

## **SPECIFICATIONS FOR ASBESTOS ABATEMENT**

**CLIENT:**

**NEWBERRY COUNTY  
1309 COLLEGE STREET, P.O. BOX 156  
NEWBERRY, SC 29108**

**SITE:**

**OLD GALLMAN SCHOOL  
540 BRANTLEY STREET  
NEWBERRY, SC**

**CRE Project #: PD24-1120-24513**

**Crossroads Environmental, LLC  
1258 Boiling Springs Road  
Spartanburg, SC 29303  
(864) 541-8736**

Prepared by:



Evans Harris

PD#: 00149, Exp. 10/31/24

## TABLE OF CONTENTS

I.	PREFACE/GENERAL DESCRIPTION .....	Page 1
II.	SCOPE OF WORK .....	Page 1
III.	CONTRACTOR INFORMATION .....	Page 1
	A. SUBMITTALS	
	B. NOTIFICATION/LICENSES	
	C. OSHA	
	D. PERSONNEL	
	E. POWER & WATER	
	F. SANITARY FACILITIES	
	G. SUMMARY OF TASKS	
	H. STOP WORK	
IV.	PERSONAL PROTECTIVE EQUIPMENT .....	Page 5
	A. WORKER PROTECTION	
	B. RESPIRATORY PROTECTION	
V.	PREPARATION OF THE WORK AREA(S) .....	Page 6
	A. REGULATED AREA DEMARCATION	
	B. CRITICAL BARRIERS	
	C. PRIMARY BARRIERS	
	D. DECONTAMINATION UNIT	
	E. LOAD-OUT	
	F. TEMPORARY LIGHTING FOR FULL CONTAINMENT	
	G. HEPA FILTERED FAN UNITS	
	H. MANOMETER	
	I. EQUIPMENT	
VI.	REMOVAL PROCEDURES .....	Page 12
VII.	WASTE STORAGE & DISPOSAL PROCEDURES .....	Page 17
VIII.	AIR MONITORING & PROJECT COMPLETION .....	Page 18
IX.	SUBMITTALS .....	Page 23

**ATTACHMENT I: S&ME Inc. 'Hazardous Materials Assessment Report'**

**SPECIFICATIONS FOR ASBESTOS ABATEMENT  
 NEWBERRY COUNTY- OLD GALLMAN SCHOOL  
 PROJECT DESIGN #: PD24-1120-24513**

**I. PREFACE/GENERAL DESCRIPTION**

Air Monitoring and Project Management shall be performed by *Crossroads Environmental, LLC* who has been hired by the Building Owner. The Building Owner or other representatives of the Building Owner shall not be held liable in any way for negligence, whereas it be intentional or unintentional on the part of the Contractor. The asbestos abatement activities are being performed prior to extensive renovation of the 'Old Gallman School' structure at 540 Brantley Street in Newberry, South Carolina. The 'Hazardous Materials Assessment Report' provided by *S&ME, Inc.*, was relied upon for this Project Design.

**II. SCOPE OF WORK**

The Contractor will be responsible for abatement of all asbestos-containing materials identified in the 'Hazardous Materials Assessment Report' provided by *S&ME, Inc.* (excludes window glazing). Approximate quantities reported by *S&ME, Inc.* are provided below; however, the Abatement Contractor is responsible for field verifying asbestos quantities.

Material	Location(s)	Quantity
12" Dark Tan VFT & Black Mastic	Located throughout except Gym & Kitchen.	30,000 sq. ft.
9" Brown VFT & Black Mastic	Located throughout beneath 12" VFT in hallways, classrooms, linoleum and carpet.	30,000 sq. ft.
Thermal System Insulation	Located beneath Gym Office & Shop Area.	200 ln. ft.
Hard Joint Insulation	Located beneath Gym Office & Shop Area.	15 Hard Joints

**III. CONTRACTOR INFORMATION**

**A. SUBMITTALS**

Project documentation including insurance certificate (see insurance requirements), SC-DHEC Asbestos Abatement Contractor's License, personnel accreditations, and waste shipment records must be submitted to the Building Owner's Representative. The contractor and personnel

accreditations must be submitted prior to project start up; waste shipment records to the Building Owner within 30 days after completion of the project.

**B. NOTIFICATIONS/LICENSES**

The Contractor is responsible for notification to SC-DHEC and for paying all applicable fees.

Contractor is responsible for obtaining a City Business license, where applicable.

**C. OSHA**

It is the abatement contractor's responsibility to fulfill all Occupational Safety and Health Administration (OSHA) requirements under CFR 1926.1101 and all other safety requirements that may be required by the work site.

**D. PERSONNEL**

**GENERAL SUPERINTENDENT/SUPERVISOR:**

Provide a General Superintendent licensed in Asbestos work that is experienced in administration, environmental remediation, general contracting coordinating, including work practices, protective measures for building and personnel, disposal procedures, etc. This person is responsible for compliance with all applicable federal, state, and local regulations, particularly those relating to asbestos-containing materials as outlined in OSHA 29 CFR 1926.1101, and 1926.20 through 1926.32. The Superintendent needs to be knowledgeable of the South Carolina Department of Health and Environmental Control Asbestos Regulation 61 61-86.1: Standards of Performance for Asbestos Projects, Effective May 27, 2011 and EPA NESHAP 61.140 Subpart M-National Emission Standard for Asbestos.

Experience and Training: The General Superintendent must be accredited as an Asbestos Abatement Supervisor in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C (ASHARA) and be licensed as a SCDHEC Asbestos Supervisor.

The General Superintendent must be on site at all times, and must be able to communicate in the language of Regulatory Personnel.

**ASBESTOS SUPERVISOR(S):**

Provide full time Supervisor(s) for inside the asbestos work area with experience in asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. One inside supervisor must be able to communicate in the language of the workers and be able to communicate in English to the Building Owner's Representative(s) and/or state regulatory personnel. All inside supervisor(s) are responsible for compliance with all applicable federal, state, and local regulations, particularly those relating to asbestos-containing materials as outlined in OSHA 29 CFR 1926.1101, and including 1926.20 through 1926.32. The Supervisor(s) need to be knowledgeable of the South Carolina Department of Health and Environmental Control Asbestos Regulation 61 61-86.1: Standards of Performance for Asbestos Projects, Effective May 27, 2011 and EPA NESHAP 61.140 Subpart M- National Emission Standard for Asbestos.

Experience and Training: The Asbestos Supervisor(s) (competent person) must be accredited as an Asbestos Abatement Supervisor in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C (ASHARA) and be licensed as SCDHEC Supervisors.

**NON-SUPERVISORY PERSONNEL:**

Provide an adequate number of qualified personnel to meet the schedule requirements of the project.

Experience and Training: All workers employed for abatement throughout the project shall be accredited as an Asbestos Abatement Worker in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C (ASHARA) and be licensed as SCDHEC Asbestos Workers.

**EVERY ASBESTOS ABATEMENT ENTITY PERFORMING WORK MUST HAVE HIS/HER ORIGINAL LICENSE, AS WELL AS A COPY OF HIS/HER MOST CURRENT TRAINING CERTIFICATE ON SITE AT ALL TIMES. HAVING THE LICENSE/CERTIFICATE IN A VEHICLE IS NOT ACCEPTABLE.**

**E. POWER & WATER**

Power and water will be provided by the Building Owner. The Contractor will be responsible for hoses, connectors, power cords, etc.

**F. SANITARY FACILITIES:**

The Contractor will be responsible for providing portable(s) toilets for their employees throughout the project. Contractor is to follow OSHA Regulation 29 (CFR1926.51 (c)) "Toilets at construction jobsites."

**G. SUMMARY OF TASKS:**

Contractor shall remove and dispose of all asbestos-containing materials to be impacted by demolition activities as indicated in the specifications for 'Old Gallman School'.

Contract work includes:

1. Pre-abatement activities including pre-construction meeting, inspection, notifications, permits, submittal approvals, preparations, emergency arrangements, and submittal of plan of action.
2. Abatement activities including preparation of work site, removal and disposal of asbestos containing and/or contaminated waste, recordkeeping, security of job site, pre-work and post-work inspections, and OSHA compliance air monitoring.
3. Cleaning, Decontaminating, and Clearance activities including final inspection, clearance testing, certification of decontamination, and all post work submittals.
4. Any equipment that is unable to be moved must be polyed and protected during abatement.

**H. STOP WORK:**

If the Building Owner or Owner's Representative verbally issues a stop work order, the abatement contractor shall immediately and automatically stop all work and initiate fiber reduction activities. Do not resume asbestos removal until authorized by the Building Owner or the Owner's Representative. Do not recommence work until authorized by the Building Owner or the Owner's Representative. Standby time and cost required for corrective action will be at the contractor's expense. The occurrence of the following events shall be reported in writing to the Owner's Representative and shall require the contractor to immediately stop asbestos removal and initiate fiber reduction and other appropriate activities:

1. Excessive airborne fibers outside the containment area (>0.01 f/cc or established background levels, whichever is greater).
2. Break in either the primary or critical containment barriers.
3. Serious injury to a worker within the containment area that necessitates interruption of the normal decontamination procedures.
4. Presence of a fire and/or safety emergency.
5. Respiratory Protection System failure.
6. Power failure

#### IV. PERSONAL PROTECTIVE EQUIPMENT

The following work practices must be employed during the abatement of the above materials accordingly:

##### A. WORKER PROTECTION:

Before beginning work of this section provide workers with the required protective equipment. Require that appropriate protective equipment be used at all times.

##### Protective Clothing:

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

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/Isolation Area for any reason, after being contaminated with asbestos-containing material. Thoroughly clean, decontaminate and bag boots before removing them from Work/Isolation Area at the end of the work.

Hard Hats: Provide head protection (hard hats) as required by OSHA for all workers, and provide 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 with plastic strap type suspension. If hats are utilized in the Work/Isolation Area, thoroughly clean, decontaminate and bag hats before removing them from Work/Isolation Area at the end of the work.

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/Isolation Area at the end of work.

##### B. RESPIRATORY PROTECTION:

##### Description of Work:

Instruct and train each worker involved in asbestos abatement or maintenance and repair of Class I, II, and III asbestos-containing materials in

proper respiratory use. Require that each worker always wear a respirator, properly fitted on the face in the Work/Isolation Area from the start of any operation which may cause airborne asbestos fibers until the Work/Isolation Area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the work place or as required for other toxic or oxygen-deficient situations encountered.

Respiratory Protection Program: Comply with ANSI Z88.2 - 1992 "Practices for Respiratory Protection" and OSHA 29 CFR 1910.134 and CFR 1926.1101. Require that respiratory protection be used at all times where there is any possibility of disturbance of asbestos-containing materials whether intentional or accidental. Require that a respirator be worn by anyone in a Work/Isolation Area at all times, regardless of activity, during a period that starts with any operation which could cause airborne fibers until a negative exposure assessment has been completed.

General: The employer shall provide respirators, and ensure that they are used where required. Respirators shall be used in the following circumstances:

- During all Class I asbestos jobs.
- During all Class II work where the ACM is not removed in a substantially intact state.
- During all Class II and III asbestos jobs where the employer does not produce a "negative exposure assessment".
- During all Class III jobs where TSI or surfacing ACM or PACM is being disturbed.
- During all Class IV work performed within the regulated areas where employees performing other work are required to wear respirators.
- During all work where employees are exposed above the TWA (0.1 f/cc) or excursion limit (1.0 f/cc).

## V. PREPARATION OF THE REGULATED WORK AREA(S)

### A. REGULATED AREA DEMARCATION:

The Regulated area is the location where environmental remediation work occurs. All class I, II, and III asbestos work as defined in OSHA CFR 1926.1101 (b) shall be conducted within regulated areas.



All work areas where asbestos work or other contaminants are being removed must be demarcated with barrier tape and signs.

Access to the regulated area shall be limited to persons authorized in accordance with OSHA and SC-DHEC.

Prohibited activities within the regulated area include, but are not limited to: no eating, drinking, smoking, chewing of tobacco and gum, or applying of cosmetics. The competent person shall ensure that all asbestos work performed within regulated area is supervised by a competent person, which is defined in South Carolina as a licensed Supervisor.

**WORK/ISOLATION AREA:**

The Work/Isolation area that is located within the regulated area is a variable of the extent of work of the Contract. It may be a portion of a room, a single room, or a complex of rooms. A "Work/Isolation Area" is considered contaminated during the work, and must be separated from the balance of the building, and decontaminated at the completion of the asbestos-control work.

Completely separate the Work/Isolation Area from other parts of the building to prevent asbestos-containing dust or debris from passing beyond the work/isolated area. Should the area beyond the Work/Isolation Area(s) become contaminated with asbestos-containing dust or debris because of the work, clean those areas in accordance with the specifications. Perform all such required cleaning or decontamination at no additional cost to owner.

Place all tools, scaffolding, staging, etc. necessary for the work in the area to be separated prior to completion of Work/Isolation Area separation.

**CONTROL ACCESS:**

Provide Warning Signs at each access to the Regulated Area on doors and/or critical barriers. Post an approximately 20 inch by 14 inch manufactured caution sign displaying the following legend with letter sizes and styles of a visibility required by OSHA 29 CFR 1926.1101:

**LEGEND:**

**DANGER  
ASBESTOS  
MAY CAUSE CANCER  
CAUSES DAMAGE TO LUNGS  
AUTHORIZED PERSONNEL ONLY  
WEAR RESPIRATORY PROTECTION AND PROTECTION CLOTHING IN THIS AREA**

Provide spacing between respective lines at least equal to the height of the respective upper line.

**B. CRITICAL BARRIERS:**

Individually seal each opening between the work area and uncontaminated areas including windows, doorways, elevator openings, corridor entrances, drains, ducts, electrical outlets, grilles, grates, diffusers, and skylights with duct tape and a minimum of two (2) independent layers of polyethylene sheeting at least 6 millimeters (mil) in thickness taped securely in place. Seal all stationary equipment with a minimum of one (1) layer of polyethylene sheeting at least 4 mil in thickness. Maintain all seals until all work, including Project Decontamination, is complete and passing clearance results have been obtained.

**C. PRIMARY BARRIERS:**

The Primary Barriers must be installed in addition to Critical Barriers as specified in the preceding paragraphs. This is to protect the building and other surfaces in the Work/Isolation Area from damage from water and high humidity or from contamination from asbestos-containing debris, slurry or high airborne fiber levels by covering with a primary barrier as described below.

**Cover all ceilings with one (1) layer of clear polyethylene sheeting, each at least 4 mil in thickness, extending beyond wall/ceiling joints at least 12 inches,** mechanically supported and sealed with tape in the same manner as “Critical Barrier” sheet plastic barriers. Tape all joints.

**Cover all walls of each work area with a minimum of one (1) layer of clear polyethylene sheeting, each at least 4 mil in thickness, extending beyond wall/floor joints at least 6 inches,** mechanically supported and sealed with duct tape or spray-adhesive in the same manner as “Critical Barrier” sheet plastic barriers. Tape all joints.

**Cover all floors not being abated with a minimum of two (2) layers of clear polyethylene sheeting, each at least 6 mil in thickness, extending beyond wall/floor and wall/wall joints at least 12 inches on any walls not being abated, mechanically supported and sealed with duct tape or spray-glue in the same manner as “Critical Barrier” sheet plastic barriers. Tape all joints.**

**Install a viewing port in each containment measuring at least 24 inches by 24 inches in an external wall to allow unobstructed observation of abatement activities in the work area.**

**PRESSURE READINGS MUST BE RECORDED A MINIMUM OF FOUR TIMES PER 8-HR. SHIFT BY THE ON-SITE AIR MONITOR.**

**D. DECONTAMINATION UNIT:**

Provide attached Personnel Decontamination facility for containment areas. Construct the decontamination facility in compliance with OSHA 29 CFR 1926.1101 and SC-DHEC Regulations. This requires that the decontamination enclosure (decon) include a clean room, airlock, shower with controllable hot and cold water, airlock, and equipment room. In addition, the Contractor must provide an adequate changing area that allows privacy when dressing out and a proper storage space for street clothes. Steps required to exit the work area through the decon are as follow:

- 1) Remove gross contamination and debris from protective clothing before entering the equipment room
- 2) Enter equipment room and remove and dispose of suit
- 3) Enter shower with respirator on, pass filters into equipment room for disposal
- 4) After showering, enter clean room to put on street clothes

The decontamination chambers must remain free of debris and standing water.

The Contractor must ensure that all contaminated water is filtered through a five-micron or smaller filter and discharged to a sanitary sewer system. No water (contaminated or filtered) shall be allowed to lead or drain outside of the work area.

**E. LOAD-OUT:**

Provide decontamination area for removal of bagged waste from work area. Where feasible, this load-out area should be separate from the personnel decon.

**F. TEMPORARY LIGHTING FOR FULL CONTAINMENT:**

Disconnect all existing power to lighting circuits in Work Area as described in Temporary Enclosures. All lighting to the Work Area and Decontamination facilities is to be provided from temporary electrical panel(s).

Provide the following or equivalent light level: One 100-watt incandescent lamp per 1,000 square feet of floor area, uniformly distributed, for general construction lighting, or equivalent illumination of a similar nature. In corridors and similar traffic areas provide one 100-watt incandescent lamp every 25 feet. In stairways, scaffold level, and at ladder runs, provide one lamp minimum per landing, located to illuminate each landing and flight. Provide sufficient temporary lighting to ensure proper workmanship everywhere.

- Provide lighting in areas where work is being performed to supply a 100-watt minimum light level in all areas of the work area.
- Provide lighting in any area being subjected to a visual inspection to supply a 100-watt minimum light level in all areas of the work area.
- Provide lighting in the Decontamination Unit supplying a 75-watt minimum light level.
- Provide sufficient lighting circuits as required by the work. All lighting circuits are to originate at temporary electrical panel.

**G. HEPA FILTERED FAN UNITS:**

Use units in the work areas that meet the following requirements.

Cabinets are to be constructed of durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Provide units whose cabinets are:

- \* Factory-sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance.
- \* Arranged to provide access to and replacement of all air filters from intake end.
- \* Mounted on casters or wheels.
- \* Rate capacity of fan according to usable air movement capacity under actual operating conditions.
- \* Clean and operates with sufficient number of pre and secondary filters to be changed out throughout the day.

Provide an operational air circulation system supplying a minimum of the following air circulation rate: 4 air changes per hour to achieve required air circulation according to the following procedure:

$$\text{Air Circulation Required in Cubic Feet of Air per Minute (CFM)} = \frac{\text{Volume of Work/isolation Area (cu. ft.)} \times \text{Number of air changes per hour}}{60 \text{ (minutes per hour)}}$$

CFM/Capacity of unit= Number of units required

Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machine's labeled operating characteristics or 50% of the manufacturer's rated capacity for the unit. The capacity of the combined units shall at least be capable of maintaining a negative pressure differential of -0.02 inches of water around the entire perimeter of the Work/isolation Area.

Provide a minimum of 2 additional units per containment as back-ups.  
**Contractor is responsible for calculating the correct number of units per containment and for providing enough units during the removal process to ensure negative pressure.**

**ALL UNITS SHOULD HAVE NEW HEPA FILTERS INSTALLED PRIOR TO PLACEMENT ON PROJECT SITE. IF A UNIT IS FOUND TO CONTAIN A DIRTY UNIT, THE CONTRACTOR WILL BE REQUIRED TO HAVE NEW HEPA FILTERS INSTALLED IMMEDIATELY OR HAVE THE UNIT WITH THE DIRTY FILTER REMOVED FROM THE JOBSITE.**

**H. MANOMETER:**

A manometer must be utilized to measure the relative pressure. The inlet sensor of the manometer shall be located at the farthest point from any source of make-up air. The manometer must be calibrated by the

Supervisor prior to the start of each work shift. The manometer record of daily readings must be recorded four times per eight-hour shift by the Licensed Air Monitor.

**I. EQUIPMENT:**

The Contractor must ensure that all necessary equipment to perform the job efficiently is provided.

**VI. REMOVAL PROCEDURES**

**Please note: Both friable and non-friable removal procedures are provided below for floor tile and mastic abatement. Friable abatement procedures must be used where the flooring is multi-layered, and/or under carpet and linoleum that cannot be removed without tile breakage.**

• **FRIABLE ABATEMENT OF VINYL FLOORING & MASTIC WITHIN THE NEGATIVE PRESSURE ENCLOSURE:**

Remove binding strips or other restrictive molding from doorways, walls, etc. Dispose of any materials that have glue or floor mastic on them as asbestos-containing waste. Wet the floors with amended water so that entire surface is wet. Do not allow to puddle or run off to other areas. Keep floor continuously wet throughout removal operation. Bag and dispose of carpet strips as ACM. Remove tiles using a manual or powered spade, or stripping machine. Continuously mist floor in area where removal is being performed with amended water. Wet any asbestos contaminated debris generated as necessary to keep continuously wet. Keep floor where tile has been removed continuously wet until after completion of heavy adhesive residue removal. Shovel broken tiles and asbestos contaminated debris into a disposal bag. Place bagged waste in a second disposal bag during decontamination and dispose of waste as required.

Remove adhesive residue by using adhesive removal solvents. Provide a slow-drying solvent intended to remove tile adhesive. Provide material that is not flammable, does not create combustible vapors and has no significant inhalation hazard. Provide materials that have no volatile organic solvents (VOCs) unless previously approved in writing by the Building Owner's Representative. Use solvents in accordance with manufacturers' instructions. Saturate adhesive with removal solvent and allow adhesive to soften. Remove by scraping, wet sanding, or wet scrub with floor cleaning machine with abrasive pad. Provide worker

protection as required by material safety data sheet (MSDS) for any material used. Mop floor with removal solvent as required by manufacturer's directions as required to completely remove all residue of adhesive.

- **NON-FRIABLE REMOVAL TECHNIQUES FOR FLOOR TILE:**

Non-friable removal techniques may be utilized in areas where the tile can be feasibly removed intact to prepare the work area for renovation and friable abatement.

The work areas shall include critical barriers, splashguards, negative air machines to be used as air scrubbers, and decontamination unit (one-stage minimum). Continuously mist the work areas and floor tiles as necessary during the removal process. Remove binding strips or other restrictive molding from doorways, walls, etc. Clean and dispose of as non-asbestos waste. Dispose of any materials that have glue or floor mastic on them as asbestos-containing waste. Removal of the floor tiles should include the combination of infrared heat machines with flat shovels, or by the use of dry ice. Remove the tiles with minimum amount of breakage, and maintain the flooring material in a non-friable condition. Pick up whole tiles, stack, and place in labeled disposal bags or wrap in 2 layers of labeled poly. At the Contractor's option tiles may be placed directly into durable leak-tight containers. Place bagged waste in a second disposal bag during decontamination.

**Please note that in the event that the flooring material becomes friable during the removal process, work will stop and all regulatory requirements regarding the removal of friable ACM will apply.**

- **NON-FRIABLE REMOVAL TECHNIQUES FOR FLOOR TILE MASTIC:**

Remove adhesive residue by using adhesive removal solvents. Provide a slow-drying solvent intended to remove tile adhesive. Provide material that is not flammable, is a low-odor solvent, and has no significant inhalation hazard. Provide materials that have no volatile organic solvents (VOCs) unless previously approved in writing by the Building Owner's Representative. Use solvents in accordance with manufacturers' instructions. Saturate adhesive with removal solvent, and allow adhesive to soften. Remove by scraping or wet sanding. Only manual methods may be utilized (no motorized buffers, sanders, etc.). Provide worker protection as required by material safety data sheet (MSDS) for any material used.

Start in the corner of the room farthest from the entrance door and moisten an area of the adhesive approximately 3 by 10 feet with amended water. Wet scrape with a stiff-bladed wall or floor scraper removing ridges and any loose adhesives until only a thin smooth film remains. Where deposits are heavy or difficult to scrape, heat with a hot-air blower prior to scraping. Deposit scrapings in a disposal bag or closed impermeable container and dispose of as required by the Disposal of Asbestos-Containing Waste Material. Keep floor wet with solvent or amended water. Wet vacuum standing water with HEPA wet/dry vacuum. Mop floor with amended water, removal encapsulant, or liquid detergent solution to remove all debris and residue. Mop floor with removal solvent as required by manufacturer's directions as required to completely remove all residue of adhesive.

Clean Floor after completion of removal of asbestos-containing materials by wet mopping with amended water. Mop at least three times or until all residue is no longer present, allowing a drying time between each mopping.

- **REMOVAL OF THERMAL SYSTEM INSULATION (GLOVEBAG METHOD):**

Use glovebag procedures in compliance with federal and state regulations for the removal of small sections of TSI. Place a Primary Barrier of at least one layer of 6 mil polyethylene as a drop cloth below material to be removed extending at least 10 feet in all directions. Provide, at a minimum, 6 mil polyethylene, polyvinylchloride or equivalent plastic sack with two inward projecting long sleeved gloves or mittens, preprinted with same warning notice as a disposal bag, equipped with a pouch for storage of tools, with designated location for wand or HEPA vacuum wand, and sufficient capacity to hold removed materials and permit sealing as specified. Provide a hand pump type pressure-can garden sprayer fabricated out of either metal or plastic, equipped with a metal wand at the end of a hose that can deliver a stream or spray of liquid under pressure. Check pipe where the work will be performed. Wrap damaged (broken lagging, hanging, etc.), pipe in 6 mil plastic and "candy-stripe" with duct tape. Place one layer of duct tape around undamaged pipe at each end where the glove bag will be attached. Slit top of the glove bag open (if necessary) and cut down the sides to accommodate the size of the pipe (about two inches longer than the pipe diameter). Place necessary tools into pouch located inside glovebag. This will usually include at least the following items: bone saw, utility knife, rags, scrub brush, wire cutters, tin snips and pre-wetted cloth. Place one strip of duct tape along the edge of the open



top slit of glove bag for reinforcement. Place the glove bag around section of pipe to be worked on and staple top together through reinforcing duct tape. Next, duct tape the ends of glove bag to pipe itself, where previously covered with plastic or duct tape. Use smoke tube and aspirator bulb to test seal. Place tube into water sleeve (two-inch opening to glove bag) squeezing bulb and filling bag with visible smoke. Remove smoke tube and twist water sleeve closed. While holding the water sleeve tightly, gently squeeze glove bag and look for smoke leaking out, (especially at the top and ends of the glove bag). If leaks are found, tape closed using duct tape and re-test. Insert wand from garden sprayer through water sleeve. Duct tape water sleeve tightly around the wand to prevent leakage. Thoroughly wet material to be worked on with amended water or removal encapsulant and allow to soak in. Wet adequately to penetrate and soak material through to substrate. One person places his hands into the long-sleeved gloves while the second person directs garden sprayer at the work. Use bone saw, if required, to cut insulation at each end of the section to be removed. A bone saw is a serrated heavy gauge wire with ring-type handles at each end. Throughout this process, spray amended water or removal encapsulant on the cutting area to keep dust to a minimum. Remove insulation using putty knives or other tools. Place pieces in bottom of bag without dropping. Rinse all tools with water inside the bag and place back into pouch. Using scrub brush, rags and water, scrub and wipe down the exposed pipe. Remove water wand from water sleeve and attach the small nozzle from HEPA-filtered vacuum. Turn on the vacuum only briefly to collapse the bag. Remove the vacuum nozzle, twist water sleeve closed and seal with duct tape. From outside the bag, pull the tool pouch away from the bag. Place duct tape over twisted portion and then cut the tool bag from the glove bag, cutting through the twisted/taped section. Contaminated tools may then be placed directly into next glove bag without cleaning. Alternatively, tool pouch with the tools can be placed in a bucket of water, opened underwater, and tools cleaned and dried. Discard rags and scrub brush with asbestos waste. With removed insulation in the bottom of the bag, twist the bag several times and tape it to keep the material in the bottom during removal of the glove bag from the pipe. Slip a 6 mil disposal bag over the glove bag (still attached to the pipe). Remove tape or cut bag, open the top of the glove bag, and fold it down into disposal bag. Clean all surfaces in the Work Area using disposable cloths wetted with water with surfactant or removal encapsulant added. When the surfaces have dried, clean them with a HEPA filtered vacuum. Seal exposed ends of remaining pipe insulation and exposed pipe. Collapse the bag with a HEPA vacuum twist top of bag, seal with

at least 3 wraps of duct tape, bend over, and seal again with at least 3 wraps of duct tape.

Dispose of all rags, plastic sheet, etc. in accordance with requirements "Disposal of Procedures".

Decontaminate Equipment: After the completion of all work, decontaminate all equipment and machinery used for work of this section.

- **REMOVAL OF ASBESTOS-CONTAINING PIPE INSULATION WITHIN THE NEGATIVE PRESSURE ENCLOSURE:**

Once the negative pressure enclosure has been constructed, lightly mist to the satisfaction of Owner's Representative and/or the Owner's Industrial Hygienist (IH) asbestos-containing materials to be removed. Accomplish misting by using a fine spray (mist) of amended water. 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. Saturate material through to the substrate sufficiently to wet to the substrate without causing excess dripping. Allow time for amended water to penetrate material thoroughly. Spray material repeatedly during the work process to maintain a continuously wet condition. If a removal encapsulant is used, apply in strict accordance with manufacturer's written instructions.

Mist the work area continuously with amended water whenever necessary to reduce airborne fiber levels.

As the material is removed, pack material while still wet into labeled 6-mil disposal bags. Do not allow material to dry out. Evacuate air from disposal bags with a HEPA filtered vacuum cleaner before sealing. Use the "gooseneck" procedure to seal bags by twisting the neck of the bags, sealing with duct tape, bending the neck of the bag over, and sealing again with a minimum three wraps of duct tape. Clean outside of bag and move to Wash-Down Station adjacent to Equipment Decontamination Unit.

Dispose of all rags, plastic sheet, etc. in accordance with requirements "Disposal of Procedures".

Decontaminate Equipment: After the completion of all work, decontaminate all equipment and machinery used for work of this section.

## VII. WASTE STORAGE AND DISPOSAL PROCEDURES

### ASBESTOS-CONTAINING MATERIALS (ACM)

All ACM waste materials are to be contained in one of the following: (1) Two 6 mil disposal bags, both bags twisted closed, folded over (gooseneck style), and both bags sealed with duct tape; (2) One 6 mil disposal bag, sealed as previously described placed into a durable leak-tight disposable container; (3) DOT-approved drum; (4) Two layers of 6-mil polyethylene sheeting sealed at seams with duct tape.

Waste stored on the site prior to disposal, must be maintained in a secured, locked location where access is controlled.

#### LABELING OF DISPOSAL CONTAINERS:

On the outside of the chosen disposal container, the following three labels must be placed and visible:

**First Label:** Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

**Second Label:** Until October 1, 1993, provide in accordance with U. S. Department of Transportation regulation on hazardous waste marking. 49 CFR Parts 171 and 172. Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987:

**Third Label:** Provide in accordance with 40 CFR Part 61 (AMENDED), subpart M, section 61.150(a)(1)(v) of EPA's National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Provision. Published November 20, 1990.

All waste is to be hauled by a waste hauler with all required licenses from all state and local authorities with jurisdiction. Protect walls, floors, and ceilings of the interior of the truck or dumpster with one layer of 6 mil polyethylene sheeting. Floor sheeting shall be installed first and shall extend up the side wall at least 12 inches and taped securely into place. Wall sheeting shall overlap by at least six inches and be taped into place. Ceiling sheeting shall extend down the sides of the walls at least six inches and be taped into place. Take containers from the Work Area directly to a sealed truck or dumpster. Do not transport disposal bagged materials on open

trucks. Comply with any local or state regulations for prior notice and delivery, and comply with any special landfill requirements.

At a disposal site, vehicles shall approach the dump location as closely as possible for unloading of the asbestos waste. Bags, drums and wrapped components shall be inspected when unloaded at the disposal site. Material in damaged containers shall be re-wrapped or re-packed in empty bags or drums. If more than 25% of the bags are broken or damaged, return to work site for re-bagging. Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out. Following the removal of all containerized waste, polyethylene sheeting shall be removed and discarded in bags or drums along with contaminated cleaning materials and protective clothing. Clean cargo area of the truck or dumpster by wet-wiping with amended water and/or using a HEPA vacuum cleaner.

Retain Waste Shipment Records (WSRs) from landfill and/or processor for materials disposed of. At completion of hauling and disposal of each load submit copy of waste manifest and landfill receipts to Owner's Representative and comply with local and state regulations for disposal documentation.

As per NESHAPS 61.150 vii(3)(4) waste shipment records shall be obtained from the landfill/or hauler within 35 days, if not received within 45 days, EPA shall be notified by the contractor of unresponsive records.

## VIII. AIR MONITORING AND PROJECT COMPLETION

A qualified and licensed air monitoring firm shall provide all air monitoring and perform all visual inspections.

### **BACKGROUND AIR MONITORING:**

Background monitoring shall be performed both inside and outside of the work areas to establish existing ambient air levels under normal activity conditions. The background samples will be analyzed using Phase Contrast Microscopy (PCM) analysis.

### **DAILY AREA AIR MONITORING:**

The purpose of the Owner's daily area air monitoring is to evaluate quality, resolve problems, and minimize the potential for the spread of contamination beyond the work area. In addition, the work of the Owner's IH includes performance of the final visual inspection and testing to determine whether a space or a building has been adequately decontaminated. All daily air monitoring is to be done utilizing Phase Contrast Microscopy (PCM) except for Final Clearance Monitoring as

specified in the following paragraphs. Owner's Air Monitor will perform the following tasks:

1. Perform continuous air monitoring, inspection and testing inside and outside the work area during actual abatement work to detect any faults in the work area isolation and any adverse impact on surrounding areas from work area activities
2. Perform final inspection and testing of decontaminated areas or buildings at the conclusion of the abatement and clean-up work to certify compliance with decontamination standard.

All data, inspection results, and testing results generated by the Owner's IH will be available to the contractor for information and consideration. Contractor shall provide cooperation and support to the Owner's IH for efficient and smooth performance of their work.

Monitoring and inspection results of the IH may be used to issue any stop removal orders to the contractor during abatement work and to accept or reject an area or a building as decontaminated.

This section also sets forth airborne fiber levels both inside and outside the work area as action levels, and describes the action required by the Contractor if an action level is met or exceeded.

**STOP ACTION LEVELS:**

Inside Work Area: Maintain an average airborne count in the work area of less than .05 f/cc. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. If the Time Weighted Average (TWA) fiber count for any work shift or 8 hour period exceeds the Stop Action Level, stop all work except corrective action, leave pressure differential and air circulation system in operation and notify Owner's Representative. After correcting cause of high fiber levels, do not recommence work for 24 hours unless otherwise authorized, in writing, by Owner's Representative.

If airborne fiber counts exceed 0.1 f/cc cease all work except corrective action. Notify Owner's Representative. Do not recommence work other than corrective action for 24 hours unless otherwise authorized, in writing, by Owner's Representative.

Outside Work Area: If any air sample taken outside of the Work Area exceeds 0.01 f/cc or the base line established by background air monitoring,

immediately and automatically stop all work except corrective action. The Owner's Representative will determine the source of the high reading and notify the Contractor in writing.

If the high reading was the result of a failure of Work Area isolation measures initiate the following actions:

- Immediately erect new critical barriers to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (eg. wall, ceiling, floor).
- Decontaminate the affected area in accordance with Project Decontamination Procedures.
- Require that respiratory protection as set forth in Respiratory Protection be worn in affected area until area is cleared for re-occupancy in accordance with Final Clearance Monitoring.
- Leave Critical Barriers in place until completion of work and ensure that the operation of the pressure differential system in the Work Area results in a flow of air from the affected area into the existing Work Area.
- If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a separate decontamination facility consisting of a Shower Room and Changing Room.
- After Certification of Visual Inspection in the Work Area, remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area as set forth in Final Clearance Monitoring.

If the high fiber reading was the result of other causes, initiate the corrective action as determined by the Owner's Representative.

**CONTRACTOR RELEASE CRITERIA FOR FINAL WORK AREA CLEARANCE:**

**1) VISUAL INSPECTION**

Final Clearance Monitoring will not begin until the Asbestos Abatement Work Area airborne asbestos structure concentrations have been reduced to the level specified and described in Project Decontamination is complete, the area has passed a thorough visual inspection by the Owner's Air Monitor and the Project Manager and successful completion of these requirements has been certified by

the Owner's Air Monitor and Project Manager. The visual inspection will be performed at the request of the Supervisor following fine cleaning of the work area.

**2) ENCAPSULATION**

A coating of compatible encapsulant must be applied to porous surfaces that have been stripped and cleaned of ACM. This must be compatible with the substrate of the replacement material.

**3) REMOVAL OF PRIMARY BARRIERS**

After all encapsulant is thoroughly dry, all primary barriers, if present, must be removed. If any evidence of contamination is observed after removal of the primary barriers, the debris/particulate should be HEPA vacuumed and wet-wiped under not residue remains.

**4) FINAL AIR MONITORING**

**TEM clearance sampling is required on this project due to the amount of friable ACM present.**

Sampling sensitivity in the tables below refer to:

Analytical Sensitivity for TEM analysis as set forth in the analytical method used and/or the AHERA regulation.

TEM samples will be secured as indicated below:

**TRANSMISSION ELECTRON MICROSCOPY:**

In each homogeneous work area after completion of all cleaning work, a minimum of 5 samples, or sufficient for the size of the project, will be taken and analyzed as follows:

Location Sampled	Number of Samples	Analysis Method	Analytical Sensitivity (fibers/cc)	Recommended Volume (liters)	Rate in Liters per Minute (LPM)
Work Area	A minimum of 5	TEM	0.005	1,200-1,800	1-10
Outside of Work Area	5*	TEM	0.005	1,200-1,800	1-10
Work Area Blank	1	TEM	0.005	0	Open for 30 Seconds
Outside of Work Area Blank	1	TEM	0.005	0	Open for 30 Seconds
Laboratory Blank	1	TEM	0.005	0	Do Not Open

\* If samples collected inside of the work area report >70 structures/mm<sup>2</sup>, TEM samples shall be collected outside of the work area.

Analysis will be performed using the analysis method set forth in the AHERA Regulation 40 CFR Part 763 Appendix A.

Asbestos Structures referred to in this Section include asbestos fibers, bundles, clusters or matrices, as defined by method of analysis.

Release Criteria: Decontamination of the work site is complete if:  
 The arithmetic mean (average) asbestos concentration is less than 70 structures per square millimeter of filter area.

**LABORATORY TESTING AND ANALYTICAL METHODS:**

**PHASE CONTRAST MICROSCOPY (PCM):**

Analysis of background and daily samples will be performed utilizing the methods set forth in NIOSH 7400 method.

**TRANSMISSION ELECTRON MICROSCOPY (TEM):**

Analysis of clearance samples will be performed using the analysis method set forth in the AHERA regulation 40 CFR Part 763 Appendix A. Samples will



be sent by overnight courier for analysis by Transmission Electron Microscopy. Samples will not be carried on weekends, so that samples shipped on Friday will arrive on the following Monday. Faxed and Verbal results will normally be available during the 2ND working day after receipt of samples by the laboratory. All Transmission Electron Microscopy results will be available to the Contractor.

**SAMPLE VOLUMES:**

The number and volume of air samples taken by the Owner will be in accordance with all regulations and standards governing air monitoring. Additional samples may be taken at Owner's or Owner's Representatives discretion. If airborne fiber counts exceed allowed limits additional samples will be taken as necessary to monitor fiber levels.

**SAMPLE CASSETTES:**

PCM: Samples will be collected on 25 mm cassettes with a 0.80 micrometer mixed cellulose ester filter.

TEM: Samples will be collected on 25 mm cassettes with 0.45 micrometer mixed cellulose ester filter.

**WRITTEN REPORTS:**

Written reports will be posted at the job site on a daily basis, and within 24 hours of collection of the samples. Location will be determined by Owner's Representative and Contractor's General Superintendent. Clearance results shall be posted at the site prior to tear-down of the containment area(s).

**ADDITIONAL TESTING:**

The Contractor may conduct his own air monitoring and laboratory testing. If he elects to do this the cost of such air monitoring and laboratory testing shall be at no additional cost to the Owner.

**PERSONAL MONITORING:**

Contractor is responsible for performing air monitoring to meet Contractor's OSHA requirements for personnel sampling or any other purpose.

**IX. SUBMITTALS**

The list below includes the submittal requirements prior to the start of work, and before project closeout. Submittal for the section At Project Closeout must be submitted to the Owner's Representative with the Final Payment Request.

**SUBMITTAL CHECKLIST - MANDATORY**

Submittal for section Before Start of Work must be turned in to the Owner or the Owner's Representative at the Pre-Construction Meeting. If no Pre-Construction Meeting is held, then the paperwork must be submitted to the Owner's or the Owner's Representative Office 48 Hours before the start of work. The Owner or Owner's Representative will then give the contractor written permission to begin work. The Contractor will not begin work without written permission.

**BEFORE START OF WORK**

- \_\_\_\_\_ 1. Copy of Contractor's SC-DHEC Contractor's License.
- \_\_\_\_\_ 2. Copies of SC-DHEC Licenses for each individual that will be working on the job site.
- \_\_\_\_\_ 3. SC-DHEC Permit
- \_\_\_\_\_ 4. Insurance Certificate

Submittal for the section Periodically During Work or Before Project Closeout must be submitted to the Owner or Owner's Representative with the Progressive Payment Request. If Progressive Payments are not indicated, then the submittals must be turned into the Owner or Owner's Representative Office before the Project Closeout. Contractor must have written permission from Owner or Owner's Representative before beginning Project Closeout.

**PERIODICALLY DURING WORK OR BEFORE PROJECT CLOSEOUT**

- \_\_\_\_\_ 5. Copy of containment checklist filled out by Air Monitor and Contractor
- \_\_\_\_\_ 6. Daily Logs filled out and signed by the Project Supervisor
- \_\_\_\_\_ 7. Daily Sign In\Sign Out Sheets
- \_\_\_\_\_ 8. Contractor's copy of Initial Exposure Assessment
- \_\_\_\_\_ 9. Contractor's copy of Negative Exposure Assessment
- \_\_\_\_\_ 10. Contractor's copy of Daily Air Monitoring Results
- \_\_\_\_\_ 11. Accident and Incident Investigation Report
- \_\_\_\_\_ 12. Visitor Log and signed Visitor's Authorization Form
- \_\_\_\_\_ 13. Documentation of Manometer Readings and Asbestos Filtration (AFD) and Water Filtration (WFD) Device Inspections
- \_\_\_\_\_ 14. Personnel Air monitoring reports

Submittal for the section At Project Closeout must be submitted with the Final Payment Request.

**AT PROJECT CLOSEOUT**

- \_\_\_\_\_ 15. Certification of Removal
- \_\_\_\_\_ 16. Asbestos Chain-of-Custody Form (Trip Ticket) completed by and signed by the Contractor Representative, Transporter and Disposal Site Representative within 35 days as required by NESHAPS 61.150 vii(3)(4)

Copies of the submittals for the section Items to be Submitted by the Air Monitoring Firm should also be obtained by the Contractor and included in the Contractor Submittals as indicated above.

**ITEMS TO BE SUBMITTED BY THE AIR MONITORING FIRM(S)**

- \_\_\_\_\_ 17. Air monitoring reports posted within 24 hours
- \_\_\_\_\_ 18. Summary to owner within 5 days
- \_\_\_\_\_ 19. Copy of Air Monitor's license(s)

**ATTACHMENT I**  
**S&ME, Inc. 'HAZARDOUS MATERIALS ASSESSMENT**  
**REPORT'**



Hazardous Materials Assessment Report  
Gallman School  
540 Brantley Street  
Newberry, South Carolina  
S&ME Project No. 22610550R.1

PREPARED FOR:

**Moseley Architects**  
44 Markfield Drive  
Charleston, SC 29407

ASSESSMENT PERFORMED BY:

**Travis Knight, CHMM, CIEC & Bobby McAllister**  
SCDHEC Lic. #BI-00885 & BI-01429  
Assessment date: November 15, 2020

PREPARED BY:

**S&ME, Inc.**  
134 Suber Road  
Columbia, SC 29210

**January 9, 2022**



January 9, 2023

Moseley Architects  
44 Markfield Drive  
Charleston, South Carolina 29407

Attention: Mr. Benjamin S. Whitener, AIA  
[bwhitener@moseleyarchitects.com](mailto:bwhitener@moseleyarchitects.com)

Reference: **Hazardous Materials Assessment Report  
Gallman School**  
540 Brantley Street  
Newberry, South Carolina  
S&ME Project No. 22610550R.1

Dear Mr. Whitener:

S&ME, Inc. (S&ME) is pleased to provide the enclosed report detailing the hazardous materials assessment of Gallman School located at 540 Brantley Street in Newberry, South Carolina. The assessment was performed in general accordance with S&ME Proposal 22610550, dated October 17, 2022. The enclosed report includes the executive summary, project background, assessment procedures, findings and results, and conclusions and recommendations for the proper treatment of the identified hazardous materials as related to the planned building renovation activities.

This report is provided for the sole use of the client. Use of this report by any other parties will be at such party's sole risk and S&ME, Inc. disclaims liability for any such use or reliance by third parties. The results presented in this report are indicative of conditions only during the time of the assessment and of the specific areas referenced. The information provided in this assessment report should not be used as a bidding document, and field conditions should be verified by contractors bidding on asbestos or hazardous materials abatement/removal.

We appreciate the opportunity to provide you with our industrial hygiene/environmental services. If you have any questions concerning this report, please call us at (803) 561-9024.

Sincerely,

**S&ME, Inc.**

Handwritten signature of Bobby McAllister in black ink.

Bobby McAllister  
Environmental Staff Professional

Handwritten signature of Tom Behnke in black ink.

Tom Behnke, PG, CHMM  
Environmental Services Manager



# Table of Contents

<b>Executive Summary .....</b>	<b>1</b>
Asbestos Assessment .....	1
Lead-Based Paint Assessment .....	2
Polychlorinated Biphenyl Screening.....	2
Mercury Screening .....	3
<b>1.0 Background .....</b>	<b>4</b>
1.1 Asbestos Assessment .....	4
1.2 Lead-based Paint Assessment.....	4
1.3 Polychlorinated Biphenyl Screening.....	4
1.4 Mercury Screening .....	5
<b>2.0 Asbestos Assessment.....</b>	<b>5</b>
2.1 Assessment Procedures .....	5
2.2 Findings and Results.....	6
<b>3.0 Lead-Based Paint Assessment .....</b>	<b>7</b>
3.1 Investigative Procedures .....	7
3.2 Findings and Results.....	8
<b>4.0 Polychlorinated Biphenyl Screening .....</b>	<b>8</b>
4.1 Procedures .....	8
4.2 Findings .....	8
<b>5.0 Mercury Screening.....</b>	<b>9</b>
5.1 Procedures .....	9
5.2 Findings .....	9
<b>6.0 Conclusions and Recommendations .....</b>	<b>9</b>
6.1 Asbestos .....	9
6.2 Lead-based Paint .....	10
6.3 Polychlorinated Biphenyls .....	10



6.4 Mercury..... 11

**7.0 Limitations..... 11**

**Appendices**

- Appendix I – Summary of Asbestos Sampling
- Appendix II – ACM Location Exhibits & Site Photographs
- Appendix III – Copy of Inspectors’ SCDHEC Licenses
- Appendix IV – Laboratory Analysis Sheets and Chain of Custody Records
- Appendix V – Summary of XRF Lead Analyzer Readings





## Executive Summary

A hazardous materials assessment was conducted by S&ME, Inc. (S&ME) on November 15, 2022 of Gallman School located at 540 Brantley Street in Newberry, South Carolina. The purpose of the assessment was to identify asbestos-containing materials (ACMs), lead-based paint coatings, and to perform a visual screening for potential sources of polychlorinated biphenyls (PCBs), and mercury to support future renovation activities.

Gallman School is a single-story building with a two-story section on the southeast end and a gym with a basement area; built on crawlspace with brick veneer exterior and a flat built-up roof system. The building encompasses approximately 39,200 square feet of space. The building contains classrooms, gymnasium, cafeteria, and administrative areas. The ceilings are finished with acoustical ceiling tiles, and the floors are finished with a combination of vinyl floor tiles, linoleum, ceramic tiles, and carpeting. Interior walls consisted of concrete masonry unit (CMU) and drywall.

This summary is for convenience only and should not be relied upon without first reading the full contents of this report, including appended materials.

## Asbestos Assessment

The asbestos assessment was performed in general accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, *Standards of Performance for Asbestos Projects* effective May 27, 2011.

The suspect ACMs sampled and analyzed as part of this assessment included drywall and associated joint compound, plaster, three styles of ceiling tiles, four styles of vinyl floor tile and mastic, three styles of linoleum, spray-applied fire proofing, baseboard mastic, window glazing, thermal system insulation (TSI), hard joint insulation, built-up roofing, black sealant and silver sealant. The Environmental Protection Agency (EPA) and the SCDHEC define materials as asbestos-containing if an asbestos content greater than one percent (> 1%) is detected in a representative sample. The identified ACMs are summarized in the table on the following page.

**Table E-1 Summary of Confirmed ACMs**

Material	HA	Material Location	Asbestos Type and Percent	Condition	*Approx. Quantity
12-inch dark tan vinyl floor tile and black mastic	FT2	Throughout except gym and kitchen	Chrysotile 3% Chrysotile 4%	Good	30,000 SF
9-inch brown vinyl floor tile and mastic	FT3	Throughout beneath 12-inch vinyl tile in hallways, classrooms, linoleum and carpet	Chrysotile 5% Chrysotile 6%	Good	30,000 SF
Thermal system insulation	TSI	Beneath gym office and shop area	Amosite 15% Chrysotile 3%	Good	200 LF
Hard joint insulation	HJ	Beneath gym office and shop area	Chrysotile 65%	Good	15 HJ



Material	HA	Material Location	Asbestos Type and Percent	Condition	*Approx. Quantity
Window glazing	WG	Exterior windows	Chrysotile 2%	Good	3,500 LF

\*The quantities are estimated and should be field verified by contractors bidding on asbestos removal.

**Abbreviations:**

HA = homogeneous area SF = square feet NF = non-friable F = friable LF = linear feet EA = Each

Silver sealant on roof parapet wall and penetration areas reported less than one percent asbestos. A material with an asbestos content less than one percent is not classified as an ACM applicable to EPA and SCDHEC, however trace levels of asbestos (less than one percent) in a material is subject to Occupational Safety and Health Administration (OSHA) regulatory requirements, to include, but not limited to, worker protection, using wet methods, proper clean-up, use of proper tools/equipment, engineering controls, etc.

**Lead-Based Paint Assessment**

Painted surfaces throughout the interior and exterior of the structure were considered suspect and analyzed for lead content. Multiple painted surfaces associated with the structure exhibited detectable levels of lead and the disturbance of these materials is regulated by OSHA regulation 29 CFR 1926.62 (Lead in Construction). The coated surfaces exceeding the SCDHEC disposal criteria of 0.7 milligrams per square centimeter (mg/cm<sup>2</sup>) were considered lead-based paint for the purpose of this assessment. The following is a general summary of the identified lead-based paint systems:

- Yellow glazed ceramic wall men’s restroom (7.70 mg/cm<sup>2</sup>).
- Black and green ceramic wall in women’s restroom (5.40-19.90 mg/cm<sup>2</sup>).

**Polychlorinated Biphenyl Screening**

Representative light ballasts were inspected for labeling regarding PCB content from readily accessible light fixtures. Approximately 197 light ballasts are estimated to be present in the subject building. Based on our field observations, several types of ballasts were observed. There were approximately 51 light ballasts not labeled regarding PCB content. Due to the age of the building and the unknown installation date, these unlabeled ballasts are presumed to contain PCBs. The unlabeled light ballasts presumed to contain PCBs were associated with 8 foot hanging fixtures with metal grates located in classrooms (18), teacher work room (2), gym hall (3), near gym (1), gym entrance (1) and lower-level (25). The remaining types of ballasts observed were labeled as “Electromagnetic” or displayed “No PCBs.” Labels designating “No PCBs” were not required after 1998. If other ballasts are encountered during the renovation process that are not labeled, and not installed post-1998, they should be presumed to contain PCBs.



## **Mercury Screening**

Fluorescent lamps inherently contain low levels of mercury regardless of classification. Approximately 154 (4' length) fluorescent bulbs and 170 (8' length) fluorescent lamps were observed in the building. Approximately 28 CFL bulbs were observed. Three mercury vapor bulbs were observed on the exterior of the building.

Two thermostats were observed in the cafeteria. No additional sources of mercury were noted during the assessment.



## 1.0 Background

A hazardous materials assessment was conducted by S&ME, Inc. (S&ME) on November 15, 2022 of Gallman School located at 540 Brantley Street in Newberry, South Carolina. The purpose of the assessment was to identify asbestos-containing materials (ACMs), lead-based paint coatings, and to perform a visual screening for potential sources of polychlorinated biphenyls (PCBs), and mercury to support future renovation activities.

Gallman School is a single-story building with a two-story section on the southeast end and a gym with a basement area; built on crawlspace with brick veneer exterior and a flat built-up roof system. The building encompasses approximately 39,200 square feet of space. The building contains classrooms, gymnasium, cafeteria, and administrative areas. The ceilings are finished with acoustical ceiling tiles, and the floors are finished with a combination of vinyl floor tiles, linoleum, ceramic tiles, and carpeting. Interior walls consisted of concrete masonry unit (CMU) and drywall.

### 1.1 Asbestos Assessment

The asbestos assessment was performed by observing and collecting random samples of suspect asbestos-containing materials associated with the interior and exterior of the subject building. The identification of ACMs will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos. Identification of ACMs also complies with Title 40 Code of the Federal Regulations, part 61, and State regulation 61-86.1 enforced by the South Carolina Department of Health and Environmental Control (SCDHEC), along with Title 29 Code of Federal Regulations, part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The following sections describe the assessment procedures used, results of the suspect ACMs sampled and analyzed, and conclusions and recommendations related to ACMs.

### 1.2 Lead-based Paint Assessment

The purpose of the testing was to assess and identify lead-based paint coatings associated with the subject building. The identification of these materials will aid in the compliance of occupational exposure and/or environmental releases of airborne lead dust in accordance with OSHA 29 CFR 1926.62 (Lead in Construction) and provide information to determine proper disposal of lead-based paint coated components and debris in accordance with the SCDHEC and Environmental Protection Agency (EPA).

### 1.3 Polychlorinated Biphenyl Screening

The polychlorinated biphenyl (PCB) screening was conducted by visually inspecting labeling associated with suspect PCB-containing equipment to include lighting ballasts and transformers associated with the subject buildings. PCBs are regulated by the EPA under 40 CFR 761, the Toxic Substance Control Act (TSCA). The identification of these materials will determine proper handling and disposal of identified PCB-containing sources. The manufacture of this known carcinogen was banned in 1976. Sampling and testing of suspect PCB-containing equipment was not performed as part of this screening.



## 1.4 Mercury Screening

The mercury screening was conducted by visually inspecting thermostats and fluorescent lamps associated with the subject building. Mercury is designated as a Universal Waste by the EPA under 40 CFR 273, the Resource Conservation and Recovery Act (RCRA). The state of South Carolina has no formal mercury program and has adopted the EPA regulations for proper handling and disposal of mercury-containing sources. The identification of these materials will aid in the prevention of occupational exposures and/or environmental releases of mercury and provide information to facilitate proper disposal of mercury-containing sources in accordance with SCDHEC and EPA Universal Waste requirements. Sampling and testing of mercury sources was not performed as part of this screening.

## 2.0 Asbestos Assessment

### 2.1 Assessment Procedures

The asbestos assessment was performed by observing and collecting random samples of suspect asbestos-containing materials associated with the interior and exterior of the subject building. Significant destructive testing was not performed, therefore the possibility exists that suspect materials were undetected in inaccessible areas such as inside pipe chases, wall voids, or flooring overlays. If additional suspect materials are discovered during the planned destructive activities, bulk samples must be collected by a SCDHEC licensed inspector and analyzed for asbestos content.

A sampling strategy was developed to provide representative samples of the suspect asbestos-containing materials in accordance with OSHA, SCDHEC and EPA. Bulk samples were then extracted from suspect ACMs, recorded on a chain of custody record, and submitted to S&ME's in house polarized light microscopy (PLM) lab in Charlotte, North Carolina for analysis. Non-friable, organically bound (NOB) samples that tested negative via PLM were also submitted to EMSL Analytical's asbestos laboratory in Pineville, North Carolina for analysis via transmission electron microscopy (TEM).

#### *Polarized Light Microscopy (PLM)*

The suspect materials were analyzed by trained microscopists using PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F-APPENDIX A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present.

#### *Transmission Electron Microscopy (TEM)*

In accordance with SCDHEC Regulation 61-86.1, Transmission Electron Microscopy (TEM) confirmation analysis is required to be performed on one sample of any non-friable, organically bound material (NOB) that tests negative via PLM analysis. The TEM analysis was performed using EPA 600 Method in accordance with ASTM E2356.



The TEM confirmation analysis was performed by EMSL’s laboratory in Charlotte, North Carolina. Both the PLM and the TEM laboratories are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology.

## 2.2 Findings and Results

The asbestos assessment conducted on November 15, 2022 included the quantification and random bulk sampling of various suspect asbestos-containing materials located on the interior and exterior of the subject building. The suspect ACMs sampled and analyzed as part of this assessment included drywall and associated joint compound, plaster, three styles of ceiling tiles, four styles of vinyl floor tile and mastic, three styles of linoleum, spray-applied fire proofing, baseboard mastic, window glazing, thermal system insulation (TSI), hard joint insulation, built-up roofing, black sealant and silver sealant. The Environmental Protection Agency (EPA) and the SCDHEC define materials as asbestos-containing if an asbestos content greater than one percent (>1%) is detected in a representative sample. The identified ACMs are summarized in the table on the following page.

**Table 2-1 Summary of Confirmed ACMs**

Material	HA	Material Location	Asbestos Type and Percent	Condition	*Approx. Quantity
12-inch dark tan vinyl floor tile and black mastic	FT2	Throughout except gym and kitchen	Chrysotile 3% Chrysotile 4%	Good	30,000 SF
9-inch brown vinyl floor tile and mastic	FT3	Throughout beneath 12-inch vinyl tile in hallways, classrooms, linoleum and carpet	Chrysotile 5% Chrysotile 6%	Good	30,000 SF
Thermal system insulation	TSI	Beneath gym office and shop area	Amosite 15% Chrysotile 3%	Good	200 LF
Hard joint insulation	HJ	Beneath gym office and shop area	Chrysotile 65%	Good	15 HJ
Window glazing	WG	Exterior windows	Chrysotile 2%	Good	3,500 LF

\*The quantities are estimated and should be field verified by contractors bidding on asbestos removal.

Abbreviations:

HA = homogeneous area SF = square feet NF = non-friable

Silver sealant on roof parapet wall and penetration areas reported less than one percent asbestos. A material with an asbestos content less than one percent is not classified as an ACM applicable to EPA and SCDHEC, however trace levels of asbestos (less than one percent) in a material is subject to Occupational Safety and Health Administration (OSHA) regulatory requirements, to include, but not limited to, worker protection, using wet methods, proper clean-up, use of proper tools/equipment, engineering controls, etc.

## Hazardous Materials Assessment Report

### Gallman School

Newberry, South Carolina

S&ME Project No. 22610550R.1



In accordance with SCDHEC Regulation 61-86.1, TEM analysis was performed on one sample of each of the non-friable, organically-bound (NOB) materials that displayed a result of no asbestos detected or less than 1% asbestos via PLM analysis. NOBs consist of materials such as vinyl floor tiles, vinyl baseboards and mastics and roofing materials. Please refer to Table I-I in Appendix I for more detail regarding which samples of NOB materials submitted for TEM analysis.

The EPA classifies ACMs into two categories; friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be "crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations." The identified asbestos-containing flooring materials are classified as Category I non-friable ACMs, in good condition, with a significant potential for disturbance due to the planned demolition activities. The identified asbestos-containing window glazing is classified as a friable ACM, in good condition, with a significant potential for disturbance due to the planned renovation or demolition activities. The remaining bulk samples collected and analyzed did not exhibit an asbestos content >1%.

A summary of asbestos results is provided in **Table I** of **Appendix I**, and provides the sample number, location, type of material tested, approximate quantity of the material sampled, condition of the material, and corresponding result for each sample. Figure 1 and site photographs of the identified ACM are provided in **Appendix II**, and a copy of the inspector's SCDHEC license is provided in **Appendix III**. Copies of the laboratory analyses and chain-of-custody records are provided in **Appendix IV**.

## 3.0 Lead-Based Paint Assessment

### 3.1 Investigative Procedures

The lead-based paint assessment was conducted for compliance with the SCDHEC limit of 0.7 milligrams (mg) of lead per square centimeter (cm<sup>2</sup>) of painted surface for lead-based paint coated waste. SCDHEC, Health Division defines lead-based paint as a coating containing lead in quantities  $\geq 0.7$  mg/cm<sup>2</sup> (SCDHEC, Health Division definition #4-53-1320f). Any coated surfaces or materials meeting or exceeding the SCDHEC limit of 0.7 mg/cm<sup>2</sup> were considered lead-based for the purpose of this assessment.

Lead-based paint testing was performed on representative interior and exterior painted components and products associated with the subject buildings. The components were analyzed with a Thermo Fisher Scientific XLP-300A XRF spectrum analyzer (serial #95004). The suspect painted finishes and products were selected based on the color of the topcoat and the underlying paint layers and/or the substrate on which it was applied. The possibility exists that lead-based paint finishes are present in those inaccessible areas such as pipe chases, wall voids, etc. SCDHEC defines a lead-based paint as any paint containing lead at concentrations equaling 0.7 mg/cm<sup>2</sup> or greater by XRF testing. For the purpose of the assessment, paint containing 0.7 mg/cm<sup>2</sup> or greater was considered lead-based paint due to the planned activities. Lead-based paint, as defined by SCDHEC, on building components, requires disposal in a Class II or Class III landfill.

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms of lead per cubic meter of



air ( $30 \mu\text{g}/\text{m}^3$ ) during an eight-hour day and a permissible exposure level of fifty micrograms per cubic meter ( $50 \mu\text{g}/\text{m}^3$ ).

### 3.2 Findings and Results

Coated surfaces throughout the interior and exterior of the building were tested for the presence of lead-based paint. The coated surfaces meeting or exceeding the SCDHEC limit of  $0.7 \text{ mg}/\text{cm}^2$  were considered lead-based paint for the purpose of this assessment.

The following summarizes the identified confirmed lead-based paint coatings:

- Yellow glazed ceramic wall men's restroom ( $7.70 \text{ mg}/\text{cm}^2$ ).
- Black and green ceramic wall in women's restroom ( $5.40\text{-}19.90 \text{ mg}/\text{cm}^2$ ).

Additionally, detectable levels of lead which are applicable to OSHA regulation 29 CFR 1926.62 (Lead in Construction) were identified in various painted components associated with the structure. The summary of the XRF readings is provided in **Appendix V**.

## 4.0 Polychlorinated Biphenyl Screening

### 4.1 Procedures

The PCB screening was performed by visually screening labels on electrical equipment and representative suspect PCB-containing light ballasts associated with fluorescent light fixtures. PCBs were banned in 1975 and those ballasts manufactured from 1978 to 1998 were required to be labelled as "No PCBs."

PCBs are regulated by the EPA found in 40 CFR 761, the Toxic Substance Control Act (TSCA). PCB-containing equipment cannot be disposed of in Solid Waste Landfills (SWLF) in the State of South Carolina according to R61-107.16. The EPA and SCDHEC require proper disposal of equipment containing PCBs per 40 CFR 761 subpart D of TSCA.

Approximately three different styles of fluorescent light fixtures were observed in each building. The PCB screening was performed by opening random light fixtures of various styles throughout the buildings and observing the ballast(s) in the fixtures for designated labeling.

### 4.2 Findings

Representative light ballasts were inspected for labeling regarding PCB content from readily accessible light fixtures. Approximately 197 light ballasts are estimated to be present in the subject building. Based on our field observations, several types of ballasts were observed. There were approximately 51 light ballasts not labeled regarding PCB content. Due to the age of the building and the unknown installation date, these unlabeled ballasts are presumed to contain PCBs. The unlabeled light ballasts presumed to contain PCBs were associated with 8 foot hanging fixtures with metal grates located in classrooms (18), teacher work room (2), gym hall (3), near gym (1), gym entrance (1) and lower-level (25). The remaining types of ballasts observed were labeled as





“Electromagnetic” or displayed “No PCBs.” Labels designating “No PCBs” were not required after 1998. If other ballasts are encountered during the renovation process that are not labeled, and not installed post-1998, they should be presumed to contain PCBs.

## 5.0 Mercury Screening

### 5.1 Procedures

The mercury screening was conducted to identify liquid mercury or mercury vapor containing sources associated with the building. The mercury screening was performed by identifying mercury vapor lamps and liquid mercury bulb thermostats. The identification of mercury sources will aid in the prevention of occupational exposures and/or environmental releases of mercury and provide information to facilitate proper disposal of mercury sources in accordance with the SCDHEC and the EPA Universal Waste requirements.

Mercury-containing equipment was added to the EPA list of universal waste that is regulated under 40 CFR 273 of the Resource Conservation and Recovery Act (RCRA). The state of South Carolina has no formal mercury program and has adopted the EPA Universal Waste Rule (UWR) regarding proper handling, shipping and disposal of mercury-containing sources.

### 5.2 Findings

Fluorescent lamps inherently contain low levels of mercury regardless of classification. Approximately 154 (4' length) fluorescent bulbs and 170 (8' length) fluorescent lamps were observed in the building. Approximately 28 CFL bulbs were observed. Three mercury vapor bulbs were observed on the exterior of the building.

Two thermostats were observed in the cafeteria. No additional sources of mercury were noted during the assessment.

## 6.0 Conclusions and Recommendations

The hazardous materials assessment conducted on November 15, 2022 of Gallman School located at 540 Brantley Street in Newberry, South Carolina identified the presence of Category I non-friable ACMs, Category II non-friable ACMs and friable ACMs, lead products applicable to SCDHEC and OSHA, mercury vapor sources were observed. This report should be provided to the contractor(s) to assist with compliance with applicable State and Federal regulations.

### 6.1 Asbestos

If additional suspect ACMs not included in this report are discovered and will be disturbed by renovation or demolition activities, bulk samples must be collected by a licensed asbestos inspector and analyzed for asbestos content, prior to disturbance of the suspect material(s). This report should be provided to the contractor(s) to assist with compliance with applicable State and Federal regulations.

## Hazardous Materials Assessment Report

### Gallman School

Newberry, South Carolina

S&ME Project No. 22610550R.1



S&ME recommends proper removal and disposal of the ACMs by a licensed asbestos abatement contractor, prior to activities that may disturb an ACM. State and Federal regulations should be carefully considered in order to verify compliance before any actions are initiated that may disturb an ACM. If additional suspect ACMs not included in this report are discovered and will be disturbed by the renovation/demolition activities, bulk samples must be collected by a licensed asbestos inspector and analyzed for asbestos content, prior to disturbance of the suspect material(s).

Asbestos removal requires written notification to SCDHEC, specific removal procedures, proper transportation, and disposal per state and federal regulations. The identification and proper removal of ACM prior to demolition or renovation will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos. In accordance with SCDHEC Regulation 61-86.1, project air monitoring must be performed by a SCDHEC licensed air sampler in conjunction with the removal of regulated asbestos materials (e.g. friable materials or non-friable materials rendered friable) that exceed the classification of a Small Project or are not regulated exterior removals. SCDHEC also requires a written project design when 3,000 square feet (or greater) of regulated are to be removed.

## 6.2 Lead-based Paint

The lead-based paint assessment conducted at 540 Brantley Street in Newberry, South Carolina identified the presence of lead-based coatings.

The following is a general summary of the identified lead-based paint systems and materials that were determined to contain lead:

The client is advised that OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. Consequently, the OSHA regulations governing worker protection for lead-based paint may apply to work practices including the disturbance of paint systems with detectable levels of lead. Destructive actions (sanding, burning, demolition, component removal, paint preparation) to the lead-containing paint surfaces will require the contractor comply with the standards of OSHA, including but not limited to initial exposure monitoring, the use of personal protective equipment, and medical surveillance.

SCDHEC Regulation 61-107.19 permits demolition materials painted with lead-based paint ( $\geq 0.7$  mg/cm<sup>2</sup>) to be disposed in a permitted Class Two (C&D) or Class Three Subtitle D, Municipal Solid Waste (MSW) landfill.

Accumulations of paint waste (chips, dust, or flakes) must be tested by the Toxicity Characteristic Leaching Procedure (TCLP) to determine if the waste is classified as hazardous, which requires disposal in a Subtitle C (hazardous waste) landfill. Lead waste, at a minimum, must be disposed in a Class Two or Three landfill.

## 6.3 Polychlorinated Biphenyls

Ballasts that may be encountered during renovation that do not exhibit the "No PCBs" labeling that were installed prior to July 1, 1998, are required by the EPA and the SCDHEC to be disposed of in accordance with 40 CFR 761, Subpart D of the Toxic Substance Control Act (TSCA) or sampling to identify PCB levels.



## 6.4 Mercury

The fluorescent light tubes observed in the building's light fixtures inherently contain low levels of mercury and must be recycled or properly disposed as mercury sources. Mercury is designated as a Universal Waste by the EPA under 40 CFR 273, the Resource Conservation and Recovery Act (RCRA). The state of South Carolina has no formal mercury program and has adopted the EPA regulations for proper handling and disposal of mercury-containing sources. Should these materials be disturbed as a part of future renovation or demolition, S&ME recommends removal of the mercury-containing lamps prior to the planned activities, and recycling at a Universal Waste Destination Facility.

## 7.0 Limitations

This report is provided for the sole use of the Client. Use of this report by any other parties will be at such party's sole risk, and S&ME disclaims liability for any such use or reliance by third parties. The results presented in this report are indicative of conditions only during the time of the sampling period and of the specific areas referenced. Under no circumstances is this report to be used as a bidding document, or as a project design or specification.

S&ME performed the services in accordance with generally accepted practices of reputable environmental consultants undertaking similar studies at the same time and in the same geographical area. S&ME has endeavored to meet this standard of care. No other warranty, expressed or implied, is intended or made with respect to this report or S&ME's services. Users of this report should consider the scope and limitations related to these services when developing opinions as to risks associated with the site. Additional limitations to our survey are as follows:

- Significant destructive sampling was not performed during the asbestos assessment. Additional suspect ACMs may be present in inaccessible locations such as in wall voids, pipe chases or flooring overlays. Consequently, if additional suspect materials are discovered during future renovation or demolition activities, bulk samples must be collected and analyzed for asbestos content.
- Portions of the subject building are finished with carpet. Our assessment involved observations beneath the carpeting at random locations. The complete removal of the carpet would be necessary to account for any additional suspect ACMs that may be present.
- The building is finished with a suspended ceiling system. Our assessment involved observations above the suspended ceiling at random locations; however, the complete removal of the ceiling system and ceiling grid would be necessary to account for any additional suspect ACMs that might be present.
- Quantities and locations were estimated during the site observations. Quantities and locations should be field verified by contractors bidding on hazardous materials abatement/removal.

# Appendices

## **Appendix I – Summary of Asbestos Sampling**

## Summary of Asbestos Sampling

<b>Project Name:</b>	Gallman School	<b>Project Number:</b>	22610550
<b>Location:</b>	540 Brantley Street Newberry, South Carolina	<b>Sampling Date(s):</b>	November 15, 2022

**Table I-I Summary of Asbestos Sampling**

HOMOGENEOUS AREA				SAMPLE DATA						Percent and Type Asbestos
HA Area	Material Description	Material Location	Quantity	<sup>1</sup> Cat (F/II)	<sup>2</sup> Type	<sup>3</sup> Condition / Potential for Disturbance	Sample Number	Sample Location		
FT1	12-inch white with brown vinyl floor tile and black mastic	Foyer	170 SF	NA	Misc.	NA/NA	FT-1 FT-2 <sup>4</sup> FT-3	Foyer Foyer Foyer	NAD NAD NAD	
FT2	12-inch dark tan vinyl floor tile and black mastic	Throughout except gym and kitchen	30,000 SF	I	Misc.	Good/Low	FT-4 FT-5 FT-6	Hall Hall Hall	Tile – 3% Chrysotile Mastic – 4% Chrysotile Tile – 3% Chrysotile Mastic – 4% Chrysotile Sample Not Analyzed	
CT1	12-inch spline ceiling tile	Various areas throughout	20,000 SF	NA	Misc.	NA/NA	CT-1 CT-2 CT-3	Hall Library Hall	NAD NAD NAD	
CT2	2x4 ceiling tile	Various areas throughout	9,500 SF	NA	Misc.	NA/NA	CT-4 CT-5 CT-6	Foyer Foyer Foyer	NAD NAD NAD	
FP	Spray-applied fire proofing	1 <sup>st</sup> floor southeast wing and lower-level classrooms	10,500 SF	NA	Surf.	NA/NA	FP-1 FP-2	1 <sup>st</sup> floor southeast wing 1 <sup>st</sup> floor southeast wing	NAD NAD	

NAD = No Asbestos Detected      NA = Not Applicable      SF = Square feet      LF = Linear feet      CF = Cubic Feet  
<sup>1</sup>Category:      F = Friable      I = Category I, Non-Friable      II = Category II, Non-Friable  
<sup>2</sup>Type:      Misc. = Miscellaneous      Surf. = Surfacing      TSI = Thermal System Insulation  
<sup>3</sup>Condition:      Good, Damaged or Significantly Damaged      Accessible during renovation or demolition with Potential for Disturbance; Low or High  
<sup>4</sup>Sample analyzed by TEM  
 Quantities are approximate and should not be used for cost estimates or bidding purposes.

## Summary of Asbestos Sampling

<b>Project Name:</b>	Gallman School	<b>Project Number:</b>	22610550
<b>Location:</b>	540 Brantley Street Newberry, South Carolina	<b>Sampling Date(s):</b>	November 15, 2022

### HOMOGENEOUS AREA

HA Area	Material Description	Material Location	Quantity	<sup>1</sup> Cat (F/II)	<sup>2</sup> Type	<sup>3</sup> Condition / Potential for Disturbance	Sample Number	Sample Location	Percent and Type Asbestos
							FP-3	1 <sup>st</sup> floor southeast wing	NAD
							FP-4	1 <sup>st</sup> floor southeast wing	NAD
							FP-5	1 <sup>st</sup> floor southeast wing	NAD
							FP-6	Lower classroom level	NAD
							FP-7	Lower classroom level	NAD
LN1	Tan pebble linoleum	Cafeteria and restroom in classroom 10	1,500 SF	NA	Misc.	NA/NA	LN-1 LN-2 4LN-3	Cafeteria Cafeteria Restroom in classroom 10	NAD NAD NAD
LN2	Cream mottled linoleum	Office	100 SF	NA	Misc.	NA/NA	LN-4 LN-5 4LN-6	Office Office Office	NAD NAD NAD
FT3	9-inch brown vinyl floor tile and mastic	Throughout beneath vinyl tile in hallways, classrooms, linoleum and carpet	30,000 SF	I	Misc.	Good/Low	FT-7 FT-8 4FT-9	Hall beneath 12-inch vinyl tile Cafeteria beneath linoleum Office beneath carpet and tile	Tile: 5% Chrysotile Mastic: 6% Chrysotile Tile: 5% Chrysotile Mastic: 6% Chrysotile Sample Not Analyzed

### SAMPLE DATA

NAD = No Asbestos Detected      NA = Not Applicable      SF = Square feet      LF = Linear feet      CF = Cubic Feet  
<sup>1</sup>Category:      F = Friable      I = Category I, Non-Friable      II = Category II, Non-Friable  
<sup>2</sup>Type:      Misc. = Miscellaneous      Surf. = Surfacing  
<sup>3</sup>Condition:      Good, Damaged or Significantly Damaged      Accessible during renovation or demolition with Potential for Disturbance; Low or High  
<sup>4</sup>Sample analyzed by TEM

Quantities are approximate and should not be used for cost estimates or bidding purposes.

## Summary of Asbestos Sampling

<b>Project Name:</b>	Gallman School	<b>Project Number:</b>	22610550
<b>Location:</b>	540 Brantley Street Newberry, South Carolina		
		<b>Sampling Date(s):</b>	November 15, 2022

### HOMOGENEOUS AREA

HA Area	Material Description	Material Location	Quantity	<sup>1</sup> Cat (F/II)	<sup>2</sup> Type	<sup>3</sup> Condition / Potential for Disturbance	Sample Number	Sample Location	Percent and Type Asbestos
FT4	12-inch tan mottled vinyl floor tile and mastic	Office beneath carpet and hallway edge	350 SF	NA	Misc.	NA/NA	FT-10	Office beneath carpet	NAD
							FT-11	Hallway edge	NAD
							<sup>4</sup> FT-12	Hallway edge	NAD
JC1	Joint compound	Rooms 1 and 13	2,500 SF	NA	Surf.	NA/NA	JC-1	Room 13	NAD
							JC-2	Room 1	NAD
							JC-3	Room 1	NAD
							JC-4	Room 13	NAD
							JC-5	Room 13	NAD
DW1	Drywall	Rooms 1 and 13	2,500 SF	NA	Misc.	NA/NA	DW-1	Room 13	NAD
							DW-2	Room 1	NAD
							DW-3	Room 1	NAD
CT3	2x2 ceiling tile	Gym	7,200 SF	NA	Misc.	NA/NA	CT-7	Gym	NAD
							CT-8	Gym	NAD
							CT-9	Gym	NAD
BBM	Baseboard mastic	Throughout	4,600 LF	NA	Misc.	NA/NA	BBM-1	Lower classroom	NAD
							BBM-2	Foyer	NAD
							<sup>4</sup> BBM-3	Hall	NAD
PL	Plaster	Kitchen	3,500 SF	NA	Surf.	NA/NA	PL-1	Kitchen	NAD
							PL-2	Kitchen	NAD
							PL-3	Kitchen	NAD
							PL-4	Kitchen	NAD
							PL-5	Kitchen	NAD

### SAMPLE DATA

NAD = No Asbestos Detected      NA = Not Applicable      SF = Square feet      LF = Linear feet      CF = Cubic Feet  
<sup>1</sup>Category:      F = Friable      I = Category I, Non-Friable      II = Category II, Non-Friable  
<sup>2</sup>Type:      Misc. = Miscellaneous      Surf. = Surfacing  
<sup>3</sup>Condition:      Good, Damaged or Significantly Damaged      Accessible during renovation or demolition with Potential for Disturbance; Low or High  
<sup>4</sup>Sample analyzed by TEM

Quantities are approximate and should not be used for cost estimates or bidding purposes.



## Summary of Asbestos Sampling

<b>Project Name:</b> Gallman School	<b>Project Number:</b> 22610550
<b>Location:</b> 540 Brantley Street Newberry, South Carolina	<b>Sampling Date(s):</b> November 15, 2022

### HOMOGENEOUS AREA

HA Area	Material Description	Material Location	Quantity	<sup>1</sup> Cat (F/II)	<sup>2</sup> Type	<sup>3</sup> Condition / Potential for Disturbance	Sample Number	Sample Location	Percent and Type Asbestos
TSI	Thermal system insulation	Beneath gym office and shop area	200 LF	F	TSI	Good/Low	TSI-1	Beneath gym office	15% Amosite 3% Chrysotile
							TSI-2	Beneath gym office	15% Amosite 3% Chrysotile
							TSI-3	Beneath gym office	15% Amosite 3% Chrysotile
HJ	Hard joint insulation	Beneath gym office and shop area	15 HJ	F	TSI.	Good/Low	HJ-1	Beneath gym office	65% Chrysotile
							HJ-2	Beneath gym office	65% Chrysotile
							HJ-3	Beneath gym office	65% Chrysotile
WG	Window glazing	Exterior windows	3,500 SF	II	Misc.	Good/Low	WG-1	Gym restroom	2% Chrysotile
							WG-2	Northeast boys' restroom	2% Chrysotile
							WG-3	Custodian closet	Sample Not Analyzed
DW2	Drywall	Beneath gym partition wall	200 SF	NA	Misc.	NA/NA	DW-4	Beneath gym partition wall	NAD
							DW-5	Beneath gym partition wall	NAD
							DW-6	Beneath gym partition wall	NAD
JC2	Joint compound	Beneath gym partition wall	200 SF	NA	Surf.	NA/NA	JC-6	Beneath gym partition wall	NAD

### SAMPLE DATA

NAD = No Asbestos Detected      NA = Not Applicable      SF = Square feet      LF = Linear feet      CF = Cubic Feet

<sup>1</sup>Category: I = Friable      F = Friable      I = Category I, Non-Friable      II = Category II, Non-Friable

<sup>2</sup>Type: Misc. = Miscellaneous      Surf. = Surfacing      TSI = Thermal System Insulation

<sup>3</sup>Condition: Good, Damaged or Significantly Damaged      Accessible during renovation or demolition with Potential for Disturbance; Low or High

<sup>4</sup>Sample analyzed by TEM

Quantities are approximate and should not be used for cost estimates or bidding purposes.

## Summary of Asbestos Sampling

<b>Project Name:</b>	Gallman School	<b>Project Number:</b>	22610550
<b>Location:</b>	540 Brantley Street Newberry, South Carolina	<b>Sampling Date(s):</b>	November 15, 2022

### HOMOGENEOUS AREA

HA Area	Material Description	Material Location	Quantity	<sup>1</sup> Cat (F/II)	<sup>2</sup> Type	<sup>3</sup> Condition / Potential for Disturbance	Sample Number	Sample Location	Percent and Type Asbestos
LN3	Brown linoleum	Hall beneath gym	30 SF	NA	Misc.	NA/NA	JC-7 JC-8	Beneath gym partition wall Beneath gym partition wall	NAD NAD
RF	Built up roof	Roof	39,200 SF	NA	Misc.	NA/NA	LN-7 LN-8 <sup>4</sup> LN-9 RF-1 RF-2 <sup>4</sup> RF-3	Hall beneath gym Hall beneath gym Hall beneath gym Roof Roof Roof	NAD NAD NAD NAD NAD NAD
S1	Black sealant	Roof	5,000 SF	NA	Misc.	NA/NA	S-1 S-2 <sup>4</sup> S-3	Roof Roof Roof	NAD NAD NAD
S2	Silver sealant	Roof parapet wall and penetration	5,000 SF	NA	Misc.	NA/NA	S-4 S-5 <sup>4</sup> S-6	Parapet Parapet Penetration	<1% Chrysotile <1% Chrysotile NAD

### SAMPLE DATA

NAD = No Asbestos Detected      NA = Not Applicable      SF = Square feet      LF = Linear feet      CF = Cubic Feet  
<sup>1</sup>Category:      F = Friable      I = Category I, Non-Friable      II = Category II, Non-Friable  
<sup>2</sup>Type:      Misc. = Miscellaneous      Surf. = Surfacing      TSI = Thermal System Insulation  
<sup>3</sup>Condition:      Good, Damaged or Significantly Damaged      Accessible during renovation or demolition with Potential for Disturbance; Low or High  
<sup>4</sup>Sample analyzed by TEM  
 Quantities are approximate and should not be used for cost estimates or bidding purposes.

## Abbreviations and Hazard Assessment Key

In accordance with the EPA and SCDHEC, a confirmed ACM is assigned a hazard assessment based on its present condition and potential for disturbance. The hazard assessment is used as a tool for prioritization in remedial actions regarding any identified ACM(s). The following key exhibits the criteria that compose the hazard assessment.

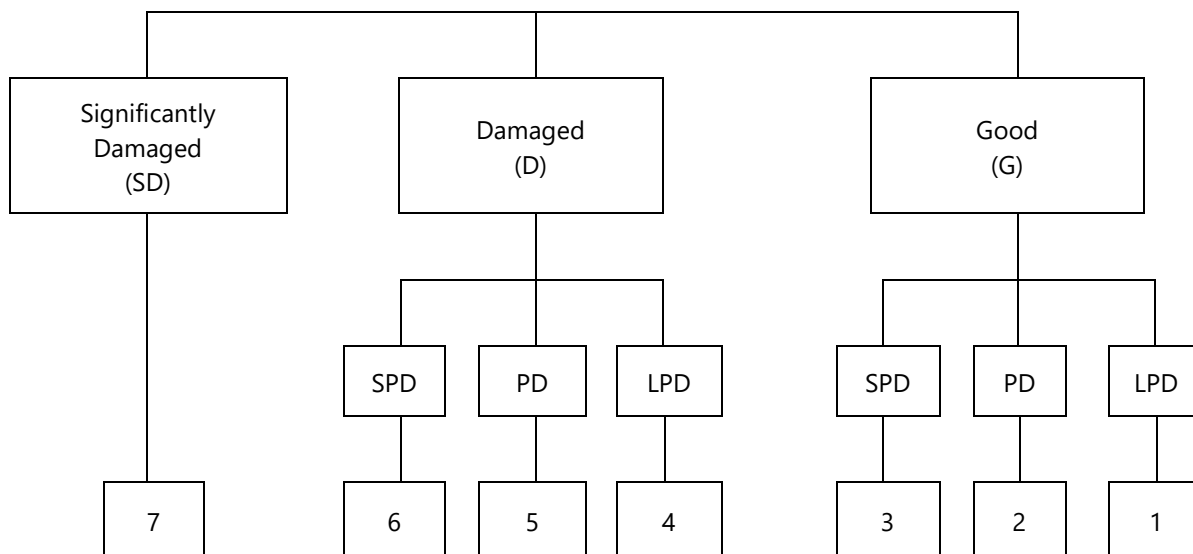
### Present Condition

F = Friable  
 NF = Non-friable  
 G = Good (Very localized limited damage)  
 D = Damaged (Damage of less than 10% distributed and less than 25% localized)  
 SD = Significantly Damaged (Damage equal to or greater than 10% distributed, 25% localized)

### Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and Air Erosion all of Low Concern)  
 PD = Potential for Disturbance (Contact, Vibration, or Air Erosion of Moderate Concern)  
 SPD = Significant Potential for Disturbance (Contact, Vibration, or Air Erosion of High Concern)

### Hazard Assessment



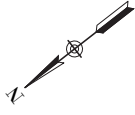
**Appendix II – ACM Location Exhibits & Site Photographs**





# HAZARDOUS MATERIAL ASSESSMENT FIRST LEVEL

GALLMAN SCHOOL  
540 BRANTLEY STREET  
NEWBERRY, SOUTH CAROLINA

SCALE:	AS SHOWN
DATE:	1-05-2023
PROJECT NUMBER:	22130550
FIGURE NO.:	1

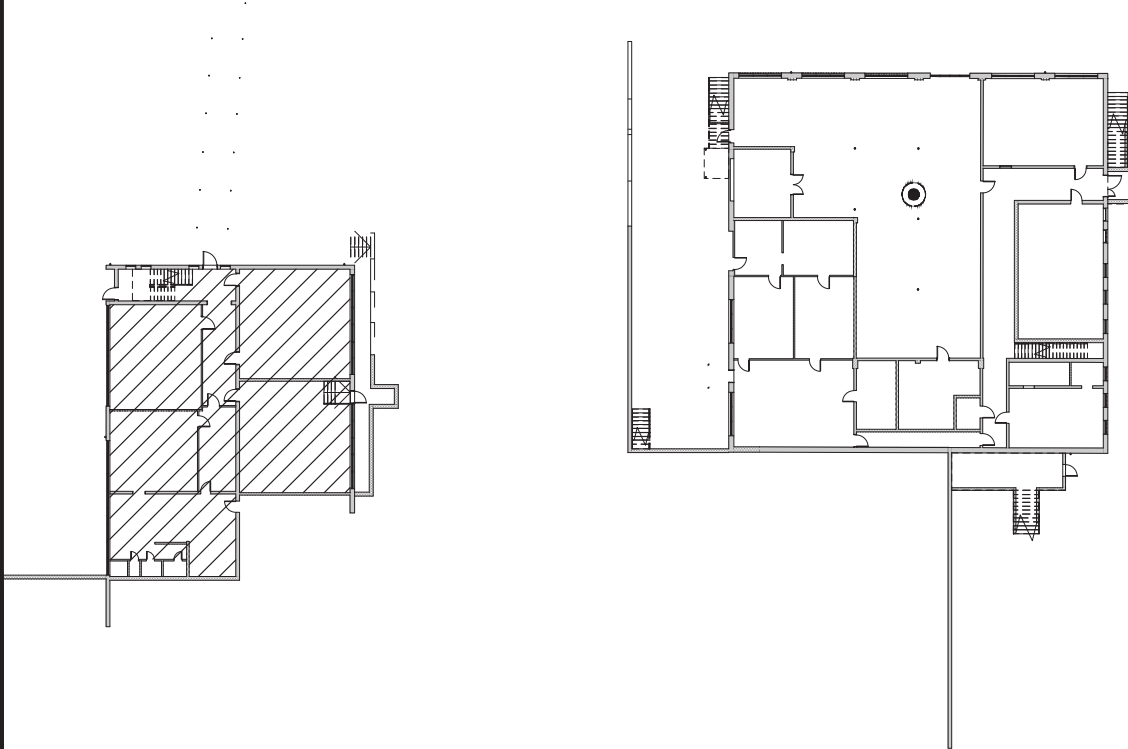


### ASBESTOS CONTAINING MATERIALS

-  12" DARK TAN VCT AND BLACK WITH 9" BROWN VCT AND MASTIC BENEATH
-  TSI AND HARD JOINT INSULATION THROUGHOUT AREA BENEATH GYM

### ASBESTOS CONTAINING MATERIALS NOT DEPICTED

- EXTERIOR WINDOW GLAZING



T:\Columba-1610\Projects\2022\22610550\_Moseley\_Architects\_Gallman\_School\_Haz-Mat\_Assessment\_Newberry\_SC\4 EN\CAD\2610550.dwg

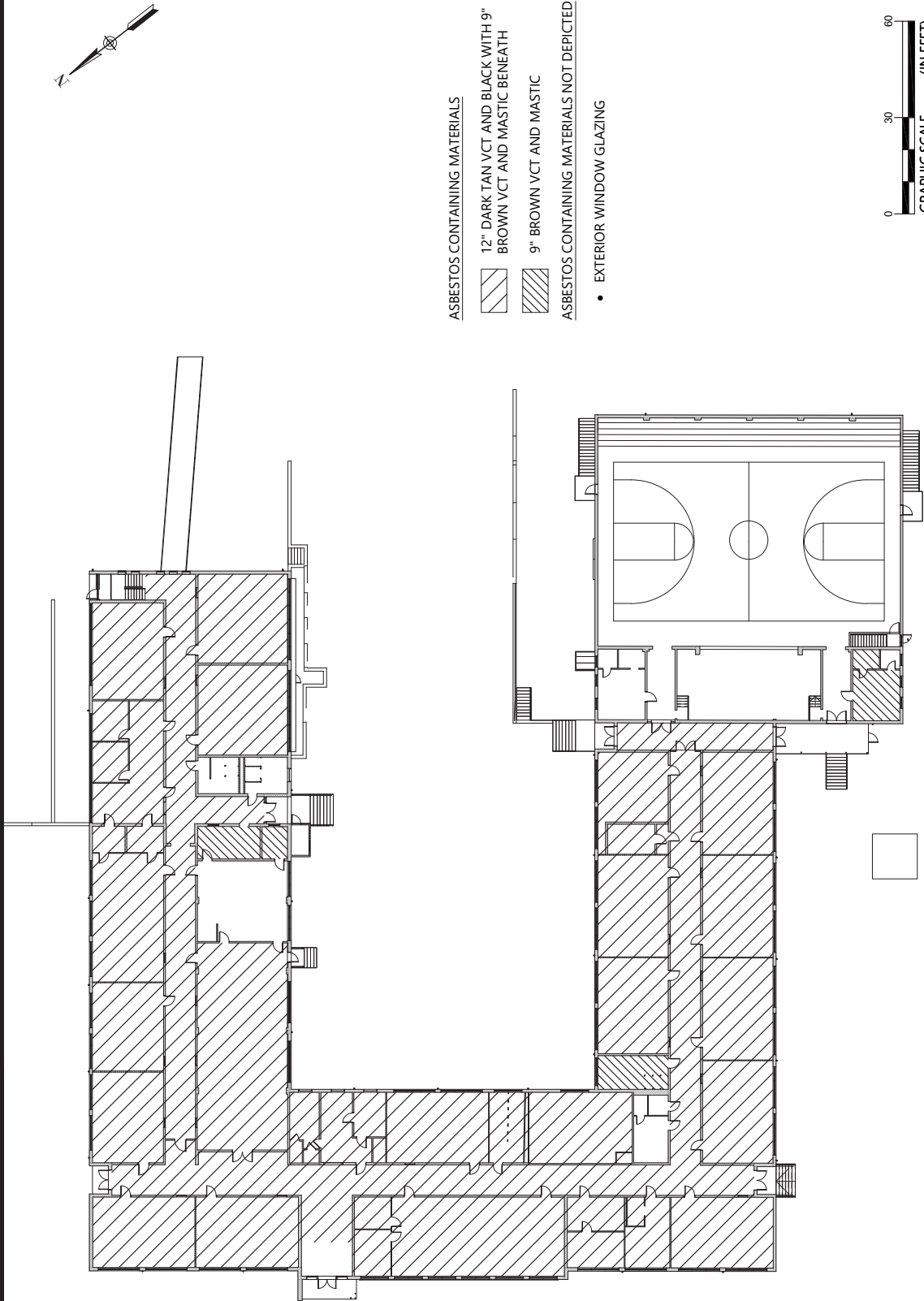


HAZARDOUS MATERIAL ASSESSMENT  
SECOND LEVEL

GALLMAN SCHOOL  
540 BRANTLEY STREET  
NEWBERRY, SOUTH CAROLINA

SCALE:	AS SHOWN
DATE:	1-05-2023
PROJECT NUMBER:	22130550
FIGURE NO.:	

2



T:\Columbia-1610\Projects\2022\22610550\_Moseley\_Architects\_Gallman\_School\_Haz-Mat\_Assessment\_Newberry\_SC\4 EN\CAD\22610550.dwg



1 Exterior view of the subject building.



3 12-inch dark tan vinyl floor tile and black mastic and 9-inch brown vinyl floor tile and mastic tested positive for asbestos (3% chrysotile).



2 Spray-applied fire proofing tested negative for asbestos via PLM analysis.



4 Window glazing tested positive for asbestos (2% chrysotile).



Site Photographs  
 Gallman School - 540 Brantley Street  
 Newberry, South Carolina

S&ME Project 22610550

Taken by: BM, TK

Date: November 15, 2022



5 TSI tested positive for asbestos (15% amosite and 3% chrysotile).



7 2x2 ceiling tile tested negative for asbestos via PLM analysis.



6 Hard joint tested positive for asbestos (65% chrysotile).



8 General view of boiler room.



Site Photographs  
 Gallman School - 540 Brantley Street  
 Newberry, South Carolina

Taken by: BM, TK

S&ME Project 22610550

Date: November 15, 2022





**9** Yellow ceramic tile in men's restroom tested positive for lead-based paint (7.70 mg/cm<sup>2</sup>).



**10** Green and black ceramic tile in men's restroom tested positive for lead based paint (5.40-19.90 mg/cm<sup>2</sup>).



**11** Silver sealant on parapet walls tested (<1% chrysotile) PLM analysis and no asbestos detected by TEM.



**12** General view of crawlspace.



**Site Photographs**  
**Gallman School - 540 Brantley Street**  
**Newberry, South Carolina**

S&ME Project 22610550

Taken by: BM, TK

Date: November 15, 2022



13 Mercury thermostat in the cafeteria.



15 Ballast presumed to contain PCBs.



14 Ballast labeled no PCBs.



16 Electromagnetic ballast no PCBs.



Site Photographs  
 Gallman School - 540 Brantley Street  
 Newberry, South Carolina

S&ME Project 22610550  
 Taken by: BM, TK  
 Date: November 15, 2022

## **Appendix III – Copy of Inspectors’ SCDHEC Licenses**

---

## SCDHEC ISSUED

Asbestos ID Card

---

**Bobby McAllister**



		Expiration Date:
AIRAMPLER	AS-00450	01/04/23
CONSULTBI	BI-01429	01/04/23
CONSULTPD	PD-000231	02/17/23
SUPERAMERA	SA-02404	01/03/23



South Carolina Department  
of  
Health and Environmental Control

Asbestos License

Travis Knight



**Appendix IV – Laboratory Analysis Sheets and Chain of Custody  
Records**



9751 Southern Pine Boulevard  
 Charlotte, NC 28273  
 704-940-1830 Fax: 704-565-4929  
 NVLAP Lab Code 102075-0

**POLARIZED LIGHT MICROSCOPY**  
 Performed by EPA 600/R-93/116 Method

## Asbestos Analysis Summary

**Client Name** Columbia Office  
**Client Job** Gullman School  
 134 Suber Rd.  
 Columbia SC 29210

**Date Received** 11/16/2022  
**Date Analyzed** 11/17/2022

**Job Number** 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13594A	FT-1	BEIGE NONFIBROUS	TILE	ND		100 OTHER
22-13594B	FT-1	BLACK NONFIBROUS	MASTIC	ND		100 OTHER
22-13595A	FT-2	BEIGE NONFIBROUS	TILE	ND		100 OTHER
22-13595B	FT-2	BLACK NONFIBROUS	MASTIC	ND		100 OTHER

Analyzed by:  Jane Wasilewski  
 Additional Comments: Issued 11/18/22

 Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCF= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13597A	FT-4	TAN NONFIBROUS	TILE	3 CHRYSOTILE		97 OTHER
22-13597B	FT-4	BLACK FIBROUS	MASTIC	4 CHRYSOTILE		96 OTHER
22-13598A	FT-5	TAN NONFIBROUS	TILE	3 CHRYSOTILE		97 OTHER
22-13598B	FT-5	BLACK NONFIBROUS	MASTIC	2 CHRYSOTILE		98 OTHER
22-13600	CT-1	WHITE/TAN FIBROUS		ND	100 CELLULOSE	<1 OTHER
22-13601	CT-2	WHITE/TAN FIBROUS		ND	100 CELLULOSE	<1 OTHER

*Analyzed by: Jane Wasilewski  
Additional Comments: Issued 11/18/22*

*Jane Wasilewski  
Laboratory Manager*


For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.



Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13602	CT-3	WHITE/TAN FIBROUS		ND	100 CELLULOSE	<1 OTHER
22-13603	CT-4	GREY FIBROUS		ND	45 MINERAL WOOL 30 CELLULOSE	25 PERLITE
22-13604	CT-5	GREY FIBROUS		ND	45 MINERAL WOOL 30 CELLULOSE	25 PERLITE
22-13605	CT-6	GREY FIBROUS		ND	45 MINERAL WOOL 30 CELLULOSE	25 PERLITE
22-13606	FP-1	WHITE FIBROUS		ND	100 CELLULOSE	
22-13607	FP-2	WHITE FIBROUS		ND	100 CELLULOSE	

  
**Analyzed by: Jane Wasilewski**  
*Additional Comments: Issued 11/18/22*

  
**Jane Wasilewski**  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13608	FP-3	WHITE FIBROUS		ND	100 CELLULOSE	
22-13609	FP-4	WHITE FIBROUS		ND	100 CELLULOSE	
22-13610	FP-5	WHITE FIBROUS		ND	100 CELLULOSE	
22-13611	FP-6	WHITE FIBROUS		ND	100 CELLULOSE	
22-13612	FP-7	WHITE FIBROUS		ND	100 CELLULOSE	
22-13613	LN-1	GREY FIBROUS		ND	3 CELLULOSE 2 SYNTHETIC	95 OTHER

*Analyzed by: Jane Wasilewski  
Additional Comments: Issued 11/18/22*

*Jane Wasilewski  
Laboratory Manager*

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13614	LN-2	GREY FIBROUS		ND	3 CELLULOSE 2 SYNTHETIC	95 OTHER
22-13616	LN-4	CREAM FIBROUS		ND	3 CELLULOSE 2 SYNTHETIC	95 OTHER
22-13617	LN-5	CREAM FIBROUS		ND	5 CELLULOSE 2 SYNTHETIC	93 OTHER
22-13619A	FT-7	BROWN NONFIBROUS	TILE	5 CHRYSOTILE		95 OTHER
22-13619B	FT-7	BLACK FIBROUS	MASTIC	6 CHRYSOTILE		94 OTHER
22-13620A	FT-8	BROWN FIBROUS	TILE	5 CHRYSOTILE		95 OTHER

Analyzed by: Jane Wasilewski  
Additional Comments: Issued 11/18/22


Jane Wasilewski  
Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13620B	FT-8	BLACK FIBROUS	MASTIC	3 CHRYSOTILE		97 OTHER
22-13622A	FT-10	TAN NONFIBROUS	TILE	ND	2 CELLULOSE	98 OTHER
22-13622B	FT-10	GOLD NONFIBROUS	MASTIC	ND		100 OTHER
22-13623A	FT-11	TAN NONFIBROUS	TILE	ND		100 OTHER
22-13623B	FT-11	BLACK NONFIBROUS	MASTIC	ND	2 CELLULOSE	98 OTHER
22-13625	JC-1	WHITE NONFIBROUS		ND		100 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 11/18/22*

  
 Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13626	JC-2	WHITE NONFIBROUS		ND		100 OTHER
22-13627	JC-3	WHITE NONFIBROUS		ND		100 OTHER
22-13628	JC-4	WHITE NONFIBROUS		ND		100 OTHER
22-13629	JC-5	WHITE NONFIBROUS		ND		100 OTHER
22-13630	DW-1	BEIGE FIBROUS		ND	2 GLASS	98 GYPSUM
22-13631	DW-2	BEIGE FIBROUS		ND	2 GLASS	98 GYPSUM

Analyzed by: Jane Wasilewski  
*Additional Comments:* Issued 11/18/22


  
 Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13632	DW-3	TAN/BEIGE FIBROUS		ND	5 CELLULOSE 2 GLASS	93 GYPSUM
22-13633	CT-7	TAN FIBROUS		ND	65 MINERAL WOOL 20 CELLULOSE	15 PERLITE
22-13634	CT-8	TAN FIBROUS		ND	65 MINERAL WOOL 20 CELLULOSE	15 PERLITE
22-13635	CT-9	TAN FIBROUS		ND	65 MINERAL WOOL 20 CELLULOSE	15 PERLITE
22-13636	BBM-1	BEIGE NONFIBROUS		ND		100 OTHER
22-13637	BBM-2	BEIGE NONFIBROUS		ND		100 OTHER

  
**Analyzed by: Jane Wasilewski**  
*Additional Comments: Issued 11/18/22*

  
**Jane Wasilewski**  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13639	PL-1	WHITE NONFIBROUS	SKIM COAT (ONLY)	ND		100 OTHER
22-13640A	PL-2	WHITE NONFIBROUS	SKIM COAT	ND		100 OTHER
22-13640B	PL-2	TAN GRANULAR	PLASTER	ND		100 OTHER
22-13641A	PL-3	WHITE NONFIBROUS	SKIM COAT	ND		100 OTHER
22-13641B	PL-3	TAN GRANULAR	PLASTER	ND		100 OTHER
22-13642A	PL-4	WHITE NONFIBROUS	SKIM COAT	ND		100 OTHER

*[Signature]*  
**Analyzed by: Jane Wasilewski**  
*Additional Comments: Issued 11/18/22*

*[Signature]*  
**Jane Wasilewski**  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13642B	PL-4	TAN GRANULAR	PLASTER	ND		100 OTHER
22-13643A	PL-5	WHITE NONFIBROUS	SKIM COAT	ND		100 OTHER
22-13643B	PL-5	TAN/GREY GRANULAR	PLASTER	ND		100 OTHER
22-13644	TSI-1	WHITE FIBROUS		15 AMOSITE 3 CHRYSOTILE		82 OTHER
22-13645	TSI-2	WHITE FIBROUS		15 AMOSITE 3 CHRYSOTILE		82 OTHER
22-13646A	TSI-3	BEIGE FIBROUS	WRAP	ND	99 CELLULOSE	1 OTHER

Analyzed by:  Jane Wasilewski  
Additional Comments: Issued 11/18/22

 Jane Wasilewski  
Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.



Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13646B	TSI-3	WHITE FIBROUS	INSULATION	15 AMOSITE 3 CHRYSOTILE		82 OTHER
22-13647A	HJ-1	TAN FIBROUS	WRAP	ND	99 CELLULOSE	1 OTHER
22-13647B	HJ-1	GREY FIBROUS	INSULATION	65 CHRYSOTILE		35 OTHER
22-13648A	HJ-2	TAN FIBROUS	WRAP	ND	99 CELLULOSE	1 OTHER
22-13648B	HJ-2	GREY FIBROUS	INSULATION	65 CHRYSOTILE		35 OTHER
22-13649A	HJ-3	TAN FIBROUS	WRAP	ND	99 CELLULOSE	1 OTHER

Analyzed by: Jane Wasilewski  
Additional Comments: Issued 11/18/22


Jane Wasilewski  
Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCF= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13649B	HJ-3	GREY FIBROUS	INSULATION	65 CHRYSOTILE		35 OTHER
22-13650	WG-1	BEIGE FIBROUS		2 CHRYSOTILE		98 OTHER
22-13651	WG-2	BEIGE FIBROUS		2 CHRYSOTILE		98 OTHER
22-13653	DW-4	BEIGE FIBROUS		ND	2 CELLULOSE	98 GYPSUM
22-13654	DW-5	BEIGE FIBROUS		ND	2 CELLULOSE	98 GYPSUM
22-13655	DW-6	BEIGE FIBROUS		ND	2 CELLULOSE	98 GYPSUM

Analyzed by: Jane Wasilewski  
*Additional Comments:* Issued 11/18/22


  
 Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCF= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13656	J-6	WHITE NONFIBROUS		ND		100 OTHER
22-13657	J-7	WHITE NONFIBROUS		ND		100 OTHER
22-13658	J-8	WHITE NONFIBROUS		ND		100 OTHER
22-13659	LN-7	BROWN FIBROUS		ND	2 GLASS	98 OTHER
22-13660	LN-8	BROWN FIBROUS		ND	2 GLASS	98 OTHER
22-13662A	RF-1	BLACK FIBROUS	ROOF	ND	25 GLASS	75 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments:* Issued 11/18/22

  
 Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested.  
 The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13662B	RF-1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
22-13663A	RF-2	BLACK FIBROUS	ROOF	ND	25 GLASS	75 OTHER
22-13663B	RF-2	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
22-13664	RF-3	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
22-13665	S-1	BLACK FIBROUS		ND	2 CELLULOSE	98 OTHER
22-13666	S-2	BLACK FIBROUS		ND	2 CELLULOSE	98 OTHER

Analyzed by: Jane Wasilewski  
Additional Comments: Issued 11/18/22

Jane Wasilewski  
Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

Job Number 22610550

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
22-13668	S-4	SILVER/BLACK FIBROUS		<1 CHRYSOTILE	20 SYNTHETIC	80 OTHER
22-13669	S-5	SILVER/BLACK FIBROUS		<1 CHRYSOTILE	20 SYNTHETIC	80 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 11/18/22*

*Jane Wasilewski*  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCT= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This report shall not be reproduced except in full with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

PLM = 5 day  
TEM = 3 day

**BULK SAMPLE**

**CHAIN OF CUSTODY RECORD**

Requested Turn Around Time:  
 24-Hour  48-Hour  3 Day  Same Day  
 6-10 Day

PROJECT NO. 22610550 PROJECT NAME: Gallman  
 FACILITY: Gallman DATE TAKEN: 11/15/22  
 RELINQUISHED BY: [Signature] RECEIVED BY: [Signature]  
 NOTES: [Signature]

SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY	COMMENTS / SPECIAL INSTRUCTIONS
FT-1	22-13574	12" White LBR VET, B/LK MARK	Foyer	10x12	} No. 3
2	95	↓	↓		
3	96	↓	↓		
FT-4	97	12" Dark Tan VET, B/LK MARK	Hall		} No. 3
5	98	↓	↓		
6	13599	↓	↓		
CT-1	13600	12" Spline ceiling tile	Hall		
2	01	↓	L-bron		
3	02	↓	Hall		
CT-4	03	2x4 Ceiling tile	Foyer		
5	04	↓			
6	05	↓			
FP-1	06	Spray-Applied Fire Proofing	15th Floor SE Wing		
2	07	↓	↓		
3	08	↓	↓		
4	09	↓	↓		
5	10	↓	↓		
6	11	↓	Lower Class Room Level		
7	13612	↓	↓		



**BULK SAMPLE**

**CHAIN OF CUSTODY RECORD**

Requested Turn Around Time:  24-Hour  48-Hour  3 Day  Same Day  6-10 Day

PROJECT NO. \_\_\_\_\_ PROJECT NAME: \_\_\_\_\_ RELINQUISHED BY: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

FACILITY \_\_\_\_\_ RECEIVED BY: \_\_\_\_\_ DATE 11/16/22 TIME \_\_\_\_\_

SAMPLER(S) \_\_\_\_\_ DATE TAKEN \_\_\_\_\_ NOTES: \_\_\_\_\_

SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY	COMMENTS / SPECIAL INSTRUCTIONS
LN-1	22-13613	Tan Pebble Linoleum	Cafeteria		} NOB
2	14	↓			
3	15	↓	Class Room 10 Restroom		} NOB
LN-4	16	Green mottled linoleum	office		
5	17	↓	↓		} NOB
6	18	↓			
FT-7	19	9" BRN UCT ? Mest. C	Hall Beneath 12"		} NOB
8	20	↓	Cafeteria Beneath Linoleum		
9	21	↓	Office Beneath Carpet + tile		} NOB
FT-10	22	12" TAN mottled UCT ? Mest. C	office Beneath Carpet		
11	23	↓	Hallway Edge		} NOB
12	24	↓			
JC-1	25	Joint Compound	Room 13		
2	26	↓	Room 1		
3	27	↓	Room 13		
4	28	↓	↓		
5	29	↓	↓		
DW-1	30	Drywall	Room 13		
2	31	↓	Room 1		
3	13632	↓	↓		



# BULK SAMPLE

## CHAIN OF CUSTODY RECORD

Requested Turn Around Time:  24-Hour  48-Hour  3 Day  6-10 Day  Same Day

PROJECT NO.	PROJECT NAME:	RELINQUISHED BY:	DATE	TIME	
FACILITY		RECEIVED BY:	DATE	TIME	
SAMPLER(S)		DATE TAKEN	NOTES:		
SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY	COMMENTS / SPECIAL INSTRUCTIONS
CT-2	22-13653	2x2 Ceiling tile	Gym	100 x 72	
8	34				
9	35				
B00-1	36	Baseboard Mastic	Lower Class Room		} NOB
2	37		Foyer		
3	38		Hall		
PL-1	39	Plaster	Kitchen		
2	40				
3	41				
4	42				
5	43				
TB1-1	44	TB1	Beneath Gym - office		} NOB
2	45				
3	46				
H.S.-1	47	Hard Joint	Beneath Gym - office		
2	48				
3	49				
WG-1	50	Window Glazing	Exterior Window		
2	51				
3	13652				





# BULK SAMPLE

## CHAIN OF CUSTODY RECORD

Requested Turn Around Time:

24-Hour  48-Hour  3 Day  6-10 Day

Same Day

PROJECT NO.		PROJECT NAME:		RELINQUISHED BY:	DATE	TIME	COMMENTS / SPECIAL INSTRUCTIONS
FACILITY		RECEIVED BY:		DATE	TIME		
SAMPLER(S)		DATE TAKEN		RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
SAMPLE #	LAB NUMBER	MATERIAL	LOCATION	QUANTITY			
DW-4	27-13653	Drywall	Beneath gym partition wall	100 SF			
5	54						
4	55						
S-6	56	Joint Compound	Beneath Gym Partition wall	100 SF			
7	57						
8	58						
LN-7	59	Brown Linoleum	Hall Beneath gym	~3 SF			No 13
8	60						
9	61						
RF-1	62	Built up Roof	Roof				
2	63						
3	64						
S-1	65	Black Sealant	Roof				
2	66						
3	67						
S-4	68	Silver Sealant	Parapet				
5	69						
4	13670		Penetration				No 13



# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

**EMSL Order:** 412211827

**Customer ID:** SMEI54

**Customer PO:** 22610550

**Project ID:**

**Attention:** Jane Wasilewski  
S&ME, Inc.  
9771D Southern Pine Blvd.  
Charlotte, NC 28273

**Phone:** (704) 940-1830  
**Fax:** (704) 565-4929  
**Received Date:** 11/18/2022 12:30 PM  
**Analysis Date:** 11/21/2022  
**Collected Date:**

**Project:** 22610550

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
FT-3 412211827-0001	Tile	Beige Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
FT-3 412211827-0002	Mastic (Black)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
LN-3 412211827-0003	Sheet Floor Only	Gray/Green Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
LN-6 412211827-0004	Sheet Floor Only	Gray Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
FT-12 412211827-0005	Tile	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
FT-12 412211827-0006	Mastic	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
BBM-3 412211827-0007	Mastic Only	Beige Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
LN-9 412211827-0008	Sheet Floor Only	Brown/Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
RF-3 412211827-0009	Roof	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
S-3 412211827-0010	Sealant	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
S-6 412211827-0011	Sealant	Black/Silver Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

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. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 11/21/2022 11:06:38



**EMSL Analytical, Inc.**

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

**EMSL Order:** 412211827  
**Customer ID:** SMEI54  
**Customer PO:** 22610550  
**Project ID:**

**Attention:** Jane Wasilewski  
S&ME, Inc.  
9771D Southern Pine Blvd.  
Charlotte, NC 28273  
**Project:** 22610550

**Phone:** (704) 940-1830  
**Fax:** (704) 565-4929  
**Received Date:** 11/18/2022 12:30 PM  
**Analysis Date:** 11/21/2022  
**Collected Date:**

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1**

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
-----------	-------------	------------	-------------------	-----------------------	----------------

Analyst(s)

Derrick Young (11)

Lee Plumley, 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. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 11/21/2022 11:06:38



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

### Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

412211827

EMSL ANALYTICAL, INC.  
10801 SOUTHERN LOOP BLVD  
PINEVILLE, NC 28134  
PHONE: 704-525-2205  
FAX: 704-525-2382

Company : S&ME Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 9751 Southern Pine Blvd.		Third Party Billing requires written authorization from third party	
City: Charlotte	State/Province: NC	Zip/Postal Code: 28273	Country:
Report To (Name): Jane Wasilewski		Telephone #: 704-940-1830	
Email Address: jwasilewski@smeinc.com		Fax #:	Purchase Order:
Project Name/Number:		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		CT-Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

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 hr through 6 hr, 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.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input 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%)	<b>TEM - Air</b> <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 <b>TEM Bulk</b> <input checked="" type="checkbox"/> TEM-EPA-NOB <input checked="" 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 <b>TEM - Water: EPA 100.2</b> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM-Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <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"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique <b>Other:</b> <input type="checkbox"/>
--	--	--

Check For Positive Stop - Clearly Identify Homogenous Group      Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: \_\_\_\_\_ Samplers Signature: \_\_\_\_\_

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
FT-3	Tile		
↓	Mastic (Black)		
LN-3	sheet Floor only		
LN-6	sheet Floor only		
FT-12	Tile		
↓	Mastic		
BBM-3	Mastic only		
LN-9	sheet Floor only		

Client Sample # (s): \_\_\_\_\_ Total # of Samples: 11

Relinquished (Client): \_\_\_\_\_ Date: 11/18/22 Time: \_\_\_\_\_

Received (Lab): *QC* Date: 11/18/22 Time: 12:30 w/11

Comments/Special Instructions:  
 \*\*\*\*EMAIL INVOICE TO: smeinc\_invoice@concur solutions.com with this contact printed on the invoice: Travis Knight  
 252-670-550



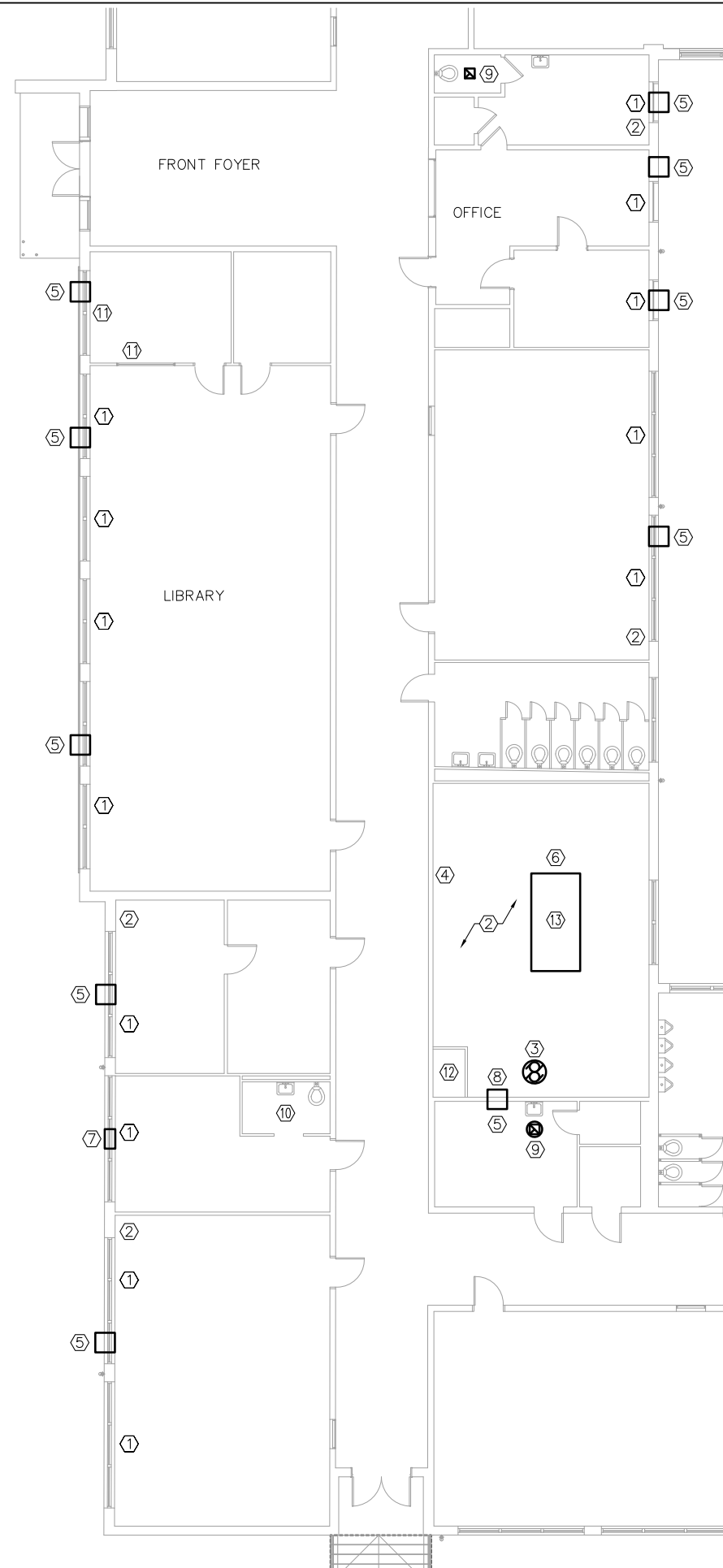
## **Appendix V – Summary of XRF Lead Analyzer Readings**

XRF LEAD-BASED PAINT READING SUMMARY TABLE

Serial #95004  
 PAINT  
 Project No.: 22610550  
 Site: Gallman School 540 Brantley Street  
 Date: November 15, 2022  
 Ranges (NEG<INC<POS): Device PCS

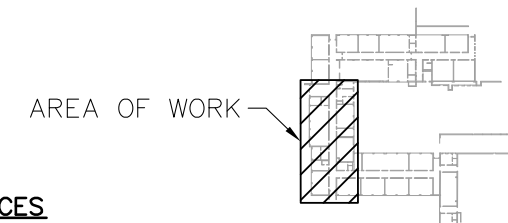


Reading Number	Floor/Area	Room	Feature	Substrate	Condition	Color	Result	XRF Reading (mg/cm <sup>2</sup> )
1			Shutter					
2			Pre-Calibrate					1.00
3			Pre-Calibrate					0.90
4			Pre-Calibrate					0.90
5	Interior	Foyer	Front door	Metal	Non-deteriorated	White	Negative	<LOD
6	Interior	Foyer	Door frame	Wood	Non-deteriorated	Red	Negative	0.13
7	Interior	Foyer	Radiator	Metal	Non-deteriorated	Red	Negative	0.07
8	Interior	Foyer	Wall	CMU	Non-deteriorated	White	Negative	<LOD
9	Interior	Classroom 10	Door	Wood	Non-deteriorated	White	Negative	<LOD
10	Interior	Classroom 10	Door frame	Metal	Non-deteriorated	Tan	Negative	0.05
11	Interior	Classroom 10	Wall	CMU	Non-deteriorated	Tan	Negative	<LOD
12	Interior	Classroom 10	Radiator	Metal	Non-deteriorated	Tan	Negative	0.14
13	Interior	Classroom 10	Window frame	Metal	Non-deteriorated	Tan	Negative	0.19
14	Interior	Classroom 10	Wall	CMU	Non-deteriorated	Blue	Negative	<LOD
15	Interior	Hallway	Window frame	Metal	Non-deteriorated	Red	Negative	0.04
16	Interior	Hallway	Door	Metal	Non-deteriorated	Red	Negative	<LOD
17	Interior	Hallway	Wall	CMU	Non-deteriorated	White	Negative	<LOD
18	Interior	Hallway	Door frame	Metal	Non-deteriorated	Purple	Negative	<LOD
<b>19</b>	<b>Interior</b>	<b>Mens restroom</b>	<b>Tile</b>	<b>Ceramic</b>	<b>Non-deteriorated</b>	<b>Yellow</b>	<b>Positive</b>	<b>7.70</b>
20	Interior	Mens restroom	Stall	Wood	Non-deteriorated	Purple	Negative	<LOD
21	Interior	Mens restroom	Door frame	Metal	Non-deteriorated	Brown	Negative	0.10
22	Interior	Mens restroom	Wall	CMU	Non-deteriorated	Light Blue	Negative	<LOD
23	Interior	Mens restroom	Floor	Ceramic	Non-deteriorated	Yellow	Negative	<LOD
24	Interior	Classroom 9	Wall	CMU	Non-deteriorated	Green	Negative	<LOD
25	Interior	Classroom 9	Shelf	Wood	Non-deteriorated	Blue	Negative	0.03
26	Interior	Classroom 9	Door frame	Metal	Non-deteriorated	White	Negative	<LOD
27	Interior	Classroom 9	Door	Wood	Non-deteriorated	White	Negative	<LOD
<b>28</b>	<b>Interior</b>	<b>Girls restrooms</b>	<b>Tile</b>	<b>Ceramic</b>	<b>Non-deteriorated</b>	<b>Green</b>	<b>Positive</b>	<b>19.90</b>
<b>29</b>	<b>Interior</b>	<b>Girls restrooms</b>	<b>Tile</b>	<b>Ceramic</b>	<b>Non-deteriorated</b>	<b>Black</b>	<b>Positive</b>	<b>5.40</b>
30	Interior	Girls restrooms	Floor	Ceramic	Non-deteriorated	Green	Negative	0.02
31	Interior	Girls restrooms	Stall	Metal	Non-deteriorated	Light Blue	Negative	<LOD
32	Interior	Girls restrooms	Window frame	Metal	Non-deteriorated	Blue	Negative	<LOD
33	Interior	Gym	Wall	CMU	Non-deteriorated	White	Negative	<LOD
34	Interior	Gym	Wall	CMU	Non-deteriorated	Grey	Negative	<LOD
35	Interior	Gym	Door	Metal	Non-deteriorated	Brown	Negative	<LOD
36	Interior	Gym	Door frame	Metal	Non-deteriorated	Brown	Negative	<LOD
37	Exterior		Door	Metal	Non-deteriorated	Brown	Negative	<LOD
38	Exterior		Handrail	Metal	Deteriorated	Blue	Negative	<LOD
39	Exterior		Gutter	Metal	Deteriorated	White	Negative	0.3
40	Exterior		Window frame	Metal	Deteriorated	White	Negative	<LOD
41	Exterior		Crawlspace door	Wood	Deteriorated	White	Negative	<LOD
42	Exterior		Handrail	Metal	Deteriorated	White	Negative	<LOD
43	Exterior		Door	Metal	Deteriorated	Blue	Negative	0.26
44	Exterior		Step	Concrete	Deteriorated	Light Blue	Negative	<LOD
45	Exterior		Handrail	Metal	Deteriorated	Light Blue	Negative	<LOD
46	Exterior		Shop door	Wood	Deteriorated	White	Negative	<LOD
47		Post-Calibrate						0.90
48		Post-Calibrate						1.00
49		Post-Calibrate						0.90



- KEYED NOTES (THIS SHEET ONLY)**
- ① STEAM RADIATOR.
  - ② EXPOSED PIPE INSULATION DAMAGED MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
  - ③ EXISTING STEAM CONDENSATE RETURN PUMPS.
  - ④ EXISTING BOILER CONTROLS.
  - ⑤ WINDOW AC UNIT INSTALLED.
  - ⑥ ROOF LEAKS DAMAGING PIPE INSULATION.
  - ⑦ WINDOW AC UNIT HAS BEEN REMOVED.
  - ⑧ THRU WALL AC UNIT DISCHARGES INTO ADJACENT BOILER ROOM.
  - ⑨ ROOF MOUNTED EXHAUST FAN.
  - ⑩ NO EXHAUST IN TOILET.
  - ⑪ OVERHEAD STEAM RADIATORS.
  - ⑫ RECOMMEND HAVING BRICK CHIMNEY INSPECTED IF BEING REUSED IN THE FUTURE.
  - ⑬ EXISTING HEATING STEAM BOILER, PEERLESS MODEL LCE-19-W/S, MFG: 2001, LAST INSPECTION 9/25/2015. NATURAL GAS.
  - ⑭ EXISTING STEAM CONDENSATE RETURN PUMPS.
  - ⑮ EXISTING BOILER CONTROLS.

**FOYER AND SCHOOL OFFICES**  
SCALE: NTS



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132 - MT. PLEASANT, SC 29466  
(843) 849-6878 - EPIC JOB NO. 23002  
COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION.

DESIGNED BY:	APPROVED BY:
ACT	ACT
DRAWN BY:	CHECKED BY:
RAD	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**FOYER AND SCHOOL OFFICES**  
DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

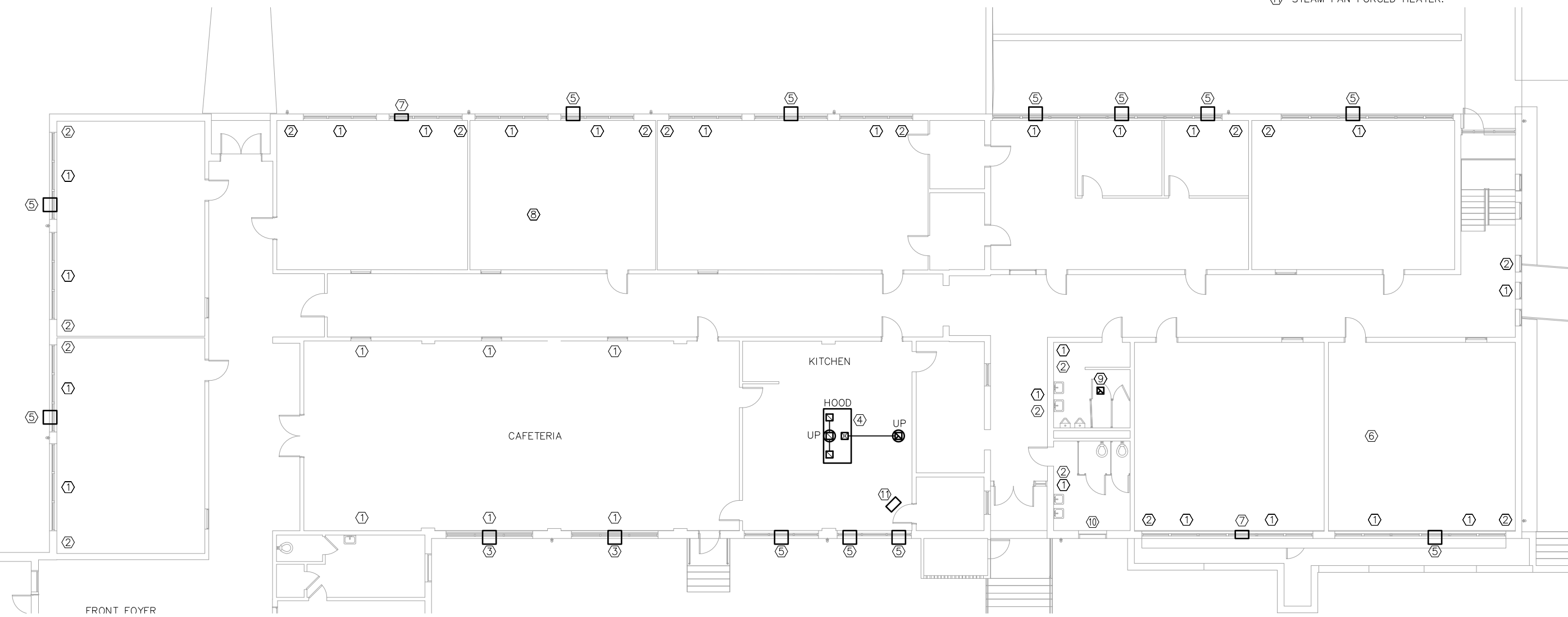
SHEET NUMBER  
**M101**

CAD FILE NAME:  
**23002M101**



**KEYED NOTES (THIS SHEET ONLY)**

- ① HOT WATER RADIATOR.
- ② EXPOSED PIPE INSULATION DAMAGED MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
- ③ BARD WALL MOUNTED HEAT PUMP WITH GRILLES. MFG DATE: 1990.
- ④ KITCHEN EXHAUST HOOD, EXHAUST FAN, MAKE-UP AIR FAN AND DUCTWORK.
- ⑤ WINDOW AC UNIT INSTALLED.
- ⑥ CEILING FAN MISSING BLADES.
- ⑦ WINDOW AC UNIT HAS BEEN REMOVED.
- ⑧ ROOF MOUNTED EXHAUST FAN.
- ⑨ EXHAUST FAN NEEDS TO BE REPLACED.
- ⑩ SIDEWALL EXHAUST FAN NEEDS TO BE REPLACED.
- ⑪ STEAM FAN FORCED HEATER.



**CAFETERIA WING**  
SCALE: NTS

AREA OF WORK



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2132 - MT. PLEASANT, SC 29466  
 (843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED IN THE TITLE BLOCK. IT IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS.

DESIGNED BY:	APPROVED BY:
ACT	ACT
DRAWN BY:	CHECKED BY:
RAD	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**CAFETERIA WING**  
 DRAWING TITLE

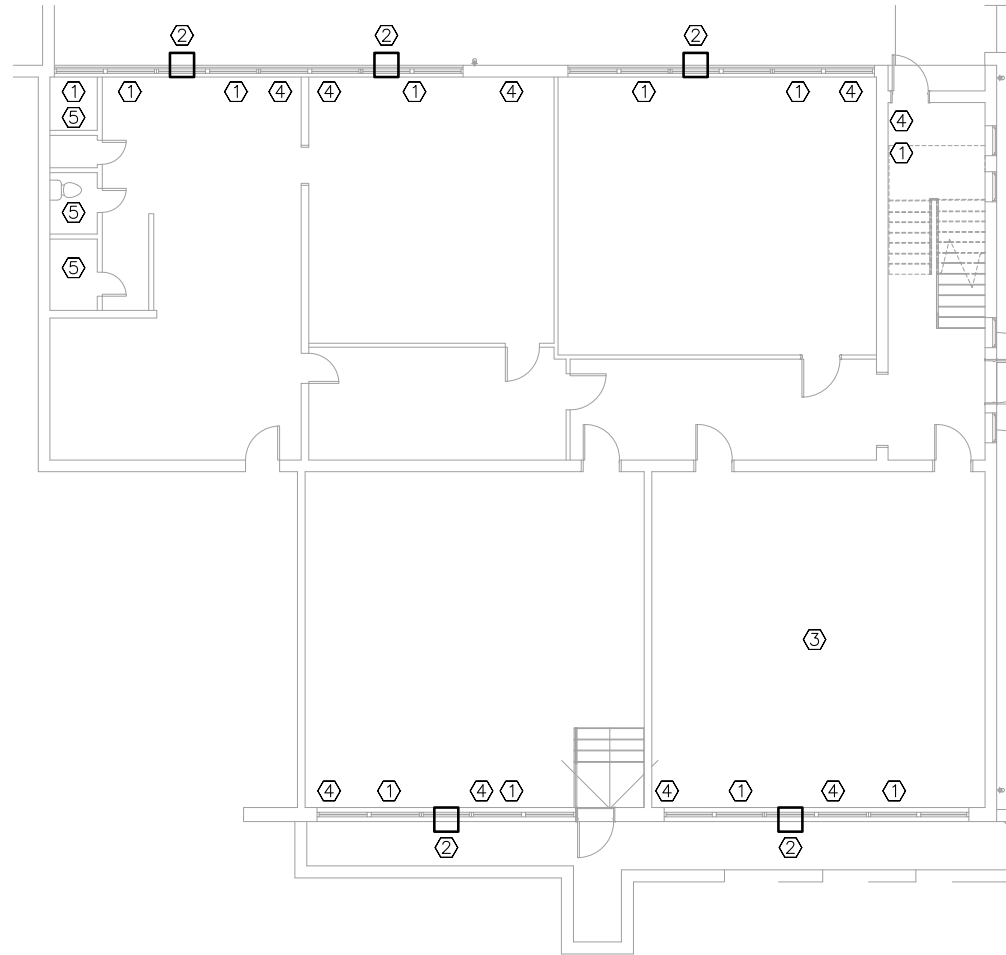
SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**M102**

CAD FILE NAME:  
**23002M102**

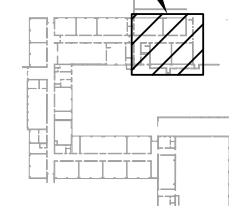
**KEYED NOTES (THIS SHEET ONLY)**

- ① EXISTING STEAM RADIATOR.
- ② WINDOW AC UNIT.
- ③ CEILING FAN MISSING BLADES.
- ④ EXPOSED PIPE INSULATION DAMAGED MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
- ⑤ WALL MOUNTED FAN IN TOILET NEEDS TO BE REPLACED AND DUCTED TO EXTERIOR OF BUILDING.



**CAFETERIA WING – LOWER ADDITION**  
SCALE: NTS

AREA OF WORK



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132 - MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**CAFETERIA WING LOWER ADDITION**  
DRAWING TITLE

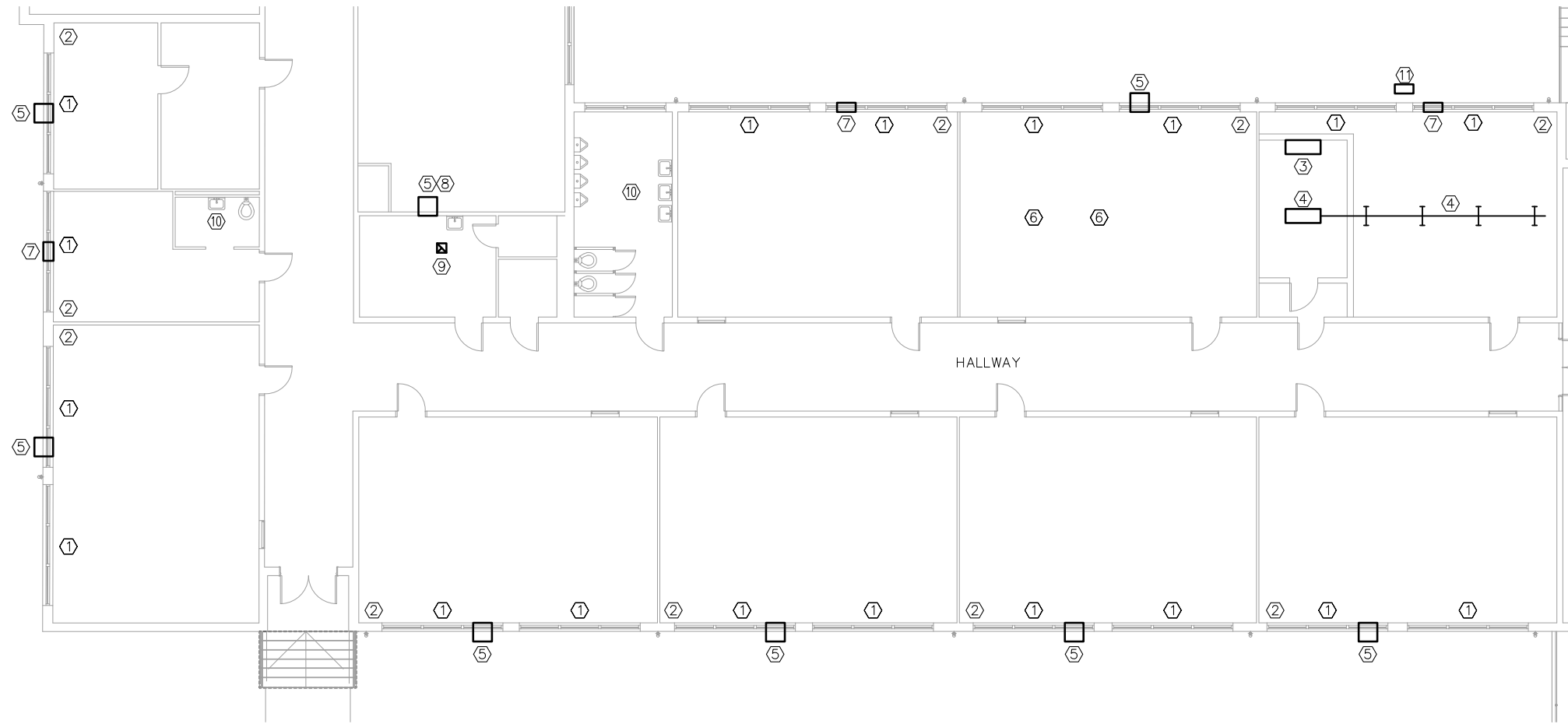
SCALE:	DATE:
AS NOTED	2/22/2023

SHEET NUMBER  
**M103**

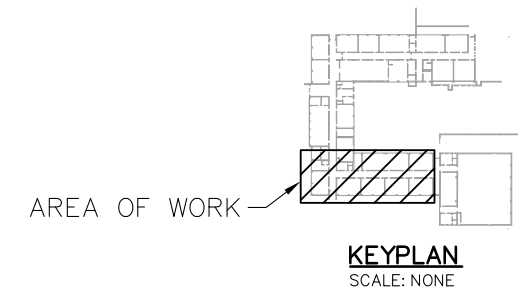
CAD FILE NAME:  
**23002M103**

**KEYED NOTES (THIS SHEET ONLY)**

- ① STEAM RADIATOR.
- ② EXPOSED PIPE INSULATION DAMAGED MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
- ③ WALL MOUNT DUCTLESS AIR HANDLER (3/4 TON).
- ④ DUCTWORK INSTALLED, NO AIR HANDLER OR CONDENSING UNIT.
- ⑤ WINDOW AC UNIT INSTALLED.
- ⑥ CEILING FAN MISSING BLADES.
- ⑦ WINDOW AC UNIT HAS BEEN REMOVED.
- ⑧ THRU WALL AC UNIT DISCHARGES INTO ADJACENT BOILER ROOM.
- ⑨ ROOF MOUNTED EXHAUST FAN.
- ⑩ NO EXHAUST IN TOILET.
- ⑪ MINI SPLIT HEAT PUMP ON WALL BRACKETS (3/4 TON).



**CLASSROOM WING**  
SCALE: NTS



**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2122 - MT. PLEASANT, SC 29465  
 (843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED. IT IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

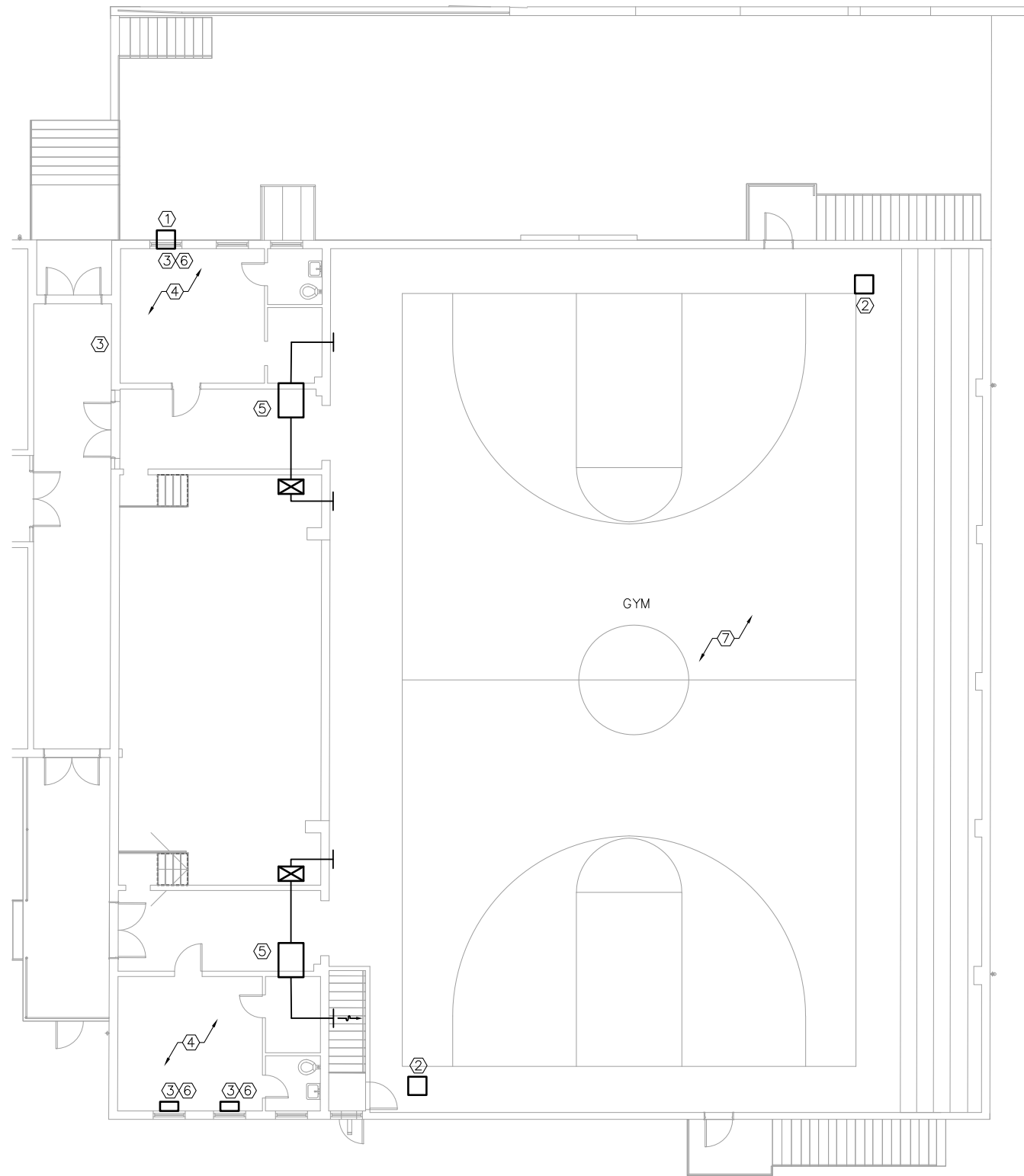
**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**CLASSROOM WING**  
 DRAWING TITLE

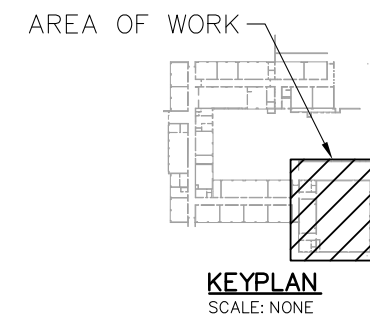
SCALE: AS NOTED  
 DATE: 3/17/23

SHEET NUMBER  
**M104**

CAD FILE NAME:  
**23002M104**



**GYM - UPPER LEVEL**  
SCALE: NTS



**KEYED NOTES (THIS SHEET ONLY)**

- ① WINDOW UNIT INSTALLED
- ② GAS HEATER MOUNTED HIGH ON WALL
- ③ FLOOR MOUNTED STEAM RADIATOR
- ④ EXPOSED PIPE INSULATION DAMAGED, MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
- ⑤ STEAM FAN COIL WITH DUCTWORK. (NO COOLING)
- ⑥ STEAM RADIATOR MISSING COVER HOUSING.
- ⑦ GYM IS PRESENTLY HEATED BUT NOT COOLED. RECOMMEND HAVING A THERMAL LOAD ANALYSIS DONE.

<b>EPIC ENGINEERING SOLUTIONS</b>	
P.O. BOX 2122 - MT. PLEASANT, SC 29465 (843) 849-6878 - EPIC JOB NO. 23002	
COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. ANY REPRODUCTION OR USE IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.	
DESIGNED BY:	APPROVED BY:
ACT	ACT
DRAWN BY:	CHECKED BY:
RAD	ACT

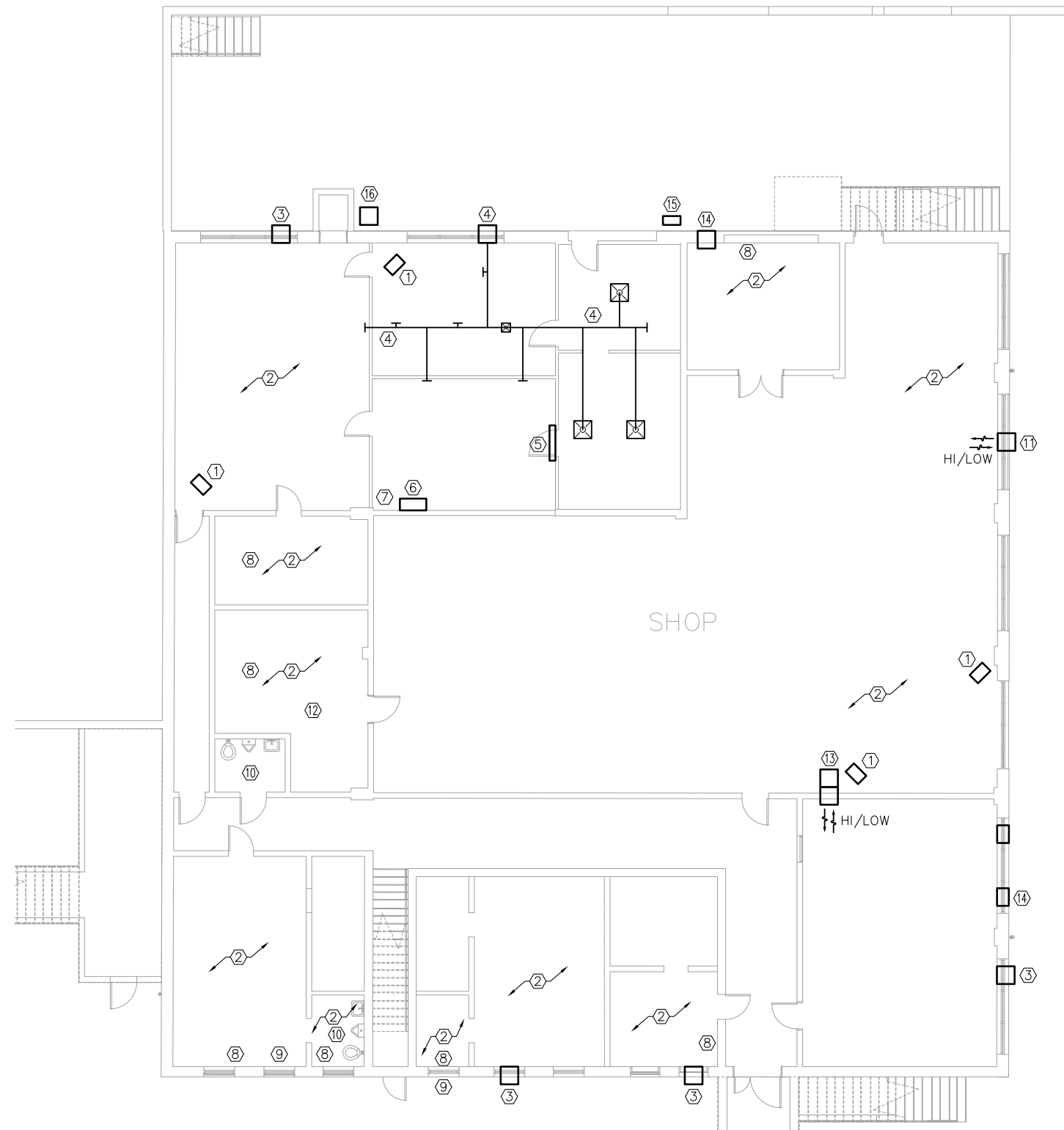
REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

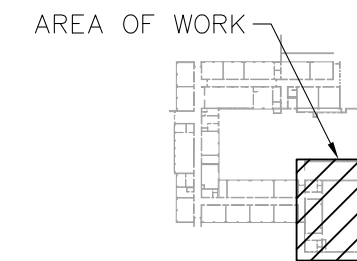
<b>GYM - UPPER LEVEL</b>	DRAWING TITLE
SCALE: AS NOTED	DATE: 3/17/23

SHEET NUMBER  
**M105**

CAD FILE NAME:  
**23002M105**



**GYM - LOWER LEVEL**  
SCALE: NT



**KEYPLAN**  
SCALE: NONE

**KEYED NOTES (THIS SHEET ONLY)**

- ① STEAM FAN FORCED HEATER.
- ② EXPOSED PIPE INSULATION DAMAGED MISSING OR WRONG TYPE. INSULATION SHOULD BE TESTED FOR ASBESTOS.
- ③ WINDOW AC UNIT
- ④ BARD AC UNIT ON OUTSIDE OF WALL WITH DUCTED SUPPLY AND RETURN DUCT/GRILLES. (5 TON) MFG DATE: 2002
- ⑤ DUCTLESS AC UNIT ABOVE DOOR MOUNTED ON WALL. (2 TON) FOR I.T. ROOM.
- ⑥ AIR HANDLER HUNG ON WALL - FREE BLOWING IN I.T. ROOM - NO DUCTWORK (5 TON) MFG. DATE: 2010
- ⑦ DISCHARGE OFF AIR HANDLER AT WALL IS CREATING AN ENVIRONMENT FOR MOLD GROWTH.
- ⑧ STEAM RADIATOR.
- ⑨ WINDOW EXHAUST FAN NEEDS TO BE REPLACE.
- ⑩ NO EXHAUST INSTALLED IN TOILET ROOM.
- ⑪ BARD AC UNIT ON OUTSIDE WALL (5 TON) MFG. DATE: 1991
- ⑫ EXISTING STEAM CONDENSATE RETURN PUMPS.
- ⑬ STEAM FAN COIL
- ⑭ SIDE WALL VENTILATION FAN
- ⑮ MINI-SPLIT HEAT PUMP - AGE UNKNOWN - REFRIGERANT'S PIPE INSULATION IN NEED OF REPAIR/REPLACEMENT. (2 TON)
- ⑯ HEAT PUMP OUTSIDE ON PAD (5 TON) MFG: COLEMAN.

<b>EPIC ENGINEERING SOLUTIONS</b>	
P.O. BOX 2192 - MT. PLEASANT, SC 29466 (843) 849-6878 - EPIC JOB NO. 23002	
COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION.	
DESIGNED BY: ACT	APPROVED BY: ACT
DRAWN BY: RAD	CHECKED BY: ACT

**REVISIONS**

NO.	DESCRIPTION	DATE REVISD
1		
2		
3		

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

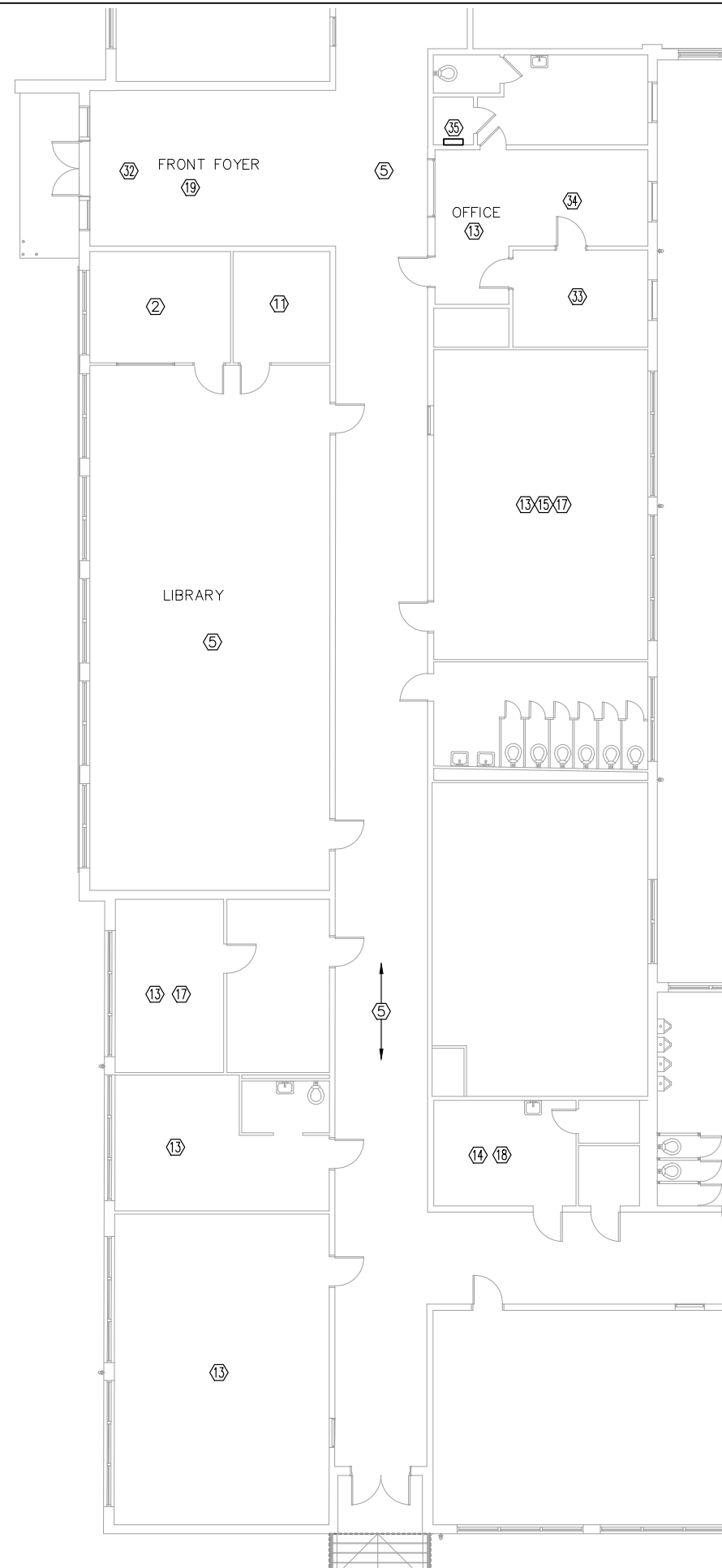
**GYM - LOWER LEVEL**  
DRAWING TITLE

SHEET NUMBER  
**M106**

CAD FILE NAME:  
**23002M106**

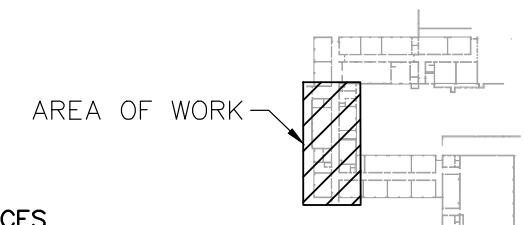
© EPIC ENGINEERING 2023

SCALE: AS NOTED  
DATE: 3/17/23



**FOYER AND SCHOOL OFFICES**  
SCALE: NTS

**KEYPLAN**  
SCALE: NONE



- KEYED NOTES (THIS SHEET ONLY)**
- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
  - ② 2X4 T-BAR
  - ③ 2X4 SURFACE
  - ④ 12X12 RECESSED
  - ⑤ 1X8 T-12
  - ⑥ CONDUIT NOT PROPERLY SUPPORTED
  - ⑦ TRIP HAZARD CLEAN OUT
  - ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
  - ⑨ INCANDESCENTS WITHOUT LENSES
  - ⑩ PENDANT INCANDESCENTS
  - ⑪ 1X4 SURFACE MOUNT
  - ⑫ DOES NOT MEET CODE REQUIRED CLEARANCES
  - ⑬ 1X4 FLUORESCENT PENDANTS
  - ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
  - ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑰ SWITCH OR RECEPTACLE MISSING COVER
  - ⑱ 1X8 T-12 PENDANT
  - ⑲ 1X4 SURFACE MOUNT T-8
  - ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
  - ㉑ EXIT NOT WORKING PROPERLY
  - ㉒ 2X4 FOUR LAMP T-8
  - ㉓ 2X8 LINEAR PENDANTS FOR A TOTAL OF 48
  - ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY
  - ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
  - ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
  - ㉗ MAIN ELECTRICAL AND SUB PANELS – MANUFACTURED BY FEDERAL ELECTRIC
  - ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
  - ㉙ 12 SPACE ELECTRICAL PANEL.
  - ㉚ 200A, PANEL B2.
  - ㉛ 4 SPACE PANEL.
  - ㉜ NO REMOTE ANNUNCIATOR.
  - ㉝ TWO LAMP X 8' PENDANT.
  - ㉞ TWO LAMP X 16' PENDANT.
  - ㉟ TELEPHONE BACKERBOARD.
  - ㊱ CABLE BOX DETACHED FROM WALL
  - ㊲ 1X4 VANITY FIXTURE
  - ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
  - ㊴ FIRE ALARM CONTROL PANEL.

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132 MT. PLEASANT, SC 29465  
(843) 849-6878 EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION

DESIGNED BY:	APPROVED BY:
ACT	ACT
DRAWN BY:	CHECKED BY:
RAD	ACT

REVISIONS	
①	DESCRIPTION: DATE REVISION:
②	DESCRIPTION: DATE REVISION:
③	DESCRIPTION: DATE REVISION:

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**FOYER AND SCHOOL OFFICES**  
DRAWING TITLE

SCALE: AS NOTED	DATE: 3/17/23
--------------------	------------------

SHEET NUMBER  
**E101**

CAD FILE NAME:  
**23002E101**

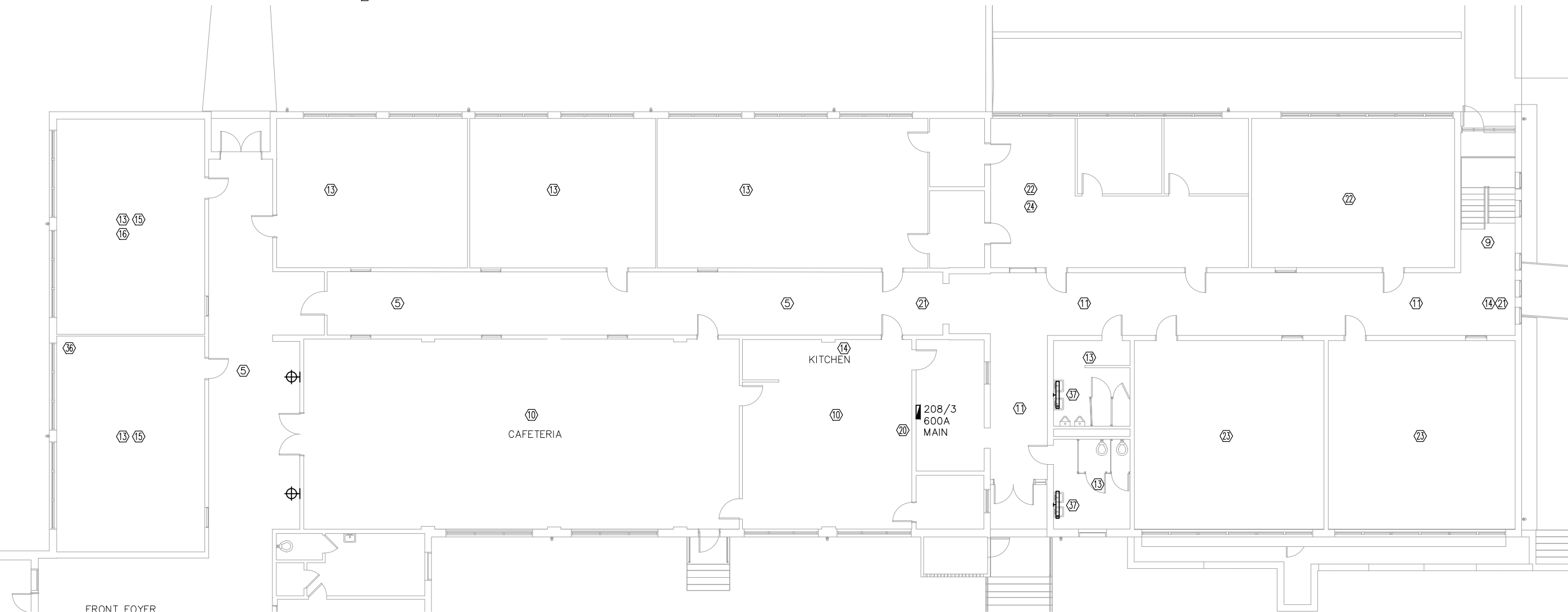
**KEYED NOTES (THIS SHEET ONLY)**

- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
- ② 2X4 T-BAR
- ③ 2X4 SURFACE
- ④ 12X12 RECESSED
- ⑤ 1X8 T-12
- ⑥ CONDUIT NOT PROPERLY SUPPORTED
- ⑦ TRIP HAZARD CLEAN OUT
- ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
- ⑨ INCANDESCENTS WITHOUT LENSES
- ⑩ PENDANT INCANDESCENTS
- ⑪ 1X4 SURFACE MOUNT
- ⑫ NOT CODE REQUIRED CLEARANCES
- ⑬ 1X4 FLUORESCENT PENDANTS

- ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
- ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
- ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
- ⑰ SWITCH OR RECEPTACLE MISSING COVER
- ⑱ 1X8 T-12 PENDANT
- ⑲ 1X4 SURFACE MOUNT T-8
- ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
- ㉑ EXIT NOT WORKING PROPERLY
- ㉒ 2X4 FOUR LAMP T-8
- ㉓ 2X8 LINEAR PENDANTS TOTAL OF 48’?
- ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY

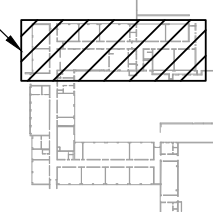
- ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
- ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
- ㉗ MAIN ELECTRICAL AND SUB PANELS – MANUFACTURED BY FEDERAL ELECTRIC
- ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
- ㉙ 12 SPACE ELECTRICAL PANEL.
- ㉚ 200A, PANEL B2.
- ㉛ 4 SPACE PANEL.
- ㉜ NO REMOTE ANNUNCIATOR.
- ㉝ TWO LAMP X 8’ PENDANT.
- ㉞ TWO LAMP X 16’ PENDANT.
- ㉟ TELEPHONE BACKERBOARD.
- ㊱ CABLE BOX DETACHED FROM WALL

- ㊲ 1X4 VANITY FIXTURE
- ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
- ㊴ FIRE ALARM CONTROL PANEL.



**CAFETERIA WING**  
SCALE: NTS

AREA OF WORK



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132, MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED. ANY REUSE OR MODIFICATION WITHOUT WRITTEN PERMISSION IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
①	DESCRIPTION: DATE REVISION:
②	DESCRIPTION: DATE REVISION:
③	DESCRIPTION: DATE REVISION:

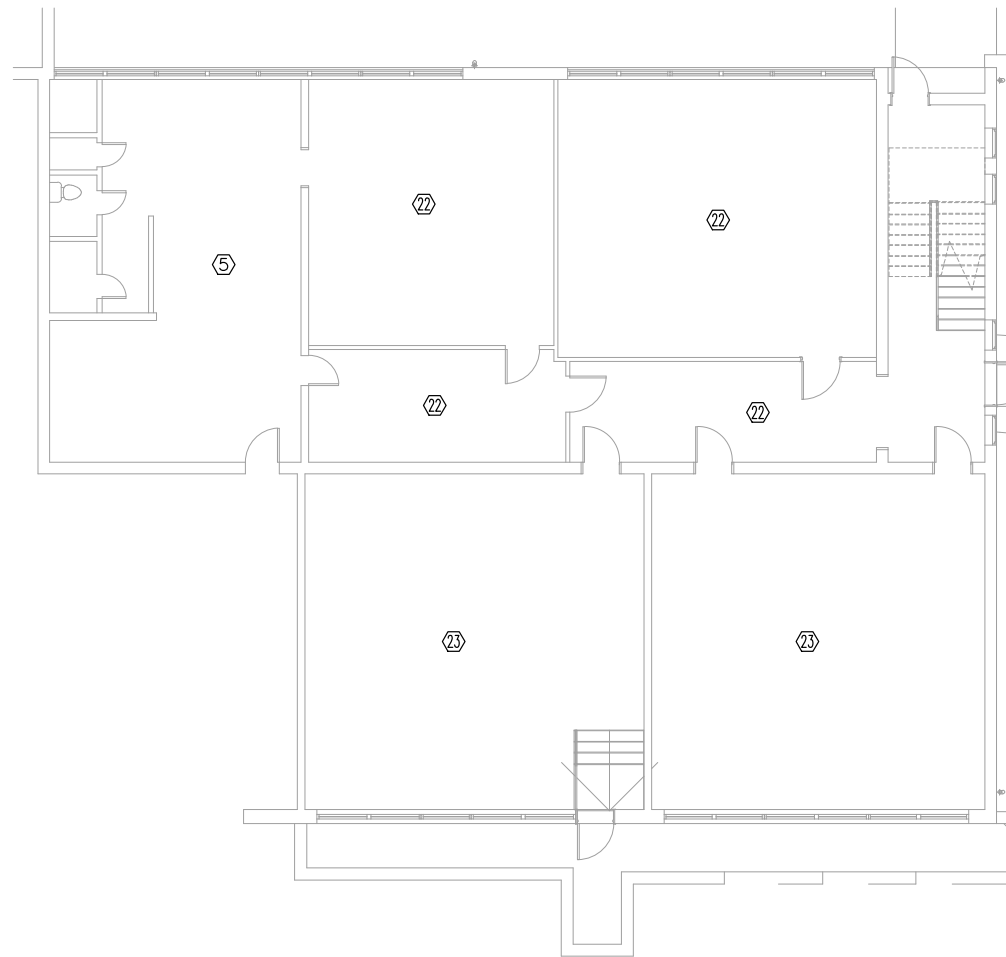
**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**CAFETERIA WING**  
DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

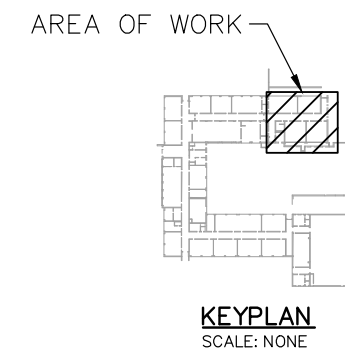
SHEET NUMBER  
**E102**

CAD FILE NAME:  
**23002E102**



**CAFETERIA WING – LOWER ADDITION**  
SCALE: NTS

- KEYED NOTES (THIS SHEET ONLY)**
- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
  - ② 2X4 T-BAR
  - ③ 2X4 SURFACE
  - ④ 12X12 RECESSED
  - ⑤ 1X8 T-12
  - ⑥ CONDUIT NOT PROPERLY SUPPORTED
  - ⑦ TRIP HAZARD CLEAN OUT
  - ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
  - ⑨ INCANDESCENTS WITHOUT LENSES
  - ⑩ PENDANT INCANDESCENTS
  - ⑪ 1X4 SURFACE MOUNT
  - ⑫ NOT CODE REQUIRED CLEARANCES
  - ⑬ 1X4 FLUORESCENT PENDANTS
  - ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
  - ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑰ SWITCH OR RECEPTACLE MISSING COVER
  - ⑱ 1X8 T-12 PENDANT
  - ⑲ 1X4 SURFACE MOUNT T-8
  - ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
  - ㉑ EXIT NOT WORKING PROPERLY
  - ㉒ 2X4 FOUR LAMP T-8
  - ㉓ 2X8 LINEAR PENDANTS TOTAL OF 48’?
  - ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY
  - ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
  - ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
  - ㉗ MAIN ELECTRICAL AND SUB PANELS – MANUFACTURED BY FEDERAL ELECTRIC
  - ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
  - ㉙ 12 SPACE ELECTRICAL PANEL.
  - ㉚ 200A, PANEL B2.
  - ㉛ 4 SPACE PANEL.
  - ㉜ NO REMOTE ANNUNCIATOR.
  - ㉝ TWO LAMP X 8’ PENDANT.
  - ㉞ TWO LAMP X 16’ PENDANT.
  - ㉟ TELEPHONE BACKERBOARD.
  - ㊱ CABLE BOX DETACHED FROM WALL
  - ㊲ 1X4 VANITY FIXTURE
  - ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
  - ㊴ FIRE ALARM CONTROL PANEL.



**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132, MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. IT IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
①	DESCRIPTION: DATE REVISD:
②	DESCRIPTION: DATE REVISD:
③	DESCRIPTION: DATE REVISD:

**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

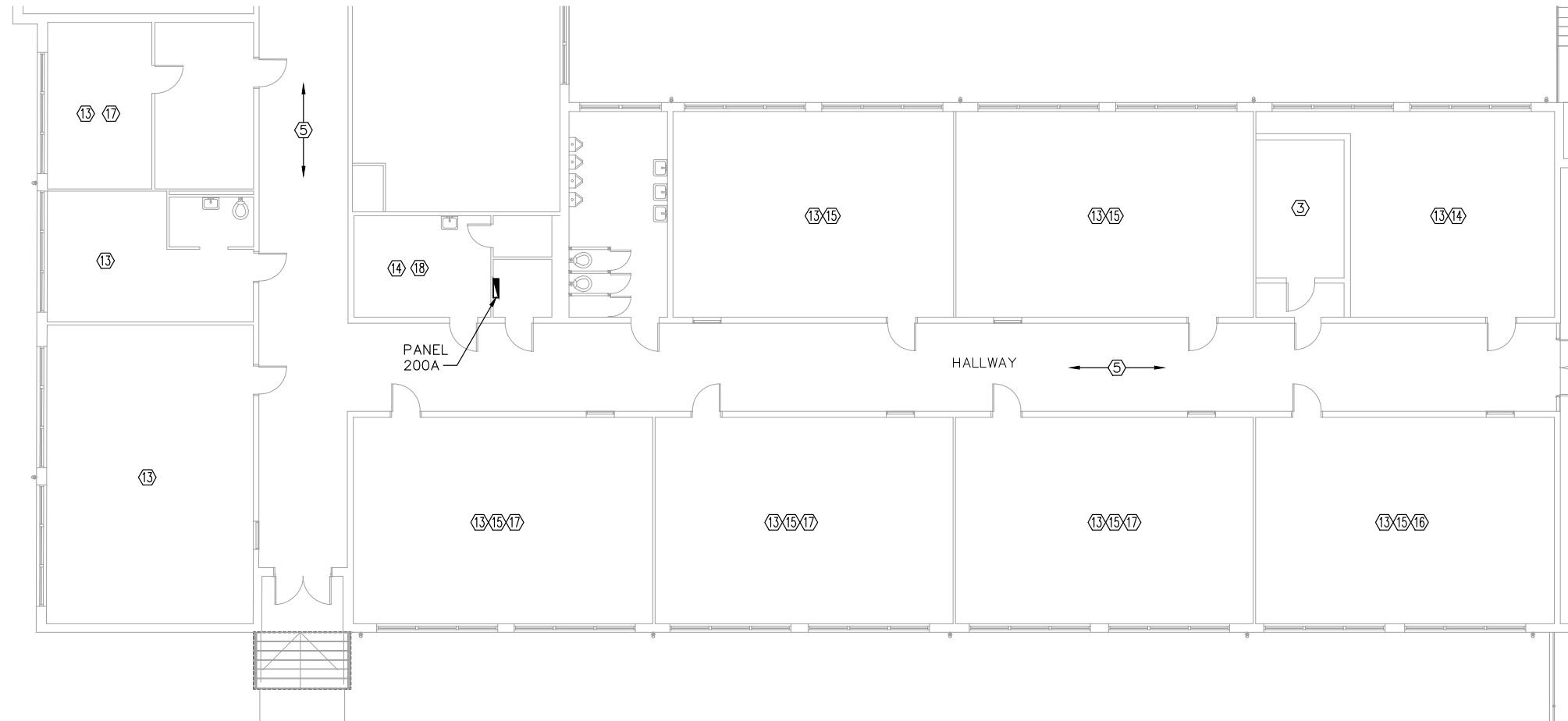
**CAFETERIA WING - LOWER ADDITION**  
DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**E103**

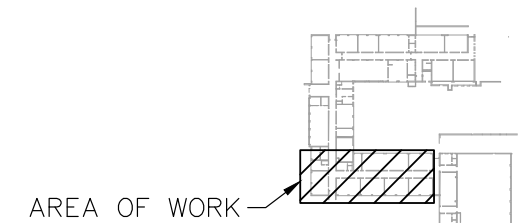
CAD FILE NAME:  
**23002E103**





**CLASSROOM WING**  
SCALE: NTS

- KEYED NOTES (THIS SHEET ONLY)**
- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
  - ② 2X4 T-BAR
  - ③ 2X4 SURFACE
  - ④ 12X12 RECESSED
  - ⑤ 1X8 T-12
  - ⑥ CONDUIT NOT PROPERLY SUPPORTED
  - ⑦ TRIP HAZARD CLEAN OUT
  - ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
  - ⑨ INCANDESCENTS WITHOUT LENSES
  - ⑩ PENDANT INCANDESCENTS
  - ⑪ 1X4 SURFACE MOUNT
  - ⑫ NOT CODE REQUIRED CLEARANCES
  - ⑬ 1X4 FLUORESCENT PENDANTS
  - ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
  - ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑰ SWITCH OR RECEPTACLE MISSING COVER
  - ⑱ 1X8 T-12 PENDANT
  - ⑲ 1X4 SURFACE MOUNT T-8
  - ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
  - ㉑ EXIT NOT WORKING PROPERLY
  - ㉒ 2X4 FOUR LAMP T-8
  - ㉓ 2X8 LINEAR PENDANTS TOTAL OF 48'
  - ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY
  - ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
  - ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
  - ㉗ MAIN ELECTRICAL AND SUB PANELS - MANUFACTURED BY FEDERAL ELECTRIC
  - ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
  - ㉙ 12 SPACE ELECTRICAL PANEL.
  - ㉚ 200A, PANEL B2.
  - ㉛ 4 SPACE PANEL.
  - ㉜ NO REMOTE ANNUNCIATOR.
  - ㉝ TWO LAMP X 8' PENDANT.
  - ㉞ TWO LAMP X 16' PENDANT.
  - ㉟ TELEPHONE BACKERBOARD.
  - ㊱ CABLE BOX DETACHED FROM WALL
  - ㊲ 1X4 VANITY FIXTURE
  - ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
  - ㊴ FIRE ALARM CONTROL PANEL.



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132, MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. ANY REUSE OR MODIFICATION WITHOUT WRITTEN PERMISSION IS STRICTLY PROHIBITED.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

**REVISIONS**

NO.	DESCRIPTION	DATE REVISION
1		
2		
3		

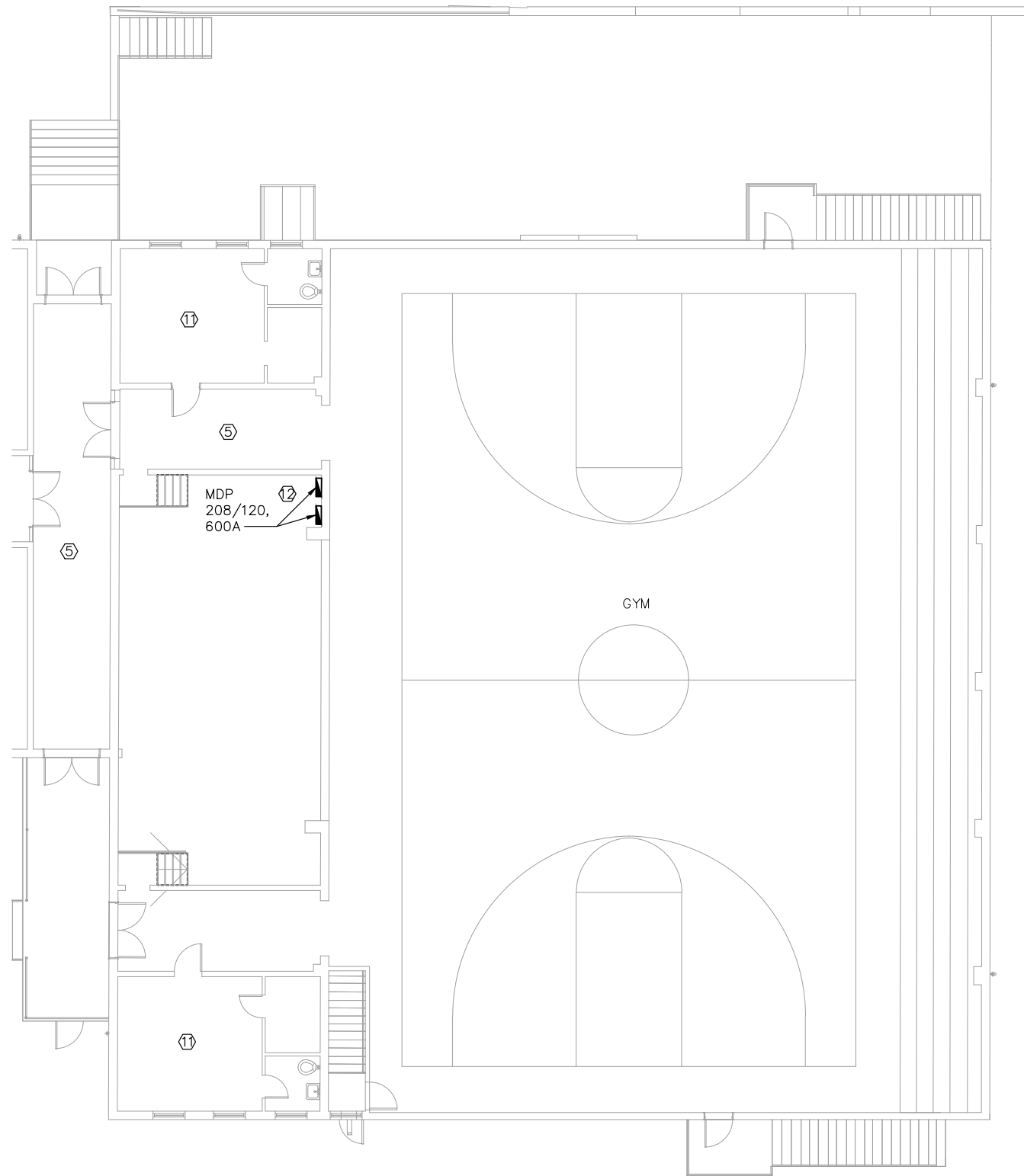
**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**CLASSROOM WING**  
DRAWING TITLE

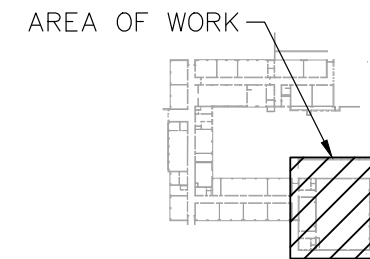
SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**E104**

CAD FILE NAME:  
**23002E104**



**GYM - UPPER LEVEL**  
SCALE: NTS



**KEYPLAN**  
SCALE: NONE

**KEYED NOTES (THIS SHEET ONLY)**

- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
- ② 2X4 T-BAR
- ③ 2X4 SURFACE
- ④ 12X12 RECESSED
- ⑤ 1X8 T-12
- ⑥ CONDUIT NOT PROPERLY SUPPORTED
- ⑦ TRIP HAZARD CLEAN OUT
- ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
- ⑨ INCANDESCENTS WITHOUT LENSES
- ⑩ PENDANT INCANDESCENTS
- ⑪ 1X4 SURFACE MOUNT
- ⑫ NOT CODE REQUIRED CLEARANCES
- ⑬ 1X4 FLUORESCENT PENDANTS
- ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
- ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
- ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
- ⑰ SWITCH OR RECEPTACLE MISSING COVER
- ⑱ 1X8 T-12 PENDANT
- ⑲ 1X4 SURFACE MOUNT T-8
- ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
- ㉑ EXIT NOT WORKING PROPERLY
- ㉒ 2X4 FOUR LAMP T-8
- ㉓ 2X8 LINEAR PENDANTS TOTAL OF 48'
- ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY
- ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
- ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
- ㉗ MAIN ELECTRICAL AND SUB PANELS - MANUFACTURED BY FEDERAL ELECTRIC
- ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
- ㉙ 12 SPACE ELECTRICAL PANEL.
- ㉚ 200A, PANEL B2.
- ㉛ 4 SPACE PANEL.
- ㉜ NO REMOTE ANNUNCIATOR.
- ㉝ TWO LAMP X 8' PENDANT.
- ㉞ TWO LAMP X 16' PENDANT.
- ㉟ TELEPHONE BACKERBOARD.
- ㊱ CABLE BOX DETACHED FROM WALL
- ㊲ 1X4 VANITY FIXTURE
- ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
- ㊴ FIRE ALARM CONTROL PANEL.

**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132, MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED. ANY REUSE OR MODIFICATION OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
①	DESCRIPTION: DATE REVISION:
②	DESCRIPTION: DATE REVISION:
③	DESCRIPTION: DATE REVISION:

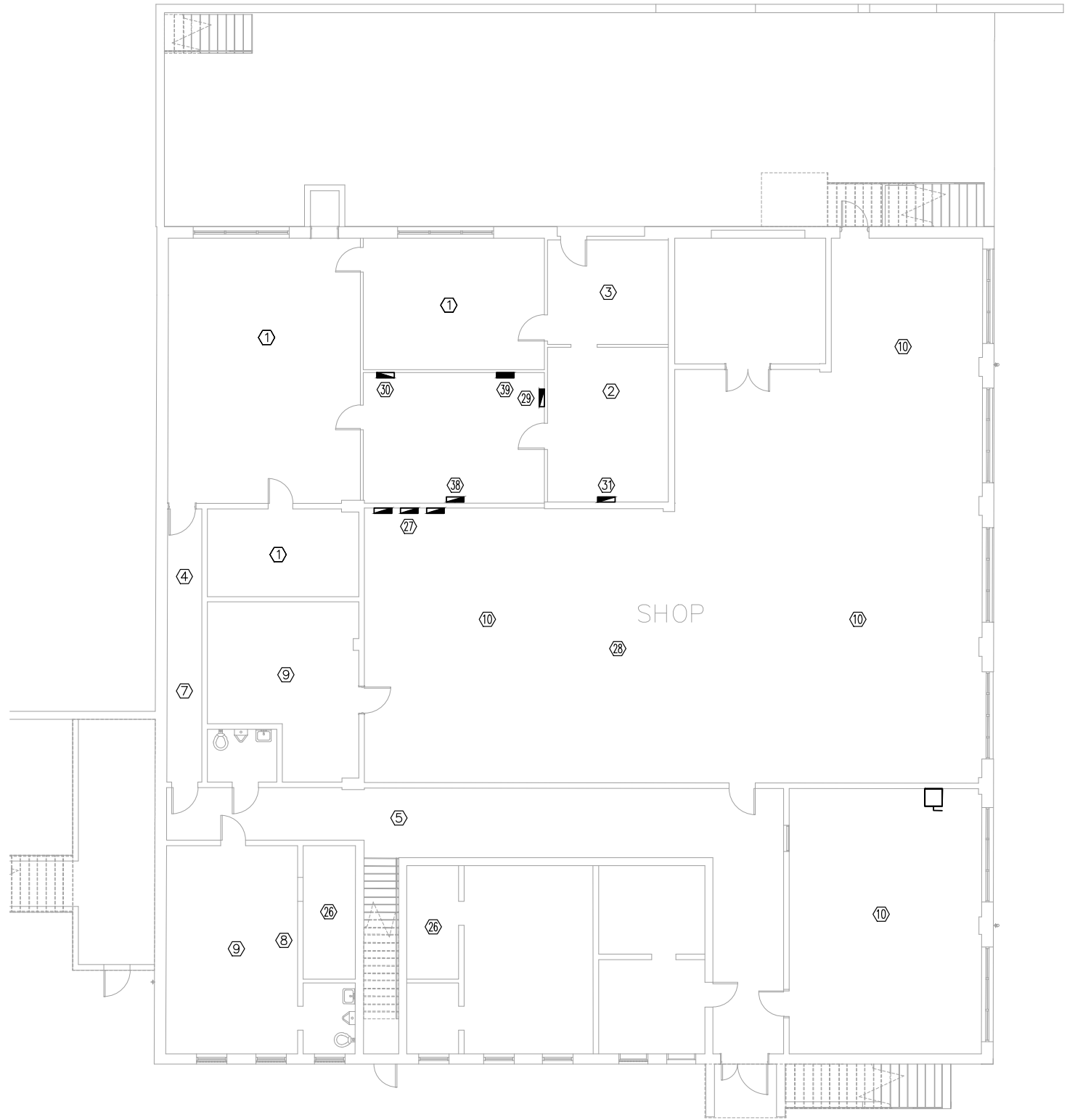
**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**GYM - UPPER LEVEL**  
DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

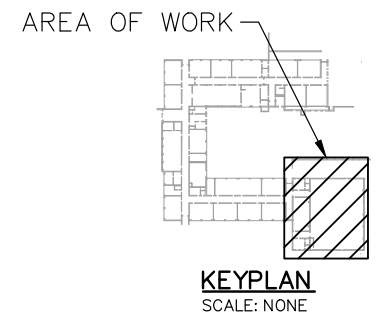
SHEET NUMBER  
**E105**

CAD FILE NAME:  
**23002E105**



**GYM - LOWER LEVEL**  
SCALE: NTS

- KEYED NOTES (THIS SHEET ONLY)**
- ① OLD INCANDESCENT RETROFIT WITH COMPACT FLUORESCENTS AND THEN 1 X 4 TWO LAMP T-12
  - ② 2X4 T-BAR
  - ③ 2X4 SURFACE
  - ④ 12X12 RECESSED
  - ⑤ 1X8 T-12
  - ⑥ CONDUIT NOT PROPERLY SUPPORTED
  - ⑦ TRIP HAZARD CLEAN OUT
  - ⑧ KILN CIRCUIT IS NOT TERMINATED PROPERLY
  - ⑨ INCANDESCENTS WITHOUT LENSES
  - ⑩ PENDANT INCANDESCENTS
  - ⑪ 1X4 SURFACE MOUNT
  - ⑫ NOT CODE REQUIRED CLEARANCES
  - ⑬ 1X4 FLUORESCENT PENDANTS
  - ⑭ NEED JUNCTION BOX COVER AND VERIFY CIRCUIT IS TERMINATED PROPERLY
  - ⑮ CEILING FAN CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑯ LIGHT CIRCUITS ARE NOT TERMINATED PROPERLY
  - ⑰ SWITCH OR RECEPTACLE MISSING COVER
  - ⑱ 1X8 T-12 PENDANT
  - ⑲ 1X4 SURFACE MOUNT T-8
  - ⑳ NON GFI CIRCUIT OVER SINK AND NEXT TO SINK
  - ㉑ EXIT NOT WORKING PROPERLY
  - ㉒ 2X4 FOUR LAMP T-8
  - ㉓ 2X8 LINEAR PENDANTS TOTAL OF 48'
  - ㉔ SCIENCE ROOM FLOOR BOX CIRCUITS ARE NOT TERMINATED PROPERLY
  - ㉕ RUSTED SPECIAL PURPOSE RECEPTACLE
  - ㉖ NON WET RATED FIXTURE USED IN SHOWER ROOMS.
  - ㉗ MAIN ELECTRICAL AND SUB PANELS - MANUFACTURED BY FEDERAL ELECTRIC
  - ㉘ ELECTRICAL CIRCUIT IS NOT TERMINATED PROPERLY.
  - ㉙ 12 SPACE ELECTRICAL PANEL.
  - ㉚ 200A, PANEL B2.
  - ㉛ 4 SPACE PANEL.
  - ㉜ NO REMOTE ANNUNCIATOR.
  - ㉝ TWO LAMP X 8' PENDANT.
  - ㉞ TWO LAMP X 16' PENDANT.
  - ㉟ TELEPHONE BACKERBOARD.
  - ㊱ CABLE BOX DETACHED FROM WALL
  - ㊲ 1X4 VANITY FIXTURE
  - ㊳ 24 SPACE PANEL UNDER AIR HANDLING UNIT.
  - ㊴ FIRE ALARM CONTROL PANEL.



**EPIC ENGINEERING SOLUTIONS**  
P.O. BOX 2132, MT. PLEASANT, SC 29465  
(843) 849-6878 - EPIC JOB NO. 23002  
© 2023 EPIC ENGINEERING SOLUTIONS  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED WITHOUT WRITTEN PERMISSION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

**REVISIONS**

NO.	DESCRIPTION	DATE REVISION
1		
2		
3		

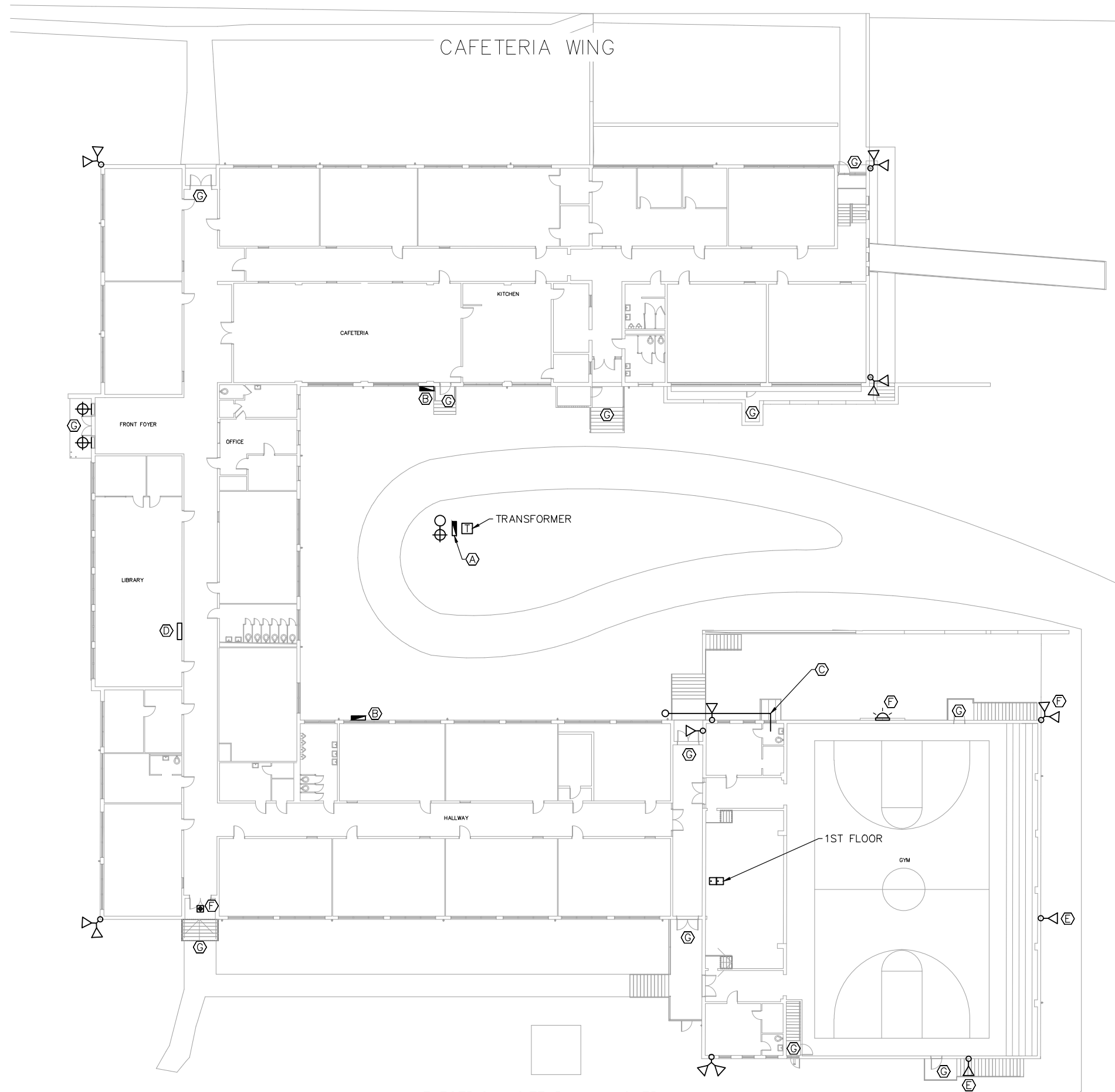
**GALLMAN CENTER**  
NEWBERRY COUNTY, SOUTH CAROLINA  
PROJECT TITLE

**GYM - LOWER LEVEL**  
DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**E106**

CAD FILE NAME:  
**23002E106**



- KEYED NOTES (THIS SHEET ONLY)**
- (A) EXTERIOR DISTRIBUTION PANEL.
  - (B) 225AMP HVAC PANEL.
  - (C) CIRCUIT INSTALLED IN AN UNCONVENTIONAL MANNER.
  - (D) BOILER CONTROLS LOCATED IN BASEMENT.
  - (E) LIGHT FIXTURE HAS BEEN REMOVED AND THE JUNCTION BOX HAS BEEN FILLED WITH CONCRETE.
  - (F) DAMAGED LIGHT FIXTURE.
  - (G) NO EMERGENCY EGRESS LIGHTING.

**ELECTRICAL SITE PLAN – OVERALL**  
SCALE: NTS

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2132 MT. PLEASANT, SC 29465  
 (843) 849-6878 EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED. ANY REUSE OR MODIFICATION OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF EPIC ENGINEERING SOLUTIONS IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
(1)	DESCRIPTION: DATE REVISION:
(2)	DESCRIPTION: DATE REVISION:
(3)	DESCRIPTION: DATE REVISION:

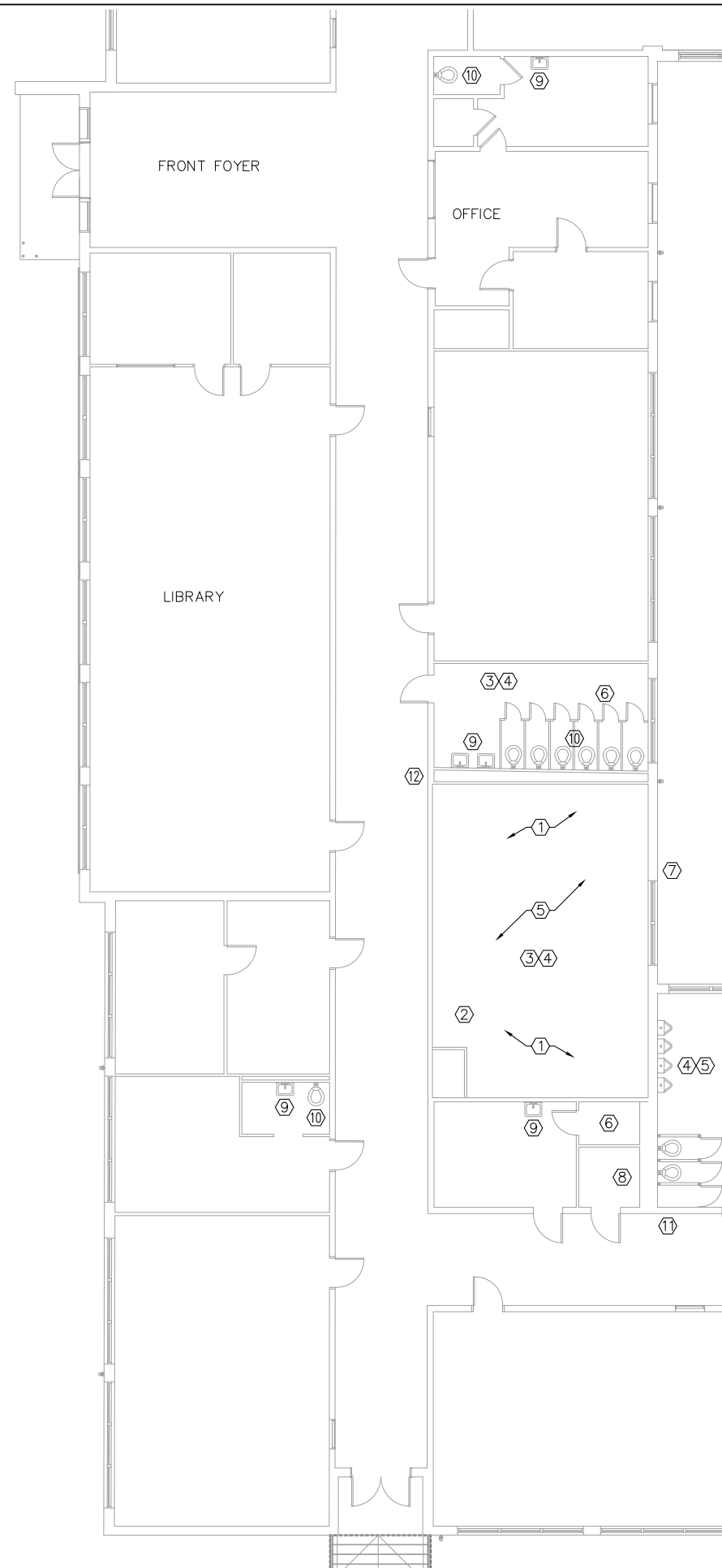
**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**ELECTRICAL SITE PLAN – OVERALL**  
 DRAWING TITLE

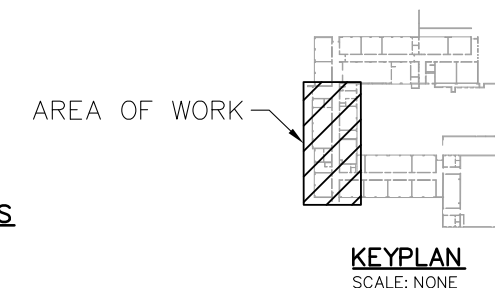
SCALE: AS NOTED	DATE: 3/17/23
--------------------	------------------

SHEET NUMBER  
**E301**

CAD FILE NAME:  
**23002E301**



**FOYER AND SCHOOL OFFICES**  
SCALE: NTS



**KEYPLAN**  
SCALE: NONE

- KEYED NOTES (THIS SHEET ONLY)**
- ① FLOOR DRAINS ARE CLOGGED AND NEED TO BE CLEANED.
  - ② 40 GALLON NATURAL GAS WATER HEATER, BY CRAFTMASTER, MFG DATE: 2007. NO DRAIN PAN, EXPANSION TANK, VACUUM BREAKER.
  - ③ MOST OF THE WASTE PIPING FOR THIS AREA IS CAST IRON THOUGH SOME PVC HAS BEEN USED.
  - ④ MOST OF THE DOMESTIC WATER PIPING IN THIS AREA IS COPPER. HOT WATER SYSTEM DOES NOT APPEAR TO BE RECIRCULATED.
  - ⑤ PIPE INSULATION INSTALLED IS IN NEED OF REPLACEMENT OR REPAIR.
  - ⑥ STANDING WATER IN CRAWL SPACE.
  - ⑦ GAS METER FOR BOILER ROOM.
  - ⑧ MOP SINK/FAUCET.
  - ⑨ WALL MOUNTED LAVATORY.
  - ⑩ FLOOR MOUNTED FLUSH VALVE TOILET.
  - ⑪ WALL MOUNTED DRINKING FOUNTAIN. (NON ADA)
  - ⑫ WALL MOUNTED DRINKING FOUNTAIN.

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2122 · MT. PLEASANT, SC 29465  
 (843) 849-6878 · EPIC JOB NO. 23002  
© COPYRIGHT 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED WITHOUT WRITTEN PERMISSION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
①	DESCRIPTION: DATE REVISD:
②	DESCRIPTION: DATE REVISD:
③	DESCRIPTION: DATE REVISD:

**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**FOYER AND SCHOOL OFFICES**  
 DRAWING TITLE

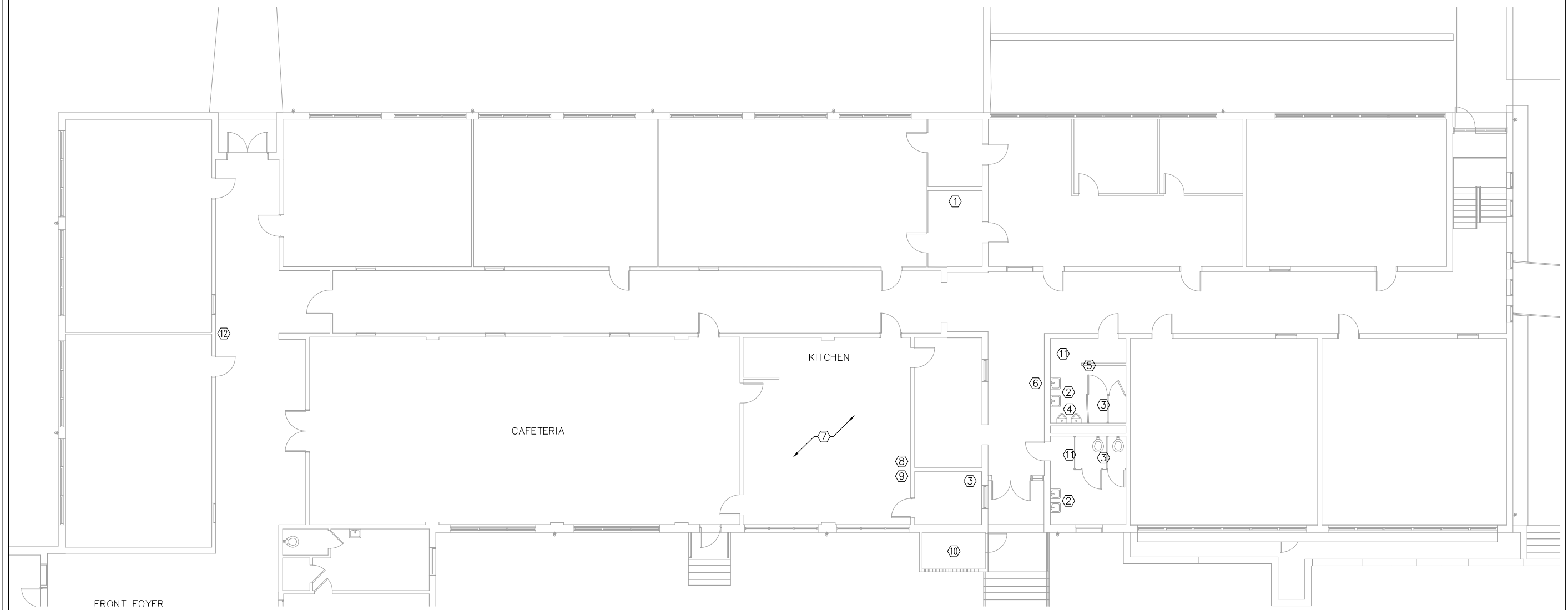
SCALE: AS NOTED	DATE: 3/17/23
--------------------	------------------

SHEET NUMBER  
**P101**

CAD FILE NAME:  
**23002P101**

**KEYED NOTES (THIS SHEET ONLY)**

- ① COUNTERTOP SINK
- ② WALL MOUNTED LAVATORIES.
- ③ FLOOR MOUNTED FLUSH VALVE TOILETS
- ④ WALL MOUNTED FLUSH VALVE URINALS.
- ⑤ FLOOR DRAIN RISES ABOVE TILE FLOOR – TRIP HAZARD.
- ⑥ FLOOR STANDING, DRINKING FOUNTAIN, (NON ADA)
- ⑦ KITCHEN EQUIPMENT NO LONGER INSTALLED. PLUMBING WASTE, HOT AND COLD WATER TAPS IN VARIOUS LOCATIONS.
- ⑧ THREE COMPARTMENT SINK.
- ⑨ MOP SINK.
- ⑩ OUTSIDE CAN WASH
- ⑪ CAST IRON WASTE PIPING BELOW IN BAD CONDITION. PIPE HAS RUSTED THROUGH AND WASTE WILL DISCHARGE INTO CRAWL SPACE.
- ⑫ DRINKING FOUNTAIN LOCATION, FIXTURE REMOVED.



**CAFETERIA WING**  
SCALE: NTS

AREA OF WORK



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2192 - MT. PLEASANT, SC 29465  
 (843) 849-6878 - EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED. ANY REUSE OR MODIFICATION WITHOUT WRITTEN PERMISSION IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	APPROVED BY:
ACT	ACT
DRAWN BY:	CHECKED BY:
RAD	ACT

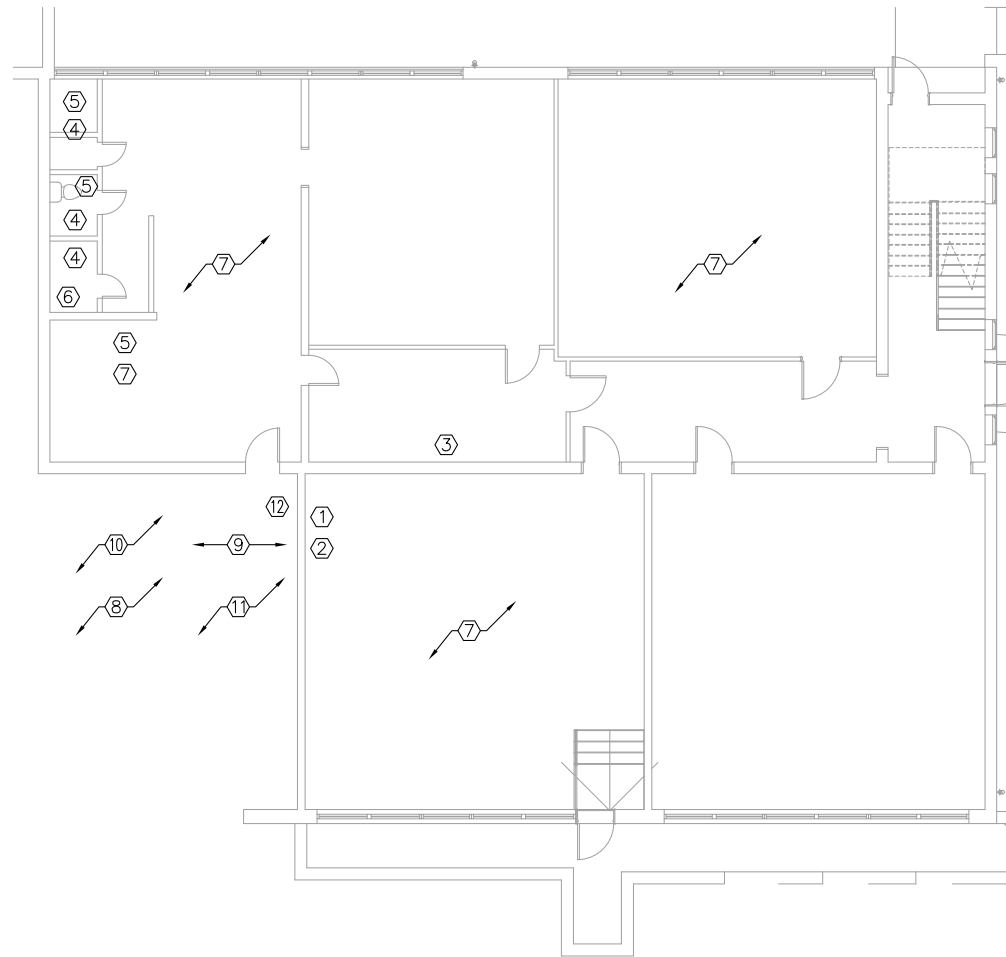
REVISIONS	
DESCRIPTION:	
DATE REVISED:	
DESCRIPTION:	
DATE REVISED:	
DESCRIPTION:	
DATE REVISED:	

**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

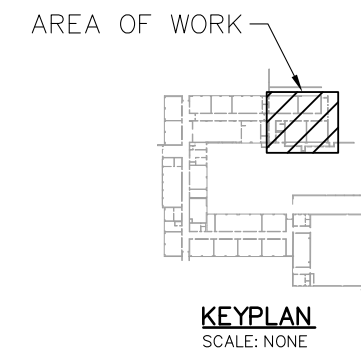
TITLE	DRAWING TITLE
SCALE:	DATE:
1/16" = 1'-0"	3/17/23

SHEET NUMBER  
**P102**

CAD FILE NAME:  
**23002P102**



**CAFETERIA WING – LOWER ADDITION**  
SCALE: NT



- KEYED NOTES (THIS SHEET ONLY)**
- ① COUNTER TOP SINK WITH PEX PIPING AND PVC WASTE PIPING.
  - ② UNDER COUNTER WATER HEATER.
  - ③ FLOOR STANDING WATER COOLER. (NON-ADA)
  - ④ WALL MOUNTED LAVATORY.
  - ⑤ FLOOR MOUNTED FLUSH TANK TOILET.
  - ⑥ TOILET REMOVED, NEW WASTE PIPE THRU WALL TO TRANSITION AT TOILET FLOOR FLANGE.
  - ⑦ EXPOSED WASTE PIPING FOR FLOOR ABOVE IS ALL CAST IRON.
  - ⑧ CAST IRON WASTE PIPING WITH NEWER PVC TIE INS.
  - ⑨ PVC WASTE PIPING NEEDS TO BE REPLACED AND SLOPED PROPERLY. TIES INTO TOILET FLANGE. SEE NOTE 6.
  - ⑩ WATER PIPING IN CRAWL SPACE, NOT INSULATED.
  - ⑪ CAST IRON WASTE PIPING TO GANG TOILETS ABOVE IN NEED OF REPLACEMENT DUE TO RUSTING. METAL FLOOR PAN ALSO RUSTING. NOTE: SOME WASTE PIPING IS COMPLETELY RUSTED THROUGH, DRAINING INTO CRAWL SPACE.
  - ⑫ SUMP PUMP COVERED IN MUD. NEEDS TO BE REPLACED AND INSTALLED CORRECTLY.

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2132 • MT. PLEASANT, SC 29466  
 (843) 849-6878 • EPIC JOB NO. 23002  
 COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**CAFETERIA WING – LOWER ADDITION**  
 DRAWING TITLE

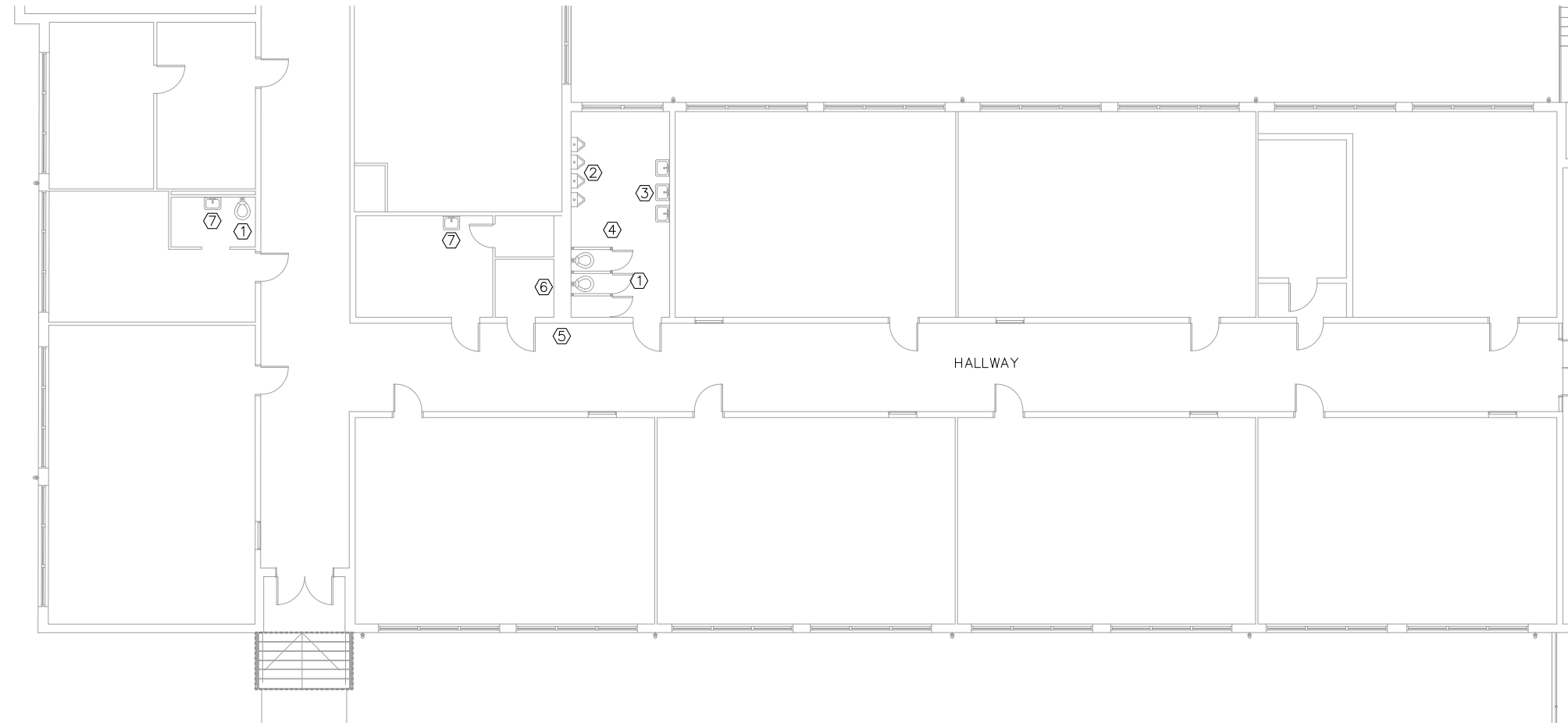
SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**P103**

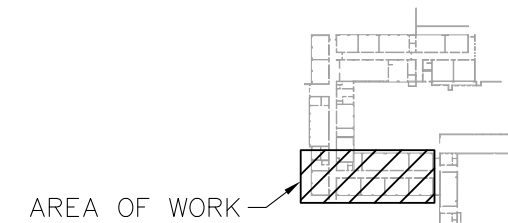
CAD FILE NAME:  
**23002P103**

**KEYED NOTES** (THIS SHEET ONLY)

- ① FLOOR MOUNTED FLUSH VALVE TOILETS.
- ② WALL MOUNTED URINALS. THREE ARE MISSING.
- ③ WALL MOUNTED LAVATORIES TWO ARE MISSING.
- ④ BATHROOM FLOOR DRAIN RISES ABOVE EXISTING TILE FLOOR – TRIP HAZARD.
- ⑤ WALL MOUNTED DRINKING FOUNTAIN. (NON-ADA)
- ⑥ MOP SINK.
- ⑦ WALL MOUNTED LAVATORY.



**CLASSROOM WING**  
SCALE: NTS



**KEYPLAN**  
SCALE: NONE

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2132 • MT. PLEASANT, SC 29465  
 (843) 849-6878 • EPIC JOB NO. 23002  
THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. REPRODUCTION OR USE IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISED:	
DESCRIPTION:	
DATE REVISED:	
DESCRIPTION:	
DATE REVISED:	

**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

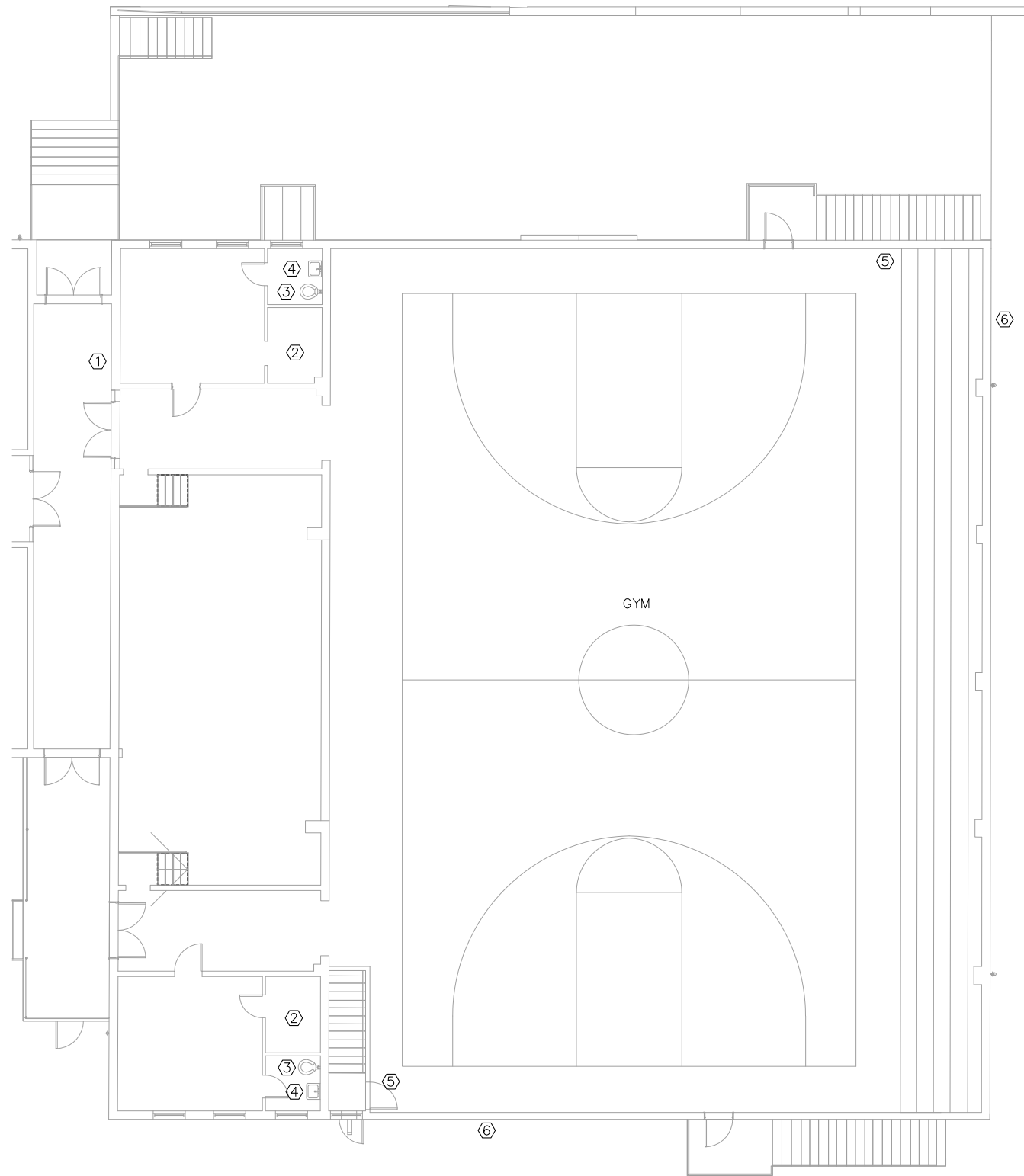
**CLASSROOM WING**  
 DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

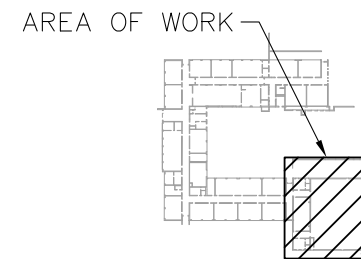
SHEET NUMBER  
**P104**

CAD FILE NAME:  
**23002P104**





**GYM - UPPER LEVEL**  
SCALE: NTS



**KEYPLAN**  
SCALE: NONE

**KEYED NOTES (THIS SHEET ONLY)**

- ① FLOOR MOUNTED WATER COOLER. (NON-ADA).
- ② SHOWERS.
- ③ FLOOR MOUNTED FLUSH VALVE TOILET.
- ④ WALL MOUNTED LAVATORY.
- ⑤ GAS PIPING TO SUSPEND FAN FORCED HEATER.
- ⑥ GAS METER. (AT GRADE, LEVEL).

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2122 - MT. PLEASANT, SC 29465  
 (843) 849-6878 - EPIC JOB NO. 23002  
© COPYRIGHT 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. NO REPRODUCTION OR USE IS PERMITTED AND SUBJECT TO LOCAL JURISDICTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

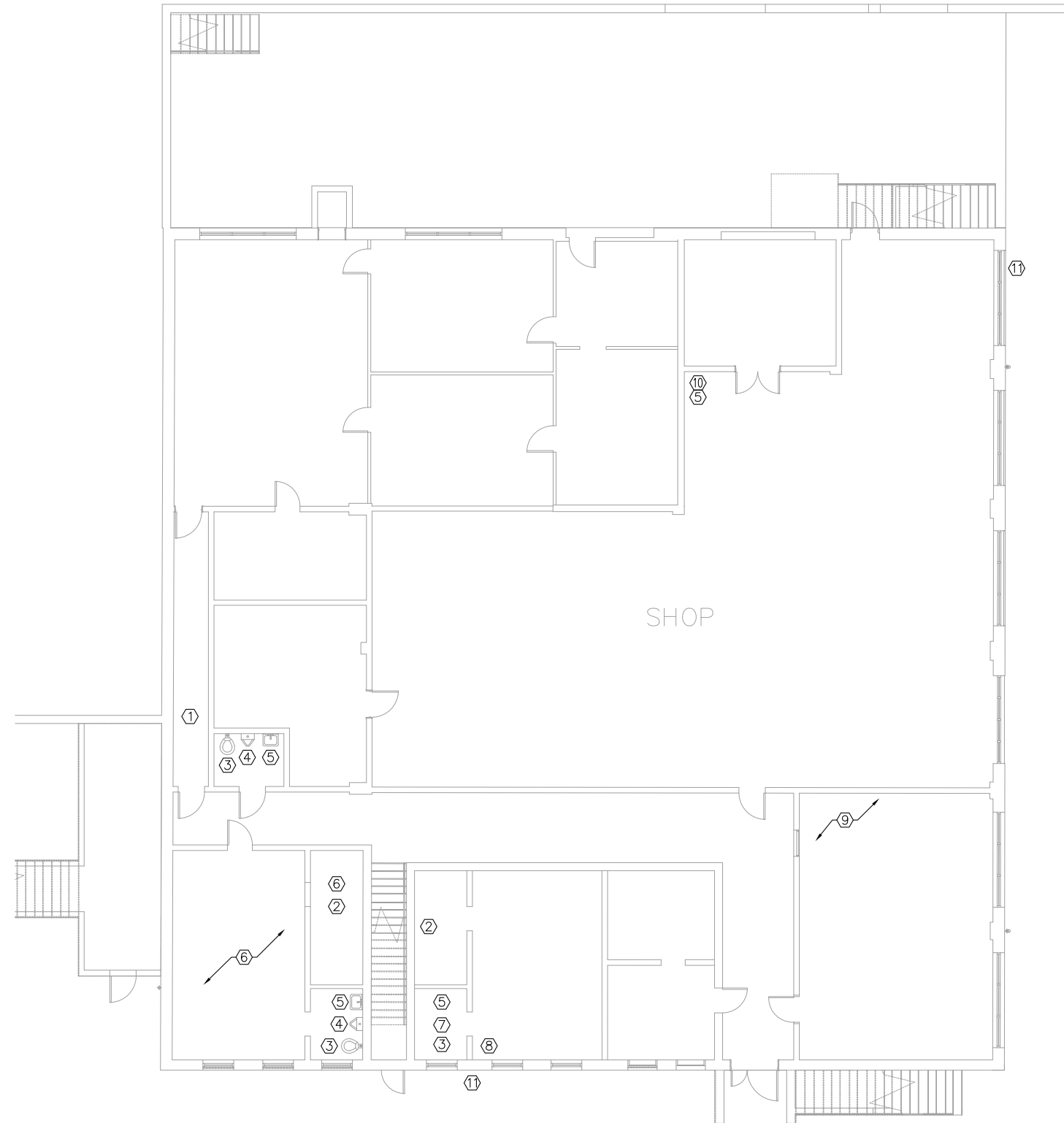
**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**GYM - UPPER LEVEL**  
 DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**P105**

CAD FILE NAME:  
**23002P105**



**GYM - LOWER LEVEL**  
SCALE: NTS

- KEYED NOTES (THIS SHEET ONLY)**
- ① WASTE CLEAN OUT, CAP ABOVE FINISHED CONCRETE FLOOR ELEVATION - TRIP HAZARD.
  - ② SHOWERS.
  - ③ FLOOR MOUNTED FLUSH VALVE TOILET.
  - ④ WALL MOUNTED FLUSH VALVE URINAL.
  - ⑤ WALL MOUNTED LAVATORY.
  - ⑥ CLOGGED FLOOR DRAINS - NEED TO BE CLEANED OUT.
  - ⑦ URINAL REMOVED.
  - ⑧ PAST WATER HEATER LOCATION - NOT INSTALLED.
  - ⑨ COMPRESSED AIR REGULATOR/QUICK CONNECTS.
  - ⑩ WALL MOUNTED WATER COOLER.
  - ⑪ GAS REGULATOR/METER.

**EPIC ENGINEERING SOLUTIONS**  
 P.O. BOX 2192 - MT. PLEASANT, SC 29465  
 (843) 849-6878 - EPIC JOB NO. 23002  
 COPYRIGHT © 2023. THIS DOCUMENT IS THE PROPERTY OF EPIC ENGINEERING SOLUTIONS. ANY REPRODUCTION OR USE IS PROHIBITED AND SUBJECT TO LEGAL PROSECUTION.

DESIGNED BY:	ACT	APPROVED BY:	ACT
DRAWN BY:	RAD	CHECKED BY:	ACT

REVISIONS	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	
DESCRIPTION:	
DATE REVISION:	

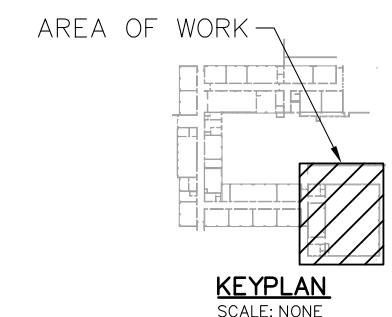
**GALLMAN CENTER**  
 NEWBERRY COUNTY, SOUTH CAROLINA  
 PROJECT TITLE

**GYM - LOWER LEVEL**  
 DRAWING TITLE

SCALE:	DATE:
AS NOTED	3/17/23

SHEET NUMBER  
**P106**

CAD FILE NAME:  
**23002P106**



**SPECIFICATIONS FOR LEAD-BASED PAINT COMPONENT REMOVAL  
NEWBERRY COUNTY- OLD GALLMAN SCHOOL  
PROJECT DESIGN #: PD24-1120-24513**

**I. PREFACE/GENERAL DESCRIPTION**

The 'Hazardous Materials Assessment Report' provided by *S&ME, Inc.*, was relied upon for this Specification. *S&ME Inc.*'s report indicates that yellow ceramic tile in the 'Men's Restroom' and green and black ceramic tile in the 'Girl's Restroom' were identified as lead-based paint containing wall components. Newberry County's renovation scope of work calls for the removal/abatement of all asbestos-containing and lead-based paint containing materials within the 'Old Gallman School'. Because the 'Old Gallman School' will be renovated into a 'Community Center', it is no longer considered a school nor a child-occupied facility by EPA definition. Therefore, the only applicable work regulations are those related to worker protection under the Occupational Safety and Health Administration (OSHA).

**II. OSHA REGULATIONS**

Where worker protection is concerned, the Occupational Safety and Health Administration (OSHA) does not specify a lead level in paint. The OSHA standard (Lead in Construction Interim Final Rule, 29 CFR 1926.62) indicates that if airborne lead levels may exceed the Action Level (AL is  $30 \mu\text{g}/\text{mm}^3$ ) from a potential disturbance, then an employee exposure assessment would be required. If the employer has appropriately tested the paint utilizing a valid detection method (XRF, paint chip collection, etc.) and found no detectable levels of lead, the standard does not apply. To meet OSHA compliance, the following steps are recommended:

- 1) Ensure that workers disturbing paint have had Lead Awareness in Construction Training as specified in OSHA 29 CFR 1926.59 and 29 CFR 1926.62. This course is approx. 1.5-2 hours in length, and can be taken on line or from a training provider.
- 2) Have an initial exposure assessment performed.

**III. DISPOSAL**

All painted components, regardless of lead concentration, can be disposed of in a Class III (C&D) Landfill. Because the ceramic tile are lead-containing components and no lead waste (chips, blasting media, etc.) will be created

during the ceramic tile removal, waste characterization determination via Toxicity Characteristic Leaching Procedure (TCLP) will not be required.