect the preparation, removal, cleaning, and disposal of asbestos, ACM, and ACCM as indicated by the contract documents and this specification.

B. The work of the contract can be summarized as follows:

The asbestos-related work for the UC Davis Project M053094 Main Hospital DT SESP PCS Carpet Removal project includes all pre-construction administration, submittal preparation, project planning, labor, transportation, and disposal as detailed herein, to conduct carpet removal and asbestos-containing adhesives removal. Work procedures for asbestos-containing material disturbance and removal are determined to be classified as Cal OSHA Class II asbestos work per CCR Title 8 Part 1529 with the removal of a Category I Non-Friable ACM floor mastic.

The reported asbestos-containing material consists of the following:

- Black mastic, underneath the carpet and floor tile, tested positive for asbestos (5%) and is a Category I Non-Friable ACM.

All black mastic under the carpet and floor tiles shall be assumed Category I Non-Friable ACM on the 4th and 6th floors of the Main Hospital.

- ❖ For details on analytical results refer to the pre-renovation survey report dated December 29, 2022.
- ❖ Quantity and Location: Review project plans to determine the quantity and location of carpet removal.

1.3 SUBMITTALS

- A. Personnel training: at the pre-construction meeting, the contractor shall submit (1) a declaration certifying all the contractor's employees have been adequately trained, and (2) a photocopy of training certificates, for each employee from their respective training agency or organization. Contractors may submit a photocopy of the employee's asbestos worker certification card in lieu of training certificates. All copies shall be legible and in color.
- B. Respirators: submit at pre-construction meeting certifications for each employee and clearly state that each employee has been fit tested and professionally trained for respirators.
- C. Medical examinations: submit proof that all persons providing labor and/or professional services who will be entering regulated areas while donning respirators have current (less than one year prior to the date of their participation on the project) medical examinations. Furnish the physician's written opinion to the owner's representative at the pre-construction meeting, or prior to each person's commencing work on this project, and for each person subsequently providing labor and/or professional services at the job site for whom a certificate was not initially furnished.
- D. Product submittals and substitutions: comply with pertinent provisions of applicable sections.
- E. Asbestos removal or encapsulation product data: within ten (10) days after the contractor has received the owner's notice of award, submit the manufacturer's catalog, samples, safety data sheets, (SDS), and other items needed to demonstrate fully the quality of the proposed materials. Under no circumstances shall proposed materials be used before written approval from the owner, owner's representative, or observation service. Submittals are required if the following materials are proposed (not necessarily a complete list). Do not submit data on products not proposed for this project:
 - 1. Encapsulant
 - 2. Surfactant
 - 3. Protective packaging
 - 4. Lagging adhesive
 - 5. Glovebags
 - 6. Solvents
- F. Permits: submit at the pre-construction meeting proof satisfactory to the owner, owner's representative, or observation service that all required permits have been obtained.
- G. Waste compliance plan: submit ten (10) days before starting work a copy of the waste compliance plan which is in compliance with federal, state, and local hazardous waste regulations and addresses:
 - 1. Identification of hazardous waste streams, if any, associated with the work.
 - 2. Sampling and analysis plan: should the contractor conduct additional waste characterization for disposal purposes, a plan detailing the following elements are required to be submitted and approved:
 - a. Identification of material(s): location, component, color, substrate;
 - b. Proposed sample collection methods to be employed;
 - c. Asbestos containing waste materials may not be commingled or composited prior to sampling;

- d. Proposed analytical methods to be used;
 - e. Proposed analytical laboratory and associated qualifications; and
 - f. Proposed methods of data interpretation.
3. Estimated quantities of wastes to be generated and disposed of.
 4. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact. Furnish two (2) copies of EPA, state, and local permit applications, permits, and EPA identification numbers.
 5. List of waste handling equipment to be used in performing the work, including cleaning, volume reduction, and transport equipment.
 6. Spill prevention, containment, and cleanup contingency measures to be implemented.
 7. Name of the EPA-approved hazardous waste treatment or disposal facility for asbestos disposal.
 8. Waste streams, excluding ACM, may be segregated, or commingled prior to waste characterization at the contractor's discretion. It may be to the contractor's benefit to segregate unique components known or suspected to contain elevated levels of lead.
 - a. Waste transportation: submit in the waste compliance plan the method of transport of hazardous waste, including the name, address, EPA ID number, and telephone number of the transporter(s).
 - b. Whenever possible, asbestos-containing waste material shall be segregated from other waste streams.
- H. The designated owner's representative shall inspect the waste and sign the uniform hazardous waste manifests and/or waste shipping record prior to transport and disposal. The designated owner's representative is the **only** person authorized to sign the manifest and shall retain the original last copy of the manifest. A copy of the land ban restriction notification or any required pertinent documentation must also be submitted in order to verify proper disposal.
- I. Asbestos Removal Plan: the contractor shall submit for approval at least ten (10) days prior to the start of work a detailed plan of the work procedures to be used in the removal, repair, clean-up, or encapsulation of materials containing asbestos. Such a plan shall include:
1. Location of asbestos work areas.
 2. Layout and construction details of decontamination and enclosure systems.
 3. Project schedule including important milestones, critical paths, and interface of trades involved in the work.
 4. Personal air monitoring procedures.
 5. Detailed description of the method to be employed in order to prevent the spread of contamination, including negative air equipment calculations for all negative pressure enclosures.

6. Infection Control Risk Assessment.
 - a. An Infection Control Risk Assessment (ICRA). This is required to mitigate dust and is mandatory for this project. The risk assessment identifies patient groups at risk for infection due to construction dust. The dust mitigation plan is designed to contain dust within the construction zone. Some hospitalized patients are fragile. These patients are at risk for acquiring infections from bacteria and viruses that are transported on air currents from the construction zone to the patient areas. Dust is a method for germs to move through the hospital. The ICRA and dust mitigation plan assures a clean, safe environment for the patients hospitalized during construction. Hospital management is expecting your assistance in providing the best possible environment for the patients. We appreciate your partnership in the campaign to prevent a hospital acquired infection related to construction dust.
 7. Names of a superintendent, supervisors (foremen), project manager, and other key personnel, and their daytime and emergency telephone numbers.
 8. Security plan including sketches necessary to clearly describe the plan.
 9. Emergency evacuation plan for injured workers, fire, and other emergencies. Include a list of emergency phone numbers and a route map to the nearest medical facility for emergency treatment.
 10. A contingency plan, in the event of a major contamination incident caused by fire (on or off the floor being abated), a large breach in the work area containment barrier, the opening of stairwell doors, breakage of the building's exterior windows, or sabotage. Such a plan will focus on how to maintain safety and order when the building is occupied by other trades or by the owner's personnel.
 11. Negative exposure assessment(s) (NEA): the contractor shall provide any NEA to be utilized on the project along with the required written determination and all air sampling data including laboratory results and the chain of custody or air sampling form used for the NEA. The NEA shall be compliant with the requirements of 8 CCR 1529.
 12. The observation service and owner must approve the asbestos plan in writing at least 5 workdays before the start of any work.
- J. Equipment certification: submit at the pre-construction meeting manufacturers' certification that vacuums, negative air pressure equipment filters, and other local exhaust ventilation equipment conform to ANSI Z9.2.
- K. Rental equipment: when rental equipment is to be used in removal areas or to transport waste materials, a copy of the written notification provided to the rental company informing them of the nature of the use of the rented equipment shall be signed by the rental company and submitted to the observation service at the pre-construction meeting. The contractor shall submit a decontamination plan for the rental equipment that has been approved, in writing, by the rental company.
- L. Notifications: When required, contact the following government agencies in writing by certified/registered mail overnight mail service, or fax delivered at least ten (10) workdays prior to commencing any disturbance of asbestos:

1. Sacramento Metropolitan Air Quality Management District
2. California Division of Occupational Safety and Health

All notifications shall contain as a minimum the following information:

- a. Name, address, and telephone number of the owner including the contact person.
 - b. Name, address, EPA numbers, license number, and telephone number of the contractor including the contact person.
 - c. Name, address, and description of the building, including size, age, and prior use of the building.
 - d. The type and quantity of friable asbestos material involved and the description of the work.
 - e. Scheduled starting and completion dates for the asbestos-related work.
 - f. Procedures that shall be employed to comply with the regulations.
 - g. The name, address, EPA number, and telephone number of the transporter.
 - h. The name and address of the asbestos waste disposal facility where the waste shall be deposited.
- M. Provide proof of contractor's C-22 license and asbestos certification from the contractor state licensing board, and proof of registration with the division of occupational safety and health in accordance with California Labor Code, Section 6501.
- N. Respiratory protection program: submit a copy of the contractor's current written respiratory protection program.
- O. Safety programs: on company letterhead, submit confirmation that the contractor has written safety programs for injury illness prevention (mandatory for all projects), hazard communication (mandatory for all projects), fall protection (when applicable), lockout/tag out (when applicable), and confined space (when applicable).
- P. Encapsulant manufacturer's certification (when required) that the contractor is an approved applicator of the encapsulants to be used on this project.
- Q. Where asbestos cement pipe is to be removed from exterior work areas the contractor shall submit documentation of, at a minimum, 4-hour asbestos cement pipe worker training from an accredited training provider.

1.4 APPLICABLE REGULATIONS AND PUBLICATIONS

The publications listed below form a part of these specifications to the extent referenced. The publications are referred to in the text by the basic designation only.

- A. Federal Regulators and Regulations

1. EPA - Environmental Protection Agency
 - a. 40 CFR, Part 763, Subpart E – AHERA
 2. OSHA - Occupational Safety and Health Administration
 - a. 29 CFR 1926.1101 - Asbestos Construction Standard
 - b. 29 CFR 1910.1001 – Asbestos General Industry Standard
 - c. 29 CFR 1926 – Construction Industry Standards
 3. NESHAPS - National Emission Standards for Hazards Air Pollutants
 - a. 40 CFR 61, Subpart M - Asbestos Emissions
 - b. 40 CFR 61, Subpart A - General Conditions
 4. DOT - Department of Transportation
 - a. 49 CFR 270-273
- B. State Regulators and Regulations
1. Cal/OSHA - California Department of Occupational Safety and Health
 - a. Title 8 CCR Section 1529 - Construction Asbestos Standard
 - b. Title 8 CCR Section 3203 - Injury and Illness Prevention
 - c. Title 8 CCR Section 5144 – Respiratory Protection
 - d. Title 8 CCR Section 5158 - Confined Space
 - e. Title 8 CCR Section 5194 - Hazard Communication
 - f. Title 8 CCR Section 5208 - General Industry Asbestos Standard
 - g. Title 8 CCR Chapter 4 Subchapter 4 – Construction Safety Orders
 2. DTSC - Department of Toxic Substance Control
 - a. Title 22 CCR Sections 66261.24, 66268.7, 66268.114
 3. CIWMB - California Integrated Waste Management Board
 4. SWQCB - State Water Quality Control Board CCR, Title 23
 5. CSLB - Contractor State Licensing Board
 - a. Business and Professional Code Section 7058.5
- C. Local Regulators and Regulations

1. SMAQMD – Sacramento Metropolitan Air Quality Management District

D. National Reference Standards

1. ANSI – American National Standards Institute
 - a. Z9.2 – Fundamentals Governing The Design and Operation of Local Exhaust Systems
 - b. Z88.2 – Practices for Respiratory Protection
2. NIOSH – National Institute of Occupational Safety and Health
 - a. Method 7400 – Asbestos and Other Fibers
 - b. Method 7402 – Asbestos Fibers by TEM
3. UL – Underwriters Laboratories
 - a. 586 – Standard for High Efficiency, Particulate, Air Filter Units

1.5 DEFINITIONS

- A. **Owner:** UC Davis Medical Center
- B. **Abatement:** Asbestos-related work procedures to control fiber release. Includes removal, disturbance, encapsulation, and enclosure.
- C. **Adequately Wet:** A term as defined in 40 CFR Part 61, Subpart M-, and EPA 340/1-90-019- that means to sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from ACM, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.
- D. **Air Lock:** A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area.
- E. **Air Monitoring:** The process of measuring the fiber content of a specific volume of air in a stated period.
- F. **Air Sampling Professional:** The professional contracted or employed to supervise air monitoring and analysis schemes. This individual is also responsible for the recognition of technical deficiencies in worker protection equipment and procedures during both the planning and on-site phases of an abatement project. Acceptable air sampling professionals include industrial hygienists, environmental engineers, and environmental scientists with equivalent experience in asbestos air monitoring and worker protection.
- G. **Amended Water:** Water to which a surfactant has been added.
- H. **Area Monitoring:** Sampling of airborne fiber concentrations within the asbestos work area and outside the asbestos work area which is representative of the airborne concentrations of asbestos fibers which may reach the breathing zone.

- I. **Asbestos:** (29 CFR 1926.1101 Definitions) Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
- J. **Asbestos** (California Code of Regulations definitions): Means fibrous forms of various hydrated minerals including chrysotile, (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous cummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.
- K. **Asbestos-Containing Material (ACM)** EPA definition: Material composed of asbestos of any type in an amount greater than 1 percent and by weight, either alone or mixed with other fibrous or nonfibrous materials.
- L. **Asbestos-Containing Construction Material (ACCM)** (California definition): Means any manufactured construction material, which contains more than 1/10th of 1% asbestos by weight.
- M. **Asbestos-Containing Waste Material (ACWM):** Any waste that contains or has been contaminated by commercial asbestos and is generated by a plant, source, or operation including, but not limited to, asbestos mill tailings, control device asbestos waste, RACM demolition, and renovation waste material, disposable equipment and clothing, and bags or containers that previously contained commercial asbestos.
- N. **Asbestos-Related Work:** Work that disturbs asbestos fibers or has the potential to release asbestos fibers into the air.
- O. **Authorized Visitor:** The owner's project team members, the owner's representative, observation service, and any representative of a regulatory or other agency having jurisdiction over the project.
- P. **Clean Room:** An uncontaminated area or room which is a part of the worker decontamination enclosure with provisions for the storage of workers' street clothes and protective equipment.
- Q. **Contained Work Area:** A work area that has been isolated, plasticized, and equipped with a decontamination enclosure system.
- R. **Curtained Doorway:** A device to allow ingress or egress from one area to another while permitting minimal air movement between the areas, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, and securing the vertical edge of the outer two sheets along the opposite vertical side of the doorway.
- S. **Decontamination Enclosure System:** A series of connected rooms, with airlocks or curtained doorways between any two adjacent rooms, for the decontamination of workers and materials, and equipment. A decontamination enclosure system always contains at least one airlock to the work area.
- T. **Encapsulant:** A liquid material that can be applied to asbestos-containing material and which controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating the material and binding its components together (penetrating encapsulant).

- U. **Encapsulation:** All herein-specified procedures necessary to apply an encapsulant to asbestos-containing materials to control the possible release of asbestos fibers into the ambient air.
- V. **Enclosure:** All herein-specified procedures necessary to enclose completely asbestos-containing material behind airtight, impermeable barriers with a designed lifespan of twenty or more years.
- W. **Excursion Limit:** An exposure of airborne concentrations of asbestos fibers of one fiber per cubic centimeter of air (1f/cc) as averaged over a sampling period of thirty (30) minutes.
- X. **Equipment Room:** A contaminated area or room that is part of the worker decontamination enclosure with provisions for the storage of contaminated clothing and equipment.
- Y. **Equipment Decontamination Enclosure:** That portion of a decontamination enclosure system is designed for the controlled transfer of materials, waste containers, and equipment, typically consisting of a washroom and a waste loadout.
- Z. **Friable Asbestos Material (40 CFR, Subpart M Definition):** Material that contains more than one percent (1%) asbestos by weight and that can be broken, crumbled, pulverized, or reduced to powder by hand pressure when dry.
- AA. **Friable Asbestos Material (California DTSC):** Material that contains equal to or more than one percent (1%) asbestos by weight and that can be broken, crumbled, pulverized, or reduced to powder by hand pressure when dry.
- BB. **Fixed Object:** A unit of equipment or furniture or other building components that cannot be detached from the building or can only be detached by destructive methods resulting in irreparable damage to the item.
- CC. **Glovebag Method:** A method with limited applications for removing friable asbestos-containing material from HVAC ducts, piping runs, valves, joints, elbows, and other non-planar surfaces. The glovebag (typically constructed of six [6] mil transparent plastic) has two inward-projecting long-sleeve rubber gloves, one inward-projecting water wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process. All workers who are permitted to use the glovebag method must be highly trained, experienced, and skilled in this method.
- DD. **HEPA Filter:** A high-efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of all monodispersed particles (asbestos fibers) equal to or greater than 0.3μ in mass median aerodynamic equivalent diameter.
- EE. **HEPA Vacuum Equipment:** Vacuuming equipment with a HEPA filter system.
- FF. **Land Ban Notification:** The notice and certification form for friable asbestos-containing waste certifying that the generator is aware of the regulations governing the disposal of RACM and that the designated waste is in compliance with Title 22 CCR Division 4.5 treatment requirements.
- GG. **Moveable Object:** A unit of equipment, furniture, or other building components that are detached or can be detached from the building without destructive methods or results.

- HH. **Negative Air Pressure Equipment:** A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated areas.
- II. **Non-friable Asbestos-Containing Material:** Material that contains more than one (1) percent Asbestos by weight in which the fibers have been locked in by a bonding agent, coating, binder, or other material so that the Asbestos is well bound and will not release fibers during any appropriate end-use, handling, demolition, storage, transportation, processing, or disposal. Also referred to as miscellaneous, Category I or Category II non-friable asbestos-containing material.
- JJ. **Observation Service:** The agent of the owner or the owner's representative who shall observe the work, perform tests, verify that abatement methods and procedures specified by the contract documents are being complied with, and report all observations and test results to the owner or the owner's representative.
- KK. **Permissible Exposure Limit (PEL):** An airborne concentration of asbestos equal to 0.10 fibers per cubic centimeter of air as an eight (8) hour time-weighted average (TWA), as determined by the method prescribed in Title 8, CCR 1529.
- LL. **Personal Monitoring:** Sampling of airborne fiber concentrations within the personal breathing zone of a worker.
- MM. **Plasticize:** To cover floors, walls, and other structural elements of a work area with NFPA-approved flame-resistant plastic sheeting as herein specified with all seams securely taped.
- NN. **Removal:** All procedures necessary to remove ACM or ACCM from the designated areas and to dispose of these materials at an acceptable site.
- OO. **Shower Room:** A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water, and suitably arranged for complete showering during decontamination. The shower room comprises an airlock between contaminated and clean areas.
- PP. **Surfactant:** A chemical wetting agent added to water to reduce surface tension and improve penetration.
- QQ. **Wet Cleaning:** The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with amended water (except where prohibited by safety concerns), and by afterward disposing of these cleaning tools as asbestos-contaminated waste.
- RR. **Work Area (Also known as "Regulated Area"):** Designated rooms, spaces, or areas of the project in which asbestos disturbance or removal actions are to be undertaken or which may become contaminated as a result of such abatement actions. Access to such regulated work areas is limited to appropriately trained and authorized personnel by use of signs, placards, barriers, and other similar devices.
- SS. **Worker Decontamination Enclosure System:** That portion of a Decontamination Enclosure System is designed for controlled passage of workers, other personnel, and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room.

1.6 ADMINISTRATION OF THE CONTRACT

- A. All work is to be performed under the scrutiny of the observation service and the owner's representative, who shall be free to review all work.

1.7 SAFETY

- A. Submit at the pre-construction meeting written procedures for evacuation of injured workers. Aid for seriously injured workers shall not be delayed in order to comply with standard decontamination procedures. It is the responsibility of the contractor to decide if the seriousness of the injury warrants noncompliance with the standard decontamination procedures.
- B. The contractor shall have a comprehensive job safety meeting at the beginning of the project with the observation service in attendance. The contractor shall give 72 hours' notice of this job safety meeting. The contractor shall thereafter hold tail-gate safety meetings at a minimum once per week or as required by other Cal-OSHA regulations. The initial and continuing safety meetings shall be conducted in the primary language of its employees. If needed, more than one primary language presentation must occur. The contractor shall keep a record of the topics and people in attendance. Workers shall each sign an attendance sheet for each safety meeting.
- C. The contractor shall retain licensed and certified personnel to remove equipment from service, including electricians, plumbers, etc., as required. Such additional support personnel shall not engage in disturbing asbestos.

1.8 QUALITY CONTROL

- A. Safety compliance: in addition to detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, and local authorities, and publications regarding handling, storing, transporting, and disposing of ACWM. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification and referenced documents vary, the most stringent requirement shall apply. When requirements of reference documents vary, the most stringent requirement shall apply.
- B. Before the commencement of any work at the site, the contractor shall post bilingual (as appropriate) EPA and OSHA caution signs in and around the work area to comply with EPA and OSHA regulations.
- C. Area monitoring may be performed by the owner or the observation service at the discretion of the owner. Area monitoring may consist of one or more of the following air sampling activities: (1) at the perimeter of the work area, (2) at the work area entry or waste load-out, or (3) in the work area. If area monitoring results exceed regulatory standards the contractor shall be responsible for adjusting work practices and engineering controls to prevent future exceedances of air quality standards. Where requirements of this specification and regulatory standards vary, the most stringent requirement shall apply.
- D. Clearance testing may be performed at the discretion of the observation service. The Observation Service shall be notified at least 24 hours prior to completion of work inside a work area where clearance testing will be performed. The contractor shall not remove the work area enclosure or shut down engineering controls until written notification of clearance is received from the observation service or the owner. Clearance testing shall generally be performed in

accordance with the following protocol; however, the protocol may be altered at the discretion of the observation service:

1. Observation service shall perform a visual inspection of the work area. A visual inspection shall be considered passed when no remaining ACM or ACCM scheduled for removal can be observed and no dust or debris is visible inside the work area. At the discretion of the owner, a work area may be cleared solely by visual inspection. After the visual inspection is passed, the contractor may be required to apply an encapsulant to the work area.
 2. After the encapsulant has been allowed to settle and dry (typically requiring 12-24 hours), the observation service may elect to collect clearance air samples. The observation service shall select the total number of clearance samples needed and the location of the samples.
 3. Air clearance samples, when collected, shall be analyzed by 40 CFR Part 763, Appendix A to Subpart E TEM Method (TEM-AHERA). When approved in advance, PCM clearance by NIOSH 7400 Method may be used with a minimum air volume of 1,200 liters. NIOSH 7402 Method may be used in conjunction with the 7400 Method.
 4. Air clearance samples shall be considered passing when the average concentration of all clearance samples collected inside a single work area does not exceed 70 structures per millimeter squared (70 str./mm²) by the TEM-AHERA Method.
 5. At the discretion of the owner, when any clearance sample result exceeds 70-str./mm², the contractor may be required to re-clean the work area at no additional expense to the owner.
 6. When PCM clearance sampling is used, the clearance criteria shall be a fiber concentration <0.010 f/cc for each individual sample. At the owner's discretion, when the individual sample(s) exceed 0.010 f/cc, these samples may be re-analyzed by NIOSH 7402 Method. The analytical results of the NIOSH 7402 Method shall take precedence over the NIOSH Method 7400 analysis of the same sample.
 7. If the above clearance air sampling thresholds are exceeded, the contractor shall be required to re-clean the subject work area at no additional cost to the owner. Additional air clearance sampling will be performed under the above protocol and any costs to the owner (i.e., laboratory fees, observation service's time, delays to the project) may be back charged to the contractor.
- E. Personal monitoring and other monitoring, which are required by law, or considered necessary by the contractor for worker protection shall be the responsibility of the contractor. The contractor shall submit all personal air monitoring data received. In no event shall results be submitted more than 5 working days from the day of collection.

PART 2 - WORKER PROTECTION

2.1 TRAINING PROGRAM

- A. Each employee shall receive training in the proper handling of materials that contain asbestos, including all aspects of work procedures and protective measures, use of protective clothing and respiratory protection, use of showers, on entry and exit procedures from work areas, and in OSHA regulations. Each employee shall also understand the health implications and risks involved, including the illness possible from exposure to airborne asbestos fibers and the increased risk of lung cancer associated with smoking cigarettes and asbestos exposure,

understand the use and limits of the respiratory equipment to be used, and understand the purpose of medical surveillance and the monitoring of airborne quantities of asbestos as related to health and respiratory equipment. The training program shall comply with federal, state, and local regulatory requirements.

- B. Emergency evacuation procedures to be followed in the event of worker injury shall be included in the worker training program.

2.2 MEDICAL SURVEILLANCE REQUIREMENTS

- A. Before exposure to airborne asbestos, the contractor will provide each employee performing labor or professional services at the project site with a current comprehensive medical exam in compliance with the requirements of California Code of Regulations Title 8, Section 1529. The medical report shall contain a statement from the examining physician that the employee can (or cannot) function normally wearing a respirator or that the safety or health of the employee or other employees will or will not be impaired by his use of a respirator. No employee will be allowed to enter the work area without having first provided a copy of their medical examination to the owner's representative and until the submitted medical has been approved by the observation service.

2.3 PERSONAL PROTECTIVE EQUIPMENT

- A. Work clothes shall consist of disposable full-body coveralls with hoods, rubber gloves, and safety shoes or equivalent. Sleeves at wrists and cuffs at ankles shall be appropriately secured. Fire retardant full-body coveralls are required in areas of open flame, or where required by local regulations.
- B. Eye protection and hard hats shall be available as appropriate or as required by applicable safety regulations.
- C. Provide authorized visitors with suitable protective clothing, headgear, eye protection, and disposable footwear covering whenever they are required to enter the work area.

2.4 RESPIRATORS

- A. Respiratory protective equipment shall be NIOSH approved in accordance with the provisions of 8 CCR 5144 and 8 CCR 1529 unless superseded by local regulations with more stringent requirements.
- B. Contractor shall maintain a respiratory protection plan in accordance with 8 CCR 5144.
- C. The contractor shall provide workers with approved, permanently personally issued, and marked respirators with changeable filters. The contractor shall provide enough quantity of filters approved for asbestos so that workers can change filters during the workday. Filters shall not be used any longer than one (1) workday or whenever an increase in breathing resistance is detected. The respirator filters shall be stored at the job site in the Clean Room and shall be totally protected from exposure to asbestos before their use.
- D. Workers shall wear appropriate respirators inside regulated work areas in accordance with 8 CCR 1529 until an NEA for each work task is submitted.

2.5 WORKER PROTECTION PROCEDURES

Bilingual (English and other appropriate language[s]) worker protection procedures must be posted on the job site. If the primary spoken language of all workers is English, the bilingual procedures are exempted.

- A. Contractor shall comply with all required worker safety regulations including, but not limited to, 8 CCR 1529 and 8 CCR Chapter 4, Subchapter 4, Construction Safety Orders.

2.6 EMPLOYEE IDENTIFICATION

- A. The contractor shall furnish an employee roster to the owner's representative for each work shift. Each employee shall bring to the job at least two forms of identification, one of which has his/her photograph.

PART 3 - PRODUCTS

3.1 GENERAL

- A. Contractor shall furnish, provide, and utilize the following products in the work as specified.

3.2 PROTECTIVE COVERING (PLASTIC)

- A. Ten (10) mil, six (6) mil, four (4) mil, and three (3) mil polyethylene sheets in sizes to minimize the frequency of joints. The protective covering shall be flame retardant.

3.3 TAPE

- A. Duct Tape 2" or wider, or equal, and capable of sealing joints of adjacent sheets of plastic, and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials, and capable of adhering under both dry and wet conditions, including use of amended water.

3.4 DISPOSAL CONTAINERS AND BAGS

- A. Appropriately labeled clear, double six (6) mil sealable polyethylene bags as a minimum.
- B. Appropriately labeled, sealable, and impermeable drum containers.
- C. Bilingual labels (English and other appropriate language[s]) on containment glovebags, waste packages, contaminated material packages, and other containers shall be in accordance with EPA, OSHA, DOT, and DTSC standards.

3.5 WARNING LABELS AND SIGNS

- A. As required by 29 CFR 1910.1101 and CCR Title 8 1529 and other pertinent state and local regulations, whichever is the most stringent.

3.6 NOT USED

3.7 ENCAPSULATING SEALER

- A. Shall be a penetrating or bridging type, pollution-free, non-toxic, with a Class A fire classification as specified herein. Material shall be flexible when cured, and resistant to weathering, oxidation, aging, and abuse.
- B. Shall be a water-dispensed coating, insoluble in water when cured.
- C. Shall be used undiluted or mixed as directed by the manufacturer.
- D. Shall have a written certification from the manufacturer that the encapsulant is compatible with the replacement material and will safely withstand temperatures of all surfaces on which the encapsulation will be applied.
- E. The owner's representative may at any time take random samples of encapsulant from open containers or spray equipment for testing to ensure product quality and compliance with the specifications.
- F. Encapsulant found not to be in conformance with the requirements of these specifications shall be removed from the site immediately. All areas where the defective encapsulant has been applied shall be resprayed with an approved encapsulant or remedied in a manner, including the possibility of removal and replacement of the subject ACM, acceptable to the owner. Re-encapsulation expenses shall be borne by the contractor.
- G. The contractor shall submit SDS (Safety Data Sheet) for encapsulating sealer to the observation service for evaluation prior to application.

3.8 GLOVEBAGS

- A. Not Used

3.9 TOOLS AND EQUIPMENT

- A. Provide suitable tools for asbestos removal and encapsulation.
- B. HEPA-filtered equipment:
 - 1. All vacuums and negative air pressure equipment shall possess high-efficiency particulate air (HEPA) filtration systems in compliance with ANSI Z9.2, local exhaust ventilation.
 - 2. No air movement system or air filtering equipment shall discharge unfiltered air outside the work area without written approval from the owner.
 - 3. All HEPA-filtered equipment shall be "DOP" (or equivalent) tested on-site for all units prior to use.
- C. Manometer:
 - 1. Shall have a built-in alarm. Continuous hard copy readout and data logging are required.

3.10 LUMBER

- A. Shall be flame retardant and carrying markings certifying such properties.

3.11 SOLVENTS

- A. Shall be non-toxic, non-carcinogenic, nonflammable (flashpoint in excess of 200° F), non-reactive with or damaging to materials it will come in contact with and approved for indoor use by regulatory agencies. Provide ventilation of the work area as required by the manufacturer. Vent exhaust to the exterior of the building in a manner that will not result in adverse effects on other areas of the facility, adjacent facilities, or public areas. Solvents shall not be used in areas in which food items are stored.
- B. The Contractor shall submit Safety Data Sheets (SDS) for each, and every product used on site. Product SDS shall be submitted along with other pre-job submittals prior to the commencement of work. No product shall be used or substituted without submitting a current SDS for review and approval by the owner's representative.
- C. Mastic solvents shall be low odor and not leave any objectionable, noxious, or toxic odors after use. The contractor shall be responsible for ensuring that solvents do not leave odors.
- D. All costs associated with air quality sampling due to misplacement of exhaust resulting in complaints by adjacent occupied spaces shall be borne by the contractor.

PART 4 - EXECUTION

All Class I, II, and III asbestos work shall be conducted within regulated areas. The regulated area shall be demarcated in a manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area. Access to regulated areas shall be limited to authorized persons. The contractor shall ensure that employees do not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area. The contractor shall only permit smoking in areas designated by the owner.

4.1 WORK AREA PREPARATION

- A. Preparation procedures for removal of ALL FRIABLE (RACM), CATEGORY I MATERIALS, AND CATEGORY II NON-FRIABLE:
 - 1. Removal of the above or other ACM, unless specified otherwise, shall be executed in a contained and regulated work area.
 - 2. Contractor shall isolate all interior work areas for the duration of the project, completely sealing all openings including, but not limited to, HVAC ducts, diffusers and grilles, skylights, doorways, and windows, with, at a minimum, six (6) mil polyethylene taped securely to a clean surface. Spray adhesive used on finished surfaces should be avoided where possible.

Particular attention shall be paid to the sealing of cracks in the field area openings along the perimeter of the floor, openings at floor/wall intersection adjacent to utility shafts, and any other openings in the floor in general that would provide an avenue for water migration. Barriers shall form a seal at vertical walls and at the floor deck above and below.

3. HVAC systems shall be shut down, wherever possible. The contractor shall coordinate with the owner to shut down the HVAC systems inside the work area. The Contractor shall design the work area preparation and engineering controls as specified and/or as required to prevent damage to and contamination of the affected HVAC system.
4. If the HVAC system cannot be shut down, the isolation system must withstand all foreseeable fluctuations in temperature and pressure. Plastic sheeting and tape alone are typically insufficient to meet this requirement.
5. The Contractor shall remove all movable objects from the work area that are vulnerable to damage or contamination, or that will impede or prevent the completion of the work. All movable objects removed from the work area shall be cleaned before being moved to the designated storage area.
6. Clean and cover fixed and movable objects that can remain in the work area with six (6) mil polyethylene sheeting taped securely in place. Special precautions shall be taken to protect fixed objects vulnerable to damage or contamination.
7. All fixed and movable objects requiring cleaning shall be washed with amended water and/or cleaned with a HEPA-filtered vacuum.
8. Work area (containment): The Contractor shall cover the entire floor, as appropriate, with a minimum of one (1) six (6) mil protective coverings. Cover wall and column surfaces, as appropriate, with a minimum of one (1) four (4) mil protective covering. Floor coverings shall extend a minimum of 12" up vertical surfaces and behind wall covers. All seams shall be staggered and securely taped.
9. Install plexiglass observation window(s) at strategic location(s) in the containment barrier to allow observation of work from outside the work area. Observation windows shall have, at a minimum, an 18" x 18" viewable area. Do not install observation windows at locations accessible to building occupants or the public unless there is no other suitable location.
10. Seal all wall, plumbing, duct, and other cavities to prevent asbestos fibers from falling into such cavities during the work.
11. The contractor shall check regularly (at the beginning, middle and end of each shift as a minimum) all isolation and containment (protective) barriers for punctures, loose seals, contact with heat-generating devices, etc. Problem areas shall be repaired or mended immediately. Visible smoke tubes shall be used to verify containment integrity.
12. Maintain existing emergency exits from the building wherever possible. Emergency exit access shall be coordinated with the general contractor and the owner. Maintain a minimum of two (2) exits from work areas where possible. The first exit shall be through the decontamination enclosure system. The second exit may be the waste load-out or an easily operable emergency-only exit in the plastic containment at a door, window, or other appropriate location. Exits, where possible, shall be on opposite ends of the work area. All exits shall be labeled in bright letters or signage. The second exit shall be labeled "Emergency Exit Only." Establish alternative exits satisfactory to fire officials where existing building or work area emergency exits are unavoidably blocked by activities of this project.
13. Provide and maintain an appropriate fire extinguisher inside and outside the Work Area. [One 30-pound type "ABC" fire extinguisher is required for each 2,000 sq. ft. of floor area.]

14. Install and maintain temporary emergency exit lighting with battery backup power in all work areas. Work areas with adequate natural lighting and no anticipated night work are exempt from this requirement.
15. Electric power inside the work area must be GFCI protected during the wet removal or encapsulation phase of the Project. Provide temporary power and lighting when necessary and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements including appropriate ground fault protection. Temporary light fixtures will be explosion-proof. Provide and maintain auxiliary generator equipment where existing facility power is insufficient. Locate the generator or vent generator exhaust in a manner that will prevent carbon monoxide hazards to workers and the public. When a power shutdown is required, the contractor shall check for conditions where shutdown will pose a danger to the building or the building's components. The contractor shall take all precautions necessary, including inspections and testing, to ensure the safety of his employees and other building occupants from electrical hazards during the course of the project. Existing fire, smoke detection, and other life safety systems shall be kept in operation at all times, or the contractor shall install and maintain a temporary system or alternate acceptable to the owner and fire officials.
16. The contractor shall install and maintain negative air pressure equipment in all negative pressure enclosures and mini-enclosures during the abatement and decontamination phases of the project. Such equipment shall be kept in operation until the contractor is notified by the owner or observations service that the work area has been cleared. In full negative pressure enclosures, enough air shall be exhausted by the unit(s) to create a pressure of -0.020 inches of water within the work area concerning the area outside the work area in addition to a minimum of 4-air changes per hour. The contractor shall have a backup unit in place should the working unit fail, and for filter changes.
17. Install and maintain a manometer at every full negative pressure enclosure from the time abatement begins until the contractor receives the notification of clearance from the owner or observation service. Provide printouts of the manometer readings (dated & time-stamped) to the owner or observation service upon request.
18. Notify the observation service twenty-four (24) hours in advance of when preparatory steps will be completed. Asbestos abatement work shall not commence until all preparation requirements have been completed; all tools, equipment, and materials are on hand; all required submittals, notices, and permits have been approved, and until the observation service or owner authorizes in writing that work may commence.

4.2 DECONTAMINATION ENCLOSURE SYSTEMS

A. Decontamination enclosure systems (worker and equipment) general requirements:

1. Build suitable wood, metal, or PVC framing as needed to support the decontamination enclosure. Framed walls susceptible to damage or which also form a security barrier between Work Areas and public areas shall be protected with a hard barrier such as 3/8" plywood or equivalent. Portable prefabricated units, if utilized, must be submitted for review and approval by the observation service before the start of construction. Submittal shall include, but not be limited to, a floor plan layout complying with the schematic layouts bound herein, showing dimensions, materials, sizes, thickness, plumbing, electrical outlets, etc.

- B. Decontamination area for asbestos work in regulated work areas for Class II work, Non-Classified ACCM removal, or where the exposure levels will not likely exceed the PEL for Asbestos:
 - 1. Construct a decontamination system consisting of one enclosed chamber as follows:
 - a. A clean room with an airlock of sufficient size to allow workers to change from street clothes to protective clothing. The clean room shall also contain means to decontaminate respirators and personnel.

4.3 ASBESTOS REMOVAL - GENERAL

- A. Before removal, asbestos materials shall be sprayed with amended water. The asbestos materials shall be sufficiently saturated without causing excessive dripping and to prevent ambient emission of airborne fibers, at any time, more than 0.10 fibers/cc. Spray materials repeatedly during the work process to maintain a wet condition. If the materials are not easily saturated, then the work area shall be constantly misted to keep fiber emission minimal.
- B. Asbestos material shall be removed in manageable sections by a multi-person team, some of whom are wetting and the remainder removing and cleaning. Any material which falls to the floor shall be wetted and picked up immediately. Material shall not be allowed to dry out. Outside of a full negative pressure enclosure, material drop shall not exceed 5 feet. For heights exceeding 5 feet, provide enclosed dust-proof chutes under negative pressure using HEPA air-filtration devices. Before a second area can be started, removed material shall be packed into approved and labeled packaging while it is still wet. The outside of all containers shall be cleaned before leaving the work area. Move containers to the waste load-out area, wet-clean each container thoroughly, and remove them to uncontaminated areas.
- C. The Contractor shall not remove any asbestos material in one shift that can be cleaned up and properly bagged in labeled 6-mil asbestos bags by the end of the shift. No loose asbestos material may be left in a work area after the end of any shift.
- D. Asbestos material applied to steel decks, beams, columns, pipes, tanks, and other nonporous surfaces, e.g., MEP components, shall be wet cleaned to a degree that no traces of debris or residue are visible.
- E. Asbestos material debris, drippings, splatters, and overspray on surfaces within ceiling cavities and other accessible areas shall be removed in the same manner and cleaned to the degree specified above.
- F. The work area shall be kept orderly, clean, and clear of work materials, polyethylene sheeting, tape, cleaning material, and clothing. All disposable material or items used in the work area shall be packed into properly labeled protective packaging and removed from the work area for disposal as asbestos waste material.
- G. Protective packages and drums containing asbestos materials shall be cleaned and removed from the work area. Such waste containers shall be stored in labeled, locked storage areas or containers until the time when the materials are to be loaded and hauled to the appropriate waste disposal facility for burial. The packages and drums shall be stored in piles no higher than four (4) feet, and in a manner that will not result in damage to the packages or drums. Transport bags in covered drums or carts from the waste loadout to the storage area or transport. The waste

storage area shall always be locked when waste is not actively being transported to or from the storage area.

- H. Equipment removal procedures: clean surfaces of contaminated equipment thoroughly by wet-sponging or wiping before removal to uncontaminated areas.
- I. Do not bag water used during abatement activities. Properly filter and drain water into the building's sanitary drain unless prohibited by local regulations. Filter shall have a maximum pore size of 5.0- μm .

4.4 SPECIFIC ASBESTOS REMOVAL METHODS

- A. Specific control methods for Class I work or work suspected or anticipated to exceed the PEL shall be performed using any or all the following control methods. Methods shall be selected in the contractor's asbestos plan and approved by the owner or observation service.
 - 1. Negative pressure enclosure (NPE) systems: the negative pressure enclosure shall be kept under negative pressure with at least 4 air changes per hour. A minimum of -0.020 column inches of water pressure differential, relative to the outside pressure, shall be maintained and evidenced by manometric measurements. Air movement shall be directed away from the employees and toward a HEPA filtration device. The NPE shall be smoke tested for leaks prior to the start of work and may be tested at any time by the owner or observation service.
 - 2. Mini-enclosure systems: the mini-enclosure system shall be constructed in compliance with 8 CCR 1529 requirements. Visible negative pressure shall be maintained in the mini-enclosure throughout the work and until notified of clearance by the owner or observation service.
- B. Class II work not anticipated or suspected to exceed the PEL, the following engineering controls, and work practices may be used:
 - 1. The use of full negative pressure enclosure systems is required for the removal of any friable asbestos-containing material exceeding 100 square feet.
 - 2. A competent person shall supervise the work.
 - 3. For indoor work, critical barriers shall be placed over all openings to the regulated area.
 - 4. For indoor work, negative pressure in relation to adjacent spaces shall be established and monitored in the work area. At least 4 air exchanges per hour shall be maintained in any enclosed work area. The negative pressure shall be maintained throughout the work and until the contractor receives the notification of clearance from the owner or observation service.
 - 5. Impermeable dropcloths shall be placed on surfaces beneath all removal activity.

4.5 DECONTAMINATION OF THE WORK AREA

- A. Decontamination procedures for contained or regulated work areas (Friable, Class I and II, and Category I and II non-friable), excluding ACM encapsulation work:
 - 1. Remove all visible accumulations of ACWM and debris. Wet-clean all surfaces within the work area to remove asbestos residue. Wait at least one (1) hour to allow for the settlement

of dust, and again wet-clean, or clean with HEPA vacuum equipment, all surfaces within the work area. After completing the second cleaning operation the contractor shall perform a complete visual inspection of the work area to ensure that the work area is free of contamination.

2. Sealed drums and bags, and all equipment used in the work area shall be included in the cleanup and shall be removed from the work area via the waste loadout at the appropriate time in the cleaning sequence.
3. After cleaning, the contractor shall perform a complete visual inspection of the work area to ensure that the work area is free of any visible debris or residue.
4. Upon completion of the visual inspection, the contractor shall notify the observation service in advance that the work area is ready for the 3rd party visual inspection.
5. Upon proper notification, the observation service will perform a pre-testing visual inspection consisting of two components: review the work area for general conformance with the specifications and close inspection of the work area for any traces of dust, debris, or residue of ACM. The observation service shall notify the contractor of any dust, debris, or residues observed.
6. Upon successful compliance with the pre-testing visual inspection by the observation service and after notification, the contractor shall encapsulate surfaces where asbestos materials have been removed. Unless specified otherwise, encapsulate those portions of the items where the ACM was located prior to the start of this contract. All surfaces within the ceiling, wall, and other accessible cavities where spray-applied or trowel-applied materials have been removed shall also be encapsulated. Apply encapsulant in accordance with the manufacturer's instructions. The encapsulant shall be compatible with the existing substrate and replacement materials and shall be rated to safely withstand the temperature of the items to which it will be applied. Encapsulants to be applied to structural members prior to reapplication of spray-applied or trowel-applied fireproofing must be a component of the fireproofing system when it was tested and rated by the Underwriters Laboratory (UL), American Society for Testing Materials (ASTM), Factory Mutual (FM) or other building code approved testing agencies.
7. Upon completion of the encapsulation work, the contractor shall notify the observation service that the work area is ready for clearance testing. Refer to the appropriate article on air monitoring in this section for clearance testing standards.
8. Upon written notification from the observation service that the work area has passed the standard for clearance testing, the contractor shall apply, when included in the contract the asbestos-free replacement materials and reestablish objects and systems as specified in these specifications. The plastic barriers, decontamination enclosure systems, and negative air pressure equipment may be removed by the contractor at any time after written notification of clearance.

4.6 ASBESTOS DISPOSAL REQUIREMENTS

- A. Friable asbestos waste shall be contained in a clear, 6-mil asbestos-labeled bag, goose-necked, and taped. This bag shall be placed into another labeled asbestos bag, goose-necked, and taped. A generator identification label shall be affixed to each bag. double bagged, sealed, and labeled containers of asbestos waste shall be removed to a secure storage location daily. All asbestos

- wastes shall be transported to a pre-approved waste site in accordance with the guidelines of 22 CCR Division 4 and 4.5, Hazardous Waste. The owner's designated representative shall inspect the waste and sign the uniform hazardous waste shipping manifests and Land Ban Notification prior to transporting and disposal. The owner's designated representative is the **ONLY** person authorized to sign the manifest and Land ban and shall retain the original generator copy of the manifest. A copy of the Land Ban Notification or any required pertinent documentation must also be submitted in order to verify proper disposal.
- B. Containers removed from the waste load-out must be removed by workers who have entered uncontaminated areas dressed in clean coveralls. Workers must not enter from uncontaminated areas into the work area; contaminated workers must not exit the work area through the waste load-out.
 - C. The contractor shall notify the observation service twenty-four (24) hours in advance when RACM are to be removed from the site. The observation service must be present during the removal of RACM from the work area. A copy of the uniform hazardous waste manifest and any other document required by State or Local agencies shall be submitted to the observation service for review prior to transporting RACM to the disposal facility.
 - D. At the conclusion of work, the contractor shall provide evidence (such as a bill of lading or hazardous waste manifest and landfill receipt) that the RACM was disposed of at the approved EPA hazardous waste disposal facility. The evidence shall be submitted with the final request for payment. The contractor shall indicate on the bill of lading or hazardous waste manifest the volume, in cubic yards, of the RACM generated from the project. This volume amount must be confirmed by a party independent of the contractor.
 - E. The contractor shall be responsible for the safe handling and transportation of all hazardous waste generated by the execution of this contract to the designated hazardous waste disposal facility. The contractor shall bear all costs for all claims, damages, losses, and clean-up expenses against the owner or the observation service, including but not limited to attorney's fees arising out of or resulting from asbestos spills on the site or spills en route to the hazardous waste disposal facility.
 - F. Waste manifest forms shall be provided by the Contractor. The contractor shall coordinate with the owner to ensure that the information in Box 1 (Generator's EPA ID number) and Box 5 (Generator's name and mailing address) are complete and correct. If the California Uniform Hazardous Waste Manifest is used the contractor shall include all information necessary to comply with the Federal EPA Waste Shipment Record requirements.
 - G. Contaminated clothing and polyethylene shall be disposed of as ACWM.
 - H. Wastewater from wet stripping, shower room, and worker and equipment decontamination systems shall be filtered through a filtration treatment system capable of removing all particles 5 μ or greater in size if it is discharged into the sanitary sewer system. If the wastewater contains regulated constituents not suitable for disposal to a sanitary sewer it shall be disposed of at a permitted facility in accordance with applicable laws and regulations.
 - I. The work area shall remain under abatement control measures until the observation service has completed the final visual inspection and/or air sampling and given the approval to dismantle the regulated area.

- J. If requested, the primary polyethylene barrier shall be left in place after abatement as a dust barrier during ensuing non-asbestos construction activities. If contamination cannot be removed from the barrier, the contractor shall remove it and erect a new one in the same location.
- K. All non-disposable equipment, including negative air machines shall be cleaned and decontaminated prior to removal from the regulated area.

4.7 AIR MONITORING AND TESTING

A. Personal Air Monitoring (contractor's responsibility):

1. Initial and periodic eight (8) hour TWA and thirty (30) minute excursion limit air monitoring of worker exposures to airborne concentrations of asbestos fibers shall be in accordance with Cal/OSHA (8 CCR 1529) requirements.
2. The contractor shall report personal monitoring results to the observation service within 5 working days from the end of the work shift. Worker exposures to airborne asbestos concentrations shall not exceed the Permissible Exposure Limit (PEL) of an 8-hour time-weighted average (TWA) of 0.10 fibers per cubic centimeter of air.

4.8 REIMBURSEMENT OF COSTS OF THE OWNER OR THE OBSERVATION SERVICE

- A. In the event that reviews and/or clearance testing by the observation service or regulatory agencies shows that the work area or any portion of the work area is not decontaminated or if the work is not in conformance with the contract documents, the owner, observation service and his consultants will record all time, tests and project-related expenses expended to monitor the work until the work is in compliance. All time, and expenses recorded by the owner, observation service, and its consultants to monitor the above work, and all time, tests, and project-related expenses incurred by the owner and observation service and its consultants outside the project workdays, work hours, or contract time shall, at the discretion of the owner, be paid for by the contractor. The contractor, promptly upon receipt of the billing from the owner, shall reimburse the owner at the normal billing rate of the owner or the observation service and his consultants, or the owner is authorized to withhold funds from the contract sum, for all time spent by the owner, observation service and his consultants for reviews, testing, and other project related expenses when any of the above conditions occur.

4.9 STOPPING THE WORK

- A. If at any time, the owner or observation service decides that work practices are violating pertinent regulations, these specifications or, in its opinion, endangering workers or the public, they will immediately notify the contractor (followed up in writing) that operations shall cease until corrective action is taken, and the contractor shall take such corrective action before proceeding with the work. Loss or damages due to a stop work order shall be borne by the contractor.

END OF SECTION



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Corporate Offices:
4683 Chabot Drive, Suite 380
Pleasanton, CA 94588
925.808.6700
www.mecaenviro.com

December 29, 2022

Project No. 21014.2008

Ms. Lake
Project Manager
Facilities Design & Construction
U.C. Davis Health
4800 2nd Ave., Suite 3010
Sacramento, CA 95817

Sent via e-mail to: kalake@ucdavis.edu

Subject: Suspect Asbestos Containing Materials (ACM) in SESP, Davis Tower, and the Main. Hospital

Ms. Lake,

Millennium Consulting Associates (Millennium) is pleased to provide the results of recent sampling of building materials scheduled to be disturbed during work activities during the planned carpet removal replacement project in SESP, Davis Tower, and the Main. Hospital buildings at the UC Davis Campus in Davis, California. Site visits were conducted on June 2nd, 2022 and December 14, 2022. During these site visits samples of suspect asbestos-containing materials were collected by Millennium staff Ms. Rachel Braun, EPA Asbestos Building Inspector No. 49044 IR, LRC No. 9710, and CSST No. 11-6974. A second site visit was conducted by Millennium staff Ms. Julie Zak, [CSST #12-4887]. The building material surveys included sample collection of all suspect asbestos materials scheduled to be disturbed during the carpet replacement project and included carpet mastic, floor tile mastic, floor tiles, and base cove mastic. The asbestos samples were collected and analyzed in accordance with Sacramento Air Quality AQMD's Rule 902 for asbestos-containing materials scheduled to be impacted by renovation activities.

- The laboratory analytical results of the samples collected indicate two of the sampled flooring materials to be asbestos-containing.
- The planned work qualifies as asbestos work under Cal/OSHA Title 8 CCR section 1529 and will need to adhere to the requirements of that section.

The following tables present the summary of the asbestos sample laboratory analytical results.



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|------------------------|--|--------|
| 220602.42-01-Mastic 1 | RM 3707 GREEN & YELLOW CARPET MASTIC | ND |
| 220602.42-01-Mastic 2 | RM 3707 GREEN & YELLOW CARPET MASTIC | ND |
| 220602.42-02 | RM 3707 GREEN & YELLOW CARPET MASTIC | ND |
| 220602.42-03-Compound | RM 3707 & 3707A BEIGE B.C. MASTIC | ND |
| 220602.42-03-Mastic | RM 3707 & 3707A BEIGE B.C. MASTIC | ND |
| 220602.42-04 | RM 3707 & 3707A BEIGE B.C. MASTIC | ND |
| 220602.42-05-Base Cove | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-05-Compound | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-05-Mastic | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-06-Base Cove | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-06-Compound | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-06-Mastic | RM 3707 BROWN B.C & MASTIC | ND |
| 220602.42-07-Compound | 5703B GREEN CARPET MASTIC | ND |
| 220602.42-07-Mastic | 5703B GREEN CARPET MASTIC | ND |
| 220602.42-08 | 5703B GREEN CARPET MASTIC | ND |
| 220602.42-09-Compound | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-09-Mastic 1 | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-09-Mastic 2 | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-10-Compound | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-10-Mastic 1 | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-10-Mastic 2 | GRAY B.C. MASTIC RM 5703B | ND |
| 220602.42-11-Carpet | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-11-Mastic 1 | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-11-Mastic 2 | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-11-Pad | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-12-Carpet | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-12-Mastic | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | ND |
| 220602.42-13-Base Cove | RM 6793 BROWN B.C. MASTIC | ND |
| 220602.42-13-Compound | RM 6793 BROWN B.C. MASTIC | ND |
| 220602.42-13-Mastic | RM 6793 BROWN B.C. MASTIC | ND |
| 220602.42-14-Base Cove | RM 6793 BROWN B.C. MASTIC | ND |
| 220602.42-14-Compound | RM 6793 BROWN B.C. MASTIC | ND |



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|------------------------|---|--------|
| 220602.42-14-Mastic | RM 6793 BROWN B.C. MASTIC | ND |
| 220602.42-15-Compound | RM 7715 GRAY B.C. MASTIC | ND |
| 220602.42-15-Mastic | RM 7715 GRAY B.C. MASTIC | ND |
| 220602.42-16-Compound | RM 7715 GRAY B.C. MASTIC | ND |
| 220602.42-16-Mastic | RM 7715 GRAY B.C. MASTIC | ND |
| 220602.42-17-Carpet | RM 7715 GREEN MASTIC (UNDER CARPET) | ND |
| 220602.42-17-Mastic | RM 7715 GREEN MASTIC (UNDER CARPET) | ND |
| 220602.42-18-Carpet | RM 7715 CARPET & GREEN MASTIC | ND |
| 220602.42-18-Mastic 1 | RM 7715 CARPET & GREEN MASTIC | ND |
| 220602.42-18-Mastic 2 | RM 7715 CARPET & GREEN MASTIC | ND |
| 220602.42-19 | RM 10723 YELLOW CARPET MASTIC | ND |
| 220602.42-20 | RM 10723 YELLOW CARPET MASTIC | ND |
| 220602.42-21-Compound | RM 10723 TAN B.C. MASTIC | ND |
| 220602.42-21-Mastic | RM 10723 TAN B.C. MASTIC | ND |
| 220602.42-22-Compound | RM 10723 TAN B.C. MASTIC | ND |
| 220602.42-22-Mastic | RM 10723 TAN B.C. MASTIC | ND |
| 220602.42-23-Base Cove | FAMILY WAITING B.C. MASTIC (RM 10703) | ND |
| 220602.42-23-Compound | FAMILY WAITING B.C. MASTIC (RM 10703) | ND |
| 220602.42-23-Mastic | FAMILY WAITING B.C. MASTIC (RM 10703) | ND |
| 220602.42-24-Base Cove | FAMILY WAITING B.C. & MASTIC (RM 10703) | ND |
| 220602.42-24-Compound | FAMILY WAITING B.C. & MASTIC (RM 10703) | ND |
| 220602.42-24-Mastic | FAMILY WAITING B.C. & MASTIC (RM 10703) | ND |
| 220602.42-25 | RM 11710A B.C. MASTIC | ND |
| 220602.42-26 | RM 11710A B.C. MASTIC | ND |
| 220602.42-27-Mastic 1 | RM 11710A BLUE/ GREEN CARPET MASTIC | ND |
| 220602.42-27-Mastic 2 | RM 11710A BLUE/ GREEN CARPET MASTIC | ND |
| 220602.42-27-Mastic 3 | RM 11710A BLUE/ GREEN CARPET MASTIC | ND |
| 220602.42-28-Mastic 1 | RM 11710A BLUE/ GREEN CARPET MASTIC | ND |
| 220602.42-28-Mastic 2 | RM 11710A BLUE/ GREEN CARPET MASTIC | ND |
| 220602.42-29 | RM 14802A CARPET MASTIC | ND |
| 220602.42-30 | RM 14802A CARPET MASTIC | ND |
| 220602.42-31-Base Cove | RM 14802A B.C. MASTIC | ND |
| 220602.42-31-Compound | RM 14802A B.C. MASTIC | ND |



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|------------------------|--------------------------------------|--------|
| 220602.42-31-Mastic | RM 14802A B.C. MASTIC | ND |
| 220602.42-32-Base Cove | RM 14802A B.C. MASTIC | ND |
| 220602.42-32-Compound | RM 14802A B.C. MASTIC | ND |
| 220602.42-32-Mastic | RM 14802A B.C. MASTIC | ND |
| 220602.42-01-Mastic 1 | RM 3707 GREEN & YELLOW CARPET MASTIC | ND |
| 4.4680B 07-Cove Base | 6" LT BROWN COVE W/ MASTIC | ND |
| 4.4680B 07-Mastic | 6" LT BROWN COVE W/ MASTIC | ND |
| 4.4680B 08-Cove Base | 6" LT BROWN COVE W/ MASTIC | ND |
| 4.4680B 08-Mastic | 6" LT BROWN COVE W/ MASTIC | ND |
| 4.4680B-09-Carpet | DK BLUE ROLLED CARPET W/ GLUE | ND |
| 4.4680B-09-Glue | DK BLUE ROLLED CARPET W/ GLUE | ND |
| 4.4680B-10-Carpet | DK BLUE ROLLED CARPET W/ GLUE | ND |
| 4.4680B-10-Glue | DK BLUE ROLLED CARPET W/ GLUE | ND |
| 6.6102.11-Carpet | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.11-Compound | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.11-Cove Base | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.11-Mastic | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.12-Compound | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.12-Cove Base | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.12-Mastic | 6" LT BRN COVE W/ MASTIC | ND |
| 6.6102.13-Carpet | MED BLUE ROLLED CARP W/ GLUE | ND |
| 6.6102.13-Glue | MED BLUE ROLLED CARP W/ GLUE | ND |
| 6.6102.14-Carpet | MED BLUE ROLLED CARP W/ GLUE | ND |
| 6.6102.14-Glue | MED BLUE ROLLED CARP W/ GLUE | ND |
| 7.7606.15-Cove Base | 4" BEIGE COVE W/ MASTIC (A/B) | ND |
| 7.7606.15-Mastic | 4" BEIGE COVE W/ MASTIC (A/B) | ND |
| 7.7606.16-Cove Base | 4" BEIGE COVE W/ MASTIC (A/B) | ND |
| 7.7606.16-Mastic | 4" BEIGE COVE W/ MASTIC (A/B) | ND |
| 7.7606.17-Carpet | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |
| 7.7606.17-Glue 1 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |
| 7.7606.17-Glue 2 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |
| 7.7606.18-Carpet | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |
| 7.7606.18-Glue 1 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|---------------------------|--------------------------------------|--------|
| 7.7606.18-Glue 2 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | ND |
| 7.7652.19-Cove Base | 4" LT BRN COVE W/ MASTIC | ND |
| 7.7652.19-Mastic | 4" LT BRN COVE W/ MASTIC | ND |
| 7.7652.20-Cove Base | 4" LT BRN COVE W/ MASTIC | ND |
| 7.7652.20-Mastic | 4" LT BRN COVE W/ MASTIC | ND |
| 7.7652.21-Carpet | CARPET BRN/ GOLD CROSSHATCH + GLUE | ND |
| 7.7652.21-Glue | CARPET BRN/ GOLD CROSSHATCH + GLUE | ND |
| 7.7652.22-Carpet | CARPET BRN/ GOLD CROSSHATCH + GLUE | ND |
| 7.7652.22-Glue | CARPET BRN/ GOLD CROSSHATCH + GLUE | ND |
| G.0624-01-Floor Tile | 12X12 GREY FT SOFT PATTERN (0624-25) | ND |
| G.0624-01-Mastic | 12X12 GREY FT SOFT PATTERN (0624-25) | ND |
| G.0624-02-Floor Tile | 12X12 GREY FT SOFT PATTERN (0624-25) | ND |
| G.0624-02-Mastic | 12X12 GREY FT SOFT PATTERN (0624-25) | ND |
| G.0624-03-Compound | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-03-Cove Base | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-03-Mastic | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-04-Compound | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-04-Cove Base | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-04-Mastic | 6" LT BRN COVE & MASTIC (0624-25) | ND |
| G.0624-05-Carpet | ROLLED CARPET & GLUE BRN/ GRAY | ND |
| G.0624-05-Glue | ROLLED CARPET & GLUE BRN/ GRAY | ND |
| G.0624-06-Carpet | ROLLED CARPET & GLUE BRN/ GRAY | ND |
| G.0624-06-Glue | ROLLED CARPET & GLUE BRN/ GRAY | ND |
| 4.4680B 07-Cove Base | 6" LT BROWN COVE W/ MASTIC | ND |
| 22.12.14.42-01- Base Cove | RM 4132B 6" TAN BASE COVE + MASTIC | ND |
| 22.12.14.42-01- Mastic | RM 4132B 6" TAN BASE COVE + MASTIC | ND |
| 22.12.14.42-02 Base Cove | RM 4132B 6" TAN BASE COVE + MASTIC | ND |
| 22.12.14.42-02-Mastic | RM 4132B 6" TAN BASE COVE + MASTIC | ND |
| 22.12.14.42-03- Mastic 1 | RM 4132 B CARPET MASTIC | ND |
| 22.12.14.42-03-Floor | RM 4132 B CARPET MASTIC | ND |
| 22.12.14.42-03-Mastic 2 | RM 4132 B CARPET MASTIC-BLACK | 5% |
| 22.12.14.42-04-Mastic 1 | RM 4132 B CARPET MASTIC-YELLOW | ND |
| 22.12.14.42-04-Floor | RM 4132 B CARPET MASTIC | ND |



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|---------------------------|--|--------|
| 22.12.14.42-04-Mastic 2 | RM 4132 B CARPET MASTIC-BLACK | 5% |
| 22.12.14.42-05-Mastic 1 | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | ND |
| 22.12.14.42-05-Floor | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | ND |
| 22.12.14.42-05-Mastic 2 | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | 5% |
| 22.12.14.42-06-Mastic 1 | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | ND |
| 22.12.14.42-06-Floor | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | ND |
| 22.12.14.42-06-Mastic 2 | RM 61303 12X12 TAN FLOOR TILE+BLACK MASTIC | 5% |
| 22.12.14.42-07-Base Cove | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-07-Mastic 1 | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-07-Mastic 2 | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-08-Base Cove | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-08-Mastic 1 | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-08-Mastic 2 | RM 61303 6" TAN BASE COVE +YELLOW MASTIC | ND |
| 22.12.14.42-09-Base Cove | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-09- Mastic 1 | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-09- Mastic 2 | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-09-Leveler | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-10- Base Cove | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-10-Mastic 1 | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-10- Mastic 2 | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-10-Leveler | RM 6123 4" TAN BASE COVE+ YELLOW MASTIC | ND |
| 22.12.14.42-11 | RM 6123 YELLOW CARPET MASTIC UNDER GRAY CARPET | ND |
| 22.12.14.42-12 | RM 6123 YELLOW CARPET MASTIC UNDER GRAY CARPET | ND |
| 22.12.14.42-13 | RM 6102 CLEAR ADHESIVE ON BLUE CARPET | ND |
| 22.12.14.42-14 | RM 6102 CLEAR ADHESIVE ON BLUE CARPET | ND |
| 22.12.14.42-15-Base. Cove | RM 6102 6" BROWN BASE COVE+BROWN MASTIC | ND |
| 22.12.14.42-15-Mastic | RM 6102 6" BROWN BASE COVE+BROWN MASTIC | ND |
| 22.12.14.42-16-Base Cove | RM 6102 6" BROWN BASE COVE+BROWN MASTIC | ND |



Table 1. Summary Results of Asbestos Sampling

| Sample | Description | Result |
|--------------------------|---|--------|
| 22.12.14.42-16-Mastic | RM 6102 6" BROWN BASE COVE+BROWN MASTIC | ND |
| 22.12.14.42-17 | RM 0625 MASTIC UNDER GRAY CARPET | ND |
| 22.12.14.42-18 | RM 0625 MASTIC UNDER GRAY CARPET | ND |
| 22.12.14.42-19-Base Cove | RM 0625 6" TAN BASECOVE + YELLOW MASTIC | ND |
| 22.12.14.42-19-Mastic | RM 0625 6" TAN BASECOVE + YELLOW MASTIC | ND |
| 22.12.14.42-20-Base Cove | RM 0625 6" TAN BASECOVE + YELLOW MASTIC | ND |
| 22.12.14.42-20-Mastic | RM 0625 6" TAN BASECOVE + YELLOW MASTIC | ND |

Conclusions and Recommendations

Based on the analytical results of our asbestos sampling, Millennium makes the following recommendations;

1. All of the bulk samples collected came back negative for the presence of asbestos with the exception of the following samples;
 - In room 4132B the black mastic, underneath the carpet, tested positive for asbestos and is 5% chrysotile asbestos.
 - In room 6103 the black mastic, underneath the tan 12"X12" floor tiles (under the carpet), tested positive for asbestos and is 5% chrysotile asbestos.
2. Millennium recommends that, in accordance with Cal-OSHA requirements, these asbestos-containing building materials be abated by an appropriately qualified, DOSH certified contractor prior to replacing the flooring materials in these areas.

Limiting Conditions

Millennium conducted the renovation survey on February 8, 2022 in general accordance with industry standards for bulk asbestos sampling procedures in existence at the time of the project. The conclusions and recommendations presented in this report are based on the applicable standards of our profession at the time this report was prepared. Copies of this report are furnished to provide the factual data that were gathered and summarized in the report.

The analysis and recommendations submitted in this report are based in part on the data obtained from specific and discrete sampling locations. However, the nature and extent of variations between the sampling locations may not become evident until planned renovation and/or demolition procedures commence. If potential variations are identified during renovation or demolition activities, it may be necessary to conduct additional bulk sampling.



This report has been prepared for the exclusive use of the Client for specific application to the limited asbestos survey performed on the property, specifically, those areas as directed by representatives of UC Davis Facilities, Design, and Construction. This report may not be copied (except by our client) without the written permission of Millennium Consulting Associates, Pleasanton, California. No other representation, expressed or implied, is made.

Millennium appreciates the opportunity to submit this proposal. If you have any questions or need additional information, please feel free to contact me at (925) 808-6700. Thank you.

Sincerely,

Millennium Consulting Associates
A MECA Consulting, Inc. Company

A handwritten signature in blue ink, which reads "Sarah Anderson-Flores". The signature is written in a cursive style and is positioned below the typed name and title.

Sarah Anderson-Flores
Project Manager

Attachments:
Sample Location Map
EMSL Analytical Reports & Chains of Custody

Sample Locations for Sampling Event 1



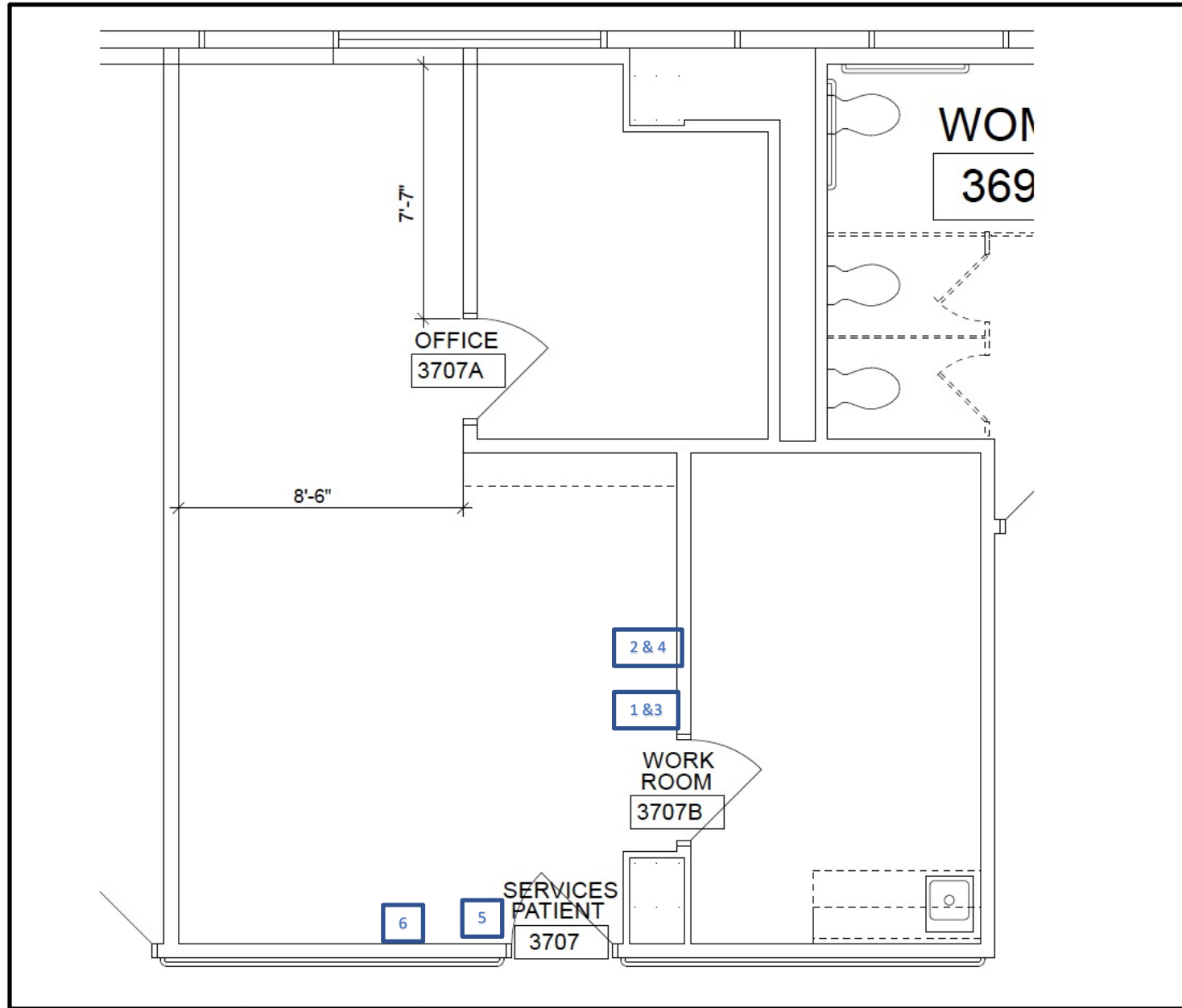
UCDH - F.I.G. REQ# W002586
DAVIS TOWER, RM 3707 & 3707A
AS-BUILT FURNITURE PLAN

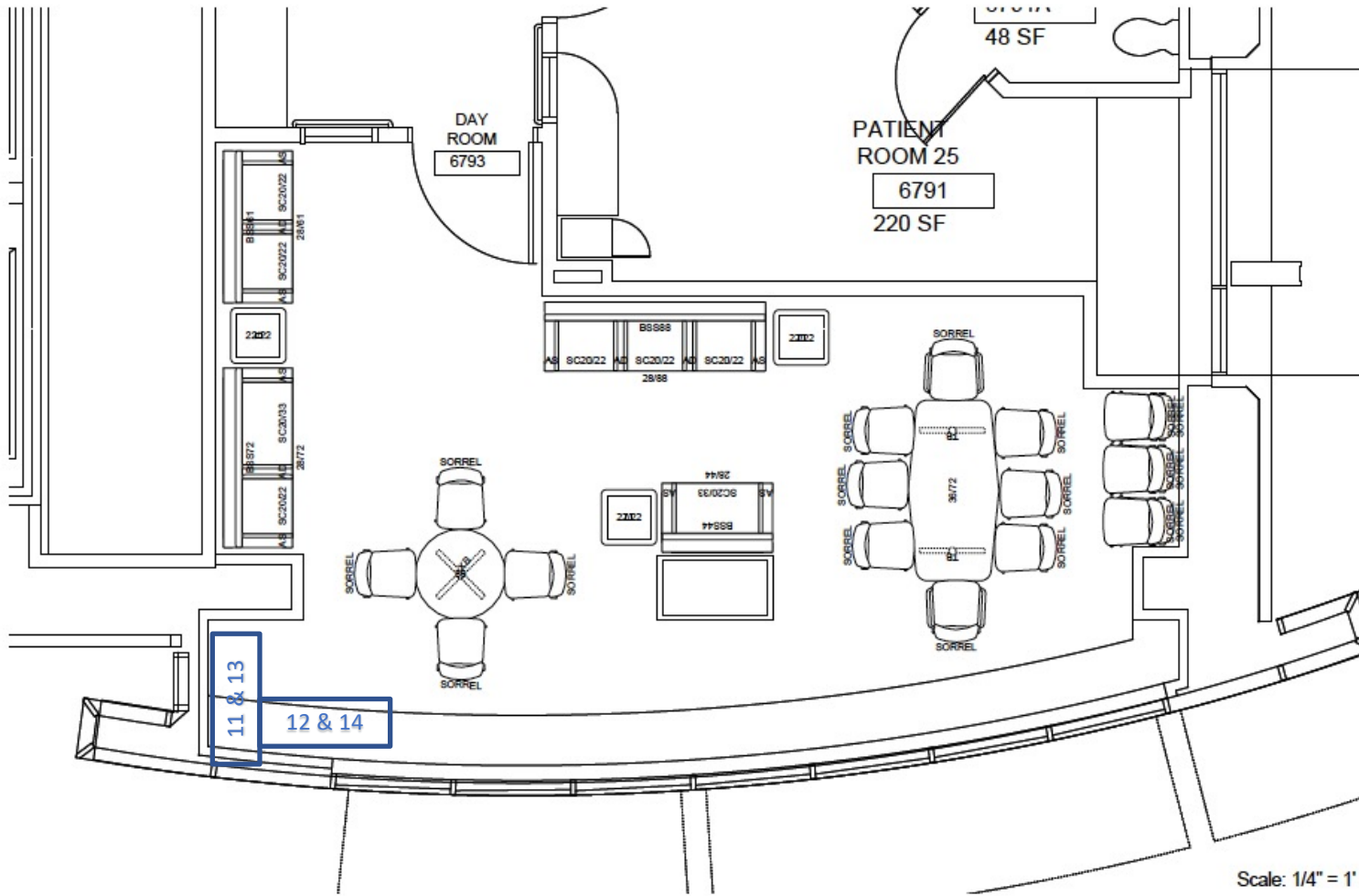
HEADQUARTERS
 2500 DE LA CRUZ BLVD., SANTA CLARA,
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 475 BRANNAN ST., 5TH FLOOR, SAN FRANCISCO,
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 7220 EDGEWATER DR., OAKLAND,
 CA 94621 P: 510.726.7800
 SACRAMENTO
 1780 N MARKET BLVD., SACRAMENTO,
 CA 95834 P: 916.553.5600
 WWW.ONEWORKPLACE.COM

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SHEET TITLE
3707 & 3707A
AS-BUILT

SCALE 1/4" = 1' - 0"
 START DATE 5/26/21
 PROJECT NO. 215821
 PROJECT MGR. K. STALLCOP
 PHONE [Sales person #3, Number]
 ACCT. MGR. G. REED
 PHONE [Sales person #2, Number]
 DESIGNER NAME C. HERNANDEZ
 PHONE [Sales person #1, Number]
 SHEET NO. F1 of 1





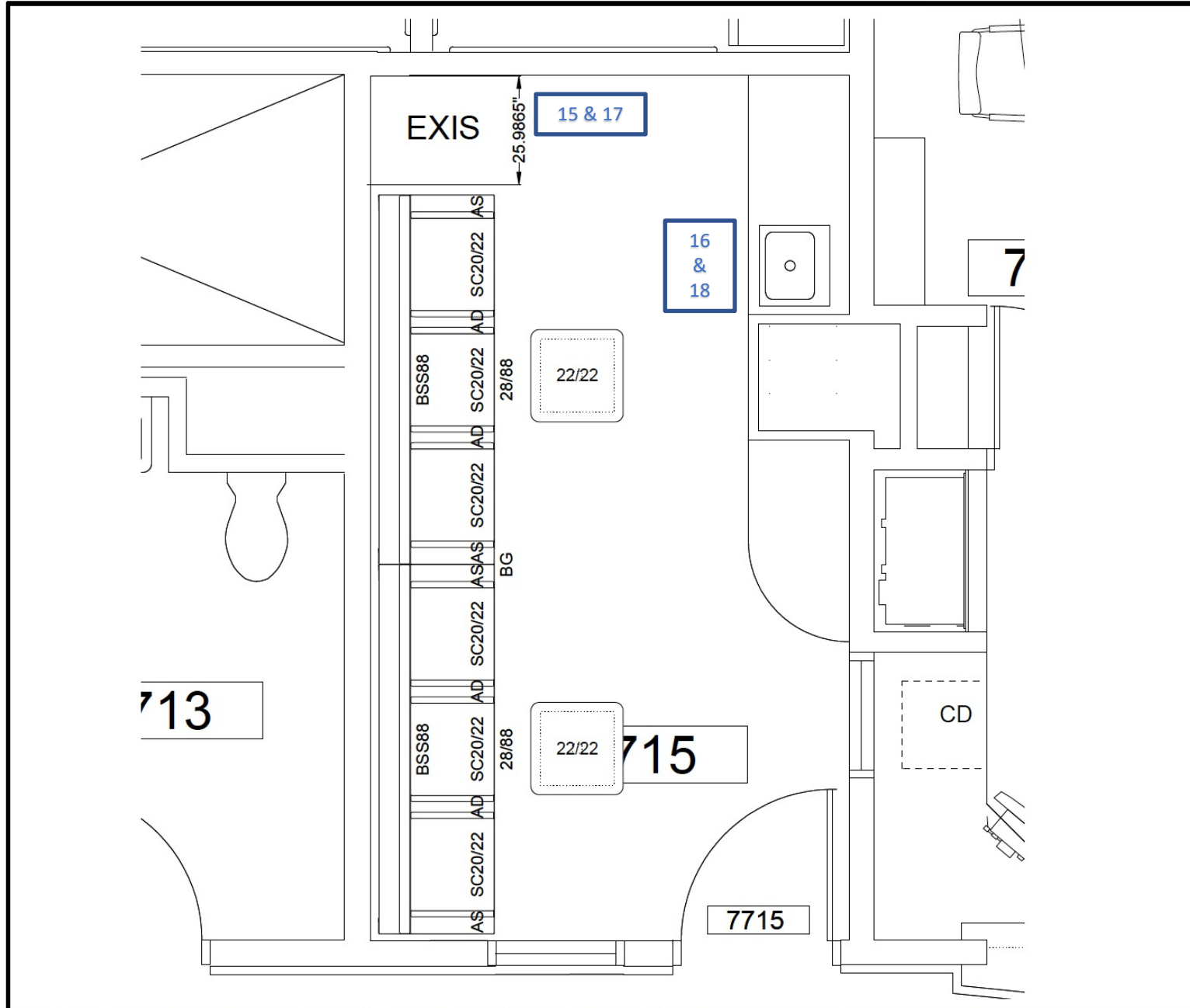
UCDH FIG REQ# W002586
 DAVIS TOWER, RM 6793
 AS-BUILT FURNITURE PLAN

SCALE: 1/4"=1'-0"
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 CLIENT APPROVAL:
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DAVIS TOWER, RM 7715
AS-BUILT FURNITURE PLAN

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SHEET TITLE
7715
AS-BUILT

SCALE 3/8" = 1' - 0"

START DATE 5/28/21

PROJECT NO. 215821

PROJECT MGR. K. STALLCOP

PHONE [Sales person #3, Number]

ACCT. MGR. G. REED

PHONE [Sales person #2, Number]

DESIGNER NAME C. HERNANDEZ

PHONE [Sales person #1, Number]

SHEET NO. F1 of 1



UCDH FIG REQ# W002586
DAVIS TOWER, RM 10723
AS-BUILT FURNITURE PLAN

HEADQUARTERS
 2500 DE LA CRUZ BLVD., SANTA CLARA,
 CA 95050 P: 669.800.2500

SAN FRANCISCO
 475 BRANNAN ST., STE 210, SAN FRANCISCO,
 CA 94107 P: 415.357.2200

OAKLAND
 7220 EDGEWATER DR., OAKLAND,
 CA 94621 P: 510.729.7800

SACRAMENTO
 1780 N MARKET BLVD., SACRAMENTO,
 CA 95834 P: 916.503.5900

WWW.ONEWORKPLACE.COM

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SHEET TITLE

10723
AS-BUILT

SCALE 3/8" = 1' - 0"

START DATE 5/26/21

PROJECT NO. 215821

PROJECT MGR. K. STALLCOP

PHONE [Sales person #3, Number]

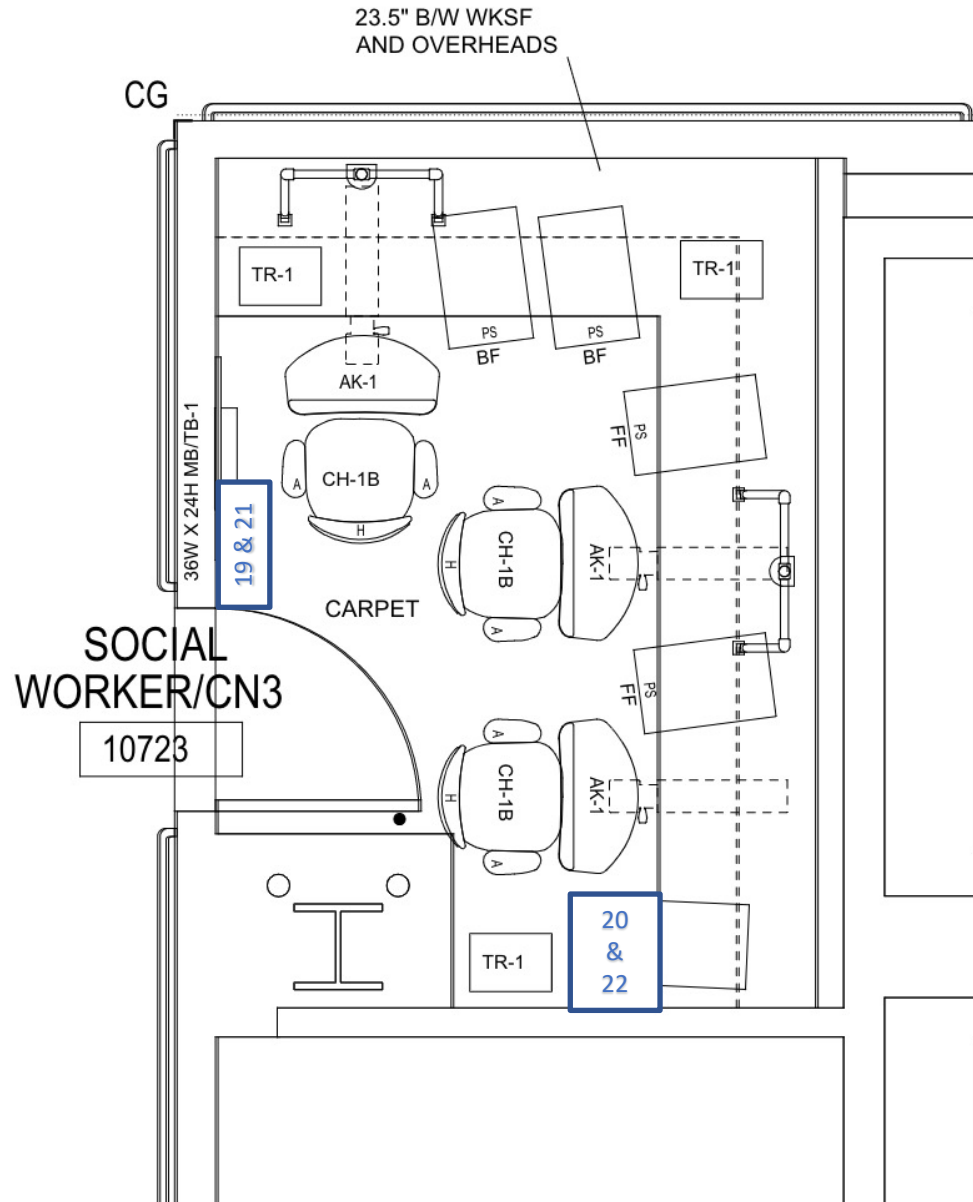
ACCT. MGR. G. REED

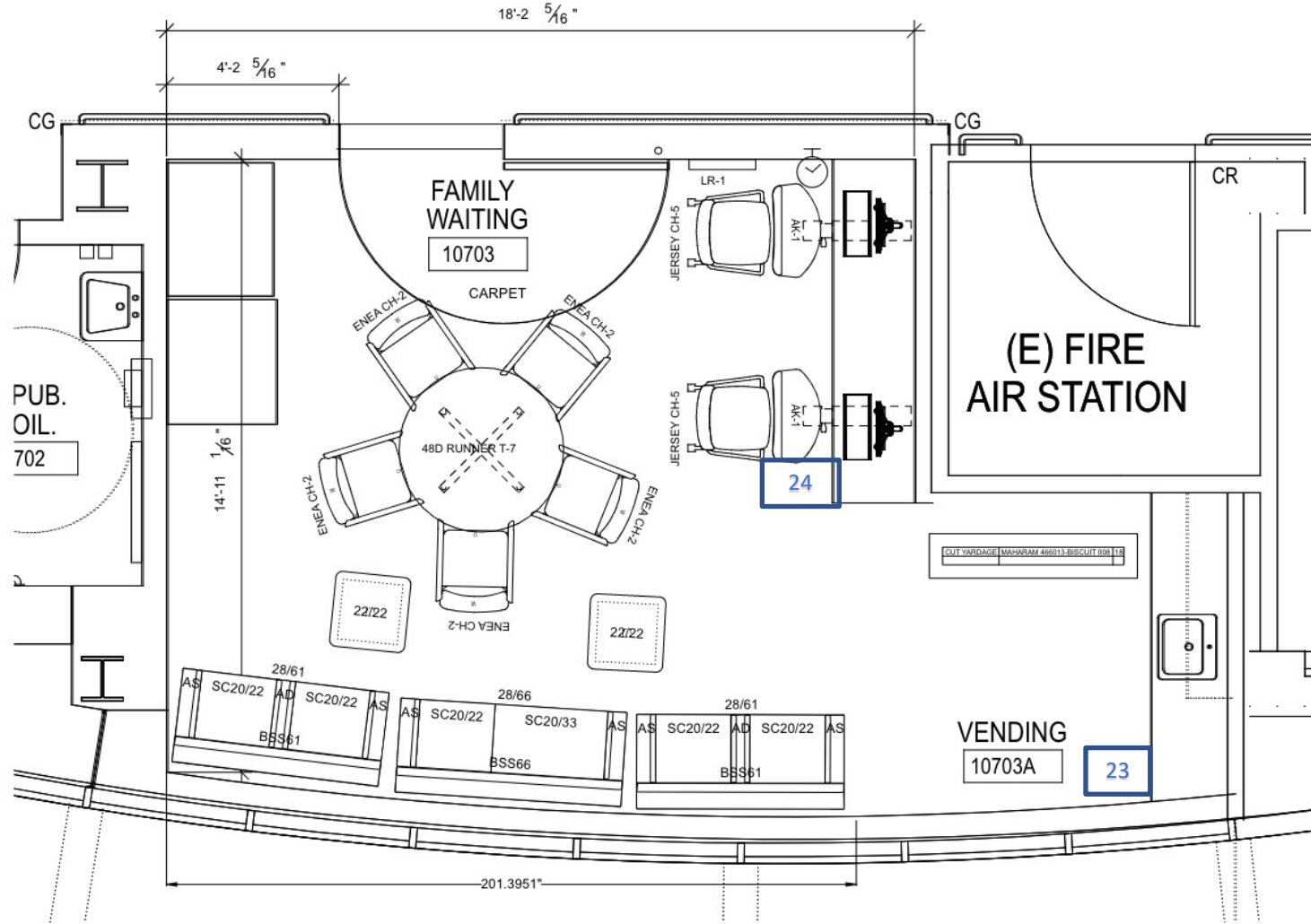
PHONE 916.825.8414

DESIGNER NAME C. HERNANDEZ

PHONE [Sales person #1, Number]

SHEET NO. F1 of 1





UCDH FIG REQ# W002586
DAVIS TOWER, RM 10703
AS-BUILT FURNITURE PLAN

HEADQUARTERS
 2500 DE LA CRUZ BLVD., SANTA CLARA,
 CA 95050 P: 669.800.2500

SAN FRANCISCO
 475 BRANNAN ST., STE 210, SAN FRANCISCO,
 CA 94107 P: 415.357.2200

OAKLAND
 7220 EDGEWATER DR. OAKLAND,
 CA 94621 P: 510.729.7800

SACRAMENTO
 1780 N MARKET BLVD. SACRAMENTO,
 CA 95834 P: 916.553.5900

WWW.ONEWORKPLACE.COM

| REV | DESCRIPTION | DWN | DATE |
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SHEET TITLE
10703
AS-BUILT

SCALE 3/8" = 1' - 0"

START DATE 5/26/21

PROJECT NO. 215821

PROJECT MGR. K. STALLCOP

PHONE [Sales person #3, Number]

ACCT. MGR. G. REED

PHONE 916.825.8414

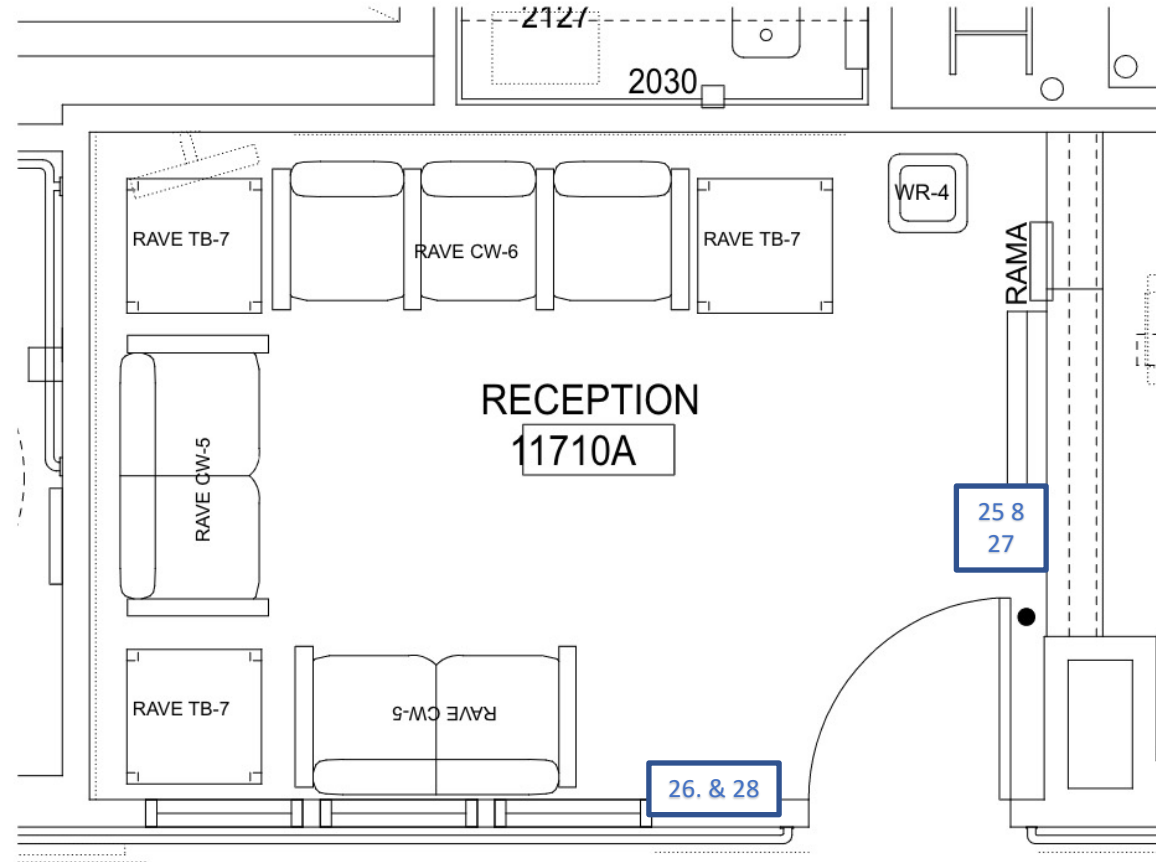
DESIGNER NAME C. HERNANDEZ

PHONE [Sales person #1, Number]

SHEET NO. F1 of 1



UCDH FIG REQ# W002586
Davis Tower, RM 11710A
AS-BUILT FURNITURE PLAN



HEADQUARTERS
 2500 DE LA CRUZ BLVD., SANTA CLARA,
 CA 95050 P: 650.850.2500

SAN FRANCISCO
 475 BRANNAN ST., STE. 210, SAN FRANCISCO,
 CA 94107 P: 415.357.2200

OAKLAND
 7220 EDGEWATER DR. OAKLAND,
 CA 94621 P: 510.729.7900

SACRAMENTO
 1780 N MARKET BLVD. SACRAMENTO,
 CA 95834 P: 916.553.5900

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| REV | DESCRIPTION | DWN | DATE |
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SHEET TITLE

11710A
AS-BUILT

SCALE 3/8" = 1' - 0"

START DATE 5/26/21

PROJECT NO. 215821

PROJECT MGR. K. STALLCOP

PHONE [Sales person #3, Number]

ACCT. MGR. G. REED

PHONE 916.825.8414

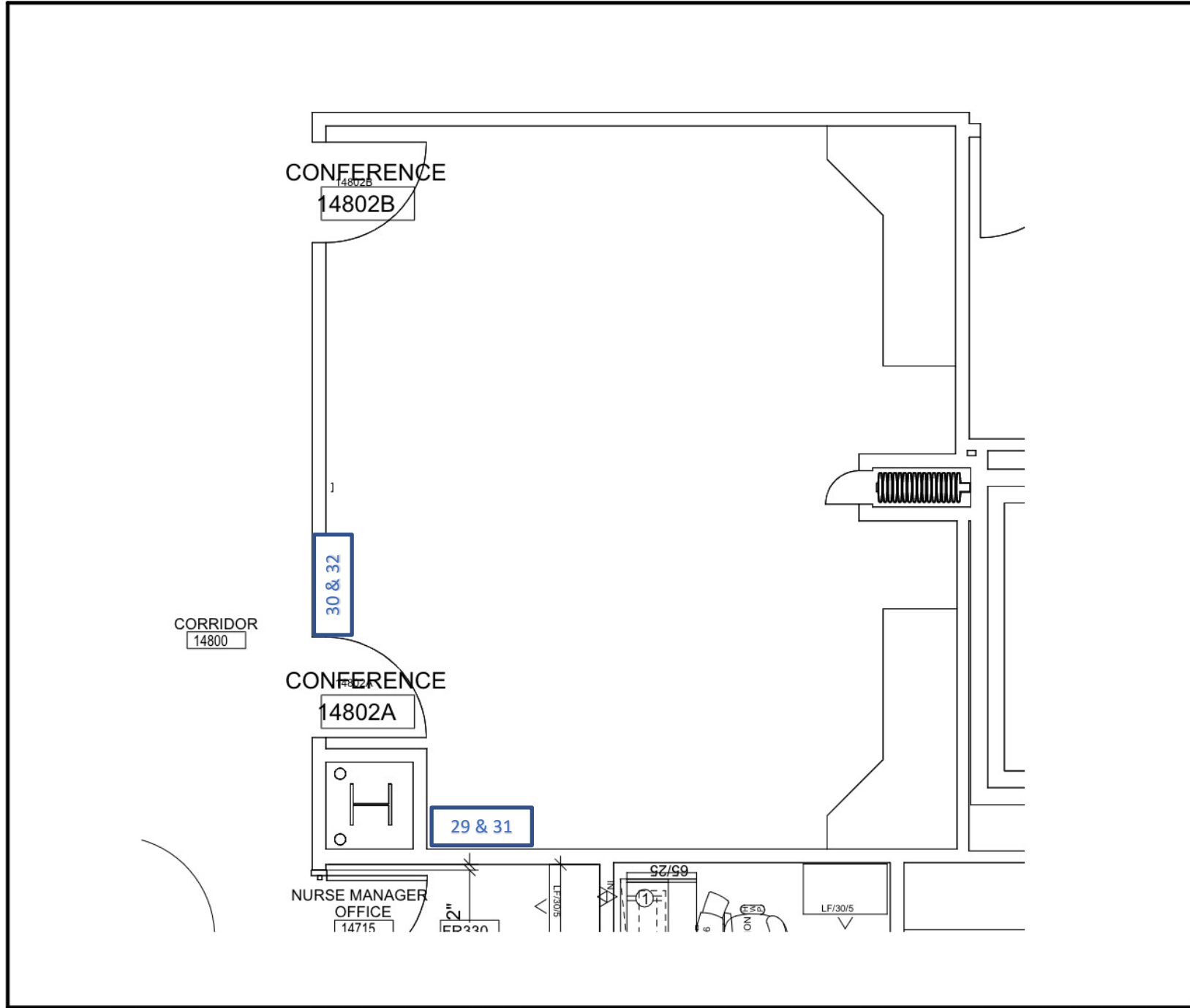
DESIGNER NAME C. HERNANDEZ

PHONE [Sales person #1, Number]

SHEET NO. F1 of 1



UCDH - F.I.G. REQ# W002586
DAVIS TOWER, RM 14802A & 14802B
AS-BUILT FURNITURE PLAN



HEADQUARTERS
 2500 DE LA CRUZ BLVD., SANTA CLARA,
 CA 95050 P: 669.800.2200

SAN FRANCISCO
 475 BRANNAN ST., STE. 210, SAN FRANCISCO,
 CA 94107 P: 415.357.2200

OAKLAND
 7220 EDGEWATER DR., OAKLAND,
 CA 94621 P: 910.729.7900

SACRAMENTO
 1780 N MARKET BLVD., SACRAMENTO,
 CA 95834 P: 916.553.5900

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| REV | DESCRIPTION | DWN | DATE |
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SHEET TITLE
14802A & 14802B
AS-BUILT

SCALE 1/2" = 1' - 0"

START DATE 5/26/21

PROJECT NO. 215821

PROJECT MGR. K. STALLCOP

PHONE [Sales person #3, Number]

ACCT. MGR. G. REED

PHONE [Sales person #2, Number]

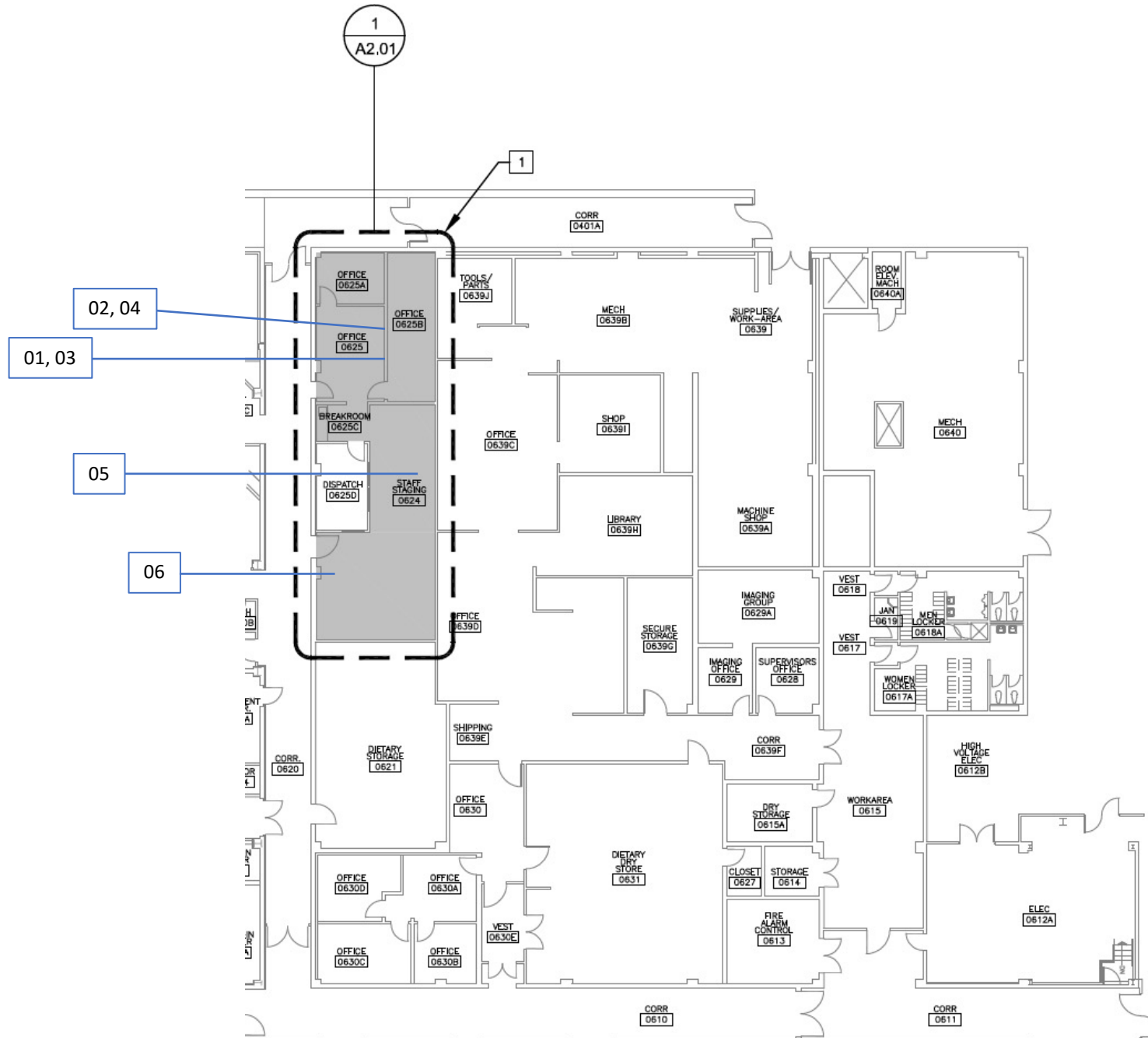
DESIGNER NAME C. HERNANDEZ

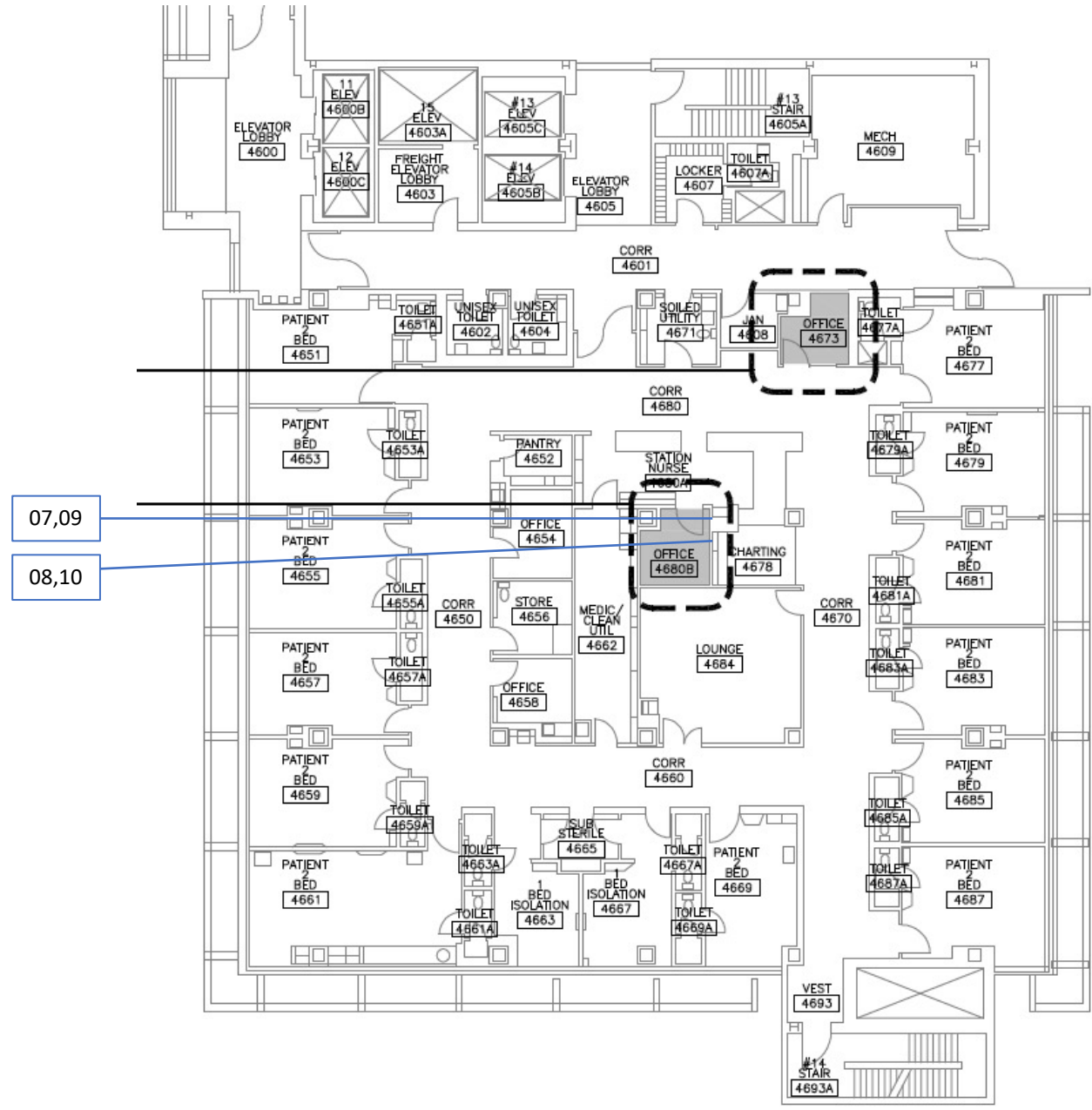
PHONE [Sales person #1, Number]

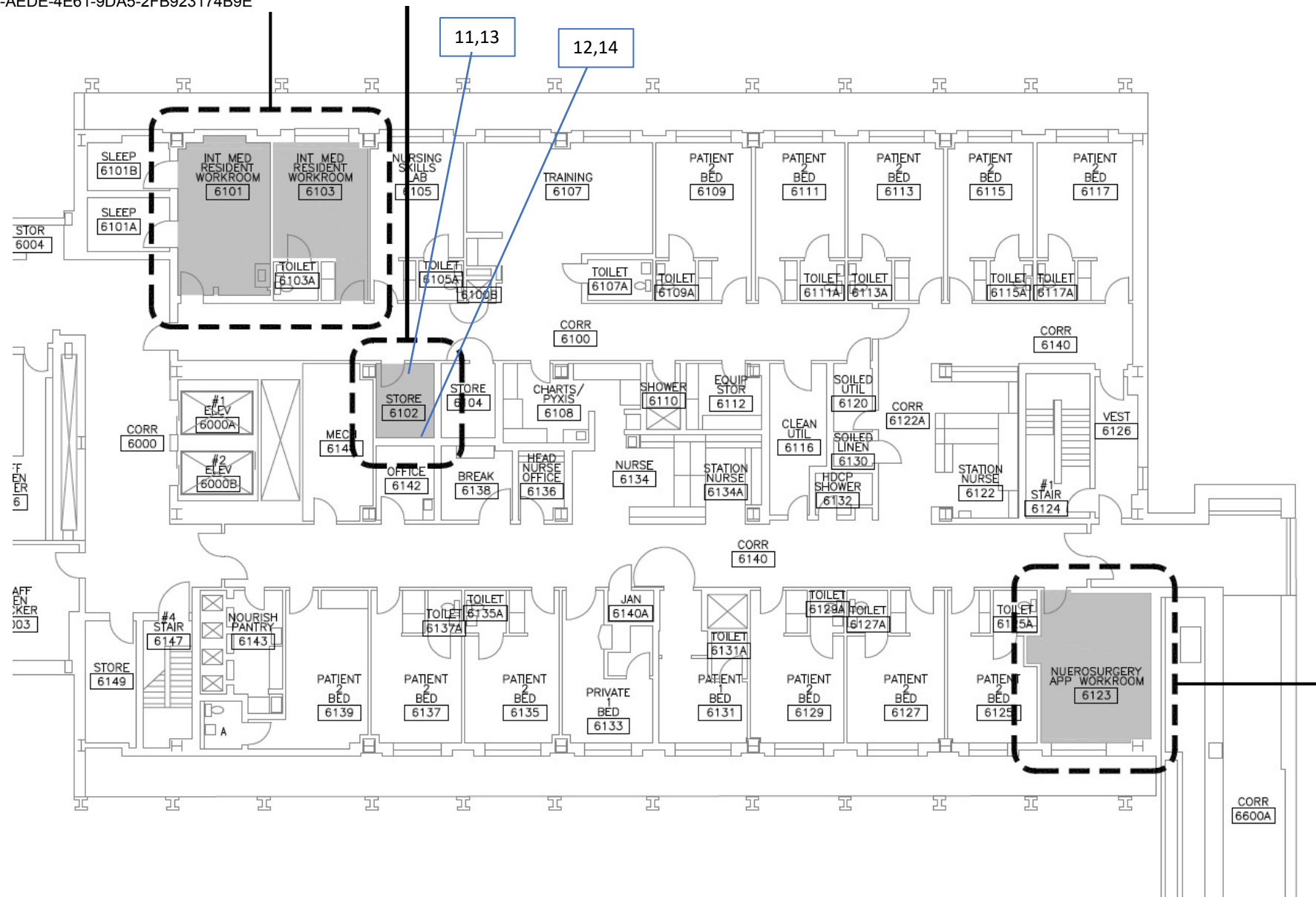
SHEET NO. F1 of 1

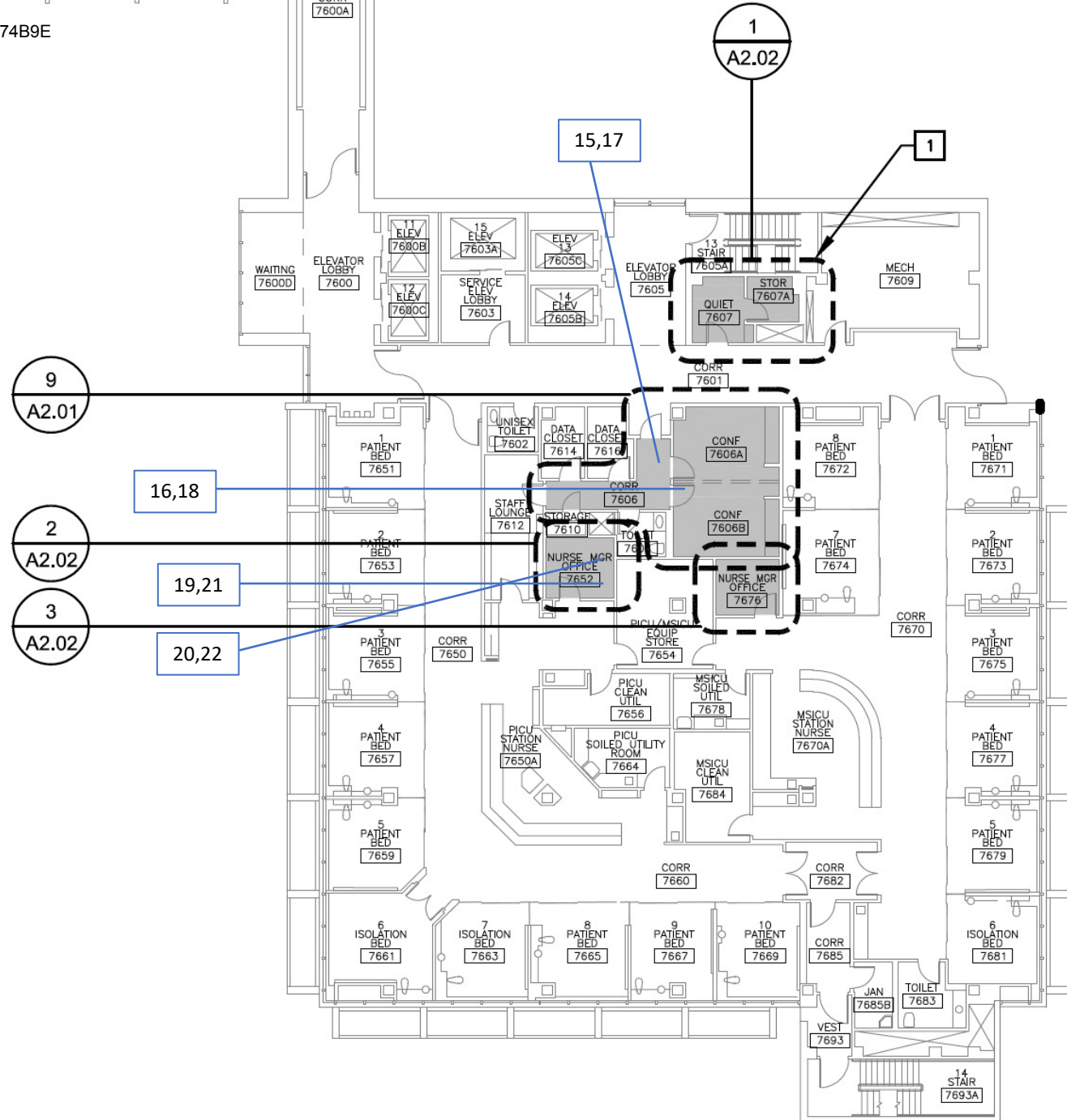
Sample Locations for Sampling Event 2

Sampling Event 2: Main Hospital Sample Locations

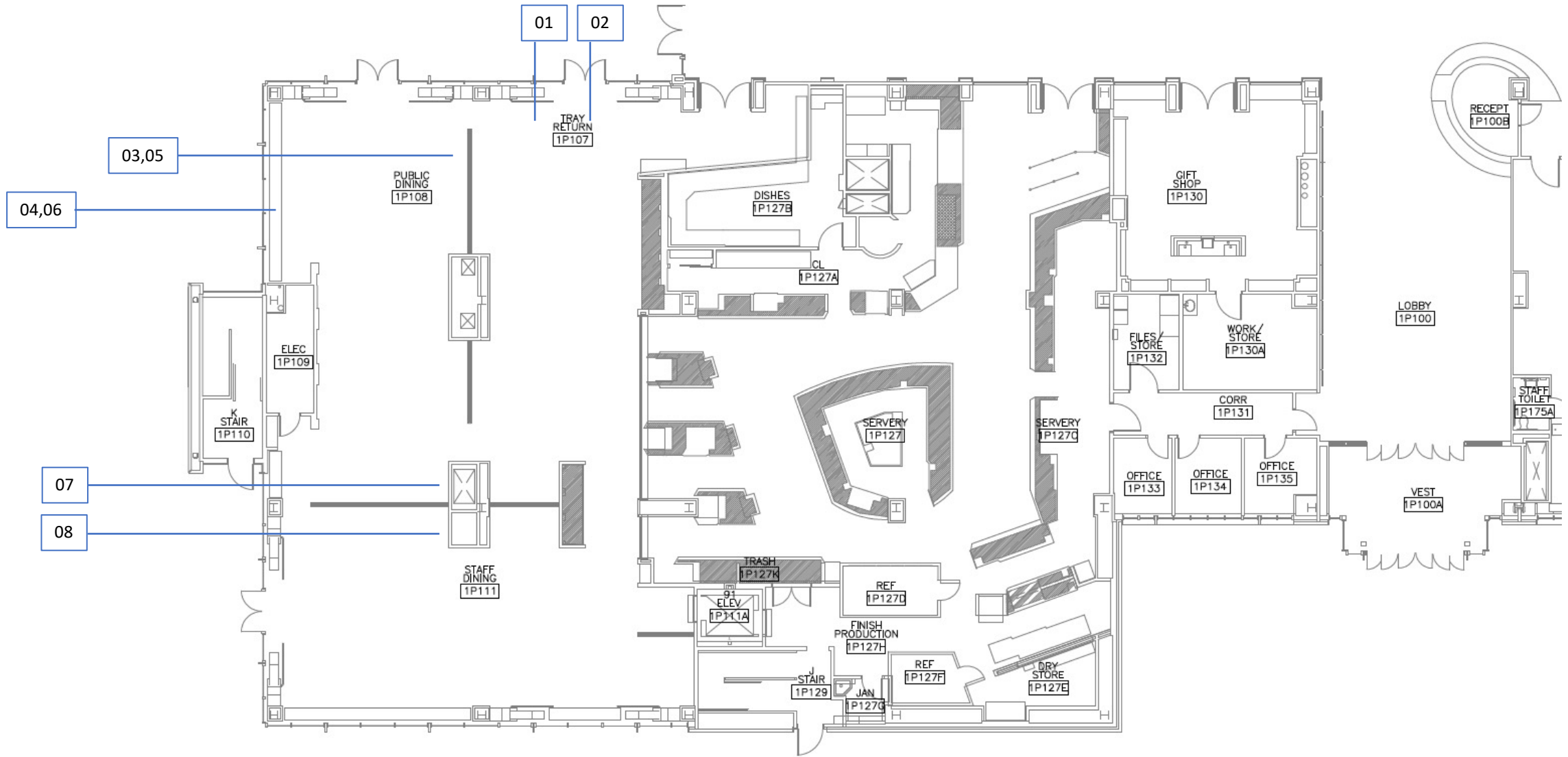


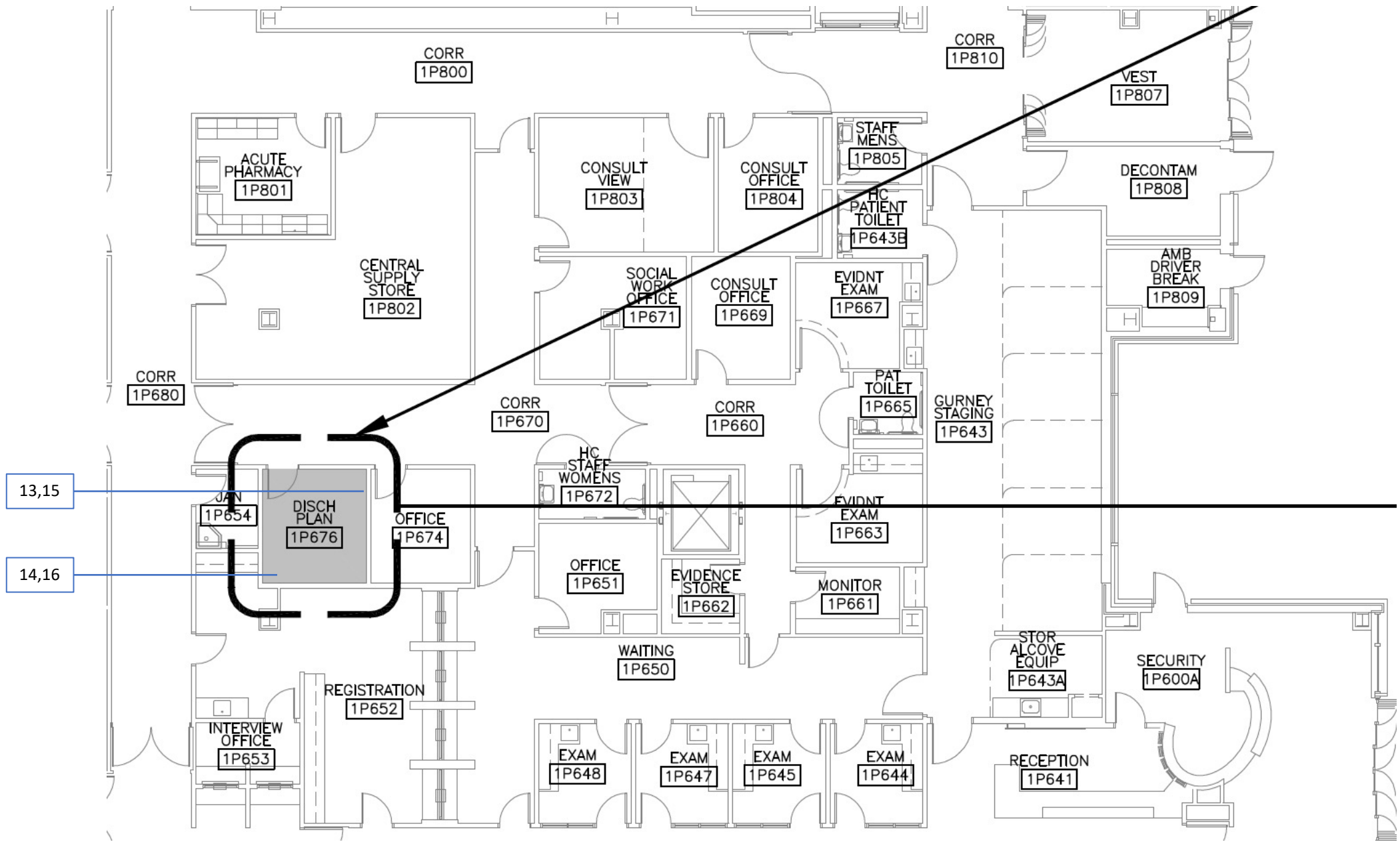


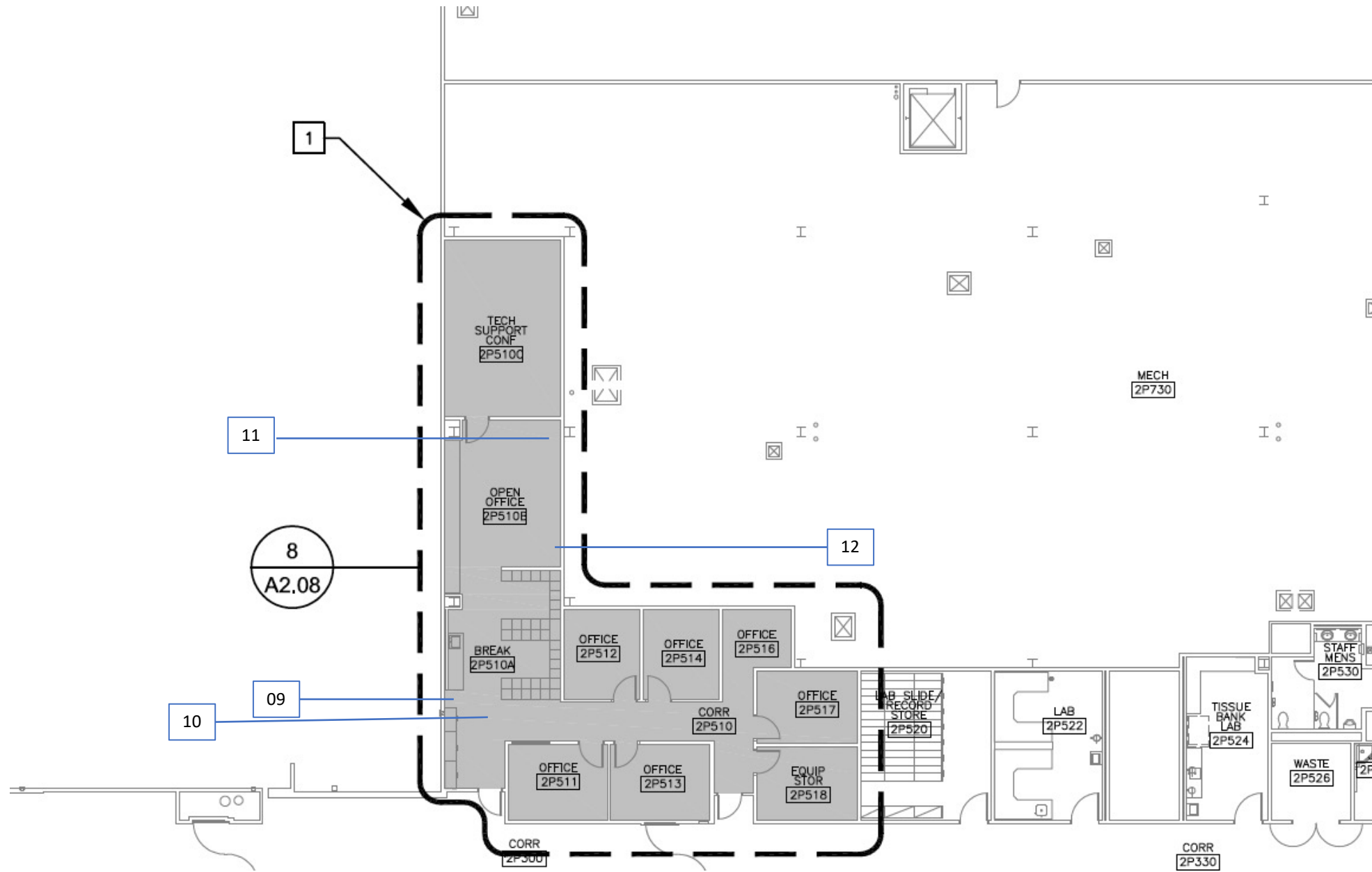




Sampling Event 2: Surgery and Emergency Services Pavilion Sample Locations







Sample Locations for Sampling Event 3

06, 08

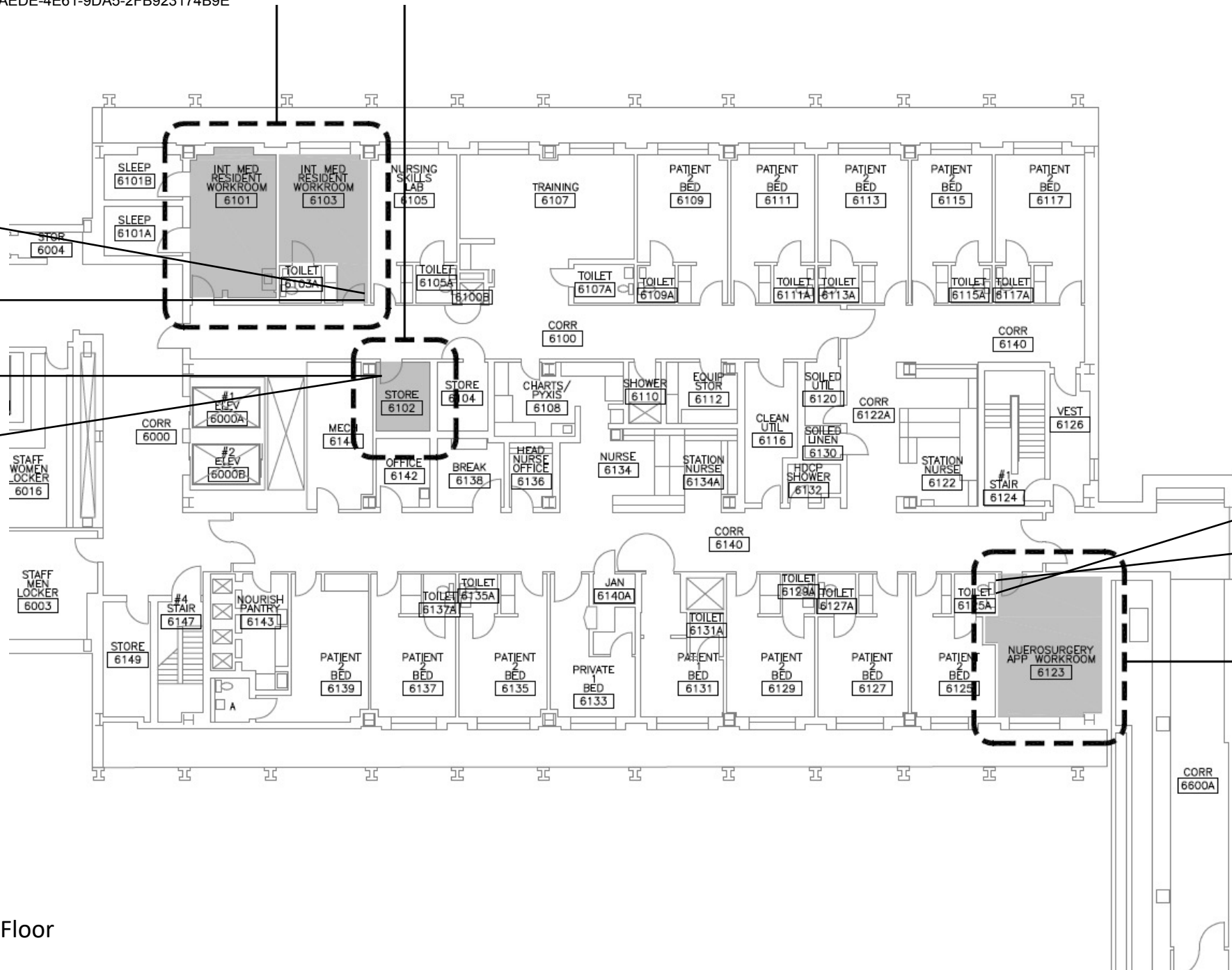
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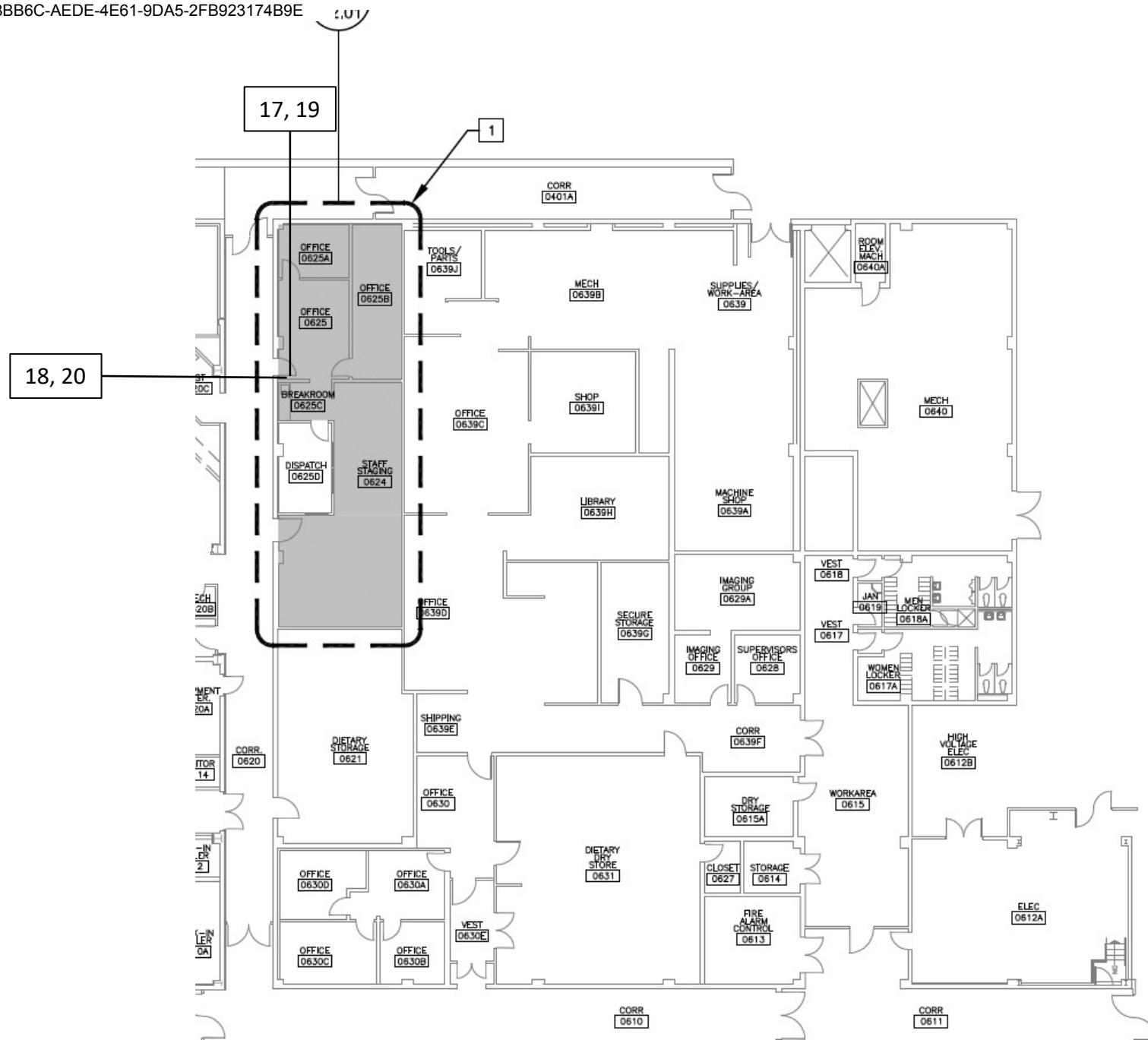
13, 15

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EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092212391

Customer ID: MECA62

Customer PO: RBRAUN06.02.22

Project ID:

Attention: Jenice Feiner
Millennium Consulting Associates, Inc.
4683 Chabot Drive, Suite 380
Pleasanton, CA 94588

Phone:
Fax:
Received Date: 06/06/2022 9:00 AM
Analysis Date: 06/13/2022
Collected Date:

Project: 21014.2008 - RBRAUN06.02.22

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|--------------------------------------|--|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 220602.42-01-Mastic 1 <i>092212391-0001</i> | RM 3707 GREEN & YELLOW CARPET MASTIC | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-01-Mastic 2 <i>092212391-0001A</i> | RM 3707 GREEN & YELLOW CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-02 <i>092212391-0002</i> <i>Green and yellow mastic are inseparable. This is a composite result of both.</i> | RM 3707 GREEN & YELLOW CARPET MASTIC | Yellow/Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-03-Mastic <i>092212391-0003</i> | RM 3707 & 3707A BEIGE B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-03-Compound <i>092212391-0003A</i> | RM 3707 & 3707A BEIGE B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-04 <i>092212391-0004</i> | RM 3707 & 3707A BEIGE B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-05-Base Cove <i>092212391-0005</i> | RM 3707 BROWN B.C & MASTIC | Brown Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-05-Mastic <i>092212391-0005A</i> | RM 3707 BROWN B.C & MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-05-Compound <i>092212391-0005B</i> | RM 3707 BROWN B.C & MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-06-Base Cove <i>092212391-0006</i> | RM 3707 BROWN B.C & MASTIC | Brown Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-06-Mastic <i>092212391-0006A</i> | RM 3707 BROWN B.C & MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-06-Compound <i>092212391-0006B</i> | RM 3707 BROWN B.C & MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-07-Mastic <i>092212391-0007</i> | 5703B GREEN CARPET MASTIC | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-07-Compound <i>092212391-0007A</i> | 5703B GREEN CARPET MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/13/2022 15:34:09



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EMSL Order: 092212391

Customer ID: MECA62

Customer PO: RBRAUN06.02.22

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|--|--|----------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 220602.42-08 <i>092212391-0008</i> | 5703B GREEN CARPET MASTIC | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-09-Mastic 1 <i>092212391-0009</i> | GRAY B.C. MASTIC RM 5703B | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-09-Mastic 2 <i>092212391-0009A</i> | GRAY B.C. MASTIC RM 5703B | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-09-Compound <i>092212391-0009B</i> | GRAY B.C. MASTIC RM 5703B | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-10-Mastic 1 <i>092212391-0010</i> | GRAY B.C. MASTIC RM 5703B | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-10-Mastic 2 <i>092212391-0010A</i> | GRAY B.C. MASTIC RM 5703B | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-10-Compound <i>092212391-0010B</i> | GRAY B.C. MASTIC RM 5703B | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-11-Carpet <i>092212391-0011</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Green Fibrous Homogeneous | 100% Synthetic | | None Detected |
| 220602.42-11-Pad <i>092212391-0011A</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Black/Yellow Fibrous Homogeneous | 100% Synthetic | | None Detected |
| 220602.42-11-Mastic 1 <i>092212391-0011B</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-11-Mastic 2 <i>092212391-0011C</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-12-Carpet <i>092212391-0012</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Green Non-Fibrous Homogeneous | 100% Synthetic | | None Detected |
| 220602.42-12-Mastic <i>092212391-0012A</i> <i>Green and yellow mastic are inseparable. This is a composite result of both.</i> | RM 6793 GREEN CARPET & YELLOW & GREEN MASTIC | Yellow/Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-13-Base Cove <i>092212391-0013</i> | RM 6793 BROWN B.C. MASTIC | Brown Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-13-Mastic <i>092212391-0013A</i> | RM 6793 BROWN B.C. MASTIC | Tan Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-13-Compound <i>092212391-0013B</i> | RM 6793 BROWN B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-14-Base Cove <i>092212391-0014</i> | RM 6793 BROWN B.C. MASTIC | Brown Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |

Initial report from: 06/13/2022 15:34:09



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EMSL Order: 092212391

Customer ID: MECA62

Customer PO: RBRAUN06.02.22

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|---|--|----------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 220602.42-14-Mastic 092212391-0014A | RM 6793 BROWN B.C. MASTIC | Tan/Yellow Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-14-Compound 092212391-0014B | RM 6793 BROWN B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-15-Mastic 092212391-0015 | RM 7715 GRAY B.C. MASTIC | Yellow/Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-15-Compound 092212391-0015A | RM 7715 GRAY B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-16-Mastic 092212391-0016 | RM 7715 GRAY B.C. MASTIC | Yellow/Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-16-Compound 092212391-0016A | RM 7715 GRAY B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-17-Carpet 092212391-0017 | RM 7715 GREEN MASTIC (UNDER CARPET) | Black Fibrous Homogeneous | 100% Synthetic | | None Detected |
| 220602.42-17-Mastic 092212391-0017A | RM 7715 GREEN MASTIC (UNDER CARPET) | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-18-Carpet 092212391-0018 | RM 7715 CARPET & GREEN MASTIC | Brown/Black Fibrous Homogeneous | 100% Synthetic | | None Detected |
| 220602.42-18-Mastic 1 092212391-0018A | RM 7715 CARPET & GREEN MASTIC | Green Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-18-Mastic 2 092212391-0018B | RM 7715 CARPET & GREEN MASTIC | Gray/Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-19 092212391-0019 | RM 10723 YELLOW CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-20 092212391-0020 | RM 10723 YELLOW CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 220602.42-21-Mastic 092212391-0021 | RM 10723 TAN B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-21-Compound 092212391-0021A | RM 10723 TAN B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 220602.42-22-Mastic 092212391-0022 | RM 10723 TAN B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 220602.42-22-Compound 092212391-0022A | RM 10723 TAN B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/13/2022 15:34:09



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<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092212391

Customer ID: MECA62

Customer PO: RBRAUN06.02.22

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|------------------------|--|---|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 220602.42-23-Base Cove | FAMILY WAITING B.C. MASTIC (RM 10703) | Tan Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0023 | | | | | |
| 220602.42-23-Mastic | FAMILY WAITING B.C. MASTIC (RM 10703) | Tan/Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0023A | | | | | |
| 220602.42-23-Compound | FAMILY WAITING B.C. MASTIC (RM 10703) | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 092212391-0023B | | | | | |
| 220602.42-24-Base Cove | FAMILY WAITING B.C. & MASTIC (RM 10703) | Tan Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0024 | | | | | |
| 220602.42-24-Mastic | FAMILY WAITING B.C. & MASTIC (RM 10703) | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0024A | | | | | |
| 220602.42-24-Compound | FAMILY WAITING B.C. & MASTIC (RM 10703) | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 092212391-0024B | | | | | |
| 220602.42-25 | RM 11710A B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0025 | | | | | |
| 220602.42-26 | RM 11710A B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0026 | | | | | |
| 220602.42-27-Mastic 1 | RM 11710A BLUE/ GREEN CARPET MASTIC | Blue Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0027 | | | | | |
| 220602.42-27-Mastic 2 | RM 11710A BLUE/ GREEN CARPET MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0027A | | | | | |
| 220602.42-27-Mastic 3 | RM 11710A BLUE/ GREEN CARPET MASTIC | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0027B | | | | | |
| 220602.42-28-Mastic 1 | RM 11710A BLUE/ GREEN CARPET MASTIC | Blue Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0028 | | | | | |
| 220602.42-28-Mastic 2 | RM 11710A BLUE/ GREEN CARPET MASTIC | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0028A | | | | | |
| 220602.42-29 | RM 14802A CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0029 | | | | | |
| 220602.42-30 | RM 14802A CARPET MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0030 | | | | | |
| 220602.42-31-Base Cove | RM 14802A B.C. MASTIC | Black Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 092212391-0031 | | | | | |
| 220602.42-31-Mastic | RM 14802A B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 092212391-0031A | | | | | |

Initial report from: 06/13/2022 15:34:09



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464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092212391

Customer ID: MECA62

Customer PO: RBRAUN06.02.22

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---------------------------|--------------------------|-------------------------------------|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 220602.42-31-Compound | RM 14802A B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| <i>092212391-0031B</i> | | | | | |
| 220602.42-32-Base Cove | RM 14802A B.C. MASTIC | Black Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| <i>092212391-0032</i> | | | | | |
| 220602.42-32-Mastic | RM 14802A B.C. MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| <i>092212391-0032A</i> | | | | | |
| 220602.42-32-Compound | RM 14802A B.C. MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| <i>092212391-0032B</i> | | | | | |

Analyst(s)

Jose Madrid (69)

Cecilia Yu, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 06/13/2022 15:34:09



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody For California

EMSL Order Number (lab use only):

092212391

PHONE:
FAX:

| | | | |
|---|--------------------|--|-----------------------------------|
| Company Name: Millennium Consulting Assc | | EMSL Customer ID: MECA62 | |
| Street: 4683 Chabot Drive | | City: Pleasanton | State or Province: CA |
| Zip/Postal Code: 94588 | Country: US | Telephone #: 925-808-67 | Fax #: phone: 925-307-6700 |
| Report To (Name): Jenice Feiner, Jeremy M; | | Please Provide Results via: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email | |
| email Address: Jfeiner@mecaenviro.com, | | Purchase Order Number: RBraun06.02.22 | |
| Client Project ID: 21014.2008-21014.2008 | | EMSL Project ID (internal use only): | |
| State or Province Collected: CA | | | |
| EMSL Bill-to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different: If Bill-to is different, note instructions in comments below. <i>Third-party billing requires written authorization.</i> | | | |

Turnaround Time (TAT) Options Please Check

- 3 Hr¹
 4-4.5Hr¹
 AHERA Only
 6 Hr¹
 24 Hr
 32 Hr²
 48 Hr
 72 Hr
 96 HR
 1 Week
 2 Week

¹Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT – you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule
²32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

| | | |
|--|--|--|
| PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (Reporting Limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> 400 Point Count (<0.25%) <input type="checkbox"/> 400 Point Count with Gravimetric Reduction (<0.25%) <input type="checkbox"/> 1000 Point Count (<0.1%) <input type="checkbox"/> 1000 Point Count with Gravimetric Reduction (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> CARB Modified AHERA <input type="checkbox"/> EPA Level II <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> TEM EPA 600/R-93/116 with Milling Prep (<0.1%)* <small>* Lower reporting limits available upon request</small> TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) | Soil/Rock/Vermiculite (Reporting Limit) <input type="checkbox"/> PLM CARB 435 - A (<0.25%)* <input type="checkbox"/> TEM CARB 435 - B (<0.1%) <input type="checkbox"/> TEM CARB 435 - C (<0.01%)* <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep <input type="checkbox"/> PLM EPA 600/R-93/116 with Milling Prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with Milling Prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with Milling Prep (<0.1%)* Other test (please specify) |
|--|--|--|

Stop At First Positive (clearly identify homogenous areas below)
 Filter Pore Size (Air Samples): 0.8µm 0.45µm

Sampler's Name: **RACHEL BRAUN**
 Sampler's Signature: *R Braun*

| Sample # | Sample Description/ Location | Volume, Area, or Homogenous Area | Date and Time Sampled |
|--------------|------------------------------------|----------------------------------|-----------------------|
| 220602.42-01 | RM 3707 green+yellow carpet mastic | | |
| ↓ | ↓ | | |
| -02 | | | |
| -03 | Rm 3707+3707A beige B.C mastic | | |
| ↓ | ↓ | | |
| -04 | | | |

| | | |
|--|----------------------------|-------------------------------|
| Client Sample # (s): 220602.42-01 | - 220602.42-32 | Total # of Samples: 32 |
| Relinquished by (Client): <i>R Braun</i> | Date: 6/3/22 | Time: 12:00 pm |
| Received by (Lab): <i>M FX</i> | Date: 06062022-0900 | Time: |
| Comments/Special Instructions: | | |

Controlled Document – COC-51 Asbestos CA R1 09/03/2019

EMSL Analytical, Inc.'s (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to LA Testing constitutes acceptance and acknowledgment of all terms and conditions.



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody For California

EMSL Order Number (Lab Use Only):

#092212391

PHONE:
FAX:

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

| Sample # | Sample Description/ Location | Volume, Area, or Homogenous Area # | Date and Time Sampled |
|--------------|--|------------------------------------|-----------------------|
| 220602.42-05 | Rm 3707 brown B.C + mastic | | |
| -06 | ↓ | | |
| -07 | 5703B green carpet mastic | | |
| -08 | 5703B green carpet mastic | | |
| -09 | gray B.C mastic rm 5703B | | |
| -10 | ↓ | | |
| -11 | Rm 6793 green carpet + yellow green mastic | | |
| -12 | ↓ | | |
| -13 | Rm 6793 brown B.C mastic | | |
| -14 | ↓ | | |
| -15 | Rm 7715 gray B.C mastic | | |
| -16 | ↓ | | |
| -17 | Rm 7715 green mastic (under carpet) | | |
| -18 | Rm 7715 carpet + green mastic | | |
| -19 | Rm 10723 yellow carpet mastic | | |
| -20 | ↓ | | |
| -21 | tan Rm 10723 tan B.C mastic | | |
| -22 | ↓ | | |
| -23 | FAMILY waiting B.C mastic (rm 10703) | | |
| -24 | ↓ B.C + mastic | | |
| -25 | Rm 11710A B.C carpet mastic | | |
| -26 | ↓ " " | | |

*Comments/Special Instructions: Received: R FR 06062022-0900



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Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092213084

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Attention: Jenice Feiner
Millennium Consulting Associates, Inc.
4683 Chabot Drive, Suite 380
Pleasanton, CA 94588

Phone:
Fax:
Received Date: 06/15/2022 9:15 AM
Analysis Date: 06/21/2022
Collected Date: 06/10/2022

Project: 21014.2008 - MAIN HOSPITAL - UCOMC FLOORING - JZ061022

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|--|--------------------------------------|---------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| G.0624-01-Floor Tile <small>092213084-0001</small> | 12X12 GREY FT SOFT PATTERN (0624-25) | Gray Non-Fibrous Homogeneous | | 15% Ca Carbonate 60% Matrix 25% Non-fibrous (Other) | None Detected |
| G.0624-01-Mastic <small>092213084-0001A</small> | 12X12 GREY FT SOFT PATTERN (0624-25) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-02-Floor Tile <small>092213084-0002</small> | 12X12 GREY FT SOFT PATTERN (0624-25) | Gray Non-Fibrous Homogeneous | | 15% Ca Carbonate 60% Matrix 25% Non-fibrous (Other) | None Detected |
| G.0624-02-Mastic <small>092213084-0002A</small> | 12X12 GREY FT SOFT PATTERN (0624-25) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-03-Cove Base <small>092213084-0003</small> | 6" LT BRN COVE & MASTIC (0624-25) | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-03-Mastic <small>092213084-0003A</small> | 6" LT BRN COVE & MASTIC (0624-25) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-03-Compound <small>092213084-0003B</small> | 6" LT BRN COVE & MASTIC (0624-25) | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| G.0624-04-Cove Base <small>092213084-0004</small> | 6" LT BRN COVE & MASTIC (0624-25) | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-04-Mastic <small>092213084-0004A</small> | 6" LT BRN COVE & MASTIC (0624-25) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-04-Compound <small>092213084-0004B</small> | 6" LT BRN COVE & MASTIC (0624-25) | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| G.0624-05-Carpet <small>092213084-0005</small> | ROLLED CARPET & GLUE BRN/ GRAY | Various Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| G.0624-05-Glue <small>092213084-0005A</small> | ROLLED CARPET & GLUE BRN/ GRAY | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| G.0624-06-Carpet <small>092213084-0006</small> | ROLLED CARPET & GLUE BRN/ GRAY | Various Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| G.0624-06-Glue <small>092213084-0006A</small> | ROLLED CARPET & GLUE BRN/ GRAY | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 4.4680B 07-Cove Base <small>092213084-0007</small> | 6" LT BROWN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 4.4680B 07-Mastic <small>092213084-0007A</small> | 6" LT BROWN COVE W/ MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/21/2022 15:30:38



EMSL Analytical, Inc.

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<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092213084

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|-------------------------------|--------------------------------------|---------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 4.4680B 08-Cove Base <i>092213084-0008</i> | 6" LT BROWN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 4.4680B 08-Mastic <i>092213084-0008A</i> | 6" LT BROWN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 4.4680B-09-Carpet <i>092213084-0009</i> | DK BLUE ROLLED CARPET W/ GLUE | Various Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 4.4680B-09-Glue <i>092213084-0009A</i> | DK BLUE ROLLED CARPET W/ GLUE | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 4.4680B-10-Carpet <i>092213084-0010</i> | DK BLUE ROLLED CARPET W/ GLUE | Various Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 4.4680B-10-Glue <i>092213084-0010A</i> | DK BLUE ROLLED CARPET W/ GLUE | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.11-Cove Base <i>092213084-0011</i> | 6" LT BRN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.11-Mastic <i>092213084-0011A</i> | 6" LT BRN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.11-Compound <i>092213084-0011B</i> | 6" LT BRN COVE W/ MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 6.6102.11-Carpet <i>092213084-0011C</i> | 6" LT BRN COVE W/ MASTIC | Various Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 6.6102.12-Cove Base <i>092213084-0012</i> | 6" LT BRN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.12-Mastic <i>092213084-0012A</i> | 6" LT BRN COVE W/ MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.12-Compound <i>092213084-0012B</i> | 6" LT BRN COVE W/ MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 6.6102.13-Carpet <i>092213084-0013</i> | MED BLUE ROLLED CARP W/ GLUE | Blue Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 6.6102.13-Glue <i>092213084-0013A</i> | MED BLUE ROLLED CARP W/ GLUE | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 6.6102.14-Carpet <i>092213084-0014</i> | MED BLUE ROLLED CARP W/ GLUE | Blue Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 6.6102.14-Glue <i>092213084-0014A</i> | MED BLUE ROLLED CARP W/ GLUE | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.15-Cove Base <i>092213084-0015</i> | 4" BEIGE COVE W/ MASTIC (A/B) | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.15-Mastic <i>092213084-0015A</i> | 4" BEIGE COVE W/ MASTIC (A/B) | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/21/2022 15:30:38



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EMSL Order: 092213084

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---------------------------------------|---|--------------------------------------|---------------|---------------------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 7.7606.16-Cove Base 092213084-0016 | 4" BEIGE COVE W/ MASTIC (A/B) | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.16-Mastic 092213084-0016A | 4" BEIGE COVE W/ MASTIC (A/B) | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.17-Carpet 092213084-0017 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Blue Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 7.7606.17-Glue 1 092213084-0017A | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.17-Glue 2 092213084-0017B | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Red Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.18-Carpet 092213084-0018 | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Blue Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 7.7606.18-Glue 1 092213084-0018A | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7606.18-Glue 2 092213084-0018B | BLUE CARP/ RED ACCENTS + GLUE (A/B) | Red Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.19-Cove Base 092213084-0019 | 4" LT BRN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.19-Mastic 092213084-0019A | 4" LT BRN COVE W/ MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.20-Cove Base 092213084-0020 | 4" LT BRN COVE W/ MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.20-Mastic 092213084-0020A | 4" LT BRN COVE W/ MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.21-Carpet 092213084-0021 | CARPET BRN/ GOLD CROSSHATCH + GLUE | Brown/Tan Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 7.7652.21-Glue 092213084-0021A | CARPET BRN/ GOLD CROSSHATCH + GLUE | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 7.7652.22-Carpet 092213084-0022 | CARPET BRN/ GOLD CROSSHATCH + GLUE | Brown/Tan Fibrous Homogeneous | 95% Synthetic | 5% Non-fibrous (Other) | None Detected |
| 7.7652.22-Glue 092213084-0022A | CARPET BRN/ GOLD CROSSHATCH + GLUE | Gray Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/21/2022 15:30:38



EMSL Analytical, Inc.

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EMSL Order: 092213084

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Analyst(s)

Stacy Trinh Le (51)

Cecilia Yu, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 06/21/2022 15:30:38



EMSL ANALYTICAL, INC.
LABORATORY-PRODUCTS-TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

092213084

EMSL ANALYTICAL, INC.
464 McCormick Street
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

| | | | |
|--|--------------------|--|--------------------------------------|
| Company : Millennium Consulting Associates | | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** | |
| Street: 4683 Chabot Drive, Suite 380 | | Third Party Billing requires written authorization from third party | |
| City: Pleasanton <i>J. Malson</i> | State/Province: CA | Zip/Postal Code: 94588 | Country: USA |
| Report To (Name): <i>sanderson@mecaenviro.com</i> | | Fax #: (925) 808-6708 | |
| Telephone #: (925) 808-6700 | | Email Address: <i>jfeiner@mecaenviro.com</i> | |
| Project Name/Number: <i>21014, 2008 - Main hospital - UCD MC Flooring</i> | | | |
| Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email | | Purchase Order: | U.S. State Samples Taken: California |

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

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

| | | |
|---|--|--|
| PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%) | TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/> |
|---|--|--|

Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: *Julie Zak* Samplers Signature: *[Signature]*

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|------------|--------------------------------------|-------------------------------|-------------------|
| G.0624-01 | 12x12 Grey FT soft pattern (0624-25) | (suite) #1 MH | 6/10/22 |
| G.0624.02 | └ | | ↓ |
| G.0624.03 | 6" lt brn Cove + mastic (0624-25) | # 2 MH | |
| G.0624.04 | └ | | |
| G.0624.05 | Rolled carpet + glue Brn/Gray | # 3 MH | |
| G.0624.06 | └ | | |
| 4.4680B 07 | 6" lt brown cove w/ mastic | # 4 MH | |
| 4.4680B 08 | └ | | |

Client Sample # (s): - Total # of Samples: **22**

Relinquished (Client): *Bm to FedEx* Date: *6.13.22* Time:

Received (Lab): *RG Fr* Date: *06152022-0915* Time:

Comments/Special Instructions:
Main Hospital



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

092213084

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|------------|-------------------------------------|-------------------------------|-------------------|
| 4.4680B-09 | DK Blue rolled carpet w/ glue | # 5 MH | 6.10.22 |
| 4.4680B-10 | └ | | ↓ |
| 6.6102.11 | 6" Lt brn core w/ mastic | # 6 MH | |
| 6.6102.12 | └ | | |
| 6.6102.13 | Med blue rolled carp w/ glue | # 7 MH | |
| 6.6102.14 | └ | | |
| 7.7606.15 | 4" beige core w/ mastic (A/B) | # 8 MH | |
| 7.7606.16 | └ | | |
| 7.7606.17 | Blue carp/ red accents + glue (A/B) | # 9 MH | |
| 7.7606.18 | └ | | |
| 7.7652.19 | 4" Lt brn core w/ mastic | # 10 MH | |
| 7.7652.20 | └ | | |
| 7.7652.21 | carpet brn/gold crosshatch + glue | # 11 MH | |
| 7.7652.22 | └ | | |

*Comments/Special Instructions:

Main Hospital - MH JZau 6.13.22 to Fed Ex



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092213083

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Attention: Jeremy Malson
Millennium Consulting Associates, Inc.
4683 Chabot Drive, Suite 380
Pleasanton, CA 94588

Phone: (925) 808-6700

Fax:

Received Date: 06/15/2022 9:15 AM

Analysis Date: 06/21/2022

Collected Date: 06/10/2022

Project: 21014.2008 - SESP @ UCDMC FLOORING PROJECT - JZ061022

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|---|--|---------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| PC-DR1-01-Crosshatch Mat <i>092213083-0001</i> | 12 X 12? CROSSHATCH GREY WALK OFF MATS HD (HEAVY DUTY) | Black Fibrous Homogeneous | 20% Synthetic | 60% Matrix 20% Non-fibrous (Other) | None Detected |
| PC-DR1-01-Mastic <i>092213083-0001A</i> | 12 X 12? CROSSHATCH GREY WALK OFF MATS HD (HEAVY DUTY) | Yellow Non-Fibrous Homogeneous | | 10% Ca Carbonate 70% Matrix 20% Non-fibrous (Other) | None Detected |
| <i>Result includes a small amount of inseparable attached material</i> | | | | | |
| PC-DR1-01-Leveler <i>092213083-0001B</i> | 12 X 12? CROSSHATCH GREY WALK OFF MATS HD (HEAVY DUTY) | Gray Non-Fibrous Homogeneous | 3% Cellulose | 60% Ca Carbonate 37% Non-fibrous (Other) | None Detected |
| PC-DR1-02-Crosshatch Mat <i>092213083-0002</i> | 12 X 12? CROSSHATCH GREY WALK OFF MATS HD (HEAVY DUTY) | Black Fibrous Homogeneous | 20% Synthetic | 60% Matrix 20% Non-fibrous (Other) | None Detected |
| PC-DR1-02-Mastic <i>092213083-0002A</i> | 12 X 12? CROSSHATCH GREY WALK OFF MATS HD (HEAVY DUTY) | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PC-DR1-03-Carpet <i>092213083-0003</i> | GREY BEIGE CARP + GLUE DR ROLLED | Gray/Beige Fibrous Homogeneous | 90% Synthetic | 10% Non-fibrous (Other) | None Detected |
| PC-DR1-03-Glue <i>092213083-0003A</i> | GREY BEIGE CARP + GLUE DR ROLLED | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-04-Carpet <i>092213083-0004</i> | GREY BEIGE CARP + GLUE DR ROLLED | Gray/Beige Non-Fibrous Homogeneous | 90% Synthetic | 10% Non-fibrous (Other) | None Detected |
| PCDR1-04-Glue <i>092213083-0004A</i> | GREY BEIGE CARP + GLUE DR ROLLED | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-05-Cove Base <i>092213083-0005</i> | 6" BLACK COVE + GRAY MASTIC | Black Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| PCDR1-05-Mastic 1 <i>092213083-0005A</i> | 6" BLACK COVE + GRAY MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-05-Mastic 2 <i>092213083-0005B</i> | 6" BLACK COVE + GRAY MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-06-Cove Base <i>092213083-0006</i> | 6" BLACK COVE + GRAY MASTIC | Black Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |

Initial report from: 06/21/2022 16:31:55



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092213083

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|---|---|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| PCDR1-06-Mastic <i>092213083-0006A</i> | 6" BLACK COVE + GRAY MASTIC | Gray/White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-07-Sheet Flooring <i>092213083-0007</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Brown Non-Fibrous Homogeneous | | 10% Ca Carbonate 60% Matrix 30% Non-fibrous (Other) | None Detected |
| PCDR1-07-Mastic <i>092213083-0007A</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-07-Leveler <i>092213083-0007B</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Gray Non-Fibrous Homogeneous | | 10% Quartz 70% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| PCDR1-08-Sheet Flooring <i>092213083-0008</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Brown Non-Fibrous Homogeneous | | 10% Ca Carbonate 60% Matrix 30% Non-fibrous (Other) | None Detected |
| PCDR1-08-Mastic <i>092213083-0008A</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| PCDR1-08-Leveler <i>092213083-0008B</i> | DK BRN CAMEL SHEET FLOORING + MASTIC / GLUE | Gray Non-Fibrous Homogeneous | | 10% Quartz 60% Ca Carbonate 30% Non-fibrous (Other) | None Detected |
| 2-510-09-Cove Base <i>092213083-0009</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 2-510-09-Mastic <i>092213083-0009A</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 2-510-09-Compound <i>092213083-0009B</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 2-510-10-Cove Base <i>092213083-0010</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 2-510-10-Mastic <i>092213083-0010A</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 2-510-10-Compound <i>092213083-0010B</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 2-510B-11-Cove Base <i>092213083-0011</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 2-510B-11-Mastic <i>092213083-0011A</i> | 4" BEIGE COVE + MASTIC | White/Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 2-510B-11-Compound <i>092213083-0011B</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 2-510B-12-Cove Base <i>092213083-0012</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 2-510B-12-Mastic <i>092213083-0012A</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |

Initial report from: 06/21/2022 16:31:55



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 092213083

Customer ID: MECA62

Customer PO: JZ061022

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|----------------------------------|-------------------------------|---------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 1-676-13-Carpet <i>092213083-0013</i> | GREY MOTTLED SHEET CARPET + GLUE | Gray Fibrous Homogeneous | 90% Synthetic | 10% Non-fibrous (Other) | None Detected |
| 1-676-13-Glue <i>092213083-0013A</i> | GREY MOTTLED SHEET CARPET + GLUE | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 1-676-14-Carpet <i>092213083-0014</i> | GREY MOTTLE CARPET + GLUE | Gray Fibrous Homogeneous | 90% Synthetic | 10% Non-fibrous (Other) | None Detected |
| 1-676-14-Glue <i>092213083-0014A</i> | GREY MOTTLE CARPET + GLUE | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 1-676-15-Cove Base <i>092213083-0015</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 1-676-15-Mastic <i>092213083-0015A</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 1-676-15-Compound <i>092213083-0015B</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| 1-676-16-Cove Base <i>092213083-0016</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 60% Matrix 40% Non-fibrous (Other) | None Detected |
| 1-676-16-Mastic <i>092213083-0016A</i> | 4" BEIGE COVE + MASTIC | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 1-676-16-Compound <i>092213083-0016B</i> | 4" BEIGE COVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |

Analyst(s)

Karina Martinez (41)

Cecilia Yu, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 06/21/2022 16:31:55



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

092213083

EMSL ANALYTICAL, INC.
464 McCormick Street
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

| | | | |
|--|--------------------|--|--------------|
| Company : Millennium Consulting Associates | | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** | |
| Street: 4683 Chabot Drive, Suite 380 | | Third Party Billing requires written authorization from third party | |
| City: Pleasanton <i>J. Matson</i> | State/Province: CA | Zip/Postal Code: 94588 | Country: USA |
| Report To (Name): <i>sanderson@mecaenviro.com</i> | | Fax #: (925) 808-6708 | |
| Telephone #: (925) 808-6700 | | Email Address: <i>jfeiner@mecaenviro.com</i> | |
| Project Name/Number: <i>21014.2008 SESP @ WCDMC Flooring Project</i> | | | |
| Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email | | Purchase Order: _____ U.S. State Samples Taken: California | |

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

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

| | | |
|---|---|---|
| PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA | TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 | TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) |
| PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%) | TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 | Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) |
| TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | | |

Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: *J Zak* Samplers Signature: *[Signature]*

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|-----------|---|----------------------------------|----------------------|
| PC-DRI 01 | <i>12x12? Crosshatch Grey Walk-off Mats HD (Heavy Duty)</i> | <i>S1</i> | <i>6-10-22</i> |
| PC-ORI 02 | | | |
| PC-DRI 03 | <i>Grey Berge Carp + Glue DR rolled</i> | <i>S2</i> | |
| PC DRI 04 | | | |
| PCDR 05 | <i>6" Black Cove + Gray Mastic</i> | <i>S3</i> | |
| PCDR 06 | | | |
| PCDR 07 | <i>DK Bm Camel Sheet Flooring + mastic/glue</i> | <i>S4</i> | |
| PCDR 08 | | | |

Client Sample # (s): _____ Total # of Samples: *(16)*

Relinquished (Client): *[Signature]* *JZAK* Date: *6/13/22* Time: *6pm*

Received (Lab): *RG* Date: *06152022-0915* Time: _____

Comments/Special Instructions:
SESP -



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

092213083

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|-------------|----------------------------------|----------------------------------|----------------------|
| 2-510-09 | 4" beige core + mastic | 55 | 6-10-22 |
| J2 2-510-10 | ⊥ | | |
| 2-510B-11 | 4" beige core + mastic | | |
| 2-510B-12 | ⊥ | ⊥ | |
| 1-676-13 | grey mottled sheet carpet + glue | 56 | |
| 1-676-14 | grey mottle carpet " " | ⊥ | |
| 1.676-15 | 4" beige core + mastic | 57 1st | |
| 1.676.16 | ⊥ | ⊥ | |
| / | | | |

*Comments/Special Instructions:

SESP - UCDMC Flooring
J2 6/13/22



EMSL Analytical, Inc.

3501 Thomas Road, Unit 9 Santa Clara, CA 95054

Tel/Fax: (408) 913-2714 / (408) 913-2715

<http://www.EMSL.com> / santaclaralab@EMSL.com

EMSL Order: 472200239

Customer ID: MECA62

Customer PO: RB121422

Project ID:

Attention: Sarah Anderson-Flores
Millennium Consulting Associates, Inc.
4683 Chabot Drive, Suite 380
Pleasanton, CA 94588

Phone: (925) 808-6700

Fax:

Received Date: 12/20/2022 1:40 PM

Analysis Date: 12/20/2022

Collected Date: 12/14/2022

Project: M053094 - 21014.2008 MAIN HOSPITAL UCDM CARPET

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

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|---|--------------------------------------|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 22.12.14.42-01-Base Cove 472200239-0001 | RM 4132B - 6" TAN BASECOVE + MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 1 | | |
| 22.12.14.42-01-Mastic 472200239-0001A | RM 4132B - 6" TAN BASECOVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 1 | | |
| 22.12.14.42-02-Base Cove 472200239-0002 | RM 4132B - 6" TAN BASECOVE + MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 1 | | |
| 22.12.14.42-02-Mastic 472200239-0002A | RM 4132B - 6" TAN BASECOVE + MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 1 | | |
| 22.12.14.42-03-Mastic 1 472200239-0003 | RM 4132B - CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 2 | | |
| 22.12.14.42-03-Floor Tile 472200239-0003A | RM 4132B - CARPET MASTIC | White Non-Fibrous Homogeneous | | 20% Ca Carbonate 80% Non-fibrous (Other) | None Detected |
| | | | HA: 2 | | |
| 22.12.14.42-03-Mastic 2 472200239-0003B | RM 4132B - CARPET MASTIC | Black Non-Fibrous Homogeneous | | 80% Matrix 15% Non-fibrous (Other) | 5% Chrysotile |
| | | | HA: 2 | | |
| 22.12.14.42-04-Mastic 1 472200239-0004 | RM 4132B - CARPET MASTIC | Yellow Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 2 | | |
| 22.12.14.42-04-Floor Tile 472200239-0004A | RM 4132B - CARPET MASTIC | White Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| | | | HA: 2 | | |
| 22.12.14.42-04-Mastic 2 472200239-0004B | RM 4132B - CARPET MASTIC | Black Non-Fibrous Homogeneous | | 80% Matrix 15% Non-fibrous (Other) | 5% Chrysotile |
| | | | HA: 2 | | |
| 22.12.14.42-05-Mastic 1 472200239-0005 | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Clear Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 3 | | |

Initial report from: 12/20/2022 18:02:14



EMSL Analytical, Inc.

3501 Thomas Road, Unit 9 Santa Clara, CA 95054

Tel/Fax: (408) 913-2714 / (408) 913-2715

<http://www.EMSL.com> / santaclaralab@EMSL.com

EMSL Order: 472200239

Customer ID: MECA62

Customer PO: RB121422

Project ID:

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

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|---|-------------------------------------|--------------|---|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 22.12.14.42-05-Floor Tile 472200239-0005A | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Brown Non-Fibrous Homogeneous | | 20% Ca Carbonate 80% Non-fibrous (Other) | None Detected |
| | | | HA: 3 | | |
| 22.12.14.42-05-Mastic 2 472200239-0005B | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Black Non-Fibrous Homogeneous | | 80% Matrix 15% Non-fibrous (Other) | 5% Chrysotile |
| | | | HA: 3 | | |
| 22.12.14.42-06-Mastic 1 472200239-0006 | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Clear Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 3 | | |
| 22.12.14.42-06-Floor Tile 472200239-0006A | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Brown Non-Fibrous Homogeneous | | 80% Ca Carbonate 20% Non-fibrous (Other) | None Detected |
| | | | HA: 3 | | |
| 22.12.14.42-06-Mastic 2 472200239-0006B | RM 61303 - 12 X 12 FLOOR TILE, TAN + BLACK MASTIC | Black Non-Fibrous Homogeneous | | 80% Matrix 15% Non-fibrous (Other) | 5% Chrysotile |
| | | | HA: 3 | | |
| 22.12.14.42-07-Base Cove 472200239-0007 | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-07-Mastic 1 472200239-0007A | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-07-Mastic 2 472200239-0007B | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-08-Base Cove 472200239-0008 | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-08-Mastic 1 472200239-0008A | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-08-Mastic 2 472200239-0008B | RM 61303 - 6" TAN BASECOVE + YELLOW MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 4 | | |
| 22.12.14.42-09-Base Cove 472200239-0009 | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 5 | | |
| 22.12.14.42-09-Mastic 1 472200239-0009A | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 5 | | |

Initial report from: 12/20/2022 18:02:14



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EMSL Order: 472200239

Customer ID: MECA62

Customer PO: RB121422

Project ID:

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

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|---|--------------------------------------|--------------|--|-------------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 22.12.14.42-09-Mastic 2 472200239-0009B | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | Brown Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-09-Leveler 472200239-0009C | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-10-Base Cove 472200239-0010 | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-10-Mastic 1 472200239-0010A | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-10-Mastic 2 472200239-0010B | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | Brown Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-10-Leveler 472200239-0010C | RM 6123 - 4" TAN BASECOVE + YELLOW MASTIC | White Non-Fibrous Homogeneous | HA: 5 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-11 472200239-0011 | RM 6123 - YELLOW CARPET MASTIC UNDER GRAY CARPET | Brown Non-Fibrous Homogeneous | HA: 6 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-12 472200239-0012 | RM 6123 - YELLOW CARPET MASTIC UNDER GRAY CARPET | Yellow Non-Fibrous Homogeneous | HA: 6 | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| 22.12.14.42-13-Carpent 472200239-0013 | RM 6102 - CLEAR ADHESIVE ON BLUE CARPET | Blue Fibrous Homogeneous | HA: 7 | 40% Synthetic 60% Non-fibrous (Other) | None Detected |
| 22.12.14.42-13-Adhesiv e 472200239-0013A | RM 6102 - CLEAR ADHESIVE ON BLUE CARPET | | HA: 7 | | Layer Not Present |
| 22.12.14.42-14-Carpent 472200239-0014 | RM 6102 - CLEAR ADHESIVE ON BLUE CARPET | Blue Fibrous Homogeneous | HA: 7 | 40% Synthetic 60% Non-fibrous (Other) | None Detected |
| 22.12.14.42-14-Adhesiv e 472200239-0014A | RM 6102 - CLEAR ADHESIVE ON BLUE CARPET | | HA: 7 | | Layer Not Present |
| 22.12.14.42-15-Base Cove 472200239-0015 | RM 6102 - 6" BROWN BASECOVE + BROWN MASTIC | Brown Non-Fibrous Homogeneous | HA: 8 | 80% Matrix 20% Non-fibrous (Other) | None Detected |

Initial report from: 12/20/2022 18:02:14



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EMSL Order: 472200239

Customer ID: MECA62

Customer PO: RB121422

Project ID:

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

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|---|--|---|--------------|---------------------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 22.12.14.42-15-Mastic 472200239-0015A | RM 6102 - 6" BROWN BASECOVE + BROWN MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 8 | | |
| 22.12.14.42-16-Base Cove 472200239-0016 | RM 6102 - 6" BROWN BASECOVE + BROWN MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 8 | | |
| 22.12.14.42-16-Mastic 472200239-0016A | RM 6102 - 6" BROWN BASECOVE + BROWN MASTIC | Brown Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 8 | | |
| 22.12.14.42-17 472200239-0017 | RM 0625 - MASTIC UNDER GRAY CARPET | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 9 | | |
| 22.12.14.42-18 472200239-0018 | RM 0625 - MASTIC UNDER GRAY CARPET | Beige Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 9 | | |
| 22.12.14.42-19-Base Cove 472200239-0019 | RM 0625 - 6" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 10 | | |
| 22.12.14.42-19-Mastic 472200239-0019A | RM 0625 - 6" TAN BASECOVE + YELLOW MASTIC | Tan/White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 10 | | |
| 22.12.14.42-20-Base Cove 472200239-0020 | RM 0625 - 6" TAN BASECOVE + YELLOW MASTIC | Tan Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 10 | | |
| 22.12.14.42-20-Mastic 472200239-0020A | RM 0625 - 6" TAN BASECOVE + YELLOW MASTIC | Tan/White Non-Fibrous Homogeneous | | 80% Matrix 20% Non-fibrous (Other) | None Detected |
| | | | HA: 10 | | |

Analyst(s)

Christian Albayaide (22)

Jonathan Nomura (22)

Jonathan Nomura, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Santa Clara, CA NVLAP Lab Code 600318-0

Initial report from: 12/20/2022 18:02:14

Row ID → T026288



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

472200239

EMSL ANALYTICAL, INC.
464 McCormick Street
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

| Company: Millennium Consulting Associates | | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** | |
|---|---|--|-------------------------------------|
| Street: 4683 Chabot Drive, Suite 380 | | Third Party Billing requires written authorization from third party | |
| City: Pleasanton | State/Province: CA | Zip/Postal Code: 94588 | Country: USA |
| Report To (Name): Sarah Anderson-Flores sanderson@mecaenviro.com | | Fax #: (925) 808-6708 | |
| Telephone #: (925) 808-6700 | | Email Address: jfeiner@mecaenviro.com | |
| Project Name/Number: 21014.2008 Main Hospital UCDCM Carpet M053094 | | | |
| Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email | | Purchase Order: RB121422 | U.S. State Samples Taken: CA |
| Turnaround Time (TAT) Options* - Please Check | | | |
| <input type="checkbox"/> 3 Hour | <input type="checkbox"/> 6 Hour | <input type="checkbox"/> 24 Hour | <input type="checkbox"/> 48 Hour |
| <input type="checkbox"/> 72 Hour | <input type="checkbox"/> 96 Hour | <input checked="" type="checkbox"/> 1 Week | <input type="checkbox"/> 2 Week |
| *For TEM Air 3 hours/6 hours, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. | | | |
| PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%) | | TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | |
| <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) | | Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) | |
| <input type="checkbox"/> Other: | | <input type="checkbox"/> Other: | |
| <input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group | | | |
| (Samplers Name): Rachel Braun | | (Samplers Signature): Rachel Braun | |
| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
| 22.12.14.42-01 | rm 4132B: 6" tan basecove + mastic | | 12/14/22; 2 pm |
| 22.12.14.42-02 | rm 4132B: 6" tan basecove + mastic | | 12/14/22; 2 pm |
| 22.12.14.42-03 | rm 4132B carpet mastic | | 12/14/22; 2 pm |
| 22.12.14.42-04 | rm 4132B carpet mastic | | 12/14/22; 2 pm |
| 22.12.14.42-05 | rm 61303 12X12 floor tile, tan + black mastic | | 12/14/22; 2 pm |
| 22.12.14.42-06 | rm 61303 12X12 floor tile, tan + black mastic | | 12/14/22; 2 pm |
| 22.12.14.42-07 | rm 61303 6" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| 22.12.14.42-08 | rm 61303 6" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| (Client Sample # (s): 22.12.14.42-01 - 22.12.14.42-20 | | (Total # of Samples): 20 | |
| (Relinquished (Client): Rachel Braun | | (Date): 12/14/22 | (Time): 5:00 pm |
| Received (Lab): SG FX | | Date: 12-15-2022-0915 | Time: |
| Comments/Special Instructions: C76 FX 12-19-22 4PM | | | |

Handwritten signatures and date:
12-20-2022



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

472200239

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

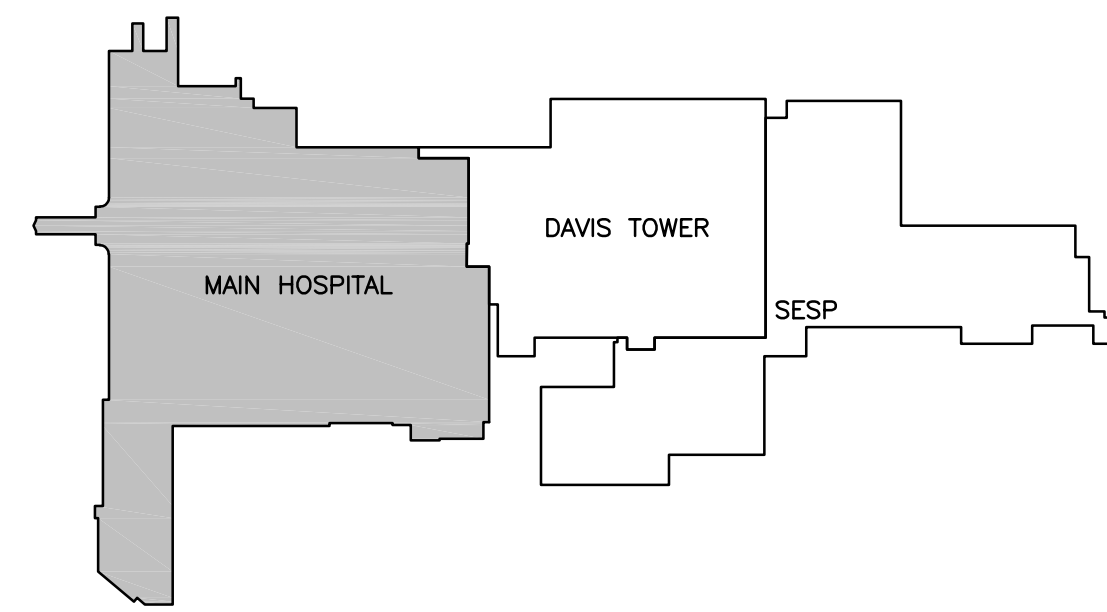
Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|----------------|--|----------------------------------|----------------------|
| 22.12.14.42-09 | rm 6123 4" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| 22.12.14.42-10 | rm 6123 4" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| 22.12.14.42-11 | rm 6123 yellow carpet mastic under gray carpet | | 12/14/22; 2 pm |
| 22.12.14.42-12 | rm 6123 yellow carpet mastic under gray carpet | | 12/14/22; 2 pm |
| 22.12.14.42-13 | rm 6102 clear adhesive on blue carpet | | 12/14/22; 2 pm |
| 22.12.14.42-14 | rm 6102 clear adhesive on blue carpet | | 12/14/22; 2 pm |
| 22.12.14.42-15 | rm 6102 6" brown basecove + brown mastic | | 12/14/22; 2 pm |
| 22.12.14.42-16 | rm 6102 6" brown basecove + brown mastic | | 12/14/22; 2 pm |
| 22.12.14.42-17 | rm 0625 mastic under gray carpet | | 12/14/22; 2 pm |
| 22.12.14.42-18 | rm 0625 mastic under gray carpet | | 12/14/22; 2 pm |
| 22.12.14.42-19 | rm 0625 6" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| 22.12.14.42-20 | rm 0625 6" tan basecove + yellow mastic | | 12/14/22; 2 pm |
| | | | |
| | | | |
| | | | |
| | | | |

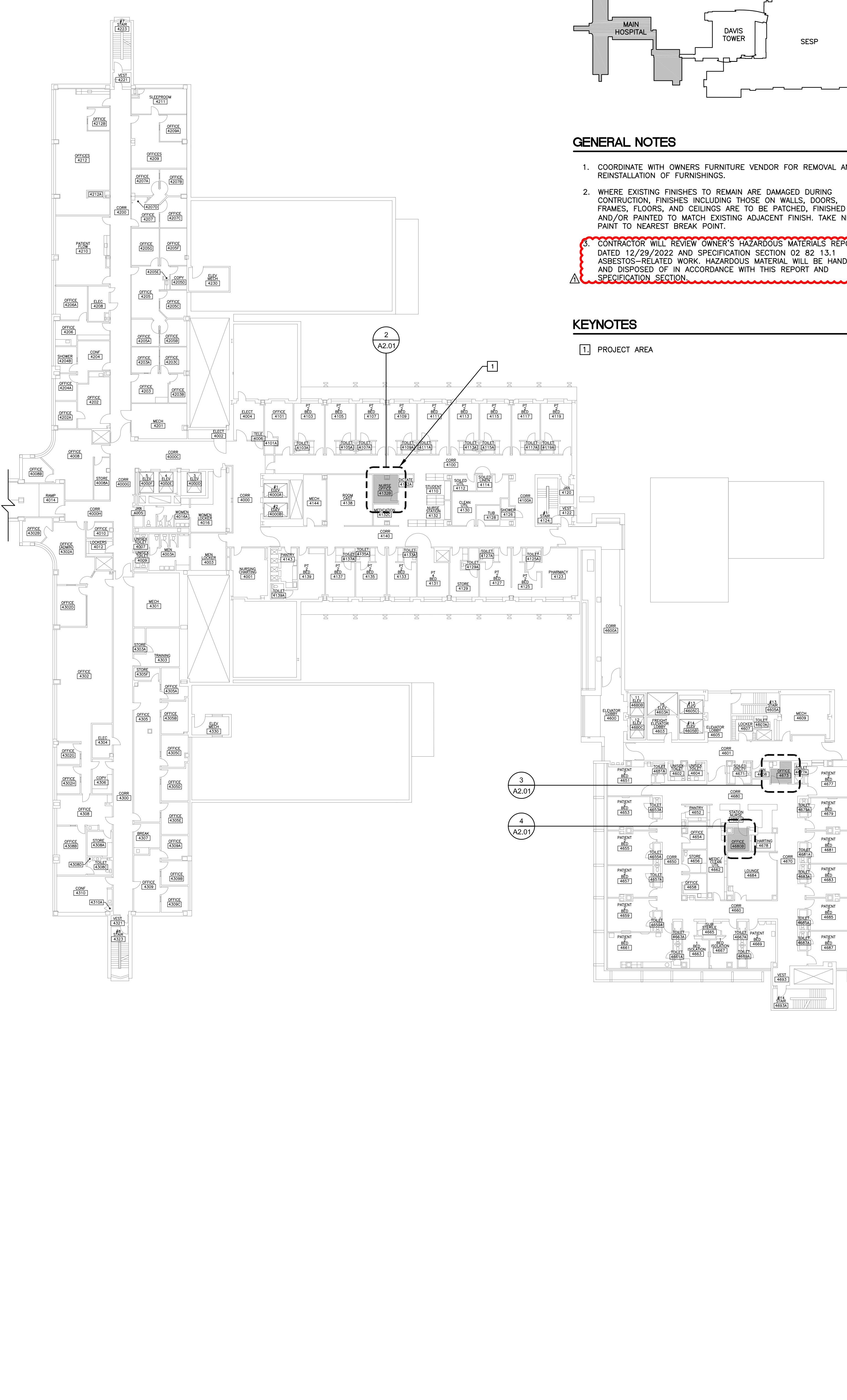
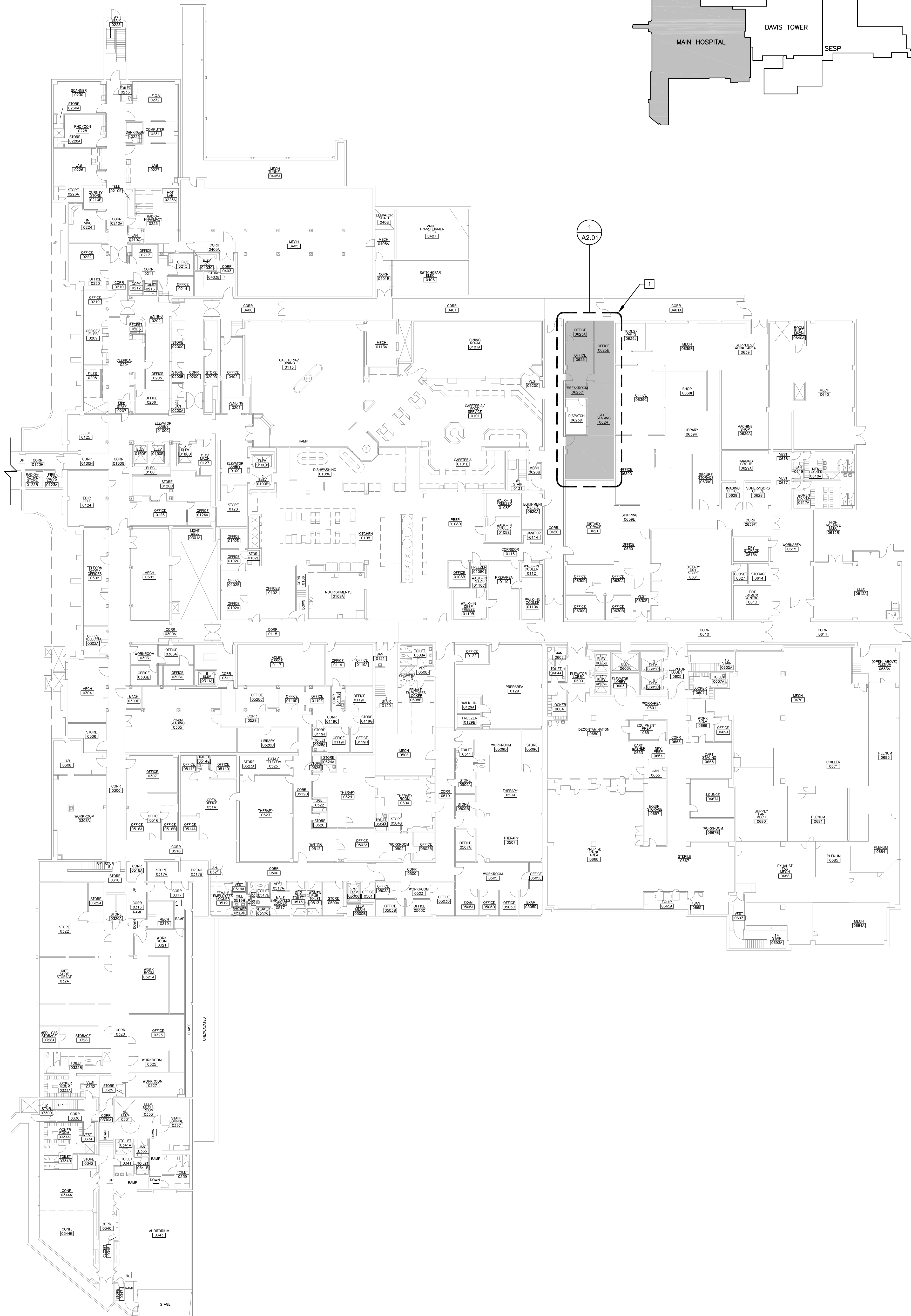
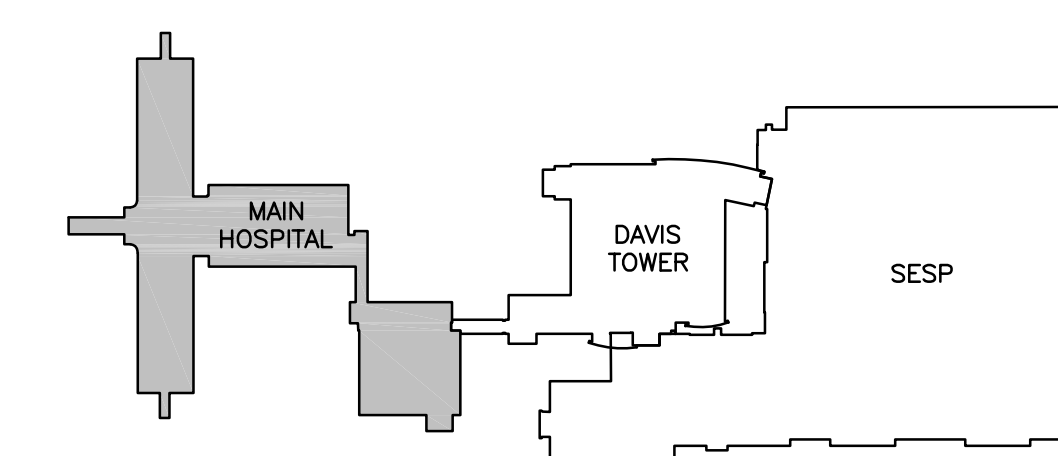
*Comments/Special Instructions:
 Received: SG FX
 12152022-0915
 C75 FX 12-19-22 4pm

dm alm
12-20-2022

KEY PLAN



KEY PLAN



GENERAL NOTES

1. COORDINATE WITH OWNERS FURNITURE VENDOR FOR REMOVAL AND REINSTALLATION OF FURNISHINGS.
2. WHERE EXISTING FINISHES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, FINISHES INCLUDING THOSE ON WALLS, DOORS, FRAMES, FLOORS, AND CEILINGS ARE TO BE PATCHED, FINISHED AND/OR PAINTED TO MATCH EXISTING ADJACENT FINISH. TAKE NEW PAINT TO NEAREST BREAK POINT.
3. CONTRACTOR WILL REVIEW OWNER'S HAZARDOUS MATERIALS REPORT DATED 12/29/2022 AND SPECIFICATION SECTION 02 82 13.1 ASBESTOS-RELATED WORK. HAZARDOUS MATERIAL WILL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THIS REPORT AND SPECIFICATION SECTION.

KEYNOTES

- 1 PROJECT AREA

UC DAVIS HEALTH
 FACILITIES DESIGN & CONSTRUCTION
 4800 2ND AVENUE SUITE 3010
 SACRAMENTO, CALIFORNIA 95817
 (916) 734-7024

CONSULTANTS: **BLACOM** ARCHITECTURE AND PROJECT MANAGEMENT
 2300 J STREET, SACRAMENTO, CA 95811
 TEL: 916-485-8800 FAX: 916-485-7977
 WWW.BLACOM.COM

STAMPS OF RECORD:
 LESLIE THOMAS
 C-29864
 EXPIRES: 12/31/2024

| THIS ISSUE | ISSUED FOR: | DATE |
|------------|--------------|----------|
| ● | PLAN REVIEW | 11-18-22 |
| ● | BIDDING | 12-1-22 |
| ● | CONSTRUCTION | |

| REV | REVISION DESCRIPTION | DATE |
|-----|----------------------|---------|
| ▲ | ADDENDUM NO. 1 | 1-30-23 |

100% CONSTRUCTION DOCUMENTS

ACCOUNT NO. M053094
 PROJECT NO. 2022-0001
 PROJECT TITLE: MAIN HOSPITAL GROUND AND FOURTH FLOORS
 SHEET TITLE: MAIN HOSP/DT/SESP PCS CARPET REMOVAL OVERALL MAIN HOSPITAL GROUND & 4TH FLOOR PLANS

AGENCY APPROVAL

1 OVERALL MAIN HOSPITAL GROUND FLOOR PLAN
 SCALE: 3/64" = 1'-0"

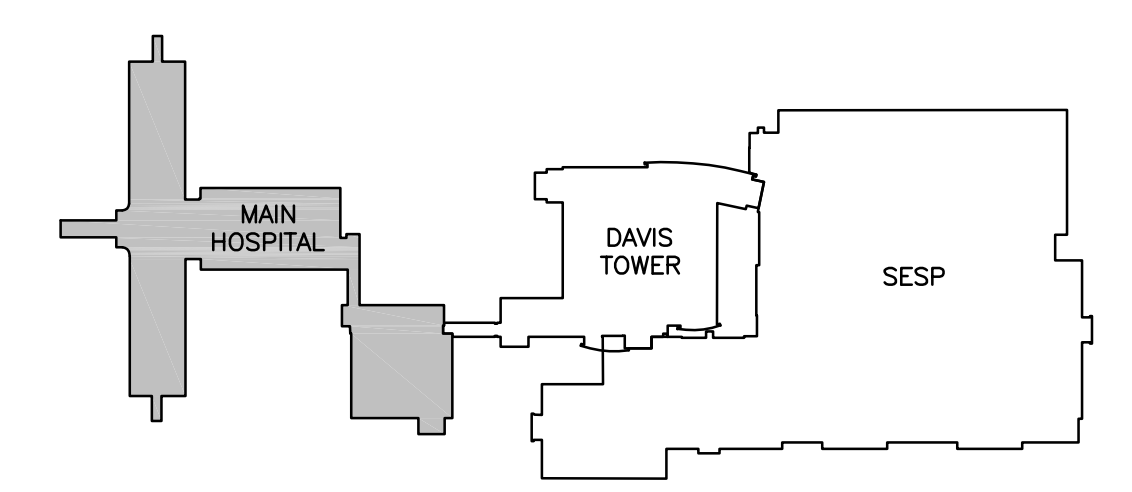
2 PARTIAL OVERALL MAIN HOSPITAL FOURTH FLOOR PLAN
 SCALE: 3/64" = 1'-0"

| ARCH.\ENGR. | FD&C JOB NO. | SHEET NO. |
|-----------------------|----------------|-----------|
| L. THOMAS | | A1.01 |
| UCDMC PROJECT MANAGER | SCALE AS SHOWN | |
| K. LAKE | DATE | |
| DESIGNED BY | CAD FILE | SHEET OF |
| LT | | |

CONSULTANTS: **BLACEDINI** ARCHITECTURE AND PROJECT MANAGEMENT
 2300 J STREET, SACRAMENTO, CA 95811
 TEL: 916-484-8800 FAX: 916-484-7977
 WWW.BLACEDINI.COM

STAMPS OF RECORD:
 LESLIE THOMAS
 C-29864
 REGISTERED ARCHITECT
 STATE OF CALIFORNIA

KEY PLAN

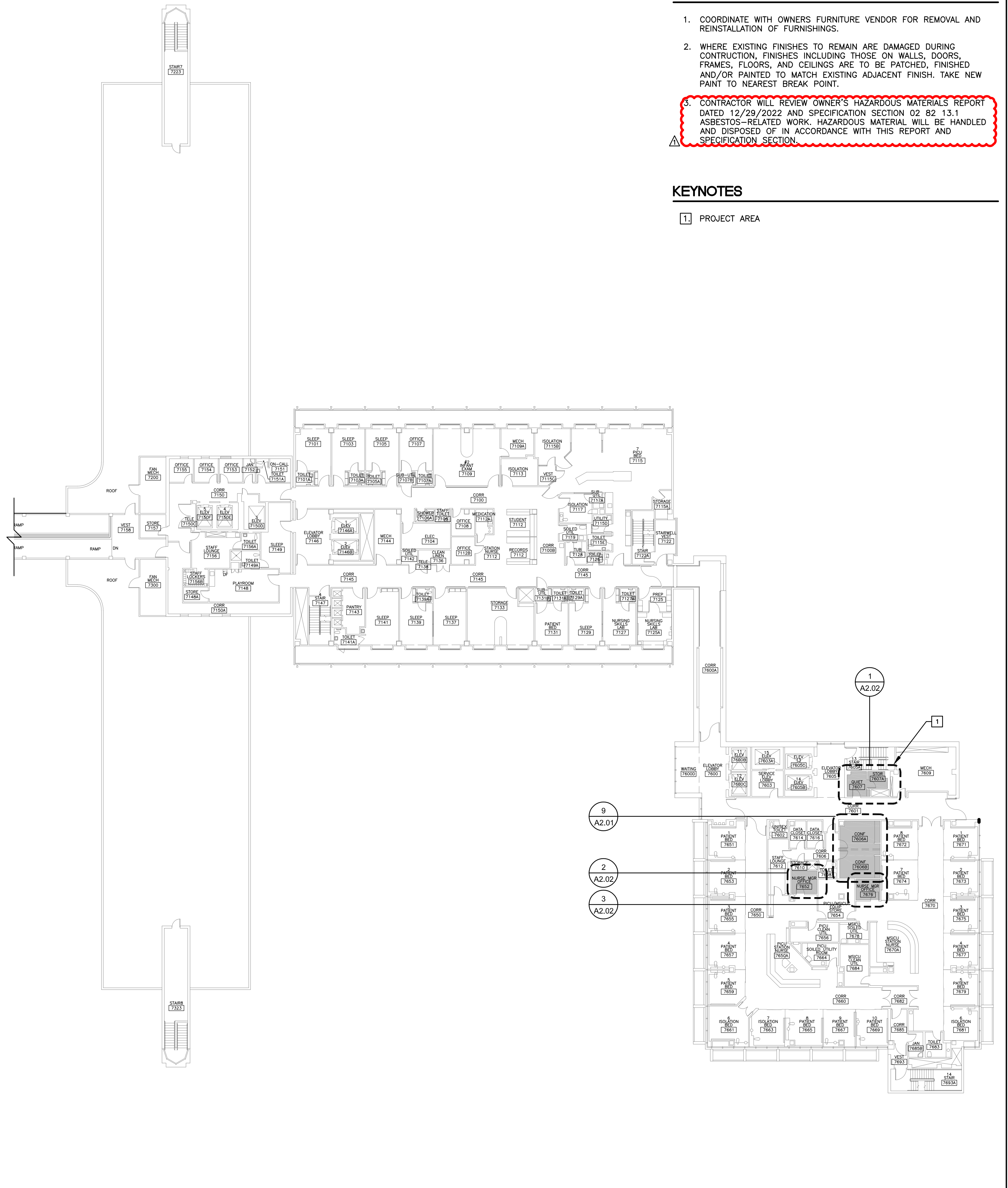
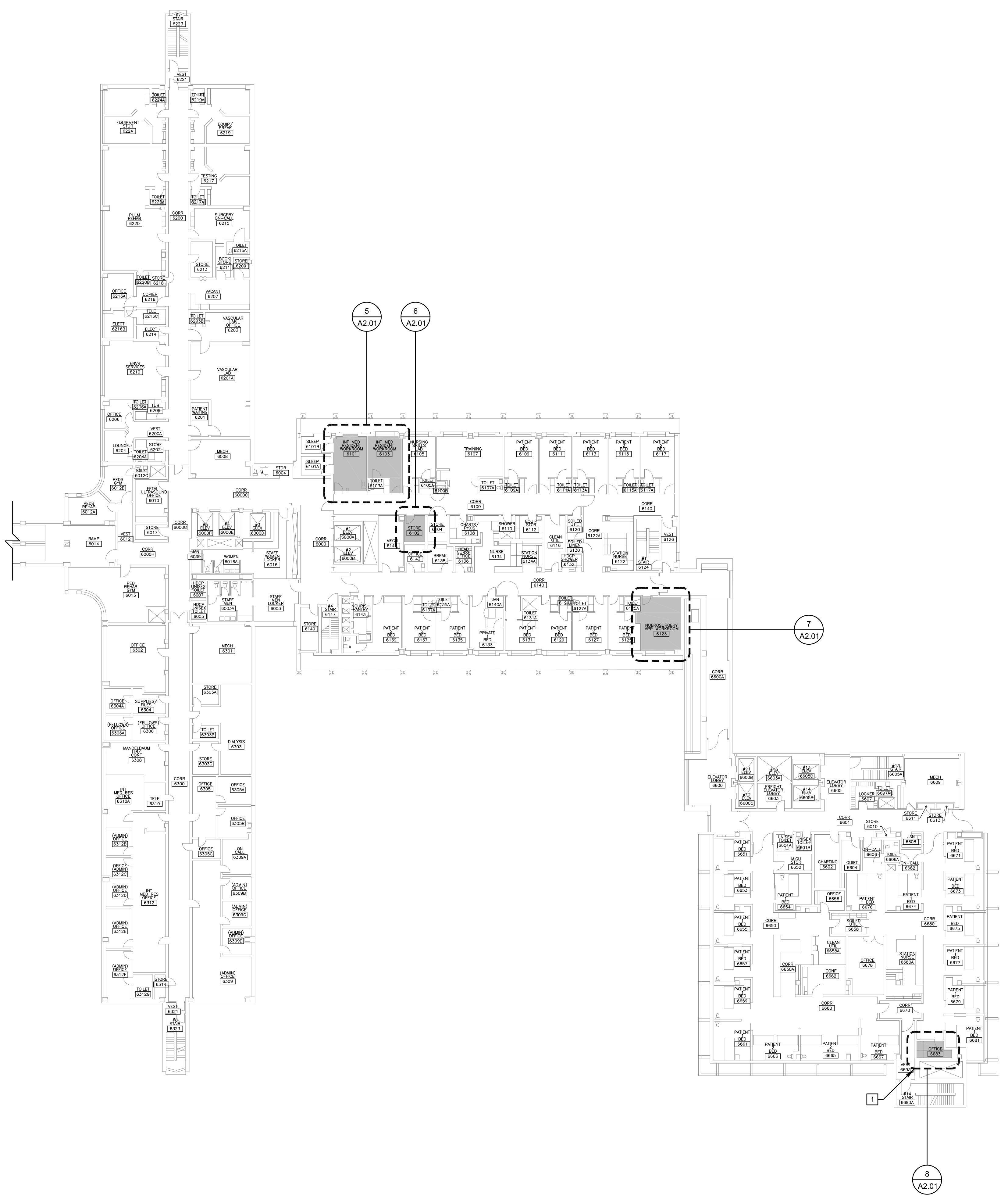


GENERAL NOTES

- COORDINATE WITH OWNERS FURNITURE VENDOR FOR REMOVAL AND REINSTALLATION OF FURNISHINGS.
- WHERE EXISTING FINISHES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, FINISHES INCLUDING THOSE ON WALLS, DOORS, FRAMES, FLOORS, AND CEILINGS ARE TO BE PATCHED, FINISHED AND/OR PAINTED TO MATCH EXISTING ADJACENT FINISH. TAKE NEW PAINT TO NEAREST BREAK POINT.
- CONTRACTOR WILL REVIEW OWNER'S HAZARDOUS MATERIALS REPORT DATED 12/29/2022 AND SPECIFICATION SECTION 02 82 13.1 ASBESTOS-RELATED WORK. HAZARDOUS MATERIAL WILL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THIS REPORT AND SPECIFICATION SECTION.**

KEYNOTES

- PROJECT AREA



100% CONSTRUCTION DOCUMENTS

ACCOUNT NO. **M053094**
 FLOOR/NO. **SIXTH AND SEVENTH FLOORS**
 PROJECT TITLE: **MAIN HOSP/D/T/SESP
 PCS CARPET REMOVAL**
 SHEET TITLE: **OVERALL MAIN HOSPITAL
 6TH AND 7TH FLOOR PLANS**

AGENCY APPROVAL

1 PARTIAL OVERALL MAIN HOSPITAL SIXTH FLOOR PLAN
 SCALE: 3/64" = 1'-0"

2 PARTIAL OVERALL MAIN HOSPITAL SEVENTH FLOOR PLAN
 SCALE: 3/64" = 1'-0"

| | | |
|---|--|---------------------------|
| ARCH.\ENGR. L. THOMAS | FD&C JOB NO. SCALE AS SHOWN | SHEET NO. A1.02 |
| UCDMC PROJECT MANAGER K. LAKE | DATE | |
| DESIGNED BY LT | CAD FILE | SHEET OF |
| DRAWN BY LT | | |

CONSULTANTS: **DLACOR**
 ARCHITECTURE AND PROJECT MANAGEMENT
 2300 J STREET, SACRAMENTO, CA 95811
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 WWW.DLACORARCH.COM

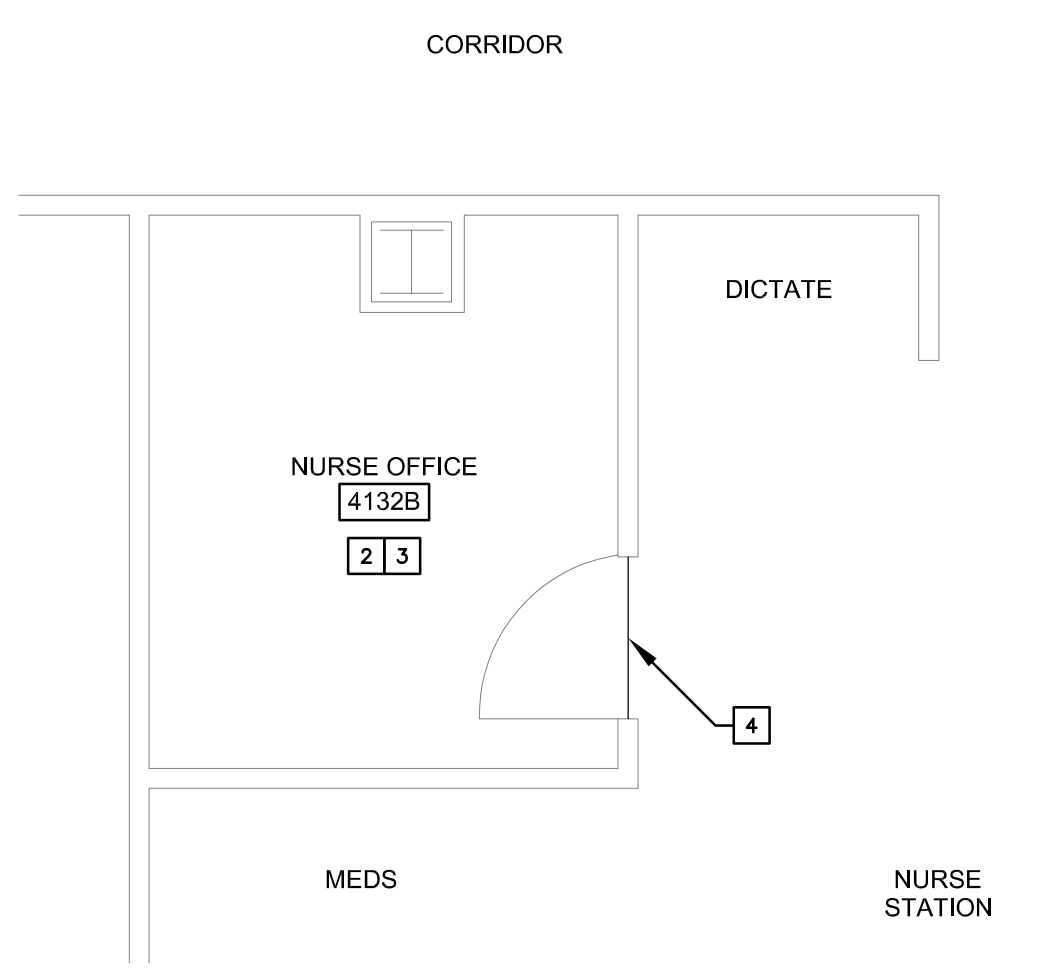
STAMPS OF RECORD:
 LESLIE THOMAS
 C-29864
 EXPIRES 12/31/2023

GENERAL NOTES

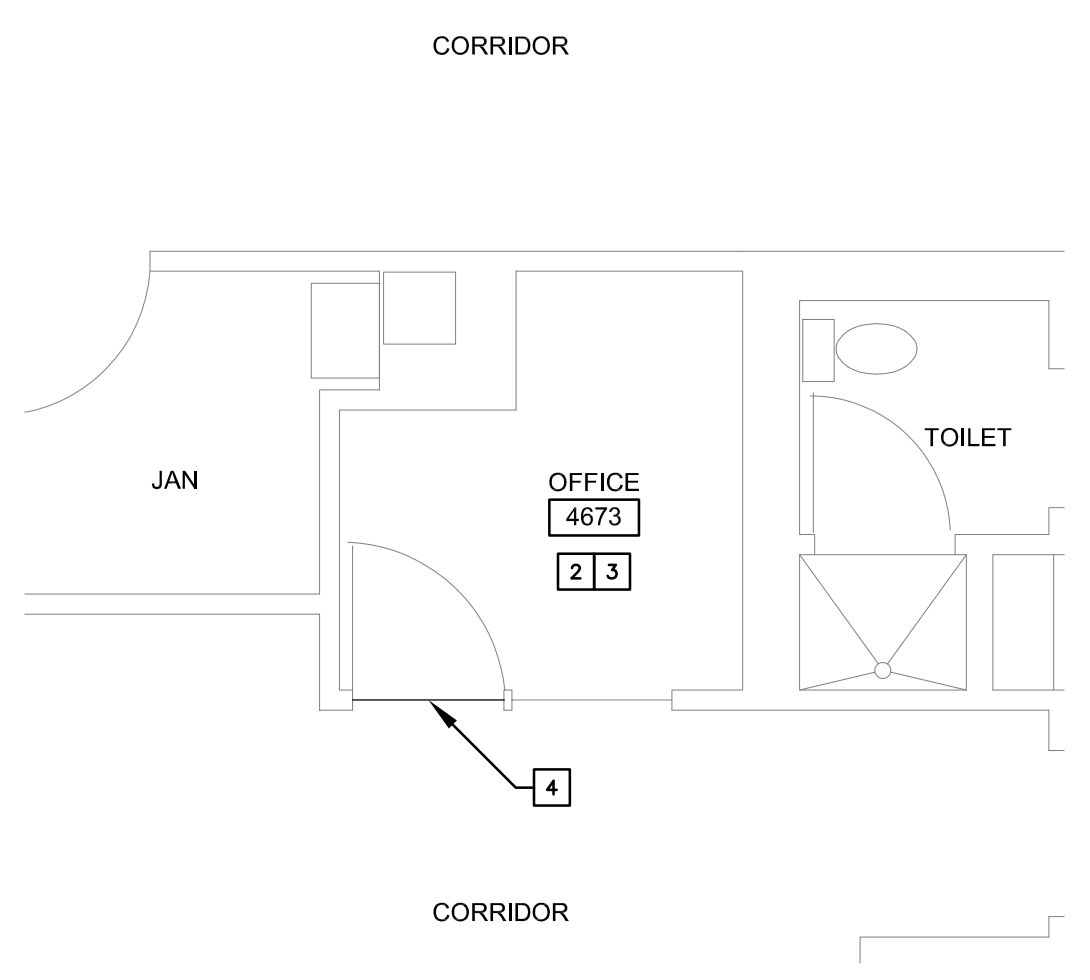
1. COORDINATE WITH OWNERS FURNITURE VENDOR FOR REMOVAL AND REINSTALLATION OF FURNISHINGS.
2. WHERE EXISTING FINISHES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, FINISHES INCLUDING THOSE ON WALLS, DOORS, FRAMES, FLOORS, AND CEILINGS ARE TO BE PATCHED, FINISHED AND/OR PAINTED TO MATCH EXISTING ADJACENT FINISH. TAKE NEW PAINT TO NEAREST BREAK POINT.
3. CONTRACTOR WILL REVIEW OWNER'S HAZARDOUS MATERIALS REPORT DATED 12/29/2022 AND SPECIFICATION SECTION 02 82 13.1 ASBESTOS-RELATED WORK. HAZARDOUS MATERIAL WILL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THIS REPORT AND SPECIFICATION SECTION.

KEYNOTES

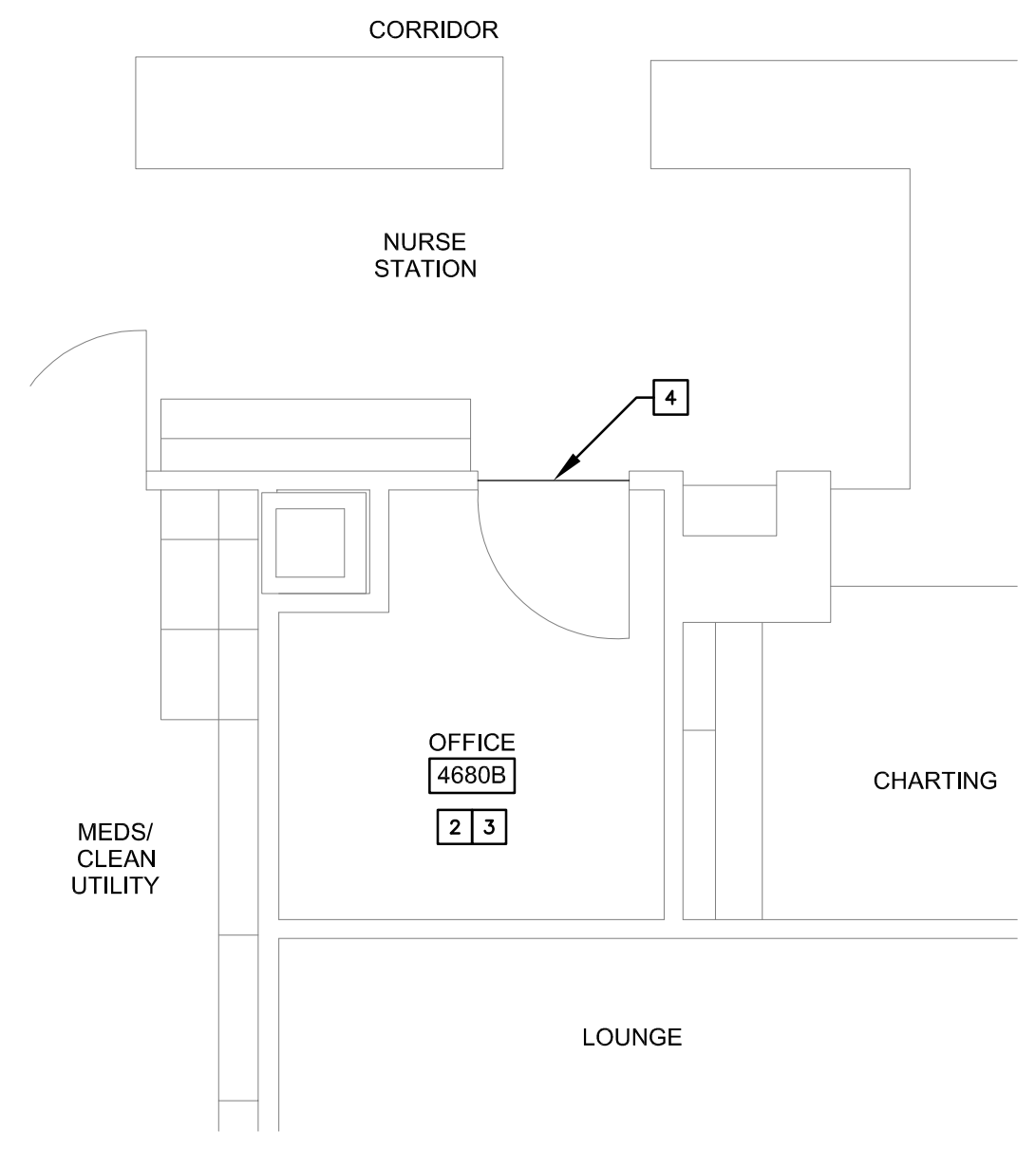
1. ALL FURNISHINGS, EQUIPMENT AND APPLIANCES TO BE REMOVED TO STORAGE BY UCDH
2. REMOVE SYSTEM FURNITURE AND/OR TALL FILE CABINET ATTACHMENTS AND CONNECTIONS, RETAIN ANCHORS FOR REINSTALLATION FOLLOWING FLOOR INSTALLATION. ALL FURNISHINGS, EQUIPMENT AND APPLIANCES TO BE REMOVED TO STORAGE BY UCDH
3. DEMOLISH FLOOR FINISH, TRANSITION STRIPS AND WALL BASE. INSTALL NEW LUXURY VINYL PLANK FLOORING. TRANSITION STRIP WHERE NEW FLOORING HEIGHT VARIES FROM EXISTING OR IS A DIFFERENT MATERIAL AND 6" WALL BASE
4. DEMOLISH FLOOR FINISH TO EDGE OF EXISTING FLOORING TO REMAIN
5. DEMOLISH FLOOR FINISH TO CENTERLINE OF CLOSED DOORS AT DOOR OPENINGS
6. EXISTING OPERABLE FOLDING WALL ROOM DIVIDER. INSTALL NEW FLOORING CONTINUOUS IN BOTH ROOMS AND INTO PANEL STORAGE POCKET
7. DEMOLISH TRANSITION STRIP AT FLOORING CHANGE IN THIS ROOM
8. NEW FLOORING CAN BE CONTINUOUS THROUGH DOOR INTO ADJACENT ROOM ALSO SCHEDULED FOR NEW FLOORING OR CAN BE INSTALLED TO CENTERLINE OF CLOSED DOOR TO ACCOMMODATE CHANGE IN PATTERN LAYOUT AS NEEDED
9. REMOVE NIGHT LATCH FLOOR RECEPTOR HARDWARE AND RETAIN FOR REINSTALLATION. NEATLY CUT OR TRIM NEW FLOORING AS REQUIRED TO REINSTALL NIGHT LATCH FLOOR RECEPTOR SO RECEPTOR PLATE COMPLETELY COVERS THE CUT FLOORING EDGES
10. DEMOLISH NIGHT LATCH FLOOR RECEPTOR HARDWARE. CLEAN, PRIME AND PATCH HOLE IN CONCRETE DECK WITH SELF-LEVELING CONCRETE PER FLOORING MANUFACTURER'S RECOMMENDATION



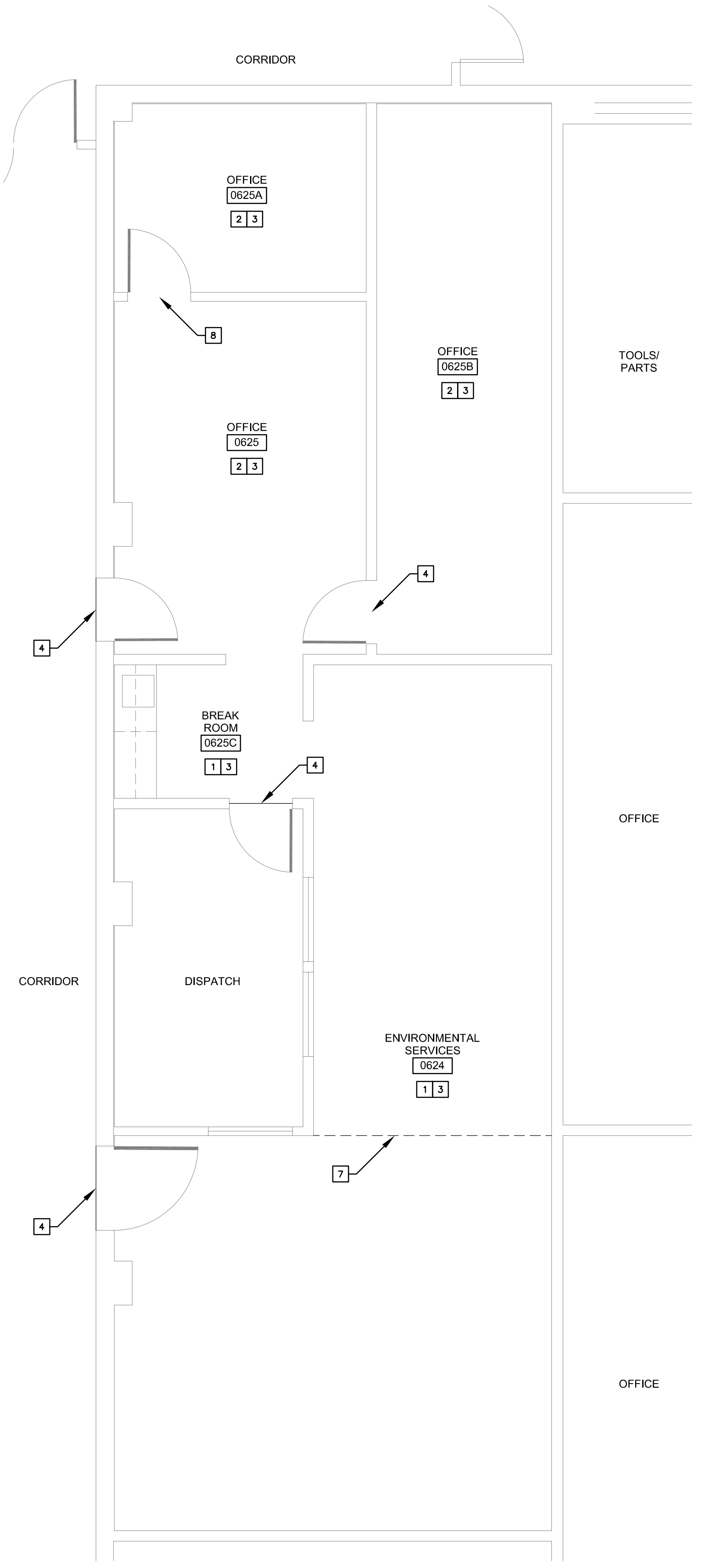
2 PARTIAL PLAN MAIN HOSPITAL RM 4132B
 SCALE: 1/4" = 1'-0"



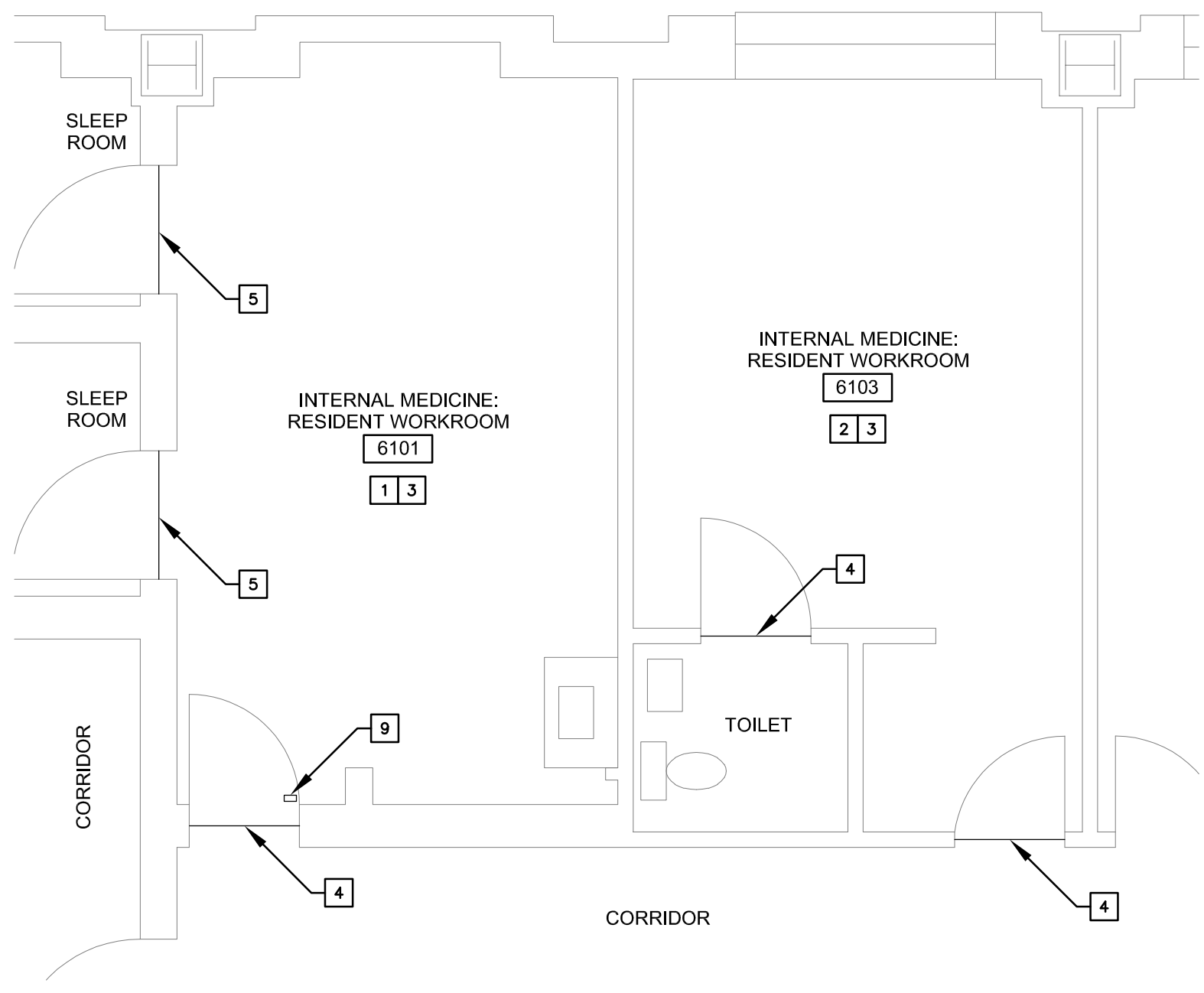
3 PARTIAL PLAN MAIN HOSPITAL RM 4673
 SCALE: 1/4" = 1'-0"



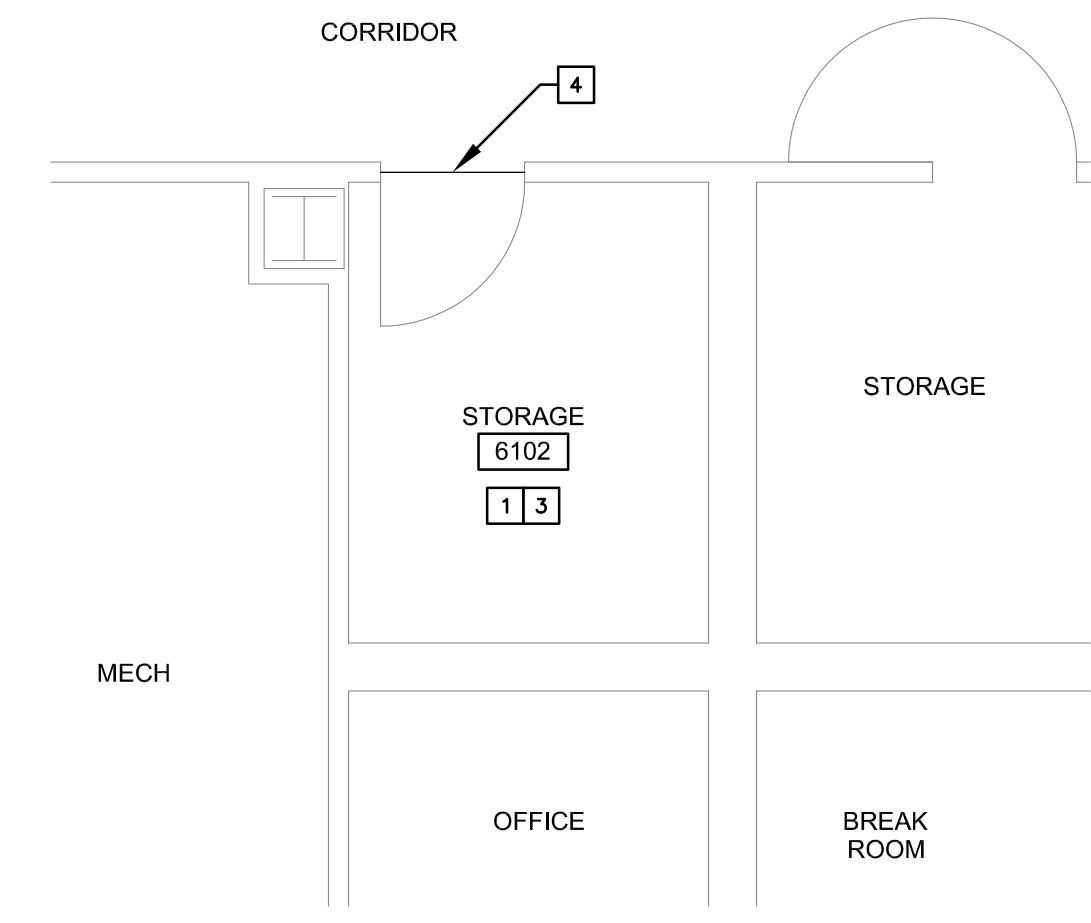
4 PARTIAL PLAN MAIN HOSPITAL RM 4680B
 SCALE: 1/4" = 1'-0"



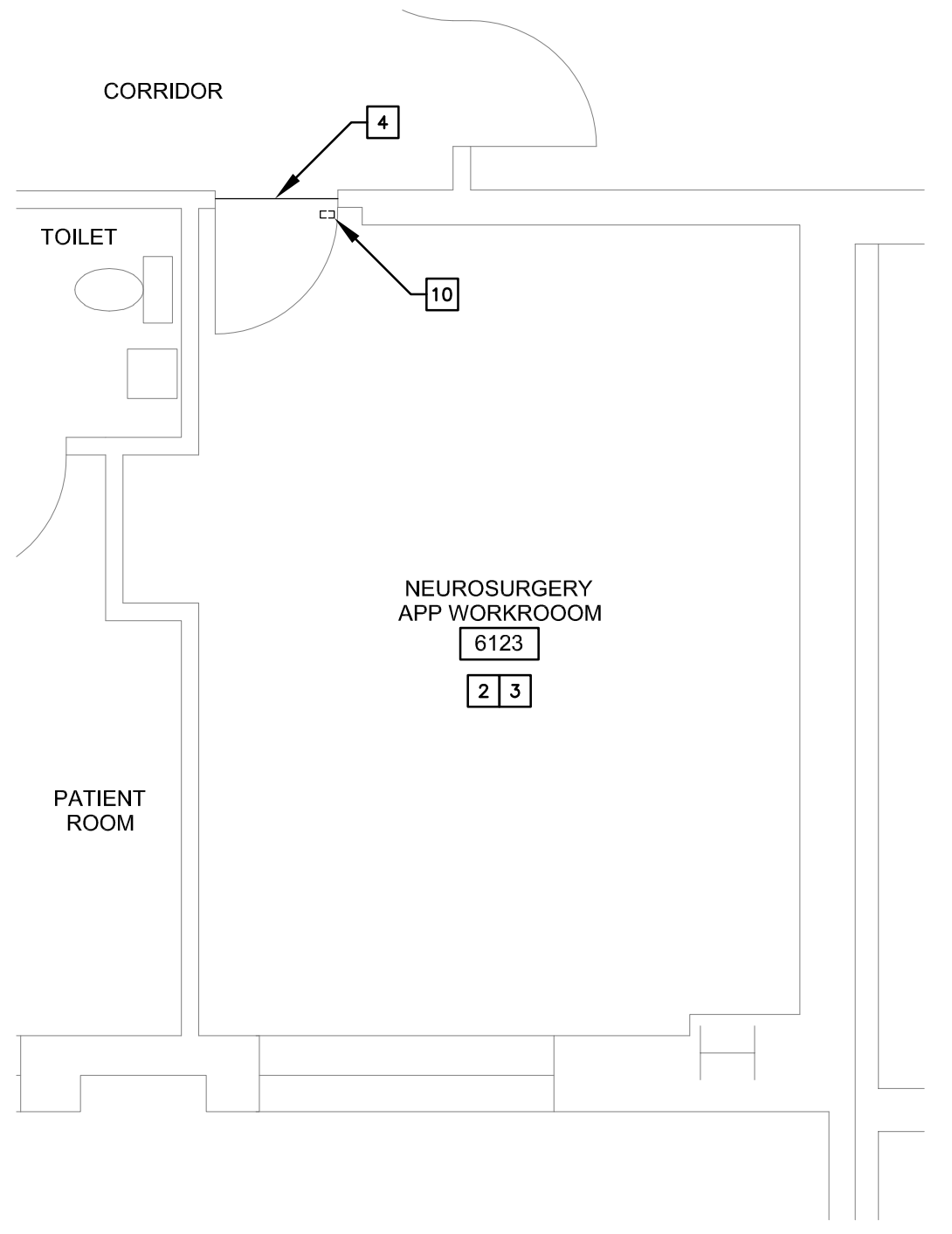
1 PARTIAL PLAN MAIN HOSPITAL ROOMS 0624 AND 0625
 SCALE: 1/4" = 1'-0"



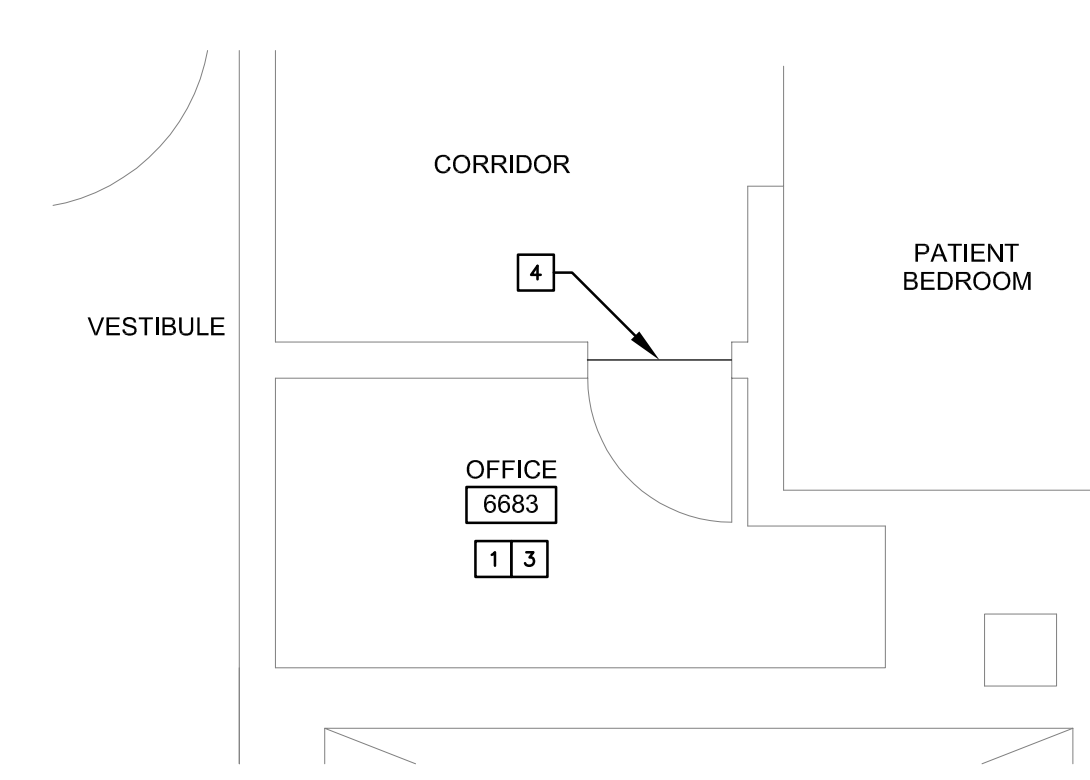
5 PARTIAL PLAN MAIN HOSPITAL ROOM 6101 AND 6103
 SCALE: 1/4" = 1'-0"



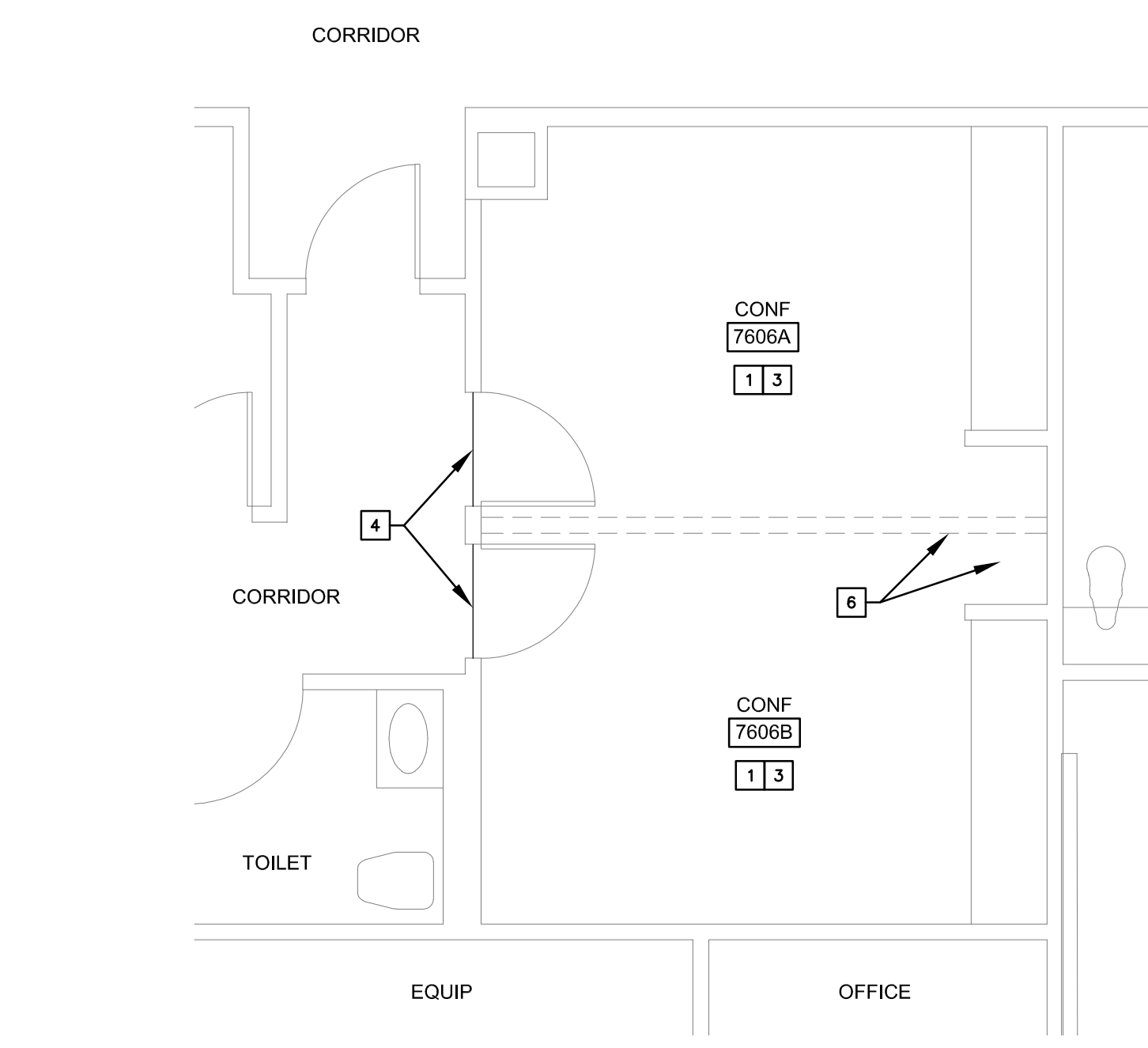
6 PARTIAL PLAN MAIN HOSPITAL RM 6102
 SCALE: 1/4" = 1'-0"



7 PARTIAL PLAN MAIN HOSPITAL RM 6123
 SCALE: 1/4" = 1'-0"



8 PARTIAL PLAN MAIN HOSPITAL RM 6683
 SCALE: 1/4" = 1'-0"



9 PARTIAL PLAN MAIN HOSPITAL ROOMS 7606A AND 7606B
 SCALE: 1/4" = 1'-0"

100% CONSTRUCTION DOCUMENTS

ACCOUNT NO: **M053094**
 PROJECT TITLE: **MAIN HOSPITAL - ENLARGED PLANS**
 PROJECT TITLE: **MAIN HOSP/DT/SESP PCS CARPET REMOVAL**
 PROJECT TITLE: **MAIN HOSP/DT/SESP PCS CARPET REMOVAL**
 PROJECT TITLE: **MAIN HOSP/DT/SESP PCS CARPET REMOVAL**

AGENCY APPROVAL

| | | |
|----------------------------------|-----------------------------------|---------------------------|
| ARCH/ENGR. L. THOMAS | FD&C JOB NO. SCALE AS SHOWN | SHEET NO. A2.01 |
| UCDMC PROJECT MANAGER K. LAKE | DESIGNED BY LT | DRAWN BY LT |
| | DATE | CAD FILE |
| | | SHEET OF |