ASBESTOS, LEAD BASED PAINT, AND HAZARDOUS MATERIAL REMOVAL WORK PLAN

For

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NEW ORLEANS, LOUISIANA

Prepared for

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SCHEMATIC DESIGN SUBMISSION – NOT FOR CONSTRUCTION

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SECTION 1.0 - SUMMARY OF WORK

1.1. GENERAL

1.1.1. This Asbestos Removal Guide or Work Plan gives the proper removal, transportation and disposal procedures to be used by FirstLine Schools for the selected Abatement Contractor for the safe removal of the following asbestos-containing building materials (ACBMs).

Table A: Summary of Identified ACBMs in Building 1 (Gymnasium)

HA	Sample #	Material Description	Material Location	Approx. Qty.	Percent Asbestos	NESHAP Category
NA	NA	Cementitious Window Panel (TRANSITE)	1st Floor	25 sq. ft.	Assumed ACM	Cat II

(1) Square feet = sq. ft., Linear feet = lin. ft., Not Applicable = NA

Table B: Summary of Identified ACBMs in Building 2 (Main School Building)

HA	Sample #	Material Description	Material Location	Approx. Qty.	Percent Asbestos	NESHAP Category
NA	NA	Black Chalkboards and Black Glue Dots	2nd and 3rd Floor Classrooms	1,250 sq. ft.	Assumed ACM	Cat II
NA	NA	ACM Debris in Debris Piles	1st, 2nd, and 3rd Floors	600 cu. yd.	Assumed ACM	RACM
002	004 005 006	1' X 1' White Floor Tile and Black Mastic	1st Floor Foyer (Under Carpet) and Offices	1,500 sq. ft.	FT 2% Ch MS 2% Ch	Cat I/II
003	007 008 009	1' X 1' Beige Floor Tile and Black Mastic	Kitchen and Cafeteria (Large Common Area)	5,000 sq. ft.	FT 2% Ch MS 2% Ch	Cat I/II
005	013 014 015	9" X 9" Red Floor Tile and Black Mastic	Reception Office, East Hall Entrance (Multi-Layer), Staircase Landings	450 sq. ft.	FT 2% Ch MS 2% Ch	Cat I/II
006	016 017 018	9" X 9" White Floor Tile and Black Mastic	Pantry and Classroom across from Kitchen	1,000 sq. ft.	FT 2% Ch MS 2% Ch	Cat I/II
007	019 020 021	9" X 9" Brown Floor Tile and Black Mastic	Hall near East Entrance, 1st Floor NE Classroom, 2nd Floor Class Rooms, 3rd Floor Classroom	7,250 sq. ft.	FT 5% Ch MS NAD	Cat I
016	046 047 048	3" OD White Pipe Insulation	1st Floor Above Ceiling	175 lin. ft.	15% Am	RACM
017	049 050 051	3" OD White Mudded Pipe Fitting	1st Floor Above Ceiling	25 Fittings	5% Ch	RACM
018	052 053 054	4" OD White Pipe Insulation	1st Floor Above Ceiling	100 lin. ft.	20% Am and 8% Ch	RACM
019	055 056	4" OD Gray Mudded Pipe Fitting	1st Floor Above Ceiling	8 Fittings	20% Am and 2% Ch	RACM

	057					
020	058 059 060	6" OD White Pipe Insulation	1st Floor Above Ceiling	250 lin. ft.	30% Am	RACM
021	061 062 063	6" OD Gray Mudded Pipe Fitting	1st Floor Above Ceiling	25 Fittings	5% Ch	RACM
023	067 068 069	9" x 9" Black Floor Tile and Black Mastic	Stairwell Landings, 2nd Floor Hall, 2nd Floor Closets, 3rd Floor Hall (below carpet), 3rd Floor Closets	750 sq. ft.	FT 5% Ch MS 2% Ch	Cat I/II

(1) Square feet = sq. ft., Linear feet = lin. ft., Cubic yards = cu. yd., Not Applicable = NA

Table C: Summary of Identified ACBMs in Building 3 (Fire Damage Building)

HA	Sample #	Material Description	Material Location	Approx. Qty.	Percent Asbestos	NESHAP Category
01	001 002 003	9" X 9" White Floor Tile and Black Mastic (mixed with building ruble)	Building 3 Ruble	1,000 cu. yd.	FT 3% Ch MS 5% Ch	RACM

(1) Square feet = sq. ft., Linear feet = lin. ft., Cubic yard = cu. yd., Not Applicable = NA

1.2. PROPERTY DESCRIPTION

1.2.1 The subject property encompasses approximately 1.5 acres of land, improved with three (3) buildings that made up the former St. John Vianney Preparatory School campus. The buildings encompass approximately 24,000 square feet of space. The subject property is bordered by Dixon Street to the northeast, Palmetto Street the southwest, a church followed to the southeast, and Monroe Street to the northwest. The school facility was damaged by Hurricane Katrina in August 2005 has remained closed since that time.

1.2.2 The individual buildings at the subject property included in this assessment include the following structures:

Building 1 – a two-story structure used as a gymnasium. The structure encompasses approximately 15,000 square feet. The building is constructed on top of a re-enforced concrete slab with re-enforced concrete floors and walls with brick walls. The building is constructed with flat roofs.
Building 2 - a three-story structure used as the main school building. The structure encompasses approximately 7,000 square feet. The building is constructed with steel framing and re-enforced concrete slab and floor deck. The building has a brick exterior. The building also has pitched and flat roofs.
Building 3 - a one-story structure that has been significantly damaged by fire and has been reduced to rubble. The structure encompasses approximately 2,500 square feet.

The buildings are not connected by any covered walkways.

1.2.3 Scaled Site Plans of the buildings layout produced by PSI are included with this document. The Drawings include designations for interior spaces that are used to reference the locations of ACBM.

1.3. GENERAL REQUIREMENTS

The Contractor shall get familiarized with the conditions for the project and is responsible for estimating the quantities and verifying the locations of all work to be performed as outlined in this specification. Failure to do so shall not relieve the Contractor of his obligation to furnish all materials and labor necessary to carry out the provisions of the Contract. **The locations and quantities of ACBM must be field verified by the Contractor prior to bidding.**

1.4. CODES AND REGULATIONS

1.4.1. General Applicability of Codes, Regulations and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.

1.4.2. Federal Regulations: Those which govern asbestos abatement work or hauling and disposal of asbestos waste materials including but not limited to the following:

U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA), including but not limited to:

General Industry
Title 29, Part 1910, Section 1001 of the Code of Federal Regulations

Respiratory Protection
Title 29, Part 1910, Section 134 of the Code of Federal Regulations

Construction Industry
Title 29, Part 1926.1101, and 1926.62 of the Code of Federal Regulations

Access to Employee Exposure & Medical Records
Title 29, Part 1910, Section 20 of the Code of Federal Regulations

Hazard Communication
Title 29, Part 1910, Section 1200 of the Code of Federal Regulations

Specifications for Accident Prevention Signs and Tags
Title 29, Part 1910, Section 145 of the Code of Federal Regulations

U.S. Environmental Protection Agency (EPA) including but not limited to:

Worker Protection Rule
40 CFR Part 763, Subpart G
CPTS 62044, FKR 2843-9
Federal Register, Vol. 50, No. 134, 7/12/85
P28530-28540

Regulation for Asbestos
Title 40, Part 61, Subpart A of the
Code of Federal Regulations

National Emission Standard for Asbestos
Title 40, Part 61, Subpart M of the Code of
Federal Regulations including Asbestos NESHAP
Revision; Final Rule, Federal Register;
Tuesday, November 20, 1990

Asbestos Hazard Emergency Response Act (AHERA)
Regulations 40 CFR 763 Subpart E

U.S. Department of Transportation (DOT) including but not limited to:

Hazardous Substances: Final Rule
Regulation 49 CFR, Parts 171 and 172

1.4.3. State and Local Regulations: Abide by all state and local regulations which govern asbestos and lead abatement work or hauling and disposal of waste materials, including but not limited to the Louisiana Department of Environmental Quality (LDEQ) code in title 33 chapter 27. Prior to initiating work, proper written notification shall be submitted to the LDEQ per the requirements.

1.5. SCOPE

1.5.1. This project includes isolated removal of ACBMs as identified in this specification or as directed by the Owner's contract documents. These operations shall comply with OSHA Class I and II asbestos work requirements and EPA AHERA requirements. The scope of work is as follows:

1.5.2. Contractor shall submit pre-work submittals (1 copy) for review, prior to work. The submittals shall contain, but not be limited to, all licenses; personnel information; performance, labor, and payment bonds (if required); and LDEQ/EPA Notification. Contractor is directed to fill out and submit the LDEQ Notification for the Owner based on the timetable as set forth by the Owner's schedule.

1.5.3. Contractor shall supply all the necessary tools, equipment, labor, construction/abatement activity materials, waste transporter/can (enclosed disposal unit) and delivery of the waste to an appropriate waste disposal facility to complete the work as specified by this document and/or by the contract agreement.

1.5.4. Contractor shall supply electrical power continuously until all work areas have passed clearance inspection and testing for the project. Contractor shall supply PSI with sufficient electrical outlets for air monitoring pumps. Electrical power has been disconnected from the property.

1.5.5. Owner shall provide access to the site. Contractor shall provide a source of water. Water supply has been disconnected from the property.

1.5.6. Contractor, as a minimum, shall isolate the work areas in accordance with appropriate sections of CFR 1926.1101(g) as well as this work plan. A temporary airtight barrier, as required, shall be constructed to separate the work areas from the occupied areas in order to maintain service to these areas of the building. This barrier shall be constructed of polyethylene sheeting and wood framing or equivalent. Penetrations through the barrier shall be sealed with appropriate sealant.

1.5.7. Contractor shall remove and dispose of ACBMs as indicated on the reference drawings and in this specification. Quantities and locations of the ACMs at the facility are identified in the Tables in Section 1.1.1 of the specification and Drawings included as attachments.

1.5.8. The quantities are provided for the sole purpose of providing general guidance to the Contractor as to the scope of the project. The scope of the project shall include removal of all observable and identified hazardous materials regardless of quantity. Only materials that are concealed and could not have been reasonably identified at the time of the bidding shall be considered for additional payment in accordance with the Unit Costs.

1.5.9. Contractor shall construct a three-chamber wet decontamination unit for each work area. The decontamination chamber shall be equipped with a shower capable of delivering hot and cold water and filtering media from the shower drain to (5) microns. An adequate supply of soap, shampoo and disposable towels shall be maintained for workers at egress.

1.5.10. All small movable objects shall be removed from the work areas. Large moveable objects left inside each work areas shall be covered by a minimum of one layer of 4-mil polyethylene sheeting.

1.5.11. Replacement (if necessary) will be conducted by others or as directed by the Owner's contract agreement.

1.5.12. Contractor is to begin work from the start date as noted on the LDEQ Notification or as amended by the Owner's contract. Work schedule is estimated to be a normal 8 hour day. The Contractor may opt to work a 10-12 hour day; however, the Contractor must inform the Consultant 24 hours in advance prior to change in work schedule. The Consultant and the Owner must approve any changes in the work schedule.

1.5.13. Contractor personnel shall not consume food, alcoholic beverages or smoke on project site premises during any activity. Personnel shall restrict themselves to

work hours and park only in designated areas. No admittance to the premises is permitted unless escorted by an Owner's Representative or approved Asbestos Contractor/Supervisor.

1.5.14. Contractor shall coordinate all work times with the Owner's Asbestos Individual Consultant (AIC) or Project Manager and is directed to submit, adjust and amend the LDEQ Notification for the Owner based on his accessibility.

1.5.15. Contractor is to submit close out documents within 15 days of completion, to include, but not limited to, waste manifest(s), personal testing (PEL/STEL), licenses and project logs.

END OF SECTION 1.0

SECTION 2.0 - PROTECTIVE CLOTHING AND EQUIPMENT

2.1. PROTECTIVE CLOTIHING

2.1.1 Coveralls:
Provide disposable full-body coveralls and disposable head covers, and require that they be worn by all workers in the Work Area. Provide a sufficient number for all required changes, for all workers in the Work Area.

2.1.2 Cold Weather Gear:
Provide each worker, as needed, with an insulated jacket, pants, gloves and hat. Require that cold weather gear be removed in the Equipment Room of the asbestos abatement decontamination unit. Dispose of cold weather gear as asbestos waste at the completion of all work.

2.1.3 Boots:
Provide work boots with non-skid soles, and where required by OSHA, foot protection, for all workers. Provide boots at no cost to workers. Do not allow boots to be removed from the Work Area for any reason, after being contaminated with asbestos-containing material. Dispose of boots which have not been decontaminated as asbestos-contaminated waste at the end of the work.

2.1.4 Hard Hats:
Provide head protection (hard hats) as required by OSHA for all workers, and provide four (4) spares for use by Owner's Representative, Project Administrator, and Owner. Require hard hats to be worn at all times that work is in progress that may potentially cause head injury. Provide hard hats of type with plastic strap type suspension. Require hats to remain in the Work Area throughout the work. Thoroughly clean, decontaminate and bag hats before removing them from Work Area at the end of the work.

2.1.5 Goggles:
Provide eye protection (goggles) as required by OSHA for all workers involved in scraping, spraying, or any other activity which may potentially cause eye injury. Thoroughly clean, decontaminate and bag goggles before removing them from Work Area at the end of the work.

2.1.6 Gloves:
Provide work gloves to all workers and require that they be worn at all times in the Work Area. Do not remove gloves from Work Area and dispose of as asbestos-contaminated waste at the end of the work.

2.2. RESPIRATORS

2.2.1 Contractor shall comply with *29 CFR 1926.1101(h) and the OSHA General Industry Respirator Protection Standard in CFR 1910.134* and initiate appropriate respirator program. A powered air-purifying respirator shall be used for Class I asbestos work, where negative exposure assessment of the work area has not been produced. A minimum of half-mask air purifying respirators with dual HEPA (High Efficiency Particulate Air) filters shall be used during work area preparation and removal of non-friable materials. Approved organic canisters shall be utilized in conjunction with the asbestos filters during mastic removal. A minimum of full-face powered air purifying respirators (PAPR) with HEPA filtration shall be utilized during the removal of friable materials.

2.2.2 All respirators shall be approved by the National Institute of Occupational Safety and Health (NIOSH) for use in asbestos-containing atmospheres.

2.2.3 Each worker must perform positive and negative air pressure fit tests each time a respirator is put on or as respirator designs permit. Supplied air respirators shall be tested for adequate flow as specified by the manufacturer.

2.2.4 No one wearing a beard or other facial hair which will prevent a proper respirator seal shall be allowed to wear a respirator or enter the regulated area.

END OF SECTION 2.0

SECTION 3.0 - EMERGENCY PLANNING

3.1 PROCEDURES

3.1.1 The contractor shall develop emergency planning procedures prior to abatement initiation. This plan shall consist of, but not be limited to, emergency exit plans, notification procedures, and fire extinguisher locations. Both the contractor and the Owner shall agree on these procedures.

3.1.2 Telephone numbers of all emergency response personnel shall be clearly posted in the Clean room and Equipment room.

END OF SECTION 3.0

SECTION 4.0 - SITE PREPARATION FOR ASBESTOS REMOVAL

4.1 WORKSITE PREPARATION

4.1.1 All movable objects shall be removed from the containment area. Cleaning of contaminated items shall be performed if the items are to be salvaged or reused. Otherwise, they shall be properly disposed of as asbestos waste. All non-movable objects that remain in the containment area shall be covered with a minimum of 4-mil plastic sheeting, secured in place.

4.2 WORKSITE ENCLOSURES AND CRITICAL BARRIERS

4.2.1 The contractor shall isolate the regulated area per *EPA regulation 40 CFR 61.145 (c) (3) (B), OSHA Standard 29 CFR 1926.1101(e)* and *LDEQ regulations*. The regulated areas shall be roped off and marked with clearly written warning labels in order to keep unauthorized personnel out of the regulated area. The regulated area shall encompass the whole area expected to have an airborne fiber concentration greater than 0.01 fibers per cubic centimeter (f/cc) as a result of the removal activities and not the other non-related activities conducted in the building.

4.2.2 Regulated areas within which asbestos abatement is to be conducted shall be separated from adjacent areas by impermeable barriers such as plastic sheeting attached securely in place. All openings between containment areas and adjacent area, including but not limited to windows, doorways, elevator openings, corridor entrances, ventilation openings, drains, ducts, grills, grates, diffusers, and skylights shall be sealed. All penetrations that could permit air infiltration or air leaks through the barrier shall be sealed, with the exception of the make-up air provisions and the means of entry and exit.

4.2.3 Floor sheeting shall completely cover all floor surfaces and consist of a minimum of two layers of sheeting with at least a dart impact of 270 grams and tear resistance of machine direction (M.D.) 512 grams and traverse direction (T.D.) of 2067 grams, or at least 6-mil true thickness. Floor sheet shall extend up sidewalls at least 12 inches and shall be sized to minimize the number of seams. No seams shall be located at wall-to-floor joints. Sealing of all floor penetrations against water leakage is mandatory. Wall sheeting shall completely cover all wall surfaces and consist of a minimum of two layers of 4-mil sheeting. Wall sheeting shall be installed so as to minimize joints and shall extend beyond wall/floor joints at least 12 inches. No seams shall be located at wall-to-wall joints. Where a fire hazard exists, all plastic sheeting will be certified by the Underwriters Laboratory (UL) as being fire retardant. Where feasible, when containment walls exceed 260 linear feet must be constructed, a viewing window will be included in the wall for each 260 linear feet or fraction of that distance which will permit the viewing of at least 51% of the abatement work area. The window shall be constructed of plexiglass which measures approximately 18 inches by 18 inches. The bottom of the window will be at a reasonable viewing height from the outside floor.

4.2.4 Contractor shall provide enough negative air units to ensure four air exchanges inside the regulated area per/hr. at all times. Contractor shall supply a sufficient quantity of negative pressure units equipped with ANSI 29.2-79 Local Exhaust Ventilation Requirement and EPA guidance document EPA 560/5-83-002 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings.

END OF SECTION 4.0

SECTION 5.0 - ASBESTOS REMOVAL AND DISPOSAL PROCEDURES

5.1 GENERAL

5.1.1 Demarcate the work area with signs and barrier tape.

5.1.2 Access to regulated areas shall be limited to authorized personnel only.

5.1.3 A Competent Person shall supervise all asbestos work.

5.1.4 All persons entering a regulated area are required to wear respirators. The minimum respiratory protection for this scope of work is ½ mask air purifying respirator with HEPA filters unless fiber concentrations require greater protection. The Contractor is responsible for appropriate respirator selection.

5.1.5 The Contractor shall not generate visible dust emissions during abatement activities. All abatement work will be stopped if visible emissions are observed.

5.2 DEFINITIONS

5.2.1 Class I Work
Class I Work means activities involving the removal of **TSI**, spray-on fireproofing, fire doors, surfacing ACBM and presumed asbestos-containing material (PACM).

5.2.2 Class II Work
Class II Work means activities involving the removal of ACBM that is not TSI or surfacing material. This includes, but is not limited to, the removal of **asbestos-containing floor tile** and vinyl floor sheeting, **cementitious panels (including chalkboards)**, roofing, **construction mastics (and chalkboard glue dots)**, and window caulking.

5.2.3 Wetting Materials:
A wetting material shall be used to minimize the amount of airborne asbestos fibers released during removal of asbestos from a structural unit and to encapsulate the removed asbestos. For wetting prior to disturbance of ACBM, use either amended water or a removal encapsulant:

5.2.3.1 Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the Asbestos-Containing Material and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

5.1.3.2 Removal Encapsulant: Provide a penetrating type encapsulant designed specifically for removal of ACBM. Use a material which results in wetting of the Asbestos-Containing Material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of one ounce of a mixture

of 50% polyoxyethylene ester and 50% polyoxyethylene ether in five gallons of water.

5.3 CLASS I WORK EXECUTION

Physical Access Limitations: Access to TSI on pipe and pipe fittings are hindered by building systems and debris piles. **Extensive removal of debris will be required prior to abatement.** It is anticipated that the Contractor shall perform the necessary removal of these building systems and debris piles prior to abatement. Specifically, the following measures will have to be taken. These measures include, but are not limited to:

- Access to lift systems and/or scaffolding for removal of TSI in Building 2;
- Removal of wall systems and ceiling systems access pipe chases;
- Removal of debris piles prior to abatement. See section 5.3.2 for disposal of debris piles.

5.3.1 TSI on Pipe Elbows and Straight Runs: Glove Bag Removal shall be employed for the abatement of TSI on pipe elbows and straight runs. The procedures are as follows:

5.3.1.1 Each glovebag removal shall be performed as a two-man operation, with one person performing removal and the other constantly spraying amended water into the glovebag.

5.3.1.2 All air shall be evacuated from the glovebag by a HEPA filtered vacuum.

5.3.1.3 Twist bag at glove insertions and seal with duct tape.

5.3.1.4 Place a properly-labeled 6-mil disposal bag under the glovebag and cut from the pipe.

5.3.1.5 Evacuate air from disposal bags with a HEPA filtered vacuum cleaner, before sealing. Goose-neck bag and seal with minimum three wraps of duct tape.

5.3.2 Debris containing ACBMs: All debris containing ACBMs within Building 2 on the subject property shall be removed prior to the abatement of TSI and other ACBMs. Debris containing ACBMs shall be treated as RACM. The quantities of debris are included in the Tables located in Section 1.1.1 of this specification. The procedures are as follows:

5.3.2.1 Post warning signs which comply with regulations.

5.3.2.2 Adequately moisten debris with amended water. Take precautions to contain water within the work area and prevent damage to areas outside the work area. Mist the work area and keep material wet during removal.

5.3.2.3 Dispose of debris as asbestos-containing waste in double 6-mil plastic bags. Goose-neck bag and seal with minimum three wraps of duct tape. Bags shall be properly labeled. Materials shall remain adequately wet once bagged.

5.3.3 Building 3 Rubble: Building 3 rubble shall be handled and discarded as RACM. The procedures are as follows:

5.3.3.1 The regulated work area shall be demarcated with the appropriate warning signage. All workers inside of the regulated work area shall be LDEQ/EPA certified asbestos workers, including heavy equipment operators.

5.3.3.2 A proper decontamination area shall be provided to allow workers to properly ingress and egress the work area.

5.3.3.3 Materials must be wetted and remain adequately wet during the demolition and load out process in order to reduce the potential for visible emissions. Any visible emission will result in shut down of demolition and load out.

5.3.3.4 Materials shall be loaded out into lined dumpsters. Dumpsters shall be lined with 6 millimeter poly (6-mil poly) and sealed with 6-mil poly and duct tape.

5.4 CLASS II WORK EXECUTION

Physical Access Limitations: Access to floor tile and mastic are hindered by debris piles and carpet throughout Building 1. **Extensive removal of the debris will be required prior to abatement. It is anticipated that the Contractor shall perform the necessary removal of the debris piles prior to abatement activities**. **The Contractor shall remove and discard the debris piles as asbestos contaminated waste.** Specifically, the following measures will have to be taken. These measures include, but are not limited to:

- Access to lift systems and/or scaffolding for removal of TRANSITE panels in Building 1;
- Removal of carpet in Building 2 to access floor tile below;
- Removal of debris piles prior abatement. See section 5.3.2 for disposal of debris piles

5.4.1 ALL CLASS II WORK

5.4.1.1 Competent Person: All Class II work shall be supervised by a competent person as defined by the regulation.

5.4.1.2 Critical Barriers: Critical barriers shall be placed over all openings to the regulated area or utilize an alternate barrier or isolation method which prevents migration of airborne asbestos from the regulated area and meets the requirements of the regulation.

5.4.1.3 Impermeable Dropcloths: Impermeable dropcloths shall be placed on surfaces beneath all removal activity. Dropcloths shall extend horizontally in all directions one foot for every vertical foot the work surface is above the

floor.

5.4.1.4 Controls: Comply with the work practices specified for each type of Class II asbestos work being performed as outlined in the following sections.

5.4.1.5 HEPA Filtration: Vacuums, powered saws and other equipment which may generate asbestos fibers shall be equipped with HEPA-filtered exhausts.

5.4.1.6 Wet Methods: Wet methods or wetting agents to control employee exposures shall be employed.

5.4.1.7 OSHA requires the prompt cleanup of wastes and debris and placement in leak-tight containers and labeled with the following information:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

5.4.1.8 Establish a decontamination area that is adjacent to the regulated area for decontamination of employees and their equipment. At a minimum the decontamination shall consist of an area covered by an impermeable drop cloth on the floor or horizontal working surface of sufficient size to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination. Work clothes must be cleaned with a HEPA vacuum before they are removed. All equipment and surfaces of containers filled with ACM must be cleaned prior to removing them from the equipment room or area. Entry to and exit from the regulated area shall be through the decontamination area.

5.5 FLOORING MATERIALS AND ASSOCIATED MASTICS

5.5.1 Pre-clean the work area by first using HEPA-vacuum equipment, then use wet cleaning methods until the area is visibly free of dust and debris.

5.5.2 Post warning signs which comply with regulations.

5.5.3 Establish a negative pressure enclosure in the work area utilizing critical barriers at all openings, decontamination unit, polyethylene sheeting on walls and negative air pressure equipment. Install a minimum of one layer of 6-mil polyethylene sheeting to a height of four feet on walls in the work area.

5.5.4 Carpet or other materials overlaid on tile must be removed within containment if floor tile fragments adhere to the carpet when removed. These materials shall be discarded as asbestos contaminated waste.

5.5.5 Soak flooring with amended water for a sufficient time to allow removal intact with breakage kept to a minimum. Take precautions to contain water within the work area and prevent damage to areas outside the work area. Mist the work area and keep material wet during removal.

5.5.6 Remove mastics using approved chemical mastic remover. All mastics must be removed. Substrate must be clean with no residue. No rotary

equipment or sanding is allowed.

5.5.7 Dispose of flooring as asbestos-containing waste in double 6-mil plastic bags. Materials shall remain adequately wet once bagged.

5.5.8 Dispose of chemical mastic remover as per manufacturer's instructions, Federal, State and local regulations.

5.6 TRANSITE

5.6.1 Install one layer of six mil polyethylene sheeting on the inside face of the cementitious asbestos (transite) panel using tape and/or glue.

5.6.2 Cover the wall, sill, or other structure beneath the panel with one layer of four mil polyethylene sheeting. Cover the ground beneath the panel outward from the wall to a distance of one foot for each foot of material height.

5.6.3 Remove the metal framing, screws, caulking, or other means of attachment from the panel to allow removal of the panel whole. Use wet methods if this process disturbs the material.

5.6.4 Wrap asbestos containing materials with two layers of six mil polyethylene sheeting, or double bag prior to disposal.

5.6.5 Provide a temporary seal for the opening created in the structure by installing plywood or other weather tight material if required by the Base Building Package and/or the General Contractor.

5.7 WASTE DISPOSAL

5.7.1 Disposal bags shall be 6-mil polyethylene bags, or Louisiana DSHS approved equivalent, that are preprinted with labels as required by the applicable *Occupational Safety and Health Administration (OSHA) regulation* and *EPA NESHAPS Standard 40 CFR Part 61, Subpart M*. All asbestos waste shall be double-bagged and goose necked at the top to prevent fiber release.

5.7.2 The contractor shall take care to prevent asbestos material from clinging to the outside of the filled bags or containers. The bags shall be HEPA vacuumed and/or wet-wiped prior to leaving the work area.

5.7.3 The waste transporter shall have a Louisiana Department of State Health Services (DSHS) asbestos transporter license.

5.7.4 Authorized persons shall be protected by disposable clothing and a minimum of half-face respirator while loading asbestos waste.

5.7.5 The enclosed cargo area of the truck or dumpster shall be lined with 6-mil polyethylene sheeting to prevent contamination from leaking containers. Trucks and dumpsters shall have lockable enclosed cargo areas.

5.7.6 Waste containers shall not be thrown into or out of the truck cargo area or dumpster.

5.7.7 Asbestos waste shall be disposed of in an approved landfill according to current state requirements.

5.7.8 A proper manifest shall be required of all off-site asbestos shipments per *LDEQ regulations* and *EPA NESHAPS Standard 40 CFR Part 61, Subpart M.* The Owner shall be responsible for signing the waste manifest. PSI shall review the manifest prior to removal of waste from the site. PSI will not be responsible for signing the waste manifests.

5.7.9 A copy of the waste manifest shall be sent to the Owner upon completion of the project.

END OF SECTION 5.0

SECTION 6.0 - AIR MONITORING PLAN - ASBESTOS

6.1 GENERAL PROCEDURES

Monitoring of airborne concentrations of asbestos fibers shall be in general accordance with *OSHA regulation 29 CFR 1926.1101(f) and Appendices A and B, and EPA-AHERA regulation 40 CFR 763.90 Subpart E* and as specified in this plan. The Contractor shall employ his own Consultant for personal air monitoring and submit the results to the Owner's Representative.

6.2 MONITORING PRIOR TO ABATEMENT

Area monitoring shall be conducted in the ACBM work area prior to abatement operations in order to establish the airborne asbestos fiber concentrations in the work area prior to the commencement of removal operations. This result will establish an airborne fiber concentration in the work area during normal environmental conditions.

6.3 MONITORING DURING ABATEMANT

Area and personal monitoring shall be conducted to determine airborne fiber concentrations in and around the working environment. All air samples shall be referenced in the daily log.

6.3.1 Area Sampling

Monitoring of the areas inside and surrounding the abatement site shall be performed on a daily basis. A minimum of two (2) general area samples shall be collected inside the regulated area and three (3) outside the regulated area. The outside samples shall be located at the negative air exhaust, in the adjacent space, and at the decontamination unit. The amount of air sampled shall be approximately 1,250 liters per sample. Reduction in air sample volumes may be necessary based on work activities and time constraints. If air monitoring outside of the regulated area shows air concentrations greater than the permissible exposure limit, (PEL-0.1 fibers/cc Time Weighted Avg.) the contractor's supervisor will be immediately notified.

6.3.2 Personal Sampling

Monitoring of workers shall be conducted as required by the *OSHA regulation 29 CFR 1926.1101 (f).* Personal sampling is the responsibility of the Contractor.

6.4 FINAL CLEARANCE

Final clearance phase contrast microscopy (PCM) sampling shall be conducted after a final inspection by the on-site project manager. A minimum of 1,250 liters to a maximum of 3,850 liters of air shall be collected from each containment area greater than 160 square feet. Areas less than 160 square feet shall have at least three samples collected per containment area and analyzed via phase contrast microscopy (PCM). The results of the PCM analysis for each sample shall be below, 0.01 f/cc.

6.5 AIR SAMPLE ANALYSIS

PCM air samples shall be analyzed in accordance with the LDEQ-required "NIOSH 7400 Analytical Method "A" rules for Asbestos and Other Fibers by PCM" by a Proficiency Analytical Testing/Asbestos Analytical Registry (PAT/AAR) certified and LDEQ licensed laboratory. Collecting and analyzing samples, as well as inspecting the site, will be the responsibility of Professional Service Industries, Inc. (PSI), 724 Central Avenue, Jefferson, Louisiana. The laboratory results will be available within 24 hours after completion of the sampling.

END OF SECTION 6.0

SECTION 7.0 – LEAD-BASED PAINT HANDLING PROCEDURES

7.1 GENERAL

7.1.1 Lead-based paint has been identified on the property. Abatement of LBP is not required for demolition projects. However, demolition activities may involve the disturbance of lead-based paint and the possibility of creating lead dust exists. Therefore, employers whose workers are involved in the disturbance of lead-based paint must comply with OSHA regulations for lead exposure. The locations of the LBP are as follows:

Table D: Summary of LBP in Building 1

Sample #	Color	Substrate	Component	Location	Approx. Quantity
660	Yellow	Concrete	Parking Bumper	Parking Area	40 lin. ft.

(1) Square feet = sq. ft., Linear feet = lin. ft.

Table E: Summary of LBP in Building 2

Sample #	Color	Substrate	Component	Location	Approx. Quantity
462	Brown	Metal	Staircase Banister Post – Large	South Stairwell	30 sq. ft.
463	Blue	Metal	Staircase Banister Post – Small	South Stairwell	30 sq. ft.
464	Brown	Metal	Staircase Banister Post – Small	South Stairwell	Included with above
472	Black	Vinyl	Cove Base	Throughout 1st, 2nd, and 3rd Floor	1,500 lin. ft.
480	Orange	Metal	Staircase C-channel Support Members	South Stairwell	150 lin. ft.
481	Brown	Metal	Staircase C-channel Support Members	South Stairwell	Included with above
497	Orange	Metal	Structural I-Beam	1st, 2nd, 3rd Floor Ceilings	750 lin. ft.
506	Gray	Metal	Large Electrical Box – East Wall	Boiler Room	12 sq. ft.
512	White	Metal	Staircase C-channel Support Members	North Stairwell	150 lin. ft.
513	White	Metal	Staircase Landing	North Stairwell	160 sq. ft.
514	Blue	Metal	Staircase Banister Post – Small	North Stairwell	30 sq. ft.
586	White	Metal	Window Flashing	Upper Portion of Window Throughout Building	400 lin. ft.

(1) Square feet = sq. ft., Linear feet = lin. ft.

7.1.2 Precautions should be taken to minimize lead dust generation and exposure and to avoid the accumulation of large quantities of LBP abatement wastes.

7.1.3 Operations that generate lead dust and fume include the following; flame-torch cutting, welding, the use of heat guns, sanding, scraping and grinding of LBP-coated surfaces.

7.1.4 The Contractor is responsible for the development and implementation of a worker protection program in accordance with 29 CFR 1926.20 and 29 CFR 1926.62(e). This program is essential in minimizing worker risk of lead exposure.

7.2 WASTE DISPOSAL

7.2.1 The contractor shall be responsible for conducting an appropriate hazardous waste determination for the demolition wastes prior to disposal. Testing of the waste stream shall include analysis of a composite sample of the waste for lead using the Toxicity Characteristic Leaching Procedure (TCLP) as well as any other testing required by the EPA or LDEQ. The contractor shall ensure that all wastes are properly disposed of at an EPA or state permitted facility in accordance with the results of the hazardous waste determination.

END SECTION 7.0

SECTION 8.0 – HAZARDOUS MATERIALS REMOVAL AND DISPOSAL PROCEDURES

8.1 GENERAL

8.1.1 The following potentially hazardous materials were observed during the survey of the subject property:

Table F: Building 1 – Hazardous Materials

Material Description	Approximate Quantity
Fluorescent Light Bulbs	600
Fluorescent Light Ballast (PCB and Non-PCB)	300
Emergency Flood Lights	10
Exit Signs	12
Fire Alarm Bulbs/Speakers	10
Smoke Detectors	12
Mercury Switches in Thermostats	15
Exterior HID Flood Lights	3

Table G: Building 2 – Hazardous Materials

Material Description	Approximate Quantity
Fluorescent Light Bulbs	300
Fluorescent Light Ballast (PCB and Non-PCB)	150
Emergency Flood Lights	10
Exit Signs	16
Smoke Detectors	5
Mercury Switches in Thermostats	5
Exterior HID Flood Lights	3
Cleaning Chemicals (Various Types), Chemistry Supplies, HVAC Refrigerants/Oils	100 gallons

8.2 FLUORESCENT LIGHTS

8.2.1 Fluorescent lights are classified as universal wastes according to the EPA's Universal Waste Rule (40 CFR Part 273). Fluorescent lights should be properly disposed of in accordance with the Universal Waste Rule.

8.2.2 Lamps shall be removed and stored in a way that avoids breakage. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents.

8.2.3 Containers of lamps shall be labeled "Universal Waste – Waste Lamps" and the number of lights within the container should be indicated on the container.

8.2.4 The Contractor shall utilize a Louisiana and EPA qualified recycling contractor for transportation and disposal of the universal wastes. The recycling contractor shall provide the proper documentation for recycling or disposal to the Contractor.

8.3 FLUORESCENT LIGHT BALLASTS

8.3.1 Ballast disposal workers shall be made aware of the hazards associated with PCBs and a materials data safety sheet must be available at the site. Ballasts not labeled "No PCBs" shall be assumed to contain PCBs.

8.3.2 When removing ballasts, be careful not to drop any ballasts, possibly causing them to leak. When moving non-leaking ballasts within a building, a cardboard box can be used. Do not overload the boxes and risk dropping the ballasts and causing a potential PCB leak. If more than one pound of PCBs (the amount contained in 12-16 ballasts) is spilled, it must be reported to the EPA National Response Center and cleaned up according to EPA procedures.

8.3.3 Any leaking ballasts, along with any other materials that come in contact with the PCB oil, shall be put into a double plastic bag and packed in a separate steel drum. Drums of leaking ballasts should bear a yellow "Caution: Contains PCBs" label. All drums should be clearly labeled.

8.3.4 The Contractor shall utilize a Louisiana and EPA qualified recycling contractor for transportation and disposal of the ballasts. The recycling contractor shall provide the proper documentation for recycling or disposal to the Contractor.

8.4 MERCURY THERMOSTATS

8.4.1 The thermostats shall be removed and stored in a way that avoids breakage of the mercury-containing ampules. The container must be closed, structurally sound, properly packed to cushion impacts and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury.

8.4.2 Containers of thermostats shall be labeled "Waste Mercury-containing Equipment".

8.4.3 The Contractor shall utilize a Louisiana and EPA qualified recycling contractor for transportation and disposal of the thermostats. The recycling contractor shall provide the proper documentation for recycling or disposal to the Contractor.

8.5 HVAC CONDENSER UNIT

8.5.1 If present, the CFCs should be captured prior to demolition of the building using certified CFC recovery/recycling equipment. An EPA certified technician shall remove the refrigerant. The recycling contractor shall provide the proper documentation for recycling or disposal to the Contractor.

8.6 CLEANING CHEMICALS AND CHEMISTRY SUPPLIES

8.6.1 If present, the janitorial cleaning chemical and chemistry supplies should be removed prior to demolition of the buildings. An EPA certified technician shall remove the cleaning chemicals and chemistry supplies. The recycling contractor shall provide the proper documentation for recycling or disposal to the Contractor.

END SECTION 8.0

SECTION 9.0 – FINAL CLEANUP PROCEDURES

9.1 WORK AREA CLEAN-UP

The work area and the decontamination area shall be thoroughly cleaned after all work is finished.

9.2 METHOD OF CLEAN-UP

The area shall be cleaned with a HEPA vacuum and/or wet-wiped.

9.3 CLEAN-UP OF POLYETHYLENE SHEETING

After vacuuming and/or wet-wiping, all of plastic sheeting shall be sprayed with an encapsulant and then disposed of as asbestos waste.

9.4 POST-CLEARANCE CLEAN-UP

Contractor shall remove all waste materials and equipment from job site within 24 hours of completion of the project (Final Clearance Notification verbally or written from the Consultant).

END SECTION 9.0

SECTION 10.0 - SUBMITTALS

10.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

10.1.1 Before the start of work, the contractor shall provide a proposed detailed schedule including work dates, work shift time, number of employees, date of start and completion including dates of preparation work, removal and final inspection dates.

10.1.2 Submit the following to the Owner's representative for review of project coordination.

10.1.2.1 Contingency Plans for emergency action.
10.1.2.2 Telephone Numbers and location of emergency services.
10.1.3.3 Notifications sent to emergency service agencies.
10.1.2.4 Resume of Supervisor.
10.1.2.5 Accreditation Training certificate for Asbestos Abatement Supervisor.
10.1.2.6 Copy of medical examination for Asbestos Abatement Supervisor.
10.1.2.7 LDEQ License for Asbestos Abatement Supervisor.

10.1.3 Submittals related to Regulatory Requirements:

10.1.3.1 Notices: Submit notices required by federal, state and local regulations together with proof of timely transmittal to agency requiring the notice.

10.1.3.2 Permits: Submit copies of current valid permits required by state and local regulations.

10.1.3.3 Licenses: Submit copies of all state and local licenses and permits necessary to carry out the work of this contract.

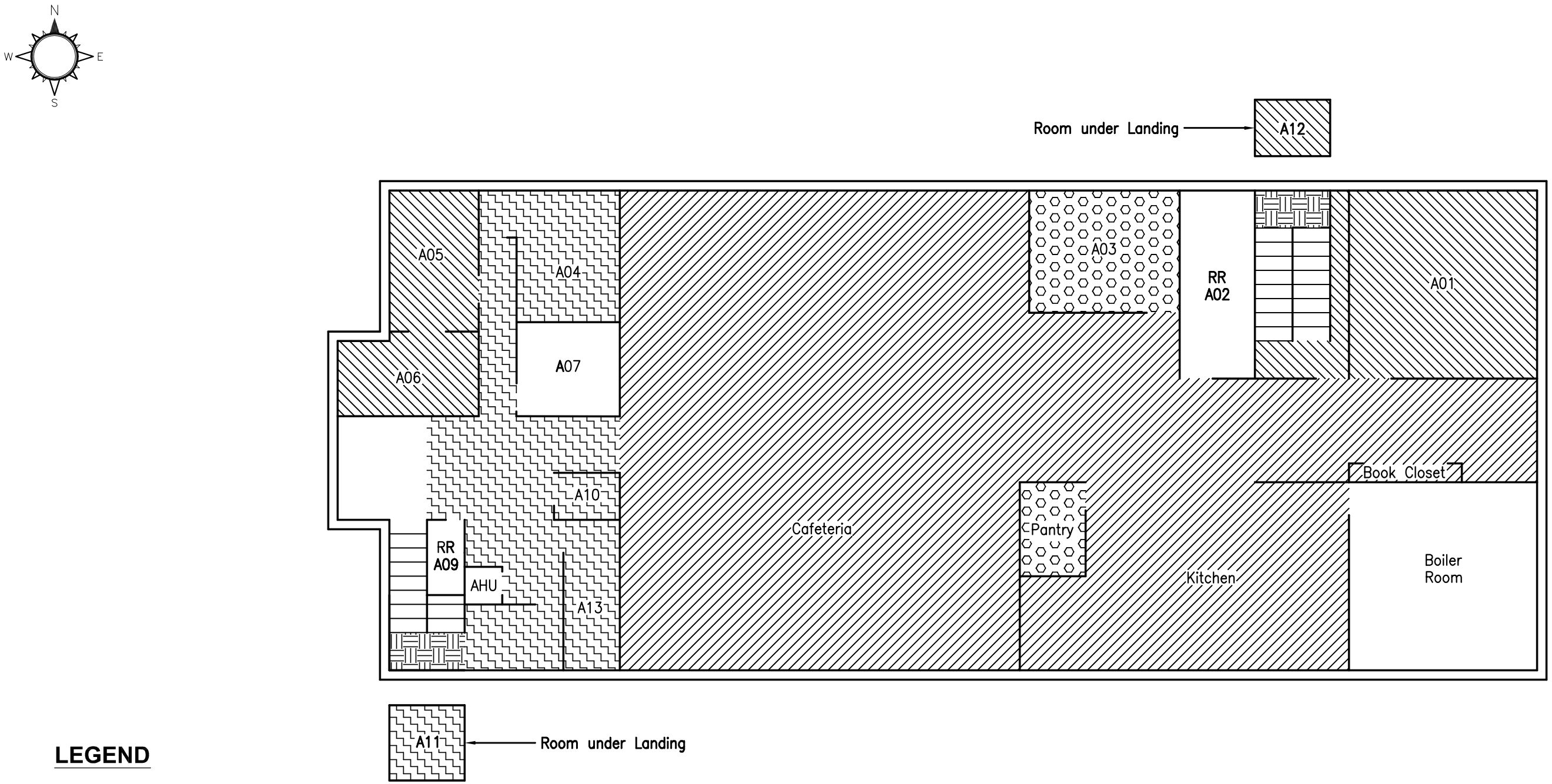
10.1.4 Before the start of work, submit the following to the Owner's representative for review:

10.1.4.1 Copies of certification from an EPA approved AHERA abatement workers course, LDEQ Asbestos Worker's registration and a current copy of medical examination for each worker.

10.1.5 At the completion of the project, submit two (2) copies of all the above referenced items to the Owner's representative as the project close-out documents.

END OF SECTION 10.0

APPENDIX A: PROJECT DRAWINGS



LEGEND

- HA002 – WHITE FLOOR TILE AND BLACK MASTIC
- HA003 – BLACK MASTIC UNDER BEIGE FLOOR TILE
- HA005 – RED FLOOR TILE AND BLACK MASTIC
- HA006 – WHITE FLOOR TILE AND BLACK MASTIC
- HA023 – BLACK FLOOR TILE AND BLACK MASTIC
- BLACK MASTIC BELOW CARPET – ASSUMED ACM (ROOM A07)

NOTE: All locations are approximate and must be field verified.

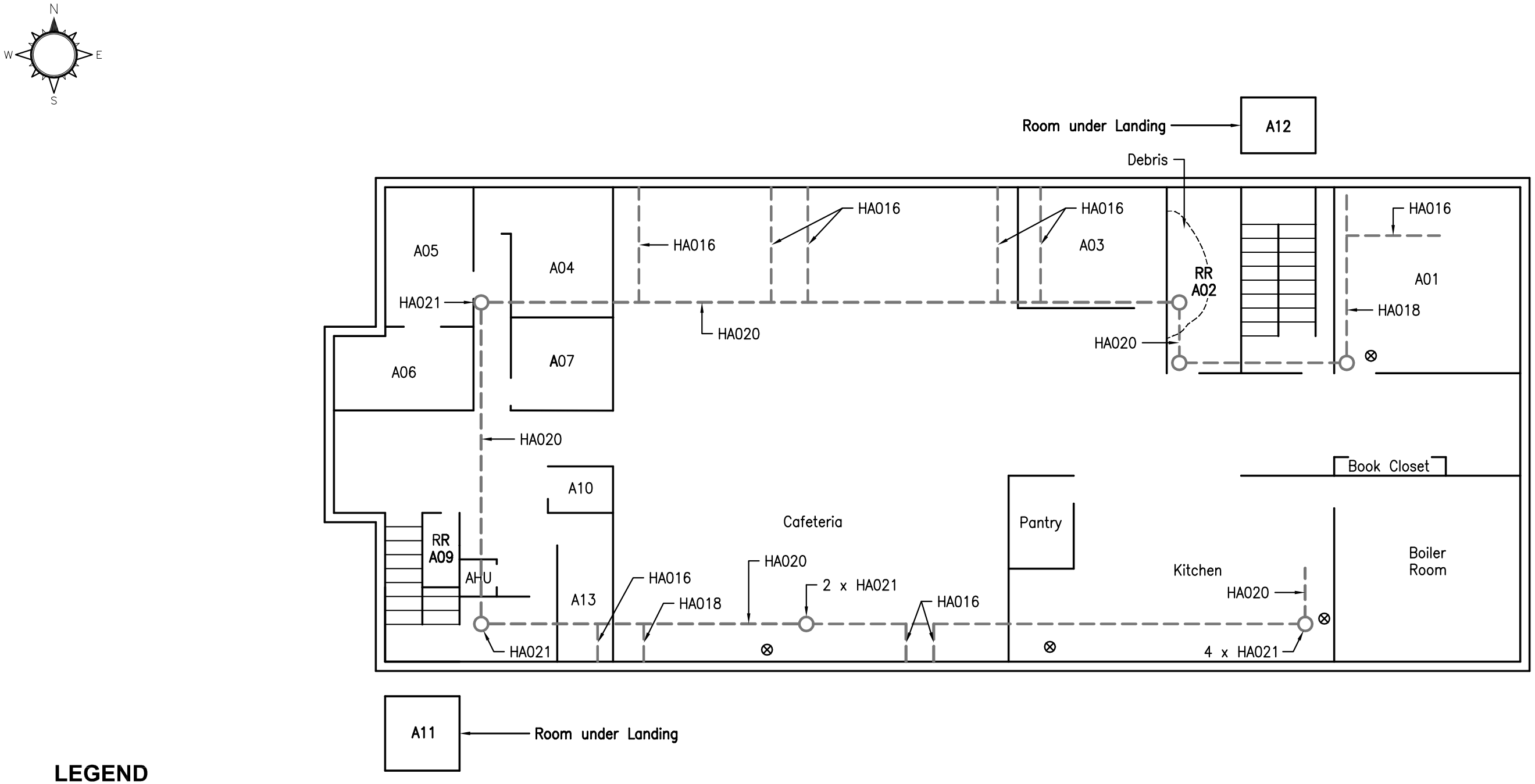
0 12 24
APPROXIMATE SCALE IN FEET

psi Information To Build On
Engineering • Consulting • Testing
Environmental Services
724 Central Avenue Jefferson, Louisiana 70121
PHONE: (504) 733-9411 FAX: (504) 733-8161

Building 2 - First Floor

St. John Vianney School
3801 Monroe Street
New Orleans, Louisiana

Scale:	AS SHOWN
Date:	1–30–13
File Name:	696–001
Project Number:	0255696-1



LEGEND

- - - - - - THERMAL SYSTEM INSULATION (TSI) APPROXIMATE LOCATION

MUDDED FITTINGS AT ALL T's AND 90° BENDS

HA016 – 3" OD STRAIGHT RUNS

HA017 – 3" OD MUDDED FITTINGS

HA018 – 4" OD STRAIGHT RUNS

HA019 – 4" OD MUDDED FITTINGS

HA020 – 6" OD STRAIGHT RUNS

HA021 – 6" OD MUDDED FITTINGS

⊗ TSI DEBRIS

NOTE: All locations are approximate and must be field verified.

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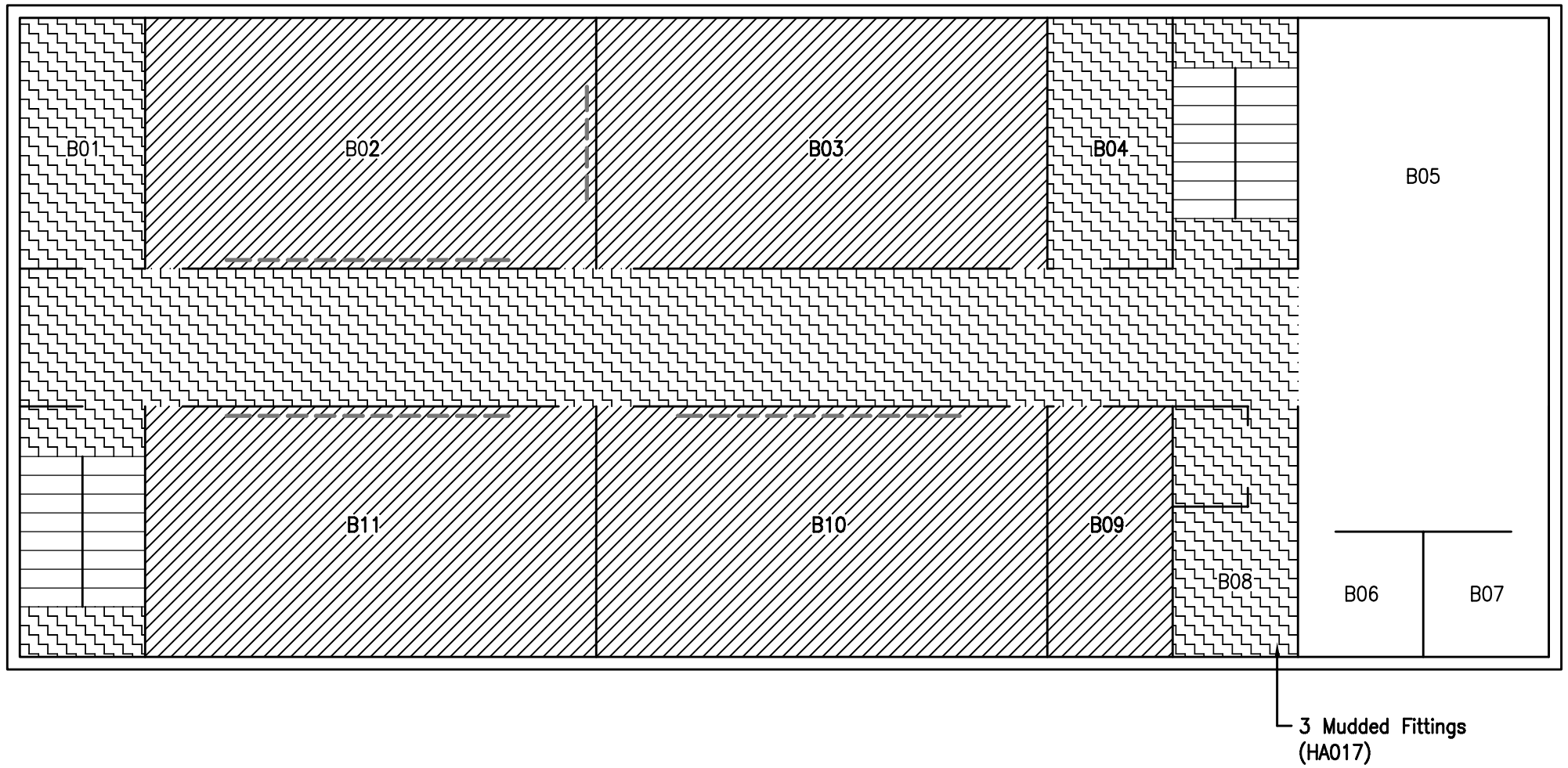

LEGEND

HA007 – BROWN FLOOR TILE

HA023 – BLACK FLOOR TILE AND BLACK MASTIC

TRANSITE CHALKBOARD AND GLUE DOTS

NOTE: All locations are approximate and must be field verified.

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Building 2 - Second Floor

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New Orleans, Louisiana

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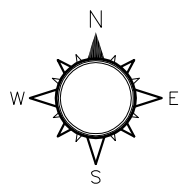

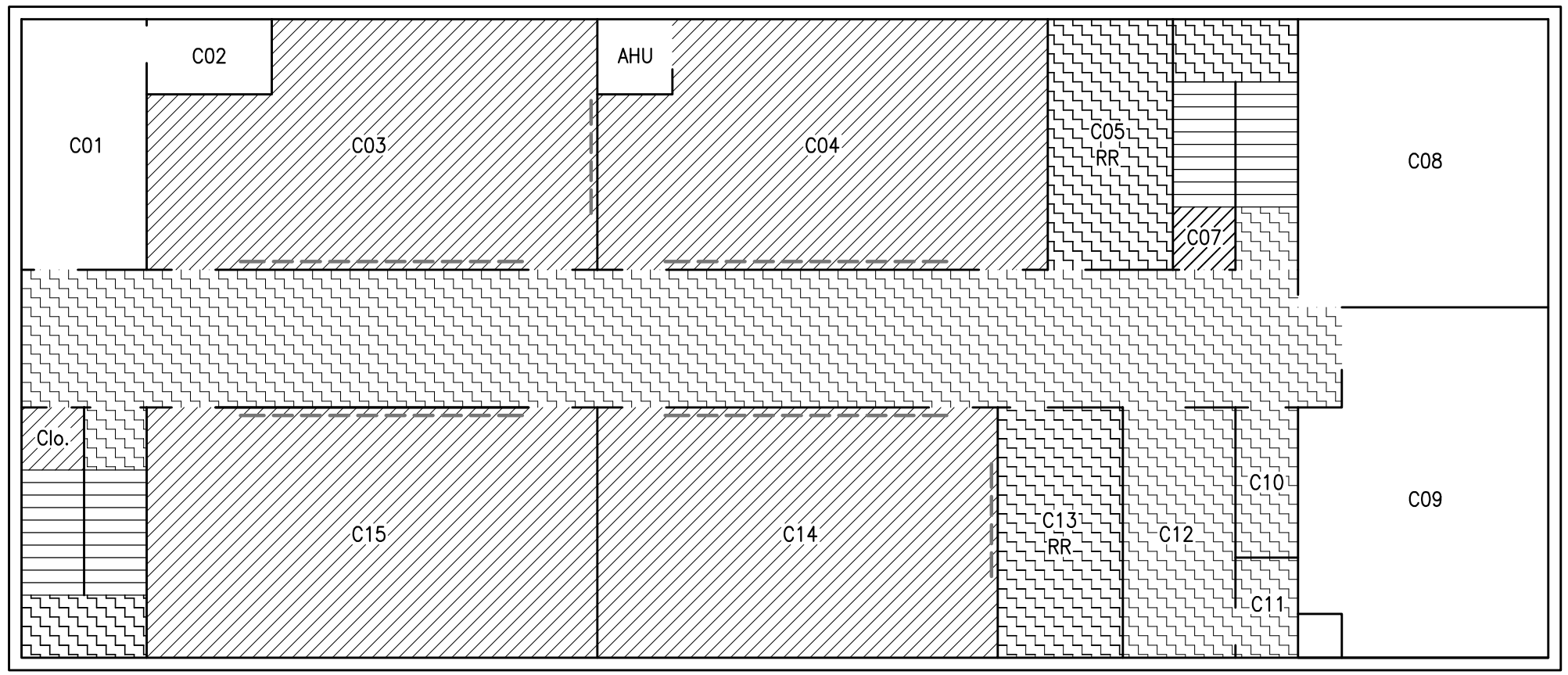

LEGEND

HA007 – BROWN FLOOR TILE

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TRANSITE CHALKBOARD AND GLUE DOTS

NOTE: All locations are approximate and must be field verified.

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Building 2 - Third Floor

St. John Vianney School
3801 Monroe Street
New Orleans, Louisiana

Scale: AS SHOWN
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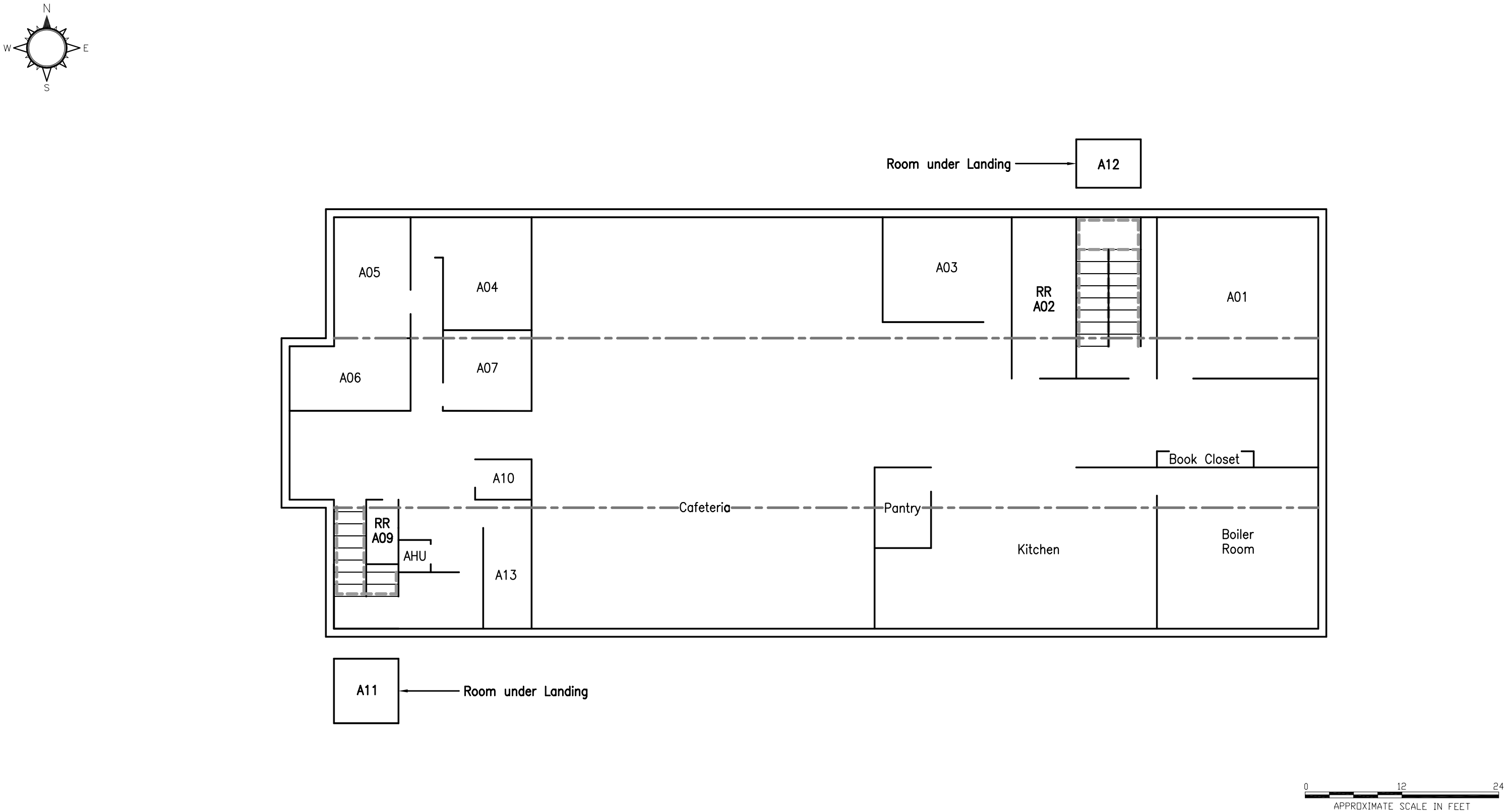
Project Number: 0255696-1



LEGEND

LEAD BASED PAINT (LBP) ON C–CHANNELS, SUPPORTS, HANDRAILS, AND BANISTER

LBP ON I–BEAM

NOTE: All locations are approximate and must be field verified.

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Environmental Services
724 Central Avenue Jefferson, Louisiana 70121
PHONE: (504) 733-9411 FAX: (504) 733-8161

Building 2 - First Floor

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New Orleans, Louisiana

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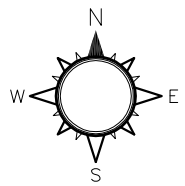

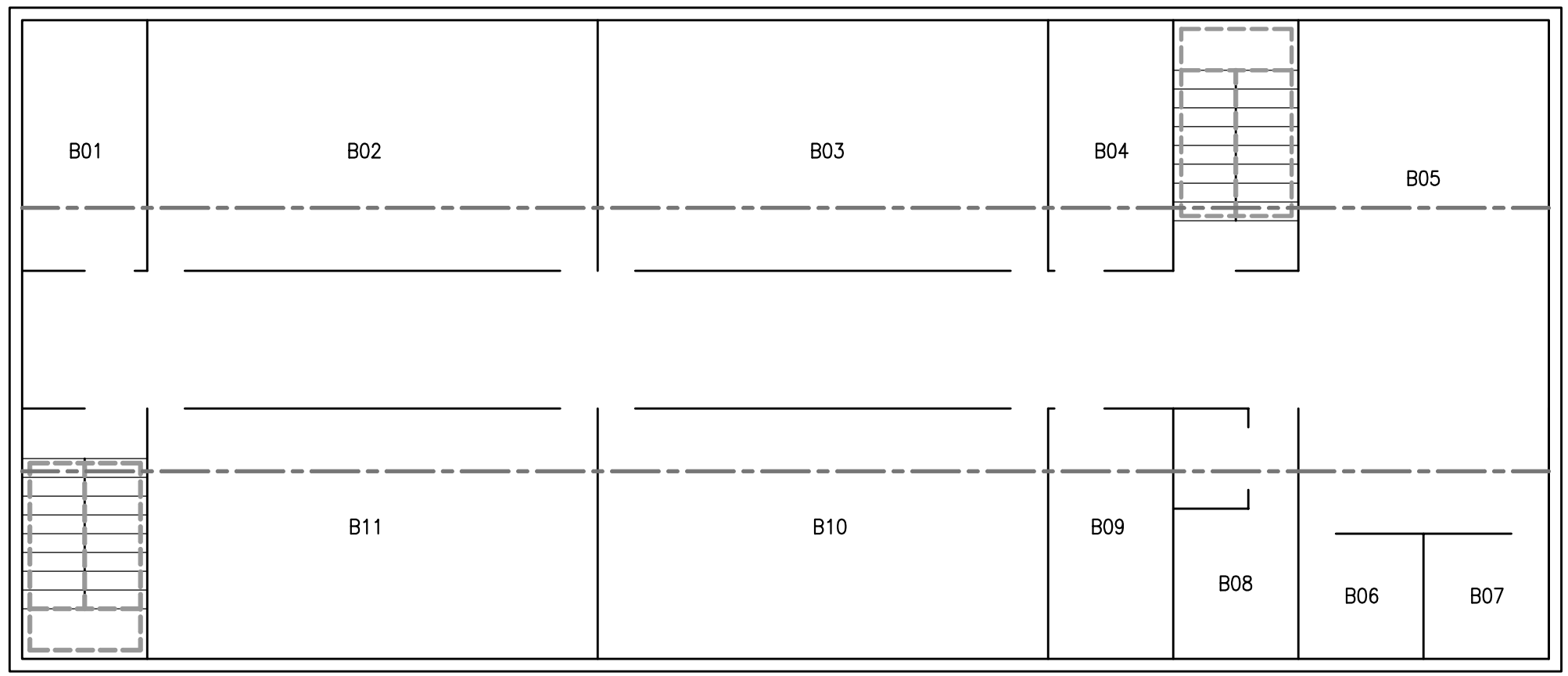

LEGEND

- - - - - - LEAD BASED PAINT (LBP) ON C–CHANNELS, SUPPORTS, HANDRAILS, AND BANISTER

- - — - - LBP ON I–BEAM

NOTE: All locations are approximate and must be field verified.

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Building 2 - Second Floor

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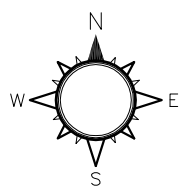

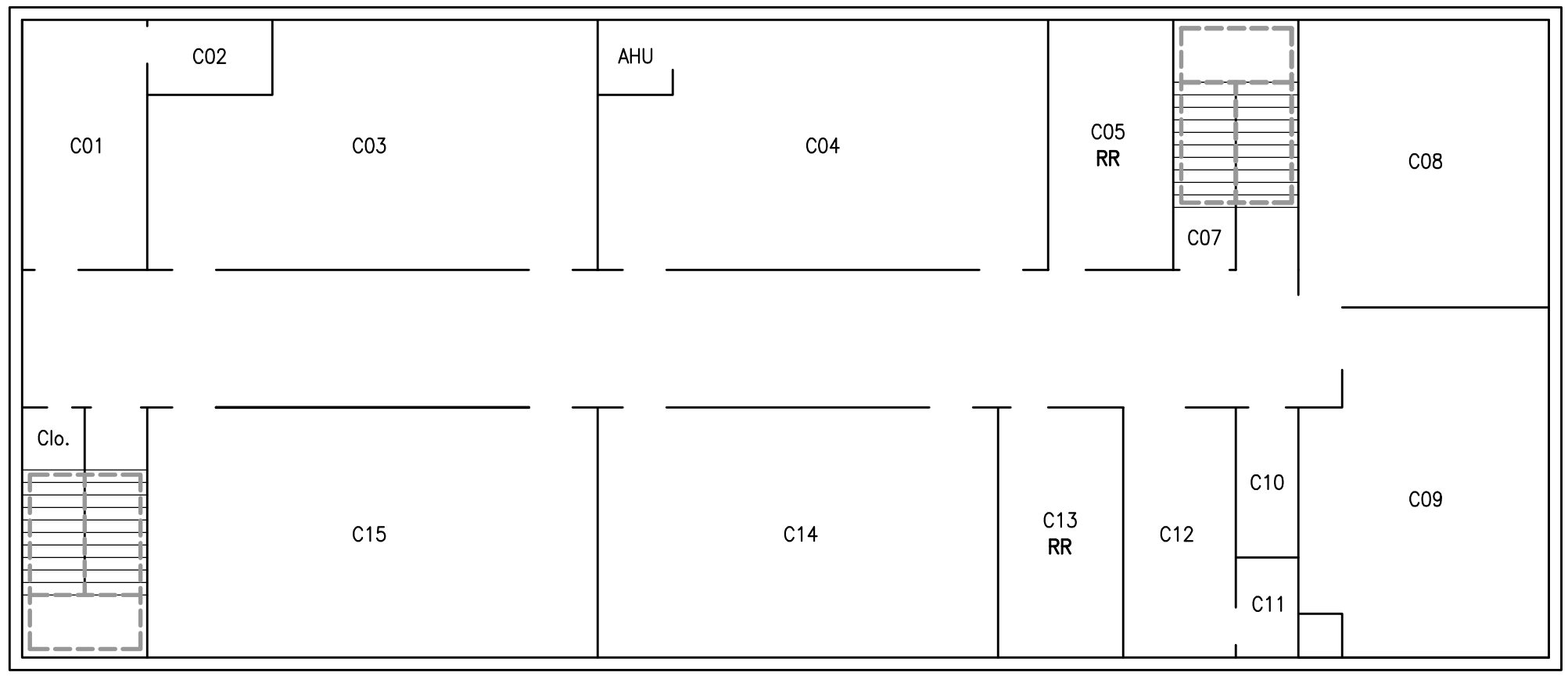

0 12 24
APPROXIMATE SCALE IN FEET

LEGEND

LEAD BASED PAINT (LBP) ON C-CHANNELS, SUPPORTS, HANDRAILS, AND BANISTER

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Scale: AS SHOWN
Date: 1-30-13
File Name: 696-001
Project Number: 0255696-1

APPENDIX B: CERTIFICATIONS

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

James B Kerr

Has complied with all requirements of the Louisiana Department of Environmental Quality and is authorized to perform the duties of

ASBESTOS INSPECTOR

Accreditation No. 3I94921 **AI No.** 94921

Date of Issuance 9/17/2012 **Expiration** 11/8/2013

Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a) may result in civil and/or criminal enforcement actions by the State.

Christopher Mayeux

Permit Support Services Division
Office of Environmental Services

CB

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Andrew Hontiveros

Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of

ASBESTOS INSPECTOR

Accreditation No. *3I182251* AI No. *182251*

Date of Issuance *6/12/2012* Expiration *6/1/2013*

Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.

Christopher Mayeux

Permit Support Services Division
Office of Environmental Services

CB