# USC AIKEN: HUMANITIES & SOCIAL SCIENCES ELEVATOR MODERNIZATION

AIKEN, SOUTH CAROLINA OSE # H-29-9542-JM

AUGUST 28, 2013

UNIVERSITY OF SC, AIKEN CAMPUS **471 UNIVERSITY PARKWAY** 

# **ARCHITECTURE**

McMILLAN PAZDAN SMITI

MECHANICAL & PLUMBING CAROLINA ENGINEERING SOLUTIONS

> JAMES JOYE, PE 8 W. MCBEE AVE GREENVILLE, SC 29601

> > PH: 864.370.9355

BURDETTE ENGINEERING INC.

DONALD BURDETTE, PE **102 PILGRIM RD GREENVILLE, SC 29607** PH: 864.297.8717

1) ALL CONTRACTORS AND SUB-CONTRACTORS ARE TO REVIEW ARCHITECT'S DRAWINGS AS WELL AS ENGINEER'S DRAWINGS AND COORDINATE EACH WITH THEIR SPECIFIC FIELD. REFER ANY QUESTIONS OR CONFLICTS TO ARCHITECT BEFORE BEGINNING CONSTRUCTION.

2) WHEN INDIVIDUAL DRAWINGS DO NOT AGREE WITH EACH OTHER OR DRAWINGS AND SPECIFICATIONS DO NOT AGREE WITH EACH OTHER, THE ARCHITECT SHALL DETERMINE WHICH IS CORRECT AND TO BE FURNISHED, SUPPLIED AND OR INSTALLED UNDER THIS CONTRACT. CONTRACTOR SHALL INCLUDE IN HIS BID THE MOST RESTRICTIVE OR 3) CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY POSSIBLE

4) GENERAL CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UNDERGROUND UTILITIES AND PIPING AND PROTECT BEFORE BEGINNING WORK. GENERAL CONTRACTOR SHALL EMPLOY A LOCATION SERVICE AT HIS EXPENSE AND WILL BE RESPONSIBLE FOR ANY REPAIRS NECESSARY AS A RESULT OF DAMAGES CAUSED BY CONSTRUCTION 5) ALL DOORS SHALL BE INSTALLED WITH MINIMUM CLEARANCES AS SHOWN ON A1/G-0 U.N.O.

6) TYP, ALL EXTERIOR WALLS - FILL VOIDS WITH BATT INSUL. WHERE CMU IS FRAMED AROUND BEAMS AND BAR JOISTS 7) FILL ALL PENETRATIONS (I.E. PLUMBING, MECHANICAL, ELECTRICAL) IN RATED WALLS WITH UL RATED COMPACTED MINERAL WOOL AND COAT WITH UL RATED FIRE STOP COATING. 8) ALL WORK SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE, THE INTERNATIONAL PLUMBING CODE, THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL

STATE OF FEDERAL CODES OR REGULATIONS HAVING JURISDICTION. 9) ALL CONSTRUCTION SHALL BE HANDICAPPED ACCESSIBLE AND COMPLY WITH BARRIER FREE DESIGN AND OTHER 10) DIMENSIONS SHOWN FOR EXTERIOR DOORS AND WINDOWS ARE TO MASONRY OPENINGS UNLESS OTHERWISE

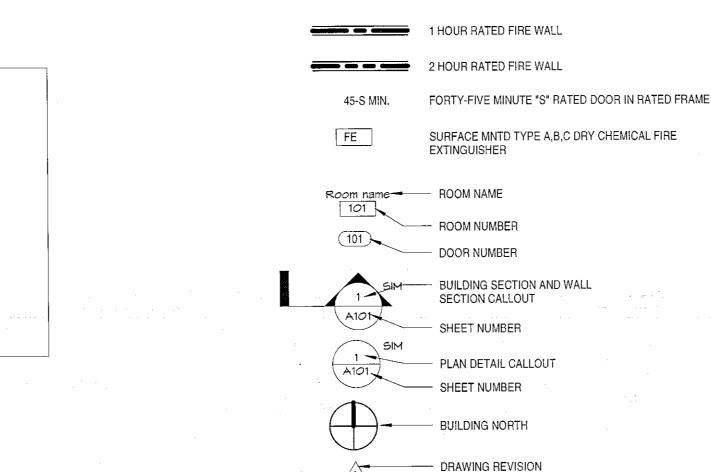
NOTED. ALL OTHER DIMENSIONS ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED. 11) DUE TO THE NATURE OF THE PROJECT, ALL DIMENSIONS SHOULD BE FIELD VERIFIED BEFORE ANY WORK IS PERFORMED, CONTRACTOR SHALL VERIFY CONDITIONS OF ALL EXISTING WALLS, STRUCTURE, MATERIALS, FINISHES OR SUBSTRATES TO VERIFY COMPATIBILITY W/ PROPOSED NEW CONSTRUCTION.

12) DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING

**GENERAL CONSTRUCTION NOTES** 

CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH THE WORK.

CONFLICTS PRIOR TO INITIATING ANY WORK IN QUESTION.



& AIR CONDITIONING PLASTIC LAMINATE ENCLOSURE

EFRIGERATOR REINFORCEMENT SOUND ATTENUATION BLANKETS SUSPENDED ACOUSTIC TILE SQUARE FEET SPECIFICATIONS TO MATCH EXISTING INLESS NOTED OTHERWISI VINYL WALL COVERING

CONSTRUCTION TERMS & ABBREVIATIONS

13) IN THE EVENT OF ANY CONFLICTS OR DISCREPANCIES FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE REQUIRED TO REQUEST FROM AND RECEIVE CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH

14) ALL WOOD BLOCKING TO BE FIRE RETARDANT TREATED IF REQUIRED BY CODE. ALL WOOD IN CONTACT WITH MORTAR, CONCRETE, OR MASONRY TO BE PRESSURE TREATED. 15) ALL WORK LISTED, SHOWN OR IMPLIED ON THE CONSTRUCTION DOCUMENTS SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR EXCEPT WHERE OTHERWISE NOTED. THE GENERAL CONTRACTOR SHALL CLOSELY

COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS OR VENDORS TO ASSURE THAT ALL SCHEDULES ARE MET AND THAT ALL WORK IS DONE IN CONFORMANCE TO THE SUPPLIERS REQUIREMENTS. 16) THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND ALL INSPECTION REQUIREMENTS STATED THEREIN. THE CONTRACTOR WILL WORK WITH ANY INSPECTORS, TESTING AGENCIES AND / OR OTHER CONSULTANTS HIRED BY THE OWNER OR THE ARCHITECT TO HELP MEET THESE REQUIREMENTS.

17) PROVIDE FIRE EXTINGUISHERS IN ACCORDANCE W/ NPPA 10. INSTALL WALL MOUNTED FIRE EXTINGUISHERS (FE) @ 4'-0" A.F.F. TO THE BRACKET OR OPERABLE HANDLE. GENERAL CONTRACTOR TO COORDINATE LOCATIONS WITH LOCAL FIRE

1. THESE PLANS ARE BASED ON DRAWINGS OF THE EXISTING FACILITY AND SHOULD BE USED FOR REFERENCE ONLY IN REPRESENTING THE AS-BUILT CONDITIONS. THE CONTRACTOR SHOULD VERIFY EXISTING CONDITIONS PRIOR TO THE DEMOLITION OF ANY EXISTING MATERIALS OR THE PLACEMENT OF ANY NEW WORK.

2. DURING CONSTRUCTION, IF ANY HAZARDOUS MATERIALS ARE SUSPECTED, INCLUDING BUT NOT LIMITED TO ASBESTOS, MERCURY OR LEAD, THE CONTRACTOR SHOULD STOP WORK IMMEDIATELY AND NOTIFY THE OWNER 3. GC SHALL FIELD VERIFY EXISTING BUILDING AND BECOME FAMILIAR WITH EXISTING STRUCTURAL SYSTEM PRIOR

4. CONTRACTOR SHOULD REMOVE EXISTING PLUMBING AND ELECTRICAL EQUIPMENT/FIXTURES AS INDICATED ON DRAWINGS, ALL EXISTING PIPING AND CONDUIT SHOULD BE REMOVED AS NECESSARY TO INSTALL NEW FIXTURES IN NEW LOCATIONS AND TO BRING CURRENT SERVICE TO CODE.

TO DEMOLITION. REMOVE ITEMS IN SUCH A WAY AS NOT TO DAMAGE ADJACENT MATERIAL NOR STRUCTURAL

5. ALL DEMOLITION AREAS SHALL BE CLEANED AND READY FOR NEW CONSTRUCTION AT THE END OF THE

6. PATCH AND REPAIR AND/OR MAKE READY ALL ADJACENT SURFACES TO RECEIVE NEW CONSTRUCTION. 7. CONTRACTOR SHALL CAREFULLY REMOVE AND PROPERLY DISPOSE OF ANY ELECTRICAL FIXTURES, CONDUIT WIRING, OUTLETS, FANS, WITHIN THE REMAINING SPACE AS REQUIRED TO ACCOMMODATE NEW WORK. CONTRACTOR SHALL IDENTIFY CIRCUITS IN EXISTING PANEL AS ELECTRICAL DEMOLITION OCCURS. EXAMINE EXISTING ELECTRICAL PANEL FOR POSSIBLE REUSE AS INDICATED ON THE ELECTRICAL DRAWINGS.

8. THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURE AND 9. ALL AREAS OF EGRESS SHALL REMAIN OPEN AND FREE OF DEBRIS DURING THE DURATION OF CONSTRUCTION.

10. CONTRACTOR SHALL REPLACE ALL DAMAGED ITEMS AS A RESULT OF DEMOLITION WORK. 11. COORDINATE AND COMPLY W/ ALL LOCAL CODES, ORDINANCES AND INSTRUCTION BY AUTHORITIES HAVING 12. THE GC IS RESPONSIBLE TO COMPLY WITH ALL OF USC AIKEN'S INFECTION CONTROL AND CONSTRUCTION

PROCEDURES AND REGULATIONS REGARDING DUST BARRIERS, DAILY WORK CLEAN UP, SCHEDULING OF OPERATIONS AND NOTIFICATION OF THE APPROPRIATE SCHOOL PERSONNEL REGARDING SHUT DOWNS AND WORK 13. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND GETTING APPROVAL FOR TEMPORARY EXIT PLANS /

14. COORDINATE HOURS OF OPERATION AT OCCUPIED AREAS. COORDINATE WORK TO AVOID DISRUPTION OF STAFF /

**GENERAL DEMOLITION NOTES** 

# PANEL LOCATION UNIT LOCATION الله النسبت 2.22

DOOR CLEARANCE DETAIL G-0 1/2" = 1'-0"

MINIMUM REQUIRED CLEARANCES AT ALL DOORS, NOTIFY ARCHITECT PRIOR TO

CLEARANCES CANNOT BE MAINTAINED.

INSTALLING FRAME IF THESE

TITLE BLOCK DIAGRAM G-0 3/4" = 1'-0"

CONSECUTIVE.

B3

WHEN LESS THAN ALL TWENTY-FIVE (25) DETAIL ZONES ARE UTILIZED OR

WHEN ZONES ARE COMBINED, DETAIL NUMBERS MAY NOT BE

IN SOME CASES SHEETS WITH TWENTY (20) DETAIL ZONES ARE UTILIZED AND DETAIL NUMBERING HAS BEEN ADJUSTED. THE ZONE IN WHICH THE LOWER LEFT HAND CORNER OF A DETAIL IS LOCATED

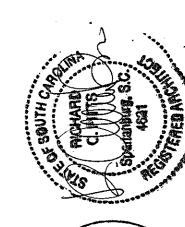
DETERMINES THE NUMBER OF THE DETAIL.

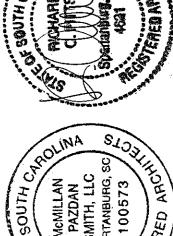
B4

SYMBOL & LIFESAFETY LEGEND 1 1/2" = 1'-0"

HUMANITIES & SOC. SCIENCES KEY PLAN

G-0 1/32" = 1'-0"







SHEET ISSUE: DESCRIPTION NO. DATE

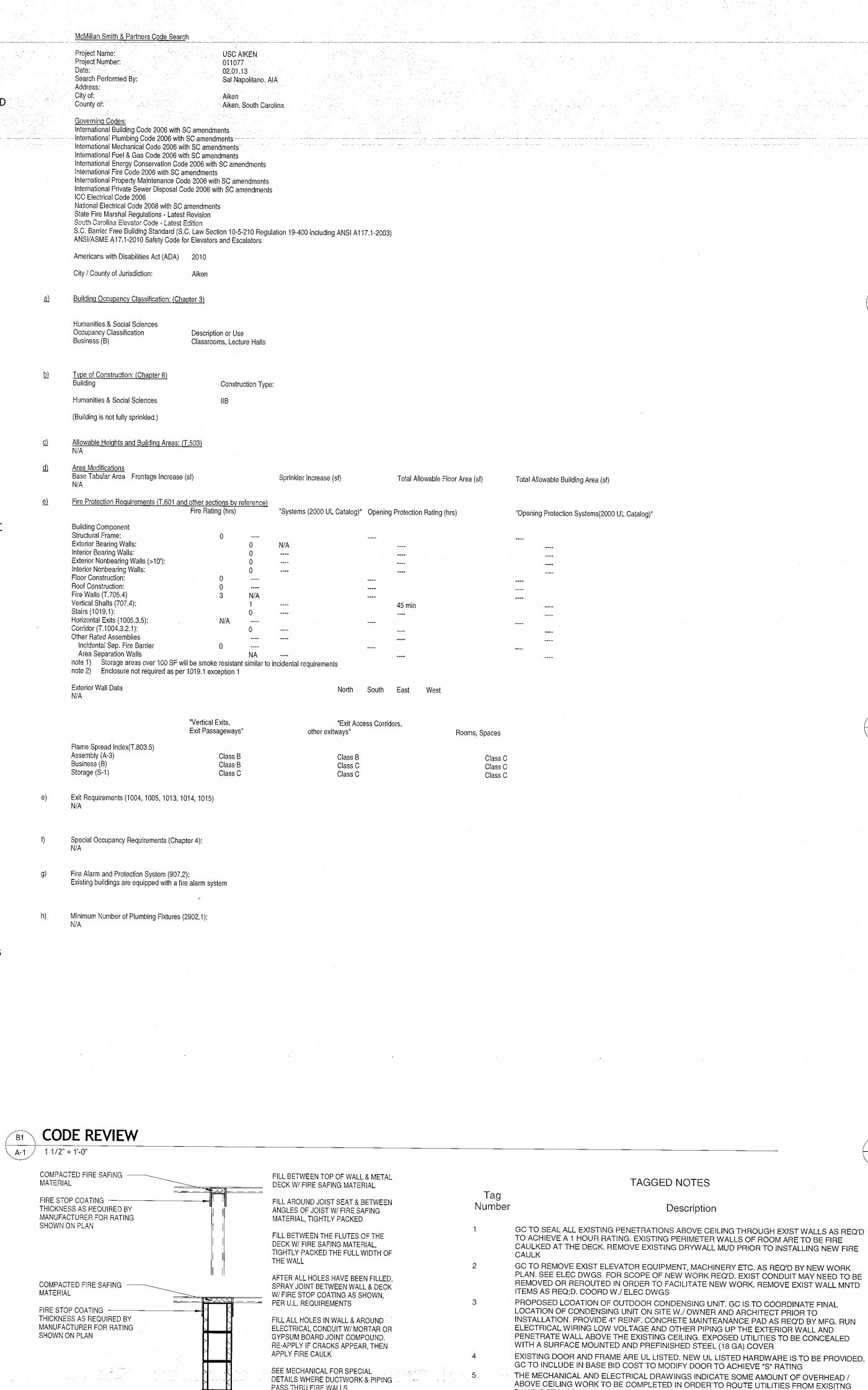
PROJECT ARCHITECT: DRAWN BY:

SHEET TITLE: **COVER SHEET & GENERAL** INFORMATION

SHEET NO.

PROJ. NO. 09253

G-0



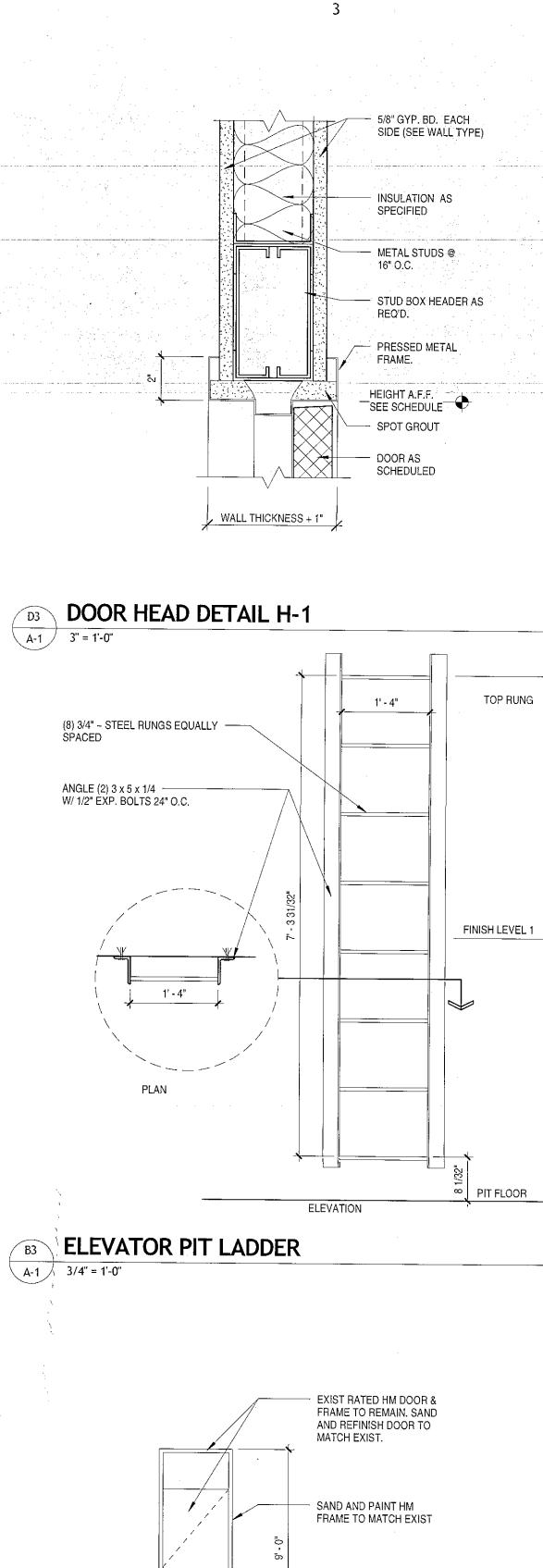
PASS THRU FIRE WALLS

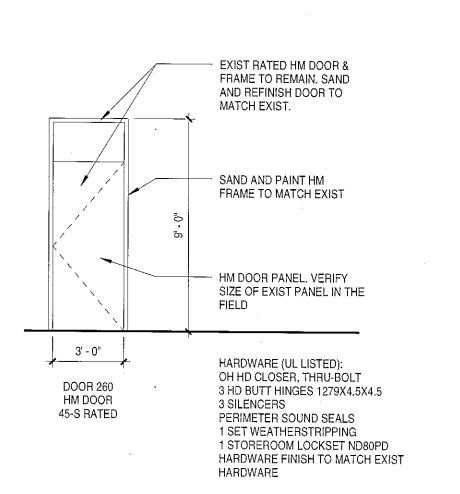
EXTEND FIRE WALLS & BARRIERS (1 HR.) TO ROOF OR FLOOR DECK ABOVE, FIRE STOP TOP OF WALL & ALL

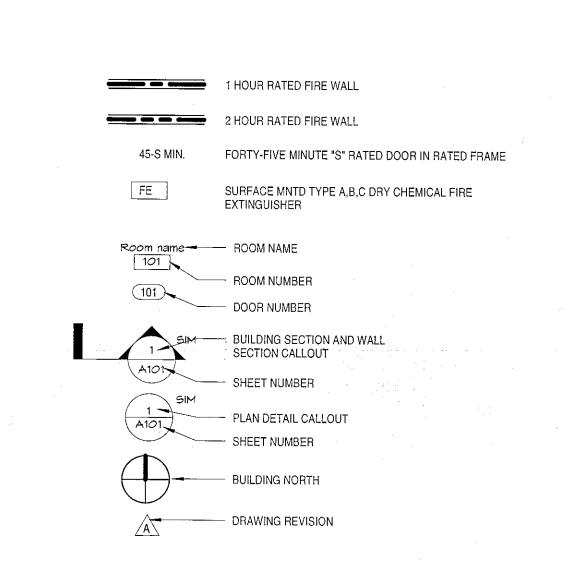
STENCIL THE ABOVE SIGN ON ALL FIREWALLS, BOTH SIDES. LOCATE SIGNS ON 30 FOOT CENTERS

ONE HOUR FIRE BARRIER

PROTECT ALL OPENINGS





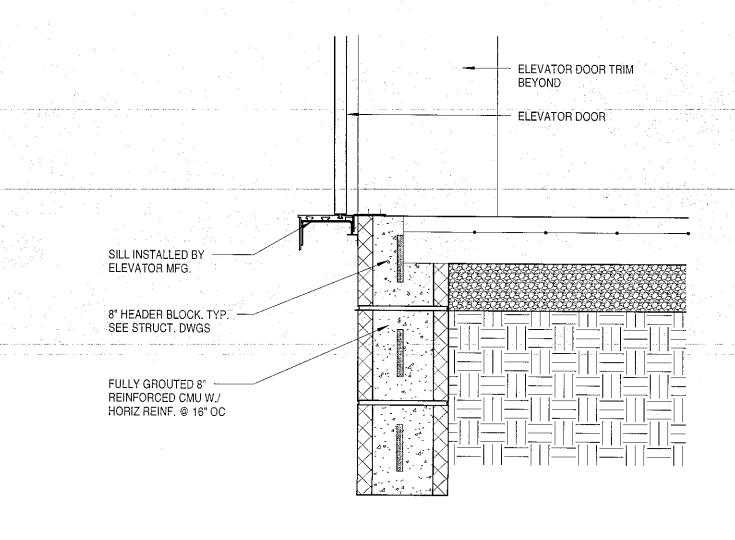


PROVIDE NEW WALL MOUNTED TYPE ABC EXTINGUSHER WITH WALL MOUNTING BRACKET. GC TO REMOVE EXIST FLOORING AND PREP FLOOR FOR NEW CARPETING TO BE PROVIDED BY THE OWNER. GC TO REMOVE EXIST P. LAM PANELS, HANDRAILS AND LUMINUOS CEILING SYMBOL & LIFESAFETY LEGEND AND REPLACE WITH NEW CEILING. P.LAM PANELS AND RAIL. SEE SPECIFICATIONS FOR <sup>/</sup> 1 1/2" = 1'-0"

- '5/8" GYP, BD, EACH " SIDE (SEE WALL TYPE) - ACOUSTICAL BATT WHERE INDICATED - METAL STUDS @ 16" O.C. - 3 JAMB ANCHOR AS REQ'D. PRESSED METAL FRAME. - SPOT GROUT (TYPICAL) DOOR AS SCHEDULED WALL THICKNESS + 1"

DOOR JAMB DETAIL J-1

A-1 3" = 1'-0"



DTL - TYP ELEV SILL A-1 1 1/2" = 1'-0"

VIF W. TOILET 257

CLASSROOM 697 SF EXIST 2X2 ACT CEILING AT +/- 9'-0" -CLASSROOM 6' - 6 1/4" <del>`````</del>\<del>\``</del>\<del>\``</del>\ 

ISSUED FOR BID PRINCIPAL IN CHARGE:

SHEET ISSUE:

NO. DATE

DESCRIPTION

08.28.13 PROJECT ARCHITECT: DRAWN BY: SHEET TITLE:

**ENLARGED ELEVATOR** PLANS, CODE SUMMARY, DOOR SCHED & DETAILS

> PROJ. NO. 09253

HUMAN. SOCIAL SCIENCES - ELEV. PLAN A-1 1/4" = 1'-0"

CLASSROOM

697 SF

4 \*

SHEET NO. **A**-

CONNECTED BY A CONTINUOUS 1 INCH WIDE RED LINE. IN LIEU OF THE CONNECTING LINE, STENCIL SIGNS ON 15 FOOT CENTERS. LETTERS TO BE 4" HIGH FIRESTOPPING DETAILS A-1 3/4" = 1'-0"

OPENINGS THRU WALL AS DETAILED & NOTED ABOVE.

DOOR LEGEND <sup>/</sup> 1/4" = 1'-0"

PANELS ETC. GC IS TO COORD W./ OWNER FOR ACCESS INTO THESE AREAS, CEILINGS ARE TO BE PATCHED AND REPAIRED AS REQUIRED TO MATCH EXISTING. ANY FIRE RATED

REQURIED RATING. SEE MEP DWGS FOR FULL ROUTING FROM EXISTING MAIN ELECTRICAL

FIRE CAULK AND SEAL ANY NEW PENETRATIONS INTO THE ELEVATOR SHAFT. NO EXISTING

PENETRATIONS WERE NOTED DURING WALKTHROUGH, GC TO VERIFY IF ANY EXIST ONES

EXIST. ELEVATOR FRAME ON BOTH FLOORS IS TO BE SANDED AND PREPPED TO RECEIVE

DWGS FOR EXTENTS. GC TO REPAIR AND REPLACE DAMGED CEILING TILES AND GRID

GC TO COORD REMOVAL OF EXIST CEILING TILES IN THE CORRIDOR WITH OWNER IN ORDER TO RUN OVERHEAD UTILITIES REQUIRED TO THE ELECTRICAL ROOM. SEE ELEC & ELEV

NEW PAINT FINISH. COLOR TO MATCH EXIST DOOR FRAMES WITHIN THE BUILDING

BARRIERS PENETRATED BY NEW CONDUITS ETC ARE TO BE SEALED BY UL LISTED PRODUCTS APPROVED FOR THE TYPE OF APPLICATION IN ORDER TO ACHIEVE THE

ROOM FOR EXTENT OF ROUTING

MOUNT BRACKET AT 48" AFF MAX.

PROVIDE NEW PIT LADDER PER SPECIFICATIONS

NEED TO BE FIRE CAULKED

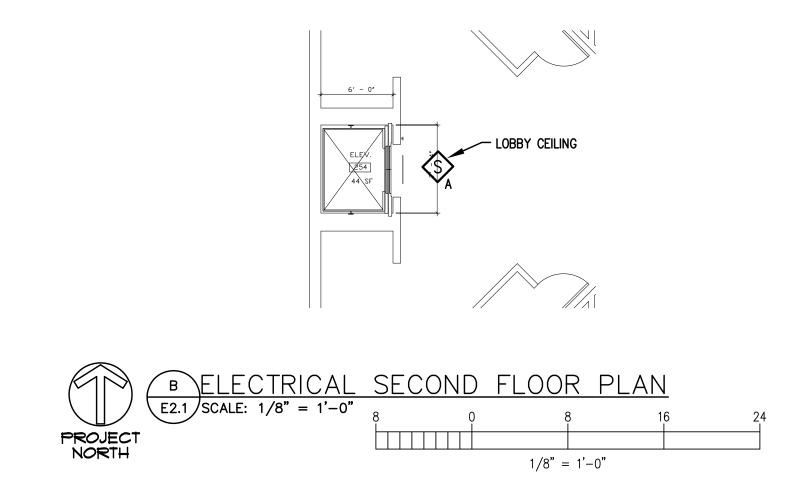
SERVICES

**HUMANITIES & S.S. BUILDING** DIMENSIONS: MACHINE ROOM: 92 1/2" X 73" SHAFT SIZE: 88" X 72" PIT DEPTH: 48" FLOOR TO FLOOR: 168" +/-

2 STOPS

					CABINET MOUNTED				TYPE EXISTING				
· · · · · · · · · · · · · · ·				FEEDER				MAINS					
DEVICE BRANCH CIRCUIT					PHASE LOAD				BRANCH CIRCUIT	DEVICE			
AMPS	POLES	NOTES	DESIGNATION	No.	(VOLT-AMPS)			φС	No.	DESIGNATION	NOTES	POLES	AMPS
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			EXISTING	33					34	EXISTING		П	
20	1	1	ELEVATOR CONTROLS	35	'	•		500	36	SPACE			
15 2	1,	1	ELEVATOR A/C	37	1352			•	38	SPACE	Т	П	
		'	EEVATORA/C	39	·	1352			40	SPACE			
20	1	1	EXTERIOR OUTLET	41				180	42	SPACE			
INTEGRATED EQUIPMENT RATING: 10KAIC ADDED KVA TOTAL				L	1.4	1.	4	0.7		PANELBOARD KVA LOAD TOTAL:	E	EXIS	TING

1. PROVIDE AND INSTALL NEW CIRCUIT BREAKERS. LABEL AS SHOWN.



CAB	LE/CONDUIT SCHEDULE					
TAG	WIRE AND CONDUIT					
N100	3 #3, 1 #3G; 1 1/4°C					

3. EXISTING TELEPHONE LINE APPEARS TO ROUTE DIRECTLY TO ELEVATOR FROM ELECTRICAL ROOM. COORDINATE WITH NEW ELEVATOR INSTALLER AND PROVIDE REQUIRED CONDUIT AND TELEPHONE CABLING TO ELEVATOR.

MODIFICATIONS TO EXISTING FIRE ALARM FOR NEW DETECTORS AND FIREMEN'S

CONTACTS FOR ELEVATOR RECALL INSTALLER'S USE AND FOR MONITORING BY

4. EXISTING FIRE ALARM PANEL IS SIMPLEX 4010 INCLUDE ALL COSTS OF

5. FIRE CAULK ALL NEW CONDUIT PENETRATIONS OF CORRIDOR WALLS. FIRE CAULK EXISTING UNSEALED CONDUIT PENETRATIONS WHERE ENTERING MAIN ELECTRICAL ROOM, ELECTRICAL ROOM 259 AND ELEVATOR MACHINE ROOM.

6. COORDINATE WITH HVAC INSTALLER FOR ACTUAL EQUIPMENT BEING

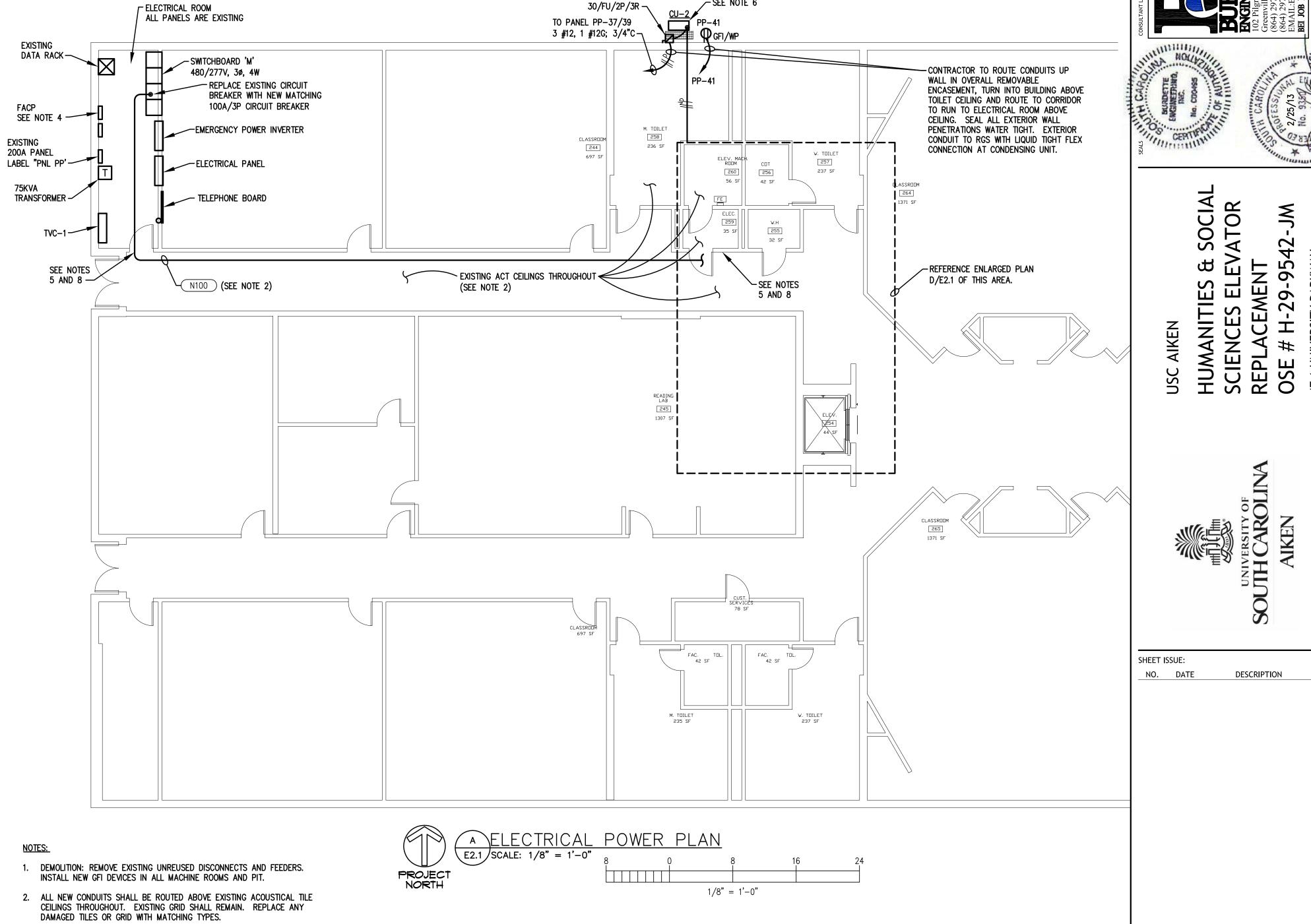
7. PROVIDE BUSSMAN POWER MODULE SWITCH OR EQUAL FOR ELEVATOR DISCONNECT. PROVIDE CAT. # PS1-T48-RI-K-G-A-F1 WITH AUXILIARY

8. ALL EXISTING CIRCUITS AND CONDUITS BEING REUSED SHALL BE CHECKED FOR PROPER TERMINATIONS, COLOR CODING AND CONDUIT SUPPORTS.

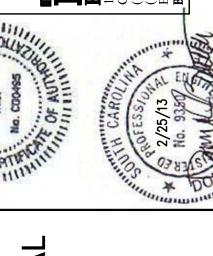
RECALL FUNCTIONS.

FIRE ALARM SYSTEM.

CORRECT AS REQUIRED.







ISSUED FOR BID 08.28.13

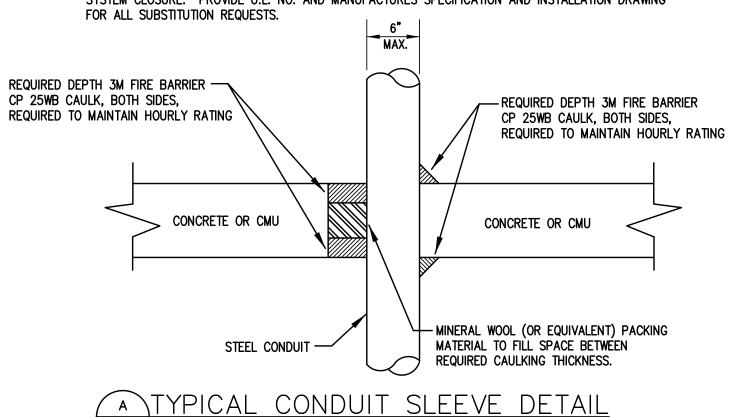
PRINCIPAL IN CHARGE: PROJECT ENGINEER: DRAWN BY: SHEET TITLE: ELECTRICAL PLAN AND **DETAILS FOR** 

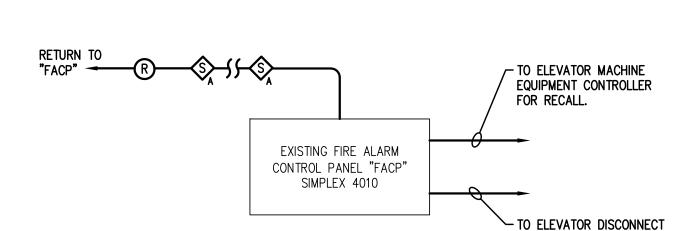
**HUMANITES & SOCIAL** 

SCIENCE BUILDING

SHEET NO.

PROJ. NO. 011077.00





MODULE FOR MONITORING

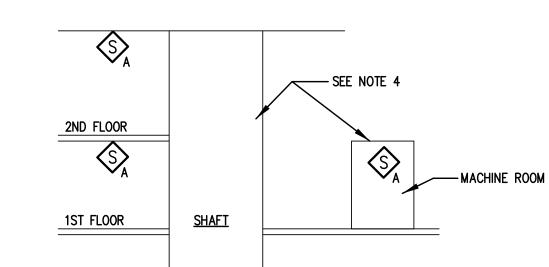
- 1. ALL CONDUIT SHALL BE 3/4" MIN WITH WIRING AS REQUIRED BY MANUFACTURER. PAINT ALL JUNCTION BOXES, COVERS AND MARK CONDUIT EVERY 10' WITH RED PAINT.
- 2. FIRE ALARM MAINTENANCE GROUPS: HUMANITIES SS BUILDING: SIMPLEX PHONE (803)476-0000 OR CONTACT DALE WILLIAM.
- 3. PROVIDE ALL MODIFICATIONS AND WIRING REQUIRED TO ENABLE ELEVATOR RECALL.

FIRE ALARM RISER DIAGRAM (TYPICAL FOR 3)

# **ELEVATOR RECALL SYSTEM NOTES**

E0.1 /NOT TO SCALE

- OPERATION:
- 1. UPON SENSING SMOKE FROM ANY OF THE LOBBY, SHAFT OR MACHINE ROOM SMOKE DETECTORS, BRING ELEVATOR TO MAIN RECALL LEVEL. IF INITIATING DETECTOR IS ON MAIN RECALL LEVEL, BRING TO ALTERNATE RECALL LEVEL. COORDINATE EXACT LEVELS WITH AUTHORITY HAVING JURISDICTION.
- 2. THE BUILDING IS NOT SPRINKLED. THERE IS NOT A REQUIREMENT FOR SHUNT TRIP. NO SMOKE DETECTORS ARE IN SHAFT PER NFPA 72 21.3.6 (2010).
- 3. PROVIDE GENERAL ALARM TO FIRE ALARM PANEL WHEN ANY DETECTOR IS ACTIVATED. ALL DETECTORS SHOWN SHALL HAVE AUXILIARY CONTACTS.
- 4. NO ELECTRICAL CONDUIT OR CABLING IS ALLOWED IN SHAFT OR MACHINE ROOM UNLESS IT PERTAINS TO THE ELEVATOR.



B ELEVATOR RECALL SYSTEM

#### SYMBOL DESCRIPTION

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30/20/3P/3R

HOME RUN TO LIGHTING/SERVICE PANEL. HASH MARKS, WHEN SHOWN, INDICATE NUMBERS OF CONDUCTORS. "/ "INDICATES HOT WIRE, "// "INDICATES NEUTRAL CONDUCTOR,"// " INDICATES GROUND CONDUCTOR. HOME RUN NOTE INDICATES PANEL NAME AND CIRCUIT NAME OR FEEDER TAG. CONDUCTORS SHALL BE #12 AWG IN 3/4" CONDUIT UNLESS NOTED OTHERWISE. ANY HOME RUN OR CONDUIT WITHOUT HASH MARKS IS TO CONTAIN 3 CONDUCTORS; 1 HOT, 1 NEUTRAL, AND 1 EQUIPMENT GROUND, EXCEPT THAT CIRCUITS SUPPLYING ISOLATED GROUND TYPE RECEPTACLES SHALL ADDITIONALLY CONTAIN A SEPARATE ISOLATED GROUND CONDUCTOR.

## EXPOSED CONDUIT

CONDUIT RUN IN SLAB OR UNDERGROUND.

CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS, UNLESS NOTED OTHERWISE.

CONDUIT JUNCTION IN CONDULET OR JUNCTION BOX.

### FLEXIBLE CONDUIT

CONDUIT TURNING UP

CONDUIT TURNING DOWN

JUNCTION BOX STEM INDICATES WALL MOUNTED

JUNCTION BOX FLOOR MOUNTED

LIGHTING OR SERVICE PANEL, SURFACE MOUNTED.(208V)

LIGHTING OR SERVICE PANEL, FLUSH MOUNTED.(208V)

MOTOR, HORSEPOWER AS SHOWN.

MAIN DISTRIBUTION PANEL, FLUSH MOUNTED.

SAFETY DISCONNECT SWITCH. "30" INDICATES AMP RATING, "20" INDICATES FUSE SIZES, "3P" INDICATES NUMBER OF POLES, ENCLOSURE TO BE NEMA 1 UNLESS NOTED OTHERWISE (3R, 4X, ETC.) SQUARE D H300 SERIES HEAVY DUTY SAFETY SWITCH. PROVIDE AUXILIARY CONTACTS WHERE REQUIRED FOR ELEVATOR FEEDER.

CONNECTION TO A SPECIFIC PIECE OF EQUIPMENT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PROVIDER / INSTALLER OF THE EQUIPMENT.

## WIRING DEVICES

NOTE: ALL WIRING DEVICES TO BE IVORY, WITH #302 STAINLESS STEEL COVERPLATE (FLUSH MOUNTED) UNLESS NOTED OTHERWISE ON THE DRAWING OR SPECIFICATIONS. SWITCH SYMBOLS

### MANUAL MOTOR STARTER

SINGLE POLE LIGHTING SWITCH 120-277 VOLT, 20 AMP, SPEC GRADE. LETTER ("a") DESIGNATES WHICH FIXTURES ARE CONTROLLED FROM WHICH SWITCHES WHEN MULTIPLE SWITCHES ARE USED ON ONE CIRCUIT

### STRAIGHT BLADE DEVICE SYMBOLS

20A, 125V, 2P, 3W, NEMA 5-20R, DUPLEX RECEPTACLE. HUBBELL 5362-I OR EQUAL. STANDARD POWER. "WP" DENOTES WEATHERPROOF COVER PLATE. "GFI" DENOTES GFCI TYPE. REPLACE EXISTING PIT AND MACHINE ROOM RECEPTACLES WITH NEW GFI TYPE

FIRE ALARM, COMMUNICATIONS AND CONTROLS COMBINATION DATA/TELEPHONE OUTLET WITH 1" CONDUIT AND TELEPHONE CABLE TO

TELEPHONE BOARD. JACKS, CABLE AND BOX COVER BY SYSTEM INSTALLER. TELEPHONE BOARD, ROUTE NO. 6 AWG CU. GROUND TO SERVICE GROUND

FIRE ALARM CONTROL PANEL (EXISTING)

AREA SMOKE DETECTOR.

SMOKE DETECTOR, SAME AS ABOVE, EXCEPT SUPPLIED WITH 120 VOLT AUXILIARY CONTACTS

> COMBINATION RATE OF RISE AND FIXED TEMPERATURE OR RATE COMPENSATED HEAT DETECTOR

# **ELECTRICAL GENERAL NOTES:**

- INSPECT SITE PRIOR TO SUBMITTING BID. DRAWINGS ARE INTENDED TO COVER THE REQUIRED ELECTRICAL SYSTEMS. DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE BUILDING OR SYSTEM IN EVERY RESPECT. 17 IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY ADDITIONAL INFORMATION AS REQUIRED.
- 2. CONFORM TO THE NATIONAL ELECTRICAL CODE (2008), IBC (2009), APPLICABLE NEMA, ANSI AND IEEE PUBLICATIONS, U.L. AND ADA STANDARDS AND OSHA REQUIREMENTS. COMPLY WITH LOCAL, COUNTY, STATE AND NATIONAL CODES HAVING JURISDICTION.
- 3. FURNISH AND INSTALL ALL MATERIALS IN A NEAT AND WORKMANLIKE FASHION. ALL MATERIALS SHALL BE NEW, WITH FIRST QUALITY AND UL LABEL.
- 4. VERIFY ALL DIMENSIONS AND CLEARANCES PRIOR TO INSTALLATION OF EQUIPMENT AND RACEWAYS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH THAT OF ALL OTHER TRADES AS REQUIRED.
- 5. CONDUIT SHALL BE EMT FOR BRANCH CIRCUIT WIRING AS ALLOWED BY NEC EXCEPT THAT SET SCREW OR CRIMP FITTINGS ARE NOT ALLOWED. WHERE EXPOSED TO PHYSICAL DAMAGE CONDUITS SHALL BE RIGID GALVANIZED STEEL. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUCTORS SHALL BE STRANDED TYPE THHN/THWN, 600V COPPER BUILDING WIRE. MINIMUM SIZE SHALL BE #12 AWG COPPER UNLESS NOTED. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 WITH TRANSITION TO RIGID GALVANIZED STEEL FOR EXPOSED CONDUITS.
- 6. PROVIDE GROUNDING FOR ALL EQUIPMENT IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- 7. ALL ENCLOSURES SHALL BE OF THE NEMA TYPE WHICH IS SUITABLE FOR THE
- 8. SEAL ALL CONDUIT PENETRATIONS TO MATCH RATING OF WALL BEING PENETRATED.
- 9. ALL WORK SHALL HAVE PROPER LABELING AND NAMEPLATES. ALL CIRCUITS SHALL BE LABELED AT PANELS AND BOXES AS INDICATED. ALL PANELS AND DISCONNECTS ARE TO BE PERMANENTLY MARKED WITH NAME OR EQUIPMENT SERVED. ALL PANELS ARE TO BE PROVIDED WITH TYPEWRITTEN PANEL SCHEDULES.
- 10. ALL BREAKERS ON CIRCUITS SUPPLYING HVAC EQUIPMENT SHALL BE TYPE HACR BREAKERS.
- 11. PROVIDE TELEPHONE CONNECTION FOR ELEVATOR AS REQUIRED. COORDINATE WITH OWNER & BELL SOUTH AND PAY ALL CHARGES FOR A COMPLETE SYSTEM. REUSE EXISTING PHONE LINES, IF POSSIBLE.
- 12. THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION. INSTRUCT THE OWNERS' PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS. FURNISH TO THE OWNER THREE SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH SYSTEM.
- OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.

13. GUARANTEE THE WORK INSTALLED FOR A PERIOD OF ONE YEAR AFTER DATE

14. CONTRACTOR SHALL KEEP CURRENT A SET OF PLANS FOR THE DURATION OF CONSTRUCTION WITH ALL CHANGES TO WORK NEATLY AND ACCURATELY MARKED IN RED AND SHALL TURN OVER TO OWNER AT COMPLETION OF

REQUIREMENTS OF 2006 IBC. CONTRACTOR SHALL PROVIDE DRAWINGS FOR ALL INSTALLATION METHODS AND MEET ALL REQUIREMENT PER AUTHORITY

SUBMITTAL DATA, PHOTOMETRICS & ENGINEERS APPROVAL AS REQUIRED BY SPECIFICATIONS.

15. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED TO MEET SEISMIC

**GENERAL LIGHTING NOTES:** 

4. PROVIDE ALL MOUNTING ACCESSORIES & HARDWARE REQUIRED.

FIXTURE DESCRIPTION

ELEVATOR PIT LIGHT, WALL MOUNTED, SCREW IN

COMPACT FLUORESCENT, WITH GLOBE GUARD

HAVING JURISDICTION.

3. ALL FIXTURES TO BE U.L. LABELED.

## **ABBREVIATIONS:**

ACT ACOUSTICAL CEILING TILE

**AFG** ABOVE FINISHED GRADE

**ACH** ABOVE COUNTER HEIGHT

**D** DEDICATED OUTLET

**EC** ELECTRICAL CONTRACTOR

**CU** COPPER

CKT CIRCUIT

**DWG** DRAWING

**FU** FUSE

MANUFACTURERS & NUMBERS ARE LISTED TO ESTABLISH QUALITY ONLY AND NOT TO LIMIT COMPETITION. PRIOR TO BIDDING, SUBSTITUTIONS ARE ALLOWED SUBJECT TO

2. ALL FLUORESCENT FIXTURES SHALL HAVE PREMIUM ELECTRONIC BALLASTS WITH 90% MIN. BALLAST FACTOR AND MAX. THD OF 15%. ALL FIXTURES TO BE PAINTED AFTER

LIGHTING FIXTURE SCHEDULE

ACCEPTABLE MANUFACTURERS

FABRICATION. BALLASTS SHALL BE MANUFACTURED BY SYLVANIA, ADVANCE OR MAGNETEK. LAMPS SHALL BE MANUFACTURED BY G.E. OR SYLVANIA.

CROUSE HINDS # VXHT12GP OR

EQUAL BY PAULUHN OR APPLETON

**AFF** ABOVE FINISH FLOOR

MCB MAIN CIRCUIT BREAKER MFR MANUFACTURER MSB MAIN SWITCHBOARD NTS NOT TO SCALE

PHASE **PNL** PANEL **RECPT** RECEPTACLE (R.) **REQD** REQUIRED SW SWITCH

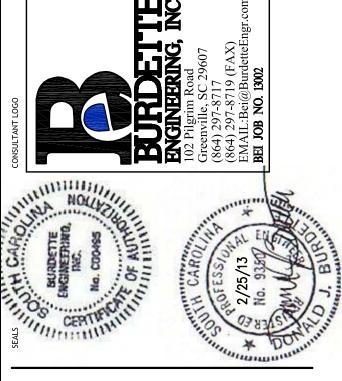
UNO UNLESS NOTED OTHERWISE UNDERGROUND

FWE FURNISHED WITH EQUIPMENT WEATHER PROOF **XFMR** TRANSFORMER

**GFI** GROUND FAULT INTERRUPTER DEVICE LTG LIGHTING (L.) MLO MAIN LUGS ONLY

\_ \_







FIXTURE WATTAGE VOLTAGE

UNIVERSAL

VOLTAGE

OR MULTI-TAP

MOUNTING

HEIGHT

1-42W T4

SPIRAL

SHEET ISSUE: NO. DATE DESCRIPTION

**ISSUED FOR BID** 

PROJECT ENGINEER: DRAWN BY:

SHEET TITLE: **ELECTRICAL LEGEND** 

SHEET NO.

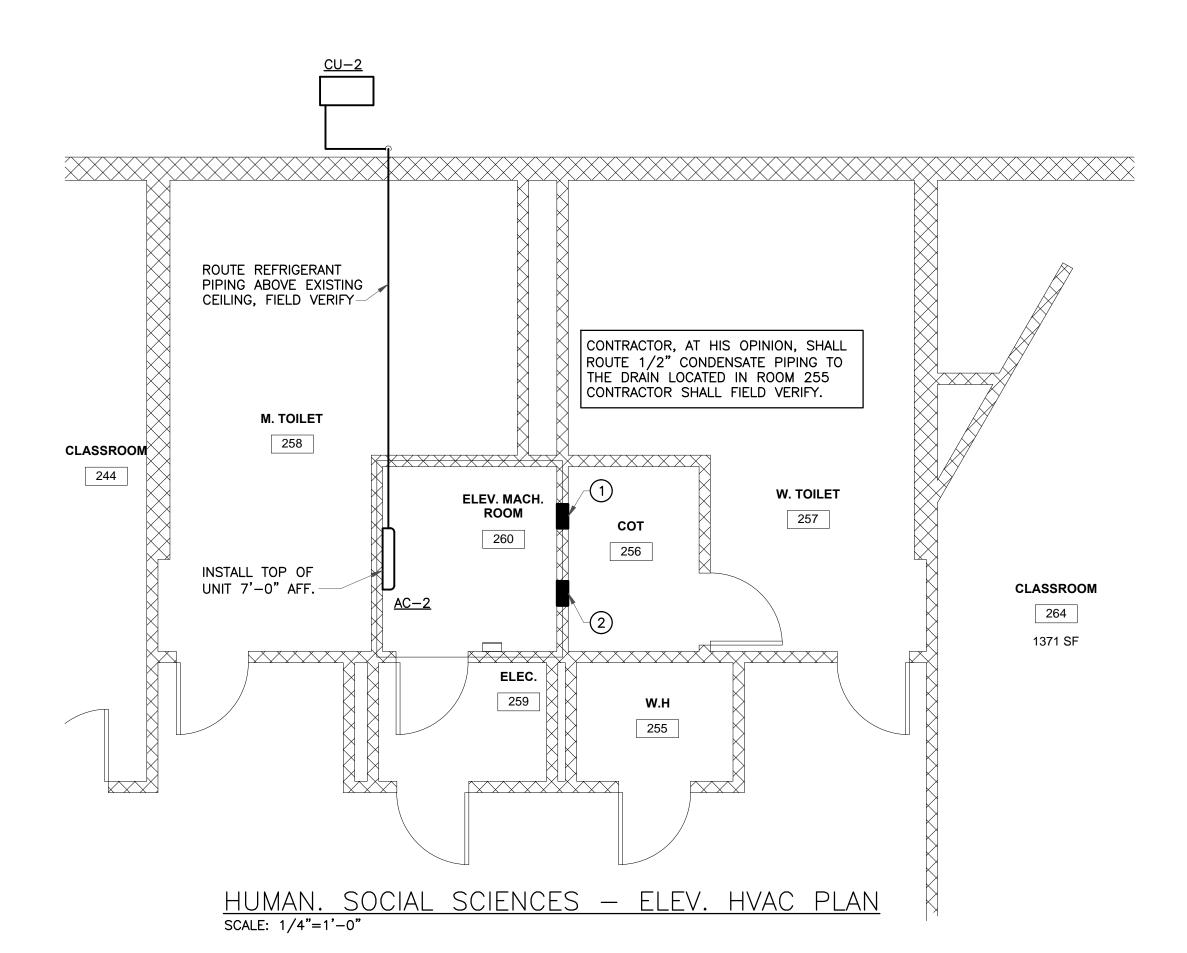
AND DETAILS

PROJ. NO. 011077.00

08.28.13

HVAC GENERAL NOTES:

- COORDINATE EXACT ROUTING OF HVAC PIPING WITH ALL OTHER TRADES
- 2. HVAC WORK SHALL BE PER INTERNATIONAL MECHANICAL CODE - 2006 AND ALL LOCAL CODE.
- 3. ALL HVAC DUCTWORK, PIPING AND EQUIPMENT INSTALLATION SHALL BE COMPLETELY COORDINATED WITH EXISTING DUCTWORK, PIPING, CONDUIT, ETC. AND ALL OTHER TRADES. NO DUCT OR PIPE SHALL BE FABRICATED OR INSTALLED OR ANY EQUIPMENT SET IN PLACE UNTIL SUCH COORDINATION HAS TAKEN PLACE.
- FINAL EXACT LOCATION OF DUCT, PIPING, AND EQUIPMENT MAY VARY SOMEWHAT FROM THAT SHOWN DUE TO COORDINATION REQUIRED IN NOTE ABOVE. AS A RESULT, THESE PLANS DO NOT NECESSARILY SHOW EACH AND EVERY DUCT AND PIPING OFFSET AND FITTING THAT MAY BE REQUIRED, BUT SHALL BE PROVIDED BY THE CONTRACTOR. DUE TO THE TIGHT CEILING SPACES, IT IS IMPERATIVE THAT THE DUCTWORK BE CLOSELY COORDINATED SO THAT CEILING HEIGHTS ARE NOT COMPROMISED.
- 5. ALL CONDENSATE DRAIN PIPING SHALL BE TYPE L COPPER.
- 6. ALL CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 3/4" THICK ARMAFLEX INSULATION.



KEYED NOTES:

- 1) INSTALL FIRE DAMPER IN EXISTING 12x8 DUCT. FIELD VERIFY EXACT SIZE AND LOCATION PRIOR TO BIDDING.
- 2) INSTALL FIRE DAMPER IN EXISTING 12x8 DUCT. FIELD VERIFY EXACT SIZE AND LOCATION PRIOR TO BIDDING.

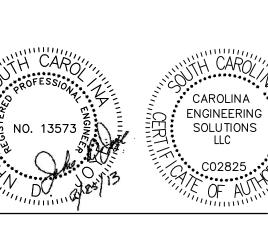
DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE								=		
	INDOOR UNIT	SECTIO	N	OUTDOOR UNIT SECTION						
		- 4:	COOLING		MODEL NUMBER	ELECTRICAL DATA				
EQUIP. NUMBER	MODEL NUMBER	S/A CFM	CAPACITY BTU	EQUIP. NUMBER		M.C.A.	M.O.C.P.	VOLTAGE	AREA SERVED	REMARKS
AC-2	PKA-A12GAL	400	12,000	CU-2	PUY-A12NHA	13.0	15	208/1/60	ELEVATOR MACHINE 260	1,2,3,4,5,6

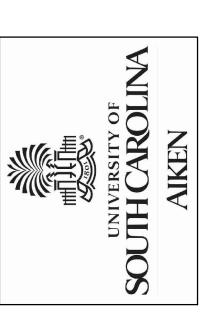
- 1. PROVIDE WALL MOUNTED CONTROLLER/THERMOSTAT. 2. PROVIDE LOW AMBIENT CONTROL TO ZERO DEGREE F.
- 3. PROVIDE WITH CONDENSATE PUMP.
  4. FOR MITSUBISHI, POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. IF
- APPROVED EQUAL PRODUCT IS USED, CONTRACTOR IS RESPONSIBLE FOR SEPARATE POWER FEED FOR INDOOR UNIT IF REQUIRED BY MANUFACTURER.
- 5. APPROVED EQUALS: SANYO, DAIKEN. 6. 4" THICK CONCRETE PAD FOR OUT DOOR UNIT.



8 WEST McBEE aVE, Suite 203 Greenville, SOUTH CAROLINA 29601 pH: (864) 370-9355 fAX: (864) 370-9505 WWW.CarolinaENGR.COM

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SHEET ISSUE: NO. DATE DESCRIPTION BY

ISSUED FOR BID

PRINCIPAL IN CHARGE: PROJECT ARCHITECT: DRAWN BY:

SHEET TITLE: MECHANICAL PLAN

PROJ. NO. 13-012

08.28.13

M-1

SHEET NO.