

# **Environmental Assessment**

**For**

## **Proposed New Claflin University Public Health Center**

**783 Goff Avenue  
Orangeburg, South Carolina**

**HRSA CDS Award Grant  
Grant #: CE1HS54334-01-03**

**Prepared for:**

**Health Resources and  
Services Administration (HRSA)**

# Table of Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>4</b>
1.1	Purpose and Need.....	4
1.2	Project Location .....	4
1.3	Description of Proposed Action .....	5
1.4	Excavation and Site Preparation.....	5
1.5	Alternatives Analysis .....	6
<b>2</b>	<b>AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED.....</b>	<b>6</b>
2.1	Alternatives Considered for Further Review.....	6
2.2	Summaries of Affected Environmental Impacts & Mitigation: .....	7
<b>3</b>	<b>AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED.....</b>	<b>11</b>
3.1	Geology, Topography and Soils Existing Conditions .....	11
3.1.1	Impacts to Soils .....	11
3.2	Land Use and Zoning .....	12
3.2.1	Impacts to Land Use and Zoning .....	12
3.3	Floodplain Encroachment.....	12
3.3.1	Impacts to Floodplains .....	13
3.4	Traffic.....	13
3.4.1	Impacts to Traffic Patterns .....	13
3.5	Hazardous Materials Current Conditions (Public Health & Safety) .....	14
3.5.1	Impacts from Hazardous Materials .....	14
3.6	Environmental Justice & Socioeconomics.....	14
3.6.1	Socio-Economic Impacts.....	15
3.7	Air Quality.....	15
3.7.1	Impacts to Air Quality.....	16
3.8	Noise .....	16
3.8.1	Impacts to Noise Conditions .....	16
3.9	Public Services and Utilities.....	17
3.9.1	Impact Public Services and Utilities .....	17
3.10	Water Resources/Water Quality.....	17

3.10.1	Groundwater Existing Conditions .....	17
3.10.1.1	Impacts to Groundwater .....	18
3.10.2	Surface Water Existing Conditions .....	18
3.10.2.1	Impacts to Surface Waters.....	18
3.11	Biological Resources.....	19
3.11.1	Wetlands Existing Conditions .....	19
3.11.1.1	Impacts to Wetlands .....	19
3.11.2	Threatened or Endangered Species .....	19
3.11.2.1	Impacts to Threatened or Endangered Species .....	20
3.12	Cultural Resources .....	20
3.12.1	Cultural Resources Historic Properties and Archaeological Resources Current Conditions .....	20
3.12.1.1	Impacts to Cultural Resources, Historic Properties and Archaeological Resources .....	21
3.13	Coordination and Permits.....	21
3.13.1	Local Permitting.....	21
3.13.2	State Permitting.....	22
<b>4</b>	<b>PUBLIC INVOLVEMENT, AGENCIES CONSULTED AND REFERENCES .....</b>	<b>22</b>
<b>5</b>	<b>REFERENCES .....</b>	<b>23</b>
<b>6</b>	<b>LIST OF PREPARERS.....</b>	<b>24</b>
<b>7</b>	<b>APPENDICES .....</b>	<b>25</b>

**Environmental Assessment**  
**Proposed New Claflin University Public Health Center**  
**HRSA CDS Grant | CE1HS54334-01-03**

## **1 INTRODUCTION**

This Environmental Assessment (EA) evaluates potential environmental impacts associated with the proposed construction of a Claflin University Public Health Center and School of Nursing at Claflin University in Orangeburg, South Carolina. The project is funded through the Health Resources and Services Administration (HRSA) and prepared in accordance with the National Environmental Policy Act (NEPA).

The EA analyzes environmental conditions, potential impacts, and mitigation measures to determine whether the project will result in significant environmental impacts or qualify for a Finding of No Significant Impact (FONSI).

### **1.1 Purpose and Need**

The purpose of the project is to construct a modern Public Health Center and School of Nursing to address shortages in healthcare professionals across South Carolina, particularly in rural communities. The facility will expand teaching, research, and healthcare training opportunities while improving public health services and workforce development.

The building will support academic instruction, clinical simulation laboratories, faculty offices, and the relocation of the university's Student Health Center.

### **1.2 Project Location**

The overall project site is located on four parcels owned by Claflin University (TMS 0173-10-07-003.000, 0173-11-01-019.000, 0173-11-01-018.000 & 0173-11-01-017.000) that are to be combined to form a single 1.69 AC tract. The address of the proposed project is 783 Goff Avenue on the campus of Claflin University in Orangeburg, South Carolina.

The existing 1.69 AC institutional property consists of two (2) single-family residential structures that were converted to classroom buildings and surrounded by asphalt parking lot. The proposed project will include demolishing the existing structures to accommodate the new facility. Maps documenting site location, ownership, and surrounding properties are included in the appendices.

### **1.3 Description of Proposed Action**

The proposed project includes demolition of two existing residential structures and construction of a new School of Nursing and Public Health Center consisting of two academic buildings.

Building A: approximately 7,555 square feet

Building B: approximately 7,042 square feet

Total building area: approximately 14,597 square feet.

The facility will include classrooms, simulation laboratories, research laboratories, faculty offices, conference rooms, administrative space, storage areas, and support areas such as restrooms and break rooms.

### **1.4 Excavation and Site Preparation**

Construction of the facility will require excavation and grading activities to support construction of building foundations, new hardscape and utilities supporting the new Public Health Center.

Approximately 1.05 AC (45,890 square feet) of the project site will be disturbed through excavation activities associated with foundation construction, sidewalk & hardscape construction and installation of utilities including sanitary sewer, domestic water, natural gas, electrical, and telecommunications services. Standard erosion and sediment control measures will be implemented to prevent soil runoff and protect surrounding areas.

## **1.5 Alternatives Analysis**

### *Alternative 1 – No Action Alternative:*

Under the No Action Alternative, the project would not be implemented, and the existing facilities would continue to limit academic capacity and healthcare training opportunities.

### *Alternative 2 – Proposed Action:*

Construction of the new Claflin University Public Health Center and School of Nursing as described.

## **2 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED**

### **2.1 Alternatives Considered for Further Review**

#### *Alternative 1 – No Action Alternative*

Under the No Action Alternative, HRSA would not fund the proposed project, and the new Claflin University Public Health Center & Nursing School would not be constructed. This would continue to limit the University's academic capacity and healthcare training opportunities.

#### *Alternative 2 – Construction of the new Public Health Center (Proposed)*

Claflin University is proposing the construction of the new Claflin University Public Health Center and Nursing School consisting of two academic buildings totaling approximately 14,597 square feet. The project will support nursing education, public health research, clinical simulation training, and relocation of the university's Student Health Center.

**2.2 Summaries of Affected Environmental Impacts & Mitigation:**

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Geology, Topography and Soils</b>	No impacts to geology or topography. There maybe short-term impacts to soils during the construction period.	Area soils would likely be disturbed during construction. Soil loss may occur directly from disturbance or indirectly via wind or water. Best management practices will be developed and implemented, such as erosion and sedimentation control (e.g. silt fences, sediment tubes, re-vegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site).
<b>Water Resources</b>	No impacts to groundwater resources are anticipated.	None
<b>Surface Water</b>	Temporary short-term impacts to surface water are possible during construction activities.	Appropriate BMPs, such as installing silt fence, sediment tubes and re-vegetating bare soils would minimize surface water runoff.
<b>Floodplains</b>	No impacts to floodplains are anticipated.	None

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Groundwater</b>	No impacts to groundwater resources are anticipated. The new facility will use the available public water system.	None
<b>Biological Resources</b>	No impacts to biological resources (e.g. threatened and endangered species) are anticipated. The proposed parcels have contained single-family residential structures since the mid- 1940's (per Orangeburg County Assessor's Page)	None
<b>Air Quality</b>	Short-term impacts to air quality may occur during the construction period.	Construction contractors would be required to water down construction areas (e.g. exposed soil) as necessary and fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Transportation</b>	<p>There may be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site.</p> <p>No impacts to daily traffic are anticipated during normal intended usage. There may be some increased traffic on occasions when the facility is utilized for community meetings, etc.</p>	<p>Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways.</p> <p>None</p>
<b>Noise</b>	<p>Short-term impacts to noise may occur at the proposed project site during the construction period.</p>	<p>Construction would take place during normal business hours (e.g. daytime hours) and equipment and machinery installed at the proposed high school would meet all local, state, and federal noise regulations.</p>
<b>Cultural Resources</b>	<p>No impacts to archeological or historic resources are anticipated. No archeological or historic resources were identified on the proposed land parcels.</p>	<p>None</p>

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Hazardous Materials</b>	No impacts from hazardous materials or wastes are anticipated.	Construction activities could expose or otherwise affect unknown subsurface hazardous waste or material. Many elements of a Phase I Environmental Site Assessment (ESA) have been conducted for the site and no recognized environmental conditions were discovered, indicating a minimal risk. Any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable local, state, and federal regulations.

### **3 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED**

#### **3.1 Geology, Topography and Soils Existing Conditions**

A soils classification of the site according to the National Resources Conservation Service (NRCS) on-line database indicates that the following soils are present on the subject property. The site consist of Dothan (DaA) loamy sand soils series mixed with remaining fill materials and concrete slabs of previous structures. The Dothan (DaA) series consists of well drained soils that formed in deposits of loamy marine sediment on the coastal plain. Dothan soil is located on uplands and gentle side slopes. The soils acidity provides a moderate risk of corrosion for uncoated steel and concrete piping.

Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off to existing stormwater infrastructure located within the roadways. The stormwater runoff, once it enters underground stormwater infrastructure, will drain in a southwesterly direction towards the North Fork of the Edisto River, located approximately 1.9 miles from the proposed project site.

##### **3.1.1 Impacts to Soils**

*Alternative 1-No Action Alternative:*

Normal occurrences of soil erosion would be expected to occur if the site is not developed. The proposed site location is not located within a 100-year floodplain and is not subject to flooding, due to its elevation and topography.

*Alternative 2 – Construct the new Public Health Center (Proposed Action)*

Area soils would likely be disturbed during construction. Soil loss would occur directly from disturbance or indirectly via wind or water. Best management practices will be developed and implemented, such as implementing an erosion and sedimentation control plan using silt fences, sediment tubes, re-vegetating disturbed soils (e.g. part of proposed landscaping activities), and maintaining site soil stockpiles during construction, to prevent soils from eroding and dispersing off-site.

Implementation of appropriate Best Management Practices (BMPs) would be required at the construction location. BMPs include but are not limited to; the installation of silt fences, sediment tubes and re-vegetating bare soils to minimize erosion.

### **3.2 Land Use and Zoning**

The proposed project location is located on Claflin University property, within the institution, and is currently developed with two (2) single-family residential structures. The proposed project location is zoned O-1 – Office-Institutional-Residential District per the current City of Orangeburg Zoning Map. The surrounding parcels are listed as zoned O-1 – Office-Institutional-Residential District (NW & SE) and A-2 – Residential, Multi-Unit District (NE & SW) per the current City of Orangeburg Zoning Map.

#### **3.2.1 Impacts to Land Use and Zoning**

*Alternative 1-No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action)*

No impact.

### **3.3 Floodplain Encroachment**

FEMA uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program (NFIP). The proposed project site for the new Claflin University Public Health Center is located in Zone X, which is not within a 100-year floodplain per the FEMA Flood Insurance Rate Map Number 45075C0188C, dated January 16, 2014. The FEMA and FIRM Maps are included in Appendix E.

### **3.3.1 Impacts to Floodplains**

*Alternative 1-No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action)*

No impact.

### **3.4 Traffic**

The proposed project site is bordered by Goff Avenue along the southeastern property boundary. The South Carolina Department of Transportation recently relinquished ownership of Goff Avenue by releasing the roadway to Claflin University for ownership and maintenance. Goff Avenue is a local road that runs through the Claflin University Campus and is primarily used by local traffic. The proposed Claflin University Public Health Center and Nursing School are replacing the existing Public Health Center and Nursing School facilities. Since there is not a proposed change in use, adverse impacts to the existing traffic pattern is not anticipated.

#### **3.4.1 Impacts to Traffic Patterns**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

The impact on traffic would be short-term during the time of active site preparation and construction activities.

### **3.5 Hazardous Materials Current Conditions (Public Health & Safety)**

Any hazardous materials (i.e., asbestos, lead based paint, PCBs) that might be encountered during the demolition portion of this project will be properly removed and disposed in accordance with state and federal regulations.

During the operation of the new Public Health Center and School of Nursing, no hazardous materials are planned to be used or hazardous waste generated.

An Asbestos Survey was prepared by ARM Environmental Services for the two (2) existing structures to be demolished. It was determined that Asbestos was present in the structure located at 783 Goff Avenue. State and Federal regulations require the removal of asbestos-containing materials prior to any disturbance caused by renovation or demolition.

#### **3.5.1 Impacts from Hazardous Materials**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

State and Federal regulations require the removal of asbestos-containing materials prior to any disturbance caused by renovation or demolition. Asbestos abatement will be addressed by Claflin University prior to the demolition of the existing structures. Since asbestos containing material will be removed prior to demolition of the existing structures, no impact is anticipated.

### **3.6 Environmental Justice & Socioeconomics**

Based on U.S. Census Bureau information for the year 2020 (Decennial Census), the percent populations of zip code 29115 (which is the zip code for the proposed new Claflin University Public Health Center) are 74% Black or African American , 20% White, 2.4% Hispanic or Latino, 0.8%, Asian, and 0.4% American Indian or Alaska Native. The

median household income per the 2024 American Community Survey 5-Year Estimates for the area is \$37,751 and 31.3 % of all families are below the poverty level.

The Council on Environmental Quality’s Climate and Economic Justice Screening Tool was not available when preparing the Environmental Assessment.

### **3.6.1 Socio-Economic Impacts**

#### *Alternative 1 – No Action Alternative:*

No impact.

#### *Alternative 2 – Construct the new Public Health Center (Proposed Action):*

Based on the location of the project and the proposed site location on the Claflin University campus, this project is not expected to have disproportionate adverse impacts on human health or the environment to overburdened and underserved communities, including minority, Tribal or low-income populations. Additionally, the new Public Health Center would serve the area by assisting with rural health initiatives. The Nursing and Social Sciences would serve the community with research and services.

### **3.7 Air Quality**

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, preventing decreased visibility, and damage to crops and buildings.

### **3.7.1 Impacts to Air Quality**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

Increase in vehicle exhaust emissions and dust is anticipated during construction. Best management practices would be developed and implemented to cover and/or wet area soils during construction to minimize dust.

### **3.8 Noise**

#### **Noise Current Conditions**

The proposed project site is located within the Claflin University Campus and is near a single-family residence and student dormitories. The City of Orangeburg does not currently have a specific noise ordinance; however, the City of Orangeburg restricts construction activity between the hours of 7:00 AM and 9:00 PM.

#### **3.8.1 Impacts to Noise Conditions**

*Alternative 1-No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

Construction noise impacts would be short-term and limited to the duration of construction activities.

### **3.9 Public Services and Utilities**

The proposed project location and surrounding area have all normal public services and utility services available. The domestic water, sanitary sewer, electric service and natural gas are provided by the City of Orangeburg Department of Public Utilities. Police, fire and emergency medical services are provided by the City of Orangeburg Department of Public Safety.

#### **3.9.1 Impact Public Services and Utilities**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

Any impact would be short term during active site preparation and construction activities. All normal construction permits and best management practices will be undertaken to minimize and/or eliminate any disruption to public utility services in the area.

### **3.10 Water Resources/Water Quality**

#### **3.10.1 Groundwater Existing Conditions**

The proposed project site is located above the Middle Florian, Gordon and Crouch Branch aquifer systems. The freshwater aquifers are located between 115 feet to 230 feet below sea level.

### **3.10.1.1 Impacts to Groundwater**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

The water supply for the proposed Claflin University Public Health Center will tie into the public utilities. No impacts anticipated.

### **3.10.2 Surface Water Existing Conditions**

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharge of pollutants into the waters of the United States. Based on the local topography, excessive stormwater run-off would drain from the proposed project location site to the southwest towards the North Fork Edisto River. There are no on-site surface water features (e.g. ponds, lakes or drainage ditches) present at the proposed project location.

#### **3.10.2.1 Impacts to Surface Waters**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

There are no anticipated impacts to nearby surface waters. A storm water drainage system will consist of both sheet flow and sub-surface drainage components.

### 3.11 Biological Resources

#### 3.11.1 Wetlands Existing Conditions

While a wetlands determination was not performed for the 1.69 AC project area, the US Fish and Wildlife Services (USFWS) National Wetlands Inventory was reviewed to determine if wetlands or waters of the state (WOS) were present. Based on the USFWS National Wetlands Inventory, there were not any wetlands or waters of the state were present. Additionally, the project area in its existing condition is fully developed with single-family residential structures and an asphalt parking lot.

##### 3.11.1.1 Impacts to Wetlands

*Alternative 1 – No Action Alternative:*

No Impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

There were no wetlands identified by the US Fish & Wildlife Services Wetland Mapper. No impact anticipated.

#### 3.11.2 Threatened or Endangered Species

A Threatened and Endangered Species survey was not conducted for the project site; however, the South Carolina Heritage Trust Program was consulted regarding this project. The South Carolina Heritage Trust Program lists the following five (5) federally protected species for Orangeburg County, South Carolina:

Orangeburg County (source: <https://natural-heritage-program-scdnr.hub.arcgis.com/>)

T – Bald eagle *Haliaeetus leucophalus*

E – Shortnose Sturgeon, *Acipenser brevirostrum*

E – Atlantic Sturgeon, *Acipenser oxyrinchus oxyrinchus*

T – Red-cockaded woodpecker, *Picoides borealis*

E – Canby's Dropwort, *Oxypolis canbyi*

The US Department of the Interior was consulted and provided a consistency letter for the Claflin University Public Health Center project and identified the following two (2) species for the project area:

T – Red-cockaded woodpecker, *Picoides borealis*

E – Canby’s Dropwort, *Oxypolis canbyi*

Based on their review of the project and project area, it was determined that the project would have “No Effect” on the listed threatened and endangered species. However, they listed the following species and/or critical habitats that may also occur in the project area and are not covered by their conclusion:

E – Tricolored Bat, *Perimyotis subflavus* (Proposed)

T – Monarch Butterfly *Danaus Plexippus* (Proposed)

T – Southern Hognose Snake *Heterodon simus* (Proposed)

### **3.11.2.1 Impacts to Threatened or Endangered Species**

*Alternative 1 – No Action Alternative:*

No impact.

*Alternative 2 – Construct the new Public Health Center (Proposed Action):*

The project Site is currently developed with two single-family structures that were converted to classroom buildings and asphalt parking area utilized by students, faculty and staff. No impacts are anticipated.

## **3.12 Cultural Resources**

### **3.12.1 Cultural Resources Historic Properties and Archaeological Resources Current Conditions**

A cultural resource survey was not conducted, because the proposed project site is currently developed with two (2) single-family residence structures and associated asphalt

pavement for driveways and parking. A cultural resource assessment was requested and conducted by the South Carolina State Historical Preservation Office (SC SHPO). The SC SHPO cultural resource assessment had no reservations with the proposed project. The SC SHPO cultural resource assessment letter is contained in Appendix H.2.

The South Carolina Department of Archives and History ARCHSITE (GIS) Map was reviewed and in the vicinity of the project the following National Register Points were listed:

- Tingley Memorial Hall, Claflin College (SHPO # 0026)
- Hodge Hall, SC State College (SHPO #0014)
- Fordham, Maj, John Hammond House, 415 Boulevard Street (SHPO #0289)

### **3.12.1.1 Impacts to Cultural Resources, Historic Properties and Archaeological Resources**

#### *Alternative 1 – No Action Alternative:*

No impact.

#### *Alternative 2 – Construct the new Public Health Center (Proposed Action):*

No impacts anticipated.

### **3.13 Coordination and Permits**

All necessary permits and coordination with governing agencies will be the responsibility of the architect, civil engineer and/or the contractor selected for site construction. All construction and required regulatory permits will be maintained and posted at the construction site.

#### **3.13.1 Local Permitting**

Building permits will be obtained from the City of Orangeburg Building Department.

### **3.13.2 State Permitting**

In accordance with applicable local, state, and federal regulations, the applicant will be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site.

## **4 PUBLIC INVOLVEMENT, AGENCIES CONSULTED AND REFERENCES**

The proposed action will be publicized during a fifteen-day public comment period on the Claflin University website. If no substantive comments are received, the Draft EA will become final, and this initial Public Notice will also serve as the final Public Notice. Substantive comments will be addressed as appropriate in the final documents.

## 5 REFERENCES

- Orangeburg County GIS Map Viewer  
<https://experience.arcgis.com/experience/02a8eeae9f074df9a0821ae7e1125c86>
- City of Orangeburg Zoning Department,  
<https://www.orangeburg.sc.us/community-planning/zoning>
- U.S. Census Bureau,  
[https://data.census.gov/profile/ZCTA5\\_29115?g=860XX00US29115#populations-and-people](https://data.census.gov/profile/ZCTA5_29115?g=860XX00US29115#populations-and-people)
- SC Department of Environmental Services | Potentiometric Mapping,  
<https://www.des.sc.gov/programs/bureau-water/hydrology/groundwater-program>
- SC Department of Natural Resources | Land, Water and Conservation Division  
Potentiometric Surface Maps of the Upper and Middle Florian and Gordan Aquifers in South Carolina, November-December 2018 and Potentiometric Surface of the Crouch Branch Aquifer in South Carolina, November-December 2020
- US Department of Agriculture | Natural Resources Conservation Service Web Soil Survey,  
<http://websoilsurvey.nrcs.usda.gov/app/>
- South Carolina Heritage Trust Program | Threatened and Endangered Species,  
<https://natural-heritage-program-scdnr.hub.arcgis.com/>
- South Carolina Department of Archives and History,  
<https://scdah.sc.gov/historic-preservation/historic-properties-research/archsitegis>
- United State Geological Survey – NationalMap Viewer  
<https://apps.nationalmap.gov/viewer/>
- USGS 7.5-Minute Topographic Quadrangle Map for “Orangeburg North, SC” (2024).
- US Fish and Wildlife Services Wetland Inventory  
<https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>
- Site Photographs taken during site visit in December 2024.
- ARM Environmental Services, Inc. | Asbestos Survey for 100 Millwood Street, dated May 9, 2024, ARM Project Number 09-7018-24
- ARM Environmental Services, Inc. | Asbestos Survey for Goff Avenue, dated April 30, 2024, ARM Project Number 09-7019-24

## 6 LIST OF PREPARERS

Dangerfield Engineering & Surveying, LLC

1250 Brickle Street

Orangeburg, SC 29118

John M. Dangerfield, II PE, PLS, SC License #21620

[john@dangerfieldengr.com](mailto:john@dangerfieldengr.com) | (843) 509-3337

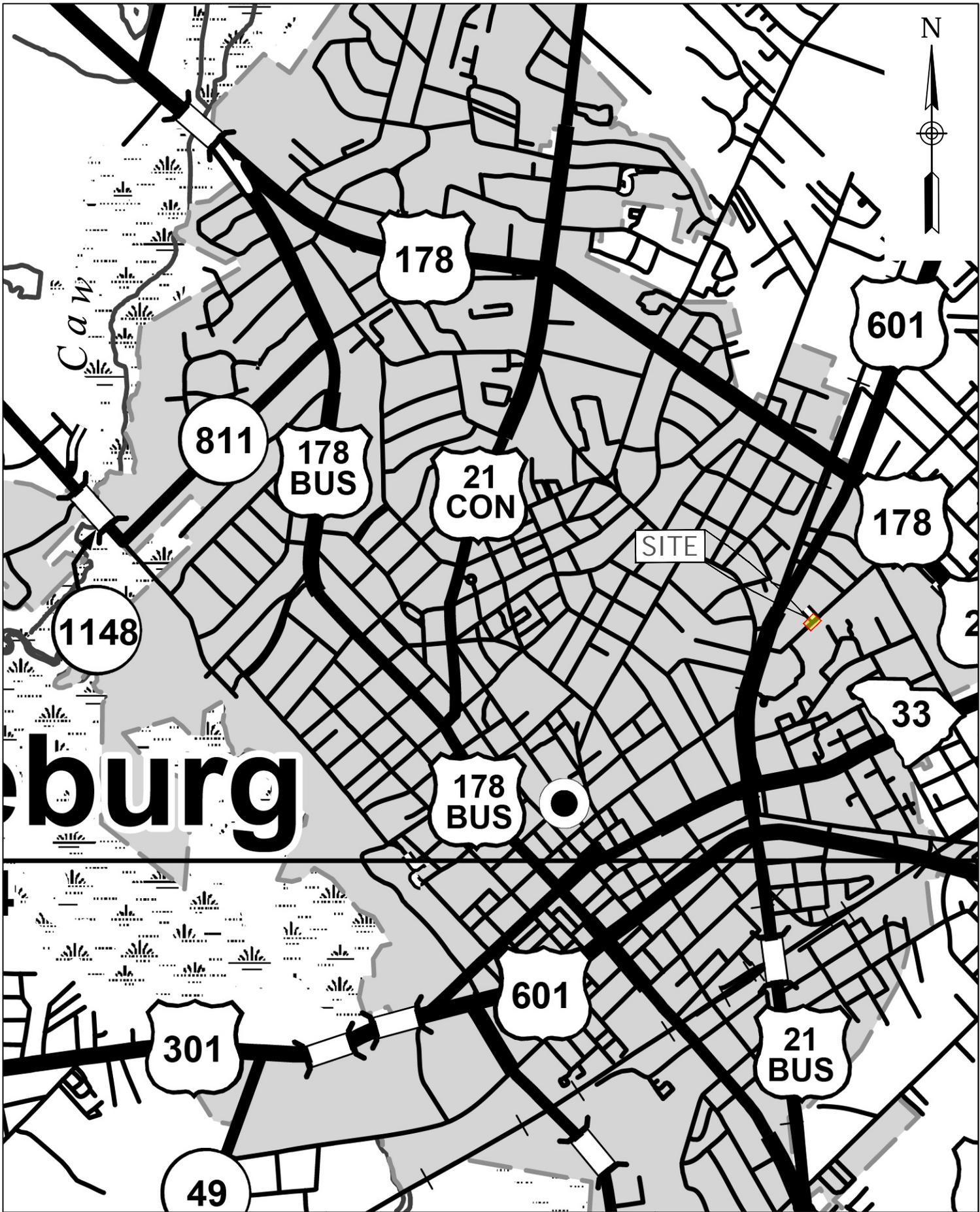
Matthew T. Coggins, PE, SC License #26493

[matt@dangerfieldengr.com](mailto:matt@dangerfieldengr.com) | (678) 923-8334

## 7 APPENDICES

Appendix A	Site Location Map, Aerial Photograph, Tax Parcel Map, Proposed Site Plan and Topographic Map
Appendix B	Site Photographs
Appendix C	Soils Map
Appendix D	City of Orangeburg Zoning Map
Appendix E	FEMA FIRMette Flood Map
Appendix F.1	Asbestos Survey for 783 Goff Avenue prepared by ARM Environmental Services
Appendix F.2	Asbestos Survey for 100 Millwood Street prepared by ARM Environmental Services
Appendix G.1	US Fish and Wildlife Service Wetland Inventory Map
Appendix G.2	US Department of Interior Fish and Wildlife Service Threatened and Endangered Species Response
Appendix H.1	South Carolina Department of Archives and History Map
Appendix H.2	South Carolina Department of Archives and History Response

## Appendix A

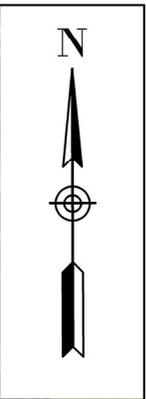
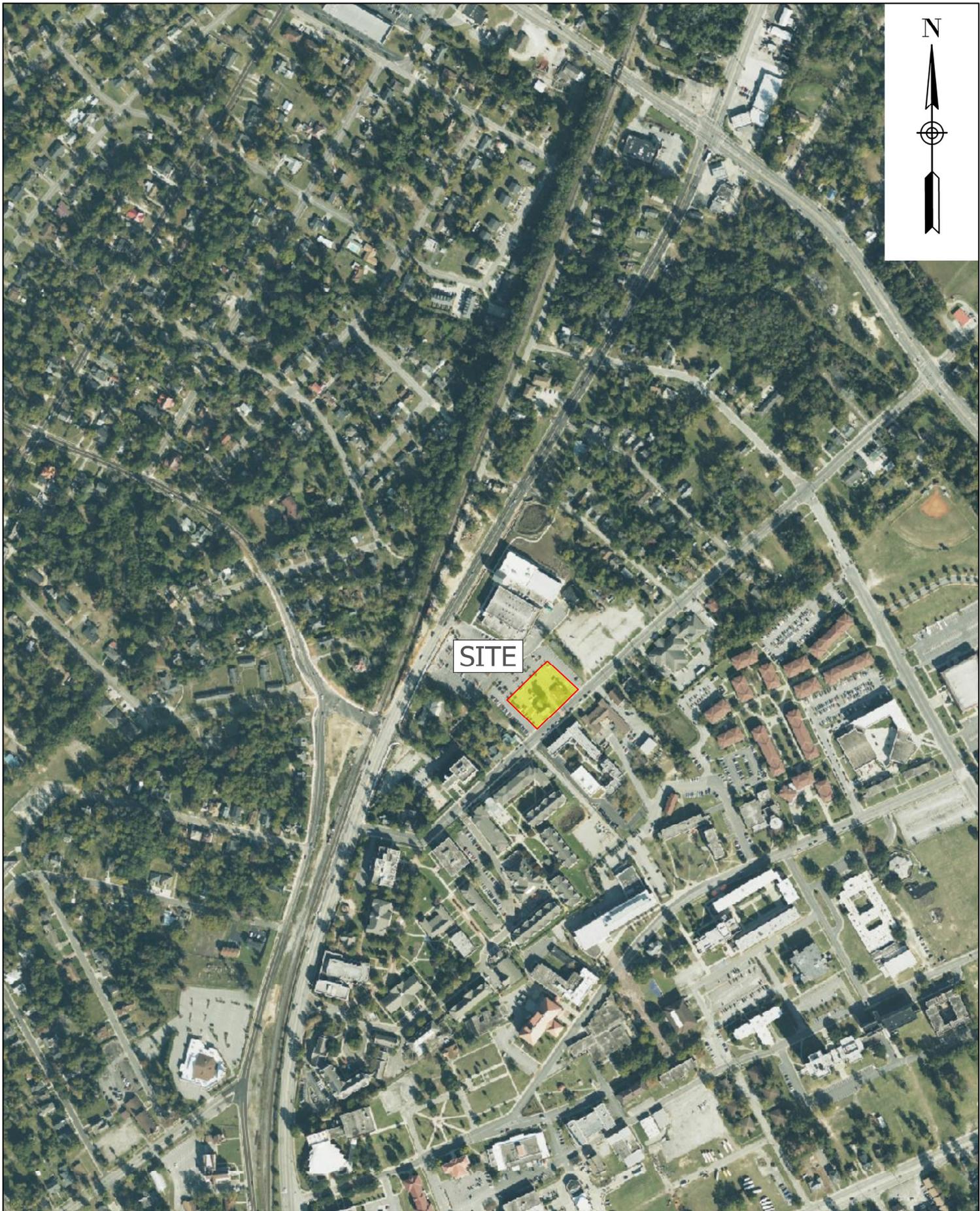


**DANGERFIELD**  
**ENGINEERING + SURVEYING**  
 CONSULTING - CIVIL ENGINEERING  
 LAND PLANNING - SURVEYING  
**803.354.1393**  
 1290 BRICKLE STREET - ORANGEBURG, SC 29118

SITE LOCATION MAP

CLAFLIN UNIVERSITY  
 NEW PUBLIC HEALTH CENTER  
 ORANGEBURG COUNTY, SOUTH CAROLINA

DATE: 03/25/2026	SCALE: 1" = 2000'
DWG NAME: 1145_Mapping.dwg	
DRAWN BY: MTC	
DES JOB NO.: 1145	
SOURCE:	SOUTH CAROLINA DEPT. OF TRANS <a href="http://www.scdot.org/">HTTP://WWW.SCDOT.ORG/</a>



SITE



**DANGERFIELD**  
ENGINEERING + SURVEYING

CONSULTING • CIVIL ENGINEERING  
LAND PLANNING • SURVEYING

**803.354.1393**

1250 BRICKLE STREET • ORANGEBURG, SC 29118

AERIAL MAP

CLAFLIN UNIVERSITY  
NEW PUBLIC HEALTH CENTER  
ORANGEBURG COUNTY, SOUTH CAROLINA

DATE: 3/25/2026

SCALE: 1" = 500'

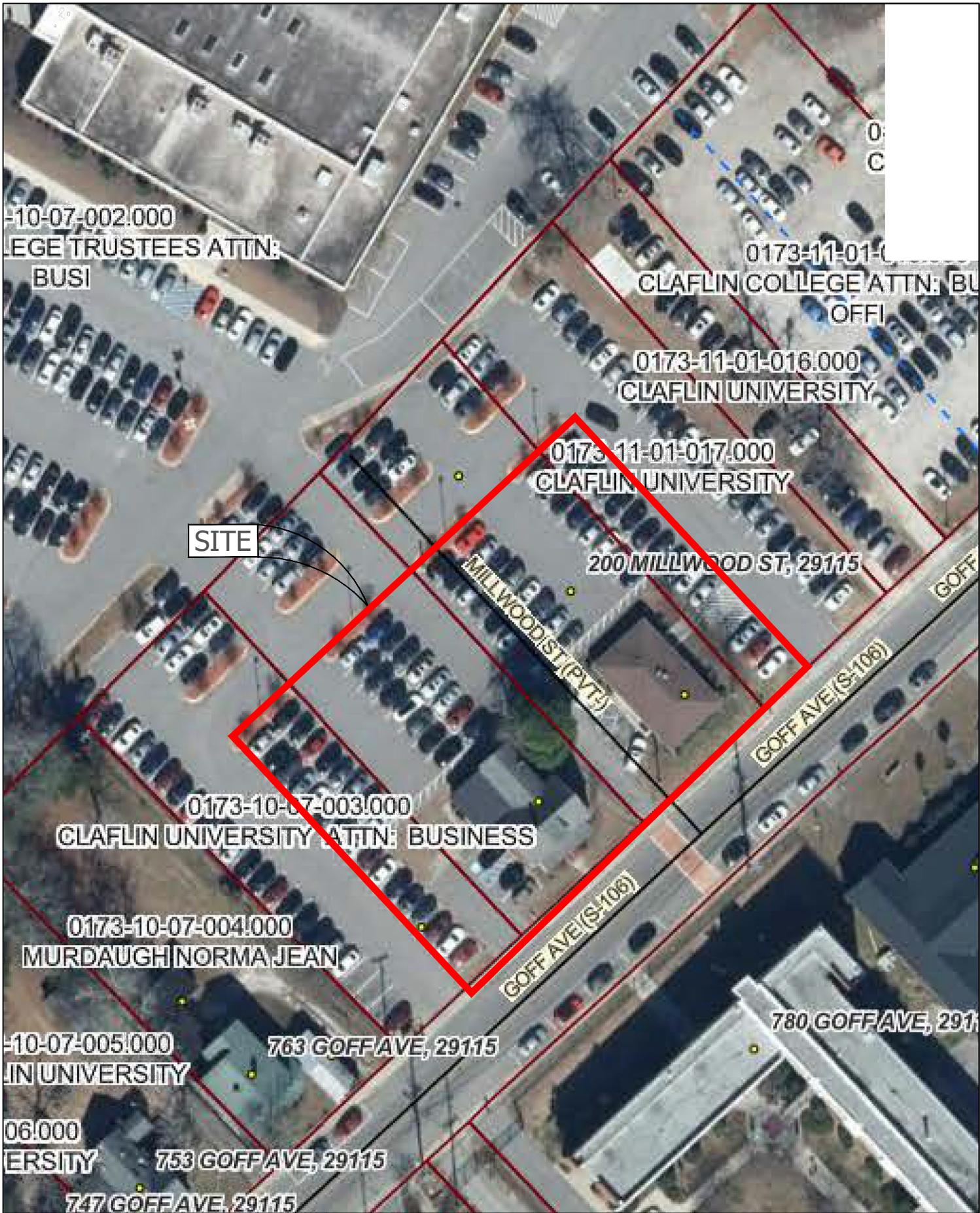
DWG NAME: 1145\_Mapping.dwg

DRAWN BY: MTC

DES JOB NO.: 1145

SOURCE:

AUTODESK GEOREFERENCED MAPPING  
[HTTP://](http://)

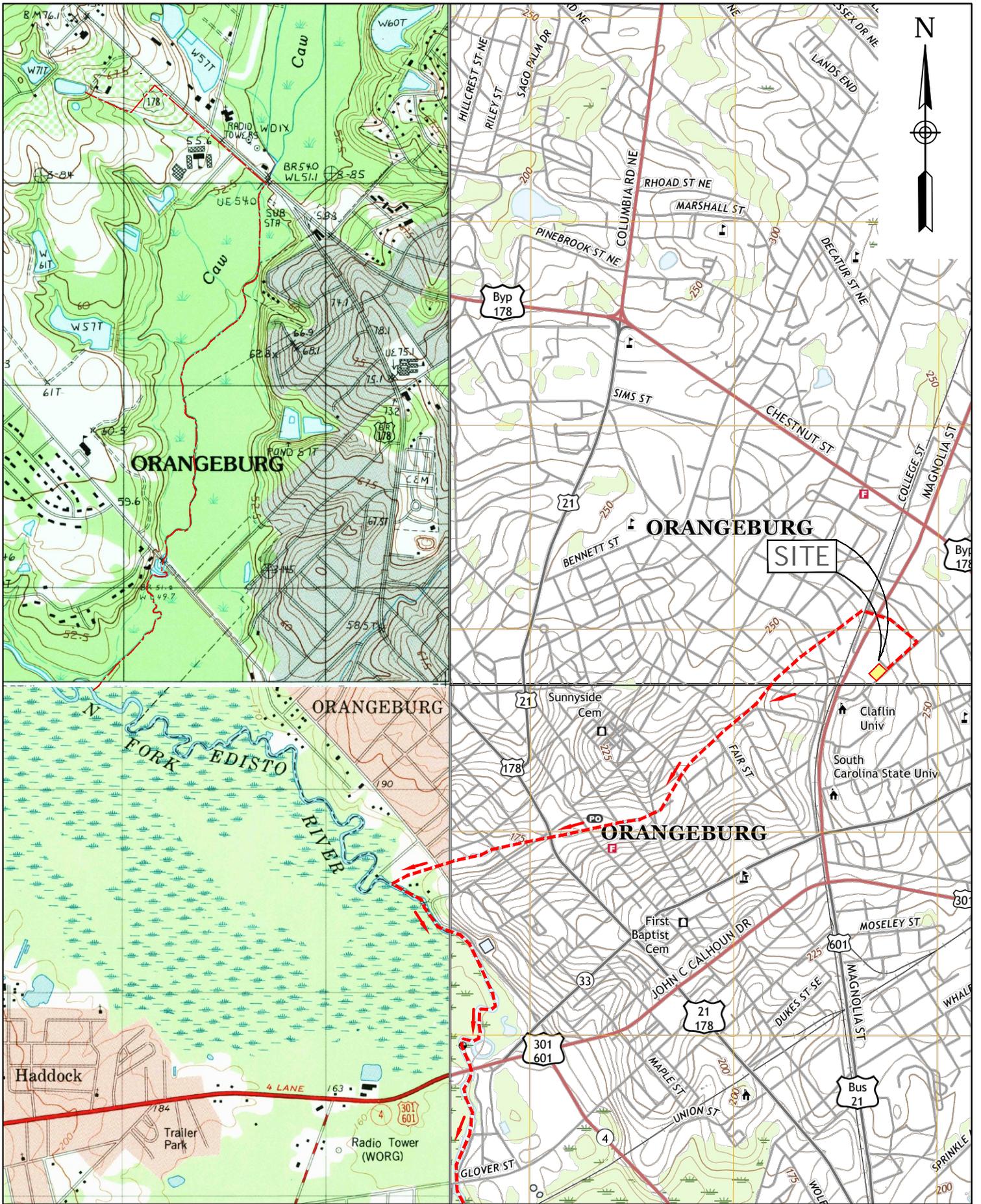


**DANGERFIELD**  
ENGINEERING + SURVEYING  
CONSULTING - CIVIL ENGINEERING  
LAND PLANNING - SURVEYING  
**803.354.1393**  
1250 BRICKLE STREET - ORANGEBURG, SC 29116

ORANGEBURG COUTNY GIS | TMS  
MAP

CLAFILIN UNIVERSITY  
NEW PUBLIC HEALTH CENTER  
ORANGEBURG COUNTY, SOUTH CAROLINA

DATE: 03/26/2026	SCALE: N.T.S.
DWG NAME: 1145_Mapping.dwg	
DRAWN BY: MTC	
DES JOB NO.: 1145	
SOURCE: ORANGEBURG COUNTY GIS WEB VIEWER <a href="https://experience.arcgis.com/">https://experience.arcgis.com/</a>	



**DANGERFIELD**  
**ENGINEERING + SURVEYING**  
 CONSULTING - CIVIL ENGINEERING  
 LAND PLANNING - SURVEYING  
**803.354.1393**  
 1290 BRICKLE STREET - ORANGEBURG, SC 29118

TOPOGRAPHIC MAP

CLAFLIN COLLEGE  
 NEW PUBLIC HEALTH CENTER  
 ORANGEBURG COUNTY, SOUTH CAROLINA

DATE: 3/25/2026 SCALE: 1" = 2000'

DWG NAME: 1145\_Mapping.dwg

DRAWN BY: MTC

DES JOB NO.: 1145

SOURCE: US TOPO MAPS

## Appendix B



783 Goff Ave – Front | Looking West)



100 Millwood Street – Front | Looking Southeast



783 Goff Ave – Rear Side | Looking West



100 Millwood Street – Rear | Looking Southwest



783 Goff Ave – Rear Side | Looking East



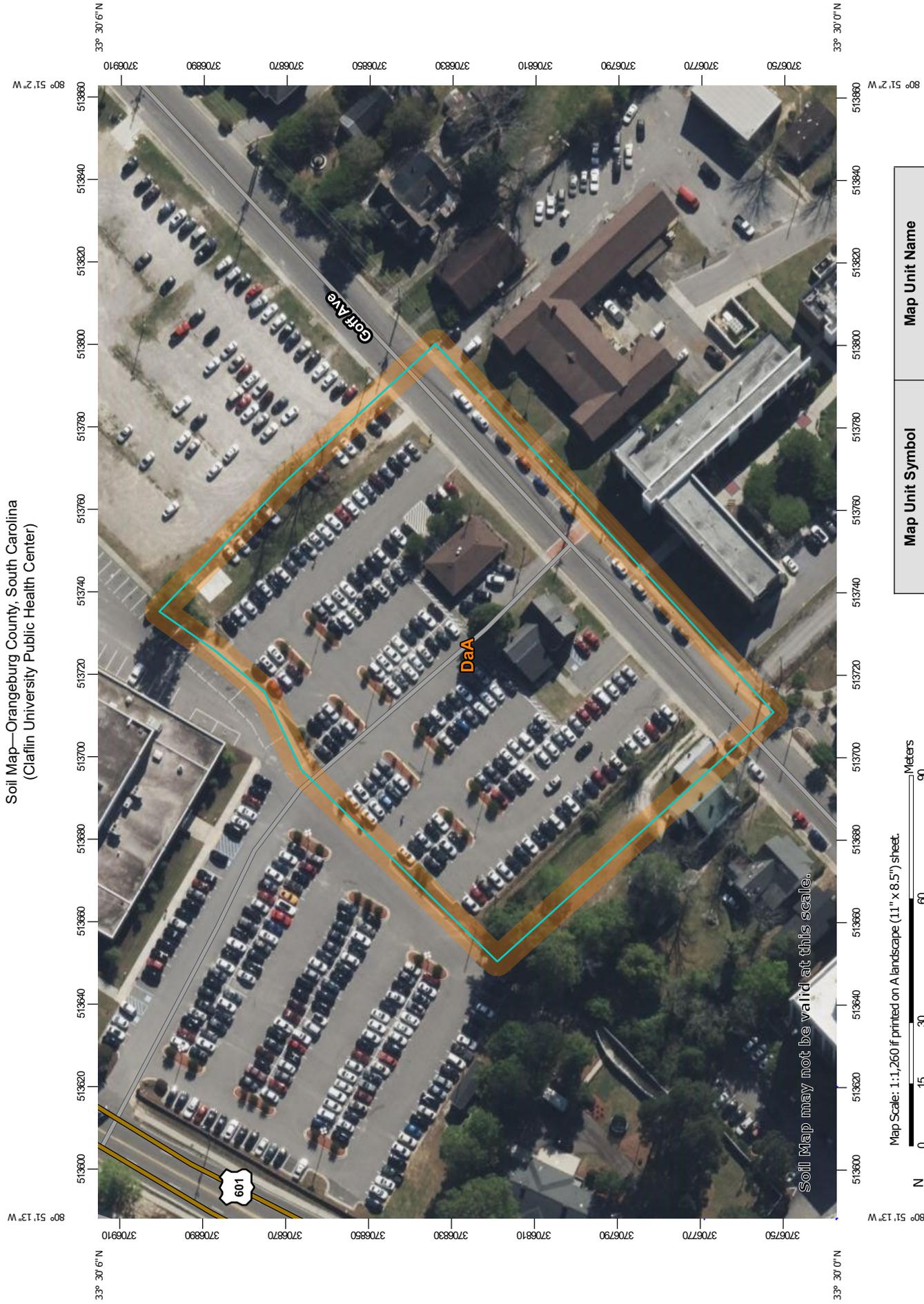
100 Millwood Street – Front | Looking Southeast



783 Goff Ave – Rear Side | Looking Northeast

## Appendix C

Soil Map—Orangeburg County, South Carolina  
(Claflin University Public Health Center)



Soil Map may not be valid at this scale.

Map Scale: 1:1,260 if printed on A landscape (11" x 8.5") sheet.



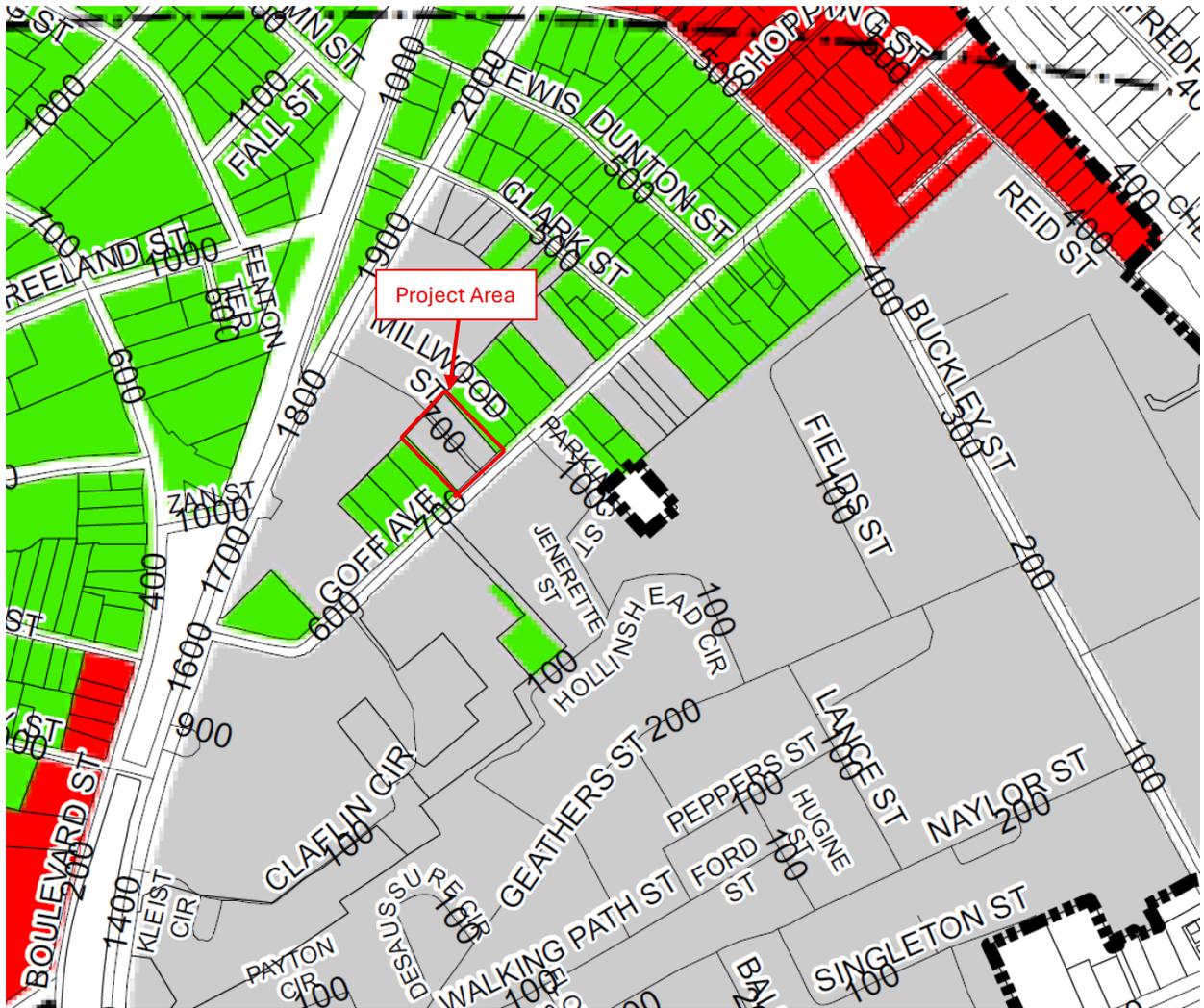
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Map Unit Symbol	Map Unit Name
DaA	Dothan loamy sand, 0 to 2 percent slopes

## Appendix D

City of Orangeburg

Current Zoning Map



Legend

— City Boundary	Zoning Overlay District	Historical Conservation District	A-2 Residential, Multi-Unit District	B-3 Neighborhood Business District	Airport Overlay District
Proposed Zoning Change	Planned Development District	A-3 Residential, General District	D-1 Industrial District	Airport Zone	
Design District	Zoning	B-1 General Business District	O-1 Office-Institutional-Residential District	Approach Zone	
	A-1 Residential, Single-Unit District	B-2 Central Business District	Proposed Annexation	Conical Zone	

## Appendix E



## Appendix F.1

Asbestos Survey  
Claflin University Academic Building  
783 Goff Avenue  
Orangeburg, South Carolina



April 30, 2024

Prepared For:  
Claflin University  
400 Magnolia Street, Orangeburg, SC 29115  
ARM Project No. 09-7019-24

Report Compiled By

*Robbie Robertson*

---

Robbie Robertson  
South Carolina Consultant / Building Inspector License #01179

Report Reviewed By

*Sid Havird*

---

Sid Havird  
South Carolina Consultant / Building Inspector License #00258



## TABLE OF CONTENTS

<i>Executive Summary</i>	<i>Page 1</i>
<i>1.0 Introduction</i>	<i>Page 2</i>
<i>2.0 Buildings Descriptions</i>	<i>Page 2</i>
<i>3.0 Scope of the Asbestos Survey</i>	<i>Page 2</i>
<i>4.0 Results / Recommendations</i>	<i>Page 5</i>
<i>Warranty</i>	<i>Page 5</i>
<i>Figures</i>	<i>Appendix A</i>
<i>Asbestos Sample Summary Tables</i>	<i>Appendix B</i>
<i>Laboratory Results</i>	<i>Appendix C</i>
<i>DHEC Asbestos Renovation/Demolition Requirements</i>	<i>Appendix D</i>
<i>SCDHEC Consultant/Building Inspector License</i>	<i>Appendix E</i>
<i>Site Photographs</i>	<i>Appendix F</i>

## Executive Summary

This executive summary is intended as an overview for the convenience of the reader. The report should be reviewed in its entirety prior to making any decisions regarding this project.

ARM Environmental Services, Inc. (ARM) has conducted an asbestos survey of the Claflin University academic building located at 783 Goff Avenue in Orangeburg, South Carolina. The building is a one & a half-story structure, approximately 1,750 square feet in size and consists of wood construction built on a crawl space foundation. The purpose of this survey was to sample and identify suspect asbestos-containing materials (ACM) and provide information regarding the identity, location, condition and approximate quantities of ACM in both interior and exterior building components.

The survey was performed on April 10, 2024, by South Carolina Department of Health and Environmental Control (SCDHEC) licensed asbestos inspectors, in general accordance with the sampling protocols established in EPA 40 CFR 763 (Asbestos Hazard Emergency Response Act, AHERA) and the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. Fifty-two (52) bulk samples were collected from fifteen (15) homogeneous areas of suspect ACM.

Based on the results of laboratory analysis, the following materials were confirmed, or assumed to contain asbestos at a concentration greater than one percent (>1%):

- **Narrow Brick Pattern Vinyl Sheet Flooring (1<sup>st</sup> Floor Closet) ~ 12 SF**
- **White Ceiling Texture (Ceilings Throughout) ~1,750 SF**
- **Wide Brick Pattern Vinyl Sheet Flooring (Rooms 8 & 9) ~ 180 SF**
- **Window Caulk (Exterior) ~ 384 LF/24 Windows**
- **Chimney Mastic (Roof) ~20 LF**

In the event of future disturbance of these asbestos containing materials, there is the potential for concentrations of asbestos fibers to be released into the air. State and Federal regulations require the removal of asbestos-containing materials prior to any disturbance caused by renovation or demolition. It is recommended that the removal of any ACMs be conducted by a licensed Asbestos Abatement Contractor. **In the event that any suspect ACM, which was not addressed in this survey is encountered, the material/component should be presumed to contain asbestos until analysis can be conducted.**

## **1.0 Introduction**

On April 10, 2024, ARM conducted an asbestos survey of the Claflin University academic building located at 783 Goff Avenue in Orangeburg, South Carolina. The survey was done by South Carolina Department of Health and Environmental Control (SCDHEC) licensed building inspectors in general accordance with our proposal dated April 8, 2024.

Suspect ACM was sampled in general accordance with the sampling protocols outlined in EPA Regulation 40 CFR 763 Subpart E763.86 (Asbestos Hazard Emergency Response Act, AHERA) and SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. Interior and exterior building components were surveyed and homogeneous areas of suspect ACM were visually identified and documented. Although reasonable effort was made to survey accessible suspect materials, additional suspect but un-sampled materials could be located in walls, in voids or in other concealed areas. Samples were sent by overnight courier to an accredited laboratory for analysis by Polarized Light Microscopy (PLM) and Transmission Electron Microscopy (TEM), as required.

## **2.0 Building Description**

Interior Materials – Interior building materials include sheetrock walls, textured sheetrock ceilings, plaster, vinyl sheet flooring, vinyl floor tile and vinyl plank flooring.

Exterior Materials – The exterior of the building consists of wood siding, brick, a pitched shingled roof, wood and vinyl windows and wood doors. The structure is approximately 1,750 square feet in size and is built on a crawl space foundation.

## **3.0 Scope of Asbestos Survey**

The asbestos survey was conducted by Robbie Robertson; SCDHEC licensed Asbestos Building Inspector (License No. BI-01179, exp. 10/9/24) and Charlie Carter; SCDHEC Licensed Asbestos Building Inspector (License No. BI-002139, exp. 11/7/24). The survey was conducted on April 10, 2024, in general accordance with the sampling protocols established by EPA Regulation 40 CFR 763 Subpart E 763.86, AHERA and SCDHEC R61-86.1. A summary of survey activities is provided below. Site photographs taken during the survey are included as Appendix F.

### **3.1 Regulatory Overview**

An ACM is defined by SCDHEC as any material containing asbestos of any type in an amount greater than one percent (1%). The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to

demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packing materials, gaskets, resilient floor coverings and asphalt roofing products containing more than 1 percent (%) asbestos. Category II non-friable ACM are non-friable materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation/demolition activities are considered regulated ACM (RACM). RACM must be removed prior to renovation or demolition activities.

In the state of South Carolina, asbestos activities are regulated by the SCDHEC under the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. SCDHEC requires that any asbestos-related activity conducted in a public building be performed by personnel licensed by the SCDHEC. The owner or operator must provide SCDHEC with written notification of planned abatement and removal activities prior to the commencement of those activities. SCDHEC typically requires 4-day notification for non-friable projects and 10-day notification for RACM projects. Asbestos abatement must be performed by SCDHEC-licensed asbestos abatement contractors. A SCDHEC-licensed Project Designer shall prepare a written abatement design for each abatement renovation project involving the removal of greater than 3,000 square, 1,500 linear, or 656 cubic feet of RACM. Third-party air monitoring is typically required during the abatement of friable (regulated) ACM. The SCDHEC asbestos regulations can be found at [http://www.scdhec.gov/environment/baq/Asbestos/asbestos\\_regulations.asp](http://www.scdhec.gov/environment/baq/Asbestos/asbestos_regulations.asp). The Occupational Safety and Health Administration (OSHA) Asbestos Standard for Construction Industry (29 CFR 1926.1101) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc).

The OSHA standard classifies construction and maintenance activities, which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work. A full copy of the OSHA asbestos standard for general industry may be found at OSHA's website ([www.osha.gov](http://www.osha.gov)) and should be referenced for specific information.

### **3.2 Visual Assessment**

The survey began with a visual observation of the interior and exterior of the subject building to identify apparent homogeneous areas of suspect ACM. A homogeneous area consists of building materials, which appear similar throughout in terms of color, texture and date of application. Building materials which were not identified as concrete, glass, wood, masonry, metal or rubber were considered suspect ACM.

ARM lifted floor coverings in several areas, where possible, and did not observe additional flooring layers unless mentioned in this report. However, as ARM could not assess beneath all floor covering in all areas, there may be isolated areas of additional suspect material present beneath existing flooring.

### **3.3 Physical Assessment**

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the EPA as a material, which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

### **3.4 Sample Collection**

Based on the results of the visual sampling, bulk samples of suspect ACM were collected in general accordance with AHERA sample collection protocols. Random samples of suspect materials were collected in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. The selection of sample locations and frequency of sampling was based on ARM's observations and the assumption that like materials in the same area are homogeneous in content.

Fifty-two (52) bulk samples were collected from fifteen (15) homogeneous areas of suspect ACM in the building. Sample locations are depicted on Figures 1-2, which are included as Appendix A.

### **3.5 Sample Analysis**

Bulk samples were submitted under chain of custody to Scientific Analytical Institute of Greensboro, North Carolina for analysis by Polarized Light Microscopy (PLM) with dispersion staining techniques per EPA/600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Scientific Analytical Institute is accredited under the National Voluntary Laboratory Accreditation Program NVLAP (#200664-0). If applicable, layered analysis of samples was conducted by the lab to separate the tile and mastic, plaster base coat and finish, layers of vinyl sheet flooring, cove base & mastic, and the drywall and joint compound.

Per the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects, negative results for non-friable organically bound (NOB) materials such as flooring and roofing were verified with at least one Transmission Electron Microscopy (TEM) analysis. The additional analysis was performed by TEM in accordance with EPA/600/R-93/116 Section 2.5.5.1.

Asbestos Sample Summary Tables of the suspect ACM samples collected during this assessment are included as Appendix B. The complete laboratory analytical results are included as Appendix C.

#### **4.0 Results / Recommendations**

Based on the results of laboratory analyses, the following materials tested positive, or are assumed positive for asbestos at a concentration >1%:

Regulated Asbestos Containing Materials (RACM) – The following regulated asbestos containing material was identified during this asbestos survey;

- **White Ceiling Texture (Ceilings Throughout) ~1,750 SF**

Non-Friable Category I Asbestos Containing Materials – Category I non-friable ACM identified during this asbestos survey is listed below.

- **Narrow Brick Pattern Vinyl Sheet Flooring (1<sup>st</sup>. Floor Closet) ~ 12 SF**
- **Wide Brick Pattern Vinyl Sheet Flooring (Rooms 8 & 9) ~ 180 SF**
- **Window Caulk (Exterior) ~ 384 LF/24 Windows**
- **Chimney Mastic (Roof) ~20 LF**

In the event of future disturbance of these asbestos containing materials, there is the potential for concentrations of asbestos fibers to be released into the air. State and Federal regulations require the removal of asbestos-containing materials prior to any disturbance caused by renovation or demolition. It is recommended that the removal of any ACMs be conducted by a licensed Asbestos Abatement Contractor.

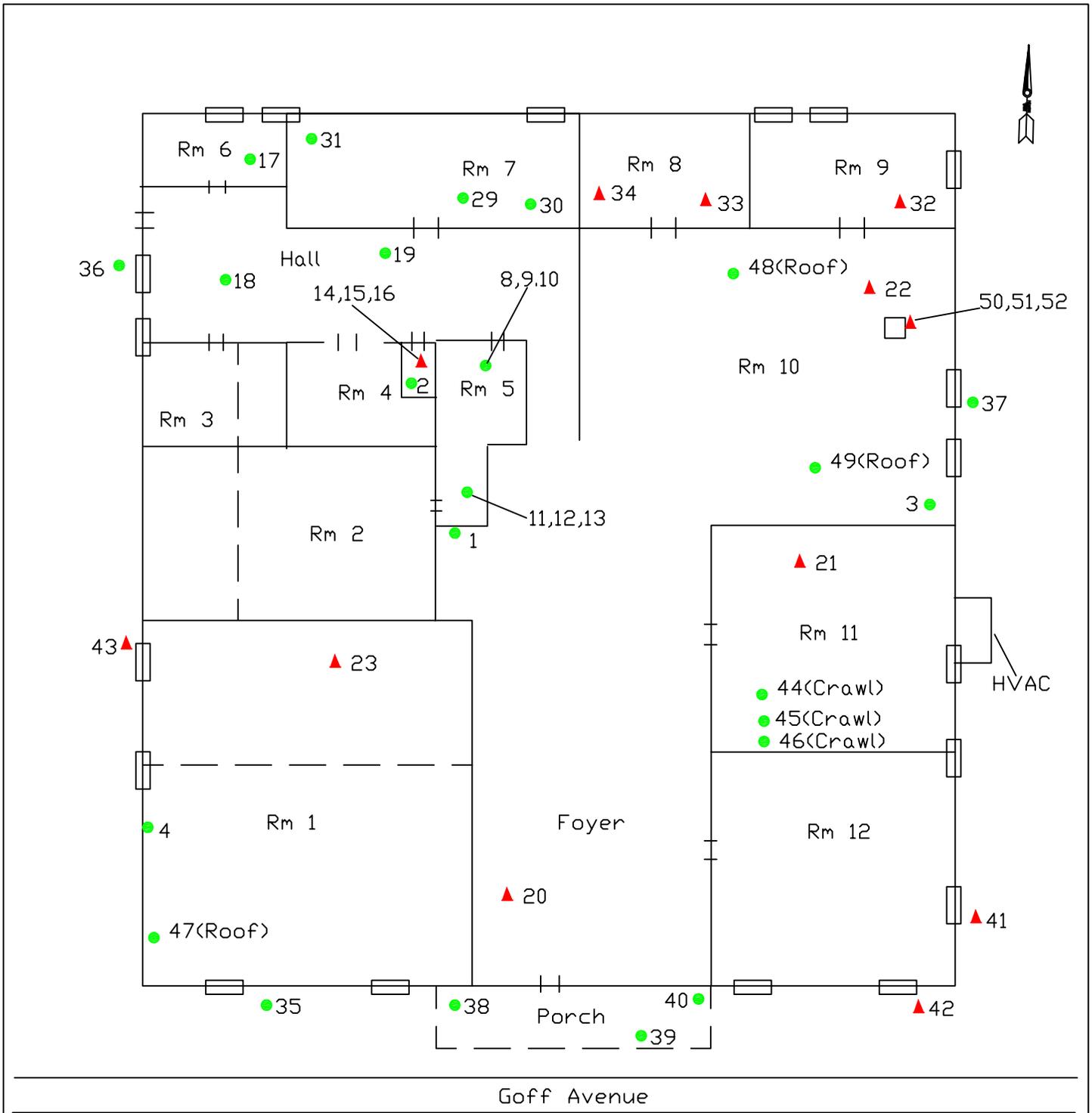
**In the event that any suspect ACM, which was not addressed in this survey is encountered, the material/component should be presumed to contain asbestos until analysis can be conducted.**

#### **Warranty**

ARM warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report. The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect lead-based coated materials at the time of the inspection. Test results are valid only for the materials tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of study or which were not apparent during the site visit. This inspection covered only those materials, which were exposed and/or accessible to the inspector. No other warranties are implied or expressed.

## **APPENDIX A**

### **Figures**



*PROJECT:*  
 Asbestos Survey  
 Clafin University  
 783 Goff Avenue  
 Orangeburg, South Carolina  
 ARM Project #09-7019-24

*DESCRIPTION:*  
 1st Floor Plan  
 Showing Sample  
 Locations  
 (Map Not To Scale)

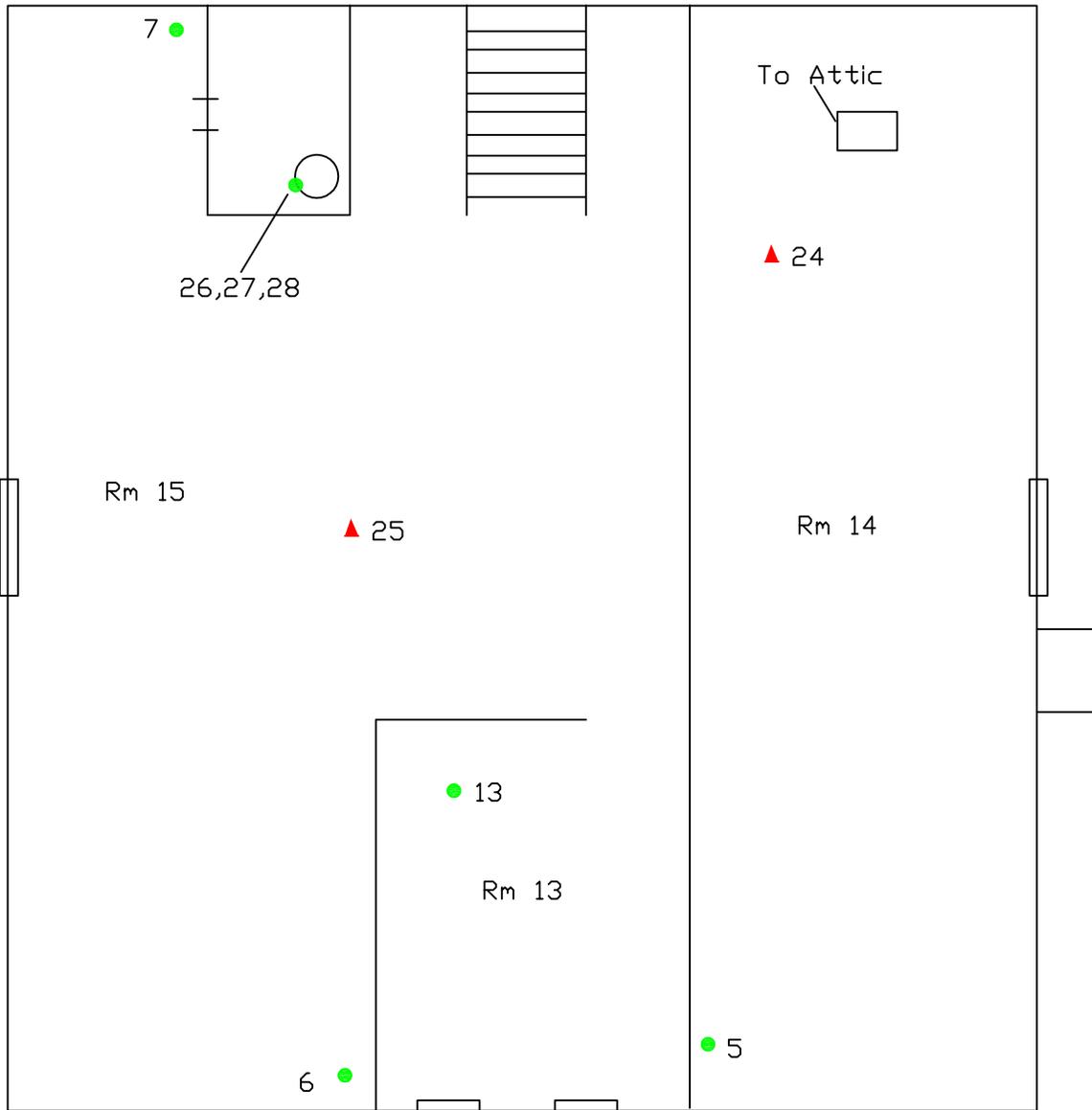
**FIGURE 1**

*DATE:*  
 April 2024



*REFERENCE:*  
 Field Notes

*LEGEND:*  
 Negative Asbestos Sample = ●  
 Positive Asbestos Sample = ▲



Goff Avenue

*PROJECT:*

Asbestos Survey  
 Clafin University  
 783 Goff Avenue  
 Orangeburg, South Carolina  
 ARM Project #09-7019-24

*DESCRIPTION:*

2nd Floor Plan  
 Showing Sample  
 Locations  
 (Map Not To Scale)

**FIGURE 2**

*DATE:*

April 2024



*REFERENCE:*

Field Notes

*LEGEND:*

Negative  
 Asbestos Sample = ●  
 Positive  
 Asbestos Sample = ▲

## **APPENDIX B**

### **Asbestos Sample Summary Tables**

**Table 1 - Asbestos Sample Summary**  
**783 Goff Avenue/ Orangeburg, South Carolina**  
**ARM Project # 09-7019-24**

HA	Approx. Quantity (ft <sup>2</sup> )	Sample Number	Description	Material Location	Lab Result	Category	Present Condition
HA-1	6,200 SF	1	Drywall & joint compound	Throughout	NAD-PLM	Misc., SM	Good/F
		2	Drywall & joint compound	Throughout	NAD-PLM	Misc., SM	Good/F
		3	Drywall & joint compound	Throughout	NAD-PLM	Misc., SM	Good/F
		4	Joint compound only	Throughout	NAD-PLM	SM	Good/F
		5	Joint compound only	Throughout	NAD-PLM	SM	Good/F
		6	Joint compound only	Throughout	NAD-PLM	SM	Good/F
		7	Joint compound only	Throughout	NAD-PLM	SM	Good/F
HA-2	70 SF	8	White 12x12 vinyl floor tile & mastic	Rm. 5	NAD-PLM	Misc.	Good/NF
		9	White 12x12 vinyl floor tile & mastic	Rm. 5	NAD-PLM	Misc.	Good/NF
		10	White 12x12 vinyl floor tile & mastic	Rm. 5	NAD-TEM	Misc.	Good/NF
HA-3	435 SF	11	Beige vinyl sheet flooring & mastic	Closet by stairs (1st Fl.)	NAD-PLM	Misc.	Good/NF
		12	Beige vinyl sheet flooring & mastic	Closet by stairs (1st Fl.)	NAD-PLM	Misc.	Good/NF
		13	Beige vinyl sheet flooring & mastic	Closet by stairs (1st Fl.)	NAD-TEM	Misc.	Good/NF
HA-4	12 SF	14	Narrow brick pattern vinyl sheet flooring & mastic	Closet (1st Fl.)	40% Chrysotile asbestos	Misc.	Good/NF
		15	Narrow brick pattern vinyl sheet flooring & mastic	Closet (1st Fl.)	Positive Stop	Misc.	Good/NF
		16	Narrow brick pattern vinyl sheet flooring & mastic	Closet (1st Fl.)	Positive Stop	Misc.	Good/NF
HA-5	190 SF	17	Brown vinyl plank flooring	Open Hall	NAD-PLM	Misc.	Good/NF
		18	Brown vinyl plank flooring	Open Hall	NAD-PLM	Misc.	Good/NF
		19	Brown vinyl plank flooring	Open Hall	NAD-TEM	Misc.	Good/NF
HA-6	1,750 SF	20	White ceiling texture	Throughout	5% Chrysotile asbestos	SM	Good/F
		21	White ceiling texture	Throughout	Positive Stop	SM	Good/F
		22	White ceiling texture	Throughout	Positive Stop	SM	Good/F
		23	White ceiling texture	Throughout	Positive Stop	SM	Good/F
		24	White ceiling texture	Throughout	Positive Stop	SM	Good/F
HA-7	150 SF	26	Plaster material	Closet (2nd Fl.)	NAD-PLM	SM	Good/F
		27	Plaster material	Closet (2nd Fl.)	NAD-PLM	SM	Good/F
		28	Plaster material	Closet (2nd Fl.)	NAD-PLM	SM	Good/F
HA-8	72 SF	29	Brown vinyl sheet flooring & mastic	Rm. 7	NAD-PLM	Misc.	Good/NF
		30	Brown vinyl sheet flooring & mastic	Rm. 7	NAD-PLM	Misc.	Good/NF
		31	Brown vinyl sheet flooring & mastic	Rm. 7	NAD-TEM	Misc.	Good/NF

**HA** - Homogeneous Area    **NAD** - No Asbestos Detected    **PLM** - Polarized Light Microscopy    **Chry** - Chrysotile asbestos    **Misc** - Miscellaneous Material  
**TEM** = Transmission Electron Microscopy    **SM** - Surfacing Material    **Cat I** - asbestos containing packings, gaskets, asphaltic roofing products, resilient flooring, pliable mastics  
**LF** - Linear Feet    **VFT** - Vinyl Floor Tile    **F**-Friable    **NF**- Non-Friable    **G** - Good (very localized limited damage)    **D** - Damaged (Damage of less than 10% distributed & less than 25% localized)  
**SF** - Square Feet    **SD** - Significantly damaged (damage equal to or greater than 10% distributed/25% localized)

**Table 1 - Asbestos Sample Summary**  
**783 Goff Avenue/ Orangeburg, South Carolina**  
**ARM Project # 09-7019-24**

HA	Approx. Quantity (ft <sup>2</sup> )	Sample Number	Description	Material Location	Lab Result	Category	Present Condition
HA-9	180 SF	32	Wide brick pattern vinyl sheet flooring & mastic	Rm. 8 & 9 (beneath carpet)	40% Chrysotile asbestos	Misc.	Good/NF
		33	Wide brick pattern vinyl sheet flooring & mastic	Rm. 8 & 9 (beneath carpet)	Positive Stop	Misc.	Good/NF
		34	Wide brick pattern vinyl sheet flooring & mastic	Rm. 8 & 9 (beneath carpet)	Positive Stop	Misc.	Good/NF
HA-10	480 LF (24 Windows)	35	Window glazing	Exterior	NAD-PLM	Misc.	Good/NF
		36	Window glazing	Exterior	NAD-PLM	Misc.	Good/NF
		37	Window glazing	Exterior	.095% Anthophyllite	Misc.	Good/NF
HA-11	50 LF	38	Cove base mastic	Porch	NAD-PLM	Misc.	Good/NF
		39	Cove base mastic	Porch	NAD-PLM	Misc.	Good/NF
		40	Cove base mastic	Porch	NAD-TEM	Misc.	Good/NF
HA-12	384 LF (24 Windows)	41	Window caulk	Exterior	5% Chrysotile asbestos	Misc.	Good/NF
		42	Window caulk	Exterior	Positive Stop	Misc.	Good/NF
		43	Window caulk	Exterior	Positive Stop	Misc.	Good/NF
HA-13	60 LF	44	White duct mastic	Crawl space	NAD-PLM	Misc.	Good/NF
		45	White duct mastic	Crawl space	NAD-PLM	Misc.	Good/NF
		46	White duct mastic	Crawl space	NAD-TEM	Misc.	Good/NF
HA-14	1,900 SF	47	Shingles & felt	Roof	NAD-PLM	Misc.	Good/NF
		48	Shingles & felt	Roof	NAD-PLM	Misc.	Good/NF
		49	Shingles & felt	Roof	NAD-TEM	Misc.	Good/NF
HA-15	20 LF	50	Chimney mastic	Roof	5% Chrysotile asbestos	Misc.	Good/NF
		51	Chimney mastic	Roof	Positive Stop	Misc.	Good/NF
		52	Chimney mastic	Roof	Positive Stop	Misc.	Good/NF

**HA** - Homogeneous Area    **NAD** - No Asbestos Detected    **PLM** - Polarized Light Microscopy    **Chry** - Chrysotile asbestos    **Misc** - Miscellaneous Material  
**TEM** = Transmission Electron Microscopy    **SM** - Surfacing Material    **Cat I** - asbestos containing packings, gaskets, asphaltic roofing products, resilient flooring, pliable mastics  
**LF** - Linear Feet    **VFT** - Vinyl Floor Tile    **F**-Friable    **NF**- Non-Friable    **G** - Good (very localized limited damage)    **D** - Damaged (Damage of less than 10% distributed & less than 25% localized)  
**SF** - Square Feet    **SD** - Significantly damaged (damage equal to or greater than 10% distributed/25% localized)

## **APPENDIX C**

### **Analytical Data**



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
1 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0001	<i>drywall</i>				Crushed
1 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0053	<i>joint compound</i>				Crushed
2 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0002	<i>drywall</i>				Crushed
2 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0054	<i>joint compound</i>				Crushed
3 - A	Drywall & joint compound	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048509_0003	<i>drywall</i>				Crushed
3 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0055	<i>joint compound</i>				Crushed
4 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0004	<i>drywall</i>				Crushed
4 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0056	<i>joint compound</i>				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
5 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0005	<i>drywall</i>				Crushed
5 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0057	<i>joint compound</i>				Crushed
6 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0006	<i>drywall</i>				Crushed
6 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0058	<i>joint compound</i>				Crushed
7 - A	Drywall & joint compound	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0007	<i>drywall</i>				Crushed
7 - B	Drywall & joint compound	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0059	<i>joint compound</i>				Crushed
8 - A	White 12x12 vinyl floor tile & mastic	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0008	<i>tile</i>				Crushed
8 - B	White 12x12 vinyl floor tile & mastic	None Detected		100% Other	Yellow Non-Fibrous Homogeneous
10048509_0060	<i>mastic</i>				Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
9 - A	White 12x12 vinyl floor tile & mastic	None Detected		100% Other	White Non-Fibrous Homogeneous
10048509_0009	tile				Crushed
9 - B	White 12x12 vinyl floor tile & mastic	None Detected		100% Other	Yellow Non-Fibrous Homogeneous
10048509_0061	mastic				Ashed
10 - A	White 12x12 vinyl floor tile & mastic	Not Analyzed			
10048509_0010	tile - TEM				
10 - B	White 12x12 vinyl floor tile & mastic	Not Analyzed			
10048509_0062	mastic - TEM				
11 - A	Beige vinyl sheet flooring & mastic	None Detected	40% Cellulose	60% Other	Beige Non-Fibrous Homogeneous
10048509_0011	vinyl sheet flooring				Ashed
11 - B	Beige vinyl sheet flooring & mastic	None Detected		100% Other	Beige Non-Fibrous Homogeneous
10048509_0063	mastic				Ashed
12 - A	Beige vinyl sheet flooring & mastic	None Detected	40% Cellulose	60% Other	Beige Non-Fibrous Homogeneous
10048509_0012	vinyl sheet flooring				Ashed
12 - B	Beige vinyl sheet flooring & mastic	None Detected		100% Other	Beige Non-Fibrous Homogeneous
10048509_0064	mastic				Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
13 - A	Beige vinyl sheet flooring & mastic	Not Analyzed			
10048509_0013	vinyl sheet flooring - TEM				
13 - B	Beige vinyl sheet flooring & mastic	Not Analyzed			
10048509_0065	mastic - TEM				
14	Small brick pattern vinyl sheet flooring & mastic	40% Chrysotile		60% Other	Beige, Tan Non-Fibrous Homogeneous
10048509_0014	vinyl sheet flooring w/ inseparable mastic				Ashed
15	Small brick pattern vinyl sheet flooring & mastic	Not Analyzed			
10048509_0015	vinyl sheet flooring w/ inseparable mastic				
16	Small brick pattern vinyl sheet flooring & mastic	Not Analyzed			
10048509_0016	vinyl sheet flooring w/ inseparable mastic				
17	Brown LVP flooring only	None Detected		100% Other	Beige, Brown Non-Fibrous Homogeneous
10048509_0017					Ashed
18	Brown LVP flooring only	None Detected		100% Other	Brown, Beige Non-Fibrous Homogeneous
10048509_0018					Ashed
19	Brown LVP flooring only	Not Analyzed			
10048509_0019	TEM				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

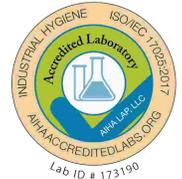
Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
20	White ceiling texture	5% Chrysotile		95% Other	Beige Non-Fibrous Heterogeneous
10048509_0020					Crushed, Dissolved
21	White ceiling texture	Not Analyzed			
10048509_0021					
22	White ceiling texture	Not Analyzed			
10048509_0022					
23	White ceiling texture	Not Analyzed			
10048509_0023					
24	White ceiling texture	Not Analyzed			
10048509_0024					
25	White ceiling texture	Not Analyzed			
10048509_0025					
26	Plaster material	None Detected		100% Other	Beige, Gray Non-Fibrous Heterogeneous
10048509_0026					Crushed
27	Plaster material	None Detected		100% Other	Beige Non-Fibrous Heterogeneous
10048509_0027					Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
28	Plaster material	None Detected		100% Other	Gray, Beige Non-Fibrous Heterogeneous
10048509_0028					Crushed
29 - A	Brown vinyl sheet flooring & mastic	None Detected	40% Cellulose	60% Other	Beige Non-Fibrous Homogeneous
10048509_0029	vinyl sheet flooring				Ashed
29 - B	Brown vinyl sheet flooring & mastic	None Detected		100% Other	Beige, Tan Non-Fibrous Homogeneous
10048509_0066	mastic				Ashed
30 - A	Brown vinyl sheet flooring & mastic	None Detected	40% Cellulose	60% Other	Beige Non-Fibrous Homogeneous
10048509_0030	vinyl sheet flooring				Ashed
30 - B	Brown vinyl sheet flooring & mastic	None Detected		100% Other	Tan, Beige Non-Fibrous Homogeneous
10048509_0067	mastic				Ashed
31 - A	Brown vinyl sheet flooring & mastic	Not Analyzed			
10048509_0031	vinyl sheet flooring - TEM				
31 - B	Brown vinyl sheet flooring & mastic	Not Analyzed			
10048509_0068	mastic - TEM				
32	Large brick pattern vinyl sheet flooring & mastic	40% Chrysotile		60% Other	Beige Non-Fibrous Homogeneous
10048509_0032	vinyl sheet flooring w/ inseparable mastic				Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
33	Large brick pattern vinyl sheet flooring & mastic	Not Analyzed			
10048509_0033	vinyl sheet flooring w/ inseparable mastic				
34	Large brick pattern vinyl sheet flooring & mastic	Not Analyzed			
10048509_0034	vinyl sheet flooring w/ inseparable mastic				
35	Window glazing	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0035					Crushed, Dissolved
36	Window glazing	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0036					Crushed, Dissolved
37	Window glazing	Not Analyzed			
10048509_0037	TEM				
38	Cove base mastic	None Detected		100% Other	Beige Non-Fibrous Homogeneous
10048509_0038					Ashed
39	Cove base mastic	None Detected		100% Other	Beige Non-Fibrous Homogeneous
10048509_0039					Ashed
40	Cove base mastic	Not Analyzed			
10048509_0040	TEM				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
41	Window caulk	5% Chrysotile		95% Other	Tan Non-Fibrous Homogeneous
10048509_0041					Ashed, Crushed
42	Window caulk	Not Analyzed			
10048509_0042					
43	Window caulk	Not Analyzed			
10048509_0043					
44	White duct mastic only	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0044					Ashed
45	White duct mastic only	None Detected		100% Other	Off-white Non-Fibrous Homogeneous
10048509_0045					Ashed
46	White duct mastic only	Not Analyzed			
10048509_0046	TEM				
47 - A	Shingles & felt	None Detected	25% Fiber Glass	75% Other	Black Non-Fibrous Heterogeneous
10048509_0047	shingle				Dissolved, Crushed
47 - B	Shingles & felt	None Detected	90% Cellulose	10% Other	Brown, Black Fibrous Homogeneous
10048509_0069	felt				Teased, Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Robbie Robertson  
 Christy Smith

**Lab Order ID:** 10048509

**Analysis:** PLM

**Date Received:** 04/11/2024

**Date Reported:** 04/12/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
48 - A	Shingles & felt	None Detected	25% Fiber Glass	75% Other	Black Non-Fibrous Heterogeneous
10048509_0048	shingle				Dissolved, Crushed
48 - B	Shingles & felt	None Detected	90% Cellulose	10% Other	Black Fibrous Homogeneous
10048509_0070	felt				Teased, Dissolved
49 - A	Shingles & felt	Not Analyzed			
10048509_0049	shingle - TEM				
49 - B	Shingles & felt	Not Analyzed			
10048509_0071	felt - TEM				
50	Chimney mastic	5% Chrysotile		95% Other	Black Non-Fibrous Heterogeneous
10048509_0050					Dissolved
51	Chimney mastic	Not Analyzed			
10048509_0051					
53	Chimney mastic	Not Analyzed			
10048509_0052					

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Lachlan Krenz (71)

Analyst

Approved Signatory



# Bulk Asbestos Analysis by Transmission Electron Microscopy

Semi-Quantitative  
Chatfield SOP 1988-02 Rev. 1

**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Robbie Robertson  
Christy Smith

**Lab Order ID:** 10048509

**Analysis:** TBS

**Date Received:** 04/12/2024

**Date Reported:** 04/15/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Organic ( Wt % )	Acid Soluble ( Wt. % )	Asbestos ( Wt % )		LCL-UCL ( Wt. % )
Lab Sample ID	Lab Notes					
10 - A	White 12x12 vinyl floor tile & mastic	18%	82%	None Detected		
10048509_0010	tile					
10 - B	White 12x12 vinyl floor tile & mastic	41%	0%	None Detected		
10048509_0062	mastic					
13 - A	Beige vinyl sheet flooring & mastic	56%	0%	None Detected		
10048509_0013	flooring					
13 - B	Beige vinyl sheet flooring & mastic	42%	0%	None Detected		
10048509_0065	mastic					
19	Brown LVP flooring only	49%	0%	None Detected		
10048509_0019						
31 - A	Brown vinyl sheet flooring & mastic	58%	0%	None Detected		
10048509_0031	flooring					
31 - B	Brown vinyl sheet flooring & mastic	42%	0%	None Detected		
10048509_0068	mastic					
37	Window glazing	19%	71%	0.095%	Anthophyllite	0.086 - 0.10%
10048509_0037						

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

Daniel Schwartz (12)

Analyst

Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888



# Bulk Asbestos Analysis by Transmission Electron Microscopy

Semi-Quantitative  
Chatfield SOP 1988-02 Rev. 1

**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Robbie Robertson  
Christy Smith

**Lab Order ID:** 10048509

**Analysis:** TBS

**Date Received:** 04/12/2024

**Date Reported:** 04/15/2024

**Project:** Claflin- 783 Goff Ave, Orangeburg SC

Sample ID	Description	Organic ( Wt % )	Acid Soluble ( Wt. % )	Asbestos ( Wt % )	LCL-UCL ( Wt. % )
Lab Sample ID	Lab Notes				
40	Cove base mastic	49%	0%	None Detected	
10048509_0040					
46	White duct mastic only	55%	0%	None Detected	
10048509_0046					
49 - A	Shingles & felt	27%	0%	None Detected	
10048509_0049	shingle				
49 - B	Shingles & felt	94%	0%	None Detected	
10048509_0071	felt				

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

Daniel Schwartz (12)

Analyst

Approved Signatory

10048509

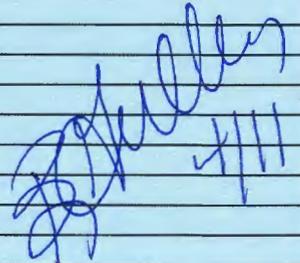
**Client:** ARM  
**Contact:** Robbie Robertson  
**Address:** 1210 First Street South Columbia SC  
**Cell Phone:** 803-260-2722  
**Office Phone:** 803-783-3314  
**Email:** rrobertson@armenv.com  
                   csmith@armenv.com  
  
**Project:** Claflin- 783 Goff Ave, Orangeburg SC  
  
**Client Notes:** Run PLM first, if less than 1% run  
                   TEM confirmation on all NOB materials  
  
**P.O. #:** RR- 09-7019-24  
**Date Submitted:** 4/10/2024 0:00  
**Date Sampled:** 4/10/2024 0:00  
**Analysis:** PLM-EPA 600; TEM-Bulk Chatfield  
**TurnAroundTime:** 24 HR TAT, \*\*Positive Stop\*\*

**\*Instructions:**  
 Use Column "B" for your contact info  
  
 To See an Example Click the  
 bottom Example Tab.  
  
**Enter samples between "<<" and ">>"**  
**Begin Samples with a "<<" above the first sample**  
**and end with a ">>" below the last sample.**  
**Only Enter your data on the first sheet "Sheet1"**  
  
*Note: Data 1 and Data 2 are optional*  
*fields that do not show up on the official*  
*report, however they will be included*  
*in the electronic data returned to you*  
*to facilitate your reintegration of the report data.*

**Scientific Analytical Institute**  
  
**4604 Dundas Drive**  
**Greensboro, NC 27407**  
**Phone: 336.292.3888**  
**Fax: 336.292.3313**  
**Email: lab@sailab.com**

Sample Number	Data 1	Sample Description	Data 2
<<			
1	PLM	Drywall & joint compound	
2	PLM	Drywall & joint compound	
3	PLM	Drywall & joint compound	
4	PLM	Drywall & joint compound	
5	PLM	Drywall & joint compound	
6	PLM	Drywall & joint compound	
7	PLM	Drywall & joint compound	
8	PLM	White 12x12 vinyl floor tile & mastic	
9	PLM	White 12x12 vinyl floor tile & mastic	
10	TEM	White 12x12 vinyl floor tile & mastic	
11	PLM	Beige vinyl sheet flooring & mastic	
12	PLM	Beige vinyl sheet flooring & mastic	
13	TEM	Beige vinyl sheet flooring & mastic	
14	PLM	Small brick pattern vinyl sheet flooring & mastic	
15	PLM	Small brick pattern vinyl sheet flooring & mastic	
16	TEM	Small brick pattern vinyl sheet flooring & mastic	
17	PLM	Brown LVP flooring only	
18	PLM	Brown LVP flooring only	
19	TEM	Brown LVP flooring only	
20	PLM	White ceiling texture	
21	PLM	White ceiling texture	

Accepted   
 Rejected


Received By



## **APPENDIX D**

### **SCDHEC Renovation and Demolition Guidelines**

## Q. Am I required to submit notification of all renovation projects?

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any renovation activity of a regulated facility/structure only if the scope of work contains asbestos.

(see chart below)

Project Type	Minimum Required Notification Period
<b>DEMOLITION</b>	10 Working Days
<b>NESHAP Removal (&gt; or = 160 SF, 260 LF, or 35 CF)</b>	10 Working Days
<b>SMALL Removal (&gt; 25 SF but &lt; 160 SF, 260 LF, or 35 CF)</b>	4 Working Days
<b>MINOR Removal (&lt; or = 25 SF)</b>	2 Working Days
<b>Non-Friable NESHAP-Sized Removal (non-friable &gt; or = 160 SF, 260 LF, or 35 CF)</b>	4 Working Days

## Q. How do I notify DHEC's Asbestos Section?

A. Get notification forms by calling or writing to:

S.C. DHEC Asbestos Section  
2600 Bull Street  
Columbia, SC 29201  
(803) 898-4289

DHEC's Asbestos Section will mail you the necessary forms and can answer any questions you may have.

The forms and additional information are also available to view and download from the DHEC Asbestos Section's website at:

[www.scdhec.gov/asbestos](http://www.scdhec.gov/asbestos)

*This brochure is a brief overview of South Carolina's asbestos regulations pertaining to demolition and renovation activities. Before owners or operators become involved in demolition and renovation activities, they are encouraged to contact the DHEC-Asbestos Section to make sure they understand the applicable regulations, accreditation and permitting requirements.*

# Renovation, Demolition & Asbestos

## What Building Owners & Contractors Should Know



S.C. Department of Health and  
Environmental Control

**Asbestos Section**  
803-898-4289



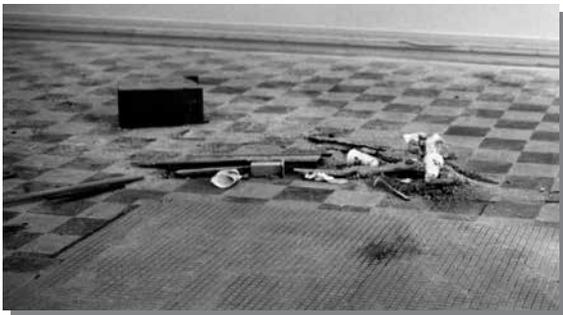
## What is Asbestos?

Asbestos is the common name for a group of naturally occurring minerals made up of long, thin fibers. Asbestos is very strong and resistant to stress or forces that might tear it apart. It's also heat resistant. Asbestos fibers can be toxic to humans if inhaled. Despite this, it can still be found in a number of building products, including:

- Heating system insulation
- Spray-applied insulation
- Vinyl floor tiles
- Vinyl sheet flooring
- Ceiling tiles
- Roofing paper and shingles
- Cement siding shingles
- Plaster and joint compound

*\*\*It is still possible to purchase new products that contain asbestos. \*\**

When materials that contain asbestos are disturbed during renovations or demolitions, people nearby may get the dangerous fibers in their lungs. So before beginning a building project that could disturb asbestos-containing materials, property owners need to know how to spot asbestos and ensure the safety of those working nearby.



## Frequently Asked Questions

### Q. What is demolition?

A. Demolition is the wrecking or removal of a regulated facility/structure's load-bearing structure(s). It also refers to related handling operations, the burning of a regulated facility, or moving of a regulated structure.

### Q. What is renovation?

A. It's altering all or part of a regulated facility/structure in any way (except demolition). Stripping or removing regulated asbestos-containing materials (RACM) from a regulated facility/structure is considered renovation.



### Q. What is a regulated facility?

- A.
- Any institutional, commercial, public, industrial, or residential structure, installation, or building (including condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units);
  - any bridge;
  - any ship;
  - any active or inactive waste disposal site; and

- any structure, installation or building that was previously subject to this requirement, regardless of its current use or function.

*Note:* Under this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building.

### Q. Do asbestos regulations require me to have my property inspected for asbestos?

A. S.C. DHEC Regulation 61-86.1 states that prior to any demolition or renovation at a regulated facility, a thorough inspection must be done to detect any asbestos-containing materials. The inspection must be carried out by a person licensed by DHEC's Asbestos Section as an asbestos building inspector.

If asbestos is found in an area that will be disturbed during renovation or repair work, it must be removed properly and disposed of at an approved landfill. DHEC's Asbestos Section keeps a list of South Carolina landfills that accept asbestos. These actions also must occur prior to any building demolition project. In most cases, asbestos removal and disposal activities must be performed by a licensed asbestos abatement contractor.

### Q. Am I required to submit notification of all demolition projects?

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any demolition of a regulated facility/structure regardless of the amount of asbestos present (and even when no asbestos is present).

## **APPENDIX E**

### **Inspector License**

# SCDHEC ISSUED

Asbestos ID Card

Robbie Robertson



CONSULTBI BI-01179  
SUPERAHERA SA-01861

Expiration Date:  
10/09/24  
10/08/24



1416 Chapin Road, Chapin, South Carolina 29036 803-345-3833

Robbie Robertson

SSN xxx-xx-3715

This is to certify that the above named student has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved:

## AHERA Asbestos Inspector Refresher

Course Location: Chapin SC

Certificate Number: 20231010Ab301-04

Start Date October 10, 2023

End Date October 10, 2023

Exam Date: October 10, 2023

Expiration Date October 9, 2024

Principal Instructor / Training Administrator - Lee Capell

10/10/2023

Date

SCDHEC ISSUED

Asbestos ID Card

Charlie Carter



CONSULTBI

BI-002139

Expiration Date:

11/06/24

# Greenville Technical College

PO Box 5616, 738 S. Pleasantburg Drive, Greenville, South Carolina 29606-5616 (864) 250-8800

CHARLIE F. CARTER, IV

1210 First St. South Ext., Columbia, SC 29209  
5557

*has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved*

## Asbestos Inspector Refresher Training Course

Greenville, SC

231 - EVT502 - 136

**Certificate Number**

November 7, 2023

**Course Date(s)**

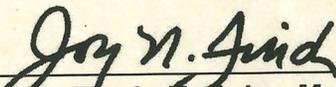
November 7, 2023

**Examination Date**

Attended and Satisfactorily Completed Course  
Exam with a Passing Score of 70% or Better



  
Jeff Gurrie, Principal Instructor

  
Joy N. Finch, Training Manager

November 7, 2024

**Expiration Date**

Approved for Remote Delivery

**SCDHEC ISSUED**  
Asbestos ID Card

Cyril O Havird Jr



CONSULTBI  
SUPERAHERA

BI-00258  
SA-003792

Expiration Date:  
10/09/24  
10/01/24



1416 Chapin Road, Chapin, South Carolina 29036 803-345-3833

Sid Havird

SSN xxx-xx-4506

This is to certify that the above named student has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved:

**AHERA Asbestos Inspector Refresher**

Course Location: Chapin SC

Certificate Number: 20231010Ab301-03

Start Date October 10, 2023

End Date October 10, 2023

Exam Date: October 10, 2023

Expiration Date October 9, 2024

Principal Instructor / Training Administrator - Lee Capell

10/10/2023

Date

## **APPENDIX F**

### **Site Photographs**



**Photograph 1** – This photo shows the subject building at 783 Goff Avenue in Orangeburg, SC where an Asbestos Survey was performed by ARM Environmental.



**Photograph 2** – A view from the rear of the subject building.



**Photograph 3** – The brick pattern vinyl sheet flooring shown here in a 1<sup>st</sup> floor closet contains 40% Chrysotile asbestos.



**Photograph 4** – This photo shows white ceiling texture throughout the subject building. This material contains 5% Chrysotile asbestos.



**Photograph 5** – The wide pattern vinyl sheet flooring shown here in Rooms 8 & 9 is beneath carpet and contains 40% Chrysotile asbestos.



**Photograph 6** – This photo shows mastic at the base of the chimney. This mastic contains 5% Chrysotile asbestos.

## Appendix F.2

Asbestos Survey  
Claflin University – Student Health Center  
100 Millwood Street  
Orangeburg, South Carolina



May 9, 2024  
Prepared For: Bill Kropff  
Claflin University  
400 Magnolia Street, Orangeburg, SC  
ARM Project No. 09-7018-24

Report Compiled By

Charlie Carter  
South Carolina Consultant / Building Inspector License #002139

Report Reviewed By

Sid Havird  
South Carolina Consultant / Building Inspector License #00258



## TABLE OF CONTENTS

<i>Executive Summary</i>	<i>Page 1</i>
<i>1.0 Introduction</i>	<i>Page 2</i>
<i>2.0 Buildings Descriptions</i>	<i>Page 2</i>
<i>3.0 Scope of the Asbestos Survey</i>	<i>Page 2</i>
<i>4.0 Results / Recommendations</i>	<i>Page 5</i>
<i>5.0 Warranty</i>	<i>Page 5</i>
<i>Figures</i>	<i>Appendix A</i>
<i>Asbestos Sample Summary Tables</i>	<i>Appendix B</i>
<i>Laboratory Results</i>	<i>Appendix C</i>
<i>SCDHEC Consultant/Building Inspector License</i>	<i>Appendix D</i>
<i>Site Photographs</i>	<i>Appendix E</i>

## ***Executive Summary***

This executive summary is intended as an overview for the convenience of the reader. The report should be reviewed in its entirety prior to making any decisions regarding this project.

ARM Environmental Services, Inc. (ARM) has conducted an asbestos survey of the Claflin University Student Health Center located at 100 Millwood Street in Orangeburg, South Carolina. This asbestos survey includes the interior and exterior building materials which are likely to be disturbed during demolition activities. The purpose of this survey was to sample and identify suspect asbestos-containing materials (ACM) and provide information regarding the identity, location, condition and approximate quantities of ACM in the interior and exterior building components.

The survey was performed on April 10, 2024, by a South Carolina Department of Health and Environmental Control (SCDHEC) licensed asbestos inspector in accordance with the sampling protocols established in EPA 40 CFR 763 (Asbestos Hazard Emergency Response Act, AHERA) and the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. Forty (40) total bulk samples were collected from twelve (12) homogeneous areas of suspect ACM.

**Based on the laboratory results, none of the building materials sampled contain asbestos.**

In the event that any suspect ACM, which was not addressed in this survey is encountered, the material / component should be presumed to contain asbestos until analysis can be conducted.

## 1.0 Introduction

ARM conducted an asbestos survey of the Claflin University Student Health Center located at 100 Millwood Street in Orangeburg, South Carolina. This asbestos survey includes the interior and exterior building materials which are likely to be disturbed during demolition activities. The survey was conducted on April 10, 2024, by a South Carolina Department of Health and Environmental Control (SCDHEC) licensed building inspector.

Suspect ACM was sampled in general accordance with the sampling protocols outlined in EPA Regulation 40 CFR 763 Subpart E763.86 (Asbestos Hazard Emergency Response Act, AHERA) and SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. Interior building components were surveyed and homogeneous areas of suspect ACM were visually identified and documented. Samples were sent by overnight courier to an accredited laboratory for analysis by Polarized Light Microscopy (PLM) and Transmission Electron Microscopy (TEM), as required.

## 2.0 Building Description

100 Millwood St. is a single-story, approximately 1,530 square foot medical office building. Interior building materials consist of drywall walls, a drop-down ceiling grid, and vinyl floor tiles over a concrete slab.

Exterior building materials consist of an exterior insulation and finish system (EIFS) over concrete masonry unit (CMU) walls, a pitched shingled roof, and metal framed windows and doors.

## 3.0 Scope of Asbestos Survey

The asbestos survey was conducted by Charlie Carter; SCDHEC Licensed Asbestos Building Inspector (License No. BI-002139, exp. 11/6/24), and Robbie Robertson; SCDHEC licensed Asbestos Building Inspector (License No. BI-01179, exp. 10/9/24). Mr. Carter and Mr. Robertson's Inspector's Licenses are included in Appendix E. The survey was conducted on April 10, 2024, in general accordance with the sampling protocols established by EPA Regulation 40 CFR 763 Subpart E 763.86, AHERA and SCDHEC R61-86.1. A summary of survey activities is provided below. Site photographs taken during the survey are included in Appendix F.

### 3.1 Regulatory Overview

An ACM is defined by SCDHEC as any material containing asbestos of any type in an amount greater than one percent (1%). The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also

requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packing materials, gaskets, resilient floor coverings and asphalt roofing products containing more than 1 percent (%) asbestos. Category II non-friable ACM are non-friable materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation/demolition activities are considered regulated ACM (RACM). RACM must be removed prior to renovation or demolition activities.

In the state of South Carolina, asbestos activities are regulated by the SCDHEC under the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. SCDHEC requires that any asbestos-related activity conducted in a public building be performed by personnel licensed by the SCDHEC. The owner or operator must provide SCDHEC with written notification of planned abatement and removal activities prior to the commencement of those activities. SCDHEC typically requires 4 day notification for non-friable projects and 10 day notification for RACM projects. Asbestos abatement must be performed by SCDHEC-licensed asbestos abatement contractors. A SCDHEC-licensed Project Designer shall prepare a written abatement design for each abatement renovation project involving the removal of greater than 3,000 square, 1,500 linear, or 656 cubic feet of RACM. Third-party air monitoring is typically required during the abatement of friable (regulated) ACM. The SCDHEC asbestos regulations can be found at [http://www.scdhec.gov/environment/baq/Asbestos/asbestos\\_regulations.asp](http://www.scdhec.gov/environment/baq/Asbestos/asbestos_regulations.asp). The Occupational Safety and Health Administration (OSHA) Asbestos Standard for Construction Industry (29 CFR 1926.1101) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc).

The OSHA standard classifies construction and maintenance activities, which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work. A full copy of the OSHA asbestos standard for general industry may be found at OSHA's website ([www.osha.gov](http://www.osha.gov)) and should be referenced for specific information.

### **3.2 Visual Assessment**

The survey began with a visual observation of the building at 100 Millwood Street to identify apparent homogeneous areas of suspect ACM. A homogeneous area consists of building materials, which appear similar throughout in terms of color, texture and date of

application. Building materials which were not identified as concrete, glass, wood, masonry, metal or rubber were considered suspect ACM.

ARM lifted floor coverings in several areas, where possible, and did not observe additional flooring layers unless mentioned in this report. However, as ARM could not assess beneath all floor covering in all areas, there may be isolated areas of additional suspect material present beneath existing flooring. A reasonable effort was made to survey accessible suspect materials but additional suspect un-sampled materials could be located in walls, in voids or in other concealed areas.

### **3.3 Physical Assessment**

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the EPA as a material, which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

### **3.4 Sample Collection**

Based on the results of the visual sampling, bulk samples of suspect ACM were collected in general accordance with AHERA sample collection protocols. Random samples of suspect materials were collected in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. The selection of sample locations and frequency of sampling was based on ARM's observations and the assumption that like materials in the same area are homogeneous in content.

Forty (40) total bulk samples were collected from twelve (12) homogeneous areas of suspect ACM in the building. Sample locations are depicted on the Figure 1 Floor Plan, which is included in Appendix A.

### **3.5 Sample Analysis**

Bulk samples were submitted under chain of custody to Scientific Analytical Institute of Greensboro, North Carolina for analysis by Polarized Light Microscopy (PLM) with dispersion staining techniques per EPA/600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Scientific Analytical Institute is accredited under the National Voluntary Laboratory Accreditation Program NVLAP (#200664-0). If applicable, layered analysis of samples was conducted by the lab to separate the tile and mastic, plaster base coat and finish, layers of vinyl sheet flooring, cove base & mastic, and the drywall and joint compound.

Per the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects, negative results for non-friable organically bound (NOB) materials such as flooring and roofing were verified with at least one Transmission Electron Microscopy (TEM) analysis. The additional analysis was performed by TEM in accordance with EPA/600/R-93/116 Section 2.5.5.1.

Asbestos Sample Summary Tables of the suspect ACM samples collected during this assessment are included in Appendix B. The complete laboratory analytical results are included in Appendix C.

## **4.0 Results / Recommendations**

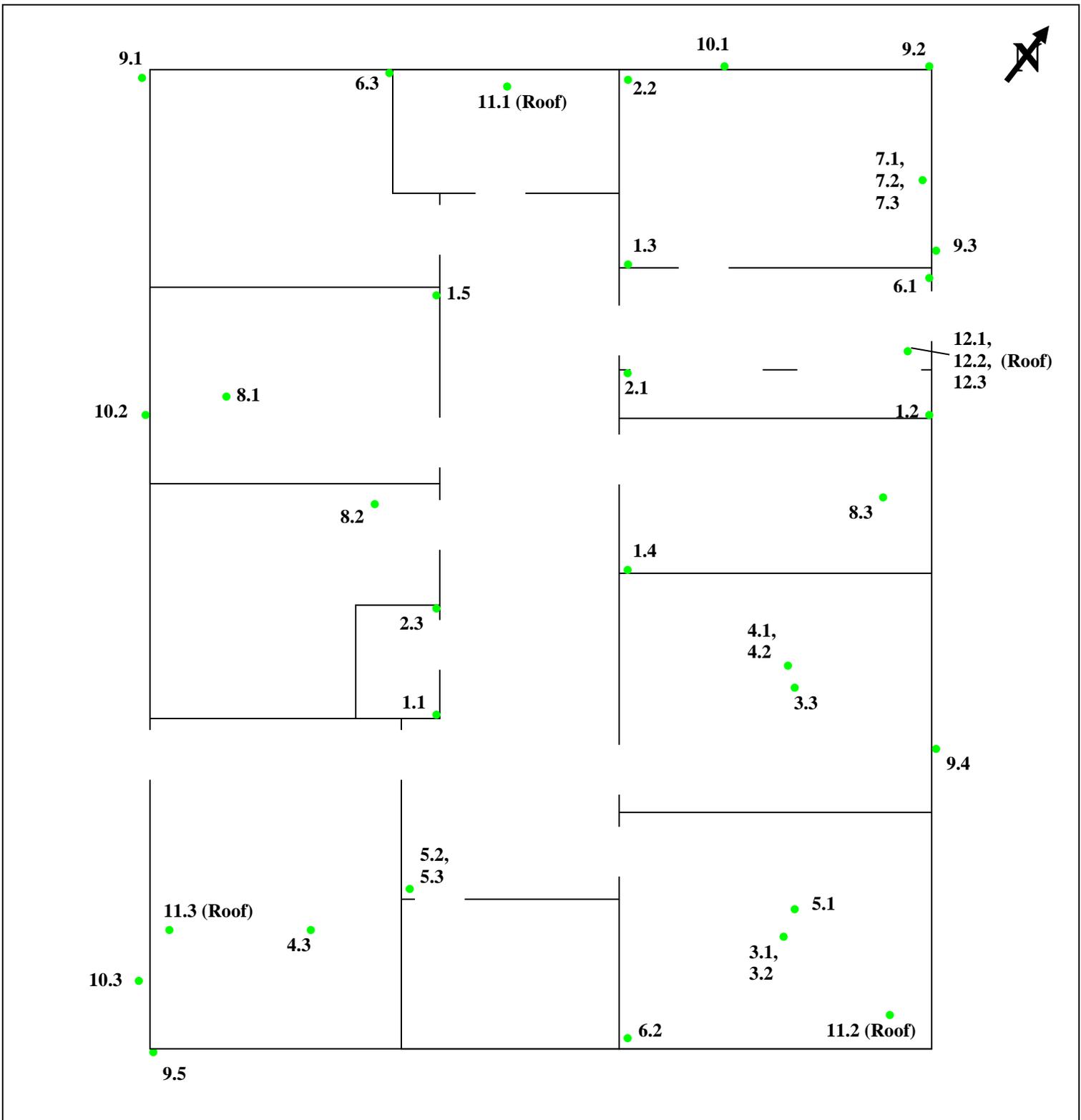
**Based on the laboratory results, none of the materials sampled contain asbestos.**

In the event that any suspect ACM, which was not addressed in this survey is encountered, the material / component should be presumed to contain asbestos until analysis can be conducted.

## **5.0 Warranty**

ARM warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report. The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect asbestos containing materials at the time of the inspection. Test results are valid only for the materials tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of study or which were not apparent during the site visit. This inspection covered only those materials, which were exposed and/or accessible to the inspector. No other warranties are implied or expressed.

**Appendix A**  
**Figures**



**Project**  
 Limited Asbestos Survey  
 Claflin University – Student Health Center  
 100 Millwood Street  
 Orangeburg, South Carolina  
 ARM Project #09-7018-24

**Figure 1**  
 Floor Plan Showing Sample Locations  
 ▲ = Positive Asbestos Sample  
 ● = Negative Asbestos Sample

**Scale**  
 Not to Scale

**Date**  
 May 2024



**APPENDIX B**  
**Asbestos Sample Summary Tables**

**Table 1 - Asbestos Sample Summary**  
**100 Millwood Street, Orangeburg, South Carolina**  
**ARM Project # 09-7018-24**

HA	Approx. Quantity (ft <sup>2</sup> )	Sample Number	Description	Material Location	Lab Result	Category	Present Condition
HA-1	3,825	1.1	Drywall & Joint Compound	Walls Throughout	NAD - PLM	Misc. / SM	G/F
		1.2	Drywall & Joint Compound	Walls Throughout	NAD - PLM	SM	G/F
		1.3	Drywall & Joint Compound	Walls Throughout	NAD - PLM	SM	G/F
		1.4	Joint Compound	Walls Throughout	NAD - PLM	SM	G/F
		1.5	Joint Compound	Walls Throughout	NAD - PLM	SM	G/F
HA-2	1,430	2.1	Gray 12"x12" VFT & Mastic	Floors Throughout	NAD - PLM	Misc.	G/NF
		2.2	Gray 12"x12" VFT & Mastic	Floors Throughout	NAD - PLM	Misc.	G/NF
		2.3	Gray 12"x12" VFT & Mastic	Floors Throughout	NAD - TEM	Misc.	G/NF
HA-3	25	3.1	Brown 12"x12" VFT	Waiting Room, Exam 1 & 2	NAD - PLM	Misc.	G/NF
		3.2	Brown 12"x12" VFT	Waiting Room, Exam 1 & 2	NAD - PLM	Misc.	G/NF
		3.3	Brown 12"x12" VFT	Waiting Room, Exam 1 & 2	NAD - TEM	Misc.	G/NF
HA-4	25	4.1	Rust 12"x12" VFT	Waiting Room, Exam 2	NAD - PLM	Misc.	G/NF
		4.2	Rust 12"x12" VFT	Waiting Room, Exam 2	NAD - PLM	Misc.	G/NF
		4.3	Rust 12"x12" VFT	Waiting Room, Exam 2	NAD - TEM	Misc.	G/NF
HA-5	50	5.1	Maroon 12"x12" VFT	Waiting Room, Hallway & Exam 1	NAD - PLM	Misc.	G/NF
		5.2	Maroon 12"x12" VFT	Waiting Room, Hallway & Exam 1	NAD - PLM	Misc.	G/NF
		5.3	Maroon 12"x12" VFT	Waiting Room, Hallway & Exam 1	NAD - TEM	Misc.	G/NF
HA-6	600	6.1	Covebase Mastic	Walls Throughout	NAD - PLM	Misc.	G/NF
		6.2	Covebase Mastic	Walls Throughout	NAD - PLM	Misc.	G/NF
		6.3	Covebase Mastic	Walls Throughout	NAD - TEM	Misc.	G/NF
HA-7	10	7.1	Sink Mastic	Break Room	NAD - PLM	Misc.	G/NF
		7.2	Sink Mastic	Break Room	NAD - PLM	Misc.	G/NF
		7.3	Sink Mastic	Break Room	NAD - TEM	Misc.	G/NF
HA-8	1530	8.1	2'x2' Ceiling Tile	Ceilings Throughout	NAD - PLM	Misc.	G/F
		8.2	2'x2' Ceiling Tile	Ceilings Throughout	NAD - PLM	Misc.	G/F
		8.3	2'x2' Ceiling Tile	Ceilings Throughout	NAD - PLM	Misc.	G/F
HA-9	1,620	9.1	EIFS	Exterior Siding	NAD - PLM	SM	G/NF
		9.2	EIFS	Exterior Siding	NAD - PLM	SM	G/NF
		9.3	EIFS	Exterior Siding	NAD - PLM	SM	G/NF
		9.4	EIFS	Exterior Siding	NAD - PLM	SM	G/NF
		9.5	EIFS	Exterior Siding	NAD - TEM	SM	G/NF
HA-10	250 LF	10.1	Exterior Window Caulk	Exterior Window Frames	NAD - PLM	Misc.	G/NF
		10.2	Exterior Window Caulk	Exterior Window Frames	NAD - PLM	Misc.	G/NF
		10.3	Exterior Window Caulk	Exterior Window Frames	NAD - TEM	Misc.	G/NF
HA-11	1,900	11.1	Shingle & Felt	Roof	NAD - PLM	Misc.	G/NF
		11.2	Shingle & Felt	Roof	NAD - PLM	Misc.	G/NF
		11.3	Shingle & Felt	Roof	NAD - TEM	Misc.	G/NF
HA-12	5 LF	12.1	Vent / Conduit Mastic	Roof	NAD - PLM	Misc.	G/NF
		12.2	Vent / Conduit Mastic	Roof	NAD - PLM	Misc.	G/NF
		12.3	Vent / Conduit Mastic	Roof	NAD - TEM	Misc.	G/NF

**HA** - Homogeneous Area    **LF** - Linear Feet    **VFT** - Vinyl Floor Tile    **NAD** - No Asbestos Detected    **PLM** - Polarized Light Microscopy  
**TEM** - Transmission Electron Microscopy    **Chry** - Chrysotile Asbestos    **Misc** - Miscellaneous Material    **SM** - Surfacing Material    **TSI** - Thermal System  
**F** - Friable    **NF** - Non-Friable    **G** - Good (very localized limited damage)    **D** - Damaged (Damage of less than 10% distributed & less than 25% localized)  
**SD** - Significantly damaged (damage equal to or greater than 10% distributed/25% localized)

**APPENDIX C**  
**Laboratory Results**



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
1.1 - A	Drywall & Joint Compound	None Detected	20% Cellulose	80% Other	Brown, Gray Fibrous Heterogeneous
10048866_0001	<i>drywall</i>				Teased
1.1 - B	Drywall & Joint Compound	None Detected		100% Calcium	White Non-Fibrous Homogeneous
10048866_0041	<i>joint compound</i>				Dissolved
1.2 - A	Drywall & Joint Compound	None Detected	20% Cellulose	80% Other	Brown, Gray Fibrous Heterogeneous
10048866_0002	<i>drywall</i>				Teased
1.2 - B	Drywall & Joint Compound	None Detected		100% Calcium	White Non-Fibrous Homogeneous
10048866_0042	<i>joint compound</i>				Dissolved
1.3 - A	Drywall & Joint Compound	None Detected	20% Cellulose	80% Gypsum	Brown, Gray Non-Fibrous Heterogeneous
10048866_0003	<i>drywall</i>				Teased
1.3 - B	Drywall & Joint Compound	None Detected		100% Calcium	White Non-Fibrous Homogeneous
10048866_0043	<i>joint compound</i>				Dissolved
1.4	Joint Compound ONLY	None Detected		100% Calcium	White Non-Fibrous Homogeneous
10048866_0004					Dissolved
1.5	Joint Compound ONLY	None Detected		100% Calcium	White Non-Fibrous Homogeneous
10048866_0005					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and  
40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
2.1 - A	Gray 12"x12" VFT & Mastic	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0006	VFT				Dissolved
2.1 - B	Gray 12"x12" VFT & Mastic	None Detected		100% Other	Gray, Yellow Non-Fibrous Homogeneous
10048866_0044	mixed mastic/leveling compound				Dissolved
2.2 - A	Gray 12"x12" VFT & Mastic	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0007	VFT				Dissolved
2.2 - B	Gray 12"x12" VFT & Mastic	None Detected		100% Other	Black, Gray Non-Fibrous Homogeneous
10048866_0045	mixed mastic/leveling compound				Dissolved
2.3 - A	Gray 12"x12" VFT & Mastic	Not Analyzed			
10048866_0008	VFT - TEM				
2.3 - B	Gray 12"x12" VFT & Mastic	Not Analyzed			
10048866_0046	mixed mastic/leveling compound - TEM				
3.1	Brown 12"x12" VFT ONLY	None Detected		100% Other	Tan Non-Fibrous Homogeneous
10048866_0009					Dissolved
3.2	Brown 12"x12" VFT ONLY	None Detected		100% Other	Tan Non-Fibrous Homogeneous
10048866_0010					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
3.3	Brown 12"x12" VFT ONLY	Not Analyzed			
10048866_0011	TEM				
4.1	Rust 12"x12" VFT ONLY	None Detected		100% Other	Brown Non-Fibrous Homogeneous
10048866_0012					Dissolved
4.2	Rust 12"x12" VFT ONLY	None Detected		100% Other	Brown Non-Fibrous Homogeneous
10048866_0013					Dissolved
4.3	Rust 12"x12" VFT ONLY	Not Analyzed			
10048866_0014	TEM				
5.1	Maroon 12"x12" VFT ONLY	None Detected		100% Other	Red Non-Fibrous Homogeneous
10048866_0015					Dissolved
5.2	Maroon 12"x12" VFT ONLY	None Detected		100% Other	Red Non-Fibrous Homogeneous
10048866_0016					Dissolved
5.3	Maroon 12"x12" VFT ONLY	Not Analyzed			
10048866_0017	TEM				
6.1	Covebase Mastic ONLY	None Detected		100% Other	Yellow Non-Fibrous Homogeneous
10048866_0018					Dissolved, Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
6.2	Covebase Mastic ONLY	None Detected		100% Other	Yellow Non-Fibrous Homogeneous
10048866_0019					Ashed, Dissolved
6.3	Covebase Mastic ONLY	Not Analyzed			
10048866_0020	TEM				
7.1	Sink Mastic	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0021					Dissolved, Ashed
7.2	Sink Mastic	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0022					Ashed, Dissolved
7.3	Sink Mastic	Not Analyzed			
10048866_0023	TEM				
8.1	2'x2' Ceiling Tile	None Detected	40% Cellulose 40% Mineral Wool	10% Other 10% Perlite	Tan Fibrous Homogeneous
10048866_0024					Teased
8.2	2'x2' Ceiling Tile	None Detected	40% Mineral Wool 40% Cellulose	10% Perlite 10% Other	Tan Fibrous Homogeneous
10048866_0025					Teased
8.3	2'x2' Ceiling Tile	None Detected	40% Mineral Wool 40% Cellulose	10% Perlite 10% Other	Tan Fibrous Homogeneous
10048866_0026					Teased

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
9.1	EIFS	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0027					Dissolved
9.2	EIFS	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0028					Dissolved
9.3	EIFS	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0029					Dissolved
9.4	EIFS	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0030					Dissolved
9.5	EIFS	None Detected		100% Other	Gray Non-Fibrous Homogeneous
10048866_0031					Dissolved
10.1	Exterior Window Caulk	None Detected		100% Other	White Non-Fibrous Homogeneous
10048866_0032					Ashed, Dissolved
10.2	Exterior Window Caulk	None Detected		100% Other	White Non-Fibrous Homogeneous
10048866_0033					Dissolved, Ashed
10.3	Exterior Window Caulk	Not Analyzed			
10048866_0034	TEM				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and  
 40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
 1210 1st Street South Ext  
 Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
11.1 - A	Shingle & Felt	None Detected	20% Fiber Glass	70% Other 10% Quartz	Black Fibrous Heterogeneous
10048866_0035	shingle				Dissolved, Teased
11.1 - B	Shingle & Felt	None Detected	70% Cellulose	30% Other	Black Fibrous Homogeneous
10048866_0047	felt				Teased
11.2 - A	Shingle & Felt	None Detected	20% Fiber Glass	70% Other 10% Quartz	Black Fibrous Heterogeneous
10048866_0036	shingle				Teased, Dissolved
11.2 - B	Shingle & Felt	None Detected	70% Cellulose	30% Other	Black Fibrous Homogeneous
10048866_0049	felt				Teased
11.3 - A	Shingle & Felt	Not Analyzed			
10048866_0037	shingle - TEM				
11.3 - B	Shingle & Felt	Not Analyzed			
10048866_0048	felt - TEM				
12.1	Vent / Conduit Mastic	None Detected		100% Other	Black Non-Fibrous Homogeneous
10048866_0038					Ashed, Dissolved
12.2	Vent / Conduit Mastic	None Detected		100% Other	Black Non-Fibrous Homogeneous
10048866_0039					Ashed, Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

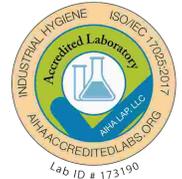
Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and  
40 CFR, Part 763, Subpart E, App.E



**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** PLM

**Date Received:** 04/16/2024

**Date Reported:** 04/17/2024

**Project:** 100 Millwood

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
12.3	Vent / Conduit Mastic	Not Analyzed			
10048866_0040	TEM				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Patrick Yarnell (49)

**Analyst**

**Approved Signatory**

10048866

<b>Client:</b>	ARM	<p><b>*Instructions:</b></p> <p>Use Column "B" for your contact info</p> <p>To See an Example Click the bottom Example Tab.</p> <p>Enter samples between "&lt;&lt;" and "&gt;&gt;"  <b>Begin Samples with a "&lt;&lt;" above the first sample and end with a "&gt;&gt;" below the last sample.</b>          Only Enter your data on the first sheet "Sheet1"</p> <p>Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.</p>	<p>Scientific Analytical Institute</p>  <p>4604 Dundas Drive          Greensboro, NC 27407          Phone: 336.292.3888          Fax: 336.292.3313          Email: lab@sailab.com</p>
<b>Contact:</b>	Charlie Carter		
<b>Address:</b>	1210 First Street South Columbia SC		
<b>Cell:</b>	803-960-4226		
<b>Office:</b>	803-783-3314		
<b>Email:</b>	ccarter@armenv.com		
<b>Project:</b>	100 Millwood		
<b>Client Notes:</b>	Please run PLM and then TEM **Positive Stop**		
<b>P.O. #:</b>	CFC - 09-7018-24		
<b>Date Submitted:</b>	4/15/2024 0:00		
<b>Date Sampled:</b>	4/10/2024 0:00		
<b>Analysis:</b>	PLM - EPA 600; TEM - Bulk Chatfield		
<b>TurnAroundTime:</b>	24 hrs		

Sample Number	Data 1	Sample Description	Data 2
<<			
1.1	PLM	Drywall & Joint Compound	
1.2	PLM	Drywall & Joint Compound	
1.3	PLM	Drywall & Joint Compound	
1.4	PLM	Joint Compound ONLY	
1.5	PLM	Joint Compound ONLY	
2.1	PLM	Gray 12"x12" VFT & Mastic	<b>Accepted</b> <input checked="" type="checkbox"/>
2.2	PLM	Gray 12"x12" VFT & Mastic	
2.3	TEM	Gray 12"x12" VFT & Mastic	
3.1	PLM	Brown 12"x12" VFT ONLY	<b>Rejected</b> <input type="checkbox"/>
3.2	PLM	Brown 12"x12" VFT ONLY	
3.3	TEM	Brown 12"x12" VFT ONLY	
4.1	PLM	Rust 12"x12" VFT ONLY	
4.2	PLM	Rust 12"x12" VFT ONLY	
4.3	TEM	Rust 12"x12" VFT ONLY	
5.1	PLM	Maroon 12"x12" VFT ONLY	
5.2	PLM	Maroon 12"x12" VFT ONLY	
5.3	TEM	Maroon 12"x12" VFT ONLY	
6.1	PLM	Covebase Mastic ONLY	
6.2	PLM	Covebase Mastic ONLY	

Relinquished By \_\_\_\_\_

Received By *BT Shulley* 4/16 10:30 am

10049866

6.3	TEM	Covebase Mastic ONLY	
7.1	PLM	Sink Mastic	
7.2	PLM	Sink Mastic	
7.3	TEM	Sink Mastic	
8.1	PLM	2'x2' Ceiling Tile	
8.2	PLM	2'x2' Ceiling Tile	
8.3	PLM	2'x2' Ceiling Tile	
9.1	PLM	EIFS	
9.2	PLM	EIFS	
9.3	PLM	EIFS	
9.4	PLM	EIFS	
9.5	PLM	EIFS	
10.1	PLM	Exterior Window Caulk	
10.2	PLM	Exterior Window Caulk	
10.3	TEM	Exterior Window Caulk	
11.1	PLM	Shingle & Felt	
11.2	PLM	Shingle & Felt	
11.3	TEM	Shingle & Felt	
12.1	PLM	Vent / Conduit Mastic	
12.2	PLM	Vent / Conduit Mastic	
12.3	TEM	Vent / Conduit Mastic	

>>

Relinquished By

Received By

\_\_\_\_\_

\_\_\_\_\_



# Bulk Asbestos Analysis by Transmission Electron Microscopy

Semi-Quantitative  
Chatfield SOP 1988-02 Rev. 1

**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** TBS

**Date Received:** 04/17/2024

**Date Reported:** 04/18/2024

**Project:** 100 Millwood

Sample ID <i>Lab Sample ID</i>	Description <i>Lab Notes</i>	Organic (Wt %)	Acid Soluble (Wt. %)	Asbestos (Wt %)	LCL-UCL (Wt. %)
2.3 - A <i>10048866_0008</i>	Gray 12"x12" VFT & Mastic <i>tile</i>	31%	68%	None Detected	
2.3 - B <i>10048866_0046</i>	Gray 12"x12" VFT & Mastic <i>mastic</i>	35%	0%	None Detected	
3.3 <i>10048866_0011</i>	Brown 12"x12" VFT ONLY	29%	70.0%	None Detected	
4.3 <i>10048866_0014</i>	Rust 12"x12" VFT ONLY	30.0%	69%	None Detected	
5.3 <i>10048866_0017</i>	Maroon 12"x12" VFT ONLY	32%	67%	None Detected	
6.3 <i>10048866_0020</i>	Covebase Mastic ONLY	43%	0%	None Detected	
7.3 <i>10048866_0023</i>	Sink Mastic	22%	0%	None Detected	
10.3 <i>10048866_0034</i>	Exterior Window Caulk	40.0%	0%	None Detected	

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

Daniel Schwartz (11)

**Analyst**

**Approved Signatory**

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888



# Bulk Asbestos Analysis by Transmission Electron Microscopy

Semi-Quantitative  
Chatfield SOP 1988-02 Rev. 1

**Customer:** ARM Environmental Services, Inc.  
1210 1st Street South Ext  
Columbia, SC 29209

**Attn:** Charlie Carter

**Lab Order ID:** 10048866

**Analysis:** TBS

**Date Received:** 04/17/2024

**Date Reported:** 04/18/2024

**Project:** 100 Millwood

Sample ID	Description	Organic ( Wt % )	Acid Soluble ( Wt. % )	Asbestos ( Wt % )	LCL-UCL ( Wt. % )
Lab Sample ID	Lab Notes				
11.3 - A	Shingle & Felt	20.0%	0%	None Detected	
10048866_0037	shingle				
11.3 - B	Shingle & Felt	97%	0%	None Detected	
10048866_0048	felt				
12.3	Vent / Conduit Mastic	23%	0%	None Detected	
10048866_0040					

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

Daniel Schwartz (11)

**Analyst**

**Approved Signatory**

10048866

<b>Client:</b>	ARM	<p><b>*Instructions:</b></p> <p>Use Column "B" for your contact info</p> <p>To See an Example Click the bottom Example Tab.</p> <p>Enter samples between "&lt;&lt;" and "&gt;&gt;"  <b>Begin Samples with a "&lt;&lt;" above the first sample and end with a "&gt;&gt;" below the last sample.</b>          Only Enter your data on the first sheet "Sheet1"</p> <p>Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.</p>	<p>Scientific Analytical Institute</p>  <p>4604 Dundas Drive          Greensboro, NC 27407          Phone: 336.292.3888          Fax: 336.292.3313          Email: lab@sailab.com</p>
<b>Contact:</b>	Charlie Carter		
<b>Address:</b>	1210 First Street South Columbia SC		
<b>Cell:</b>	803-960-4226		
<b>Office:</b>	803-783-3314		
<b>Email:</b>	ccarter@armenv.com		
<b>Project:</b>	100 Millwood		
<b>Client Notes:</b>	Please run PLM and then TEM **Positive Stop**		
<b>P.O. #:</b>	CFC - 09-7018-24		
<b>Date Submitted:</b>	4/15/2024 0:00		
<b>Date Sampled:</b>	4/10/2024 0:00		
<b>Analysis:</b>	PLM - EPA 600; TEM - Bulk Chatfield		
<b>TurnAroundTime:</b>	24 hrs		

Sample Number	Data 1	Sample Description	Data 2
<<			
1.1	PLM	Drywall & Joint Compound	
1.2	PLM	Drywall & Joint Compound	
1.3	PLM	Drywall & Joint Compound	
1.4	PLM	Joint Compound ONLY	
1.5	PLM	Joint Compound ONLY	
2.1	PLM	Gray 12"x12" VFT & Mastic	<b>Accepted</b> <input checked="" type="checkbox"/>
2.2	PLM	Gray 12"x12" VFT & Mastic	
2.3	TEM	Gray 12"x12" VFT & Mastic	
3.1	PLM	Brown 12"x12" VFT ONLY	<b>Rejected</b> <input type="checkbox"/>
3.2	PLM	Brown 12"x12" VFT ONLY	
3.3	TEM	Brown 12"x12" VFT ONLY	
4.1	PLM	Rust 12"x12" VFT ONLY	
4.2	PLM	Rust 12"x12" VFT ONLY	
4.3	TEM	Rust 12"x12" VFT ONLY	
5.1	PLM	Maroon 12"x12" VFT ONLY	
5.2	PLM	Maroon 12"x12" VFT ONLY	
5.3	TEM	Maroon 12"x12" VFT ONLY	
6.1	PLM	Covebase Mastic ONLY	
6.2	PLM	Covebase Mastic ONLY	

Relinquished By \_\_\_\_\_

Received By *BT Shulley* 4/16 10:30 am

10049866

6.3	TEM	Covebase Mastic ONLY	
7.1	PLM	Sink Mastic	
7.2	PLM	Sink Mastic	
7.3	TEM	Sink Mastic	
8.1	PLM	2'x2' Ceiling Tile	
8.2	PLM	2'x2' Ceiling Tile	
8.3	PLM	2'x2' Ceiling Tile	
9.1	PLM	EIFS	
9.2	PLM	EIFS	
9.3	PLM	EIFS	
9.4	PLM	EIFS	
9.5	PLM	EIFS	
10.1	PLM	Exterior Window Caulk	
10.2	PLM	Exterior Window Caulk	
10.3	TEM	Exterior Window Caulk	
11.1	PLM	Shingle & Felt	
11.2	PLM	Shingle & Felt	
11.3	TEM	Shingle & Felt	
12.1	PLM	Vent / Conduit Mastic	
12.2	PLM	Vent / Conduit Mastic	
12.3	TEM	Vent / Conduit Mastic	

>>

Relinquished By

Received By

\_\_\_\_\_

\_\_\_\_\_

**APPENDIX D**  
**SCDHEC Consultant/Building Inspector License**

**SCDHEC ISSUED**

Asbestos ID Card

Charlie Carter



CONSULTBI

BI-002139

Expiration Date:  
11/06/24

# Greenville Technical College

PO Box 5616, 738 S. Pleasantburg Drive, Greenville, South Carolina 29606-5616 (864) 250-8800

**CHARLIE F. CARTER, IV**

**1210 First St. South Ext., Columbia, SC 29209**

5557

*has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved*

## ***Asbestos Inspector Refresher Training Course***

Greenville, SC

231 - EVT502 - 136

**Certificate Number**

November 7, 2023

**Course Date(s)**

November 7, 2023

**Examination Date**

Attended and Satisfactorily Completed Course  
Exam with a Passing Score of 70% or Better



**Jeff Gurrie, Principal Instructor**

**Joy N. Finch, Training Manager**

November 7, 2024

**Expiration Date**

Approved for Remote Delivery

# SCDHEC ISSUED

Asbestos ID Card

Robbie Robertson



CONSULTBI  
SUPERAHERA

BI-01179  
SA-01861

Expiration Date:  
10/09/24  
10/08/24



1416 Chapin Road, Chapin, South Carolina 29036

803-345-3833

Robbie Robertson

SSN xxx-xx-3715

This is to certify that the above named student has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved:

## AHERA Asbestos Inspector Refresher

Course Location: Chapin SC

Certificate Number: 20231010Ab301-04

Start Date October 10, 2023

End Date October 10, 2023

Exam Date: October 10, 2023

Expiration Date October 9, 2024

Principal Instructor / Training Administrator - Lee Capell

10/10/2023

Date

**SCDHEC ISSUED**  
Asbestos ID Card

Cyril O Havird Jr



CONSULTBI  
SUPERAHERA

BI-00258  
SA-003792

Expiration Date:  
10/09/24  
10/01/24



1416 Chapin Road, Chapin, South Carolina 29036 803-345-3833

Sid Havird

SSN xxx-xx-4506

This is to certify that the above named student has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved:

**AHERA Asbestos Inspector Refresher**

Course Location: Chapin SC

Certificate Number: 20231010Ab301-03

Start Date October 10, 2023

End Date October 10, 2023

Exam Date: October 10, 2023

Expiration Date October 9, 2024

Principal Instructor / Training Administrator - Lee Capell

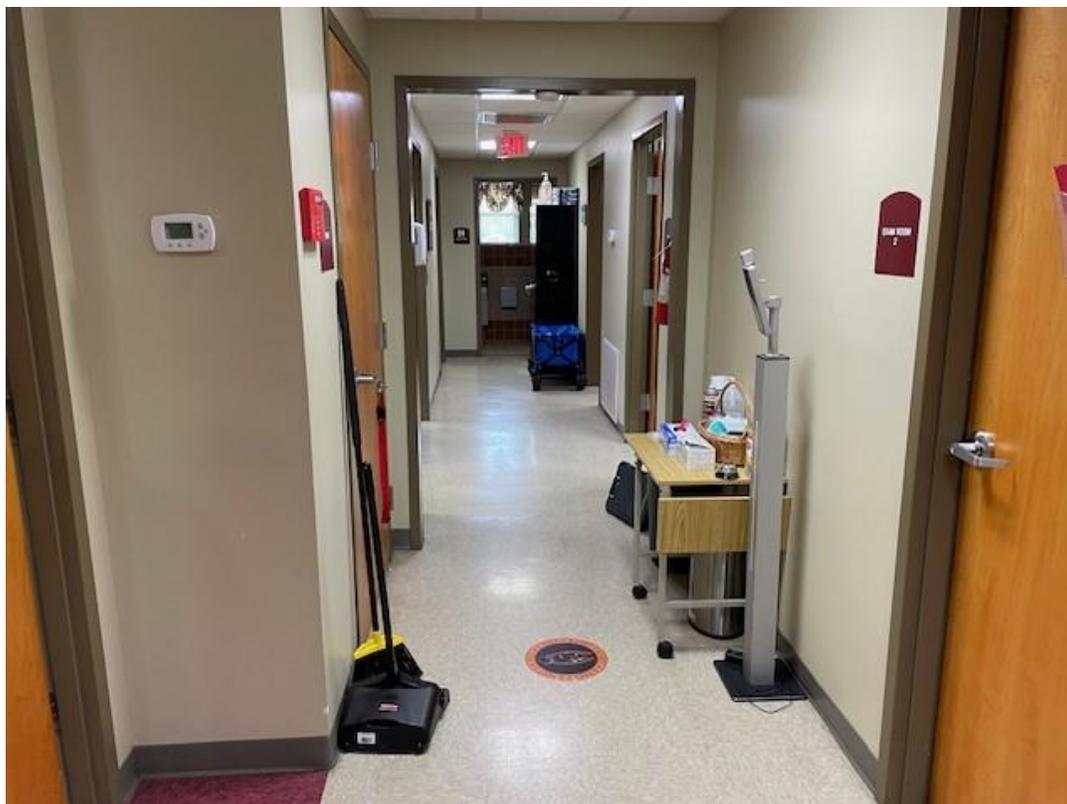
10/10/2023

Date

**APPENDIX E**  
**Site Photographs**



**Photo 1:** View of the front of 100 Millwood St. in Orangeburg, SC.



**Photo 2:** General view of the interior.

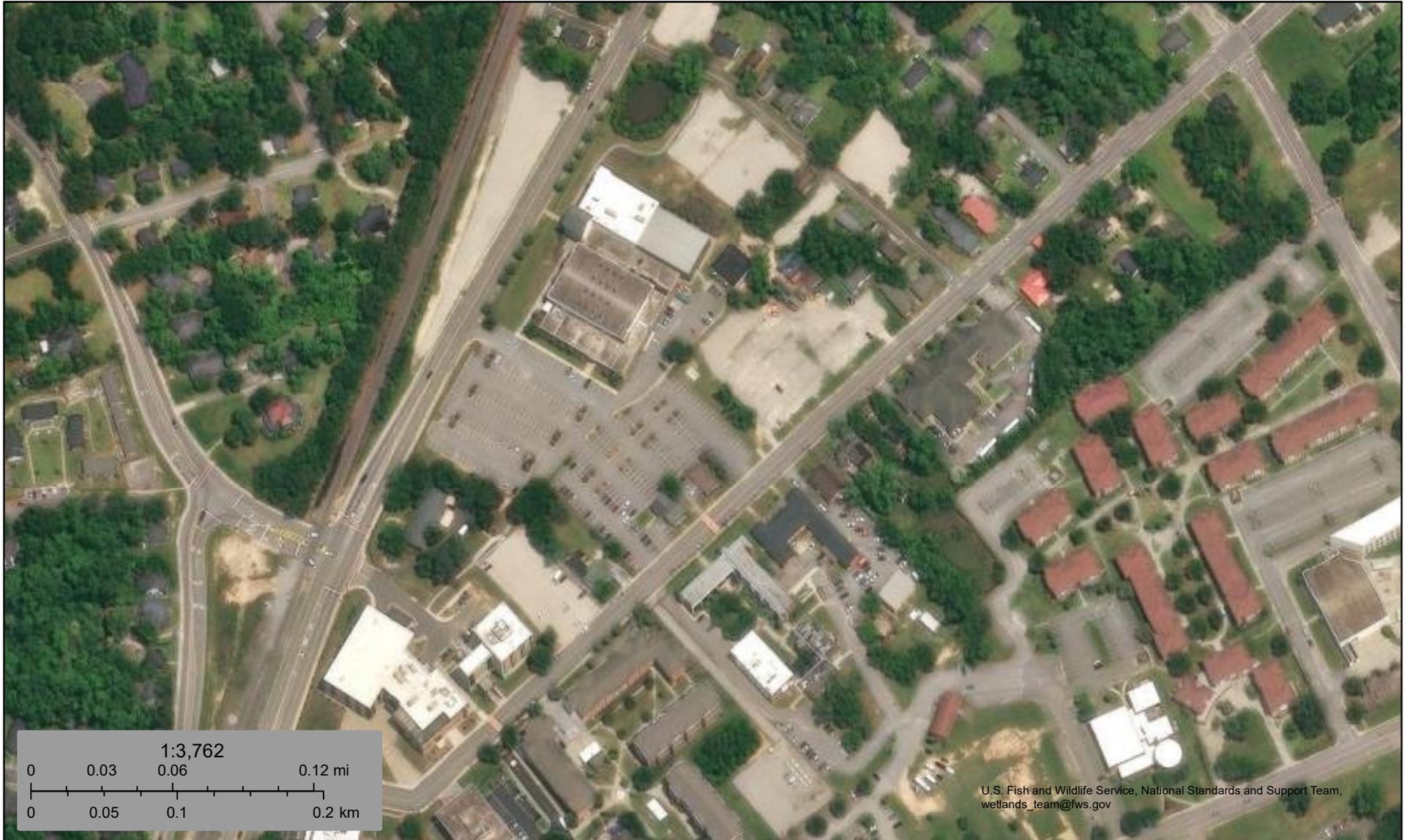


**Photo 3:** General view of the interior.



**Photo 4:** General view of the interior.

## Appendix G.1



March 23, 2026

**Wetlands**

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## Appendix G.2



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Carolina Ecological Services  
176 Croghan Spur Road, Suite 200  
Charleston, SC 29407-7558  
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:

03/25/2026 18:25:27 UTC

Project code: 2026-0067808

Project Name: Claflin University Public Health Center

Subject: Consistency letter for 'Claflin University Public Health Center' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the South Carolina Ecological Services Field Office (ESFO) Determination Key (DKey) for project review and guidance for federally listed species.

Tarshua Mack:

The U.S. Fish and Wildlife Service (Service) received on **March 25, 2026** your effect determination(s) for the 'Claflin University Public Health Center' (the Action) using the South Carolina ESFO DKey for project review and guidance for federally-listed species within the Information for Planning and Consultation (IPaC) application. The Service developed this application in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's South Carolina ESFO DKey, you made the following effect determination(s) for the proposed Action:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
Canby's Dropwort ( <i>Oxypolis canbyi</i> )	Endangered	No effect
Red-cockaded Woodpecker ( <i>Dryobates borealis</i> )	Threatened	No effect

### Consultation Status

Your agency has met consultation requirements for the species listed above by informing the Service of the "no effect" determinations. No further consultation for this project is required for these species. This consistency letter confirms you may rely on effect determinations you reached by considering the South Carolina ESFO DKey to satisfy agency consultation requirements under Section 7(a) (2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.; ESA).

The following species and/or critical habitats may also occur in your project area and **are not** covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Southern Hognose Snake *Heterodon simus* Proposed Threatened
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

Please note that due to obligations under the ESA, potential impacts of this project must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action. If any of the above conditions occurs, additional consultation with the South Carolina ESFO should take place before project changes are final or resources committed.

**Bald and Golden Eagle Protection Act (BGEPA):** Bald and golden eagles are not included in this section 7(a)(2) consultation and this information does not constitute a determination of effects by the Service. The Service developed the [National Bald Eagle Management Guidelines](#) to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the BGEPA may apply to their activities. The guidelines should be consulted prior to conducting new or intermittent activity near an eagle nest.

If the Federal Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) may be required. Please contact Ulgonda Kirkpatrick (phone: 321/972-9089, e-mail: [ulgonda\\_kirkpatrick@fws.gov](mailto:ulgonda_kirkpatrick@fws.gov)) with any questions regarding potential impacts to bald or golden eagles.

## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

Claflin University Public Health Center

### 2. Description

The following description was provided for the project 'Claflin University Public Health Center':

Claflin University is committed to addressing the critical shortage of healthcare professionals in South Carolina. This project will provide the necessary infrastructure and resources to educate and train the next generation of nurses and public health professionals, significantly impacting the local and state healthcare systems. The establishment of the School of Nursing and Public Health Center is a strategic investment in the future of healthcare in South Carolina, particularly in underserved rural areas. Through this initiative, Claflin University aims to enhance the quality of healthcare education, improve health equity, and contribute to the overall well-being of the community.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.4980671,-80.85167965860875,14z>



## QUALIFICATION INTERVIEW

1. Does the proposed project involve research or other actions that include the collection, capture, handling, or harassment of any individual federally listed threatened, endangered or proposed species?

*No*

2. Is the action authorized, funded, or being carried out by a Federal agency?

*Yes*

3. Does the proposed action involve **wind or solar energy**.

*No*

4. Is the project an existing structure that requires maintenance, repair, or replacement?

*Yes*

5. Will all project take place within the existing structure's footprint?

*No*

6. Does the project intersect the red-cockaded woodpecker AOI?

**Automatically answered**

*Yes*

7. Is the action area located within suitable Red-cockaded woodpecker [foraging habitat](#) (pine or pine/hardwood stands in which 50% or more of the dominant trees are pines and the dominant pine trees are 30 years of age or older or >10-inches diameter breast height (dbh) and the midstory height does not exceed 12 feet)?

*No*

8. Does the project intersect the Canby's dropwort AOI?

**Automatically answered**

*Yes*

9. Is there suitable habitat for Canby's dropwort located within the project area?

**Note:** Canby's Dropwort can be found in a variety of coastal plain habitats, including natural ponds dominated by pond cypress, grass-sedge-dominated Carolina bays, wet pine savannas, shallow pineland ponds and cypress-pine swamps or sloughs. The largest and most vigorous populations have been found in open bays or ponds that are wet throughout most of the year, but which have little or no canopy cover. Soils are sandy loams or acidic peat mucks underlain by clay layers which, along with the slight gradient of the areas, result in the retention of water.

*No*

## **IPAC USER CONTACT INFORMATION**

Agency: Claflin University  
Name: Tarshua Mack  
Address: 400 Magnolia Street  
City: Orangeburg  
State: SC  
Zip: 29115  
Email: tamack@claflin.edu  
Phone: 8035355540

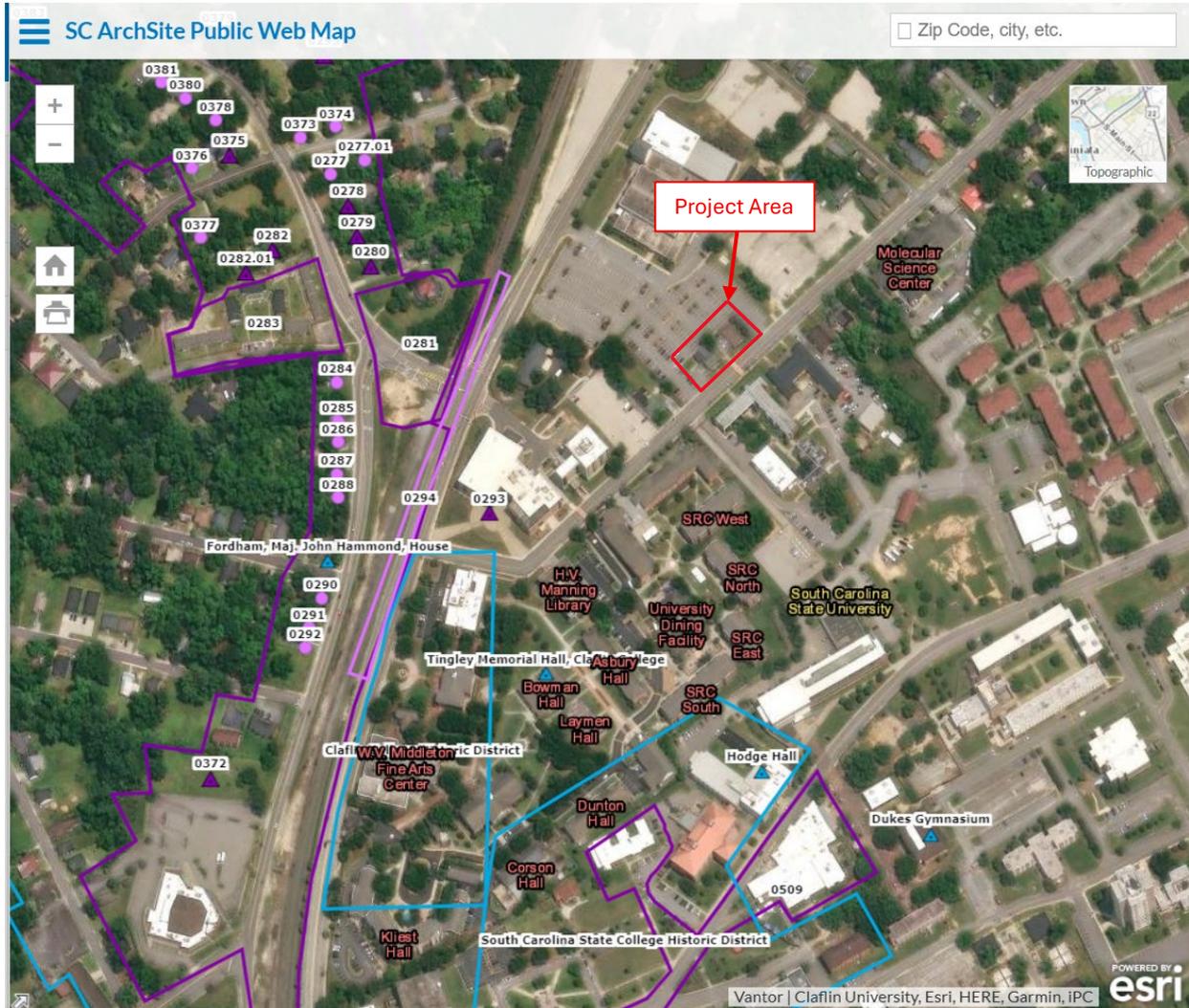
## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Health Resources and Services Administration  
Name: Tarshua Mack  
Email: tamack@claflin.edu  
Phone: 8035355540

## Appendix H.1

South Carolina Department of Archives & History

ARCHSITE(GIS) Map of Surrounding Area



## Appendix H.2



February 11, 2026

Bill Kropff  
Claflin University  
[wkropff@claflin.edu](mailto:wkropff@claflin.edu)

Re: Demolition of Two Homes at 783 Goff Ave and New Construction of a School of Nursing and Public Health Center at Claflin University  
Orangeburg, Orangeburg County, South Carolina  
SHPO Project No. 26-JS0034

Dear Mr. Kropff:

Thank you for your project review submittal, which we received via email on January 28, 2026, regarding the above referenced proposed undertaking. We received a Section 106 Project Review Form, project narrative, maps, and NEPA spreadsheet as supporting documentation for this undertaking. The State Historic Preservation Office (SHPO) is providing comments to the U.S. Health Resources and Services Administration (HRSA) pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes including those with state recognition, local governments, or the public.

Based on the description of the undertaking, its Area of Potential Effect (APE), and the identification of no historic properties within the APE, our office concurs that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this project.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

Please refer to SHPO Project Number 26-JS0034 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6129 or [jsylvest@scdah.sc.gov](mailto:jsylvest@scdah.sc.gov).

Sincerely,

*John D. Sylvest*

John D. Sylvest  
Supervisor of Survey and Review & Compliance  
State Historic Preservation Office

Cc: [cgsprogram2024@hrsa.gov](mailto:cdsprogram2024@hrsa.gov)  
[wcmillan@claflin.edu](mailto:wcmillan@claflin.edu); [apavel@claflin.edu](mailto:apavel@claflin.edu); [aschofield@claflin.edu](mailto:aschofield@claflin.edu)