

GENERAL CONSTRUCTION NOTES

- PROVIDE ALL WORK IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:

INTERNATIONAL BUILDING CODE	2012 EDITION
NFPA 70 - NATIONAL ELECTRICAL CODE	2011 EDITION
NFPA 72 - NATIONAL FIRE ALARM CODE	2010 EDITION
ANSI A117.1 - ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES	2009 EDITION
- PROVIDE RACEWAY AND WIRING TO ALL DEVICES AND EQUIPMENT INDICATED ON THE CONTRACT DRAWINGS. THE DRAWINGS INDICATE PARTIAL RACEWAY AND WIRING REQUIREMENTS TO HELP CLARIFY DESIGN INTENT. WHERE RACEWAY AND/OR WIRING IS NOT INDICATED FOR DEVICES OR EQUIPMENT, THE ARRANGEMENT, GROUPING, AND ROUTING SHALL BE PROVIDED IN ACCORDANCE WITH THE 2011 EDITION OF THE NATIONAL ELECTRICAL CODE.
- ALL CONDUIT PENETRATIONS THROUGH WALLS AND CEILINGS SHALL BE 2-HOUR FIRESTOPPED IN ACCORDANCE WITH THE FIRESTOP DETAILS SHOWN ON THIS DRAWING.
- RACEWAYS SHALL BE EMT WITH COMPRESSION TYPE FITTINGS UNLESS NOTED OR DETAILED OTHERWISE. SIZE RACEWAYS FOR MAXIMUM OF 40% FILL PER THE NATIONAL ELECTRICAL CODE. CONCEAL RACEWAYS IN WALLS AND ABOVE DROP CEILINGS WHERE APPLICABLE.
- PROVIDE THE DEVICE MANUFACTURER'S CUSTOM SURFACE BACKBOX FOR NOTIFICATION DEVICES (STROBES AND COMBINATION SPEAKER/STROBES) AND FOR PULL STATIONS WHERE THEY CANNOT BE SEMI-FLUSH MOUNTED IN WALLS OR CEILINGS. PROVIDE GREENLITE CABLE ACCESSORY CORPORATION GTB-SERIES, BREAKOFF TYPE TERMINAL BLOCKS OR PRIOR APPROVED EQUAL (PHONE: 626-575-6263).
- PROVIDE FIRE ALARM SYSTEM CABLES/WIRING AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. CABLES/WIRES SHALL BE SIZED TO ACCOMMODATE VOLTAGE DROP.
- SPLICING: CONNECT CONDUCTORS ASSOCIATED WITH THE FIRE ALARM SYSTEM THAT ARE TERMINATED, SPLICED, OR INTERRUPTED TO TERMINAL BLOCKS. MARK EACH TERMINAL IN ACCORDANCE WITH THE WIRING DIAGRAMS OF THE SYSTEM. MARK ALL CONNECTIONS WITH APPROVED CRIMP-ON TERMINAL SPADE LUGS, PRESSURE-TYPE TERMINAL BLOCKS, OR PLUG CONNECTORS. SOLDER AND/OR WIRE NUTS SHALL NOT BE USED. PROVIDE GREENLITE CABLE ACCESSORY CORPORATION GTB-SERIES, BREAKOFF TYPE TERMINAL BLOCKS OR PRIOR APPROVED EQUAL (PHONE: 626-575-6263).
- INSTALL SMOKE AND HEAT DETECTORS IN ACCORDANCE WITH THEIR U.L. LISTED SPACINGS AND IN ACCORDANCE WITH NFPA 72.
- COORDINATE AND PERFORM TESTING OF FIRE ALARM AND FIRE REPORTING SYSTEMS WITH USC'S SUPERVISING MONITORING STATION AS REQUIRED BY THE UNIVERSITY.
- COORDINATE ALL REQUIRED OUTAGES TO EXISTING ELECTRICAL SERVICES AND THE EXISTING FIRE ALARM SYSTEM WITH DENNIS GALLAGHER OF USC MAINTENANCE (PHONE NUMBER 917-0340) AND TODD GRIFFIN OF USC HEALTH & SAFETY (PHONE NUMBER 212-8775).
- INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH EXISTING DUCTS, PIPES, FIXTURES, STRUCTURAL MEMBERS, OR OTHER EXISTING BUILDING COMPONENTS. RACEWAY, EQUIPMENT, AND DEVICE LOCATIONS INDICATED ON PLAN ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE EQUIPMENT AND DEVICES SO AS NOT TO CONFLICT WITH EXISTING CEILING AND WALL MOUNTED EQUIPMENT, FIXTURES, AND DEVICES. THE CONTRACTOR SHALL MAINTAIN U.L. LISTED SPACINGS FOR FIRE ALARM SYSTEM DETECTION AND NOTIFICATION DEVICES WHEN DETERMINING THEIR EXACT MOUNTING LOCATION.
- CUTTING, DRILLING, AND PATCHING: PROVIDE CHASES, SLOTS, AND OPENINGS IN EXISTING BUILDING COMPONENTS TO ALLOW FOR ELECTRICAL INSTALLATIONS. PERFORM CUTTING, DRILLING, FITTING, AND PATCHING REQUIRED TO:
 - INSTALL EQUIPMENT, MATERIALS, AND RACEWAYS IN EXISTING STRUCTURES.
 - REMOVE AND REPLACE DEFECTIVE WORK THAT DOES NOT CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - UPON WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER, UNCOVER AND RESTORE WORK TO PROVIDE FOR ARCHITECT/ENGINEER OBSERVATION OF CONCEALED WORK.

PROTECT EXISTING STRUCTURES, FURNISHINGS, FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS WHILE PERFORMING CUTTING, DRILLING, FITTING, AND PATCHING.

PATCH EXISTING SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS THAT MATCH EXISTING MATERIALS. PATCHING SHALL BE PERFORMED BY EXPERIENCED INSTALLERS.

GENERAL DEMOLITION NOTES

- THE NEW FIRE ALARM SYSTEM SHALL BE FULLY INSTALLED AND TESTED PRIOR TO DEMOLITION OF THE EXISTING FIRE ALARM SYSTEM.
- REMOVE ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT, DEVICES, AND ALL ASSOCIATED RACEWAYS AND WIRING - CONTRACTOR SHALL TURN OVER EXISTING FIRE ALARM SYSTEM PANELS, DETECTION DEVICES, AND NOTIFICATION DEVICES TO THE USC FIRE MARSHAL (TODD GRIFFIN). INTENT OF THIS CONTRACT IS FOR THE CONTRACTOR TO DEMOLISH ALL EXISTING FIRE ALARM SYSTEM COMPONENTS AND ALL ASSOCIATED RACEWAYS AND WIRING SYSTEMS IN AND ON THE BUILDING, UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE CONTRACTOR SHALL VISIT THE SITE/BUILDING TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID AND SHALL INCLUDE ALL WORK REQUIRED FOR COMPLETE DEMOLITION IN HIS BID.
- ALL HOLES EXPOSED BY THE REMOVAL OF EXISTING EQUIPMENT, DEVICES, AND RACEWAYS SHALL BE PATCHED AND PAINTED TO MATCH SURROUNDING FINISHES.

ELECTRICAL LEGEND

	SURFACE MOUNTED ELECTRICAL PANELBOARD.
	SURFACE MOUNTED CONTROL PANEL, TYPE AS NOTED ON PLAN.
	FLUSH MOUNTED CONTROL PANEL, TYPE AS NOTED ON PLAN.
	RJ-31X COMMUNICATIONS PHONE JACK. MOUNT IN FIRE ALARM CABINET.
	FIRE ALARM SYSTEM ADDRESSABLE MONITOR INTERFACE MODULE WITH CLASS "B" TYPE MONITOR WIRING IN ACCORDANCE WITH NFPA 72. MOUNT MODULE IN A STEEL NEMA-1 ENCLOSURE.
	FIRE ALARM SYSTEM ADDRESSABLE RELAY INTERFACE CONTROL MODULE. MOUNT MODULE IN A STEEL NEMA-1 ENCLOSURE.
	FIRE ALARM MANUAL PULL STATION. SEMI-FLUSH MOUNT STATION IN WALL WITH TOP OF STATION AT 48 INCHES ABOVE FINISHED FLOOR.
	ADDRESSABLE PHOTO-ELECTRIC SMOKE DETECTOR. SEMI-FLUSH MOUNT DETECTOR IN CEILING.
	ADDRESSABLE 135 DEGREE HEAT DETECTOR WITH RATE-OF-RISE FEATURE. SEMI-FLUSH MOUNT DETECTOR IN CEILING.
	ADDRESSABLE PHOTO-ELECTRIC DUCT-TYPE SMOKE DETECTOR WITH SAMPLING TUBE. DETECTOR SHALL BE PROPERLY RATED FOR AIR FLOW IN DUCT SYSTEM. MOUNT TO DUCTWORK AND PROVIDE CUSTOM CONTROL WIRING TO SHUTDOWN AIR HANDLING UNIT FAN AND ASSOCIATED DUCT HEATERS (WHERE APPLICABLE). MODIFY EXISTING DUCT INSULATION AS REQUIRED TO INSTALL DETECTOR. A SUPERVISORY ALARM SHALL BE INDICATED AT THE FIRE ALARM CONTROL PANEL WHEN DETECTOR IS ACTIVATED.
	REMOTE TEST AND INDICATING STATION FOR DUCT-TYPE SMOKE DETECTOR. WALL MOUNT STATION AT 60 INCHES ABOVE FINISHED FLOOR.
	SPRINKLER SYSTEM FLOW SWITCH. MOUNT ON EXISTING SPRINKLER/STANDPIPE RISER PIPING.
	SPRINKLER SYSTEM TAMPER SWITCH - OS&Y TYPE. MOUNT ON EXISTING SPRINKLER/STANDPIPE RISER OS&Y VALVE.
	AUDIBLE (SPEAKER) NOTIFICATION APPLIANCE. SEMI-FLUSH MOUNT APPLIANCE IN CEILING. APPLIANCES MOUNTED ON HARD CEILINGS IN EQUIPMENT ROOMS SHALL BE MOUNTED ON A CUSTOM SURFACE BOX SPECIFICALLY MANUFACTURED FOR THE APPLIANCE.
	VISIBLE (STROBE) NOTIFICATION APPLIANCE. CEILING MOUNTED. SEMI-FLUSH MOUNT APPLIANCE IN CEILING. APPLIANCES MOUNTED ON HARD CEILINGS IN EQUIPMENT ROOMS SHALL BE MOUNTED ON A CUSTOM SURFACE BOX SPECIFICALLY MANUFACTURED FOR THE APPLIANCE. PROVIDE APPLIANCE WITH STROBE CANDELA RATING NOTED ON PLAN.
	COMBINATION AUDIBLE/VISIBLE (SPEAKER & STROBE) NOTIFICATION APPLIANCE, SAME AS DESCRIBED ABOVE EXCEPT DEVICE SHALL BE WALL MOUNT TYPE. PROVIDE APPLIANCE WITH STROBE CANDELA RATING NOTED ON PLAN.
	COMBINATION AUDIBLE/VISIBLE (SPEAKER & STROBE) NOTIFICATION APPLIANCE, SAME AS DESCRIBED ABOVE EXCEPT DEVICE SHALL BE WEATHERPROOF. PROVIDE A CUSTOM, GASKETED CAST-METAL BACKBOX TO SURFACE MOUNT APPLIANCE ON WALL.
	STEEL JUNCTION BOX WITH COVER, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. MOUNT ABOVE ACCESSIBLE CEILINGS WHERE APPLICABLE. FLUSH MOUNT IN NON-ACCESSIBLE CEILINGS WHERE APPLICABLE.
	STEEL JUNCTION BOX WITH COVER, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, WALL MOUNTED.
	EMT RACEWAY WITH COMPRESSION TYPE FITTINGS - INSTALL CONCEALED IN WALLS AND ABOVE CEILINGS, AS APPLICABLE. INSTALL HORIZONTAL RACEWAYS TIGHT TO STRUCTURAL CEILINGS. RACEWAYS MAY BE INSTALLED EXPOSED ON WALLS AND CEILINGS IN EQUIPMENT ROOMS.
	EXISTING ELECTRICAL PANELBOARD - TO REMAIN IN PLACE.
	EXISTING FLUSH MOUNTED FIRE ALARM SYSTEM PANEL - REMOVE PANEL AND ALL ASSOCIATED RACEWAY AND WIRING.
	EXISTING FIRE ALARM MANUAL PULL STATION - REMOVE STATION AND ALL ASSOCIATED RACEWAY AND WIRING. PROVIDE A CUSTOM-SIZE BLANK, WHITE, PHENOLIC COVERPLATE TO FULLY COVER EXISTING OPENING IN WALL. MOUNTING SCREWS SHALL BE PAINTED MATCH COLOR OF COVERPLATE.
	EXISTING FIRE ALARM SMOKE DETECTOR - REMOVE DETECTOR AND ALL ASSOCIATED RACEWAY AND WIRING. PROVIDE A CUSTOM-SIZE BLANK, ROUND, WHITE, PHENOLIC COVERPLATE TO FULLY COVER EXISTING OPENING IN CEILING. MOUNTING SCREWS SHALL BE PAINTED MATCH COLOR OF COVERPLATE.
	EXISTING FIRE ALARM HEAT DETECTOR - REMOVE DETECTOR AND ALL ASSOCIATED RACEWAY AND WIRING.
	EXISTING DUCT-TYPE SMOKE DETECTOR - REMOVE AND REPLACE WITH NEW DUCT-TYPE SMOKE DETECTOR.
	EXISTING FIRE ALARM NOTIFICATION APPLIANCE - REMOVE APPLIANCE AND ALL ASSOCIATED RACEWAY AND WIRING. PROVIDE A CUSTOM-SIZE BLANK, WHITE, PHENOLIC WALLPLATE TO FULLY COVER EXISTING OPENING IN WALL. MOUNTING SCREWS SHALL BE PAINTED MATCH COLOR OF WALLPLATE.

ELECTRICAL DRAWING INDEX

E-1	GENERAL NOTES, LEGEND, AND DETAILS
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E-5	SECOND FLOOR FIRE ALARM PLAN
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E-7	ROOF LEVEL FIRE ALARM PLAN

System No. W-J-1226

ANSI/UL1479 (ASTM E814)	CANULC S115
F Ratings — 1, 2, 3 and 4 Hr (See Item 3)	F Ratings — 1, 2, 3 and 4 Hr (See Item 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Sq Ft	FH Ratings — 1, 2, 3 and 4 Hr (See Item 3)
L Rating At 400 F — 4 CFM/Sq Ft	FTH Rating — 0 Hr
	L Rating At Ambient — Less Than 1 CFM/Sq Ft
	L Rating At 400 F — 4 CFM/Sq Ft

SECTION A-A

- Wall Assembly — Min 6 in. (152 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 5-3/4 in. (146 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- Through Penetrant — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tube and periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe, conduit or tube to be rigidly supported on both sides of wall assembly.
 - Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit.
 - Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic conduit.
 - Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Fill, Void or Cavity Material — Sealant* — Fill material applied within annulus, flush with both surfaces of wall. Type and thickness of sealant is dependent on F and FH Ratings as indicated in Table below. An additional 1/2 in. (13 mm) diameter bead of sealant applied at penetrant/gypsum board interface at point contact location on both surfaces of wall.

F, FH Ratings hr	Sealant Type	Sealant Thickness, In. (mm)
1, 2	FS-ONE or CP 606	5/8 (16)
3	FS-ONE or CP 606	1 (25)
4	FS-ONE	1 (25)

*Bearing the UL Classification Mark

HILTI Firestop Systems
 Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. November 26, 2012

1 FIRESTOP DETAIL - CONCRETE
NOT TO SCALE

System No. W-L-1252

ANSI/UL1479 (ASTM E814)	CANULC S115
F Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)	F Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Rating — 1, 2, 3 and 4 Hr (See Items 1 and 3)	FT Rating — 0 HR.
L Rating At Ambient — Less Than 1 CFM/Sq Ft	FH Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)
L Rating At 400 F — Less Than 1 CFM/Sq Ft	FTH Rating — 0 HR.
	L Rating At Ambient — Less Than 1 CFM/Sq Ft
	L Rating At 400 F — Less Than 1 CFM/Sq Ft

SECTION A-A

- Wall Assembly — The 1, 2, 3 or 4 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs — Wall framing shall consist of steel channel studs. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
 - Gypsum Board* — Min 5/8 in. (16 mm) thick with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall or Partition Design in the UL Fire Resistance Directory. Max diam of opening is 5-3/4 in. (146 mm).

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
- Through Penetrant — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tube and periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe, conduit or tube to be rigidly supported on both sides of wall assembly.
 - Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit.
 - Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic conduit.
 - Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Fill, Void or Cavity Material — Sealant* — Fill material applied within annulus, flush with both surfaces of wall. Type and thickness of sealant is dependent on F and FH Ratings as indicated in Table below. An additional 1/2 in. (13 mm) diameter bead of sealant applied at penetrant/gypsum board interface at point contact location on both surfaces of wall.

F, FH Ratings hr	Sealant Type	Sealant Thickness, In. (mm)
1, 2	FS-ONE or CP 606	5/8 (16)
3	FS-ONE or CP 606	1 (25)
4	FS-ONE	1 (25)

*Bearing the UL Classification Mark

HILTI Firestop Systems
 Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. November 26, 2012

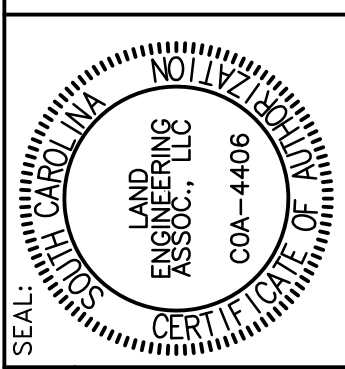
2 FIRESTOP DETAIL - STUD WALLS
NOT TO SCALE



USC-2014-06

LEA LAND ENGINEERING ASSOCIATES, LLC
 262 SANDHURST ROAD, SUITE 101
 COLUMBIA, SOUTH CAROLINA
 (803) 528-1437
 Joe.Land.LEA@sc.rr.com

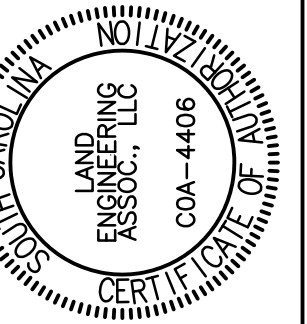
OFFICE OF
FACILITIES MANAGEMENT
COLUMBIA, SC 29208



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STATE PROJECT NO.: H27-6111
 PROJECT TITLE: USC 15 MEDICAL PARK FIRE ALARM
 University of South Carolina

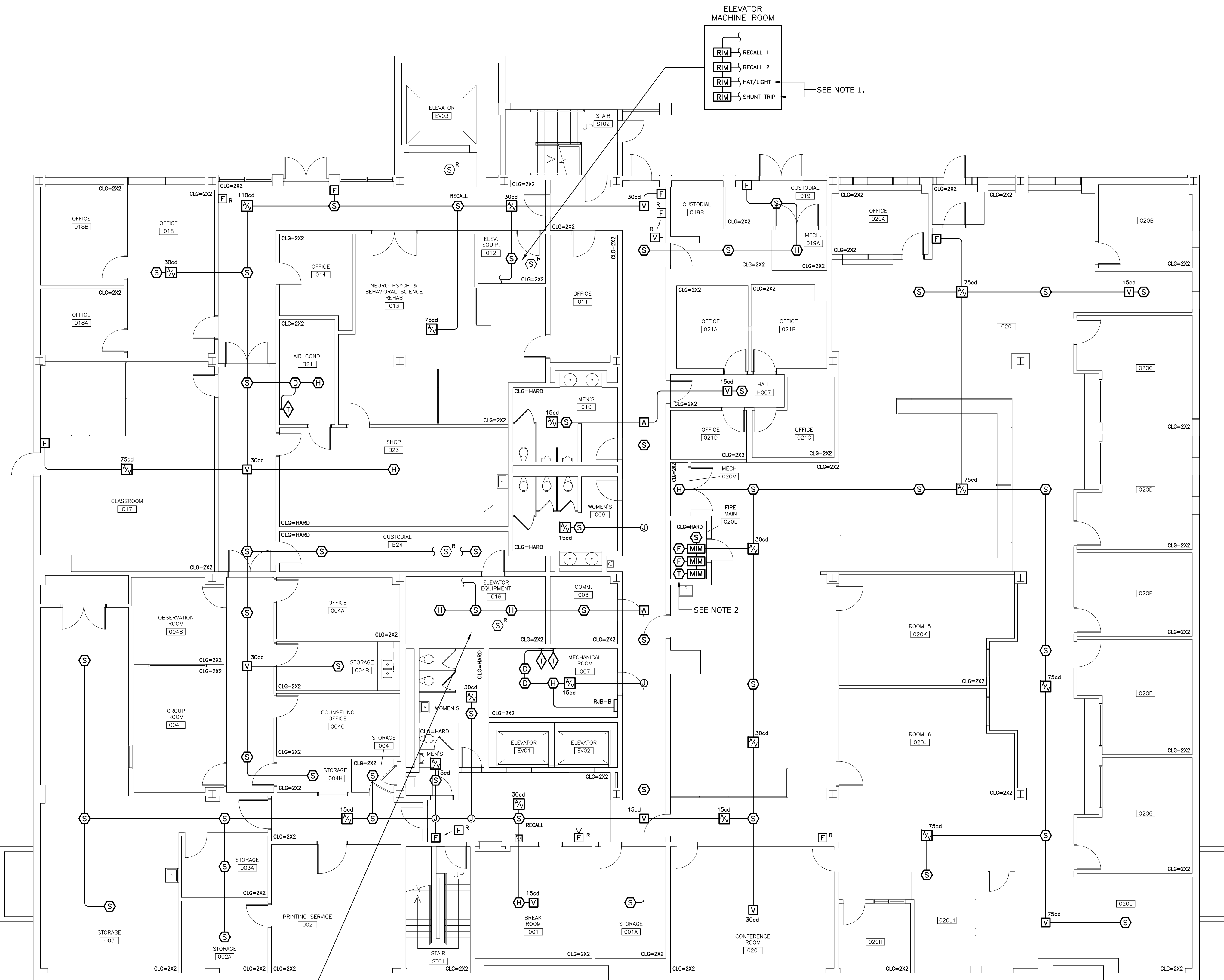
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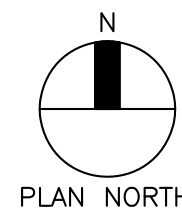
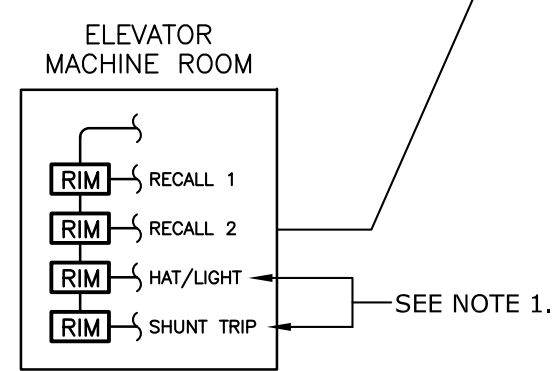
STATE PROJECT NO.: H27-6111
USC 15 MEDICAL PARK FIRE ALARM
University of South Carolina

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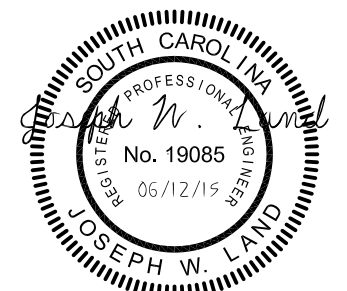
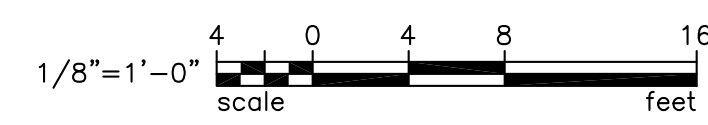


NOTES

- ELEVATORS: EXISTING ELEVATORS AND ASSOCIATED CONTROLLERS DO NOT CURRENTLY HAVE PROVISIONS FOR CONNECTION OF HAT/LIGHT INDICATOR IN ELEVATOR CAB AND SHUNT-TRIP FOR POWER DISCONNECT. THESE FEATURES WILL BE ADDED UNDER A FUTURE PROJECT. PROVIDE RELAY MODULES AS INDICATED AND ASSOCIATED PROGRAMMING, BUT RELAYS WILL NOT BE CONNECTED TO ELEVATOR EQUIPMENT UNDER THIS PROJECT.
- SPRINKLER RISER: THE EXISTING STANDPIPE/SPRINKLER RISER LOCATED IN MAIN FIRE ROOM 020L DOES NOT CURRENTLY HAVE FLOW SWITCHES OR A TAMPER SWITCH. PROCURE THE SERVICES OF A SOUTH CAROLINA LICENSED SPRINKLER CONTRACTOR TO DRILL/BORE EXISTING SPRINKLER PIPING AS REQUIRED TO INSTALL NEW FLOW SWITCHES, AND TO INSTALL A NEW OS&Y TAMPER SWITCH - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 13.

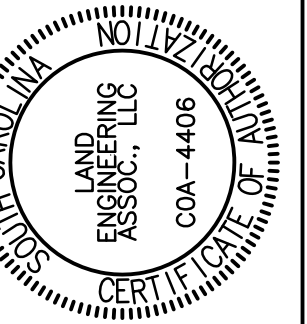


1 BASEMENT FIRE ALARM PLAN
E-3 SCALE: 1/8" = 1'-0"



LEA LAND ENGINEERING ASSOCIATES, LLC
262 SANDHURST ROAD, SUITE 101
COLUMBIA, SOUTH CAROLINA
(803) 528-1437
Joe.Land.LEA@sc.rr.com

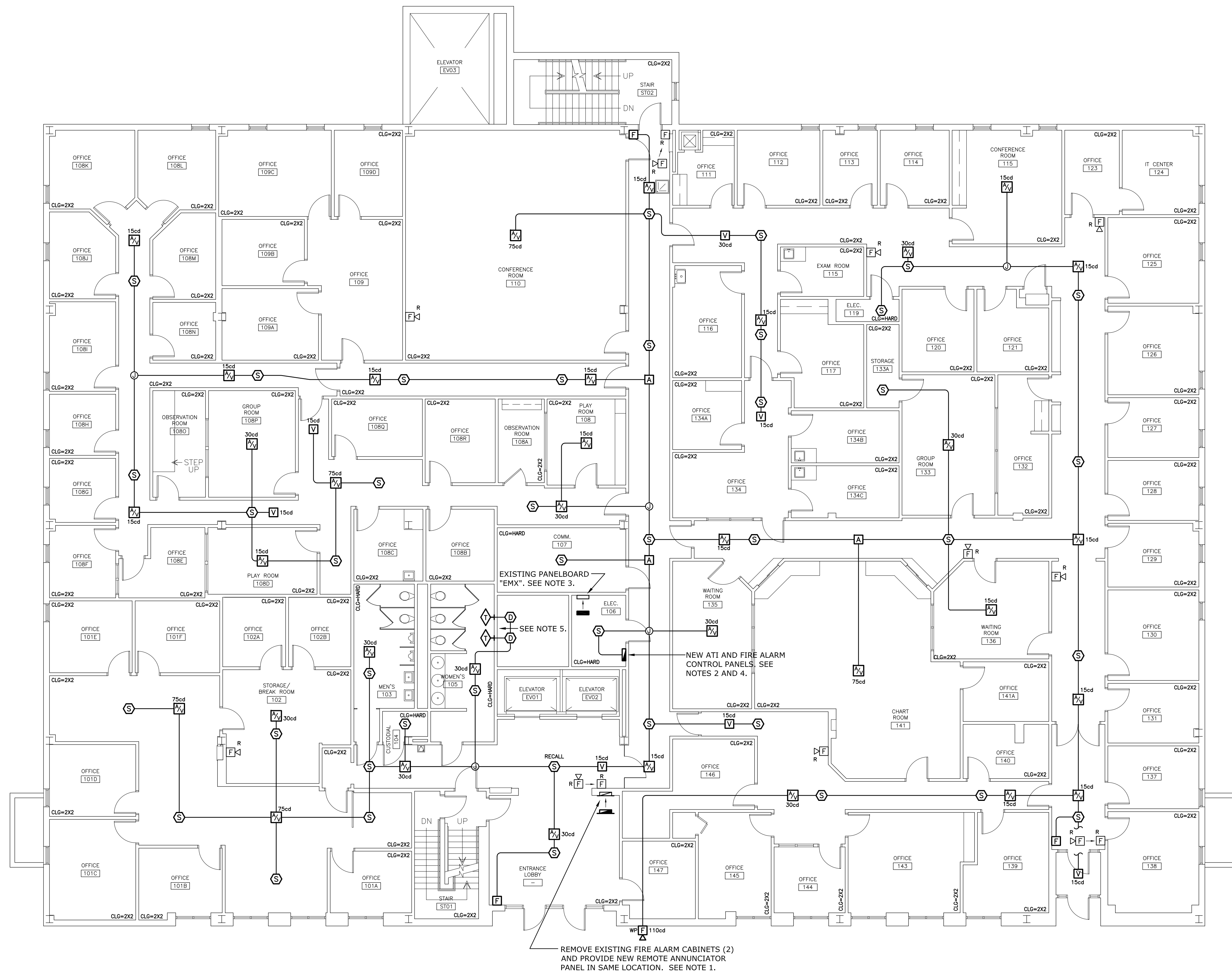
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SEAL: JOSEPH W. LANE, LICENSE NO. 19085, STATE OF SOUTH CAROLINA	CHECKED BY: JWL	DATE: 12JUN15
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BUILDING: 667	DRAWING: []	DESCRIPTION: []
REV. []	[]	[]

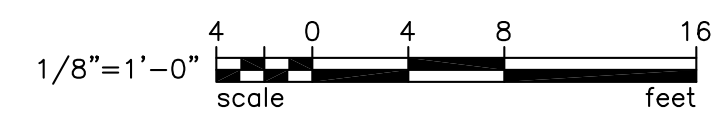
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USC 15 MEDICAL PARK FIRE ALARM
 PROJECT TITLE:
 University of South Carolina

SHEET:
E-4
 4 OF 7
 SHEET IN SET:
 4 OF 7



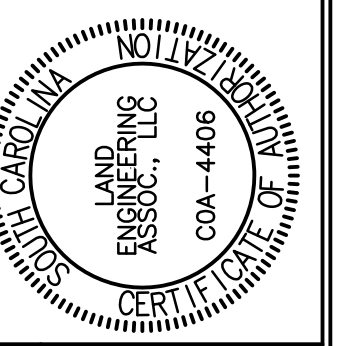
- ### NOTES
- MODIFY EXISTING ENTRANCE LOBBY WALL AS REQUIRED TO INSTALL NEW REMOTE ANNUNCIATOR PANEL IN PLACE OF EXISTING FIRE ALARM CABINETS. PATCH AND PAINT WALL - COORDINATE PAINT COLOR AND TYPE WITH THE OWNER.
 - ELECTRICAL ROOM 106: REMOVE EXISTING OBSOLETE BATTERY CABINET AND ASSOCIATED RACEWAY AND WIRING LOCATED ON WALL WHERE NEW ATI AND FIRE ALARM CABINETS ARE SHOWN TO BE INSTALLED.
 - PANELBOARD "EMX": EXISTING PANEL IS A SQUARE-D 24-SPACE, 100-AMP, 120/208 VOLT, GENERATOR-BACKED PANELBOARD. REMOVE EXISTING PANELBOARD. PROVIDE A NEW 30-SPACE, 100-AMP MAIN BREAKER, 120/208 VOLT, 3-PHASE, 4-WIRE PANELBOARD TO REPLACE EXISTING PANELBOARD (CUTLER-HAMMER, GENERAL ELECTRIC, SEIMENS, OR SQUARE-D). PANEL SHALL HAVE COPPER BUSES, A NEMA 1 ENCLOSURE, A DOOR-IN-DOOR HINGED CABINET DOOR WITH KEYPED LOCK, AND A 10,000 AIC RATING. PROVIDE 25 SINGLE-POLE, 20-AMP RATED CIRCUIT BREAKERS. PROVIDE ONE TWO-POLE, 30-AMP RATED CIRCUIT BREAKER. PROVIDE ONE THREE-POLE, 60-AMP RATED CIRCUIT BREAKER. MODIFY EXISTING RACEWAY AND WIRING AS REQUIRED TO ACCOMMODATE LARGER PANEL AND RECONNECT ALL EXISTING FEEDER AND BRANCH CIRCUITS TO NEW BREAKERS (NOTE THAT EXISTING PANEL IS BOTTOM FED, AS IT RELATES TO MAIN BREAKER PLACEMENT IN NEW PANELBOARD).
 - PROVIDE 120 VOLT, 20-AMP RATED CIRCUITS FROM PANELBOARD "EMX" TO NEW ATI AND FIRE ALARM CONTROL PANELS (NUMBER AS DETERMINED BY FIRE ALARM SYSTEM MANUFACTURER). CIRCUITS SHALL BE TWO #12 AWG THHN COPPER CONDUCTORS WITH ONE GREEN INSULATED #12 AWG COPPER GROUND WIRE (CIRCUITS SHALL HAVE DEDICATED NEUTRAL AND GROUND CONDUCTORS). CONNECT CIRCUIT CONDUCTORS TO SPARE 20-AMP RATED CIRCUIT BREAKERS IN PANELBOARD AND UPDATE LOAD SCHEDULE TO REFLECT ADDED LOADS. PAINT CIRCUIT BREAKER HANDLES "RED".
 - WOMEN'S RESTROOM 105: PROVIDE A 48" x 48" STEEL ACCESS DOOR WITH KEYPED LOCK IN EXISTING WALL FOR ACCESS TO NEW DUCT TYPE SMOKE DETECTORS. INVESTIGATE EXISTING CHASE TO DETERMINE BEST LOCATION FOR ACCESS DOOR ON WALL.

PLAN NORTH
1 **FIRST FLOOR FIRE ALARM PLAN**
 E-4 SCALE: 1/8" = 1'-0"

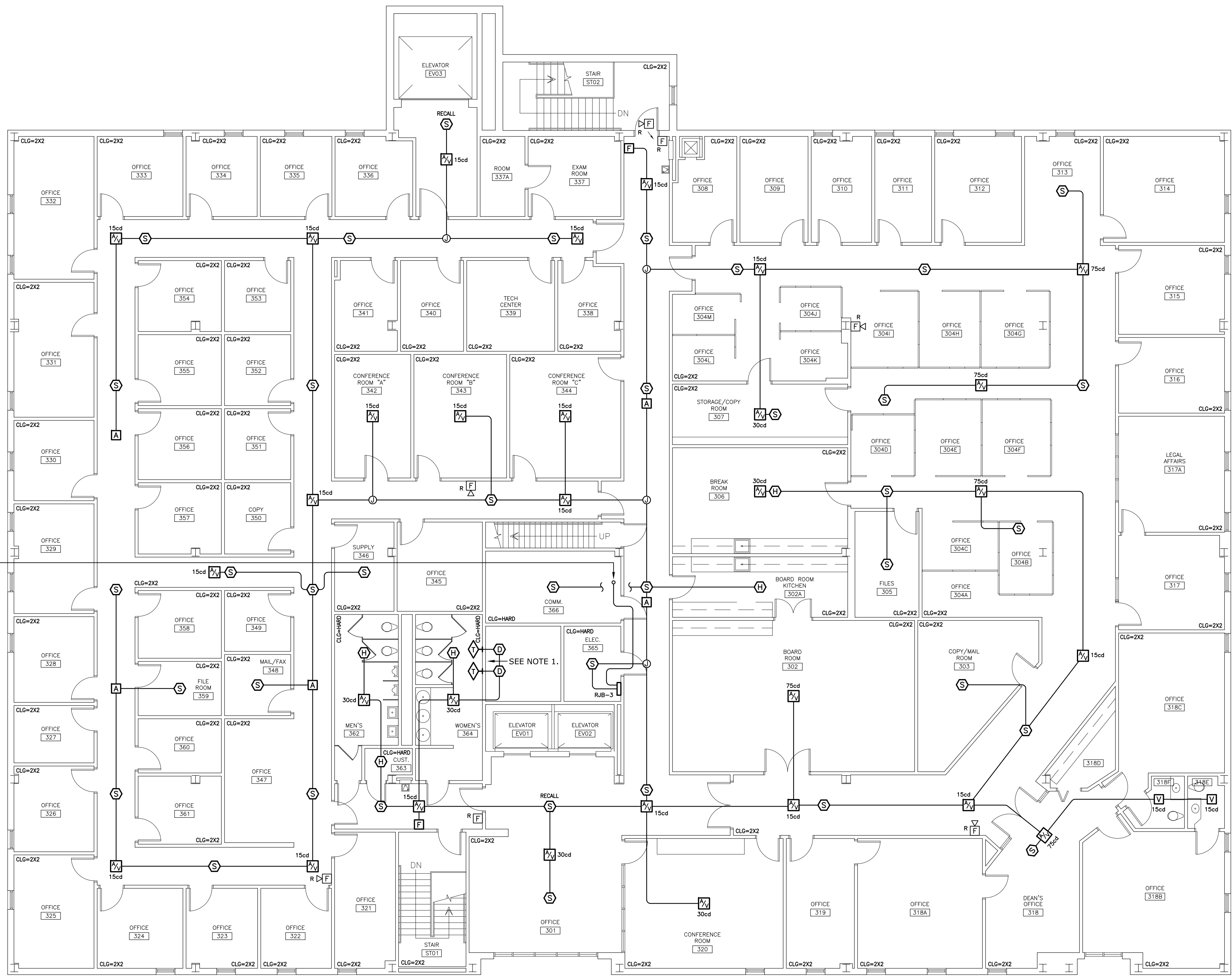


REMOVE EXISTING FIRE ALARM CABINETS (2) AND PROVIDE NEW REMOTE ANNUNCIATOR PANEL IN SAME LOCATION. SEE NOTE 1.

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LEA LAND ENGINEERING ASSOCIATES, LLC
 262 SANDHURST ROAD, SUITE 101
 COLUMBIA, SOUTH CAROLINA
 (803) 528-1437
 Joe.Land.LEA@sc.rr.com



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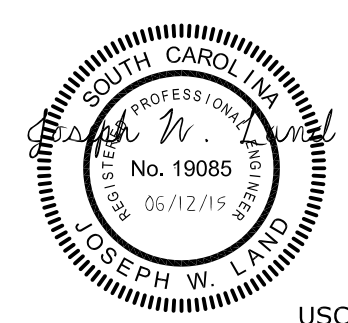
ATI AND FIRE ALARM RISER
CONDUITS TO ROOF LEVEL
MECHANICAL ROOM.

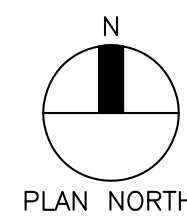
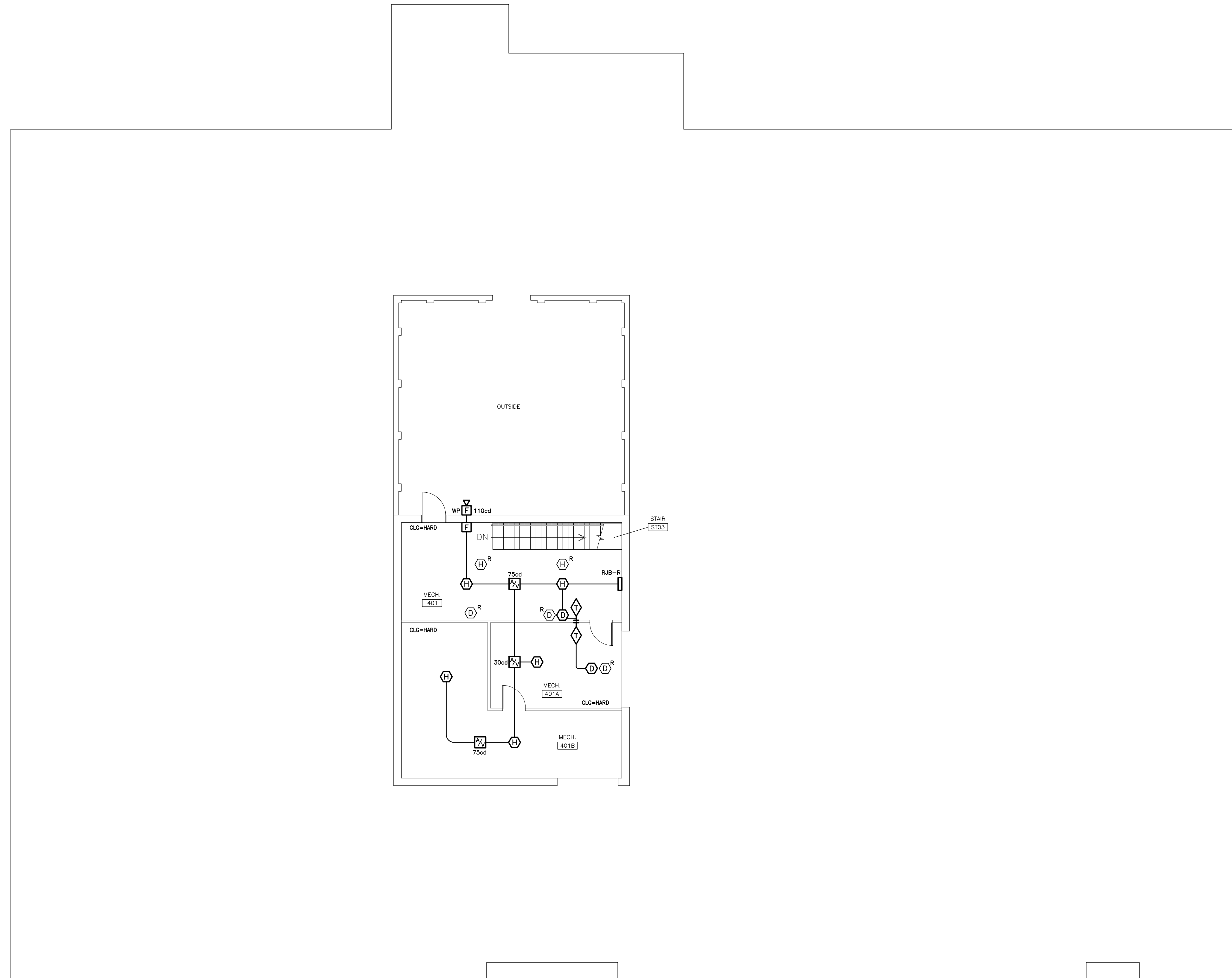
NOTES

1. WOMEN'S RESTROOM 240: PROVIDE A 48" x 48" STEEL ACCESS DOOR WITH KEYPED LOCK IN EXISTING WALL FOR ACCESS TO NEW DUCT TYPE SMOKE DETECTORS. INVESTIGATE EXISTING CHASE TO DETERMINE BEST LOCATION FOR ACCESS DOOR ON WALL.

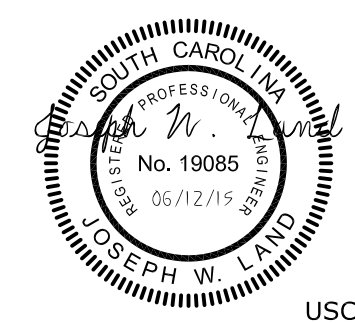
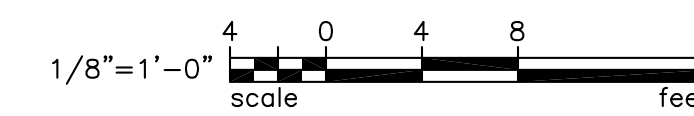
1 THIRD FLOOR FIRE ALARM PLAN
E-6 SCALE: 1/8" = 1'-0"
1/8" = 1'-0" scale feet

LEA LAND ENGINEERING ASSOCIATES, LLC
262 SANDHURST ROAD, SUITE 101
COLUMBIA, SOUTH CAROLINA
(803) 528-1437
Joe.Land.LEA@sc.rr.com





1 ROOF LEVEL FIRE ALARM PLAN
E-7 SCALE: 1/8" = 1'-0"



USC-2014-06

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COLUMBIA, SOUTH CAROLINA
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Joe.Land.LEA@sc.rr.com

SHEET: **E-7**
7 OF 7
SHEET IN SET:
7 OF 7

STATE PROJECT NO.: H27-6111

PROJECT TITLE: USC 15 MEDICAL PARK FIRE ALARM

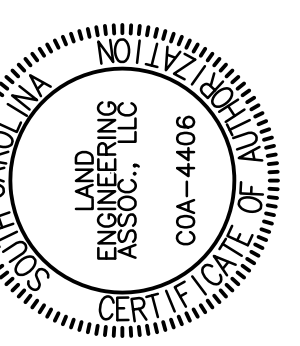
University of South Carolina

BUILDING: 667 DRAWING: - CHECKED BY: JWL

DATE: 12JUN15 DRAWN BY: JSJ

ORIG. BY: DATE:

REV. DESCRIPTION:



OFFICE OF
FACILITIES MANAGEMENT
COLUMBIA, SC 29208