SUMMIT
ENGINEERING • LABORATORY • TESTING

AHERA/NESHAP ASBESTOS PROJECT DESIGN

CLIENT:
Sylvia Frierson
City of Sumter
13 E Canal Street
Sumter, SC 29150

LOCATION:
28 E Red Bay Road
Sumter, SC

DATE OF DESIGN:

January 20, 2021

PREPARED BY:
Allyson Bowen, MPH
SC DHEC AHERA Asbestos Project Designer No. PD-00215
Expiration Date: September 8, 2021
SC DHEC AHERA Asbestos Inspector No. BI-01566
SC DHEC AHERA Asbestos Management Planner No. MP-00276
SC DHEC AHERA Asbestos Air Sampler No. AS-00542
SC DHEC AHERA Asbestos Supervisor No. SA-03051

SUMMIT Engineering, Laboratory & Testing, PC ***(SUMMIT)***
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SUMMIT Job No. 5563.E0009

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28 E Red Bay Road
Sumter, SC

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1.0 DOCUMENT INTENT

This document represents the Asbestos Abatement Specifications for the abatement of Asbestos Containing Materials (ACMs) for the City of Sumter at 28 E Red Bay Road, Sumter, South Carolina. The CONTRACTOR shall be responsible for adhering to the Specifications contained in the Asbestos Abatement Specifications.

The Summary of Work is intended to limit the scope and locations of items of the Work included therein. It is not intended to limit the Scope of Work should plans, schedules or notes indicate an increased scope. Inadvertent omission of an item from its proper section of the Specifications and its inclusion in another section shall not relieve the CONTRACTOR of responsibilities for the item specified.

Project:
28 E Red Bay Road, Sumter, SC

Consultant: SUMMIT Engineering Laboratory &Testing, PC
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The CONTRACTOR shall assume full responsibility and liability for compliance with all applicable federal, state and local regulations pertaining to work practices, hauling, disposal and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

The CONTRACTOR shall be responsible for inspecting the site prior to commencing wok to confirm the scope of work. Any quantities listed by the designer in the plans, specifications or survey are so as approximations. The calculation and verification of actual quantities of materials to be encountered is the responsibility of the CONTRACTOR.

The CONTRACTOR has and assumes the responsibility of proceeding in such a manner that they offer their employees, the OWNER's representative, the CONSULTANT and any other authorized visitors, a workplace free of recognized hazards causing or likely to cause death or serious injury.

The CONTRACTOR will be responsible for all costs associated with employee monitoring to meet the OSHA requirements.

2.0 SCOPE OF WORK

Project Location
All of the work described within this report will be conducted at the following location:

Location:
28 E Red Bay Road, Sumter, SC

Project Type: Asbestos Abatement Specifications for the removal of the following materials prior to demolition. Estimated quantities of ACM to be abated include:

- **Approximately 3,500 square feet of damaged drywall and joint compound.**
- **Approximately 30 square feet of damaged floor tiles.**
- **Approximately 130 square feet of damaged sheet flooring.**
- **Approximately 100 square feet of damaged sheet flooring.**
- **Approximately 1,500 square feet of transite panels (cementitious siding).**
- **Approximately 100 square feet of damaged window glazing.**

The project involves the removal and disposal of the above noted items.

Ambient daily air monitoring and clearance shall be conducted.

The CONTRACTOR will be responsible for complete removal of the asbestos containing materials listed above in accordance with the project design.

Minimum respiratory protection will be half-face air-purifying respirators equipped with HEPA cartridges. The CONTRACTOR is responsible for selecting the appropriate respiratory protection for each work task and expected exposure to each employee.

The CONTRACTOR shall provide the following utility services for proper completion of the project: potable water and 110-volt electricity. The CONTRACTOR shall coordinate the location and availability of utilities through the OWNER. The CONTRACTOR shall ensure that all electrical cords are connected to GFI devices. Hoses and cords not suspended shall be taped to the floor utilizing caution tape in high traffic areas. The CONTRACTOR shall allow the CONSULTANT the use of the power and water as necessary to complete the air monitoring during the entire course of the project.

3.0 SUMMARY OF WORK

A. Furnish all labor, materials, services, employee training and testing, permits, insurance (pertaining to asbestos abatement activity), tools and equipment necessary for safe completion of all work in accordance with all federal, state, local laws and regulations. The CONTRACTOR shall have complete understanding of all contract documents as supplied by CONSULTANT (SUMMIT). Work shall include abatement activities defined below and as represented by the accompanying drawings. The CONTRACTOR is responsible for securing the job site and is solely responsible for their materials and equipment.

B. Abatement Work

1. **Location:**
   28 E Red Bay Road, Sumter, SC

Project Type: Asbestos Abatement Specifications for the removal of the following materials. Estimated quantities of ACM to be abated include:

Project Type: Class I/II (Friable, Interior) - RACM

- **Approximately 3,500 square feet of drywall and joint compound.**

Project Type: Class II (Friable, Interior) - RACM

- **Approximately 30 square feet of damaged floor tiles.**
- **Approximately 130 square feet of damaged sheet flooring.**
- **Approximately 100 square feet of damaged sheet flooring.**

Project Type: Class II (Non-Friable, Exterior)

- **Approximately 1,500 square feet of transite panels (cementitious siding).**

Project Type: Class II (Friable, Exterior) - RACM

- **Approximately 100 square feet of damaged window glazing.**

Qualifications

The CONTRACTOR shall be licensed by the South Carolina Department of Health and Environmental Control (SC DHEC) to abate asbestos containing materials in the state of South Carolina. CONTRACTOR's employees shall be licensed by SC DHEC in their respective job/worker category.

4.0 DEFINITIONS

1. "Abatement" - Procedures to control fiber release from regulated asbestos-containing materials. This includes removal, enclosure, encapsulation, repair, and any associated preparation, clean up and disposal activities having the potential to disturb regulated asbestos-containing material.
2. "Adequately wet" - To sufficiently mix or penetrate with liquid to prevent the potential release of particulates. The absence of visible emissions is not sufficient evidence of being adequately wet.
3. "Aggressive clearance sampling" - A method of sampling which uses electric fan(s), electric leaf blower(s), and other devices to simulate vigorous activity in the abated area while air samples are being collected.
4. "AHERA" - Regulations developed pursuant to the Asbestos Hazard Emergency Response Act, 40 CFR Part 763, Asbestos Containing Materials in Schools (December 20, 1987).
5. "AIHA" - American Industrial Hygiene Association.
6. "Airlock" - A chamber which permits entrance and exit with minimum air movement between a contaminated area and an uncontaminated area, consisting of two doorways protected by two overlapping polyethylene sheets and separated by a sufficient distance such that one passes through one doorway into the chamber, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway. The airlock maintains a pressure differential between the contaminated and uncontaminated areas, thereby minimizing flow-through contamination further.
7. "Air sampler - A person licensed by SC DHEC to implement air-monitoring plans and analysis schemes during abatement.
8. "Air sampling" - A method such as NIOSH 7400 for PCM, the OSHA Reference Method, 40 CFR 763 Appendix A for TEM, or an equivalent method accepted by SC DHEC used to determine the fiber content of a known volume of air during a specified period of time.
9. "Amended water" - Water to which a surfactant (for example, a non-sudsing detergent) has been added.
10. "Area air sampling" - Any form of air sampling whereby the sampling device is placed at a stationary location either inside or outside the regulated work area.
11. "Asbestos" - The asbestiform varieties of Serpentine (chrysotile), Riebeckite (crocidolite), Cummingtonite-Grunerite (amosite), Anthophyllite, and Actinolite-Tremolite.
12. "Asbestos Containing Material (ACM)" - Material containing asbestos of any type, either alone or mixed with other materials, in an amount greater than one percent (1%) as determined by using the method specified in 40 CFR Part 763, Appendix A, Subpart F, Section 1, as amended, or an accepted equivalent. (NOTE: "Appendix A to Subpart F" has been redesignated as, and shall hereinafter be referred to as, "Appendix E to Subpart E" - 60 FR 31917, June 19, 1995.)
13. "Asbestos containing waste materials" - As applied to demolition and renovation operations, this term includes regulated asbestos-containing waste materials and materials contaminated with asbestos, including disposable equipment and clothing.
14. "Asbestos project" - Any activity associated with abatement including inspection, design, air monitoring, in-place management, encapsulation, enclosure, renovation, repair,

removal, any disturbance of regulated asbestos containing materials (RACM), and demolition of a facility.

15. "Asbestos project design" - A written or graphic plan prepared by an accredited project designer specifying how an asbestos abatement project will be performed that includes, but is not limited to, scope of work and technical specifications.
16. "ASHARA" - Regulations developed pursuant to 40 CFR Part 763, Subpart E, Appendix C Model Accreditation Plan, Asbestos School Hazard Abatement Reauthorization Act (November 28, 1992).
17. "Background monitoring" - Area sampling performed prior to abatement to obtain an index of existing airborne fiber levels under typical activity.
18. "Category I nonfriable asbestos containing material (ACM)" - Nonfriable asbestos or nonfriable asbestos-containing packing, gaskets, and resilient floor covering; and asphalt roofing products containing greater than one percent (1%) asbestos as determined using the method specified in 40 CFR Part 763, Appendix E, Subpart E, or an accepted equivalent.
19. "Category II nonfriable ACM" - Any material that cannot, when dry, be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations, excluding Category I nonfriable ACM and containing greater than one percent (1%) asbestos as determined using the methods specified in 40 CFR Part 763, Appendix E, Subpart E, or an accepted equivalent.
20. "Clean room" - An uncontaminated area or room that is part of the decontamination enclosure system and that has provisions for storage of street clothing and protective equipment.
21. "Clearance monitoring" - Area air sampling performed using SC DHEC accepted aggressive clearance sampling techniques to determine the airborne concentrations of residual fibers upon conclusion of asbestos abatement.
22. "Contractor" - Any individual, partnership, corporation or other business concern that performs asbestos abatement but is not a permanent employee of the facility owner.
23. "Control measure" - Use of amended water, negative pressure differential equipment, encapsulant, high efficiency particulate air filtration device, glove bag or other state-of-the-art equipment designed to prevent fiber release into the air.
24. "Critical barrier" - At minimum, two independent layers of 6-mil plastic sheeting applied to any opening into a work area in a manner that creates a leak-tight seal within the work area to isolate vents, windows, doors, switches, outlets, and any other cavity or opening to the contaminated work area.
25. "Cut" - To penetrate with a sharp-edged instrument. This includes sawing, but may not include shearing, slicing, or punching.
26. "Decontamination enclosure system" - An enclosed area adjacent and connected to the regulated work area consisting of an equipment room, shower area, and clean room, each separated by airlocks, that is used for the decontamination of employees, materials, and equipment that are contaminated with asbestos.
27. "Demolition" - Wrecking or taking out any load-supporting structural member of a facility together with any related handling operations, the burning of any facility, or moving of a structure.
28. "SC DHEC" - The South Carolina Department of Health and Environmental Control.

29. "Encapsulation" - A form of abatement involving the treatment of regulated asbestos-containing material (RACM) with a liquid that covers the surface with a protective coating (bridging) or embeds fibers in an adhesive matrix (penetrating) to prevent the release of asbestos fibers.
30. "Enclosure" - A form of abatement involving placement of a leak-tight, impermeable, permanent barrier to prevent access to regulated asbestos-containing material and to prevent the release of asbestos fibers.
31. "EPA" - United States Environmental Protection Agency.
32. "Equipment room" - A contaminated area or room that is part of the decontamination enclosure system and that has provisions for the storage of contaminated clothing and equipment.
33. "F/cc" - Fibers per cubic centimeter.
34. "Friable" - Refers to ACM, which may, when dry, be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations. This also refers to previously non-friable ACM after such material becomes damaged to the extent that when dry, can be or has been crumbled, pulverized, or reduced to powder.
35. "Friable asbestos containing material" - Any material that, when dry, can be or has been crumbled, pulverized, or reduced to powder and contains greater than one percent (1%) asbestos as determined using the method specified in 40 CFR Part 763, Appendix E, Subpart E, as amended, or an accepted equivalent.
36. "Goose neck" - Process for sealing the outer bag by twisting the opening of the bag, folding twisted portion of bag over, and creating a loop. Adequately secure the opening of the bag to the base of the twist, using duct tape.
37. "Glovebag" - A sealed compartment with attached inner gloves used for the handling of asbestos containing materials. Information on glovebag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rules on occupational exposure to asbestos, 29 CFR 1926.1101 (August 10, 1994), as amended, and any subsequent amendments or editions.
38. "HEPA filter" - A high efficiency particulate air filter that will capture particles with an aerodynamic diameter of 0.3 micrometers with a minimum efficiency of 99.97 percent.
39. "Homogeneous area" - Area of surfacing material, thermal system insulation material, or a miscellaneous material that is uniform in color or texture.
40. "HVAC" - Heating, ventilation, and air conditioning.
41. "In poor condition" - Refers to any ACM where the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.
42. "Installation" - Any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of a single owner or operator (or of owners or operators under common control).
43. "Leak-tight" - Dust, solids, or liquids cannot escape or spill out.
44. "License" - A document issued by SC DHEC that allows an asbestos abatement contractor, building inspector, project designer, management planner, air sampler, supervisor, worker, or other to engage in asbestos projects.
45. "Manometer" - Instrument for the measurement of gas pressure whose units are represented in inches of water column.

46. "Minor project" - A project where 25 or fewer square or linear feet of regulated asbestos-containing material (RACM) are removed, or where 10 or fewer cubic feet of RACM off a facility component are cleaned up.
47. "Movable object" - A structure within the work area that can be moved (e.g., chair, desk, etc.).
48. "Negative pressure differential equipment" - A portable exhaust system equipped with a HEPA filter.
49. "NESHAP" - National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart M, February 3, 1994, as amended, and any subsequent amendments or editions.
50. "NESHAP project" - An asbestos project which involves at least 160 square feet or 260 linear feet of regulated asbestos containing material (RACM), or 35 or more cubic feet of RACM off a facility component such that the area or length could not be measured prior to abatement. If several contemporaneous projects in the same area within the same building being performed by the same contractor are smaller than 160 square or 260 linear feet individually but add up to that amount, then the combination of the smaller projects shall be considered one NESHAP project.
51. "NIOSH" - National Institute for Occupational Safety and Health.
52. "OSHA" - Occupational Safety and Health Administration.
53. "Owner/operator" - Any person or contractor who owns, leases, operates, controls, or supervises a facility being demolished or renovated, or any person who operates, controls, or supervises the demolition or renovation operation, or both.
54. "Owner's representative" - A licensed supervisor, management planner, project designer, or air sampler designated by the facility owner to manage the asbestos project, and who serves to ensure that abatement work is completed according to specification and in compliance with all relevant statutes and regulations.
55. "Personal air sampling" - A method used to obtain an index of an employee's exposure to airborne fibers. Samples are collected outside the respirator in the worker's breathing zone.
56. "Project designer" - A person licensed by SC DHEC who is directly responsible for planning all phases of an asbestos abatement project design from project site preparation through complete disassembly of all abatement area barriers.
57. "Regulated area" - An area established by the owner/operator of an asbestos project to demarcate areas where asbestos abatement activities are conducted; any adjoining area where debris and waste from such asbestos work is stored; and any work area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.
58. "Regulated asbestos-containing material (RACM)" - (a) Friable asbestos-containing material; (b) Category I nonfriable ACM that has become friable; (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, drilling, or abrading; or (d) Category II nonfriable ACM that is likely to become or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.
59. "Removal" - Taking out RACM or facility components that contain or are covered with RACM from any facility.

60. "Renovation" - Altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.
61. "Repair" - Returning damaged asbestos-containing material to an undamaged condition or to an intact state so as to prevent fiber release.
62. "Shower room" - A room located between the clean room and the equipment room in the decontamination enclosure system containing a shower with hot and cold or warm running water controllable at the tap.
63. "Start date" - The date printed on SC DHEC-issued asbestos abatement project license, which indicates when asbestos renovation or demolition operations, including any abatement activity having the potential to disturb RACM, will begin.
64. "Strip" - To remove RACM from any part of a facility or facility component.
65. "Structures per square millimeter" - Reporting measure for Transmission Electron Microscopy (TEM) Analysis. TEM clearance requires fewer than 70 structures per square millimeter (70s/mm^2).
66. "Supervisor" - A person licensed by SC DHEC and designated as the contractor's representative to provide direct on-site supervision and guidance to workers engaged in abatement of RACM.
67. "Surfactant" - A chemical wetting agent added to water to improve penetration, such as a non-sudsing detergent.
68. "Variance" - Written SC DHEC approval for the use of alternative work practices at an asbestos project.
69. "Visible emissions" - Any emissions that are visually detectable without the aid of instruments that originate from RACM or asbestos-containing waste material or a regulated work area.
70. "Waste shipment record" - The shipping document, required to be originated, prepared, and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.
71. "Wet cleaning" - The process of removing asbestos contamination from facility surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with amended water.
72. "Work area" - Designated rooms, spaces, or areas in which asbestos abatement activities are to be undertaken, or that may be contaminated as a result of such abatement activities.
73. "Worker" - A person licensed by SC DHEC to perform asbestos abatement under the direct guidance of an accredited and licensed supervisor.
74. "Working day" - Monday through Friday, including holidays that fall on any of the days Monday through Friday.

5.0 PROJECT COORDINATION

5.1 Action Plan

A. Coordinate with OWNER/CONSULTANT to determine availability of facilities.

B. Schedule abatement operations in the sequence required to obtain the best results where execution of one part of the Work depends on execution of other components, before or after its own execution.

C. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as SC DHEC notifications, surveys, notices, reports, CONTRACTOR lists, work schedules, and attendance at meetings.

D. Prepare a plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas, the sequencing of asbestos work, and methods used to assure the safety of workers and visitors to the site. A disposal plan should include the location of the approved disposal site, a detailed description of the methods to be employed to control pollution, methods of removal to prohibit visible emissions, and packaging of removed asbestos debris.

5.2 Project Directory

A. Develop and post a directory of all entities involved in the project. Include the CONTRACTOR'S principal staff assignments, including the Superintendent and other personnel in attendance at the site. Identify individuals, their duties and responsibilities. List business name, contact person, normal business and emergency telephone, pager and fax numbers, and addresses of:

1. CONTRACTOR'S general superintendent, supervisory personnel, and CONTRACTOR'S home office
2. Emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company, water company
3. Local, state, and federal agencies with jurisdiction over the project.

5.2 Miscellaneous

A. Workers are to dress appropriately when out of the construction area and in view of the public (e.g. street clothing unless involved in asbestos abatement activities). Workers are to decon and change into street clothes prior to exiting the sight barriers. Respirators shall remain in bags when not in use.

B. No flames or flammable materials are to be used or brought into buildings. Solvents for the removal of resilient floor covering cutback adhesives must have a flashpoint greater than 140 degrees Fahrenheit.

C. All electrical equipment shall utilize ground fault circuit interrupters (GFCI).

D. The CONTRACTOR shall ensure an adequate number of fire extinguishers are on-site. A minimum of one fire extinguisher with a National Fire Protection Association rating of 10BC (dry chemical) shall be placed in each per 3000 square feet of containment space or fraction thereof, of containment area. Each fire extinguisher shall be maintained in a fully charged and operable condition.

E. SC DHEC licenses and accreditations, current fit test certification, current training/refresher certificates and medical surveillance documentation for each worker

involved in the abatement work must be on-site and made available for review to the CONSULTANT and SC DHEC upon request.

6.0 SUBMITTALS

A. Have a complete bound set of pre-job submittals prior to the start of work. Work is prohibited until submittal package has been reviewed and approved by the PROJECT DESIGNER or their Designee. A copy of the approved submittals shall be kept in a 3-ring binder (project log) by the CONTRACTOR at the project site in the Clean Room or in the on-site office of the CONTRACTOR.

1. Notifications: Where applicable, provide copies of the Asbestos Permit application and the notification for Demolition/Renovation, which provide written notice to all required agencies, including SC DHEC.
2. Employee List: Provide copies of lists of Supervisors and Workers, along with their accreditation/license numbers.
3. Medicals: Provide copies of current medical information indicating the employee has been medically cleared to wear respirator and perform the work outlined herein.
4. Respirator Training: Copies of the most recent fit testing records, individually signed for each worker to be utilized on the project.
5. Project schedule: Time schedule for the project, outlining the proposed start date, working hours and expected completion date.
6. Initial Exposure Assessment: As required by the OSHA construction asbestos standard 29 CFR 1926.1101.

B. Submit the following to the CONSULTANT upon the completion of the project:

1. All asbestos waste manifests within five (5) days of receipt from the landfill if not previously submitted.
2. Copy of all notes, logs and reports maintained or prepared by the CONTRACTOR'S security personnel within five (5) days of project completion if not previously submitted.

C. Emergency telephone numbers for the local fire department, police department, and emergency medical services shall be posted at the entrance to the Clean Room.

7.0 AIR MONITORING AND TEST LABORATORY SERVICES

A. QUALITY ASSURANCE

1. All environmental baseline and daily air monitoring will be performed in accordance with the procedures outlined in the latest edition of the National Institute for Occupational Safety and Health (NIOSH) 7400 Method and guidelines issued by Environmental Protection Agency regarding detection limits.

B. The OWNER has contracted **SUMMIT** to perform all required perimeter and area air monitoring during the abatement process.

C. Samples shall be collected during abatement according to the following schedule: Background samples in the abatement area shall be collected prior to the CONTRACTOR starting. Daily air samples shall be collected during each 8-hour work shift. The daily air samples shall be collected a minimum 2.5-hours of every 4-hours worked, and not to exceed 4-hour intervals. Clearance samples shall only be collected after the area has passed final visual inspection by the Air sampler.

D. The CONTRACTOR shall be responsible for personnel monitoring of his employees as regulated by OSHA 1926.1101 and must be conducted by SC DHEC licensed personnel.

E. PHASE CONTRAST MICROSCOPY (PCM)

1. **Interior**

In each homogeneous Work Area or as required by the CONSULTANT, **a minimum of five (5) PCM samples will be taken and analyzed as a baseline** prior to the CONTRACTOR's mobilization to the site. PCM air samples both inside and outside of the work area will be obtained daily throughout the duration of the abatement to ensure public air space meets SC DHEC criteria. If baseline samples cannot be collected for any reason, they will be assumed to be Zero (0).

The air monitoring shall be as follows:

- For Class I and Class II friable containments, daily air monitoring requirements will be one (1) sample collected at the exit of the clean room, one (1) sample collected inside the dirty room, one (1) sample collected within 10 feet of the exhaust of the negative air machines and one (1) sample collected in the regulated area.
- For Class II non-friable containments, daily air monitoring requirements will be up to four (4) samples collected in the area of the abatement. The sample collection locations will be selected by the air monitor.

The number and volume of air samples taken, and analytical methods used by SUMMIT for sampling will generally be as follows:

Location Sampled	Scheduled Number of Samples	Minimum Volume (Liters)	Filter Media
Inside Work Area (Initial Baseline)	5	1,200	Mixed Cellulose Ester

Outside Work Area (Daily)	4	1,200	Mixed Cellulose Ester
Inside Work Area (Clearance)	5	1,200	Mixed Cellulose Ester

Clearance sampling, as detailed in AHERA [763.90(i)(3)] consists of: five (5) clearance samples inside the work area plus one (1) field blank inside the work area; five (5) clearance samples outside the work area plus one (1) field blank outside the work area; plus, one (1) trip blank.

For this project, the above noted AHERA Clearance sampling shall be modified as such: Clearance samples outside the work area and the field blank sample outside the work area will not be collected and will be assumed to be Zero (0). The trip blank sample will also be assumed to be Zero (0).

Clearance sampling will be conducted for all interior friable and non-friable Class I and Class II work.

Clearance samples shall be by PCM analysis and verbal results will be available within 2 hours of completion of clearance sampling and approval to re-occupy the area. Upon completion of the project, CONSULTANT will provide OWNER and CONTRACTOR a written report detailing the air sampling results. The written report will be available within five (5) business days.

Analysis: Asbestos fibers on each 0.8-micron filter will be measured using analysis per NIOSH 7400 counting rules A.

Release Criteria: Decontamination of the project is complete as determined by the analytical protocol if each of the Work Area samples is below 0.01 fibers/cubic centimeter or (f/cc) 70 (structures) f/mm2. If the analysis of the Work Area samples fails to meet the release criteria, then the CONTRACTOR must cease demolition activities and reassess their abatement to bring the fiber count to below 0.01 f/cc or 70 structures/mm^2.

The CONTRACTOR is cautioned, however, that should interpretations be made, opinions be formed, and conclusions be drawn as a result of examining the test results, these interpretations, opinions and conclusions will be those made, formed and drawn solely by the CONTRACTOR. The CONTRACTOR is responsible for performing air tests required for its evaluation of the safety of its employees.

2. Exterior

PCM air samples both outside of the work area will be obtained daily throughout the duration of the abatement to ensure public air space meets SC DHEC criteria.

The number and volume of air samples taken, and analytical methods used by SUMMIT for sampling will generally be as follows:

Location Sampled	Scheduled Number of Samples	Minimum Volume (Liters)	Filter Media
Outside Work Area (Daily)	4	1,200	Mixed Cellulose Ester

The air monitoring shall be performed of the outside ambient air on each corner of the construction site (north, east, south and west).

Analysis: Asbestos fibers on each 0.8-micron filter will be measured using analysis per NIOSH 7400 counting rules A.

Fiber concentrations must be maintained below 0.1 f/cc at the edge of the regulated area.

8.0 REGULATED AREAS

Securing Work Area

A. Secure work area from access by non-authorized personnel. Accomplish this, where possible, by constructing temporary barriers with signs and warning tape.

Demarcation of Regulated Area (Refer to Section 4.0)

Demarcate the Regulated Area with signs and barrier tape. Configure the Regulated Area to minimize the number of persons within the area and to protect persons outside the area from exposure to airborne concentrations of asbestos. Establish sight barriers utilizing black plastic sheeting inside the Regulated Area and post the Asbestos Signs so that they are out of public view.

A. SIGNS
   1. Signs must be posted (in both English and Spanish) at all entrances to the Regulated Area, at least 20" x 14", with the legend:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

B. Post warning signs at each side of the building.

C. Barrier tape must be used to establish the Regulated Area. Delineate the area with 3-inch wide polyethylene ribbon printed with the warning "CAUTION ASBESTOS REMOVAL". Install at a height of between three and four feet above the floor or ground level. The controlled access points shall be clearly marked with the signs required as noted above.

D. General procedures
   1. Management of the Regulated Area is to be under the supervision of an OHSA Competent Person as described in Project Coordination.
   2. Do not allow eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics in the Regulated Area.
   3. Before start of work, comply with requirements for worker protection in Respiratory Protection Section.

9.0 RESPIRATORY PROTECTION

General Requirements

Instruct and train each worker involved in asbestos abatement/demolition in proper respirator use and require that each worker always wear a respirator, properly fitted on the face in the Regulated Area from the start of any operation which may cause airborne asbestos fibers until the Regulated Area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the workplace or as required for other toxic or oxygen-deficient situations encountered. Respiratory protection will not be required during preparation of the Negative Pressure Enclosures and Regulated Areas. Minimum respiratory protection will be half-face air-purifying respirators equipped with HEPA cartridges.

Standards

Except to the extent that more stringent requirements are written directly into the Contract Documents, the following regulations and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in the regulations and standards, the more stringent requirement must be met.

1. SC DHEC- REGULATION 61-86.1, STANDARDS OF PERFORMANCE FOR ASBESTOS PROJECTS
2. OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 134 and 29 CFR 1926.1101.
3. ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2-1990.
4. NIOSH - National Institute for Occupational Safety and Health

Non-permitted respirators - Do not use single use, disposable or quarter face respirators.

10.0 MATERIALS AND EQUIPMENT

Utilities

A. The CONTRACTOR shall supply electricity (110V) and potable water.
B. The CONTRACTOR shall supply GFCI for all electrical circuits.

Tools and Equipment

A. Respirators
   1. Respiratory protection will not be required during preparation of NPE's or Regulated Areas.
   2. Minimum respiratory protection will be half-face air-purifying respirators equipped with HEPA cartridges.
   3. All respirators must be NIOSH approved.

B. Protective clothing shall meet or exceed minimum protective clothing requirements of Title 29 CFR 1926.1101 and include full body disposable coveralls, disposable hood (separate or integral to coverall) and foot coverings (reusable footwear, 18-inch high boot type disposable foot coverings or foot coverings integral to coverall).

C. Decontamination system for non-friable removals shall be 6-mil poly on the floor outside the enclosure (regulated area). Decontamination system for friable removals shall consist of a "clean room", a "shower room", and an "equipment room". Each room shall be separated from each other and the work area by a "Z" flap airlock (or non-friable materials that are rendered friable).

D. Filtration systems for drain lines from showers or other water sources carrying asbestos contaminated water shall have disposable type primary and secondary filters and, if necessary, sump pump. Primary filter shall pass particles 20 microns and smaller; secondary filters, 5 microns and smaller.

E. Miscellaneous Equipment
   1. Low pressure sprayer for amended water applications.
   2. First Aid Kit must be on-site and available at the clean room.

Materials

A. For wetting prior to disturbance of Asbestos-Containing Materials, use either amended water or a removal encapsulant.
   1. Amended water must result in the retardation of fiber release equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.
   2. Encapsulant shall be penetrating or bridging type designed to provide the same retardation of fiber release as the amended water in the above.

B. Polyethylene sheeting shall be 'true' 6-mil OR with a dart impact of 270 grams, tear resistance of 512 grams, and transverse direction of 2067 grams (check manufacturer's specifications). Wall polyethylene sheeting must be 'true' 4 mil OR the equivalent dart impact. Width of sheeting must be the largest size possible to minimize seams, clear, frosted or black, as indicated. Disposal bags must meet the

'true' 6-mil requirement for disposal of ACM. Manufacturer's specifications must be on-site for any other thickness that 'true' 6-mil poly.

C. Duct tape in 2" or 3" widths and spray cement formulated to stick aggressively to polyethylene sheeting.

11.0 WORK AREA CLEAN UP AND VERIFICATION

A. Provide general clean-up of work area concurrent with the removal of all asbestos-containing materials. Do not permit accumulation of debris.

11.1 REMOVAL OF ASBESTOS-CONTAINING MATERIAL

Removal
Remove and properly dispose of all asbestos containing materials as specified in the Contact Documents in accordance with the methods and procedures outlined in the OSHA 29 CFR 1926.1101, 40 CFR Part 763, and 40 CFR 61, Subpart M, February 3, 1994, as amended, and any subsequent amendments or editions.

Maintain exposure levels below 0.1 fibers per cubic centimeter (f/cc) regardless of respiratory protection provided. The CONSULTANT'S PROJECT MANAGER reserves the right to order a cease in abatement activity should fiber counts exceed the PEL or visible emissions are observed until control measures are implemented to reduce fiber levels below the PEL and/or eliminate visible emissions.

A. Removal of ACM utilizing Enclosures (Friable Class I/II Work, Interior, Full Containment).

Seal each opening between the work area and uncontaminated areas including windows, doorways, elevator openings, corridor entrances, drains, ducts, electrical outlets, grills, grates, diffusers, and skylights with a critical barrier consisting of at least two independent sheets of 6-mil or thicker polyethylene sheeting secured in place. These critical barriers must be maintained leak-tight for the duration of asbestos abatement.

Thoroughly clean and remove all movable objects from the work area.

Thoroughly clean, then cover and secure each non-movable object in the work area with at least one sheet of 4-mil or thicker polyethylene sheeting.

Use polyethylene sheeting to isolate contaminated from uncontaminated areas, and ensure the sheeting is attached securely in place and properly maintained at all times.

Prevent contamination of carpet with ACM or dispose of the carpet as asbestos-contaminated waste.

Cover floors not being abated with at least two layers of 6-mil or thicker polyethylene sheeting. Floor sheeting shall be installed first and shall extend at least 12 inches up the walls and be taped into place. No seams shall be located at wall/floor joints. Spray-applied polyethylene coating shall not be used.

Cover walls and ceilings not being abated with at least one sheet of 4-mil or thicker polyethylene sheeting. Wall sheeting shall be installed to minimize joints and shall extend at least six inches beyond wall/floor joint and be taped into place. Ceiling sheeting shall

extend at least 12 inches down the wall and be sized and taped into place. No seams shall be located at wall/ceiling or wall/wall joints.

Construct a decontamination enclosure system adjoining the contained work area. The decontamination enclosure shall be built in a manner that will prevent track-out of RACM, and shall consist of: a clean room equipped with appropriate storage containers and adequate space for changing clothing; an air lock; a shower room containing hot and cold or warm running water controllable at the tap; and an equipment room suitable for storage of tools and equipment.

Construct a clear viewing port measuring at least 24 inches by 24 inches in an external wall of the contained work area to allow unobstructed observation of abatement activities in the work area.

Operate negative pressure differential equipment with HEPA filtration continuously from the time that barrier construction is completed through the time that acceptable final clearance air monitoring results are obtained.

The CONTRACTOR shall have the appropriate number of negative air machines to exchange the air inside the containment 4 times per hour and to maintain a minimum of -0.02 column inches of water pressure differential, relative to outside pressure as verified and recorded by a manometer.

Prior to removal, all RACM is thoroughly wet through to the substrate using amended water and shall remain wet until disposed of in accordance with 40 CFR 61.150, as amended, and any subsequent amendments and editions.

Carefully lower RACM to the ground or floor, not dropped or thrown; and at no time shall RACM be allowed to accumulate or become dry.

Polyethylene bags of at least 6-mil thickness shall be used for waste, bags shall be leak-tight. Excess air (gooseneck) shall be removed from bags prior to sealing using a vacuum equipped with a HEPA filtration system in accordance with OSHA regulation 29 CFR 1926.1101, as amended, and any subsequent amendments and editions.

ACM from within the work area is not permitted outside of the work area except in sealed leak-tight containers.

Any person exiting or any equipment or machinery being removed from the contaminated work area shall be thoroughly decontaminated. If equipment or machinery is not or cannot be thoroughly decontaminated, it shall be sealed in leak-tight containers. No visible residue shall appear on the outside surface of the container.

Following abatement, a visual inspection of the abated substrate is performed. Upon passing the visual inspection, a coating of a compatible encapsulating agent is applied to

porous surfaces that have been stripped and cleaned of ACM. The encapsulant must be allowed to thoroughly dry prior to additional cleaning or final air clearance.

If there is any evidence of contamination, the CONTRACTOR shall perform additional wet cleaning and HEPA vacuuming.

All polyethylene sheeting, except for critical barriers and the decontamination enclosure system, is removed and disposed of as asbestos-contaminated waste.

With only the critical barriers and decontamination enclosure system left in place, the entire work area, including any duct work, is wet-cleaned and HEPA vacuumed until no visible residue remains.

Ambient daily air monitoring during abatement shall be conducted.

Clearance air monitoring shall be conducted.

Areas exceeding clearance standards are re-cleaned by the contractor using wet methods and HEPA vacuuming. Re-cleaning, drying, and retesting shall be repeated until the satisfactory clearance standard is achieved.

Following satisfactory clearance of the work area, remaining polyethylene critical barriers and decontamination enclosure systems are removed and disposed of as asbestos-contaminated waste. The CONTRACTOR shall bear the costs of additional clearance testing.

B. Removal of transite siding and window glazing (Class II Work, Exterior):

The CONTRACTOR shall remove the ACM in a non-friable manner. All ACM once removed in shall be: thoroughly wet during stripping or removal and shall remain wet until disposed of, carefully lowered to the ground or floor, not dropped or thrown, and at no time shall the ACM to accumulate or become dry.

Ambient daily air monitoring during abatement shall be conducted.

Clearance shall consist of visual observation only.

12.0 DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL

A. Dispose of ACM and used plastic sheeting, tape, cleaning materials and disposable protective clothing as asbestos waste materials.

B. Waste must be loaded, stored and transported in a 6 mil, poly-lined, rigid top truck or dumpster which can be locked or guarded from unauthorized access. Dumpster will remain closed and locked when not in use.

D. Prepare for each load a SC DHEC Asbestos Waste Manifest and obtain signature on the waste manifest from the CONSULTANT'S PROJECT MANAGER prior to transporting waste.

E. Dispose of asbestos waste in landfills approved by the EPA and/or the state as authorized disposal facilities for asbestos and operating in compliance with Title 40 CFR 61.156 at the time of disposal.

F. Transport waste, accompanied by manifest, to an approved waste site for disposal as asbestos waste and provide the CONSULTANT'S PROJECT MANAGER a copy of manifest signed by the waste disposal facility representative.

Asbestos Inspections

AHERA/NESHAP ASBESTOS INSPECTION REPORT

CLIENT:
Sylvia Frierson
City of Sumter
13 E Canal Street
Sumter, SC 29150

LOCATION:
28 E Red Bay Road
Sumter, SC

DATE OF INSPECTION:
November 30, 2020

DATE OF REPORT:
January 4, 2021

PREPARED BY:
Allyson Bowen, MPH
SC DHEC AHERA Asbestos Building Inspector No. BI-01566
SC DHEC Asbestos Supervisor No. SA-03051
SC DHEC Asbestos Air Sampler No. AS-00542
SC DHEC Asbestos Project Designer No. PD-00215
Expiration Date: September 8, 2021

SUMMIT Engineering, Laboratory & Testing, P.C. ***(SUMMIT)***
3575 Centre Circle
Fort Mill, SC 29715
704-504-1717

SUMMIT Job No. 5563.E0009

AHERA/NESHAP ASBESTOS INSPECTION REPORT
28 E Red Bay Road
Sumter, SC

TABLE OF CONTENTS

1.0 REPORT CERTIFICATION

SUMMIT is pleased to provide environmental consulting services for Sylvia Frierson with the City of Sumter. Please contact this office at 704-504-1717 with any questions or comments regarding the findings submitted in this report.

This document, entitled *AHERA/NESHAP Asbestos Inspection Report,* was prepared for Sylvia Frierson with the City of Sumter, and the South Carolina Department of Health and Environmental Control with sound practices and procedures and in accordance with Asbestos Hazard Emergency Response Act (AHERA), Title II of the Toxic Substance Control Act (TSCA), SCDHEC Regulation 61-86.1, 40 CFR 61, and 40 CFR 763 for Asbestos Containing Materials (ACM) guidance. The results obtained by the work documented in this report fulfill the requirements of federal, state, and local regulations regarding Asbestos Containing Materials.

January 4, 2021

Allyson Bowen, MPH — Date
SC DHEC Asbestos Inspector No. BI-01566
Expiration Date: September 10, 2021
SC DHEC AHERA Supervisor No. SA-03051
Expiration Date: September 9, 2021
SC DHEC Asbestos Air Sampler No. AS-00542
Expiration Date: September 9, 2021
SC DHEC Asbestos Project Designer No. PD-00215
Expiration Date: September 8, 2021

2.0 EXECUTIVE SUMMARY

On November 30, 2020, SUMMIT Engineering, Laboratory & Testing, P.C. (**SUMMIT**) performed an AHERA/NESHAP Asbestos Inspection for Sylvia Frierson with the City of Sumter at a residential structure located at 28 E Red Bay Road in Sumter, SC. The structure is currently vacant and will be demolished. The structure is approximately 1125 square feet in size. The sample areas featured ceiling tiles, drywall and joint compound, various sheet floorings, floor tiles, window glaze, transite panels, and roofing systems.

The purpose of this inspection was to investigate available records for the specification of asbestos containing material (ACM), inspect for suspect materials, sample and analyze suspect materials to test for asbestos, and assess the condition and location of the ACM and other characteristics of the structure. Materials were sampled by a licensed asbestos inspectors, Allyson Bowen and Belinda Campbell, of **SUMMIT** Engineering.

A homogeneous material is a material that appears to be uniform when properties such as age, color, and texture are compared. Thirteen (13) homogeneous areas were sampled. The homogeneous areas are described in detail in section 3.0 of this report.

Six (6) asbestos containing materials were identified within the structure.

DW-01-01- through 05

The drywall and joint compound were sampled from various areas throughout the residence. The results indicated that these materials are classified as Asbestos Containing Materials (ACM), with 3% Chrysotile asbestos. The materials are classified as friable, surfacing materials and are in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

FT-02-01- through 03

The floor tiles were sampled from the bathroom of the residence. The results indicated that the tan floor tiles are classified as Asbestos Containing Materials (ACM), with 2% Chrysotile asbestos. The materials are classified as non-friable, miscellaneous materials and are in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

SF-02-01- through 03

The sheet flooring was sampled from the hallway and kitchen. The results indicated that the sheet flooring is classified as an Asbestos Containing Material (ACM), with 15% Chrysotile asbestos. The material is classified as non-friable, miscellaneous material and is in damaged

condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

SF-05-01- through 03

The sheet floorings were sampled from bedroom 3. The results indicated that the bottom layer (wood-look plank) sheet flooring is classified as an Asbestos Containing Material (ACM), with 10% Chrysotile asbestos. The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

TP-01-01- through 03

The transite panels were sampled from the exterior siding. The results indicated that the transite panels are classified as Asbestos Containing Materials (ACM), with 20% Chrysotile asbestos. The materials are classified as non-friable, miscellaneous materials and are in good condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

WG-01-01- through 03

The window glaze was sampled from the windows. The results indicated that this material is classified as an Asbestos Containing Material (ACM), with 2% Chrysotile asbestos. The material is classified as a friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.0 SUSPECT MATERIALS

3.1 Ceiling Tiles

CT-01-01- through 03

The ceiling tiles were sampled from the living room and dining room of the residence. The results indicated that these materials are not classified as Asbestos Containing Materials (ACM). The materials are classified as friable, miscellaneous materials and are in good condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.2 Drywall and Joint Compound

DW-01-01- through 05

The drywall and joint compound were sampled from various areas throughout the residence. The results indicated that these materials are classified as Asbestos Containing Materials (ACM), with 3% Chrysotile asbestos. The materials are classified as friable, surfacing materials and are in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.3 Floor Tiles (Green)

FT-01-01- through 03

The floor tiles were sampled from various areas throughout the residence. The results indicated that the floor tiles are not classified as Asbestos Containing Materials (ACM). The materials are classified as non-friable, miscellaneous materials and are in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.4 Floor Tiles (Red/Tan)

FT-02-01- through 03

The floor tiles were sampled from the bathroom of the residence. The results indicated that the tan floor tiles are classified as Asbestos Containing Materials (ACM), with 2% Chrysotile asbestos. The materials are classified as non-friable, miscellaneous materials and are in damaged condition with a low potential for damage. The sample analysis of the material is

enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.5 Sheet Flooring (Three Layers – Green/Pink/Blue)

SF-01-01- through 03

The sheet flooring was sampled from bedroom 1. The results indicated that the sheet flooring is not classified as an Asbestos Containing Material (ACM). The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.6 Sheet Flooring (Brown)

SF-02-01- through 03

The sheet flooring was sampled from the hallway and kitchen. The results indicated that the sheet flooring is classified as an Asbestos Containing Material (ACM), with 15% Chrysotile asbestos. The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.7 Sheet Flooring (Floral)

SF-03-01- through 03

The sheet flooring was sampled from bedroom 2. The results indicated that the sheet flooring is not classified as an Asbestos Containing Material (ACM). The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.8 Sheet Flooring (Gray Floral)

SF-04-01- through 03

The sheet flooring was sampled from the closet. The results indicated that the sheet flooring is not classified as an Asbestos Containing Material (ACM). The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.9 Sheet Flooring (Floral/Pink Swirl/Yellow Pattern/Wood-Look Plank)

SF-05-01- through 03

The sheet floorings were sampled from bedroom 3. The results indicated that the bottom layer (wood-look plank) sheet flooring is classified as an Asbestos Containing Material (ACM), with 10% Chrysotile asbestos. The material is classified as non-friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.10 Transite Panels

TP-01-01- through 03

The transite panels were sampled from the exterior siding. The results indicated that the transite panels are classified as Asbestos Containing Materials (ACM), with 20% Chrysotile asbestos. The materials are classified as non-friable, miscellaneous materials and are in good condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.11 Window Glaze

WG-01-01- through 03

The window glaze was sampled from the windows. The results indicated that this material is classified as an Asbestos Containing Material (ACM), with 2% Chrysotile asbestos. The material is classified as a friable, miscellaneous material and is in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.12 Roofing Systems (Main)

RS-01-01- through 03

The roofing systems were sampled from the roof. The results indicated that these materials are not classified as Asbestos Containing Materials (ACM). The materials are classified as non-friable, miscellaneous materials and are in good condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

3.13 Roofing Systems (Porch)

RS-02-01- through 03

The roofing systems were sampled from the roof. The results indicated that these materials are not classified as Asbestos Containing Materials (ACM). The materials are classified as non-friable, miscellaneous materials and are in damaged condition with a low potential for damage. The sample analysis of the material is enclosed in Appendix A. A detailed map showing the locations of the sampling locations can be found in the SUMMIT Documentation.

4.0 CONCLUSIONS AND RECOMMENDATIONS

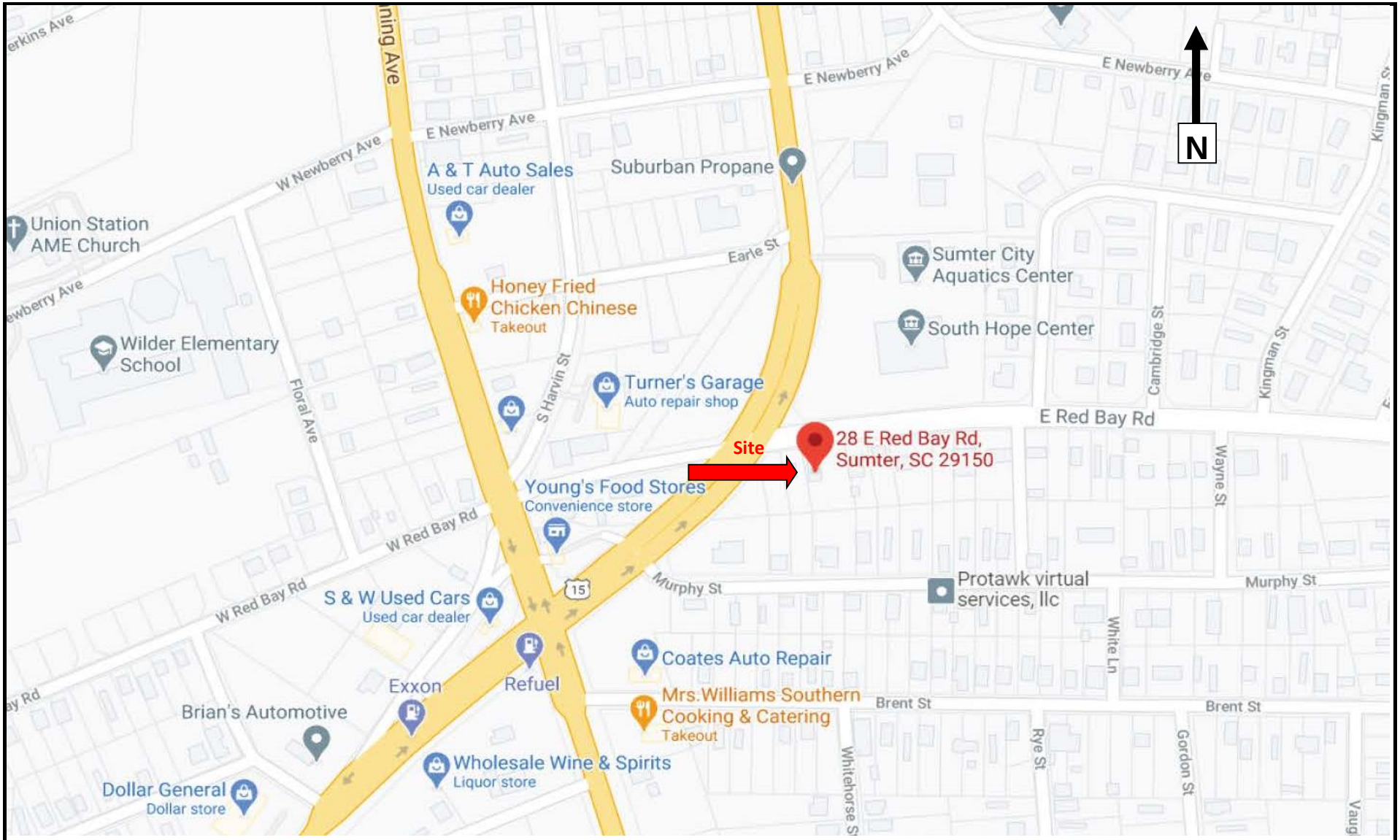
On November 30, 2020, SUMMIT Engineering, Laboratory & Testing, P.C. (**SUMMIT**) performed an AHERA/NESHAP asbestos inspection at 28 E Red Bay Road, Sumter SC.

SUSPECT MATERIAL	ACM (Y/N)	FRIABLE (Y/N)	AMOUNT (Square feet)
Ceiling Tile (CT-01)	N	Y	250
Drywall and Joint Compound (DW-01)	**Y**	**Y**	**3500**
Floor Tile (FT-01)	N	N	350
Floor Tile (FT-02)	**Y**	**N**	**30**
Sheet Flooring (SF-01)	N	N	125
Sheet Flooring (SF-02)	**Y**	**N**	**130**
Sheet Flooring (SF-03)	Y	N	125
Sheet Flooring (SF-04)	N	N	20
Sheet Flooring (SF-05)	**Y**	**N**	**100**
Transite Panels (TP-01)	**Y**	**N**	**1500**
Window Glaze (WG-01)	**Y**	**Y**	**100**
Roof Systems (RS-01)	N	N	1100
Roof Systems (RS-02)	N	N	50

If the structure is to be renovated or demolished, a copy of this report and a notification of demolition or renovation forms must be submitted to The South Carolina Department of Health and Environmental Control (SCDHEC) at least ten working days prior to these activities taking place.

Bidders are responsible for their own calculations and estimates of quantities. Actual quantities may be more or less than indicated. Though every effort was made to examine wall cavities and other areas for pipe insulation, spray-applied or trowel applied miscellaneous material or other miscellaneous materials and other Presumed Asbestos Containing Material (PACM), this survey and report only deals with accessible areas of the building. There may be additional inaccessible areas above ceiling, behind walls and below floors that become evident during demolition or renovation activities. If suspect materials are found, additional asbestos testing may be required.

FIGURES



Source: Base Map provided by Online sources

SUMMIT	**Site Location Map** 28 E Red Bay Road Sumter, SC	Chris Hilditch City of Sumter	**Prepared By\Date: AB/1/21** **Checked By\Date: PL/1/21** **Scale** Not to Scale **Figure 1**

APPENDIX A

ANALYTICAL RESULTS

CHAIN OF CUSTODY

LAB USE ONLY:
Summit Order Number: 2021-1-5-5563.E0009

SUMMIT LABORATORIES

3575 Centre Circle, Fort Mill, SC 29715
Tel: 704-504-1717; Fax: 704-504-1125

COMPANY CONTACT INFORMATION	
Company: Summit	Job Contact: A. Bowen
Address: 3575 Centre Circle	Email: abowen@summit-companies.com
Fort Mill, SC 29715	Tel: 803.391.1863
	Fax:
Project Name: 28 E. Red Bay Road	State Collected In: SC
Project ID #: 5563. E0009	

ASBESTOS	METHOD	TURN AROUND TIME						
		4 HR	8 HR	12 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	☐	☐	☐	☐	☒	☐	☐
PCM AIR	NIOSH 7400	☐	☐	☐	☐	☐	☐	☐
POSITIVE STOP ANALYSIS: ☑								

COMMENTS: TEM on 1/7/2021

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	1/4/2021	[signature]	1/5/2021

Samples will be disposed of 60 days after analysis

SUMMIT LABORATORIES

SAMPLING FORM

LAB USE ONLY:
Summit Order Number:

COMPANY CONTACT INFORMATION	
Company: Summit	Job Contact: A. Bowen
Project Name: 28 E. Red Bay Road	
Project ID #: 65163.E0009	Tel: 803.391.1863.

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/AREA	DATE/TIME SAMPLED
CT-01-01	ceiling Tile | Living Room	PLM	
-02	↓	↓	
-03	↓ Dining Room		
DW-01-01	Drywall & JC | Throughout		
-02	↓		
-03	↓		
-04	↓		
-05	↓		
FT-01-01	Floor Tile | Living Room		
-02	(Green) ↓ ↓	↓	
TEM -03	↓ Dining Room	TEM	
FT-02-01	Floor Tile | Bathroom	PLM	
-02	(Beg.) ↓ ↓	↓	
-03	↓ ↓	TEM	
SF-01-01	Sheet Flooring | Bedroom 1	PLM	
-02	↓ ↓	↓	
TEM -03	↓ ↓	TEM	
SF-02-01	↓ | Hallway	PLM	
-02	↓ ↓	↓	
-03	↓ ↓	TEM	
SF-03-01	↓ | Bedroom 2	PLM	
-02	↓ ↓	↓	
TEM -03	↓ ↓	TEM	
SF-04-01	↓ | Closet	PLM	
-02	↓ ↓	↓	
TEM -03	↓ ↓	TEM	
SF-05-01	↓ | Bedroom 3	PLM	
-02	↓ ↓	↓	
-03	↓ ↓	TEM	

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/AREA	DATE/TIME SAMPLED
TP-01-01	Transite Panel | Exterior	PLM	
-02	〃 〃	〃	
-03	〃 〃	TEM	
WG-01-01	Window Glaze | Windows	PLM	
-02	〃 〃	〃	
-03	〃 〃	TEM	
RS-01-01	Roof Shingles | Roof (Main)	PLM	
-02	〃 〃	〃	
TEM -03	〃 〃	TEM	
RS-02-01	Roof Shingles | Roof (Porch)	PLM	
-02	〃 〃	〃	
TEM -03	〃 〃	TEM	

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/AREA	DATE/TIME SAMPLED

Asbestos Laboratory Report

Prepared for

Summit ELT, P.C.

Project: 28 E. Red Bay Road

Summit #: 2021-1-5-5563.E0009

Date Analyzed: 1/7/2021

Date Reported: 1/7/2021

Total Samples Analyzed: 46

 # Samples >1% Asbestos: 6

Method of Analysis: EPA 600 / R93 / 116

Summit Laboratories
3575 Centre Circle, Fort Mill, SC 29715
Phone: (704) 504-1717

Summit Order: 2021-1-5-5563.E0009

Summit ELT, P.C.
3575 Centre Circle
Fort Mill, SC 29715

Date Received: 1/5/2021
Date Analyzed: 1/7/2021
Date Reported: 1/7/2021

Project : 28 E. Red Bay Road

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

			Non-Asbestos		Asbestos
Sample ID	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
CT 1-1 2021-1-5-5563.E0009-1	Ceiling Tile	White,Tan Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (other)	None Detected
CT 1-2 2021-1-5-5563.E0009-2	Ceiling Tile	White,Tan Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (other)	None Detected
CT 1-3 2021-1-5-5563.E0009-3	Ceiling Tile	White,Tan Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (other)	None Detected
DW 1-1-Drywall 2021-1-5-5563.E0009-4	Drywall & JC	Gray,Brown Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
DW 1-1-Joint Compound 2021-1-5-5563.E0009-4A	Drywall & JC	Tan Fibrous Homogeneous		97% Non-fibrous (other)	**3% Chrysotile**
DW 1-2-Drywall 2021-1-5-5563.E0009-5	Drywall & JC	Gray,Brown Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
DW 1-2-Joint Compound 2021-1-5-5563.E0009-5A	Drywall & JC				Positive stop (not analyzed)
DW 1-3-Drywall 2021-1-5-5563.E0009-6	Drywall & JC	Gray,Brown Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
DW 1-3-Joint Compound 2021-1-5-5563.E0009-6A	Drywall & JC				Positive stop (not analyzed)
DW 1-4-Drywall 2021-1-5-5563.E0009-7	Drywall & JC	Gray,Brown Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
DW 1-4-Joint Compound 2021-1-5-5563.E0009-7A	Drywall & JC				Positive stop (not analyzed)
DW 1-5-Drywall 2021-1-5-5563.E0009-8	Drywall & JC	Gray,Brown Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
DW 1-5-Joint Compound 2021-1-5-5563.E0009-8A	Drywall & JC				Positive stop (not analyzed)
FT 1-1-Floor Tile 2021-1-5-5563.E0009-9	Floor Tile	Green Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s): Maria Cao

Summit Laboratories
3575 Centre Circle, Fort Mill, SC 29715
Phone: (704) 504-1717

Summit Order: 2021-1-5-5563.E0009

Summit ELT, P.C.
3575 Centre Circle
Fort Mill, SC 29715

Date Received: 1/5/2021
Date Analyzed: 1/7/2021
Date Reported: 1/7/2021

Project : 28 E. Red Bay Road

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

			Non-Asbestos		Asbestos
Sample ID	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
FT 1-1-Mastic 2021-1-5-5563.E0009-9A	Floor Tile	Black Non-fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
FT 1-1-Felt 2021-1-5-5563.E0009-9B	Floor Tile	Black,Brown Non-fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
FT 1-2-Floor Tile 2021-1-5-5563.E0009-10	Floor Tile	Green Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
FT 1-2-Mastic 2021-1-5-5563.E0009-10A	Floor Tile	Black Non-fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
FT 1-2-Felt 2021-1-5-5563.E0009-10B	Floor Tile	Black,Brown Non-fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
FT 2-1-Tan Floor Tile 2021-1-5-5563.E0009-11	Floor Tile	Tan Fibrous Homogeneous		98% Non-fibrous (other)	**2% Chrysotile**
FT 2-1-Mastic 2021-1-5-5563.E0009-11A	Floor Tile	Black Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
FT 2-1-Green Floor Tile 2021-1-5-5563.E0009-11B	Floor Tile	Green Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
FT 2-1-Felt 2021-1-5-5563.E0009-11C	Floor Tile	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
FT 2-2 2021-1-5-5563.E0009-12	Floor Tile				Positive stop (not analyzed)
FT 2-3 2021-1-5-5563.E0009-13	Floor Tile				Positive stop (not analyzed)
SF 1-1-Green Flooring 2021-1-5-5563.E0009-14	Sheet Flooring	Green Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 1-1-Mastic 2021-1-5-5563.E0009-14A	Sheet Flooring	Green Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
SF 1-1-Pink Flooring 2021-1-5-5563.E0009-14B	Sheet Flooring	Pink,Red Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected

Analyst(s): Maria Cao

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3575 Centre Circle, Fort Mill, SC 29715
Phone: (704) 504-1717

Summit Order: 2021-1-5-5563.E0009

Summit ELT, P.C.
3575 Centre Circle
Fort Mill, SC 29715

Date Received: 1/5/2021
Date Analyzed: 1/7/2021
Date Reported: 1/7/2021

Project : 28 E. Red Bay Road

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

			Non-Asbestos		Asbestos
Sample ID	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
SF 1-1-Blue Flooring 2021-1-5-5563.E0009-14C	Sheet Flooring	Blue,Brown Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 1-2-Green Flooring 2021-1-5-5563.E0009-15	Sheet Flooring	Green Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 1-2-Mastic 2021-1-5-5563.E0009-15A	Sheet Flooring	Green Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
SF 1-2-Pink Flooring 2021-1-5-5563.E0009-15B	Sheet Flooring	Pink,Red Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 1-2-Blue Flooring 2021-1-5-5563.E0009-15C	Sheet Flooring	Blue,Brown Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 2-1 2021-1-5-5563.E0009-16	Sheet Flooring	Brown Fibrous Homogeneous		85% Non-fibrous (other)	**15% Chrysotile**
SF 2-2 2021-1-5-5563.E0009-17	Sheet Flooring				Positive stop (not analyzed)
SF 2-3 2021-1-5-5563.E0009-18	Sheet Flooring				Positive stop (not analyzed)
SF 3-1 2021-1-5-5563.E0009-18	Sheet Flooring	Beige,Green,Red Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
SF 3-2 2021-1-5-5563.E0009-19	Sheet Flooring	Beige,Green,Red Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
SF 4-1 2021-1-5-5563.E0009-20	Sheet Flooring	Gray Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (other)	None Detected
SF 4-2 2021-1-5-5563.E0009-21	Sheet Flooring	Gray Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (other)	None Detected
SF 5-1-Brown Flooring 2021-1-5-5563.E0009-22	Sheet Flooring	Brown,Beige Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (other)	None Detected
SF 5-1-Tan Flooring 2021-1-5-5563.E0009-22A	Sheet Flooring	Tan Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected

Analyst(s): Maria Cao

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3575 Centre Circle, Fort Mill, SC 29715
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Summit ELT, P.C.
3575 Centre Circle
Fort Mill, SC 29715

Date Received: 1/5/2021
Date Analyzed: 1/7/2021
Date Reported: 1/7/2021

Project : 28 E. Red Bay Road

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

			Non-Asbestos		Asbestos
Sample ID	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
SF 5-1-Mastic 2021-1-5-5563.E0009-22B	Sheet Flooring	Tan Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
SF 5-1-Green Flooring 2021-1-5-5563.E0009-22C	Sheet Flooring	Green Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
SF 5-1-Tan Flooring 2021-1-5-5563.E0009-22D	Sheet Flooring	Tan Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
SF 5-2 2021-1-5-5563.E0009-23	Sheet Flooring				Positive stop (not analyzed)
SF 5-3 2021-1-5-5563.E0009-24	Sheet Flooring				Positive stop (not analyzed)
TP 1-1 2021-1-5-5563.E0009-25	Transite Panel	White Fibrous Homogeneous		80% Non-fibrous (other)	**20% Chrysotile**
TP 1-2 2021-1-5-5563.E0009-26	Transite Panel				Positive stop (not analyzed)
TP 1-3 2021-1-5-5563.E0009-27	Transite Panel				Positive stop (not analyzed)
WG 1-1 2021-1-5-5563.E0009-28	Window Glaze	Gray Fibrous Homogeneous		98% Non-fibrous (other)	**2% Chrysotile**
WG 1-2 2021-1-5-5563.E0009-29	Window Glaze				Positive stop (not analyzed)
WG 1-3 2021-1-5-5563.E0009-30	Window Glaze				Positive stop (not analyzed)
RS 1-1-Shingle 2021-1-5-5563.E0009-31	Roof Systems	Gray Fibrous Homogeneous	5% Glass	95% Non-fibrous (other)	None Detected
RS 1-1-Tar 2021-1-5-5563.E0009-31A	Roof Systems	Black Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected
RS 1-2-Shingle 2021-1-5-5563.E0009-32	Roof Systems	Gray Fibrous Homogeneous	5% Glass	95% Non-fibrous (other)	None Detected
RS 1-2-Tar 2021-1-5-5563.E0009-32A	Roof Systems	Black Non-fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s): Maria Cao

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3575 Centre Circle, Fort Mill, SC 29715
Phone: (704) 504-1717

Summit Order: 2021-1-5-5563.E0009

Summit ELT, P.C.
3575 Centre Circle
Fort Mill, SC 29715

Date Received: 1/5/2021
Date Analyzed: 1/7/2021
Date Reported: 1/7/2021

Project : 28 E. Red Bay Road

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

			Non-Asbestos		Asbestos
Sample ID	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
RS 2-1 2021-1-5-5563.E0009-33	Roof Shingle	Gray,Black Fibrous Homogeneous	8% Glass	92% Non-fibrous (other)	None Detected
RS 2-2 2021-1-5-5563.E0009-34	Roof Shingle	Gray,Black Fibrous Homogeneous	8% Glass	92% Non-fibrous (other)	None Detected

Analyst(s): Maria Cao

METHOD: EPA 600 / R93 / 116

For samples easily separated into homogeneous layers, each component will be analyzed separately. The sample may not be representative of the larger material in question. Interpretation and use of test results are the responsibility of the client. Due to the limitations of the EPA 600 Method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles, mastic and roofing can be difficult to analyze by PLM. Reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or None Detect for these materials is recommended.

Analyst(s): Maria Cao

Maria Cao

Approved By:

Michael Zavislak,
Approved Signatory

NVLAP Lab Code 600041-0

Summit Laboratories, 3575 Centre Circle, Fort Mill, SC 29715, Phone: (704) 504-1717

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(lab use only)*: 412100067

PHONE:
FAX:

Company Name : Summit ELT, P.C.		**EMSL Customer ID:**	
Street: 3575 Centre Circle		**City:** Fort Mill	**State or Province:** SC
Zip/Postal Code: 29715	**Country:** US	**Telephone #:**	**Fax #:**
Report To (Name): Ally Bowen		**Please Provide Results via:** ☐ Fax ☑ Email	
email Address: abowen@summit-companies.com		**Purchase Order Number:**	
Client Project ID: 28 E. Red Bay Rd / 5563.E0009		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: SC		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☐ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hr[1]	☐ 4-4.5Hr[1] AHERA Only	☐ 6 Hr[1]	☑ 24 Hr	☐ 32 Hr[2]	☐ 48 Hr	☐ 72 Hr	☐ 96 Hr	☐ 1 Week	☐ 2 Week

[1]*Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT – you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule*
[2] *32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable - NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NYS 198.8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air[1]
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☑ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Settled Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil – Rock – Vermiculite (reporting limit)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM

*Lower reporting limits avaialble on request

Other test (please specify):

☐ **Stop At First Positive** *(clearly identify homogenous areas below)*

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Sampler's Name:

Sampler's Signature:

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
FT-01-03	Floor Tile, Mastic, Felt		
SF-01-03	Green Floor, Mastic, Pink Floor, Blue Floor		
SF-03-03	Flooring		
SF-04-03	Flooring		
RS-01-03	Roof Shingle, Tar		

Client Sample # (s): -

Total # of Samples:

Relinquished by (Client): Christopher Estes **Date:** 1/5/2021 **Time:** 8:00pm

Received by (Lab): [signature] **Date:** 1/6/21 **Time:** 7:15am

Comments/Special Instructions: PB

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*):

PHONE:
FAX:

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
RS-02-03	Roof Shingle		

***Comments/Special Instructions:**

Sample Instructions

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

EMSL Order: 412100067
Customer ID: SECS21A
Customer PO:
Project ID:

Attention: Ally Bowen
Summit Engineering & Construct. Services
3575 Centre Circle
Fort Mill, SC 29715

Project: 28 E. Red Bay Rd./ 5563.E0009

Phone: (803) 547-8107
Fax:
Received Date: 01/06/2021 7:15 AM
Analysis Date: 01/06/2021
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
FT-01-03-Floor Tile *412100067-0001*	Floor Tile, Mastic, Felt	Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
FT-01-03-Mastic *412100067-0001A*	Floor Tile, Mastic, Felt	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
FT-01-03-Felt *412100067-0001B*	Floor Tile, Mastic, Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
SF-01-03-Green Flooring *412100067-0002*	Green Floor, Mastic, Pink Floor, Blue Floor	Green Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
SF-01-03-Mastic *412100067-0002A*	Green Floor, Mastic, Pink Floor, Blue Floor	Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
SF-01-03-Pink Flooring *412100067-0002B*	Green Floor, Mastic, Pink Floor, Blue Floor	Pink Fibrous Homogeneous	100.0 Other	None	<0.1% Chrysotile
SF-01-03-Blue Flooring *412100067-0002C*	Green Floor, Mastic, Pink Floor, Blue Floor	Blue Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
SF-03-03 *412100067-0003*	Flooring	Red/Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
SF-04-03 *412100067-0004*	Flooring	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
RS-01-03-Shingle *412100067-0005*	Roof Shingle, Tar	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
RS-01-03-Tar *412100067-0005A*	Roof Shingle, Tar	Black Non-Fibrous Homogeneous	96.7 Other	3.3 Fibrous_Other	No Asbestos Detected
RS-02-03 *412100067-0006*	Roof Shingle	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 01/06/2021 17:12:59

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

EMSL Order: 412100067
Customer ID: SECS21A
Customer PO:
Project ID:

Attention: Ally Bowen
Summit Engineering & Construct. Services
3575 Centre Circle
Fort Mill, SC 29715

Project: 28 E. Red Bay Rd./ 5563.E0009

Phone: (803) 547-8107
Fax:
Received Date: 01/06/2021 7:15 AM
Analysis Date: 01/06/2021
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 (12)

Lee Plumley, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 01/06/2021 17:12:59

APPENDIX B

INSPECTOR'S LICENSES

SCDHEC ISSUED

Asbestos ID Card

Allyson Bowen

		Expiration Date:
AIRSAMPLER	AS-00542	09/09/21
CONSULTBI	BI-01566	09/10/21
CONSULTMP	MP-00276	09/10/21
CONSULTPD	PD-00215	09/08/21
SUPERAHERA	SA-03051	09/09/21

APPENDIX C

SUMMIT DOCUMENTATION

SITE PHOTOGRAPHS

This photo depicts the front of the residence.

This photo depicts the side of the residence where transite was sampled.

This photo depicts the back of the residence.

This photo depicts bedroom 1.

This photo depicts the sheet flooring sampled from bedroom 1.

This photo depicts bedroom 2.

This photo depicts the sheet flooring sampled from the hallway.

This photo depicts the ceiling tiles sampled from bedroom 2.

This photo depicts the sheet flooring sampled from bedroom 2.

This photo depicts the sheet flooring sampled from the closet.

This photo depicts various sheet floorings sampled from bedroom 3.

This photo depicts bedroom 3.

This photo depicts the kitchen.

This photo depicts the sheet flooring sampled from the kitchen.

This photo depicts a view of the living room.

This photo depicts the green floor tiles sampled from the living room.

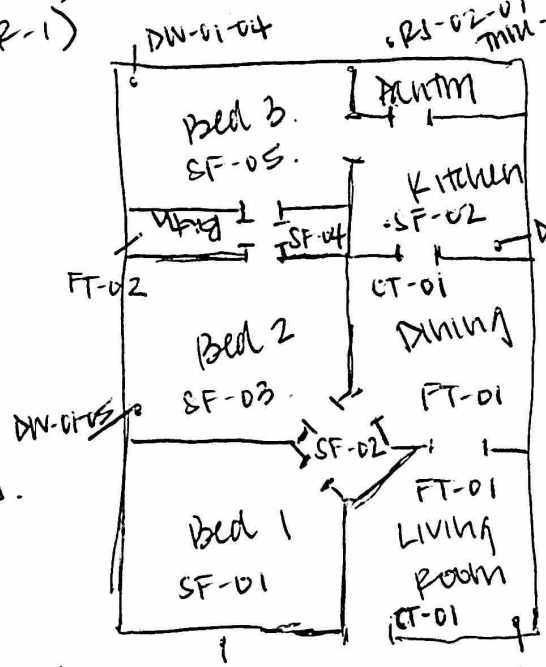
28 E. Red Bay. 10 16 windows. 25x45

Window Glaze
Transite Panell (All sides)
Roofing - Main (LR-2)
Roofing Porch - (LR-1)

Living Room
Ceiling Tile
DWSC under CT
DWSC walls.
Green 9x9 FT - FT-01

Dining Room
Same ceiling ~~plywood~~ Panel
Walls.
Green 9x9 FT.

Kitchen
DW ceiling
Wood Panel walls. Red Brick SF 9x9 FT.



Brick
Two layer FT.

Pantry
Red Brick SF.

Bed 3
DW ceiling & walls.
1. Small Flower SF
2. Pink Swirl SF
3. Yellow Pattern SF
4. Wood Plank SF.

Closet
1. Rose SF

Bed 2
1. Floral SF
Ceiling Tile
DW walls.

Hall
Red Brick SF
Green FT

Bed 1
Wood ceiling
DW walls.
1. Green SF
2. Red Rose SF
3. Lanet 3 SF.