



**Columbia Area Office**  
1611 Chapin Road  
Chapin, SC 29036  
(803) 260-4532  
(803) 422-7493

**Charleston Area Office**  
226 N. Live Oak Drive  
Moncks Corner, SC 29461  
(843) 499-2756  
(352) 397-8208

wmbeconsultants.com

---

## Addendum No. 1

Date Issued: April 12, 2024

Project Name: SCC – P. Dan Hull Building Roof Replacement  
Project Number: H59-6273 - PD

WMBE Project Number: 2023-47

### Attachments:

1. Questions and Answers
2. Drawing Page – Additional Unit removal
3. Areas of Suspected Existing Wet Roof Insulation
4. Laydown Plan
5. PLM Results.
6. TEM results

This addendum modifies the Contract Documents as stated herein and shown on any accompanying drawings or attachments and is part of the Contract Documents.

Bidder shall acknowledge receipt of all addenda issued in the space provided on the Bid Form. Failure to acknowledge addenda may result in the bidders bid being rejected as non-responsive.

This addendum consists of 19 pages including attachments.

1. Changes to Bidding Requirements:
  - a. None.
2. Changes to Specifications:
  - a. None
3. Changes to Drawings:
  - a. Additional Drawing sheet provided in addendum for additional mechanical units and associated penetrations to be removed.



#### **Columbia Area Office**

1611 Chapin Road  
Chapin, SC 29036  
(803) 260-4532  
(803) 422-7493

#### **Charleston Area Office**

226 N. Live Oak Dr  
Moncks Corner, SC 29461  
(843) 499-2756  
(352) 397-8208

wmbeconsultants.com

---

## Questions and Answers

1. Question: Is any interior protection required inside the building?

Answer: Yes, Contractor is responsible to protect interior machinery, servers, computers, books, etc. It is the contractor's responsibility to protect all interior conditions under areas of work.

2. Question: What is the wind-up lift pressures?

Answer: Wind Resistance Design: Installed roof assembly shall meet or exceed the following wind uplift pressures. The tested assembly shall include a Factor of Safety of 2 of the pressures listed below.

Roof Area(s) : Interior Field (1'): - 17 psf  
Field (1): - 27 psf  
Perimeter (2): - 34 psf  
Corner (3): - 44 psf

3. Question: How many units are abandoned to be removed?

Answer: In addition to the areas hatched with the cross hatch to be removed on the drawing plans there are approximately a total of (24) pieces / ventilators that are additional items to be removed.

(21) exhaust fans to remove. (2) HVAC units. One is a green colored "Swamp Cooler" we call it over the Kitchen. The other is the very old, abandoned HVAC unit sitting on the rusted steel above E46 HVAC lab. (1) Roof cap covered with sheet metal above E46 HVAC lab sink.

Plan is attached for reference marked with a red dot.

4. Question: Are there specific locations expected to have existing wet insulation to be removed and replaced.

Answer: Plan is attached with areas in red where test cuts will be completed prior to removal using the unit price line item.

5. Question: Can work be completed at night and on the weekends?

Answer: Yes

6. Question: Where are wall panels to be installed?

Answer: At all wall locations over 24 inches.

7. Question: Are all the mechanical units that were marked with an "X" to be removed?

Answer: No

8. Question: Is tectum deck noted on R1.1 as damaged to be replaced as part of Unit Costs?

Answer: No, to be included in base bid pricing.

9. Question: Existing wall ladders are to remain?

Answer: No. All ladders shall be replaced with new.

10. Question: Is there any asbestos in the existing roof system or flashing?

Answer: See attached TEM and PLM results.

11. Question: May contractor work during regular work hours Monday – Friday?

Answer: Yes, but work shall only occur in areas where classes are not taking place. Class schedule will be discussed and issued to the awarded contractor. All work will take place around the class schedule. The equipment in the classrooms and labs must also be protected from damage.

12. Question: Chimney is to have metal cap and wall panels?

Answer: Yes, and functioning chimney cap fabricated out of stainless steel.

13. Question: Is all roofing work to be self-performed or may contractor use subcontractors for roofing work?

Answer: Certified pay roll can be requested by the agency at any time.

14. Question: All roof drains will be replaced, or just 10 selected with locations TBD? Will this be charged as Unit Costs or included in Base Bid?

Answer: All roof drains and overflow drains shall be raised and replaced with new. This will not be a unit price. This is to be included in the base bid and alternate bid based on roof areas in scopes of work.

15. Question: Will contractor be able to access the interior of the building during regular working hours to handle the required drain work?

Answer: No, this will be after hour work and is to be completed during times when classes are not taking place in classrooms where drain work is taking place

16. Question: Will all roofing work be able to be performed during regular business hours Monday – Friday?

Answer: All roofing work will be completed over areas where classes are not taking place. Class schedule will be provided. In areas where work is taking place the interior will have flagging and cones set up as required. The equipment in the classrooms and labs must also be protected from damage.

17. Question: Are all retrofit drains being replaced with new roof drain bowls, drain pipe connections, clamping rings, bolts and strainers?

Answer: Yes.

18. Question: Is the low bid Contractor required to submit a Certified Pay Roll for Employees?

Answer: The low bid Contractor is subject to submit a Certified Pay Roll.

19. Question: What is required if wood supports for equipment or other items can not be removed or substituted with pre-fabricated supports.

Answer: Wood blocking will be replaced and wrapped in sheet metal prior to reinstallation.

20. Question: Is a licensed electrician and or plumber to be used and coordinate by the Contractor for any HVAC work to raise units and any plumbing work at roof drains?

Answer: Yes.

21. Question: Is taper insulation required.

Answer: Secondary taper is required to enhance positive drainage to roof drain locations. Secondary drainage, crickets, saddles, sumps, etc. to be 2x the primary slope.

22. Question: Are any roof membrane substitution request approved/accepted to be installed over the LWIC pour?

Answer: Yes. Required 20 year Manufacturer's labor and Material no dollar limit warranty and a 73, mph wind speed rider include.

- Carlisle's PVC FleeceBACK - 60mil
- JM PVC FB – 60mil (Johns Manville)

23. Question: Is standing seam joints required for the coping?

Answer: Yes.

24. Question: Is an underlayment system required behind wall panels.

Answer: Yes

25. Question: What is the spacing of the hat channels?

Answer: One at the bottom and top of wall and then spaced at 5' on center.

26. Question: How high does mechanical curbs and penetrations are to be raised?

Answer: All equipment shall raised to the 8-inch minimum finished height from the top of the finished new roof system. This includes any associated gas lines, electrical , controls, etc.

27. Question: Are new wood nailers required at all perimeter locations and penetration locations?

Answer: Yes, to match new insulation height and to obtain the minimum flashing height of 8" inches at penetrations.

28. Question: Is the edge condition to be two-piece condition?

Answer: Yes.

29. Question: Is either prefinished Steel or prefinished Aluminum acceptable for metal details?

Answer: Pre-finished galvalume or pre-finished aluminum is acceptable.

30. Question: Is a add and deduct price to be included on the bid form for the unit prices

Answer: yes, add cost and deduct cost to be included. Add cost / deduct cost to be written on bid form.

31. Question: When the Single Ply is installed what will be required for cleaning at the end of the project?

Answer: The Contractor will be responsible for cleaning the new roof system with recommended product per the system Manufacturer. No pressure washing / no abrasive methods of cleaning will be acceptable. Hand cleaning will include squeegee, mops, rags, etc.

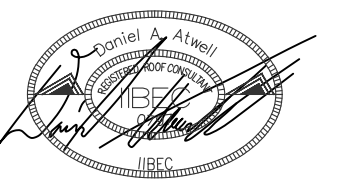
32. Question: Is the Contractor to provide a three-ring binder with printed pages included in the closeout documents with items as listed in specification?

Answer: Yes, two hard copies and also an electronic copy on a flash drive.

33. Question: In the approved laydown locations how are the grounds to be repaired?

Answer: Any concrete or paving will be repaired to match existing. Any grass locations will be repaired with sod to match existing grounds.

End of Addendum No. 1



DESIGNED: DANIEL ATWELL

SPARTANBURG COMMUNITY COLLEGE  
P-DAN HULL BUILDING ROOF  
REPLACEMENT

PROJECT NUMBER: H59-6273  
111 COMMUNITY COLLEGE DRIVE  
SPARTANBURG, SC 29303



COLUMBIA AREA OFFICE

1611 CHAPIN ROAD  
CHAPIN, SOUTH CAROLINA  
EMAIL:CHRIS@WMBECONSULTANTS.COM  
EMAIL:DANIEL@WMBECONSULTANTS.COM

CHARLESTON AREA OFFICE

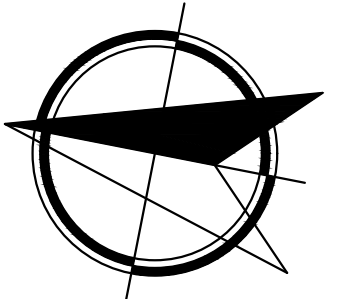
226 N. LIVE OAK DRIVE  
MONCK'S CORNER, SOUTH CAROLINA  
EMAIL:JOE@WMBECONSULTANTS.COM  
EMAIL:MAX@WMBECONSULTANTS.COM

THESE DRAWINGS ARE THE PROPERTY OF:

WM BUILDING ENVELOPE  
CONSULTANTS, LLC

THE REPRODUCTION, COPYING OR OTHER  
USE OF THESE DRAWINGS WITHOUT THEIR  
WRITTEN CONSENT IS PROHIBITED AND  
MAY BE SUBJECT TO LEGAL ACTION.

NORTH



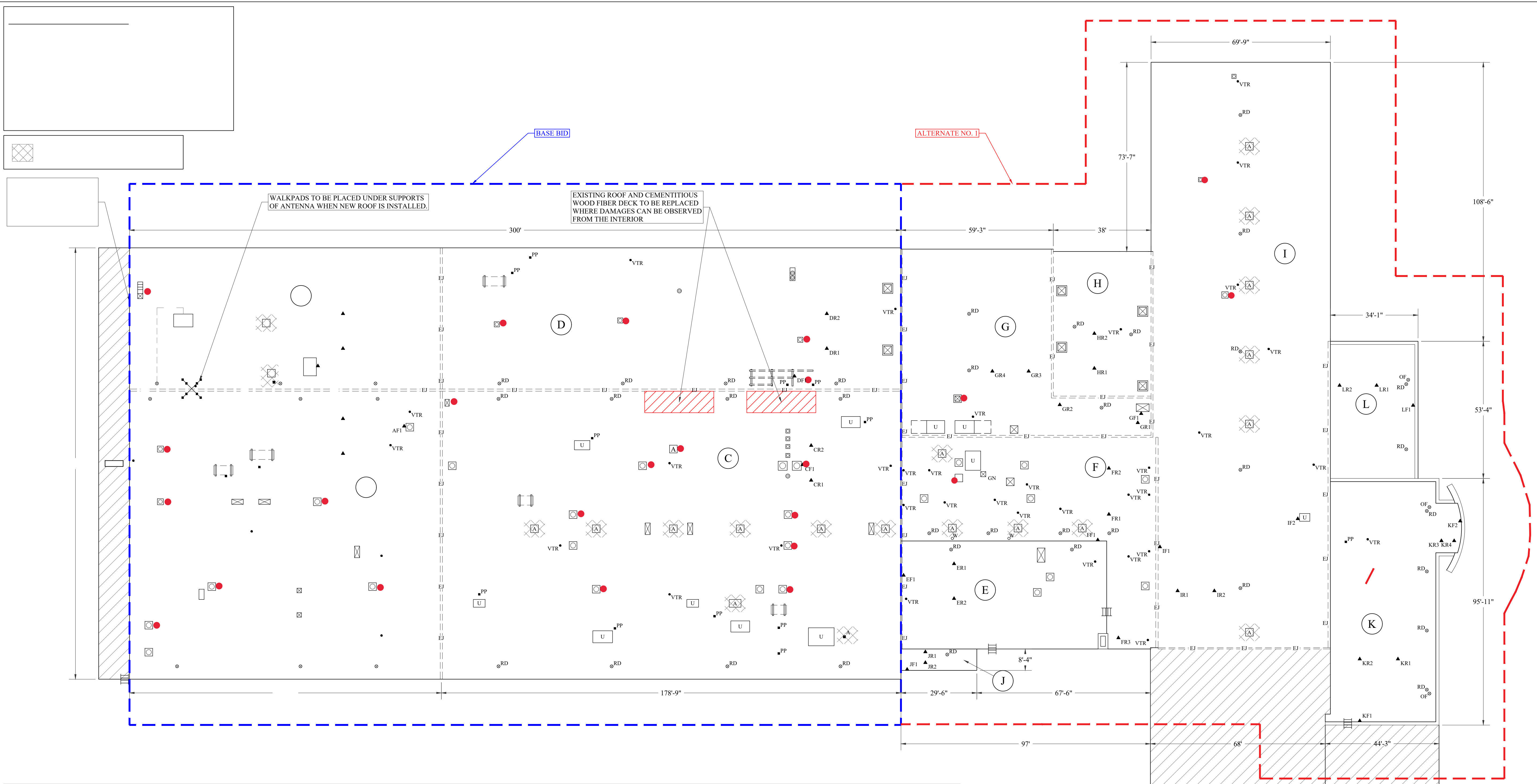
WMBE PROJECT NUMBER: 2023-47

CONSTRUCTION DOCUMENTS

DATE: 3/25/2024

OVERALL EXISTING  
ROOF PLAN

R-1.1



EXISTING ROOF CORE SUMMARY

▲	FR2	GBUR PERLITE = 1-1/2" BASE SHEET / VAPOR RETARDER TECTUM / CEMENTITIOUS WOOD FIBER DECK TOTAL THICKNESS = 2"	HR1	GBUR PERLITE = 3/4" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3-1/4"	KR1	GBUR PERLITE = 1/2" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3"
▲	GR1	GBUR PERLITE = 3" BASE SHEET / VAPOR RETARDER RED ROSEN PAPER CEMENTITIOUS WOOD FIBER ROOF DECK TOTAL THICKNESS = 3-1/2"	HR2	GBUR PERLITE = 3/4" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3-1/4"	KR2	GBUR PERLITE = 1/2" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3"
	GR2	GBUR PERLITE = 3" BASE SHEET / VAPOR RETARDER RED ROSEN PAPER CEMENTITIOUS WOOD FIBER ROOF DECK TOTAL THICKNESS = 3-1/2"	IR1	GBUR PERLITE = 1-1/2" BASE SHEET / VAPOR RETARDER TECTUM / CEMENTITIOUS WOOD FIBER DECK TOTAL THICKNESS = 2"	KR3	GBUR PERLITE = 3-1/4" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 5-1/2"
	GR3	GBUR PERLITE = 3" BASE SHEET / VAPOR RETARDER RED ROSEN PAPER CEMENTITIOUS WOOD FIBER ROOF DECK TOTAL THICKNESS = 3-1/2"	IR2	GBUR PERLITE = 1-1/2" BASE SHEET / VAPOR RETARDER TECTUM / CEMENTITIOUS WOOD FIBER DECK TOTAL THICKNESS = 2"	KR4	GBUR PERLITE = 3-1/4" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 5-1/2"
	GR4	GBUR PERLITE = 3" BASE SHEET / VAPOR RETARDER RED ROSEN PAPER CEMENTITIOUS WOOD FIBER ROOF DECK TOTAL THICKNESS = 3-1/2"	JR1	SBUR PERLITE = 3/4" BASE SHEET / VAPOR RETARDER GYPSUM OVER METAL FORM TOTAL THICKNESS = 2-1/4"	LR1	GBUR PERLITE = 1/2" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3"
			JR2	SBUR PERLITE = 3/4" BASE SHEET / VAPOR RETARDER GYPSUM OVER METAL FORM TOTAL THICKNESS = 2-1/4"	LR2	GBUR PERLITE = 1/2" POLYISOCYANURATE = 2" METAL ROOF DECK TOTAL THICKNESS = 3"

ROOF LAYDOWN  
LOCATION



P. Dan Hull Building

Google Earth

Image © 2024 Airbus





RED AREAS ARE ANTICIPATED AREAS OF EXISTING WET ROOF INSULATION THAT WILL BE REMOVED AND REPLACED WITH NEW USING THE UNIT PRICE. TEST CUTS SHALL BE COMPLETED TO CONFIRM.





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

**POLARIZED LIGHT MICROSCOPY**

Performed by EPA 600/R-93/116 Method

# Asbestos Analysis Summary

**Client Name** WMBE Consultants 1501 Chapin Rd  
**Client Job** SCC P. Dan Hall Bldg 2023-47 Chapin SC 29036

**Date Received** 4/24/2023

**Date Analyzed** 4/24/2023

**Job Number** 4335-15-156

<b>Lab ID:</b>	<b>Sample #:</b>	<b>Appearance</b>	<b>Comments</b>	<b>Asbestos %/Type</b>	<b>Non-Asbestos Fibrous %/Type</b>	<b>Non-Fibrous %/Type</b>
23-3386A	ER1	BLACK FIBROUS	ROOF	ND	20 GLASS	80 OTHER
23-3386B	ER1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
23-3387	ER1BS	BLACK FIBROUS		ND	1 CELLULOSE	99 OTHER
23-3388	EF1	WHITE/BLACK FIBROUS		ND	5 GLASS	95 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 4/24/23*

Jane Wasilewski  
 Laboratory Manager

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

<i>Lab ID:</i>	<i>Sample #:</i>	<i>Appearance</i>	<i>Comments</i>	<i>Asbestos %/Type</i>	<i>Non-Asbestos Fibrous %/Type</i>	<i>Non-Fibrous %/Type</i>
23-3389A	CR1	BLACK FIBROUS	ROOF	ND	20 GLASS	80 OTHER
23-3389B	CR1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
23-3390	CR1BS	BLACK/TAN FIBROUS		ND	10 GLASS 5 CELLULOSE	85 OTHER
23-3391	CF1	BLACK FIBROUS		ND	5 GLASS	95 OTHER
23-3392A	DR1	BLACK FIBROUS	ROOF	ND	20 GLASS	80 OTHER
23-3392B	DR1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 4/24/23*

Jane Wasilewski  
Laboratory Manager

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

<i>Lab ID:</i>	<i>Sample #:</i>	<i>Appearance</i>	<i>Comments</i>	<i>Asbestos %/Type</i>	<i>Non-Asbestos Fibrous %/Type</i>	<i>Non-Fibrous %/Type</i>
23-3393	DR1BS	BLACK FIBROUS		ND	15 CELLULOSE	85 OTHER
23-3394	DF1	BLACK FIBROUS		ND	5 GLASS 3 CELLULOSE 2 SYNTHETIC	90 OTHER
23-3395A	IR2	BLACK FIBROUS	ROOF	ND	20 GLASS	80 OTHER
23-3395B	IR2	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
23-3396	IR2BS	BLACK FIBROUS		ND	10 GLASS 1 CELLULOSE	89 OTHER
23-3397	IF2	BLACK FIBROUS		ND	5 GLASS	95 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 4/24/23*

**Jane Wasilewski**  
**Laboratory Manager**

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

<i>Lab ID:</i>	<i>Sample #:</i>	<i>Appearance</i>	<i>Comments</i>	<i>Asbestos %/Type</i>	<i>Non-Asbestos Fibrous %/Type</i>	<i>Non-Fibrous %/Type</i>
23-3398A	GR1	BLACK FIBROUS	ROOF	ND	10 GLASS	90 OTHER
23-3398B	GR1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
23-3399	GR1BS	BLACK FIBROUS		ND	10 GLASS	90 OTHER
23-3400	GF1	BLACK FIBROUS		ND	5 GLASS 2 SYNTHETIC	93 OTHER
23-3401A	FR1	BLACK FIBROUS	ROOF	ND	20 GLASS	80 OTHER
23-3401B	FR1	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 4/24/23*

Jane Wasilewski  
Laboratory Manager

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

<i>Lab ID:</i>	<i>Sample #:</i>	<i>Appearance</i>	<i>Comments</i>	<i>Asbestos %/Type</i>	<i>Non-Asbestos Fibrous %/Type</i>	<i>Non-Fibrous %/Type</i>
23-3402A	FR1BS	BLACK/TAN FIBROUS	ROOF	ND	10 GLASS 5 CELLULOSE	85 OTHER
23-3402B	FR1BS	GREY FIBROUS	INSULATION	ND	98 CELLULOSE	2 PERLITE
23-3403	FF1	BLACK FIBROUS		ND	5 GLASS	95 OTHER

Analyzed by: Jane Wasilewski  
*Additional Comments: Issued 4/24/23*

Jane Wasilewski  
Laboratory Manager

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



**BULK SAMPLE**  
CHAIN OF CUSTODY RECORD

4335-15-156

**POLARIZED LIGHT MICROSCOPY**  
PERFORMED BY EPA 600/R-93/116 METHOD

<b>PROJECT NO.</b> 2023-47	<b>PROJECT NAME</b> Spartanburg Community College - P. Dan Hall Building Roof Replacement	<b>RELINQUISHED BY:</b> Daniel Atwell	<b>DATE</b> 4/18/2023	<b>TIME</b> 12:00 PM	<b>RECEIVED BY:</b> <i>[Signature]</i> 4/24/23	
<b>FACILITY</b> Spartanburg Community College - P. Dan Hall Building		<b>RELINQUISHED BY:</b>	<b>DATE</b>	<b>TIME</b>	<b>RECEIVED BY:</b>	
<b>SAMPLER(S)</b> Daniel Atwell		<b>DATE TAKEN</b> 4/18/2023	<b>RELINQUISHED BY:</b>	<b>DATE</b>	<b>TIME</b>	<b>RECEIVED BY:</b>

SAMPLE #	LAB NUMBER	DATE ANALYZED	ANALYSTS INITIALS	ASBESTOS + N/D	ARCHIVE NUMBER	DATE ARCH	ARCHIVER INITIALS	SPECIAL INSTRUCTIONS
ER1 - GBUR	23-3386							
ER1BS - Base Sheet / VR	87							
EF1 - Flashing Sample	88							
CR1 - GBUR	89							
CR1BS - Base Sheet / VR	90							
CF1 - Flashing Sample	91							
DR1 - GBUR	92							
DR1BS - Base Sheet / VR	93							
DF1 - Flashing Sample	3394							

Same Day    
  24 Hour    
  48 Hour    
  3-5 Day    
  6-10 Day

ALL SAMPLES WILL BE DISPOSED OF AFTER ANALYSIS UNLESS OTHERWISE REQUESTED

By signing below, I warrant that I am authorized to enter into this agreement for the client named below, and that I authorize the above analysis subject to the terms and conditions on the reverse hereof.

**AUTHORIZED BY** *[Signature]* 3/17/23 PM  
(DATE & TITLE)  
**PRINT NAME** Daniel Atwell - Project Manager

This agreement is governed by the terms and conditions on the reverse side hereof.

Analysis charges shall be as included in S&ME, Inc.'s fee schedule in effect at the time of the analysis.

<b>CLIENT INVOICE INFORMATION</b>	Client Name <b>WM Building Envelope Consultants, LLC</b>	ATTN:	Name, Dept. Daniel Atwell, daniel@wmbeconsultants.com
	Client PO#		Co. WM Building Envelope Consultants, LLC
	Address 1501 Chapin Road		Address 1501 Chapin Road
	City, State, Zip Chapin, SC. 29036		City, State, Zip Chapin, SC. 29036
	Phone: (803) 422-7493	FAX:	Phone: (803) 422-7493

WHITE COPY-LABORATORY

YELLOW COPY-ACCOUNTING

PINK COPY-CLIENT



**BULK SAMPLE**  
CHAIN OF CUSTODY RECORD

**POLARIZED LIGHT MICROSCOPY**  
PERFORMED BY EPA 600/R-93/116 METHOD

<b>PROJECT NO.</b> 2023-47	<b>PROJECT NAME</b> Spartanburg Community College - P. Dan Hall Building Roof Replacement	<b>RELINQUISHED BY:</b> Daniel Atwell	<b>DATE</b> 4/18/2023	<b>TIME</b> 12:00 PM	<b>RECEIVED BY:</b> <i>[Signature]</i> 4/24/23	
<b>FACILITY</b> Spartanburg Community College - P. Dan Hall Building		<b>RELINQUISHED BY:</b>	<b>DATE</b>	<b>TIME</b>	<b>RECEIVED BY:</b>	
<b>SAMPLER(S)</b> Daniel Atwell		<b>DATE TAKEN</b> 4/18/2023	<b>RELINQUISHED BY:</b>	<b>DATE</b>	<b>TIME</b>	<b>RECEIVED BY:</b>

SAMPLE #	LAB NUMBER	DATE ANALYZED	ANALYSTS INITIALS	ASBESTOS + N/D	ARCHIVE NUMBER	DATE ARCH	ARCHIVER INITIALS	SPECIAL INSTRUCTIONS
IR2 - SBUR	23- 3395							
IR2BS - Base Sheet / VR	96							
IF2 - Flashing Sample	97							
GR1 - SBUR	98							
GR1BS - Base Sheet / VR	3399							
GF1 - Flashing Sample	3400							
FR1 - SBUR	01							
FR1BS - Base Sheet / VR	02							
FF1 - Flashing Sample	3403							

Same Day    
 24 Hour    
 48 Hour    
 3-5 Day    
 6-10 Day

ALL SAMPLES WILL BE DISPOSED OF AFTER ANALYSIS UNLESS OTHERWISE REQUESTED

By signing below, I warrant that I am authorized to enter into this agreement for the client named below, and that I authorize the above analysis subject to the terms and conditions on the reverse hereof.

**AUTHORIZED BY** *[Signature]* 3/17/23 PM (DATE & TITLE)     This agreement is governed by the terms and conditions on the reverse side hereof.

**PRINT NAME** Daniel Atwell - Project Manager     Analysis charges shall be as included in S&ME, Inc.'s fee schedule in effect at the time of the analysis.

<b>CLIENT INVOICE INFORMATION</b>	<b>Client Name</b> WM Building Envelope Consultants, LLC	<b>SEND COPIES OF RESULTS TO</b>	<b>Name, Dept.</b> Daniel Atwell, daniel@wmbeconsultants.com
	<b>Client PO#</b>		<b>Co.</b> WM Building Envelope Consultants, LLC
	<b>Address</b> 1501 Chapin Road		<b>Address</b> 1501 Chapin Road
	<b>City, State, Zip</b> Chapin, SC, 29036		<b>City, State, Zip</b> Chapin, SC, 29036
	<b>Phone:</b> (803) 422-7493 <b>FAX:</b>		<b>Phone:</b> (803) 422-7493 <b>FAX:</b>

WHITE COPY-LABORATORY

YELLOW COPY-ACCOUNTING

PINK COPY-CLIENT



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

## EMSL Order Number (Lab Use Only):

412304309

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

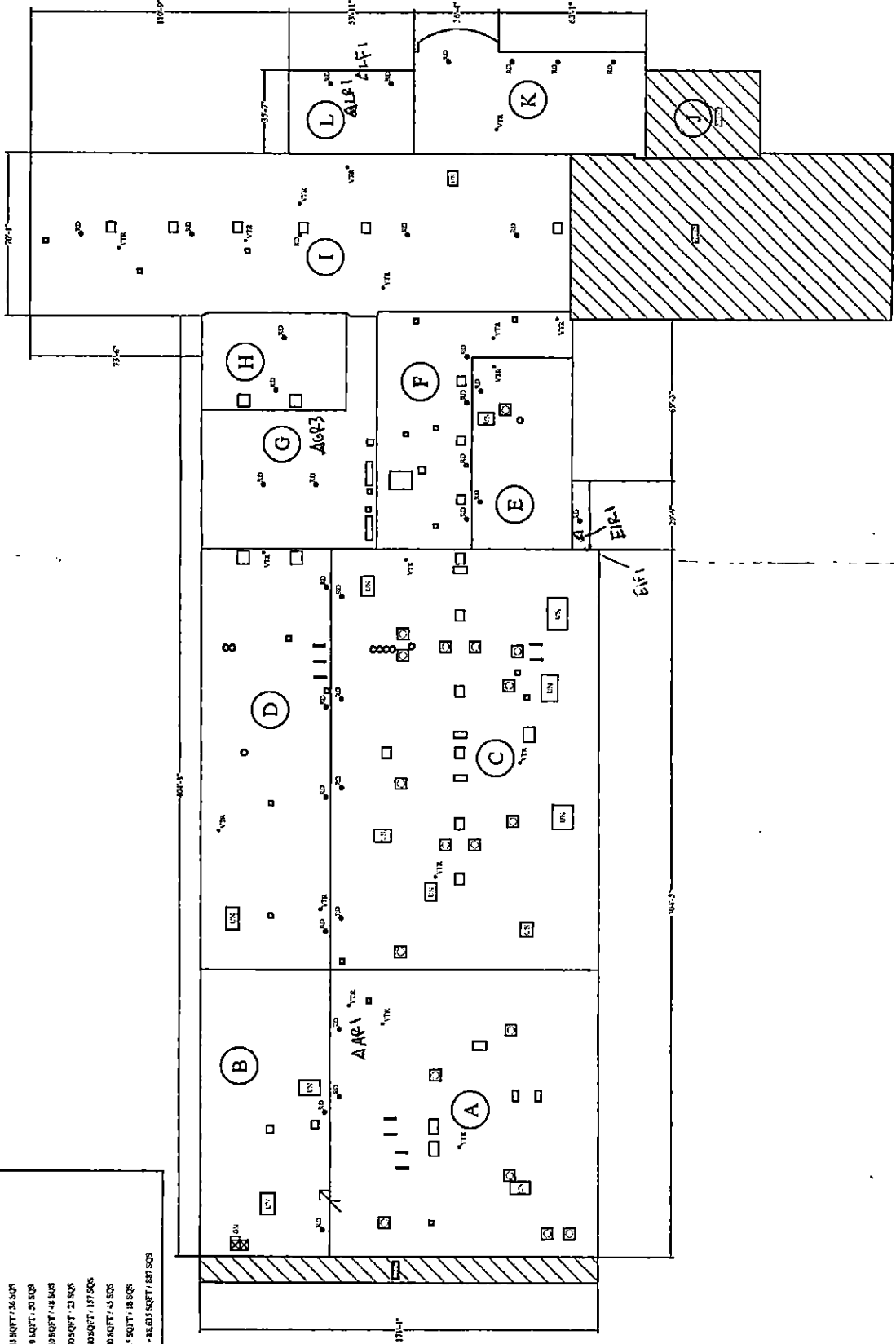
Company : WM Building Envelope Consultants, LLC		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 1501 Chapin Road		<i>Third Party Billing requires written authorization from third party</i>	
City: Chapin	State/Province: SC	Zip/Postal Code: 29036	Country: USA
Report To (Name): Daniel Atwell		Fax #: NA	
Telephone #: 803-260-4532		Email Address: daniel@wmbeconsultants.com	
Project Name/Number: SCC - P. Dan Hall Building Roof Replacement / 2023-47			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: NA	U.S. State Samples Taken: SC
<b>Turnaround Time (TAT) Options* – Please Check</b>			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	
<b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Bulk</b> <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water: EPA 100.2</b> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)	
		<b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)	
		<b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop – Clearly Identify Homogenous Group			
Samplers Name: Daniel Atwell		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
GR3	SBUR		4/18/23
LR1	SBUR		
AR1	GBUR		
E1R1	GBUR		
GR3BS	Base Sheet / VR		
E1R1BS	Base Sheet / VR		
LF1	Flashing Sample		
E1F1	Flashing Sample		
Client Sample # (s): 1		Total # of Samples: 8	
Relinquished (Client): Daniel Atwell		Date: 4/18/23	Time: 3:00 PM
Received (Lab):		Date: 4-19-23	Time: 1245 UPS
Comments/Special Instructions: <span style="float: right;">171A5493 03 3576 1826</span>			



4309

TEM

**APPROX. ROOF AREAS:**

A	- 11743 SQFT / 1050 PSF
B	- 6381 SQFT / 6650 PSF
C	- 20451 SQFT / 2000 PSF
D	- 10300 SQFT / 1010 PSF
E	- 3321 SQFT / 3630 PSF
F	- 2010 SQFT / 2050 PSF
G	- 4810 SQFT / 4840 PSF
H	- 2290 SQFT / 2330 PSF
I	- 14600 SQFT / 14750 PSF
K	- 4440 SQFT / 4550 PSF
L	- 1711 SQFT / 1850 PSF
<b>TOTAL - 86635 SQFT / 88750 PSF</b>	



DESIGNED BY SPARTANBURG COMMUNITY COLLEGE P. DAN HILL BUILDING ROOF REPLACEMENT H59-N277-PD 800 BRISSACK RD SPARTANBURG, SC 29303	 <p><b>W.M.</b> BUILDING ENVELOPE CONSULTANTS, LLC COLUMBIA, SOUTH CAROLINA 1001 CHURCH ROAD COLUMBIA, SOUTH CAROLINA 29201 TEL: 803-733-1100 FAX: 803-733-1101 WWW.WMCONSULTANTS.COM</p>	THESE DRAWINGS ARE THE PROPERTY OF W.M. BUILDING ENVELOPE CONSULTANTS, LLC NO REPRODUCTION, COPIES OR OTHER USE OF THESE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF W.M. BUILDING ENVELOPE CONSULTANTS, LLC MAY BE SUBJECT TO LEGAL ACTION.	NORTH 	PROJECT NUMBER: 2014-7 DESIGN/DATE: 08/14/14 DATE: 4/10/2014 EXISTING ROOF PLAN	<h1>R-1.3</h1>
---	--	--	--	--	----------------

1 EXISTING ROOF PLAN



# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

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

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

EMSL Order: 412304309

Customer ID: WMBE42

Customer PO:

Project ID:

**Attention:** Daniel Atwell  
WM Building Envelope Consultants LLC  
512 Limestone Point  
Chapin, SC 29036

**Phone:** (803) 422-7493  
**Fax:**  
**Received Date:** 04/19/2023 12:45 PM  
**Analysis Date:** 04/24/2023  
**Collected Date:** 04/18/2023

**Project:** SCC - P. Dan Hall Building Roof Replacement/ 2023-47

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

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
GR3 412304309-0001	SBUR	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
LR1 412304309-0002	SBUR	Black Fibrous Homogeneous	100.0 Other	<0.1 Fibrous_Other	No Asbestos Detected
AR1 412304309-0003	GBUR	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
E1R1 412304309-0004	GBUR	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
GR3BS 412304309-0005	Base Sheet / VR	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
E1R1BS 412304309-0006	Base Sheet / VR	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
LF1 412304309-0007	Flashing Sample	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
E1F1 412304309-0008	Flashing Sample	Gray Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Sarah Breneman (8)

Lee Plumley, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 04/24/2023 10:55:52