

ADDENDUM TO  
SPECIFICATIONS ENTITLED  
"SPECIFICATIONS FOR  
WARDLAW COLLEGE ROOF REPLACEMENT  
STATE PROJECT NO. 50003317-2  
WARDLAW COLLEGE  
COLLEGE OF EDUCATION  
820 SOUTH MAIN STREET  
COLUMBIA, SOUTH CAROLINA"  
"

**ADDENDUM NO. 2**

**JULY 24, 2019**

The Specifications and Drawings contained in the project manual entitled "Specifications for Wardlaw College Roof Replacement, State Project No. 50003317-2, Wardlaw College, College of Education, 820 South Main Street, Columbia, South Carolina" are amended as follows:

**GENERAL**

1. Results were returned as Negative for Asbestos at the exterior stucco wall along Roof Area F. Asbestos test results are attached.

**DRAWINGS**

1. Delete Drawings G-101, A-101 and A-103 in their entirety and replace with attached Drawings G-101, A-101, A-103 (Addendum No. 2)

Nothing herein is to be interpreted or construed as changing any provisions of the specifications except as specifically stated herein.

Enclosure: Asbestos Test Results  
G-101, A-101 and A-103 (Addendum No. 2)

END OF ADDENDUM

Description    HAZMAT SURVEY - 080							
Site	COLUMBIA	Assigned To	SSINCLAIR				
Building	080    WARDLAW COLLEGE	Crew	HAZMAT				
Floor	ROOF	Start Date	16-APR-18	Priority	20		
Equipment	Room:	Due date		Request Date	22-FEB-18	by	CAMOORE

Request #	FM00568662	Description	HAZMAT SURVEY - 080
Parent WO #			

CP Number	50003317-2	WARDLAW COLLEGE ROOF REPLACEMENT
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State/Internal Project Number	H27-Z377
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Requestor	Project Manager	BRANHAM, DALE
Telephone	Telephone	777-1288
Alternate	Estimated Cost	\$ 2,958.50
Telephone	Billing	FIXED PRICE
Non-Available Time	CL013-57140	(FACILITIES PLANNING - CONSTR)

Task List
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DATE WORK STARTED	CAUSE	
DATE WORK COMPLETED	CONDITION	
EQUIPMENT		
CLOSING REMARKS		
BENCHSTOCK MATERIALS		
Qty	Description	Price Per Unit

Supervisor's Approval \_\_\_\_\_

Note Date	Title
23-JUL-19	HAZMAT SURVEY RESULTS
SURVEY DATE: 7/23/2019	
INSPECTOR #: ANTONIO THOMPSON (GR00052)	
SCOPE: THE FOLLOWING SURVEY WAS PERFORMED IN PREPARATIONS TO REPAIR DAMAGE STUCCO ON THE EXTERIOR PORTION OF THE BUILDING.	
ASBESTOS SECTION: STUCCO: NEGATIVE FOR ASBESTOS	
INSPECTOR NOTES: 1. IF A BUILDING MATERIAL IS NOT LISTED, DO NOT ASSUME THAT IT DOES NOT CONTAIN ASBESTOS. IT MAY NOT HAVE BEEN TESTED. FOR FURTHER INFORMATION, PLEASE CONTACT THE USC HAZMAT PROGRAM.  2. IF YOU ENCOUNTER ANY OTHER MATERIALS IN PLACE AND DEEM THEM SUSPECT FOR ASBESTOS AND/OR LEAD, PLEASE STOP WORK AND CONTACT THE ASBESTOS PROGRAM MANAGER FOR FURTHER TESTING OR ABATEMENT.  3. PLEASE NOTE THAT THE MATERIAL QUANTITY PROVIDED ON THE FIELD SHEET IS ONLY AN ESTIMATE FOR SAMPLING PURPOSES. THE QUANTITY	

SHOULD BE FIELD VERIFIED FOR ALL OTHER PURPOSES INCLUDING ABATEMENT. THIS SURVEY IS ONLY VALID FOR THE DESIGNATED AREA(S)/LOCATION(S) TESTED IE: (WARDLAW COLLEGE EXTERIOR WALLS).

**02-MAY-18 HAZMAT SURVEY RESULTS**

SURVEY DATE:05/07/2018

INSPECTOR #: SIMONE WARREN (GR00052)

SCOPE: THE FOLLOWING SURVEY WAS PERFORMED IN PREPARATION TO REMOVE/REPLACE EXISTING ROOF AT WARDLAW COLLEGE. THE FOLLOWING SECTIONS TO BE IMPACTED INCLUDE: SECTIONS A, B, C, D, E, AND F. PLEASE SEE ATTACHMENT FOR IMAGES, BIRDS EYE VIEW OF ROOF, AND SECTION DESIGNATIONS. PLEASE NOTE: IN-HOUSE ROOFERS CORE DRILLED ROOFING MATERIAL TO THE DECK. LAB RESULTS WILL REFLECT RESULTS FOR ALL LAYERS. CLIENT INDICATED THAT HVAC DUCT WORK AND HVAC DUCT MASTICS & ITS CORRESPONDING CAULK WILL NOT BE IMPACTED BY PLANNED WORK ACTIVITIES. CLIENT HAS ALSO INDICATED THAT ROOF LAYERS SHALL BE TREATED AS ONE UNIT AND OTHERWISE CANNOT BE ABATED SEPERATELY BY LAYER.

**ASBESTOS SECTION :**

SECTIONS A,B,C,D, E AND F

- ROOFING MATERIAL: POSITIVE FOR ASBESTOS
- ALL EXISTING ROOF FELT:TREATED POSITIVE FOR ASBESTOS
- ROOF FLASHING (TO INCLUDE ALL PATCHWORK): POSITIVE FOR ASBESTOS.
- WHITE SEALANT AND ANY OTHER MATERIAL USED TO PATCH AND SEAL AREAS ON ROOF :TREATED POSITIVE FOR ASBESTOS
- ALL EXISTING CAULK ENCOUNTERED: POSITIVE FOR ASBESTOS (PLEASE SEE LINE 1 INSPECTORS NOTES FOR EXCLUSIONS TO THIS LINE ITEM)
- SILVER PAINTED DECORATIVE ORNAMENTS/ROOF FELT/CAULK: POSITIVE FOR ASBESTOS. PLEASE NOTE: ROOF FELT MATERIAL WAS PRESENT UNDER SILVER PAINT. RESULTS FOR ROOF FELT: 60% CHRYSOTILE. CORRESPONDING SILVER CAULK IS ALSO POSITIVE FOR ASBESTOS.
- TEXTURED PLASTER (SECTION F: INTERIOR STAIRWELL): NEGATIVE FOR ASBESTOS
- HVAC DUCT WORK (BLACK INTERIOR/WHITE EXTERIOR) : NEGATIVE FOR ASBESTOS

**LEAD SECTION:**

SILVER PAINT OBSERVED ON DECORATIVE ORNAMENTS: POSITIVE FOR LEAD

YELLOW PAINTED WALL AT METAL COPING: POSITIVE FOR LEAD

WHITE & RED PAINT ON BIRD HOUSE (METAL AND CONCRETE SUBSTRATE): POSITIVE FOR LEAD

VENT PIPES: POSITIVE FOR LEAD

GREEN/BLACK PAINTED CAULK (SECTION C-ACCESS PANEL BOX): NEGATIVE FOR LEAD

ELEVATOR MACHINE RM EXTERIOR WALLS: NEGATIVE FOR LEAD

BEIGE PAINTED STAIR WELL (SECTION F):NEGATIVE FOR LEAD

BEIGE PAINTED CEILINGS – (SECTION F- STAIRWELL): NEGATIVE FOR LEAD

WHITE PAINTED HVAC BRACKET (SECTION A): NEGATIVE FOR LEAD

**30-JUN-18 HAZMAT SURVEY RESULTS**

INSPECTORS NOTES: (PLEASE SEE ATTACHED IMAGES)

DURING OBSERVATION, THERE WERE LOCATIONS WHERE EXISTING CAULK APPEARED TO BE CROSS CONTAMINATED WITH EXCESS ROOF FLASHING MATERIAL (WHICH TESTED POSITIVE FOR ASBESTOS). FOR THESE REASONS- ANY GRAY, WHITE, BEIGE, CLEAR, AND BROWN CAULK FOUND ON THE ROOF, ON PERIMETER OF DOORS, PERIMETER OF ELEVATOR MACHINE ROOM/STAIR WELL (EXTERIOR), AND/OR ON THE PERIMETER OF METAL FLASHING SHALL BE TREATED AS POSITIVE FOR ASBESTOS. SEE LIST BELOW FOR EXCLUSIONS:

1. (CAULK EXCLUSIONS)-\*\*\*CAULK THAT WILL BE VIEWED AS NEGATIVE FOR ASBESTOS\*\*\*:

- BROWN CAULK ON PERIMETER OF EXTERIOR WINDOWS: NEGATIVE FOR ASEBSTOS

2. THERE ARE VARIOUS ITEMS ON THE ROOF, NOT LIMITED TO :SUPPORT ANCHORS FOR HVAC UNIT, EXHAUST FANS, PITCH POCKETS, VENT PIPES, HVAC UNIT BRACKETS, AND ANY OTHERS THAT HAVE CONTAMINATED ROOFING MATERIAL ON ITS SURFACE. IF THERE ANY PLANS MADE TO DISPOSE ANY OF THE PRESENT ITEMS, CONSIDERATIONS SHALL BE MADE TO DISPOSE OF ANY RESIDUAL ROOFING MATERIAL LEFT ON THESE SURFACES AS ACM.

3. THERE APPEARED TO BE A RUBBER SHEET BELOW ROOF COPINGS THAT LOOKED TO BE MECHANICALLY FASTENED IN PLACE. THE RUBBER SHEET IS NON SUSPECT FOR ASBESTOS. IF ANY ADDITONAL MATERIAL IS ENCOUNTERED DURING REMOVAL OF ROOF COPING, AND ANYWHERE ELSE ON ROOF, PLEASE STOP WORK AND CONTACT USC HAZMAT TO REASSESS.

4. IF A BUILDING MATERIAL IS NOT LISTED, DO NOT ASSUME THAT IT DOES NOT CONTAIN ASBESTOS. IT MAY NOT HAVE BEEN TESTED. FOR FURTHER INFORMATION, PLEASE CONTACT THE USC HAZMAT PROGRAM.

5. IF YOU ENCOUNTER ANY OTHER MATERIALS IN PLACE AND DEEM THEM SUSPECT FOR ASBESTOS AND/OR LEAD, PLEASE STOP WORK AND CONTACT THE ASBESTOS PROGRAM MANAGER FOR FURTHER TESTING OR ABATEMENT.

6. PLEASE NOTE THAT THE MATERIAL QUANTITY PROVIDED ON THE FIELD SHEET IS ONLY AN ESTIMATE FOR SAMPLING PURPOSES. THE QUANTITY

SHOULD BE FIELD VERIFIED FOR ALL OTHER PURPOSES INCLUDING ABATEMENT. THIS SURVEY IS ONLY VALID FOR THE DESIGNATED AREA(S)/LOCATION(S) TESTED IE: SECTIONS A, B, C, D, E, F ; WARDLAW COLLEGE (ROOF).

**08-SEP-16 ASBESTOS SUMMARY FOR WARDLAW COLLEGE (080) – SEPTEMBER 2016**

ASBESTOS HAS BEEN FOUND IN THIS BUILDING. IF DISTURBED, ASBESTOS MAY BE HARMFUL TO YOUR HEALTH.

PLEASE DO NOT DISTURB THE FOLLOWING MATERIALS IN THIS BUILDING AS THEY HAVE BEEN FOUND TO CONTAIN ASBESTOS.

- JOINT COMPOUND / SHEETROCK (3RD FLOOR ONLY)
- 9X9 FLOOR TILE
- BLACK MASTIC UNDER FLOOR TILE
- RESIDUAL BLACK MASTIC ON FLOORING
- BLACK DUCT MASTIC
- PIPE INSULATION
- BLACK MASTIC ON PIPE INSULATION
- RED FIRE CAULKING

IF A BUILDING MATERIAL IS NOT LISTED, DO NOT ASSUME THAT IT DOES NOT CONTAIN ASBESTOS. IT MAY NOT HAVE BEEN TESTED.

FOR FURTHER INFORMATION, PLEASE CONTACT THE USC HAZMAT PROGRAM.

**08-SEP-16 CRAWL SPACE MAY BE CONTAMINATED WITH ASBESTOS**

THE SOIL IN CRAWL SPACES MAY BE CONTAMINATED WITH ASBESTOS FROM OLD PIPE INSULATION AND OTHER MATERIALS. PLEASE CONTACT THE USC HAZMAT PROGRAM BEFORE ENTERING THESE CRAWL SPACES.



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

4909

EMSL Analytical, Inc.  
706 Gralin Street

Kernersville, NC 27284

PHONE: (336) 992-1025

FAX: (336) 992-4175

Company Name : University of South Carolina		EMSL Customer ID:	
Street: 743 Greene Street		City: Columbia	State/Province: SC
Zip/Postal Code: 29208	Country: US	Telephone #: 803-917-0291	Fax #: 803-777-3990
Report To (Name): USC HAZMAT Dept		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: asbestos@mailbox.sc.edu		Purchase Order:	
Project Name/Number: 080 Wardlaw College		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: SC		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party			
Turnaround Time (TAT) Options* - Please Check <input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" 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"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input 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:</b> EPA 100.2 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 EPA 600/R-93/116 with milling prep (<1%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep <input type="checkbox"/> Cincinnati Method EPA 600/R-04/004 - PLM/TEM (BC only) <b>Other:</b> <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: Antonio Thompson		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
	SEE FIELD SHEET ATTACHED		
Client Sample # (s):		Total # of Samples: 7	
Relinquished (Client): Antonio Thompson		Date: 7/19/2019	Time: 10:05 AM
Received (Lab):		Date: 7/22/19	Time: 10:15
Comments/Special Instructions: ① EFX 795746004289			



Print Form

Reset Form



Building # 080 WARDLAW COLLEGE

## Sample Analysis

Type of Analysis: Lead / Asbestos Date: 7/19/19

Turn Around Time 24 HOUR

Area	Sample ID	Material Sampled	Material Location	F/NF	Cond	Quantity	Pot to Disturb
A	1	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	2	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	3	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	4	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	5	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	6	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW
A	7	STUCCO	EXTERIOR STAIR TOWER WALLS	NF	GOOD	<5000 SQ FT	LOW

License # GR00052

FM# FM00605773

Signature

Requestor

BRANHAM, DALE

Send lab results in PDF and CSV format as soon as possible to: asbestos@mailbox.sc.edu



# EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

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

EMSL Order: 021904909

Customer ID: UNSC62

Customer PO: 2000041931

Project ID:

**Attention:** USC Hazmat  
University of South Carolina  
743 Greene Street  
Columbia, SC 29208

**Phone:** (803) 777-7000

**Fax:** (803) 777-3990

**Received Date:** 07/22/2019 10:15 AM

**Analysis Date:** 07/22/2019

**Collected Date:** 07/19/2019

**Project:** 080 Wardlaw College

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1 021904909-0001	Stucco	Gray/White Non-Fibrous Homogeneous	<1% Cellulose	25% Quartz 20% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2 021904909-0002	Stucco	Gray Non-Fibrous Homogeneous	<1% Cellulose	30% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected
3 021904909-0003	Stucco	Gray/White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
4 021904909-0004	Stucco	Gray Non-Fibrous Homogeneous	<1% Cellulose	30% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected
5 021904909-0005	Stucco	Gray Non-Fibrous Homogeneous	<1% Cellulose	30% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected
6 021904909-0006	Stucco	Gray/White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
7 021904909-0007	Stucco	Gray Non-Fibrous Homogeneous	<1% Cellulose	30% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected

Analyst(s)

Cameron Evans (5)

Ryan Rains (2)

Stephen Bennett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. 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. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Kernersville, NC NVLAP Lab Code 102104-0, CA ELAP 2689, Virginia 3333-000228, West Virginia LT000321

Initial report from: 07/22/2019 17:16:39





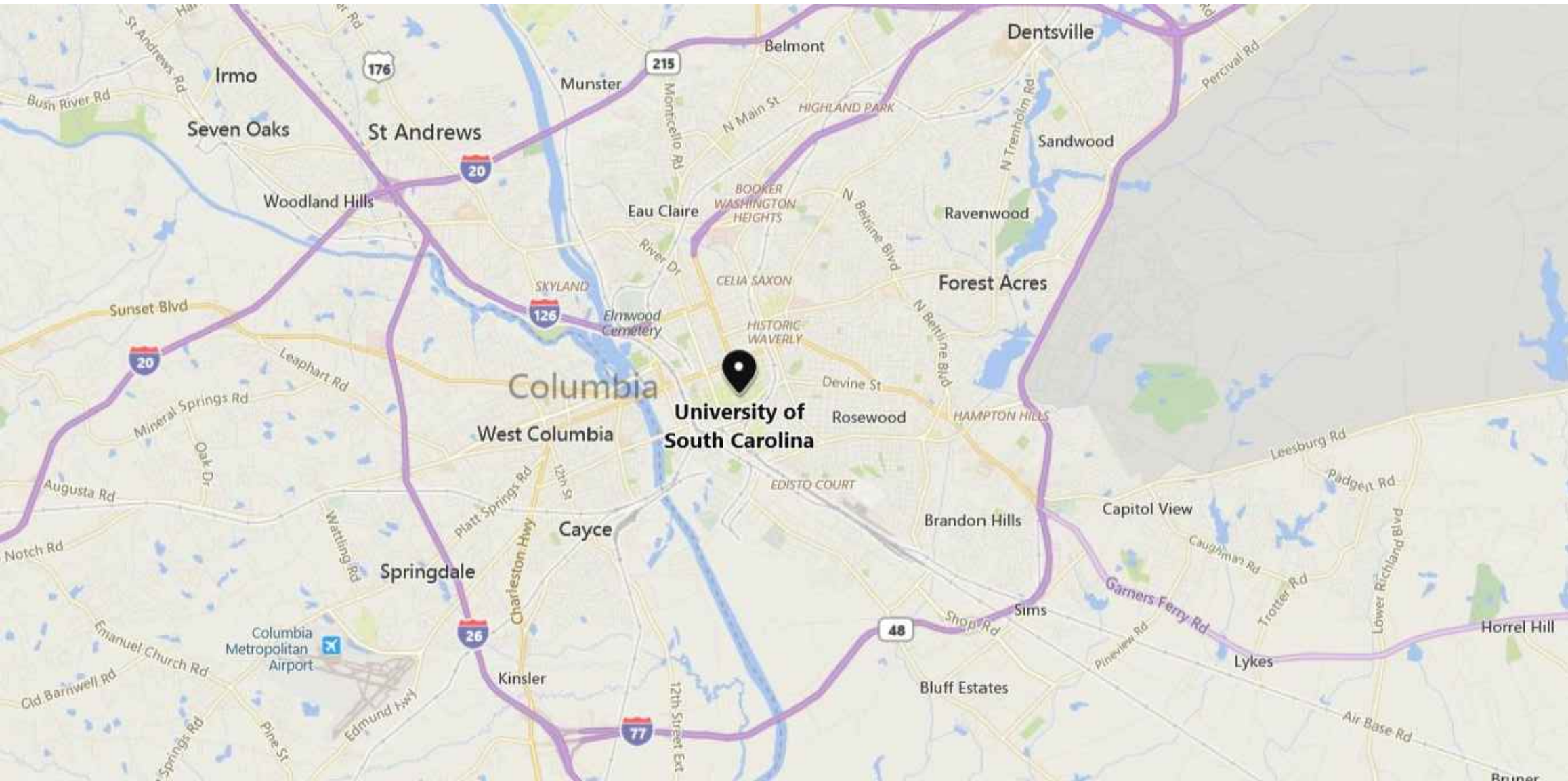
University of South Carolina

# WARDLAW COLLEGE ROOF REPLACEMENT PROJECT

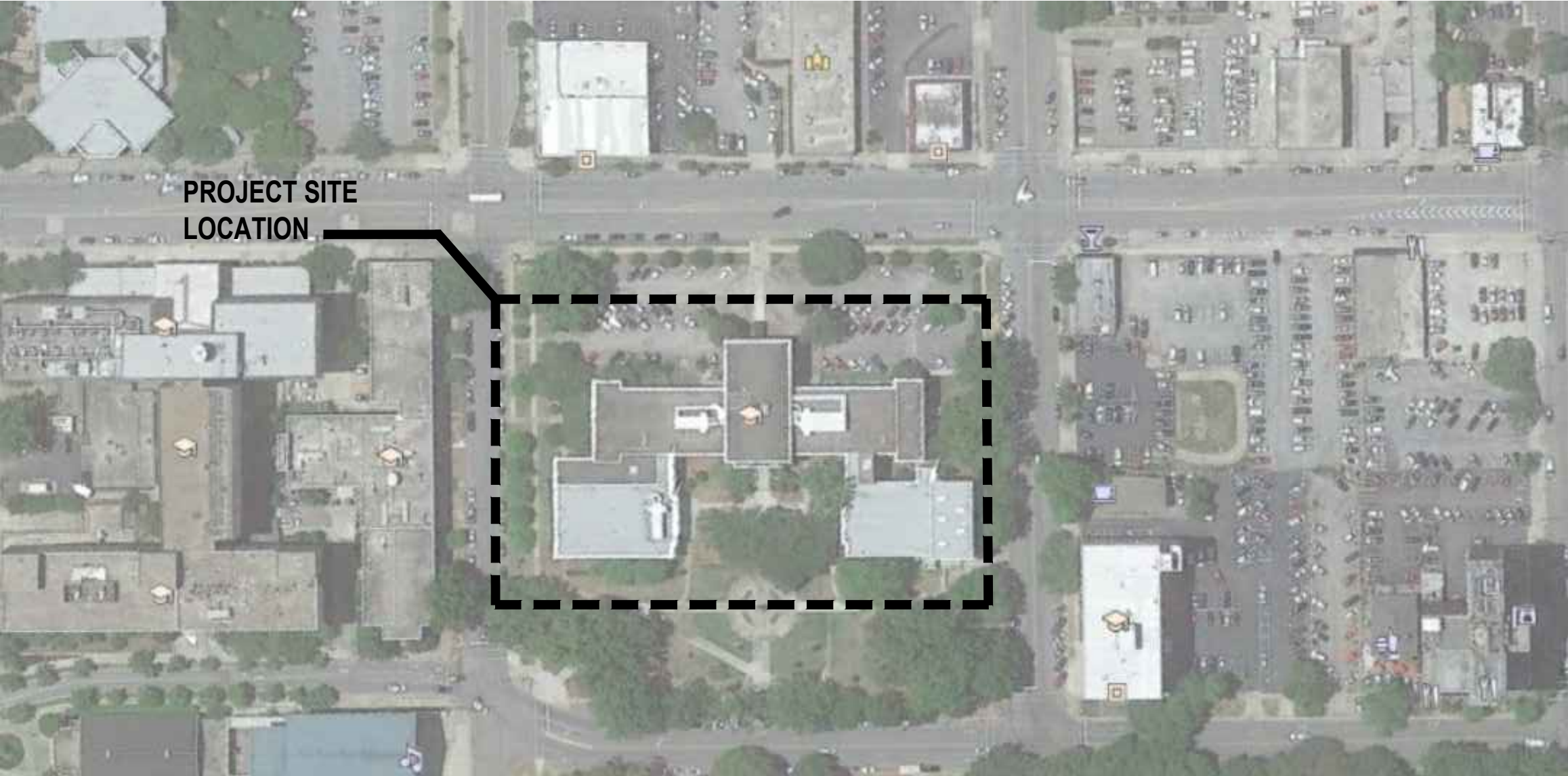
## STATE PROJECT No.: 50003317-2

Project Address  
820 SUMTER STREET  
COLUMBIA, SOUTH CAROLINA 29208

Project Location



VICINITY MAP

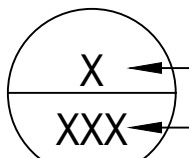
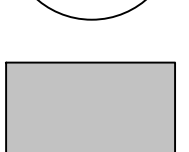



SITE LOCATION

Abbreviations

- MAX. MAXIMUM
- MIN. MINIMUM
- N.I.C NOT IN CONTRACT
- NTS NOT TO SCALE
- O.C. ON CENTER
- O.H OPPOSITE HAND
- TYP. TYPICAL
- SIM. SIMILAR

Details / Elevations / Sections Identifier

-  ELEVATION / DETAIL / SECTION LABEL
-  SHEET SHOWN ON
-  SHADING IDENTIFIES EXISTING CONDITIONS AND NOT IN SCOPE OF WORK

Index of Drawings

General  
G-101 COVER SHEET

Architectural  
A-101 ROOF PLAN  
A-102 ROOF PLAN: WIND ZONES  
A-103 ROOF PLAN: WALKPAD LAYOUT  
A-502 ROOF DETAILS  
A-503 ROOF DETAILS  
A-504 ROOF DETAILS  
A-505 ROOF DETAILS  
A-506 ROOF DETAILS  
A-507 ROOF DETAILS  
A-508 ROOF DETAILS  
A-509 ROOF DETAILS AND SMACNA DETAILS

Structural (Alternate No.2)  
S-100 STRUCTURAL GENERAL NOTES  
S-101 ENLARGED ROOF PLAN AREA F  
S-200 ELEVATIONS AND DETAILS  
S-201 SECTIONS AND DETAILS

CLIENT

UNIVERSITY of SOUTH CAROLINA  
743 Greene Street  
Columbia, South Carolina

Mr. Dale Branham  
e: branhamd@fmc.sc.edu  
p: 803.777.1288

ENGINEERING CONSULTANT

TERRACON CONSULTANTS, INC.  
2701 Westport Road  
Charlotte, North Carolina

Mr. Stewart S. Swing, RRO, E.I.  
Senior Staff Engineer I Facilities  
e: Stewart.Swing@terracon.com  
p: 704.594.8905




ENGINEER STATE LICENSE SEAL

PROJECT NAME AND ADDRESS:

University of South Carolina  
**WARDLAW COLLEGE**  
**ROOF REPLACEMENT PROJECT**  
**STATE PROJECT No.: 50003317-2**  
  
Project Address:  
820 South Main Street  
Columbia, South Carolina 29208

ISSUE DATE:  
**07.03.2019**

ISSUE FOR:  
**ISSUED FOR BIDDING**

ADDENDUM:  
No.: DATE: DESCRIPTION:  
 7/23/19 ADDED WALKPAD REQUIREMENTS

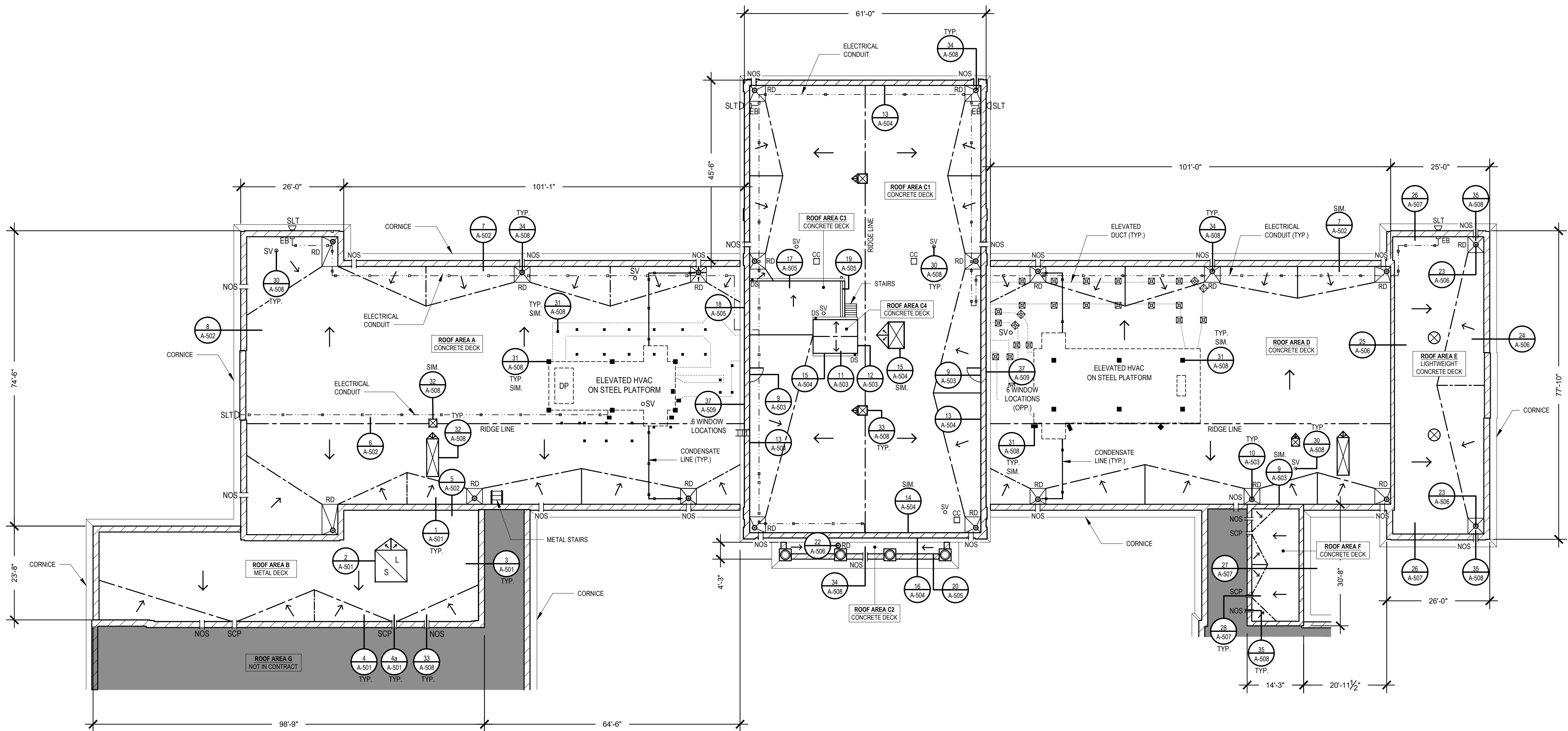
PROJECT TEAM:  
DESIGNED BY:  
**SSS**  
DRAWN BY:  
**EGM II**  
APR REVIEWER:  
**LTH**

TERRACON'S PROJECT NUMBER:  
**FH186084**

TITLE SHEET:  
**COVER SHEET**

SHEET NUMBER:  
**G-101**

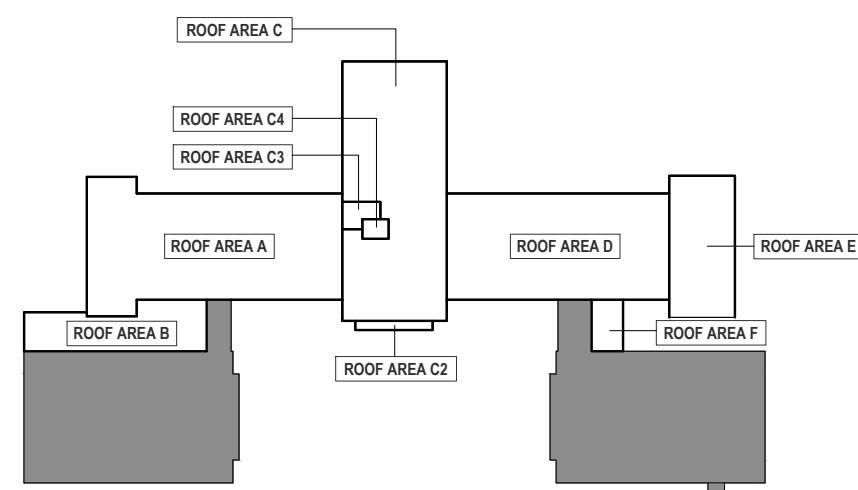




1 WARDLAW COLLEGE ROOF PLAN  
SCALE: 1/16" = 1'-0"

### KEY PLAN

- SCOPE OF WORK  
■ NOT IN SCOPE OF WORK



### LEGEND

- TAPERED INSULATION  
→ TAPERED SLOPE DIRECTION  
→ STRUCTURAL SLOPE  
RD ○ ROOF DRAIN  
SV ○ SANITARY VENT  
⊠ EQUIPMENT UNIT  
▨ PARAPET WALL/CORNICE  
..... ELEVATED DUCT  
SCP = SCUPPER  
SL SKYLIGHT  
▪ EQUIPMENT SUPPORT  
⊗ VENTILATOR  
▢ COVERED CURB  
SLT ▽ SECURITY LIGHT  
EB □ ELECTRICAL BOX  
NOS = NEW OVERFLOW SCUPPER  
DS = GUTTER/DOWNSPOUT  
▢ DUCT SUPPORT PEDESTAL  
○ DETAIL FLAG No. #  
■ NOT IN CONTRACT

### CONSTRUCTION NOTES

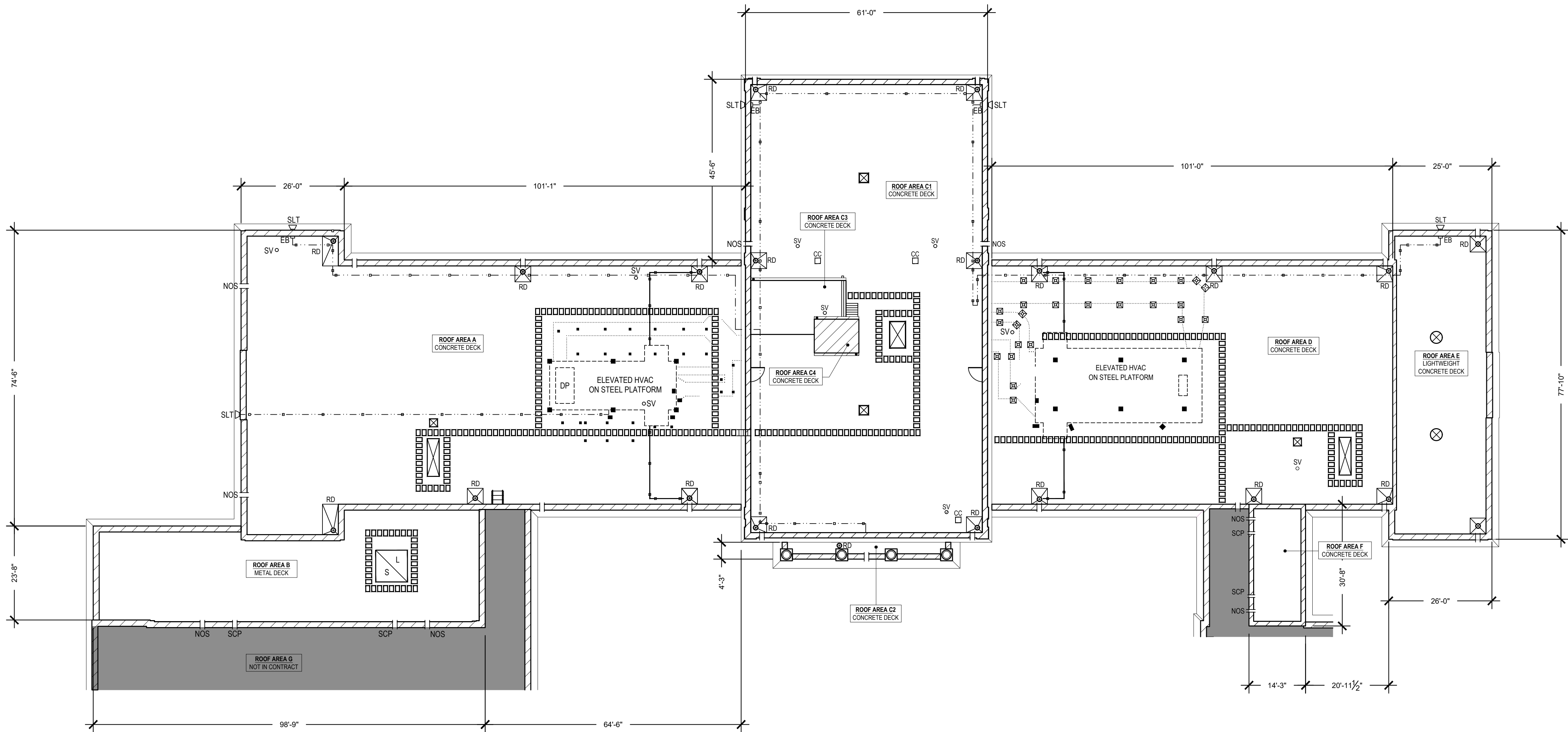
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
- ELECTRICAL CONDUITS, BOXES, OUTLET AND CABLES MAY REQUIRE POWER TO BE DISCONNECTED PRIOR TO PERFORMING THE WORK. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO REMOVAL.
- ABANDONED EQUIPMENT TRUSSES AND POURABLE SEALER SHOULD BE REMOVED AND DISCARDED.
- RAISE ALL CURBS TO ACHIEVE AN 8" MINIMUM FLASHING HEIGHT.
- CLEAN, PRIME AND PAINT BIRD HOUSES AT ROOF AREAS A, C AND D.
- STAIRS AT ROOF AREA C3 WILL NEED TO BE REMOVED AND REINSTALLED ONCE NEW ROOF INSTALLATION IS COMPLETED.
- ALL EQUIPMENT SUPPORTS AND PIPE PENETRATIONS ARE TO BE LIQUID FLASHED.
- EXISTING DRAIN INSERTS WILL NEED TO BE REMOVED AT ALL DRAINS TO ALLOW FOR NEW RETRO-FIT INSERT.
- MECHANICAL UNIT STRUTS THAT ARE ATTACHED TO PARAPET WALL WILL NEED TO BE REMOVED, STORED AND REINSTALLED ONCE NEW ROOFING IS COMPLETED. STRUTS TO BE FLASHED WITH NEW LIQUID APPLIED FLASHING.
- NEW CONCRETE PAD AND DOORS TO BE INSTALLED AT ROOF AREAS A AND D.
- BASE FLASHING HEIGHTS WILL VARY AT SECTIONS WHERE WALL METAL PANELS ARE TO HAVE CONSISTENT HEIGHT.
- ROOF AREA C2 WILL NEED CONCRETE REPAIR WORK AT WALLS TO COMPLETE NEW ROOFING INSTALLATION.
- PULL TEST AT LIGHTWEIGHT CONCRETE DECK SHOULD BE CONDUCTED PRIOR TO NEW ROOFING INSTALLATION.
- CRICKETS SHOULD BE INSTALLED AT ALL CURBS THAT EXCEED 24" INCHES IN WIDTH.
- CONTRACTOR TO REMOVE AND INSTALL NEW COPING CAP AT ROOF AREA G TO ACCOMMODATE NEW PARAPET WALL HEIGHT AT ROOF AREA B.
- PROVIDE SUPPORTS FOR ALL CONDUIT, PIPES, AND CONDENSATION LINES. ALL SUPPORTS SHOULD BE SET ON WALKPADS.
- ON ANY ROOF AREA THAT A DOWNSPOUT IS TO BE INSTALLED, THE DOWNSPOUT SHOULD EXTEND TO THE NEAREST ROOF DRAIN AND BE SUPPORTED. SUPPORTS SHOULD BE INSTALLED OVER WALK PADS.

### ALTERNATE No.1: (TYPICAL ON ALL SHEETS)

- INSTALL ROOFING SYSTEM UTILIZING ADHESIVE, AND COLD APPLIED - ADHESIVE IN LIEU OF HOT-APPLIED ASPHALT.

### BASE BID:

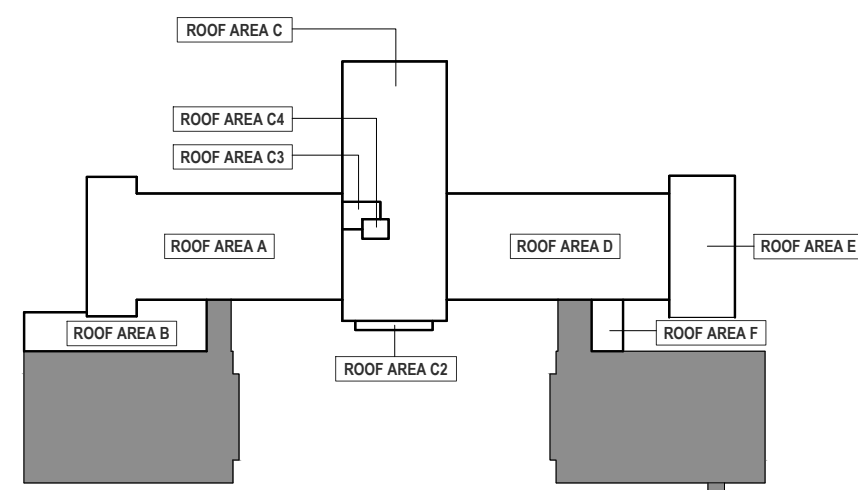
- RE-ROOFING OF ROOF AREAS A, B, C1, C2, C3, C4, D, E AND F
  - LOW SLOPE ROOF AREAS TO RECEIVE NEW TWO-PLY MODIFIED BITUMEN ROOFING SYSTEM.
  - ROOF AREA C2 TO RECEIVE LIQUID PMMA ROOFING SYSTEM.
- COATING OF VENTS (BIRDDHOUSES) AT ROOF AREAS A, C, AND D.
- WALL PANEL INSTALLATION AT AREAS A, C, D, AND E.
- SEALANT INSTALLATION AT WINDOW PERIMETER.
- MISCELLANEOUS WORK INCLUDES, BUT IS NOT LIMITED TO, THE INSTALLATION OF EDGE METAL, COPING, NEW OVERFLOW SCUPPERS, RETROFIT ROOF DRAINS, GUTTERS, DOORS, DOWNSPOUTS, AND FLASHING.
- REMOVE AND REPLACE STUCCO (TO MATCH EXISTING) AT ROOF AREA F.



1 WARDLAW COLLEGE WALKPAD LAYOUT PLAN  
SCALE: 1/16" = 1'-0"

### KEY PLAN

- SCOPE OF WORK  
■ NOT IN SCOPE OF WORK



### LEGEND

- NEW WALKPADS  
RD ○ ROOF DRAIN  
SV ○ SANITARY VENT  
□ EQUIPMENT UNIT  
▨ PARAPET WALL/CORNICE  
..... ELEVATED DUCT  
SCP = SCUPPER  
□ SKYLIGHT  
■ EQUIPMENT SUPPORT  
⊗ VENTILATOR  
▢ COVERED CURB  
SLT ▽ SECURITY LIGHT  
EB □ ELECTRICAL BOX  
NOS = NEW OVERFLOW SCUPPER  
DS = GUTTER/DOWNSPOUT  
□ DUCT SUPPORT PEDESTAL  
■ NOT IN CONTRACT

### CONSTRUCTION NOTES

- PROVIDE SUPPORTS FOR ALL CONDUIT, PIPES, AND CONDENSATION LINES. ALL SUPPORTS SHOULD BE SET ON WALKPADS.
- ON ANY ROOF AREA THAT A DOWNSPOUT IS TO BE INSTALLED, THE DOWNSPOUT SHOULD EXTEND TO THE NEAREST ROOF DRAIN AND BE SUPPORTED. SUPPORTS SHOULD BE INSTALLED OVER WALKPADS.

### BASE BID:

- RE-ROOFING OF ROOF AREAS A, B, C1, C2, C3, C4, D, E AND F
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**Terracon**  
Consulting Engineers and Scientists

2701 Westport Road  
Charlotte, North Carolina  
p: 704.559.1777  
Project No. FH186084  
Terracon SC License No. 2220  
terracon.com

ENGINEER STATE LICENSE SEAL

PROJECT NAME AND ADDRESS:

University of South Carolina  
**WARDLAW COLLEGE**  
**ROOF REPLACEMENT PROJECT**  
**STATE PROJECT No.: 50003317-2**

Project Address:  
820 South Main Street  
Columbia, South Carolina 29208

ISSUE DATE:

07.03.2019

ISSUE FOR:

ISSUED FOR BIDDING

ADDENDUM:

No.: DATE: DESCRIPTION:  
1 7/23/19 ADDED WALKPAD REQUIREMENTS

PROJECT TEAM:

DESIGNED BY:

SSS

DRAWN BY:

EGM II

APR REVIEWER:

LTH

TERRACON'S PROJECT NUMBER:

FH186084

TITLE SHEET:

**ROOF PLAN:**  
**WALKPAD LAYOUT PLAN**

SHEET NUMBER:

**A-103**