

ELECTRICAL SYMBOL LEGEND

Ⓢ	EXISTING CEILING MOUNTED SMOKE DETECTOR - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING CEILING MOUNTED SMOKE DETECTOR WITH INTEGRAL SOUNDING BELLS - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING CEILING MOUNTED HEAT DETECTOR - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING WALL MOUNTED HEAT DETECTOR - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING MANUAL PULL STATION - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING MANUAL PULL STATION - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING MANUAL PULL STATION WITH A WEATHERPROOF PROJECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING AUDIO-ONLY (SPEAKER) ALARM UNIT, WALL MOUNTED - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING AUDIO-ONLY (SPEAKER) ALARM UNIT, CEILING MOUNTED - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING AUDIO-ONLY (SPEAKER) ALARM UNIT, WALL MOUNTED - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING AUDIO-ONLY (SPEAKER) ALARM UNIT, WALL MOUNTED, HIGH RANGE TYPE - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING COMBINATION AUDIO/VISIBLE (SPEAKER/STROBE) ALARM UNIT, CEILING MOUNTED - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING COMBINATION AUDIO/VISIBLE (SPEAKER/STROBE) ALARM UNIT WITH A WEATHERPROOF HOUSING, WALL MOUNTED - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING ZONE ADDRESSABLE MODULE (ZAM) - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING ADDRESSABLE INTERFACE UNIT (AIU) - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING SPRINKLER VALVE TAPPER SWITCH.
Ⓢ	EXISTING ISOLATION RELAY TO INTERFACE ZONE ADDRESSABLE MODULE WITH OTHER CONTROLS - PROTECT & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	ADDRESSABLE TYPE DUCT SMOKE DETECTOR - REMOVE DEVICE, BACKBOX, & ALL ASSOCIATED WIRING & WIRING.
Ⓢ	COMBINATION REMOTE INDICATING LIGHT AND TEST STATION FOR DUCT AND SPOT-TYPE SMOKE DETECTORS - REMOVE DEVICE, BACKBOX, & ALL ASSOCIATED RACEWAY & WIRING.
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Ⓢ	EXISTING JUNCTION BOX TO REMAIN, WALL MOUNTED.
Ⓢ	EXISTING JUNCTION BOX TO REMAIN, CEILING MOUNTED.
Ⓢ	EXISTING JUNCTION BOX TO REMAIN, WALL MOUNTED.
Ⓢ	EXISTING 2'x4' FLUORESCENT FIXTURE TO BE REMOVED - REMOVE FUTURE & ALL ASSOCIATED RACEWAY & WIRING; MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING 1'x4' FLUORESCENT WARM AROUND FIXTURE TO BE REMOVED - REMOVE FUTURE, BACKBOX, & ALL ASSOCIATED RACEWAY & WIRING; MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING 8' FLUORESCENT STRIP FIXTURE TO REMAIN - MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING 4' FLUORESCENT WALL MOUNTED FIXTURE TO BE REMOVED - REMOVE FUTURE & ALL ASSOCIATED RACEWAY & WIRING; MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING WALL MOUNTED FLUORESCENT SCENE TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING BACKBOX & EXISTING CIRCUIT(S).
Ⓢ	EXISTING FLUORESCENT DOWNLIGHT TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING FLUORESCENT PENDANT TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING SURFACE MOUNTED FLUORESCENT FIXTURE TO BE REMOVED - MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING EXIT SIGN, CEILING MOUNTED, SINGLE FACE TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING EXIT SIGN, CEILING MOUNTED, DOUBLE FACE TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING EXIT SIGN, WALL MOUNTED, SINGLE FACE TO BE REMOVED - REMOVE FUTURE & MAINTAIN INTEGRITY OF EXISTING CIRCUIT(S).
Ⓢ	EXISTING ELECTRICAL CONNECTION TO A MOTOR OR TO MOTOR-DRIVEN EQUIPMENT, DISCONNECT POWER TO MOTOR AND REMOVE DISCONNECT SWITCH, STARTER/VARIABLE FREQUENCY DRIVE UNIT, AND ALL ASSOCIATED RACEWAYS AND/OR WIRE SCHEDULES WHERE CONDUIT IS REMOVED.
Ⓢ	EXISTING MOTOR CONNECTION TO REMAIN - MAINTAIN INTEGRITY OF CIRCUIT(S).
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Ⓢ	EXISTING MOTOR CONNECTION TO REMAIN - MAINTAIN INTEGRITY OF CIRCUIT(S).

GENERAL NOTES

- PROVIDE RACEWAY AND WIRING TO ALL DEVICES, FIXTURES, AND EQUIPMENT INDICATED ON THE CONTRACT DRAWINGS. THE DRAWINGS INDICATE EQUIPMENT RACEWAY AND WIRING REQUIREMENTS FOR ALL DEVICES, FIXTURES, AND EQUIPMENT. THE ARRANGEMENT, GROUPING, AND ROUTING SHALL BE PROVIDED IN ACCORDANCE WITH THE 2005 EDITION OF THE NATIONAL ELECTRICAL CODE AND THE 2005 EDITION OF THE NATIONAL FIRE ALARM CODE.
- RACKWAY LOCATIONS INDICATED ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE/RIG/ROUTE RACKWAYS SO AS NOT TO CONFLICT WITH EXISTING BUILDING COMPONENTS, EQUIPMENT, FIXTURES, AND DEVICES.
- ALL PENETRATIONS THROUGH FLOORS, WALLS, AND PARTITIONS SHALL BE PROVIDED WITH PROTECTIVE FLASHING AND FINISHES. PENETRATIONS THROUGH ROOFS SHALL BE PROVIDED WITH PROTECTIVE FLASHING AND FINISHES. PENETRATIONS THROUGH ROOFS SHALL BE PROVIDED WITH PROTECTIVE FLASHING AND FINISHES. PENETRATIONS THROUGH ROOFS SHALL BE PROVIDED WITH PROTECTIVE FLASHING AND FINISHES.
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- ONLY RACKWAYS AND WIRING THAT SPECIFICALLY STATE DEVICES AND/OR EQUIPMENT LOCATED IN A STAIRWELL MAY BE INSTALLED IN THE STAIRWELL AS REQUIRED PER THE INTERNATIONAL BUILDING CODE.
- INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH DUCTS, PRESS, STRUCTURAL, STRUCTURAL MEMBERS, OR OTHER SYSTEMS.
- EQUIPMENT WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING.
- PULL AND JUNCTION BOXES.
- INSTALL FIRE ALARM SYSTEM DEVICES AS INDICATED. INSTALLATION DETAILS SHOWN ON DRAWING E02.2 AS APPLICABLE. WHERE DEVICE INSTALLATIONS ARE NOT APPLICABLE TO THESE DETAILS, THE CONTRACTOR SHALL INSTALL DEVICES USING THE DETAILS IN THE NATIONAL FIRE ALARM CODE (NFPA 72) AND THE NATIONAL ELECTRICAL CODE AND THE NATIONAL FIRE ALARM CODE.
- EQUIPMENT AND DEVICES INDICATED ON PLANS 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 EXISTING CEILING AND WALL MOUNTED EQUIPMENT, FIXTURES, AND DEVICES SHALL BE REMOVED AND/OR RELOCATED AS NECESSARY TO ACCOMMODATE THE NEW EQUIPMENT AND DEVICES.
- SPRINGING, CONNECT CONDUCTORS ASSOCIATED WITH THE FIRE ALARM SYSTEM THAT ARE TERMINATED, SPUN, OR INTERRUPTED TO TERMINAL BLOCKS, MARK EACH END OF THE TERMINAL BLOCKS, OR PULL CONNECTORS. SPUN AND/OR WIRE UNITS SHALL NOT BE USED.
- CABLE TIES, CABLE TAPS, WILL ONLY BE ALLOWED IN ADDRESSABLE TYPE SIGNALING LINE CIRCUITS. CABLE TAPS SHALL NOT BE PROVIDED IN HARDWARE TYPE INITIATING DEVICES, CIRCUITS, AND NOTIFICATION APPLIANCE CIRCUITS. MOST NOTIFICATION WITH PROPER FUSE PROTECTION SHALL BE PROVIDED IN HARDWARE TYPE INITIATING DEVICES. CABLE TIES SHALL NOT BE USED IN JUNCTION, PULL OR OUTLET BOXES, SOLIDER AND/OR WIRE NUTS SHALL NOT BE USED.
- 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:
  - REMOVE AND REPAIR DEFECTIVE WORK THAT DOES NOT CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS.
  - UPON WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER, UNDO WORK AND REPAIR DEFECTIVE WORK.
- PROTECT EXISTING STRUCTURES, FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS WHILE PERFORMING CUTTING, DRILLING, FITTING, AND PATCHING. MATCH EXISTING SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS THAT MATCH EXISTING MATERIALS. PATCHING SHALL BE PERFORMED BY EXPERIENCED INSTALLERS.
- CONFORM TO ALL REQUIRED CHARGES TO EXISTING ELECTRICAL, SPACE AND FIRE ALARM SYSTEM WITH REMAINS CHARGES OF USC MAINTENANCE SPECIFICATION NUMBER 917-0340 AND TOOL GRIPPER OF USC HEALTH & SAFETY (PHONE NUMBER 212-8775).

WIRE/CONDUIT SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	OPTICAL ELEMENT	MOUNTING	VOLTS	LAMPS
A	2'x4' SPECIFICATION GRADE L.E.D. TROFFER	H.E. WILLIAMS	HETG-524-LEPH4000/50/40K A EDPH UNV	0.125" ACRYLIC LENS	CEILING GRID	120	LED - 4000K, 6000 LUMENS
B	6000 LUMEN OUTPUT "A" EXCEPT SAME LUMEN OUTPUT	H.E. WILLIAMS	HETG-524-LEPH4000/50/40K A EDPH UNV	0.125" ACRYLIC LENS	CEILING GRID	120	LED - 4000K, 3600 LUMENS
C	2'x2' SPECIFICATION GRADE L.E.D. TROFFER	INSIGHT	V122 40K T W	0.125" ACRYLIC LENS	CEILING GRID	120	LED - 4000K, 2800 LUMENS
D	4' L.E.D. WARMWHITE	LITHONIA	S174 22L W40LT D50 LP40	ACRYLIC LENS	CEILING SURFACE	120	LED - 4000K, 2200 LUMENS
F	8' FLUORESCENT STRIP FIXTURE WITH WAREHOUSE 2 LAMPS PER CROSS SECTION	LITHONIA	T2322 120 GB10IS HC38 WCUUN	NONE	HUNG	120	4 - F23T8/TL741/AUTO
H	8' L.E.D. DOWNLIGHT, SEMI-LUMEN OUTPUT	BETA LED	ES4 ADR 942 C MD SS GC WF	ACRYLIC LENS	RECESSED	120	LED - 4000K, 3700 LUMENS
J	8' L.E.D. DOWNLIGHT, SEMI-LUMEN OUTPUT, LOW	OMEGA	OMGLED 40 120 RELED 40K WD	ACRYLIC LENS	RECESSED	120	LED - 4000K, 2000 LUMENS
K	DECORATIVE CEILING L.E.D. PENDANT FIXTURE	BETA CALCO	XKCARA 50 1852 DD	NONE	CEILING PENDANT	120	LED - 4000K, 11000 LUMENS
M	SMALL CEILING MOUNTED L.E.D. SLEEPING ROOM VANITY FIXTURE	KEYALL	M4S813 PAN AS MW 6L40K-120	ACRYLIC LENS	CEILING SURFACE	120	LED - 4000K, 1000 LUMENS
T	L.E.D. STUDY AREA WALL FIXTURE	VISA LIGHTING	CS174885X LEDOWT PTD JBC CL PS-240CDWMT	CLEAR ACRYLIC LENS	WALL OR CEILING	120	LED - (INCLUDED)
X	EXIT SIGN, EDGE-LIT THERMOPLASTIC ACRYLIC UNIVERSAL MOUNT	CHLORIDE	CA 6 RM A (12)	NONE	WALL OR CEILING	120	LED - (INCLUDED)
XA	EXIT SIGN, EDGE-LIT THERMOPLASTIC ACRYLIC UNIVERSAL MOUNT	CHLORIDE	CA 6 RM A (12)	NONE	WALL OR CEILING	120	LED - (INCLUDED)

ELECTRICAL ABBREVIATIONS

ABI	ADDITIVE BID ITEM
AFR	ACCESS FINISHED FLOOR
AG	ABOVE FINISHED GRADE
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
BFG	BELLY FINISHED GRADE
CGU	CONCRETE MASONRY UNIT
CD	CANDELA FAN
ED	ELECTRIC METALLIC TUBING
EMC	ELECTRIC WATER COOLER
FOP	FINISHED OTHER PANEL
FU	FAN COIL UNIT
GS	GROUND AND RIGID STEEL
HH	HANDHOLE
JOB	INSTRUMENT CONTROL PANEL
JOX	MAIN LINES ONLY
M.B.	MAIN BREAKER
M.L.O.	NON-FUSIBLE
NE	NON-FUSIBLE
RNC	RIGID NON-METALLIC CONDUIT
UC	UNDERCOUNTER
U.N.O.	UNLESS NOTED OTHERWISE
W.P.	WEATHERPROOF
WP	WEATHERPROOF
+56	WEATHERPROOF

ELECTRICAL DRAWING INDEX

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E1.100	POWER PLANS - ROOF AND PENHOUSE

DISCONNECT SWITCH SCHEDULE

AMPS	POLES	RATED	NEMA ENCLOSURE
1	2	240	1
2	3	240	1
3	3	240	1
4	3	240	1
5	3	240	1
6	3	240	1
7	3	240	1
8	3	240	1
9	3	240	1
10	3	240	1
11	3	240	1
12	3	240	1

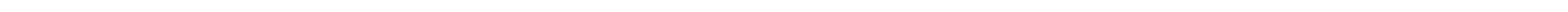
NOTES

- PHASE A WORK - NOTE TO CONTRACTORS:
  - NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
  - THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE Gypsum BOARD MATERIAL, CORROSION PARTITIONS ON THE EXISTING FLOORS, 2" THIN 8" AND OTHER PARTITIONS ON THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO:
    - REMOVAL OF Gypsum BOARD MATERIAL FROM THE CEILING.
    - REMOVAL OF ASBESTOS FROM THE CEILING.
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  - DURING THE PROCESS OF INSTALLING UL RATED RACKWAYS AT CORRIDOR WALLS, GIBBS SHALL BE PROVIDED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
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DETAIL LEGEND

- FLOOR, WALL OR CEILING ASSEMBLY: MINIMUM 4-1/2" CONCRETE OR BLOCK.
- REINFORCING: I.D.M. MAXIMUM 6" STEEL CONDUIT OR MAXIMUM 4" EXT.
- EXISTING, SPACE CONSTRUCTION PRODUCTS FLAMESHIELD FS-1900 BEAD APPLIED TO 1/2" DEPTH. ADD A 3/8" BEAD AT POINT OF CONTACT.
- WALL ASSEMBLY: WOOD OR STEEL STUDS COVERED WITH Gypsum WALLBOARD.
- EXISTING, SPACE CONSTRUCTION PRODUCTS FLAMESHIELD FS-1900 BEAD APPLIED TO 5/8" DEPTH. ADD A 3/8" BEAD AT POINT OF CONTACT.
- BACKER RODS POLYURETHANE OR EQUIVALENT USED AS DAMPING.

DETAIL



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- PULL AND JUNCTION BOXES.
- INSTALL FIRE ALARM SYSTEM DEVICES AS INDICATED. INSTALLATION DETAILS SHOWN ON DRAWING E02.2 AS APPLICABLE. WHERE DEVICE INSTALLATIONS ARE NOT APPLICABLE TO THESE DETAILS, THE CONTRACTOR SHALL INSTALL DEVICES USING THE DETAILS IN THE NATIONAL FIRE ALARM CODE (NFPA 72) AND THE NATIONAL ELECTRICAL CODE AND THE NATIONAL FIRE ALARM CODE.
- EQUIPMENT AND DEVICES INDICATED ON PLANS 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 EXISTING CEILING AND WALL MOUNTED EQUIPMENT, FIXTURES, AND DEVICES SHALL BE REMOVED AND/OR RELOCATED AS NECESSARY TO ACCOMMODATE THE NEW EQUIPMENT AND DEVICES.
- SPRINGING, CONNECT CONDUCTORS ASSOCIATED WITH THE FIRE ALARM SYSTEM THAT ARE TERMINATED, SPUN, OR INTERRUPTED TO TERMINAL BLOCKS, MARK EACH END OF THE TERMINAL BLOCKS, OR PULL CONNECTORS. SPUN AND/OR WIRE UNITS SHALL NOT BE USED.
- CABLE TIES, CABLE TAPS, WILL ONLY BE ALLOWED IN ADDRESSABLE TYPE SIGNALING LINE CIRCUITS. CABLE TAPS SHALL NOT BE PROVIDED IN HARDWARE TYPE INITIATING DEVICES, CIRCUITS, AND NOTIFICATION APPLIANCE CIRCUITS. MOST NOTIFICATION WITH PROPER FUSE PROTECTION SHALL BE PROVIDED IN HARDWARE TYPE INITIATING DEVICES. CABLE TIES SHALL NOT BE USED IN JUNCTION, PULL OR OUTLET BOXES, SOLIDER AND/OR WIRE NUTS SHALL NOT BE USED.
- 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:
  - REMOVE AND REPAIR DEFECTIVE WORK THAT DOES NOT CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS.
  - UPON WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER, UNDO WORK AND REPAIR DEFECTIVE WORK.
- PROTECT EXISTING STRUCTURES, FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS WHILE PERFORMING CUTTING, DRILLING, FITTING, AND PATCHING. MATCH EXISTING SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS THAT MATCH EXISTING MATERIALS. PATCHING SHALL BE PERFORMED BY EXPERIENCED INSTALLERS.
- CONFORM TO ALL REQUIRED CHARGES TO EXISTING ELECTRICAL, SPACE AND FIRE ALARM SYSTEM WITH REMAINS CHARGES OF USC MAINTENANCE SPECIFICATION NUMBER 917-0340 AND TOOL GRIPPER OF USC HEALTH & SAFETY (PHONE NUMBER 212-8775).

WIRE/CONDUIT SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	OPTICAL ELEMENT	MOUNTING	VOLTS	LAMPS
A	2'x4' SPECIFICATION GRADE L.E.D. TROFFER	H.E. WILLIAMS	HETG-524-LEPH4000/50/40K A EDPH UNV	0.125" ACRYLIC LENS	CEILING GRID	120	LED - 4000K, 6000 LUMENS
B	6000 LUMEN						





**RENOVATION NOTES**

R1. COORDINATE ALL MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL CONTRACTOR.  
 R2. LINE VOLTAGE COOLING THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR SHALL WIRE AND INSTALL. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.

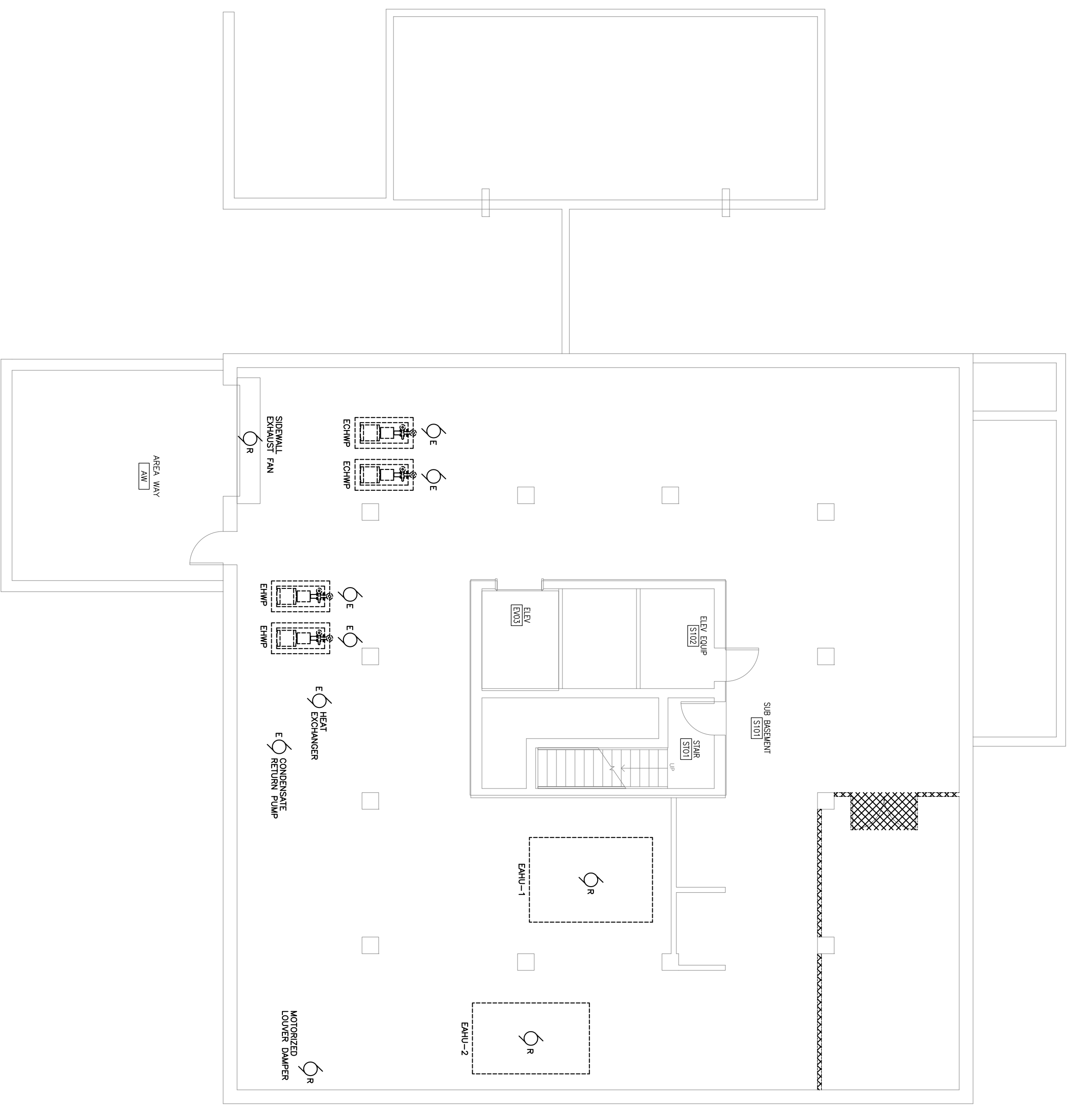
**NOTES**

**PHASE A WORK -- NOTE TO CONTRACTORS:**

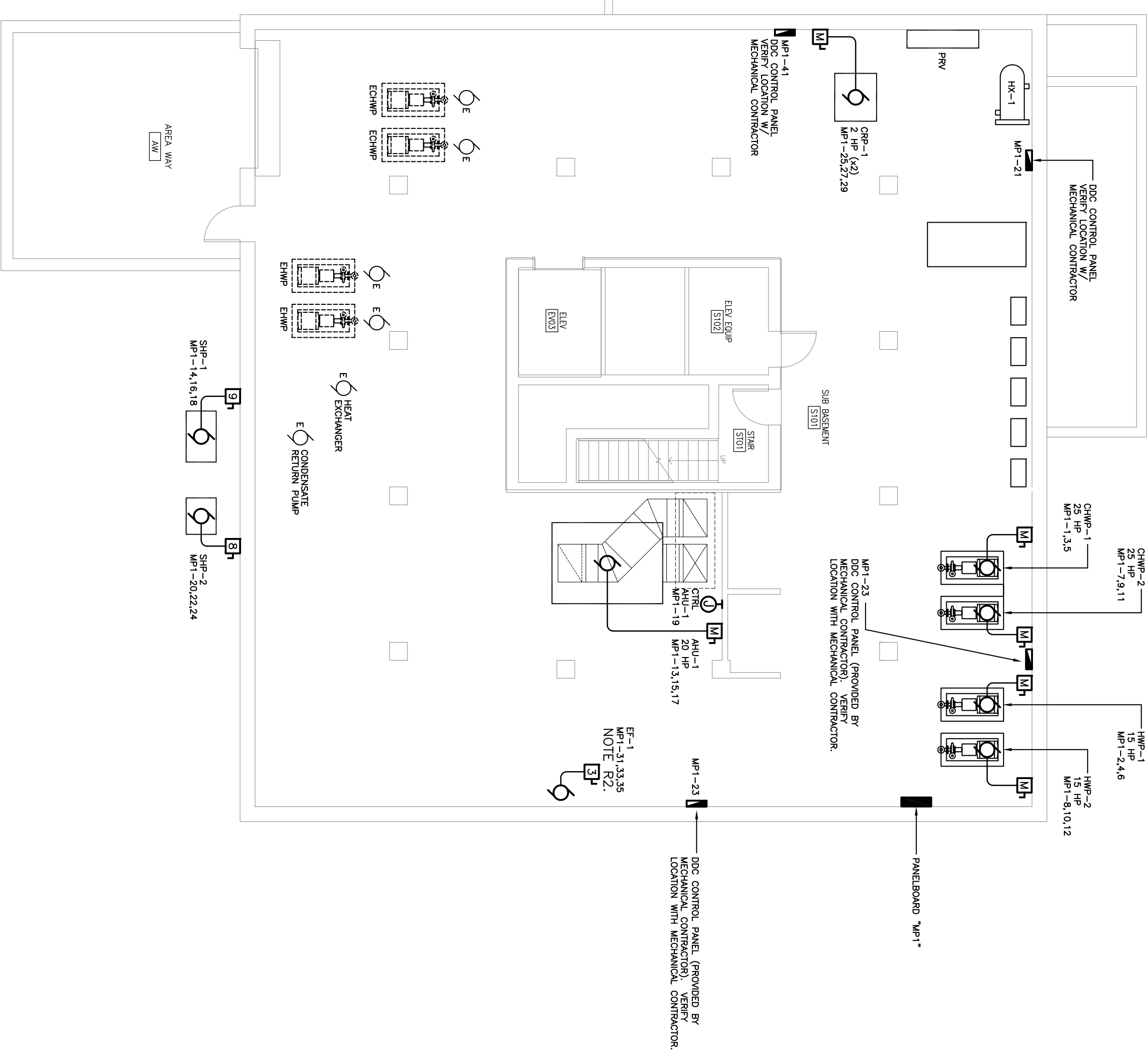
- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE COMPLETED BY THE ABATEMENT CONTRACTOR.
- THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS ON THE BASEMENT AND SECOND FLOOR. COMPLETION OF THESE SPACES CAUSED BY THE ABATEMENT AND REMOVAL OF ASBESTOS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COSTS ASSOCIATED WITH CLEARING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.

**PHASE B WORK -- NOTE TO CONTRACTORS:**

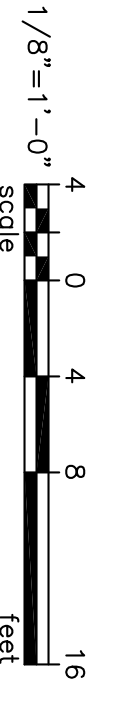
- DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PAN COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF CORRIDOR PARTITIONS, THE CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY MATERIALS THAT REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CEILING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COSTS ASSOCIATED WITH CLEARING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UL RATED RECEPTS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB THE EXISTING GYPSUM BOARD IN ANY FASHION. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD SHALL BE COMPLETED BY THE ABATEMENT CONTRACTOR.



**POWER DEMOLITION PLAN**  
**BASEMENT -- PHASE A**  
 SCALE: 1/8" = 1'-0"

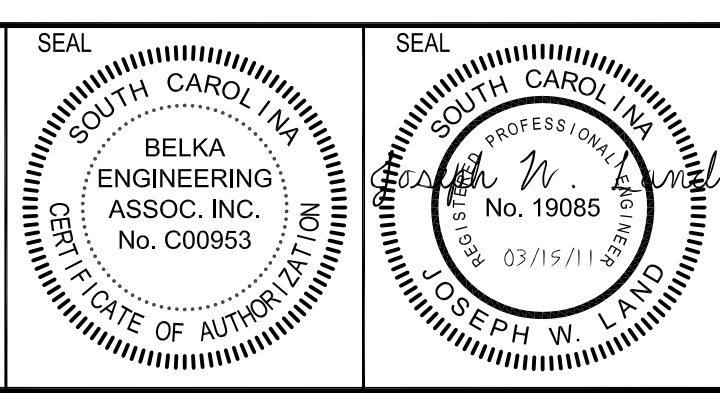


**POWER RENOVATION PLAN**  
**BASEMENT -- PHASE A**  
 SCALE: 1/8" = 1'-0"



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SHEET TITLE: <b>POWER PLANS - BASEMENT PHASE A</b>	DRAWING: E2.00A	DATE: 03/15/12	DRAWN BY: TSR	CHECKED BY: JWJL	PROJECT TITLE: SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS
	REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY
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**RENOVATION NOTES**

R1. REMOVE TWO ADJACENT 20 AMP SINGLE-POLE BREAKERS FROM EXISTING PANEL PROVIDE NEW 50 AMP 120/240V 1.5W 12 CIRCUIT PANELBOARD 1 1/2" FEED FROM 50 AMP BREAKER WITH CONDUIT AND WIRE AS SHOWN ON THE POWER RISER DIAGRAM. REWIRE THE TWO ADJACENT 20 AMP CIRCUITS PREVIOUSLY REMOVED FROM PANEL 1A FROM NEW PANELBOARD 1B.

**NOTES**

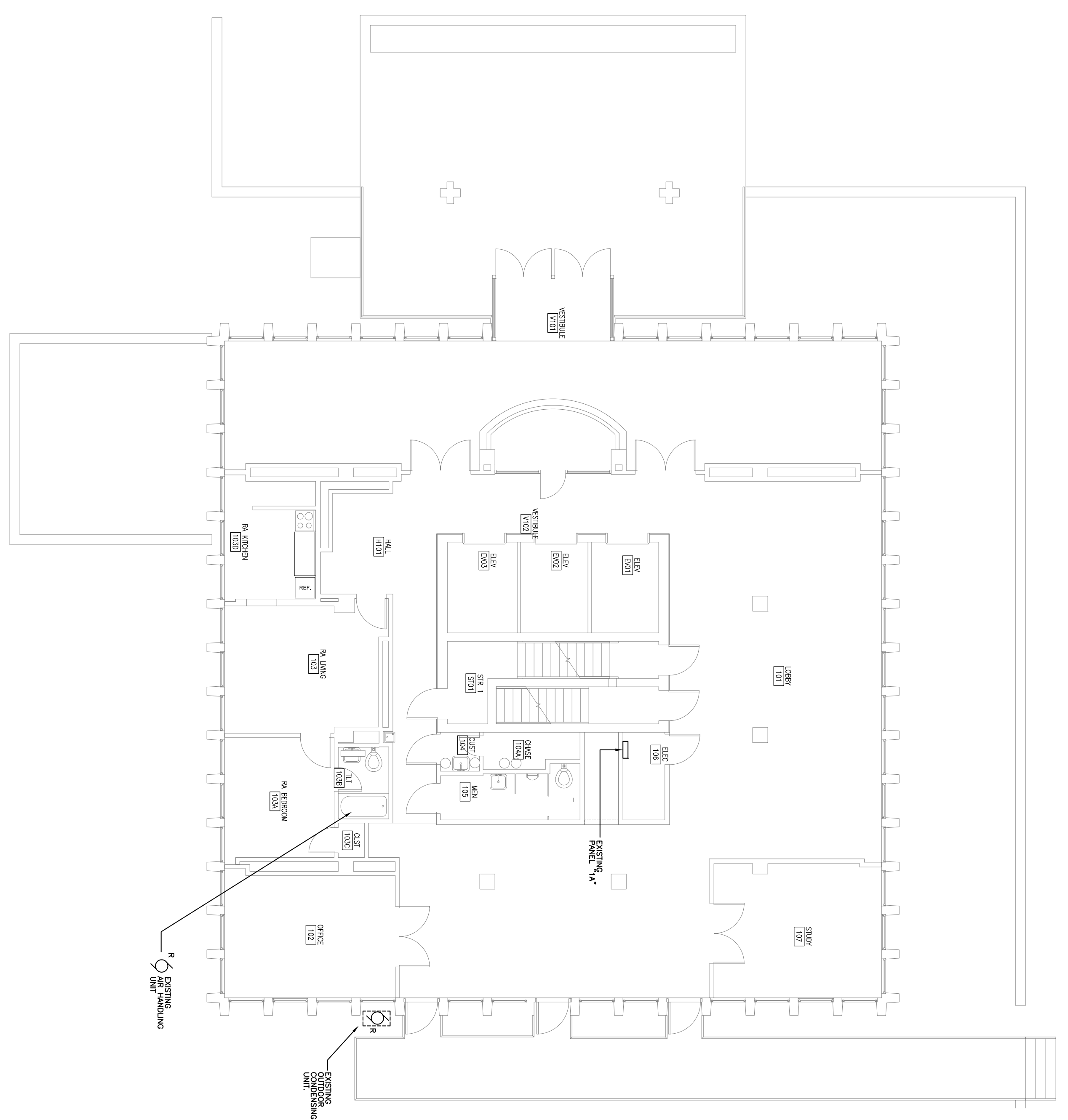
PHASE A WORK - NOTE TO CONTRACTORS:

- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE MADE BY THE CONTRACTOR. ASBESTOS ABRASION HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
- THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS ON DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING HANGERS, SORTERS, FAN COILS, METAL PAN COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CEILING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS MATERIAL. THE CONTRACTOR SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UNPAID RECEIPTS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB THE EXISTING GYPSUM BOARD IN ANY FASHION. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD WILL BE MADE BY THE CONTRACTOR. THE ASBESTOS ABRASION HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.

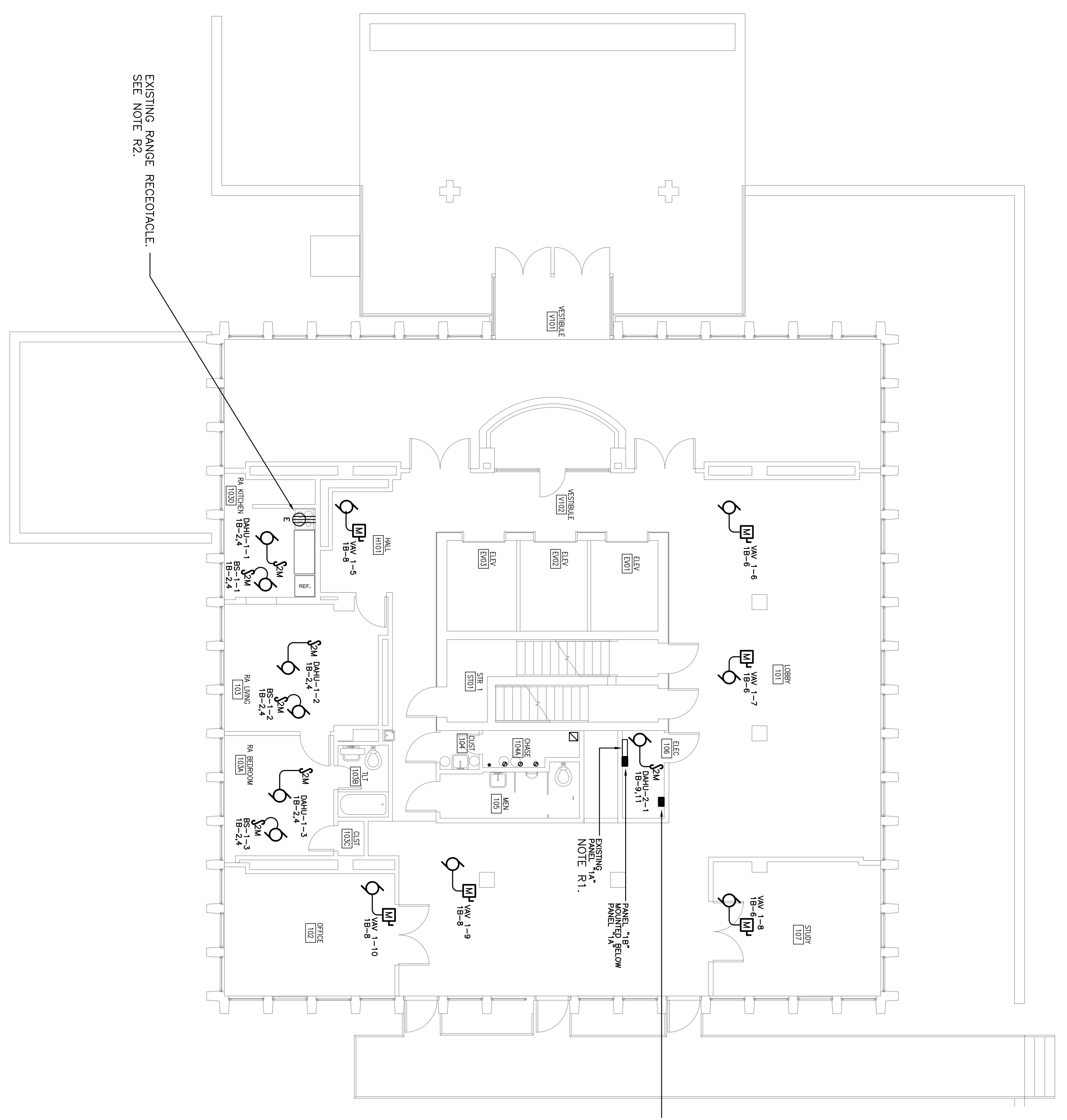
**RENOVATION NOTES**

R1. REMOVE TWO ADJACENT 20 AMP SINGLE-POLE BREAKERS FROM EXISTING PANEL PROVIDE NEW 50 AMP 120/240V 1.5W 12 CIRCUIT PANELBOARD 1 1/2" FEED FROM 50 AMP BREAKER WITH CONDUIT AND WIRE AS SHOWN ON THE POWER RISER DIAGRAM. REWIRE THE TWO ADJACENT 20 AMP CIRCUITS PREVIOUSLY REMOVED FROM PANEL 1A FROM NEW PANELBOARD 1B.

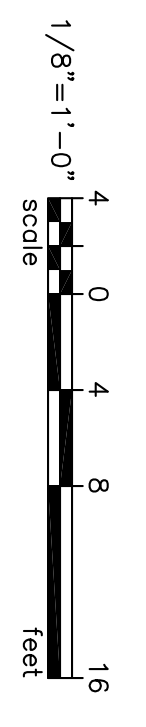
R2. PROVIDE A 240-VOLT RATED 2-POLE ELECTRICALLY-HELD CONNECTOR IN A NEKA-1 ENCLOSURE WITH 120-VOLT HOLDING COIL IN ELECTRICAL CLOSET 106 (LOCATION IN CLOSET MAY VARY DUE TO EXISTING EQUIPMENT). REMOVE OUTLET/RECEPTACLE LOCATED IN RA KITCHEN 103D SUCH THAT THE CONNECTOR WILL BE IN SERIES WITH THE CIRCUIT (THE CONTRACTOR SHALL BE CAPABLE OF TURNING POWER ON AND OFF TO THE RANGE RECEPTACLE). NEW CONDUCTORS BEING RAN FROM ONE 200 AMPROUND CHANNEL RACEWAY (1 EMP) SHALL BE RAN THROUGH THE 200 AMPROUND CHANNEL RACEWAY TO THE CONNECTOR TO A SEPARATE HOOD SUPPRESSION SYSTEM SUCH THAT THE CONTRACTOR WILL LOGO THE HOOD SUPPRESSION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPRESSION SYSTEM WIRE ACTIVATED CONTROL CIRCUIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HOOD SUPPRESSION SYSTEM WIRE AND #12 AWG SUPPRESSION SYSTEM WITH ONE #12 AWG GROUND WIRE IN 1/2" EMP RACEWAY.



**POWER DEMOLITION PLAN**  
**FIRST FLOOR - PHASE A**  
 SCALE: 1/8" = 1'-0"



**POWER RENOVATION PLAN**  
**FIRST FLOOR - PHASE A**  
 SCALE: 1/8" = 1'-0"



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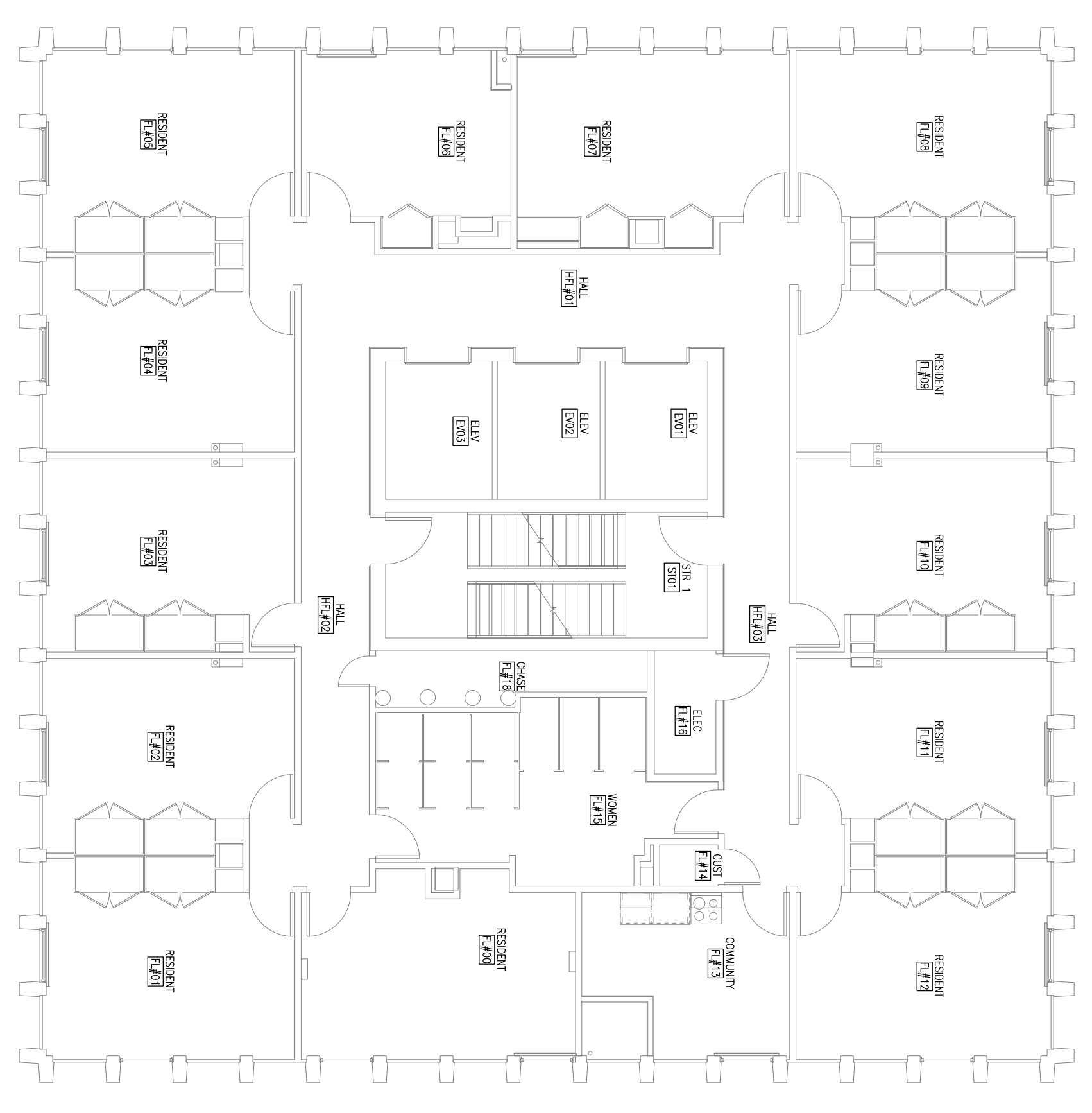
NOTES

- PHASE A WORK - NOTE TO CONTRACTORS:
- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABLATION HAS BEEN COMPLETED BY THE ABLATION CONTRACTOR.
  - THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE Gypsum BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABLATION OF ASBESTOS FROM THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE Gypsum BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  - DURING THE PROCESS OF INSTALLING HANGERS, SPRINGS, PAN COLLS, METAL PAN OR OTHER MECHANICAL PARTS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  - DURING THE PROCESS OF INSTALLING UL RATED RACEWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB EXISTING PARTITIONS OR PARTITIONS TO BE INSTALLED IN PHASE B. DAMAGE TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABLATION HAS BEEN COMPLETED BY THE ABLATION CONTRACTOR.

RENOVATION NOTES

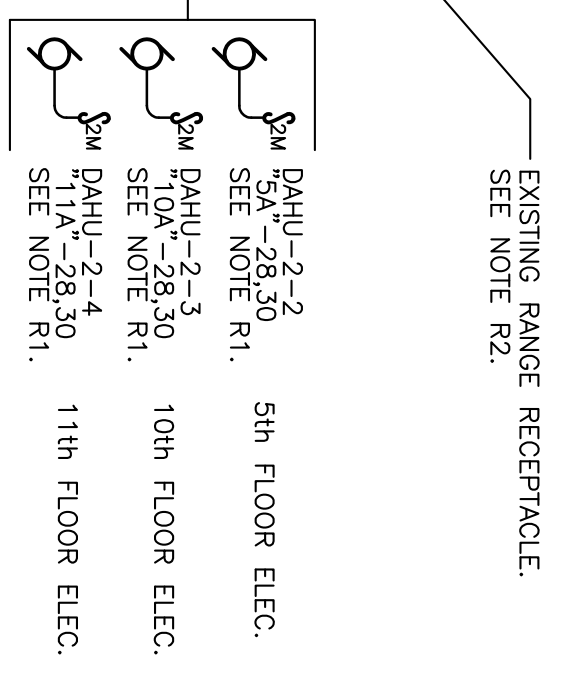
- R1. REARRANGE EXISTING CIRCUITS/BREAKERS IN PANEL SUCH THAT THERE IS A CONSECUTIVE TWO-POLE BREAKER SPACE. PROVIDE ONE 15 AMP 2-POLE BREAKER FOR 5th, 10th AND 11th FLOORS ONLY.
- R2. PROVIDE A 240-VOLT RATED, 2-POLE, ELECTRICALLY-HELD CONTRACTOR IN A NEARBY ENCLOSURE WITH 120-VOLT HOLDING COIL IN THE ELECTRICAL CLOSET. PROVIDE 1/2" CONDUIT WITH VAD-1000 WHICH RUNS FROM PANEL "A" TO THE RANGE OUTLET/RECEPTACLE LOCATED IN THE COMMUNITY ROOM SUCH THAT THE CONTRACTOR WILL BE IN SERIES WITH THE CIRCUIT (THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RANGE OUTLET/RECEPTACLE). PROVIDE 1" CONDUCTORS (THREE #8 AWG THIN WITH ONE #10 GROUND) AND RACEWAY (1" EMT) SHALL BE PROVIDED AS REQUIRED TO ACCOMMODATE CHANGES.
- A SEPARATE CONTROL CIRCUIT SHALL BE PROVIDED FROM THE CONTRACTOR TO THE RANGE RECEPTACLE. THE RANGE RECEPTACLE SHALL BE INSTALLED IN THE COMMUNITY ROOM. THE RANGE RECEPTACLE WHEN THE HOOD SUPPRESSION SYSTEM IS ACTIVATED. CONTROL CIRCUIT SHALL BE TWO #12 AWG THIN CONDUCTORS WITH ONE #12 AWG GROUND WIRE IN 1/2" EMT RACEWAY.

NO POWER DEMOLITION WORK  
IN PHASE A



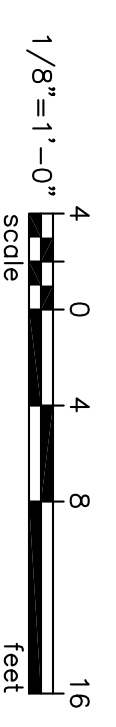
TYPICAL:  
COORDINATE BOX LOCATION ABOVE CEILING HANGERS FOR MECHANICAL CONTRACTOR FOR PLACEMENT AT FIRESTOP PENETRATIONS INTO ROOMS (SEE NOTE B). THIS WORK WILL BE MADE IN PHASE B)

TYPICAL:  
PROVIDE 3/4" EMT RACEWAY WITH PULSTRINGS CONCEALED ABOVE SERVICE CEILING. RACEWAYS AND SERVICE RINGS SHALL BE INSTALLED IN PHASE B



POWER DEMOLITION PLAN  
TYPICAL 2ND-18TH FLOORS - PHASE A  
SCALE: 1/8" = 1'-0"

POWER RENOVATION PLAN  
TYPICAL 2ND-18TH FLOORS - PHASE A  
SCALE: 1/4" = 1'-0"



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	<table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>ORIG. BY</th> <th>DRAWN BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY											<p>SHEET: E2.2A</p>	<p>SHEET TITLE: POWER PLANS - 2ND - 18TH FLOORS PHASE A</p>
REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY														

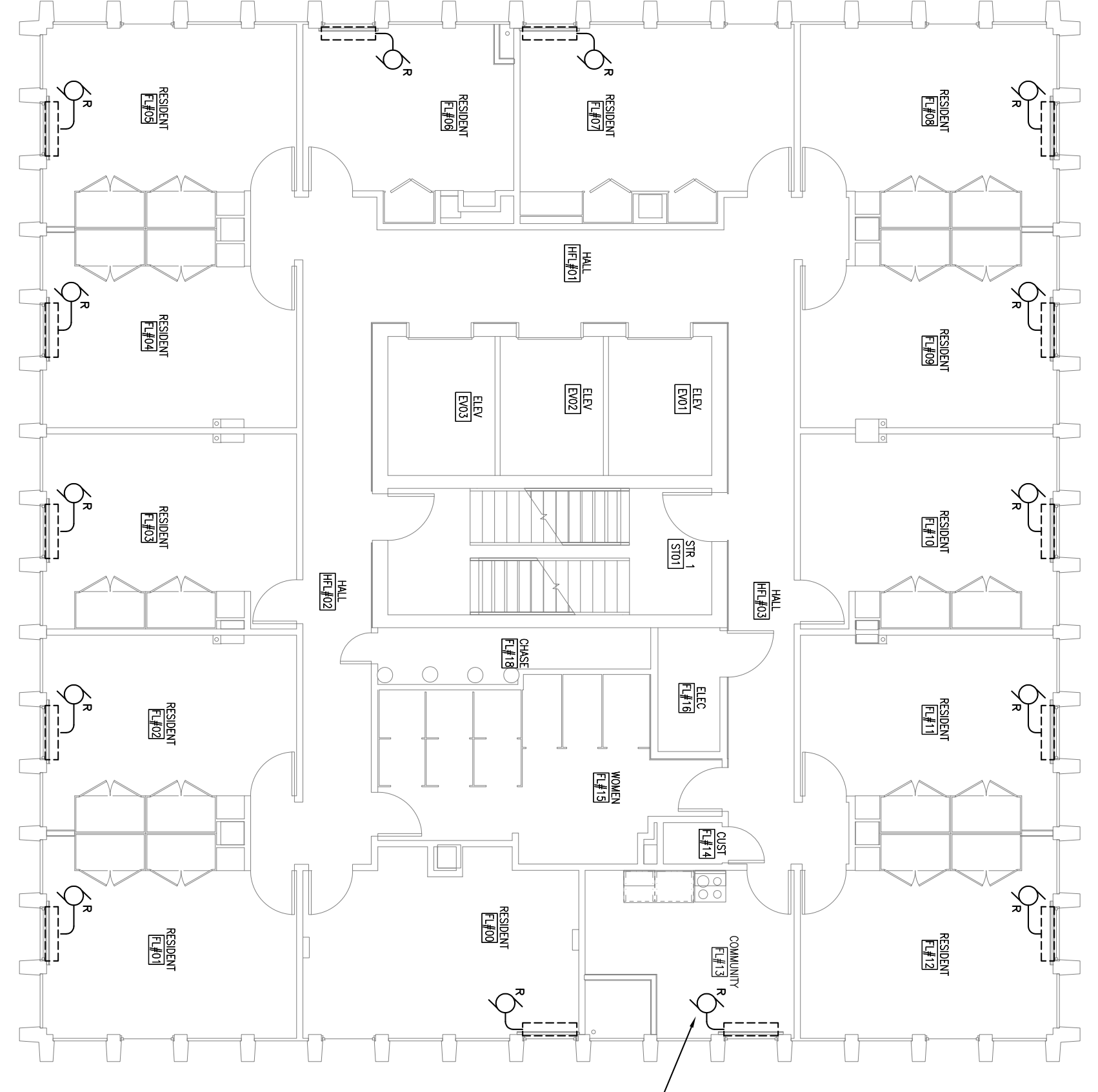


**DEMOLITION NOTES**

01. EXISTING FAN COIL UNITS ON EACH FLOOR ARE SERVED FROM THREE 20 AMP, SINGLE-POLE CIRCUIT BREAKERS PANELBOARD ON THE 2ND FLOOR. PROVIDE 3/4" EMT RACEWAY FROM JUNCTION BOX TO FAN COIL UNITS AND DISCONNECT ASSOCIATED WIRING BACK TO PANELBOARD. CUT OFF CONDUIT FLUSH WITH FLOOR AND FILL WITH GROUT.

**NOTES**

PHASE A WORK - NOTE TO CONTRACTORS:  
 1. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE APARTMENT CONTRACTOR.  
 2. THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL, THE EXISTING GYPSUM BOARD PARTITIONS OR THE EXISTING GYPSUM BOARD PARTITIONS ON CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS ON THE EXISTING GYPSUM BOARD PARTITIONS. CONTAMINATION OF THESE SPACES CAUSED BY THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.  
 PHASE B WORK - NOTE TO CONTRACTORS:  
 3. DURING THE PROCESS OF INSTALLING HANGERS, SPRTS, FAN COILS, METAL PAN COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CEILING. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. AIR SAMPLING SHALL NOT BE PERFORMED IN THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.  
 4. DURING THE PROCESS OF INSTALLING IN SUTED PARTITIONS AT CORRIDOR WALL, THE CONTRACTOR SHALL NOT PENETRATE THE EXISTING GYPSUM BOARD PARTITIONS. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE APARTMENT CONTRACTOR.

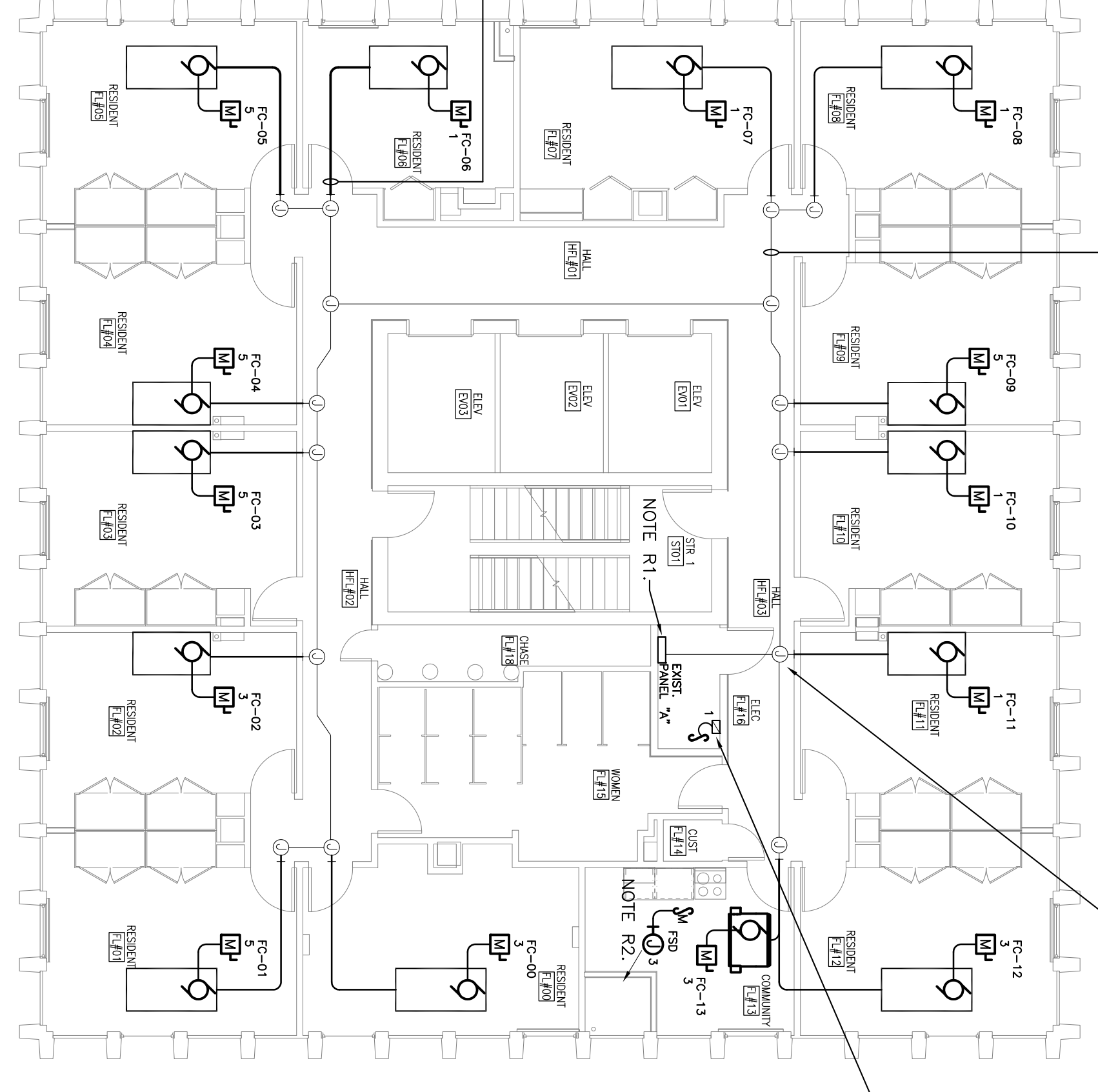


TYPICAL:  
EXISTING FLOOR-MOUNTED FAN COIL UNIT. SEE NOTE 01.

TYPICAL FOR EACH FAN COIL UNIT, PROVIDE 3/4" EMT RACEWAY FROM JUNCTION BOX TO FAN COIL UNIT. SEE NOTE R1.

**RENOVATION NOTES**

R1. EXISTING FAN COIL UNITS ON EACH FLOOR ARE SERVED FROM THREE 20 AMP, SINGLE-POLE CIRCUIT BREAKERS PANELBOARD ON THE 2ND FLOOR. PROVIDE 3/4" EMT RACEWAY FROM JUNCTION BOX TO FAN COIL UNITS. CIRCUITS SHALL BE ARRANGED SUCH THAT THERE IS NO MORE THAN FIVE FAN COIL UNITS ON AN INDIVIDUAL 120-VOLT, 20-AMP CIRCUIT. PROVIDE A DIAGRAMMATIC TO DEDUCT NUMBER OF CIRCUITS, NOT ACTUAL BREAKER SPACE. UPDATE PANELBOARD SCHEDULES ON EACH FLOOR TO INDICATE WHICH FAN COIL UNITS/ROOMS ARE SERVED FROM BREAKERS.  
 R2. PROVIDE 120V POWER FROM CIRCUIT FEEDING FAN COIL UNIT IN THIS ROOM TO DAMPER MOUNT DISCONNECT SWITCH TO PROVIDE POINT TO FIRE DAMPER CIRCUIT NEAR DUCT ACCESS PANEL.  
 R3. PROVIDE #2/12, #12 GND IN 3/4" EMT TO NEW JCI PANEL ON SHARED FAN COIL CIRCUIT SHOWN.



TYPICAL: CONDUIT INSTALLED IN PHASE A

TYPICAL: JUNCTION BOX INSTALLED IN PHASE A

JOHNSON CONTROLS DDC PANEL. SEE NOTE R3.

**1**  
POWER DEMOLITION PLAN  
TYPICAL 2ND-18TH FLOORS - PHASE B  
SCALE: 1/8" = 1'-0"

**2**  
POWER RENOVATION PLAN  
TYPICAL 2ND-18TH FLOORS - PHASE B  
SCALE: 1/8" = 1'-0"

1/8" = 1'-0"  
SCALE

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**DEMOLITION NOTES**

D1. EXISTING LIGHTNING PROTECTION SYSTEM AIR TERMINALS AND CONDUCTORS WERE EXPOSED FROM ORIGINAL CONSTRUCTION SPACES. EXISTING LIGHTNING PROTECTION SYSTEM COMPONENTS AND CONDUCTORS DURING ROOF RENOVATIONS. REPAIR ANY DAMAGES REALIZED DURING ROOF REPLACEMENT AT THE CONTRACTOR'S EXPENSE. REPAIR AND/OR REPLACE AIR TERMINALS AT THE CONTRACTOR'S EXPENSE TO THE OWNER AND IN ACCORDANCE WITH UL 96A AND NFPA 780.

EXISTING AIR TERMINALS WERE NOTED ON THE ORIGINAL BUILDING CONSTRUCTION DRAWINGS TO BE 24" TAPERED ALUMINUM RODS 5/8" IN DIAMETER.

EXISTING CONDUCTORS WERE NOTED ON THE ORIGINAL BUILDING CONSTRUCTION DRAWINGS TO BE COMMERCIAL STRANDED COPPER WITH #15 AWG STRANDED HAVING A MINIMUM COMBINED CROSS-SECTION OF 119,000 CIRCULAR MILLS.

**NOTES**

PHASE A WORK -- NOTE TO CONTRACTORS:

- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE MADE IN CONTACT WITH THE GYPSUM BOARD PARTITION HAS BEEN COMPLETED BY THE ADVERTISED CONTRACTOR.
- THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS ON DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UL RATED RACKWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION IN ANY FASHION, NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD IN ANY PARTITION, THE CONTRACTOR SHALL NOT DISTURB OR REMOVE ANY MATERIAL FROM THE EXISTING PARTITION. THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ADVERTISED CONTRACTOR.

PHASE B WORK -- NOTE TO CONTRACTORS:

- COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF CORRIDOR PARTITIONS SHALL BE REMOVED AND RE-INSTALLED IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CEILING SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UL RATED RACKWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION IN ANY FASHION, NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD IN ANY PARTITION, THE CONTRACTOR SHALL NOT DISTURB OR REMOVE ANY MATERIAL FROM THE EXISTING PARTITION. THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ADVERTISED CONTRACTOR.

**RENOVATION NOTES**

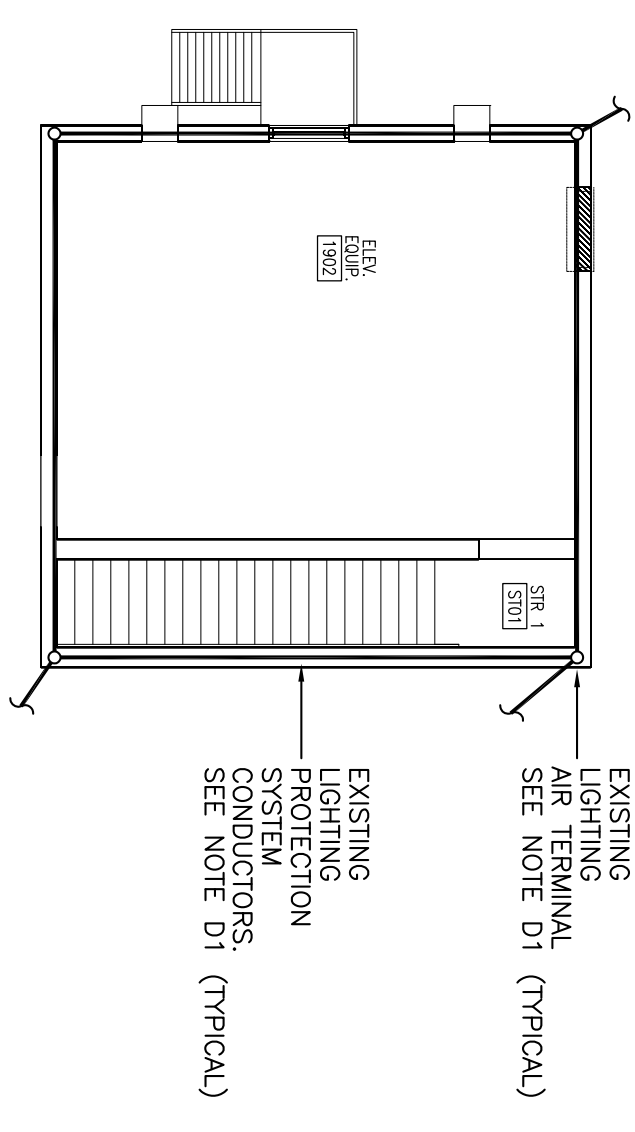
R1. GENERAL: BOND ALL NEW METALLIC COMPONENTS INSTALLED ON THE ROOF AND PENTHOUSE TO THE EXISTING LIGHTNING PROTECTION SYSTEM. SEE PREVIOUS DRAWINGS FOR THE EXISTING LIGHTNING PROTECTION SYSTEM. ELECTRICAL DRAWINGS FOR THE EXISTING LIGHTNING PROTECTION SYSTEM SHALL BE USED TO VERIFY THE EXISTING LIGHTNING PROTECTION SYSTEM. THE CONTRACTOR SHALL VERIFY THE EXISTING LIGHTNING PROTECTION SYSTEM. THE CONTRACTOR SHALL VERIFY THE EXISTING LIGHTNING PROTECTION SYSTEM. THE CONTRACTOR SHALL VERIFY THE EXISTING LIGHTNING PROTECTION SYSTEM.

R2. PROVIDE NEW LIGHTNING AIR TERMINALS ON EQUIPMENT AND STRUCTURAL MEMBERS (INCLUDING PHP-1) AS REQUIRED PER UL 96A AND NFPA 780. AIR TERMINALS SHALL MATCH SPECIFICATIONS OF EXISTING AIR TERMINALS. AIR TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS ARE REQUIRED PER UL 96A AND NFPA 780.

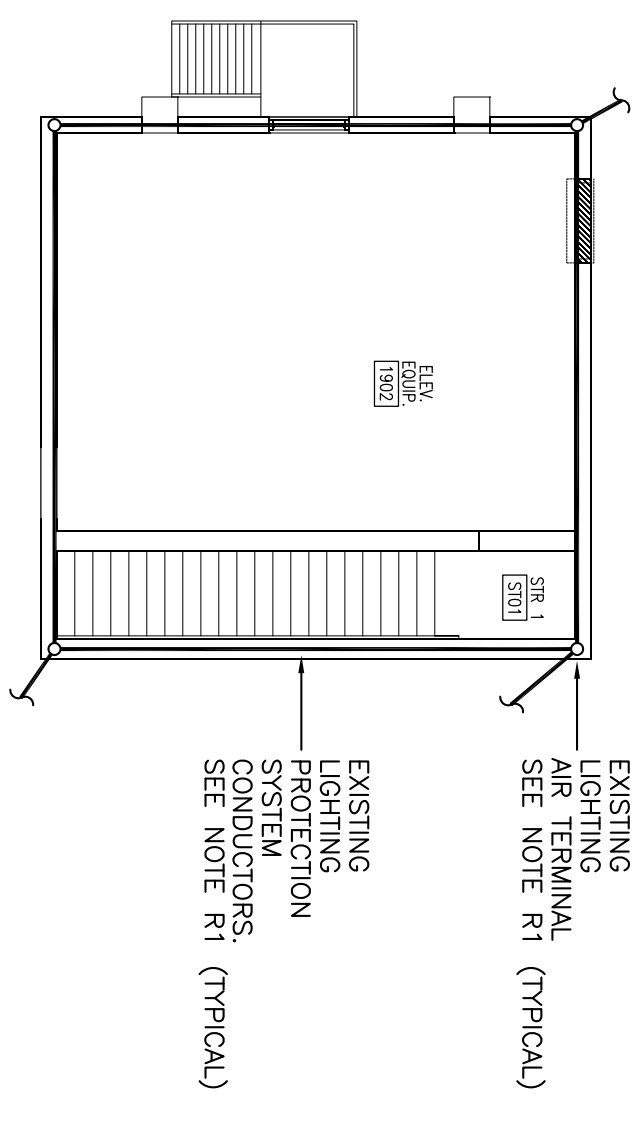
PROVIDE NEW CONDUCTORS TO BOND LIGHTNING PROTECTION SYSTEM COMPONENTS. CONDUCTOR SPECIFICATIONS SHALL MATCH SPECIFICATIONS OF EXISTING CONDUCTORS (SEE NOTE D2 ON THIS SHEET) UNLESS MORE STRINGENT SPECIFICATIONS ARE REQUIRED PER UL 96A AND NFPA 780.

INSTALL LIGHTNING PROTECTION COMPONENTS AND SYSTEMS ACCORDING TO UL 96A AND NFPA 780. CONTRACTOR SHALL NOT PROTECT SITE AND INSPECT EXISTING SYSTEM PARTS TO REMAIN IN A BOX.

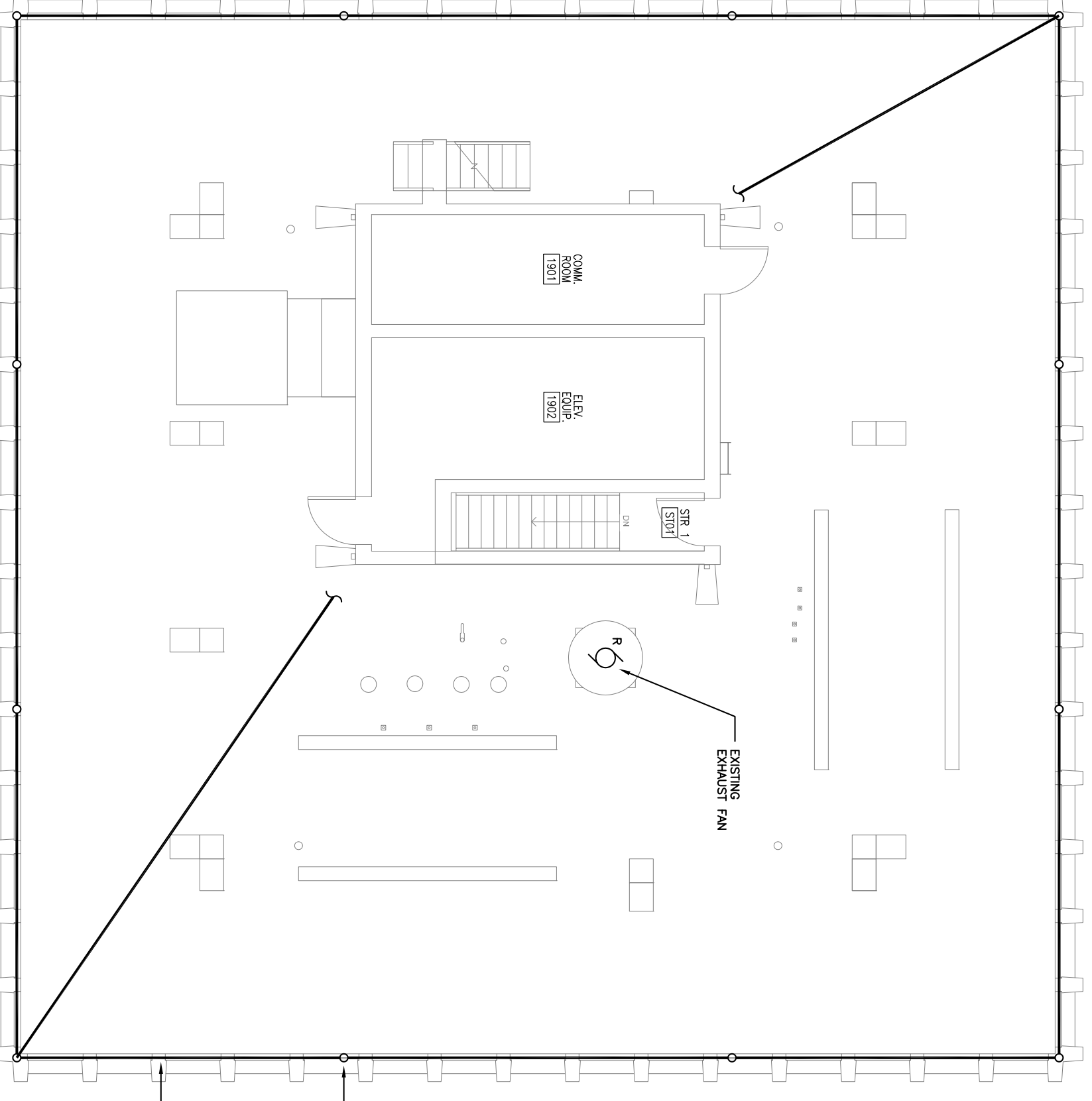
R3. EXTEND CONDUIT STRIPPED UP TO THE ROOF IN PHASE A TO DISCONNECT THE MECHANICAL CONTRACTOR.



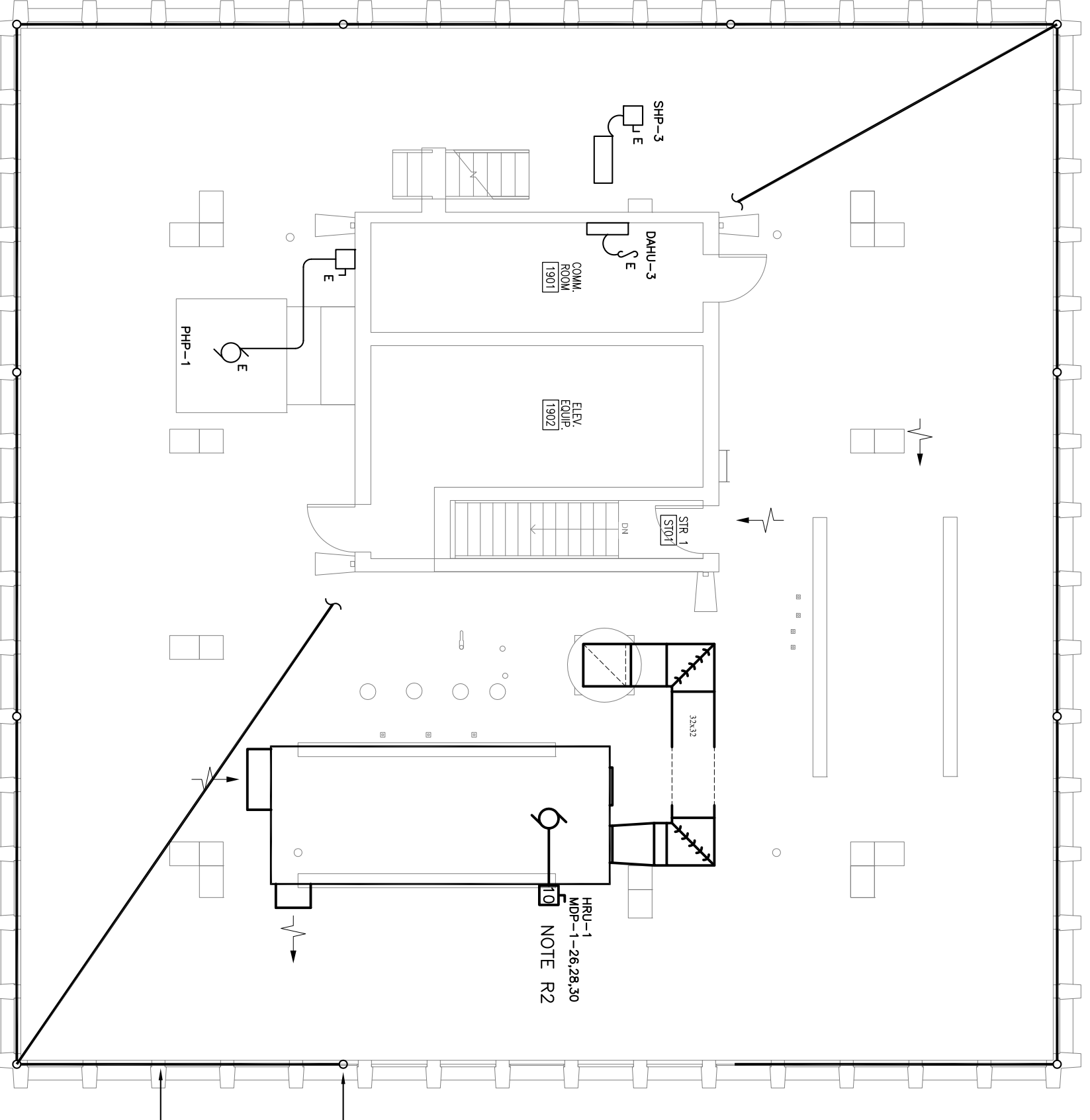
**1** POWER DEMOLITION PLAN  
PENTHOUSE -- PHASE A  
SCALE: 1/8" = 1'-0"



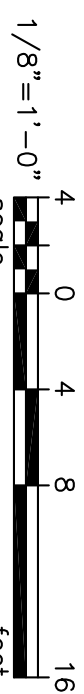
**4** POWER RENOVATION PLAN  
PENTHOUSE -- PHASE B  
SCALE: 1/8" = 1'-0"



**1** POWER DEMOLITION PLAN  
ROOF -- PHASE B  
SCALE: 1/8" = 1'-0"



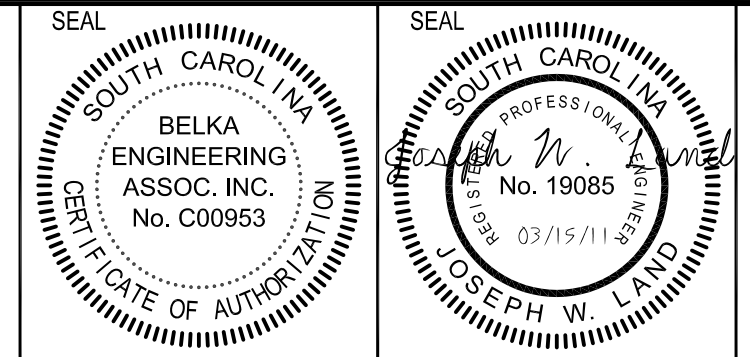
**3** POWER RENOVATION PLAN  
ROOF -- PHASE B  
SCALE: 1/8" = 1'-0"



REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY	CHECKED BY:

PROJECT TITLE: SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS

DRAWING: DATE: 03/15/12 DRAWN BY: TSR CHECKED BY: JWJ



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SHEET TITLE: POWER PLANS - ROOF AND PENTHOUSE PHASE B

SHEET: **E2.3B**

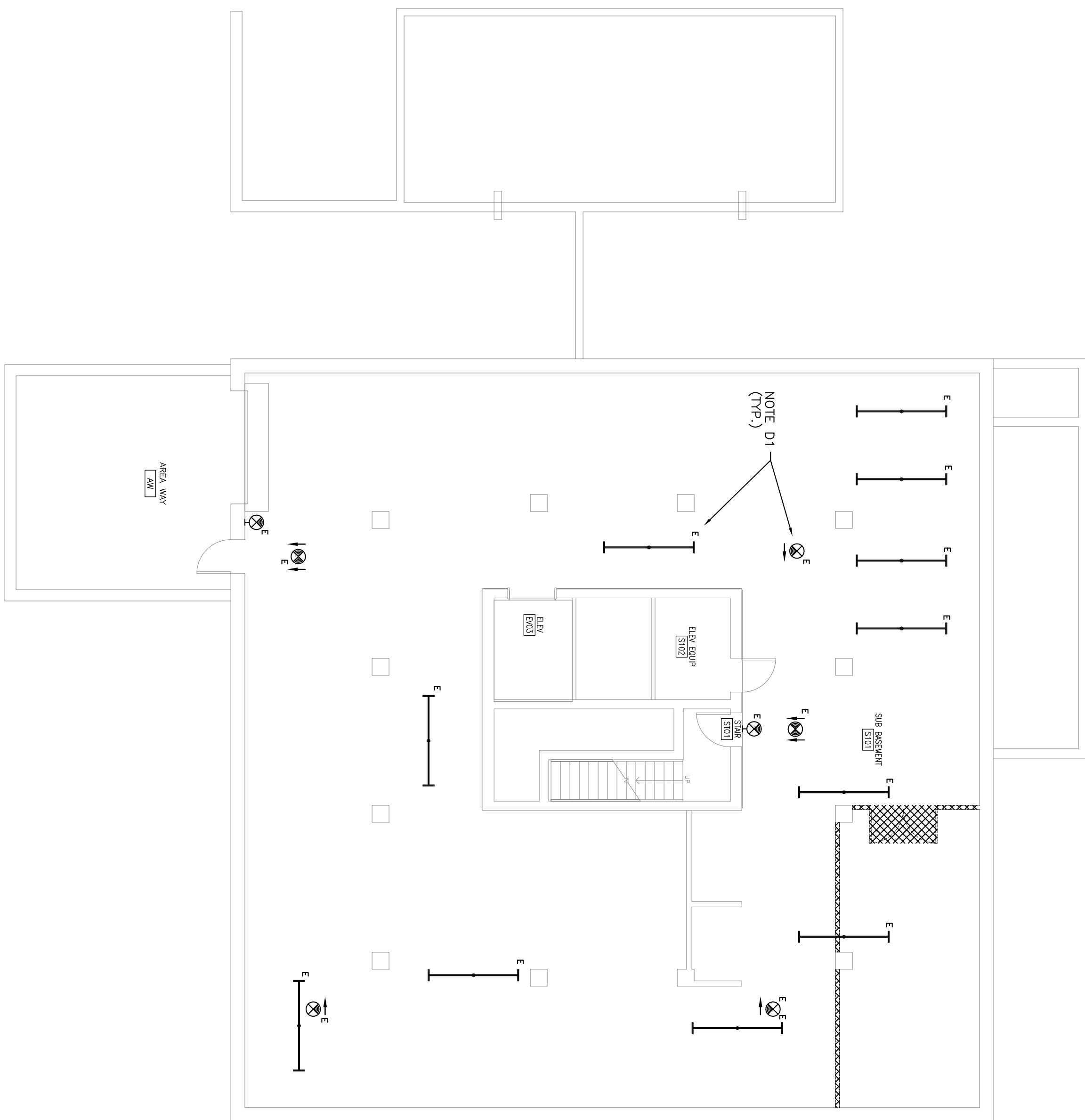
BEKA ENGINEERING ASSOCIATES, INC.  
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**ELECTRICAL DEMOLITION NOTES**

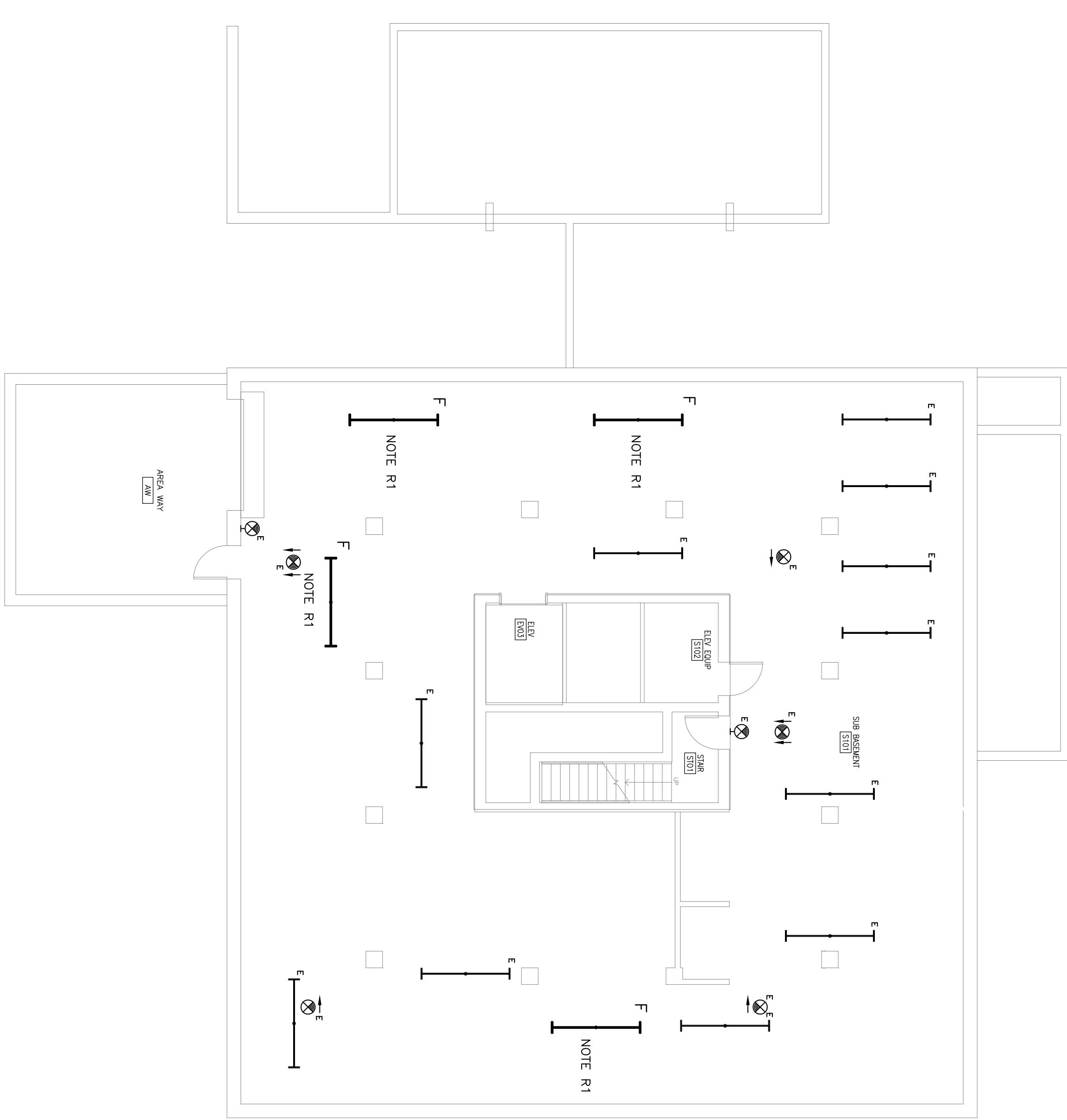
D1. PROTECT EXISTING LIGHT FIXTURES & EXIT SIGNS DURING RENOVATION. REPLACE ANY DAMAGED FIXTURES.

**ELECTRICAL RENOVATION NOTES**

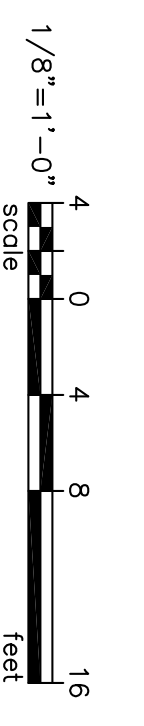
R1. CORRELATE EXACT LOCATIONS OF NEW FIXTURES WITH MECHANICAL EQUIPMENT AND DUCTWORK. EXTEND EXISTING CIRCUIT TO FEED THESE NEW FIXTURES. REUSE EXISTING SWITCHING.



**1**  
LIGHTING DEMOLITION PLAN  
BASEMENT - PHASE A  
SCALE: 1/8" = 1'-0"



**2**  
LIGHTING RENOVATION PLAN  
BASEMENT - PHASE A  
SCALE: 1/8" = 1'-0"



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<b>E3.00A</b>	SHEET TITLE:	LIGHTING PLANS - BASEMENT PHASE A
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REV.		DESCRIPTION		DATE		ORIG. BY			

**SEAL**  
UNIVERSITY OF SOUTH CAROLINA  
BELKA ENGINEERING ASSOC. INC.  
No. C00953  
STATE OF SOUTH CAROLINA  
JOSEPH W. [Signature]

**SEAL**  
UNIVERSITY OF SOUTH CAROLINA  
JOSEPH W. [Signature]  
No. 19085  
03/15/12

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**ELECTRICAL DEMOLITION NOTES**

D1. PROTECT EXISTING LIGHT FIXTURES DURING RENOVATION, REPLACE ANY DAMAGED FIXTURES.

**NOTES**

PHASE A WORK - NOTE TO CONTRACTORS:

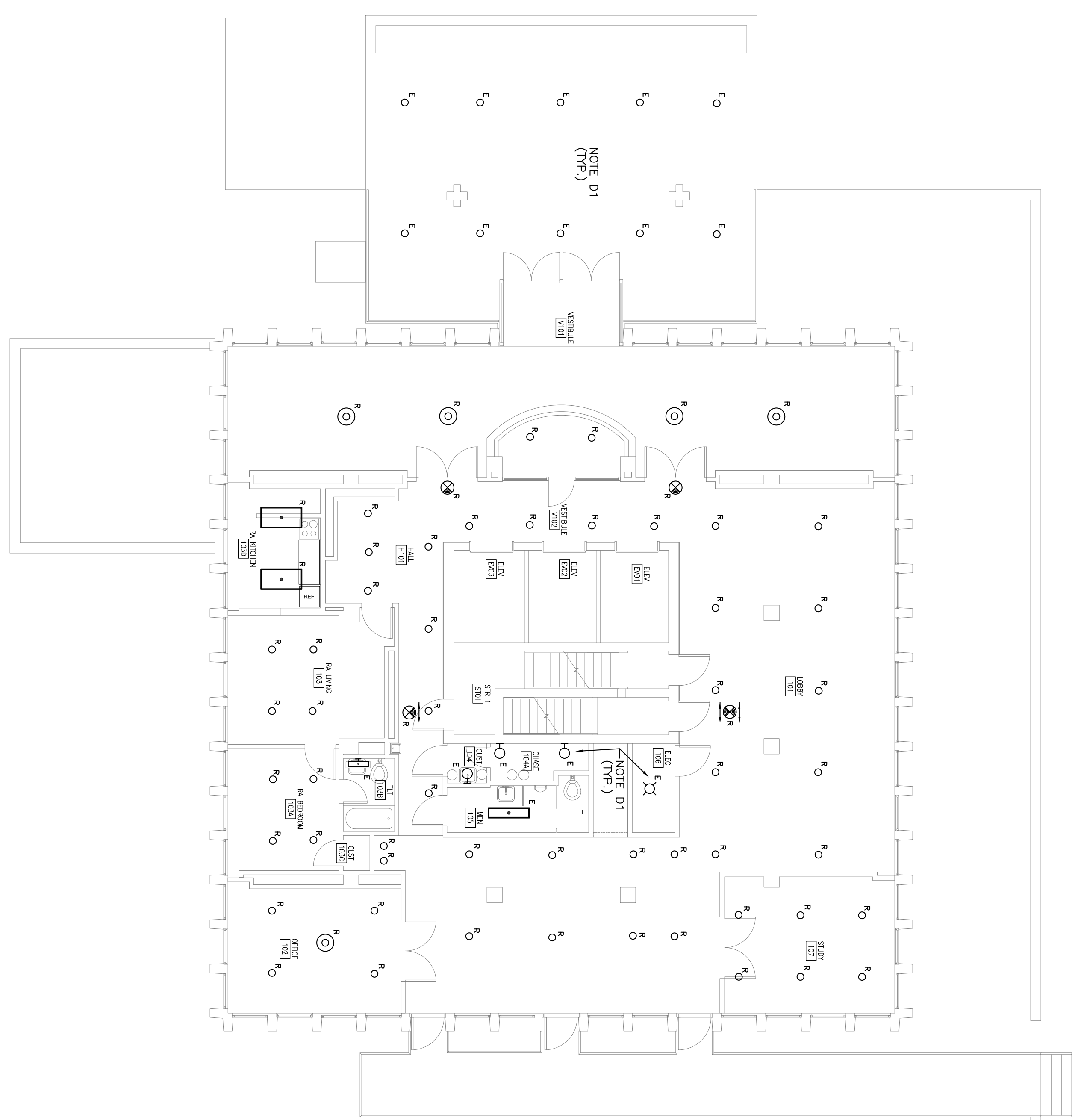
- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
- THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PAN OR COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UL RATED RACEWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB EXISTING PARTITIONS. PENETRATIONS TO EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.

**ELECTRICAL RENOVATION NOTES**

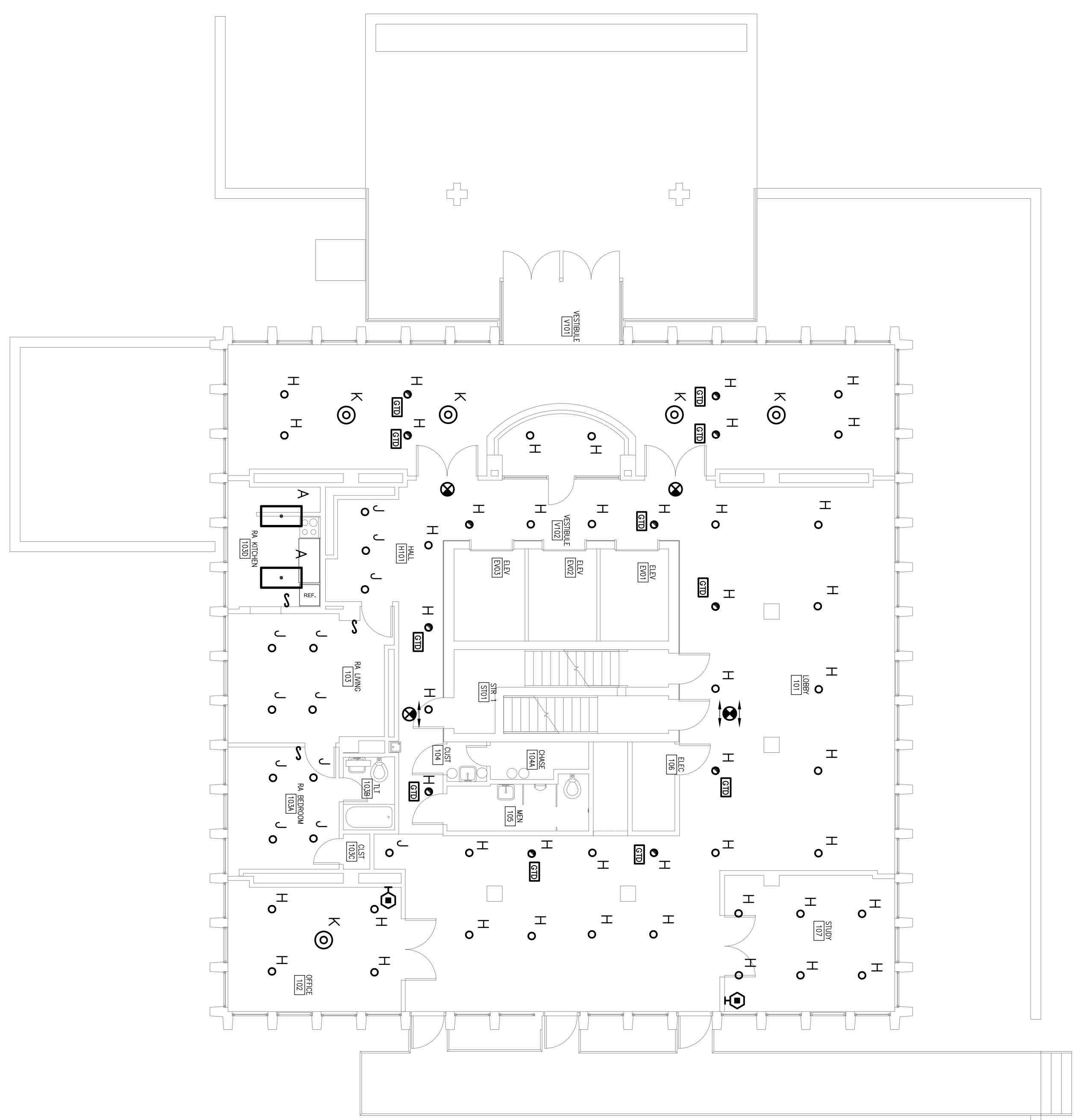
R1. PROVIDE NEW LIGHTING FIXTURES AS INDICATED AND REUSE EXISTING LIGHTING CIRCUITS PER SPACE. PROVIDE OCCUPANCY SENSORS TO CONTROL INDIVIDUAL SPACES AS INDICATED. SENSORS MAY BE CEILING MOUNTED IN CORNER OF ROOMS. PROVIDE SENSORS TO CONTROL CORRIDOR LIGHTING. PROVIDE SENSORS TO CONTROL LOBBY LIGHTING (SENSITIVITY AND TIME DELAY) WITH OWNER. PROVIDE ONE SITE VISIT 30 DAYS AFTER COMPLETION TO ADJUST ANY SETTINGS.

R2. LOBBY AND MAIN CORRIDOR LIGHTING SHALL OPERATE WITHOUT LOCAL AUTOMATIC OR MANUAL SWITCHING.

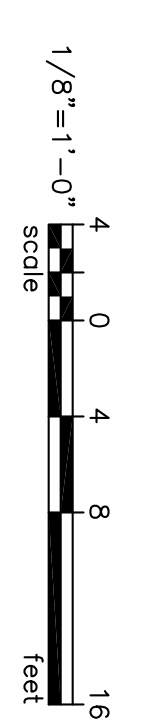
R3. FOR EACH GENERATOR-BACKED LIGHTING FIXTURE, PROVIDE GENERATOR TRANSFER DEVICE (GTD) (BODINE OR APPROVED EQUAL). GTD REQUIRE A NORMAL AND GENERATOR-BACKED CIRCUIT CONNECTION - SEE MANUFACTURER'S WIRING DIAGRAM.



**1 LIGHTING DEMOLITION PLAN**  
FIRST FLOOR - PHASE A  
SCALE: 1/8" = 1'-0"



**2 LIGHTING RENOVATION PLAN**  
FIRST FLOOR - PHASE A  
SCALE: 1/8" = 1'-0"



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EMAIL: jwendel@bea-usa.com

SHEET: <b>E3.1A</b>	SHEET TITLE:	DATE:	DRAWN BY:	CHECKED BY:	PROJECT TITLE:
	<b>LIGHTING PLANS - FIRST FLOOR PHASE A</b>	03/15/12	TSR	JWL	<b>SOUTH TOWER MECHANICAL RENOVATIONS</b> UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS

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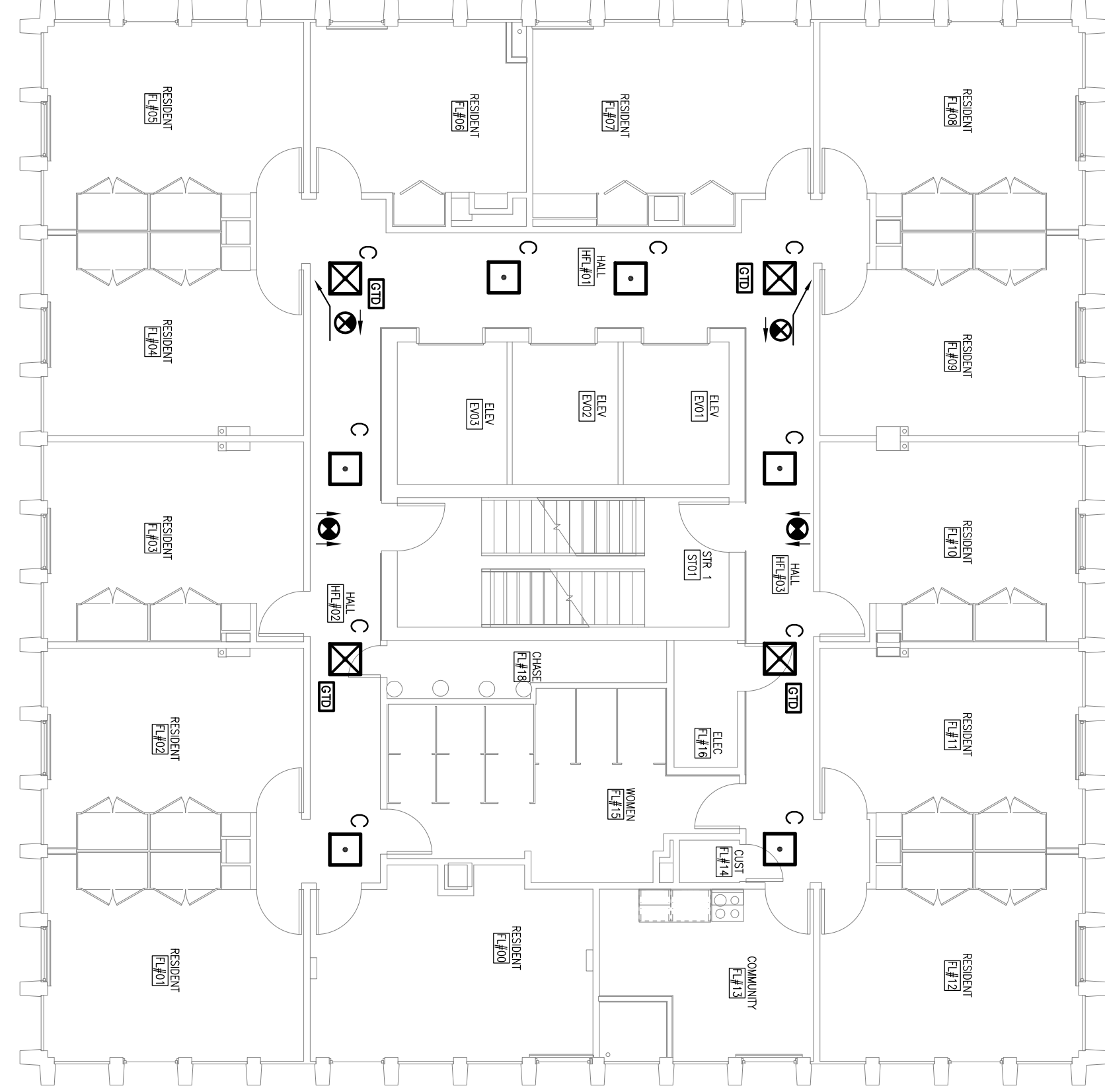
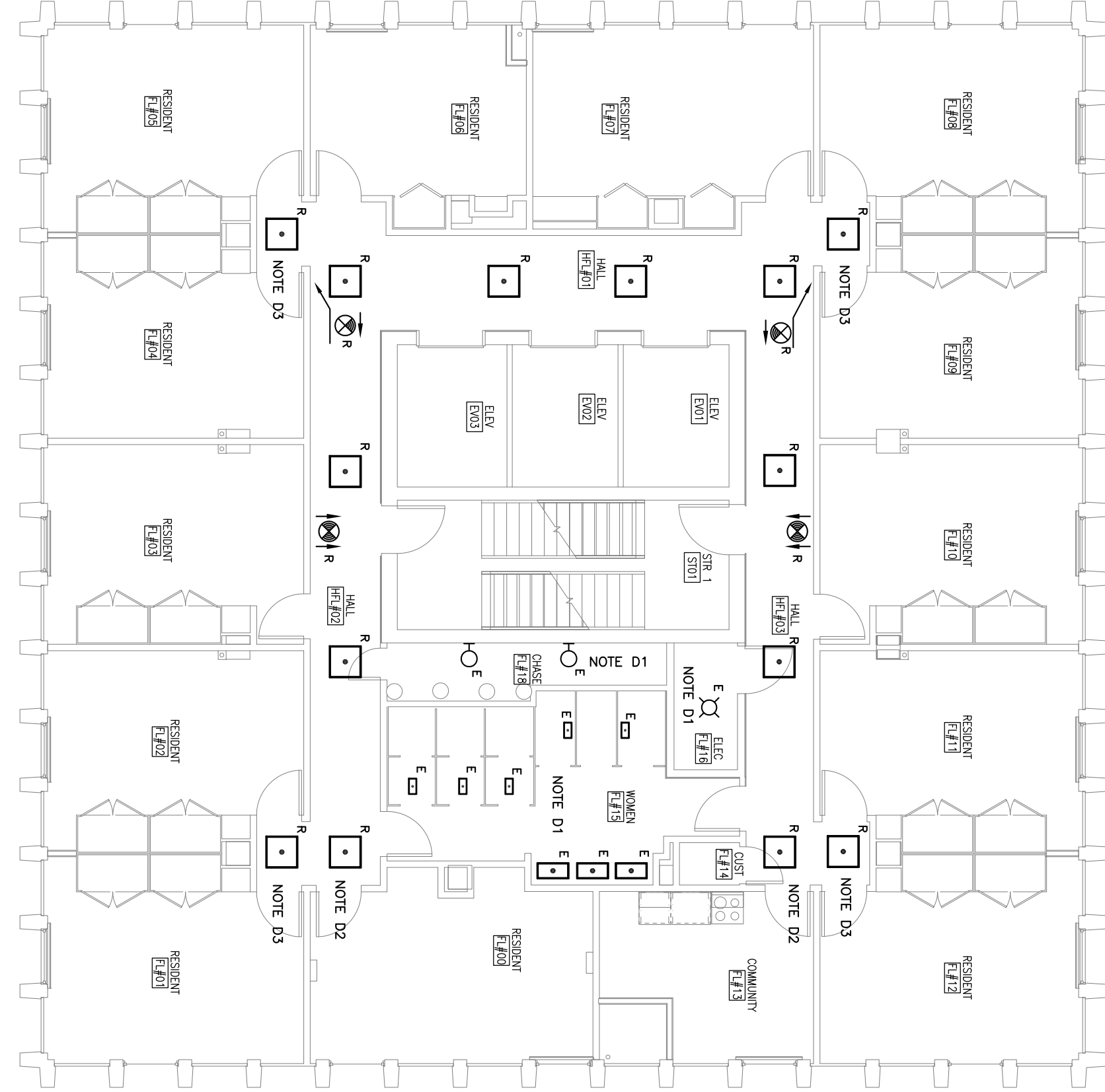
SEAL: SOUTH CAROLINA ENGINEERING ASSOCIATION, INC. No. 19085

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Columbia, S.C. 29211 mail@swygert-associates.com

- ELECTRICAL DEMOLITION NOTES**
- D1. PROTECT EXISTING LIGHT FIXTURES DURING RENOVATION, REPLACE ANY DAMAGED FIXTURES.
  - D2. THIS EXISTING LIGHT FIXTURE TO BE REMOVED IS ONLY ON 2ND THRU 12TH FLOORS.
  - D3. THIS EXISTING LIGHT FIXTURE TO BE REMOVED IS ONLY ON 13TH THRU 18TH FLOORS.

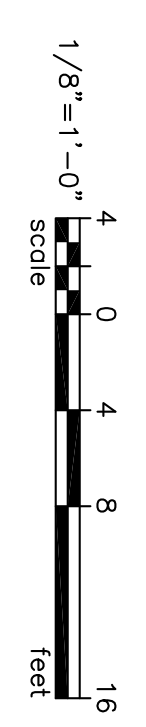
- NOTES**
- PHASE A WORK — NOTE TO CONTRACTORS:**
1. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
  2. THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  3. DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PAN OR COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  4. DURING THE PROCESS OF INSTALLING UL RATED RACEWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB EXISTING PARTITIONS. PENETRATIONS AND NEW PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
- PHASE B WORK — NOTE TO CONTRACTORS:**



- ELECTRICAL RENOVATION NOTES**
- R1. PROVIDE NEW LIGHTING FIXTURES AS INDICATED AND REUSE EXISTING LIGHTING CIRCUITS PER SPACE.
  - R2. CORRIDOR LIGHTING SHALL OPERATE WITHOUT LOCAL, AUTOMATIC OR MANUAL SWITCHING.
  - R3. FOR EACH GENERATOR-BACKED LIGHTING FIXTURE, PROVIDE GENERATOR TRANSFER SWITCH (GTS) AND GROUNDING CONNECTION — SEE MANUFACTURER'S WIRING DIAGRAM.
  - R4. GENERATOR-BACKED CIRCUIT CONNECTION — SEE MANUFACTURER'S WIRING DIAGRAM.

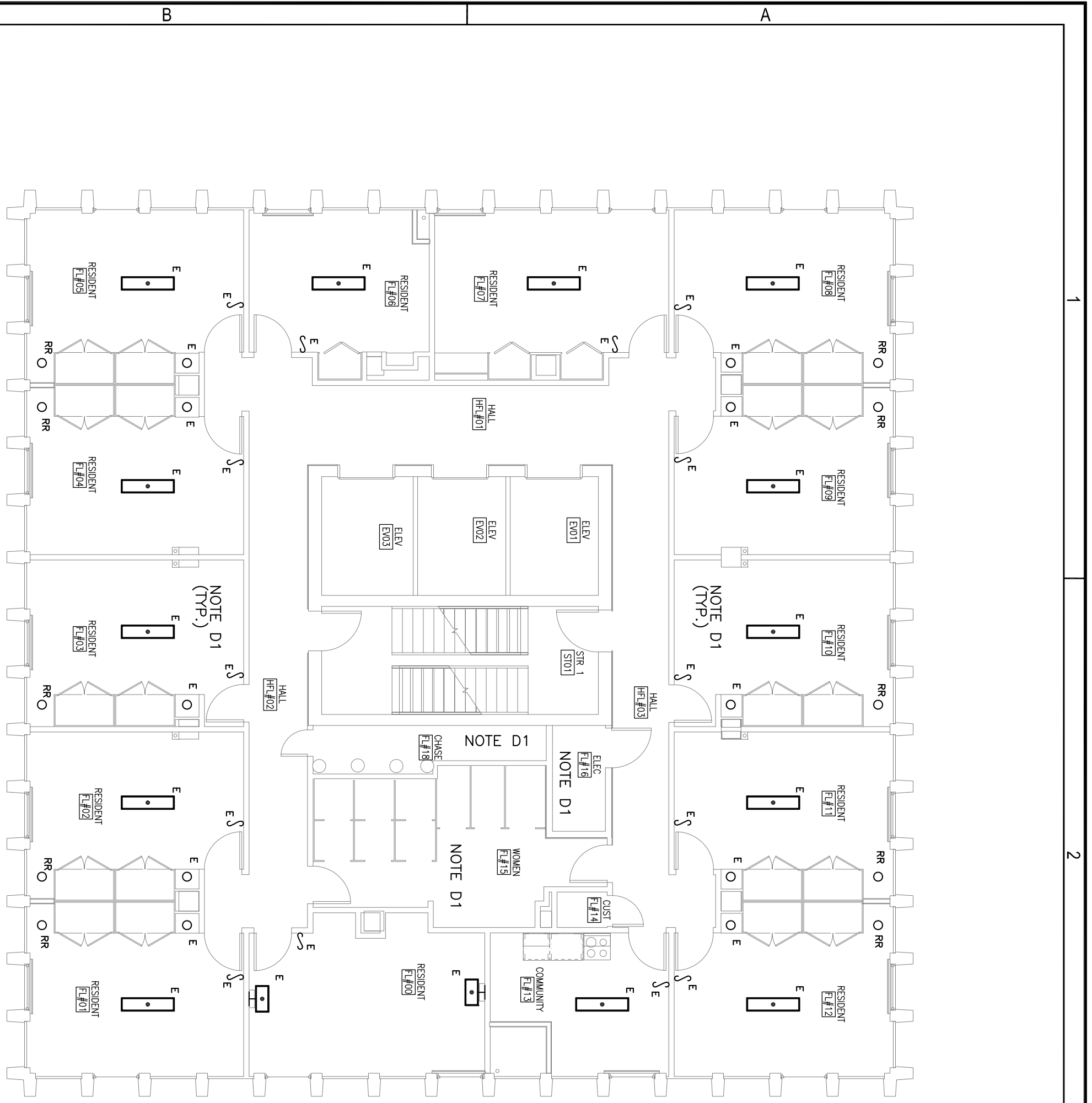
**1** LIGHTING DEMOLITION PLAN  
TYPICAL 2ND-18TH FLOORS — PHASE A  
SCALE: 1/8" = 1'-0"

**2** LIGHTING RENOVATION PLAN  
TYPICAL 2ND-18TH FLOORS — PHASE A  
SCALE: 1/8" = 1'-0"



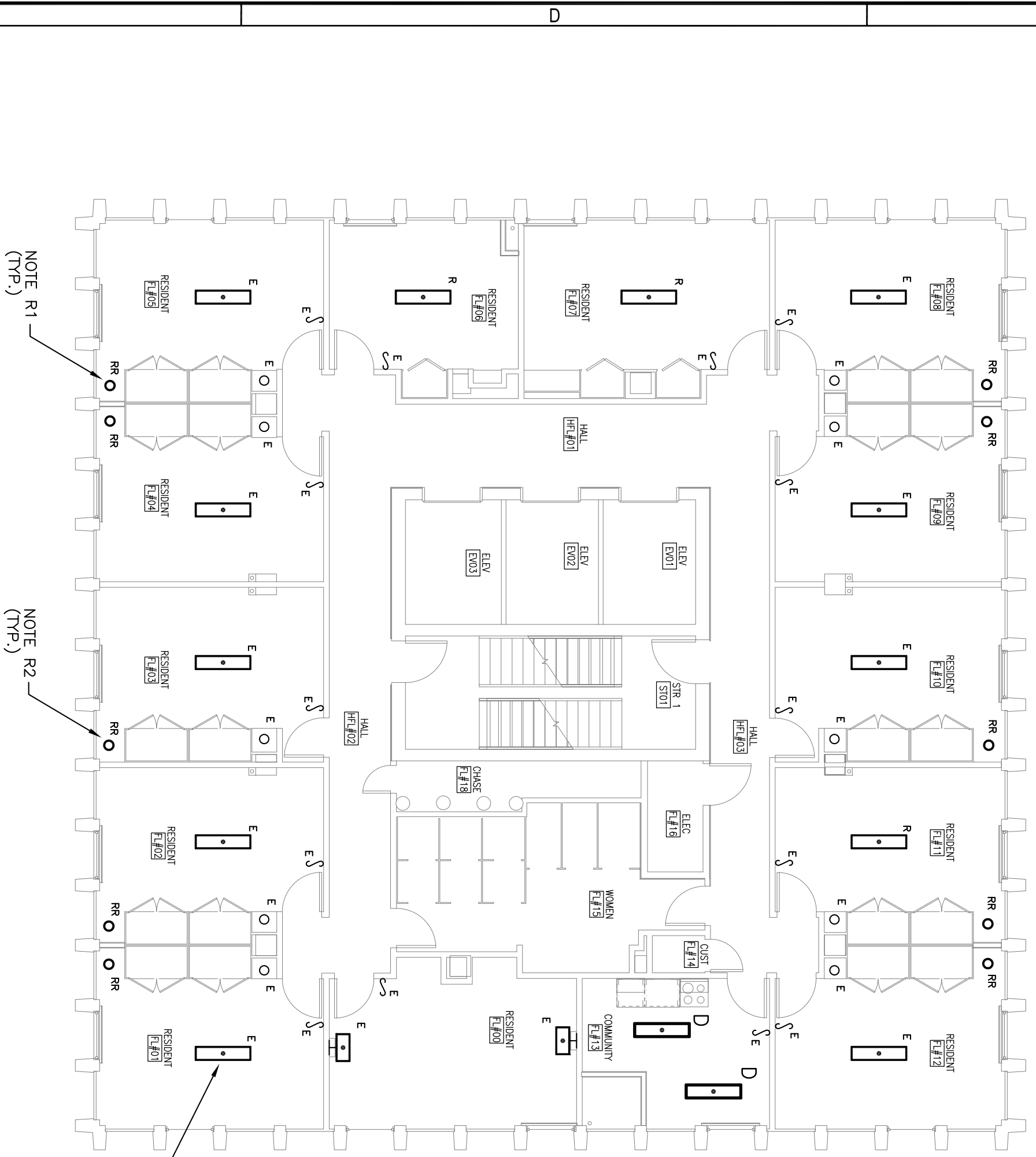
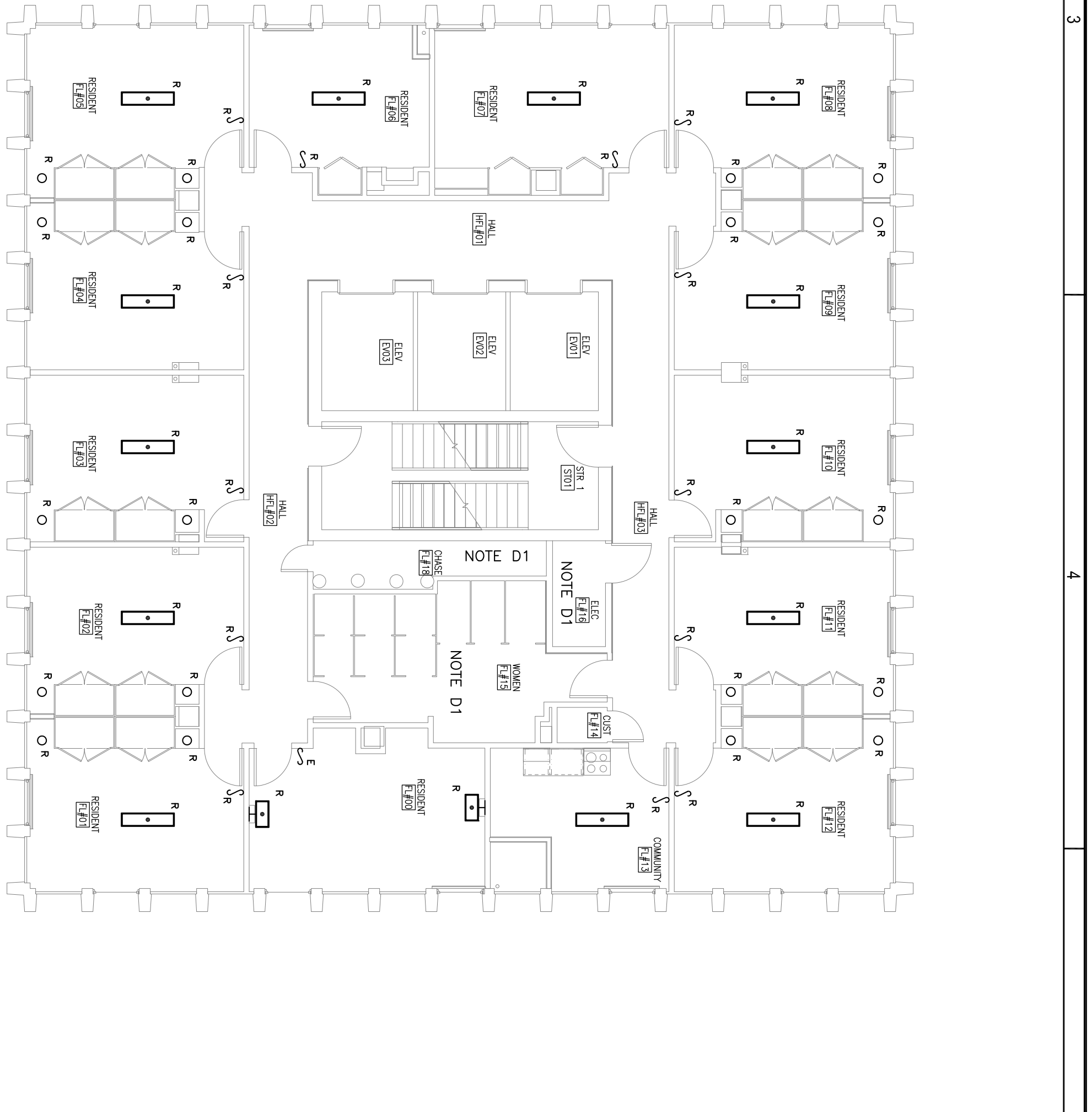
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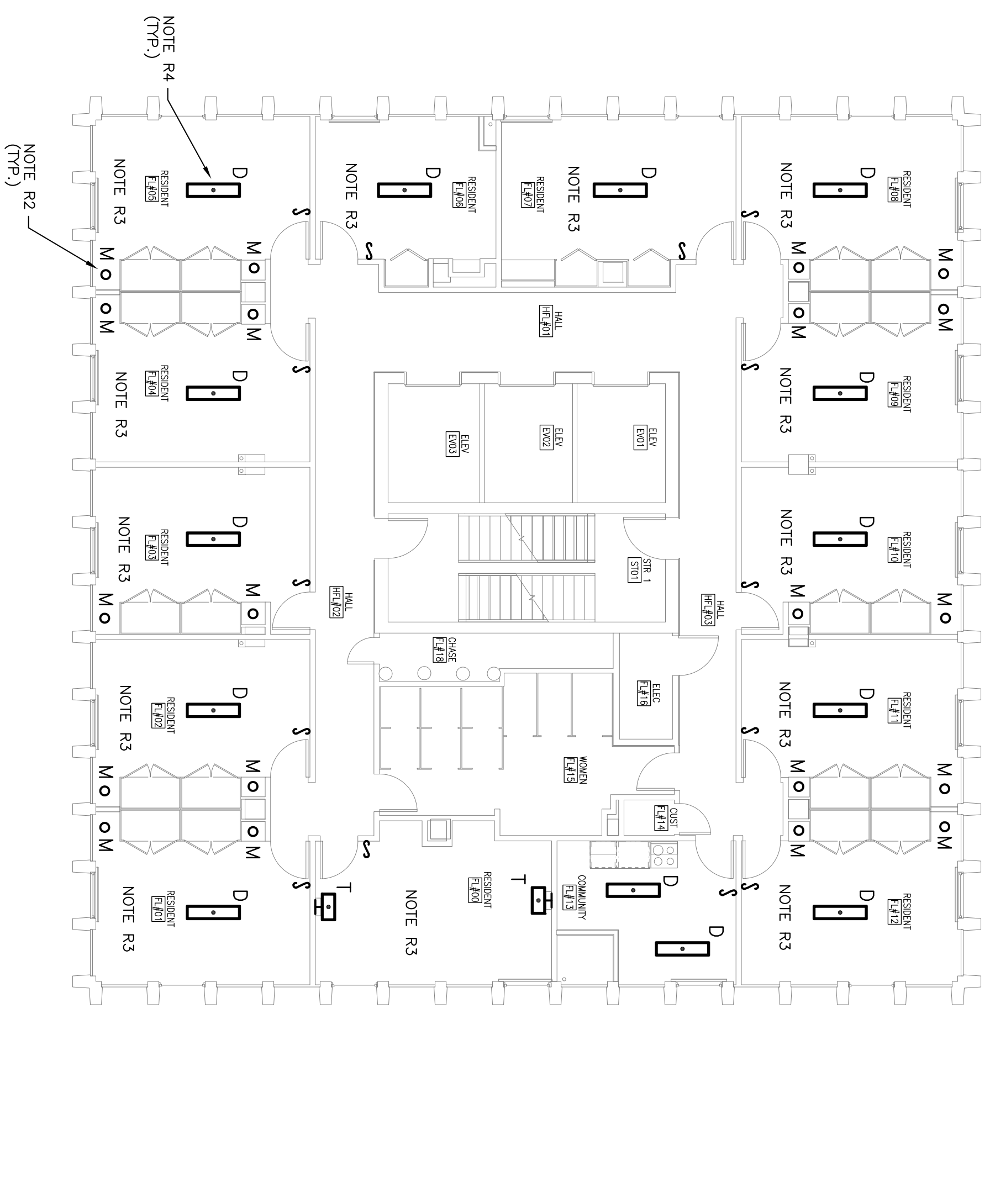
**1** LIGHTING DEMOLITION PLAN - BASE BID  
TYPICAL 2ND-18TH FLOORS - PHASE B

**3** LIGHTING DEMOLITION PLAN - ALT. NO. 1  
TYPICAL 2ND-18TH FLOORS - PHASE B



**2** LIGHTING RENOVATION PLAN - BASE BID  
TYPICAL 2ND-18TH FLOORS - PHASE B

**4** LIGHTING RENOVATION PLAN - ALT. NO. 1  
TYPICAL 2ND-18TH FLOORS - PHASE B



**ELECTRICAL DEMOLITION NOTES**

D1 - PROTECT EXISTING LIGHT FIXTURES DURING RENOVATION. REPLACE ANY DAMAGED FIXTURES.

**NOTES**

- PHASE A WORK - NOTE TO CONTRACTORS:**
- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
  - THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL, CORRIDOR PARTITIONS ON THE EXISTING FLOORS 2 THRU 18 AND OTHER PARTITIONS ON THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE. INCLUDING BUT NOT LIMITED TO, CLEANING OF THE GYPSUM BOARD MATERIAL FROM THE CEILING, IE: AIR SAMPLING, CLEANING THESE SPACES FOR RE-ACCESS, IE: AIR SAMPLING.
- PHASE B WORK - NOTE TO CONTRACTORS:**
- DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PAN COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT REMOVE OR DISRUPT THE EXISTING GYPSUM BOARD PARTITIONS FROM THE CEILING. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE. INCLUDING BUT NOT LIMITED TO, CLEANING OF THE GYPSUM BOARD MATERIAL FROM THE CEILING, IE: AIR SAMPLING, CLEANING THESE SPACES FOR RE-ACCESS, IE: AIR SAMPLING.
  - DURING THE PROCESS OF INSTALLING UL RATED BACKWAYS AT CORRIDOR WALL DISTURBANCES TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.

**LIGHTING RENOVATION NOTES**

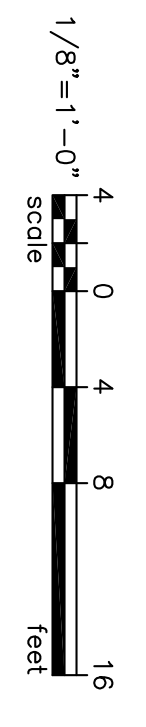
R1 - IF ALTERNATE NO. 1 IS NOT TAKEN THIS FIXTURE SHALL BE REMOVED DURING DEMOLITION PHASE AND RE-INSTALLED DURING RENOVATION PHASE. ELECTRICAL CONNECTIONS SHALL BE MAINTAINED AND REPAIRS MADE TO MAINTAIN INTEGRITY DURING RE-INSTALLATION.

R2 - EXTEND RACEWAY AND WIRING SO THAT THIS FIXTURE CAN BE MOUNTED ON NEW METAL SOFFIT.

R4 - IF ALTERNATE NO. 1 IS TAKEN ALL EXISTING FIXTURES IN THIS ROOM SHALL BE REMOVED AND REPLACED WITH NEW LED FIXTURES - FIXTURE TYPE AS INDICATED.

R4 - COORDINATE MOUNTING OF ANY CEILING MOUNTED FIXTURE (EXISTING OR NEW) WITH MECHANICAL IN THE EVENT FIXTURE INTERFERES WITH MECHANICAL EQUIPMENT.

R6 - PROVIDE NEW LIGHTING FIXTURES (ALTERNATE NO. 1) AS INDICATED AND REUSE EXISTING LIGHTING CIRCUITS. PROVIDE NEW LOCAL SWITCHING AND SWITCH PLATES IN EACH SPACE.



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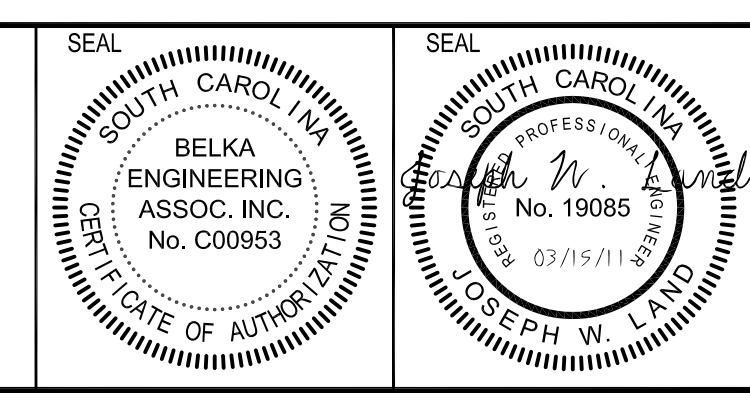
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SHEET TITLE: <b>LIGHTING PLANS - 2ND-18TH FLOORS PHASE B</b>		DATE: 03/15/12		DRAWN BY: TSR		CHECKED BY: JWL		PROJECT TITLE: <b>SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS</b>	
REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY					

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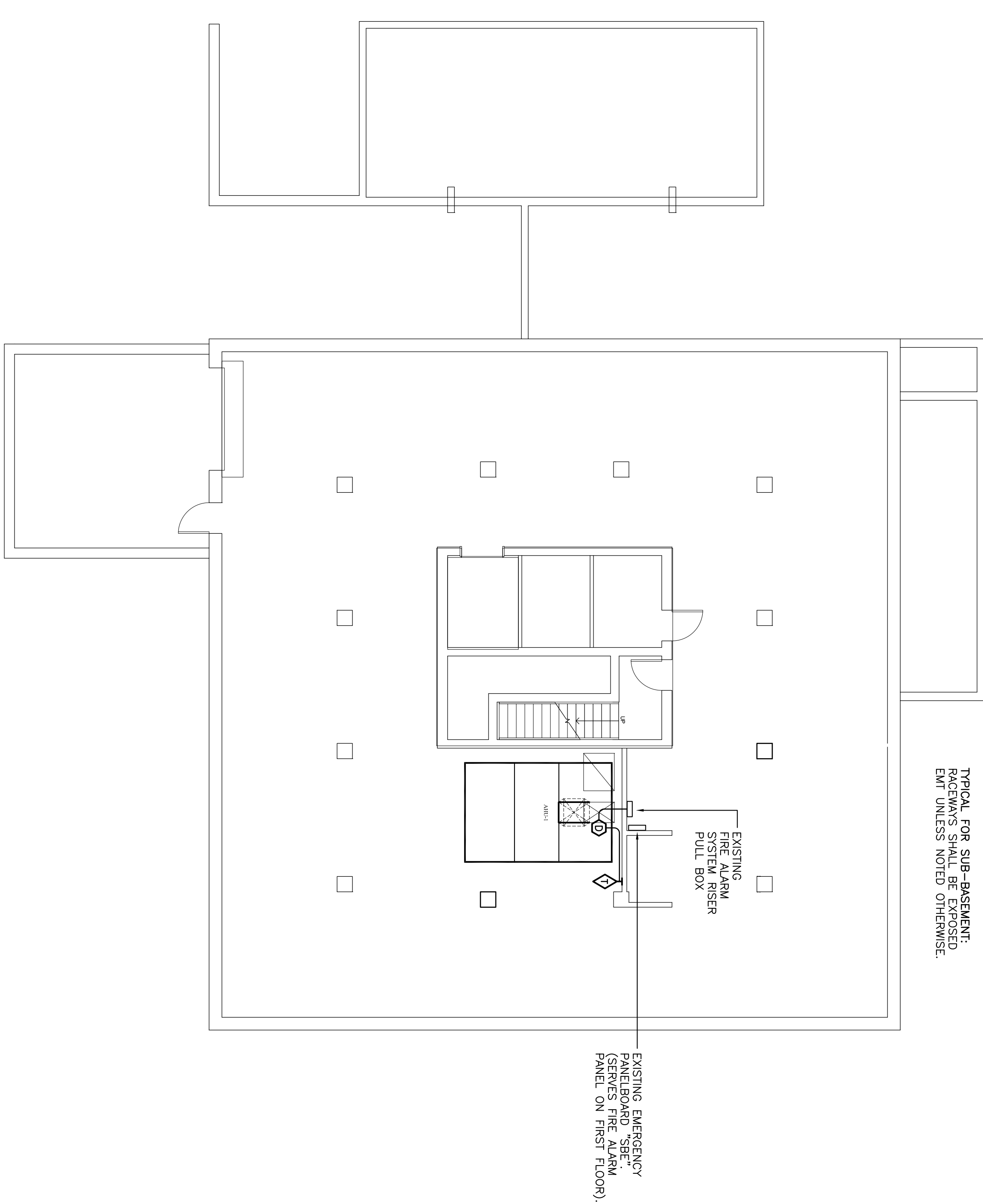
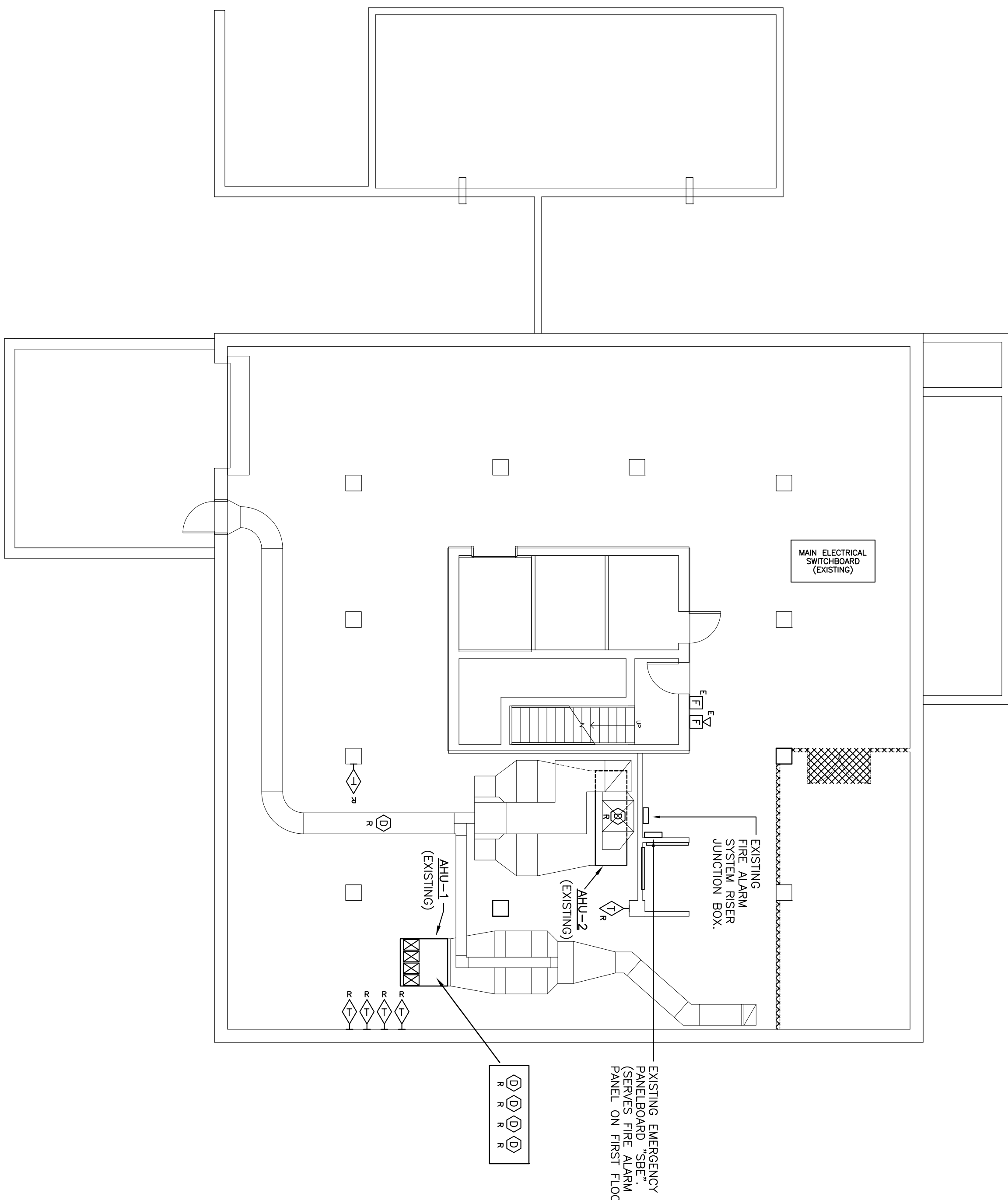


**GENERAL DEMOLITION NOTES**

- EXISTING FIRE ALARM RISER JUNCTION BOX: REMOVE EXISTING WIRENUTS IN RISER JUNCTION BOX AND PROVIDE TERMINAL BLOCKS IN RISER JUNCTION BOX. ALL EXISTING WIRENUTS AND WIRENUTS IN RISER JUNCTION BOX (SHIELDS) ARE TERMINATED ON THE TERMINAL BLOCKS AND PROPERLY LABELED.

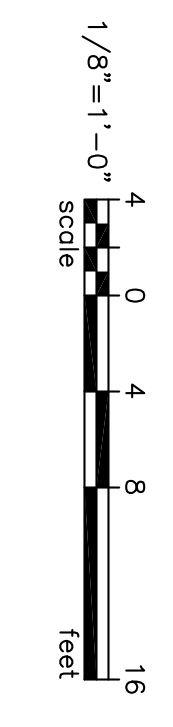
**GENERAL RENOVATION NOTES**

- CONNECT NEW FIRE ALARM DEVICES TO NEW RISER WAPNET CONDUCTORS AND 24 VDC POWER CONDUCTORS (SEE FIRE ALARM RISER DIAGRAM) AS APPLICABLE.
- ALL NEW FIRE ALARM CABLES AND CONDUCTORS SHALL BE INSTALLED IN EMT RACEWAYS WITH COMPRESSION FITTINGS.
- COVER ON JUNCTION BOXES SHALL BE PAINTED RED IN COLOR.
- PROVIDE TERMINAL BLOCKS FOR ALL WIRING SPICES (INCLUDING SHIELDS).



**FIRE ALARM DEMOLITION PLAN**  
**BASEMENT — PHASE A**  
 SCALE: 1/8" = 1'-0"

**FIRE ALARM RENOVATION PLAN**  
**BASEMENT — PHASE A**  
 SCALE: 1/8" = 1'-0"



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<b>E4.00A</b>	SHEET TITLE:	<b>FIRE ALARM PLANS - BASEMENT PHASE A</b>	
	DATE:	03/15/12	DRAWN BY: TSR
	REV.	DESCRIPTION	DATE

DRAWING:	DATE:	DRAWN BY:	CHECKED BY:	PROJECT TITLE:
	03/15/12	TSR	JWL	<b>SOUTH TOWER MECHANICAL RENOVATIONS</b> UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS

SEAL  
 SOUTH CAROLINA  
 BELKA ENGINEERING ASSOC. INC.  
 No. C00953  
 STATE OF SOUTH CAROLINA  
 JOSEPH W. SWYGER  
 No. 19095  
 03/15/12

SEAL  
 SOUTH CAROLINA  
 JOSEPH W. SWYGER  
 No. 19095  
 03/15/12

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 CONSULTING ENGINEERS

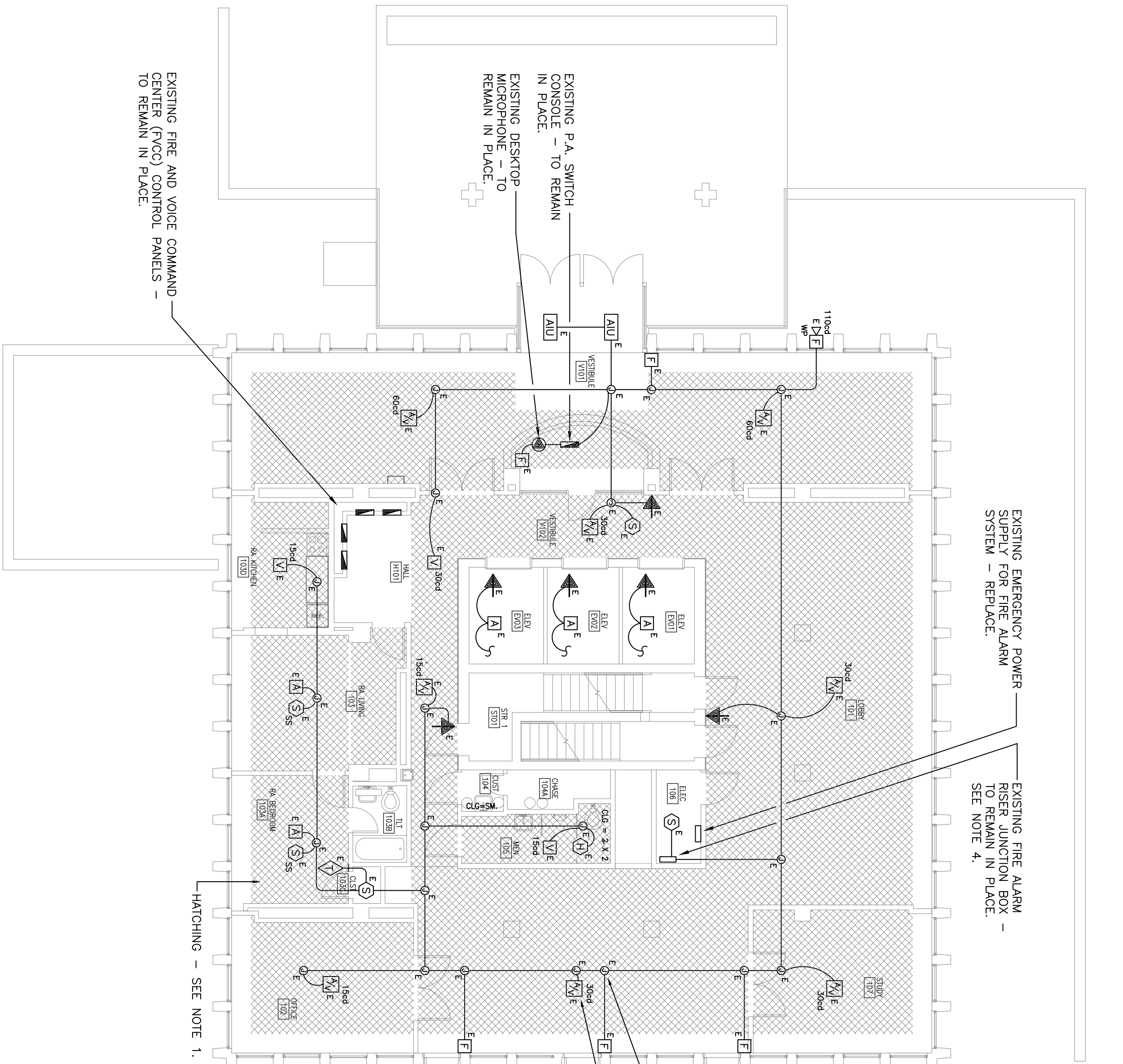
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 Columbia, S.C. 29211 mail@swyger-associates.com



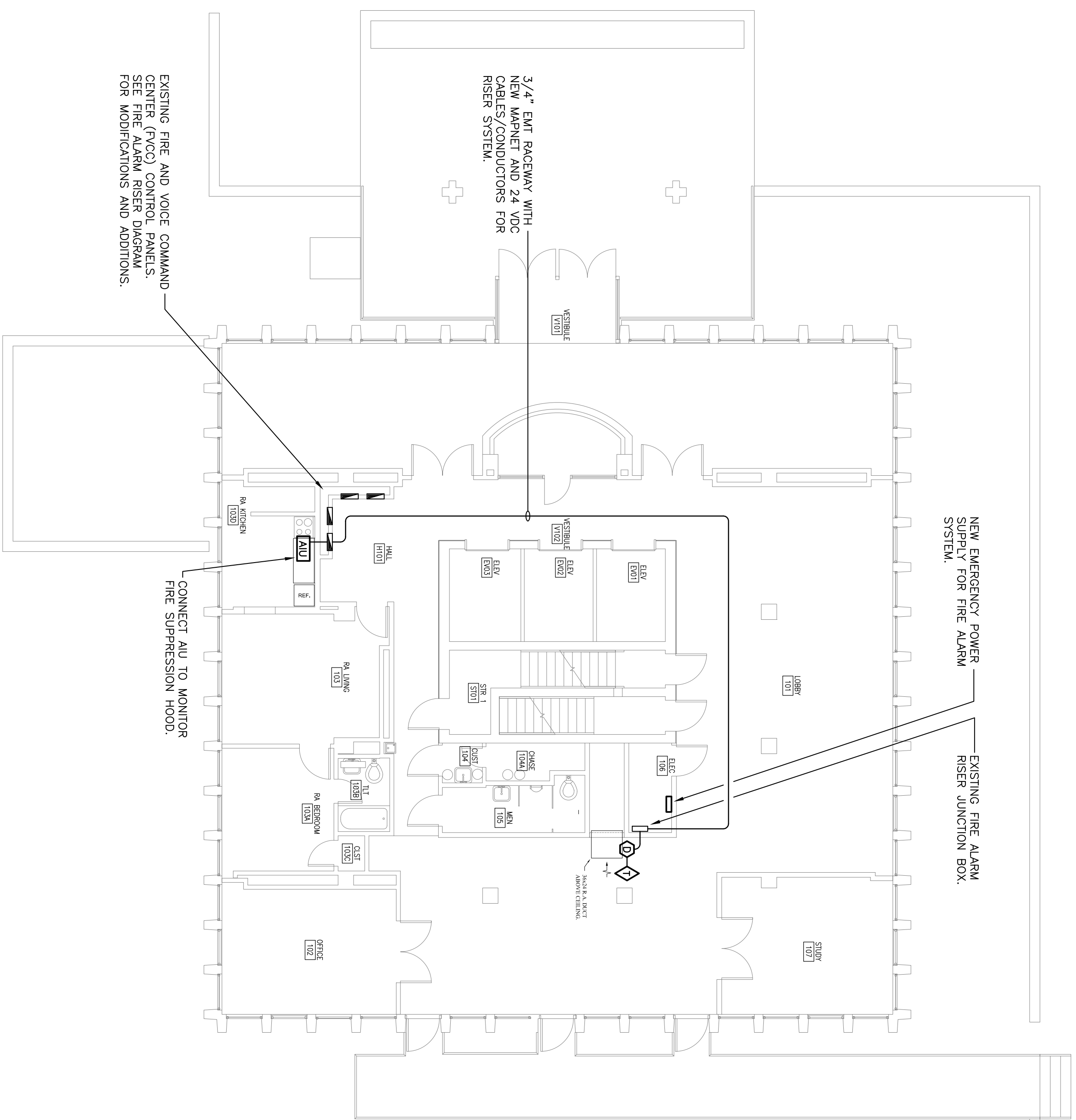
- GENERAL DEMOLITION NOTES**
- WHERE EXISTING CEILINGS ARE DEMOLISHED AND REPLACED (WHERE HATCHING IS SHOWN), ALL EXISTING FIRE ALARM NOTIFICATION DEVICES SHALL BE REMOVED PRIOR TO CEILING DEMOLITION AND STORED IN A CLEAN, DRY, CONDITIONED SPACE, AND SHALL BE RE-INSTALLED AFTER NEW CEILINGS ARE INSTALLED.  
FOR EXISTING DETECTION AND NOTIFICATION DEVICES THAT ARE NOT MOUNTED ON CEILINGS THAT WILL BE DEMOLISHED, PROVIDE DUST COVERS AND/OR AIR-TIGHT PLUGS TO PROTECT DEVICES FROM DEBRIS AND DUST. AFTER THE CEILING DEMOLITION AND AFTER THE NEW CEILINGS ARE INSTALLED AND JUST PRIOR TO PRE-TESTING OF THE FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM PANELS, DEVICES, RACKWAYS, JUNCTION BOXES, BACKBOXES, AND WIRING SHALL BE PROTECTED DURING DEMOLITION AND RENOVATION WORK SHALL BE REPERCHED AT CONTRACTOR'S EXPENSE.
  - PROVIDE NEW CEILING GRID HANGERS (EMCO OR EQUAL) FOR ALL EXISTING CEILINGS THAT ARE DEMOLISHED AND REPLACED.  
FOR ALL EXISTING FIRE ALARM BRANCH JUNCTION BOXES, LOCATED ABOVE CEILINGS THAT ARE DEMOLISHED AND REPLACED, PROVIDE BOX EXTENSIONS AND RED COVERPLATES ON ALL BOXES, REMOVE EXISTING WIREWAYS IN JUNCTION BOXES AND PROVIDE TERMINAL BLOCKS IN JUNCTION BOXES. REMOVE EXISTING WIREWAYS AND PROVIDE TERMINAL BLOCKS IN RACKWAYS. REMOVE EXISTING WIREWAYS ON THE TERMINAL BLOCKS AND PROPERLY LABELLED.
  - EXISTING FIRE ALARM RISER JUNCTION BOX, REMOVE EXISTING WIREWAYS IN RISER JUNCTION BOX AND PROVIDE TERMINAL BLOCKS IN RISER JUNCTION BOX. REWORK EXISTING WIRING SUCH THAT ALL CONDUCTORS (INCLUDING TAPE SHIELDS) ARE TERMINATED ON THE TERMINAL BLOCKS AND PROPERLY LABELLED.

- NOTES**
- PHASE A WORK - NOTE TO CONTRACTORS:**
- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABEVEMENT HAS BEEN COMPLETED BY THE ABEVEMENT CONTRACTOR.
  - THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABEVEMENT OF ASBESTOS FROM THE CEILING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE REMAINING GYPSUM BOARD MATERIAL. THE CONTRACTOR'S EXPENSE INCLUDING BUT NOT LIMITED TO COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  - PHASE B WORK - NOTE TO CONTRACTORS:**
  - DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PANELS OF THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS MATERIAL. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
  - DURING THE PROCESS OF INSTALLING UL RATED RACKWAYS AT CORRIDOR WALL PENETRATIONS, INSTALLATION OF NEW PARTITIONS, THE CONTRACTOR SHALL NOT DISTURB EXISTING WIRING IN THE EXISTING GYPSUM BOARD PARTITIONS. THE CONTRACTOR SHALL NOT DISTURB THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABEVEMENT HAS BEEN COMPLETED BY THE ABEVEMENT CONTRACTOR.

- GENERAL RENOVATION NOTES**
- CONNECT NEW FIRE ALARM DEVICES TO NEW RISER WARET CONDUCTORS AND 24" VSD POWER CONDUCTORS (SEE FIRE ALARM RISER DRAWING) AS APPLICABLE.
  - ALL NEW FIRE ALARM CABLES AND CONDUCTORS SHALL BE INSTALLED IN EMT ABOVE ACOUSTICAL PROP CEILINGS.
  - COVER ON JUNCTION BOXES SHALL BE PAINTED RED IN COLOR.
  - PROVIDE TERMINAL BLOCKS FOR ALL WIRING SPACES (INCLUDING SHIELDS).



**1**  
FIRE ALARM DEMOLITION PLAN  
FIRST FLOOR - PHASE A  
SCALE: 1/8" = 1'-0"



**2**  
FIRE ALARM RENOVATION PLAN  
FIRST FLOOR - PHASE A  
SCALE: 1/8" = 1'-0"

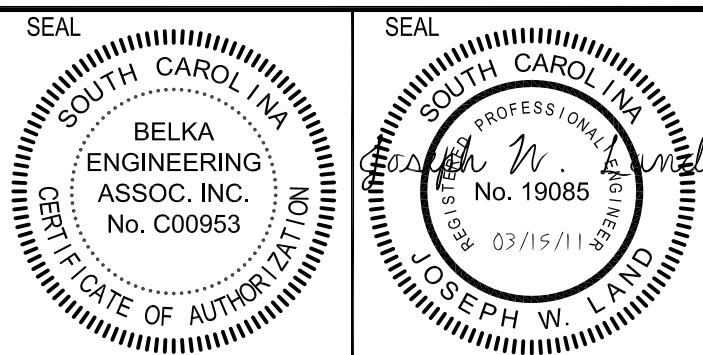
1/8" = 1'-0" scale

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REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY

DRAWING:	DATE:	DRAWN BY:	CHECKED BY:	PROJECT TITLE:
TSR	03/15/12	JWL	JWL	SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS



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SHEET: **E4.1A**

SHEET TITLE:  
**FIRE ALARM PLANS - FIRST FLOOR PHASE A**

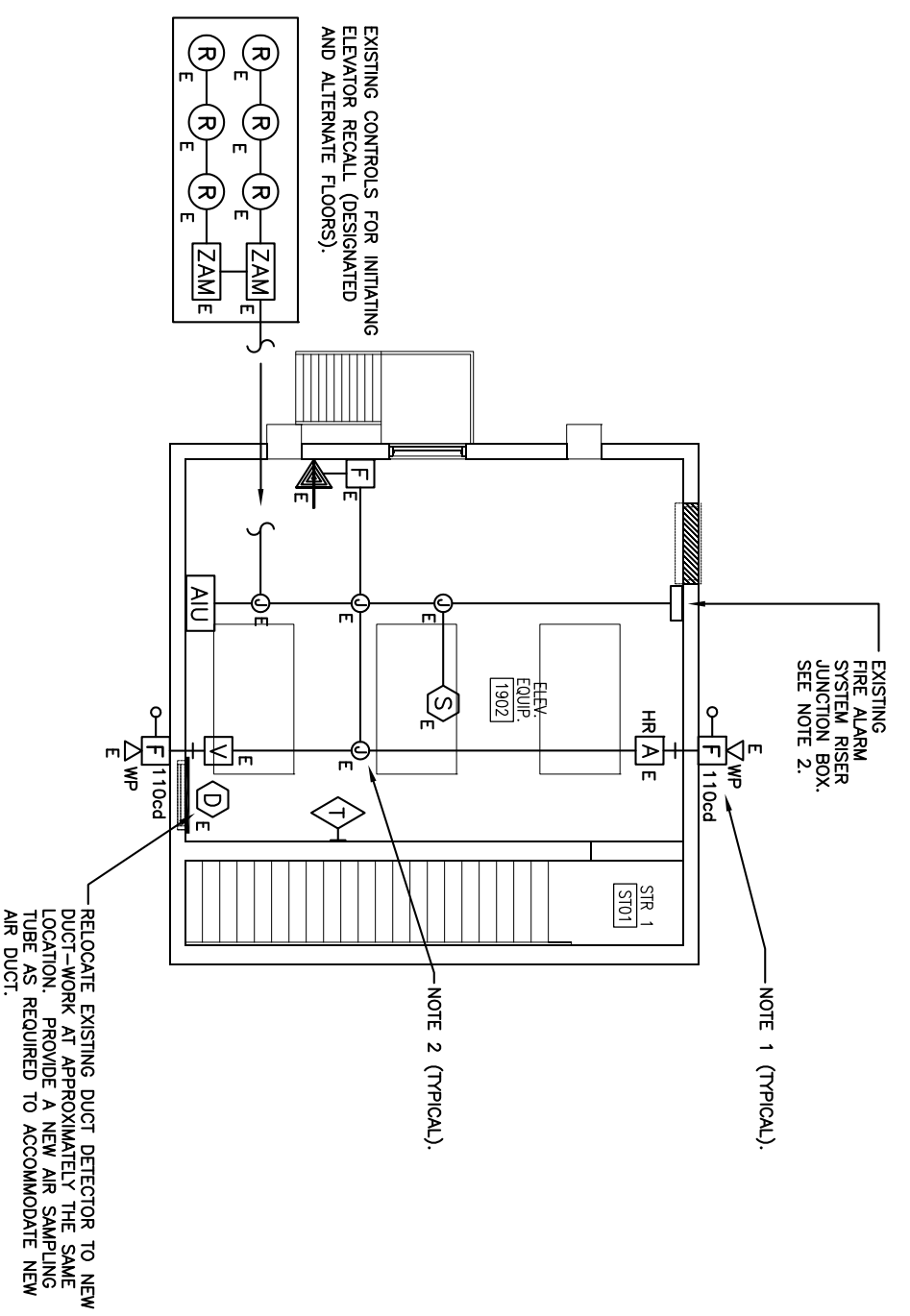


GENERAL DEMOLITION NOTES

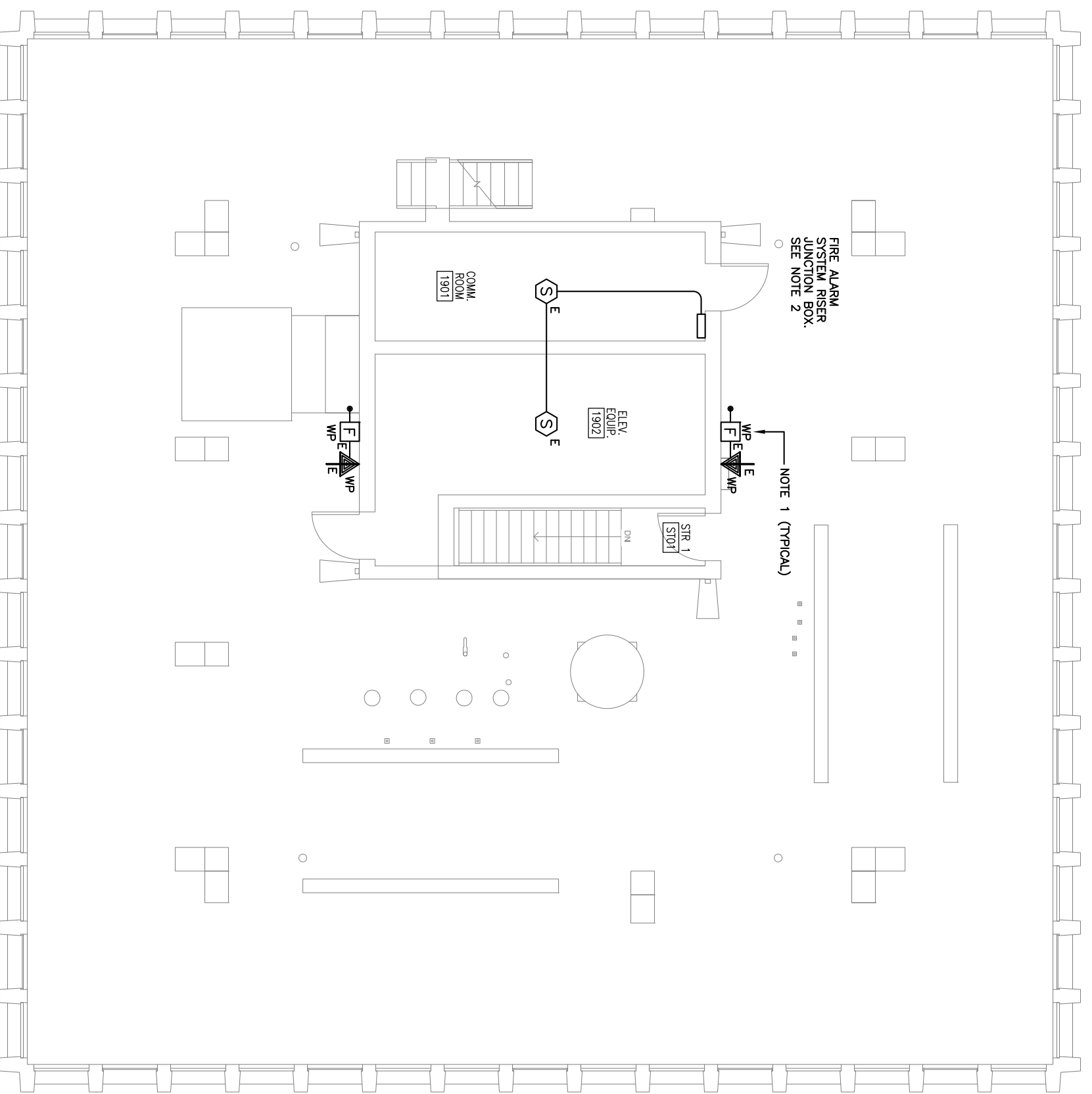
- FOR ALL EXISTING DETECTION AND NOTIFICATION DEVICES, PROVIDE DUST COVERS AND/OR AIR-TIGHT BAGS/WRAPPING OVER DEVICES TO PROTECT FROM DUST REMOVE COVERS AFTER THE NEW ROOFING SYSTEM IS INSTALLED AND JUST PRIOR TO FIRE TESTING OF THE FIRE ALARM SYSTEM.
- EXISTING FIRE ALARM SYSTEM DEVICES, FACEWAYS, JUNCTION BOXES, BACKBOXES, JUNCTION BOXES, AND RISES SHALL BE DEMOLISHED AND REMOVED. ANY DAMAGE THAT OCCURS DURING DEMOLITION AND RENOVATION WORK SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- FOR ALL EXISTING FIRE ALARM RISES, JUNCTION BOXES AND BRANCH JUNCTION BOXES, PROVIDE BOX EXTENSIONS AND RED COVERS/PLATES ON ALL BOXES. REMOVE EXISTING WIREMENS IN JUNCTION BOXES AND PROVIDE TERMINAL BLOCKS (INCLUDING TAP SHIELDS) ARE TERMINATED ON THE TERMINAL BLOCKS AND PROPERLY LABELED.

RENOVATION NOTES

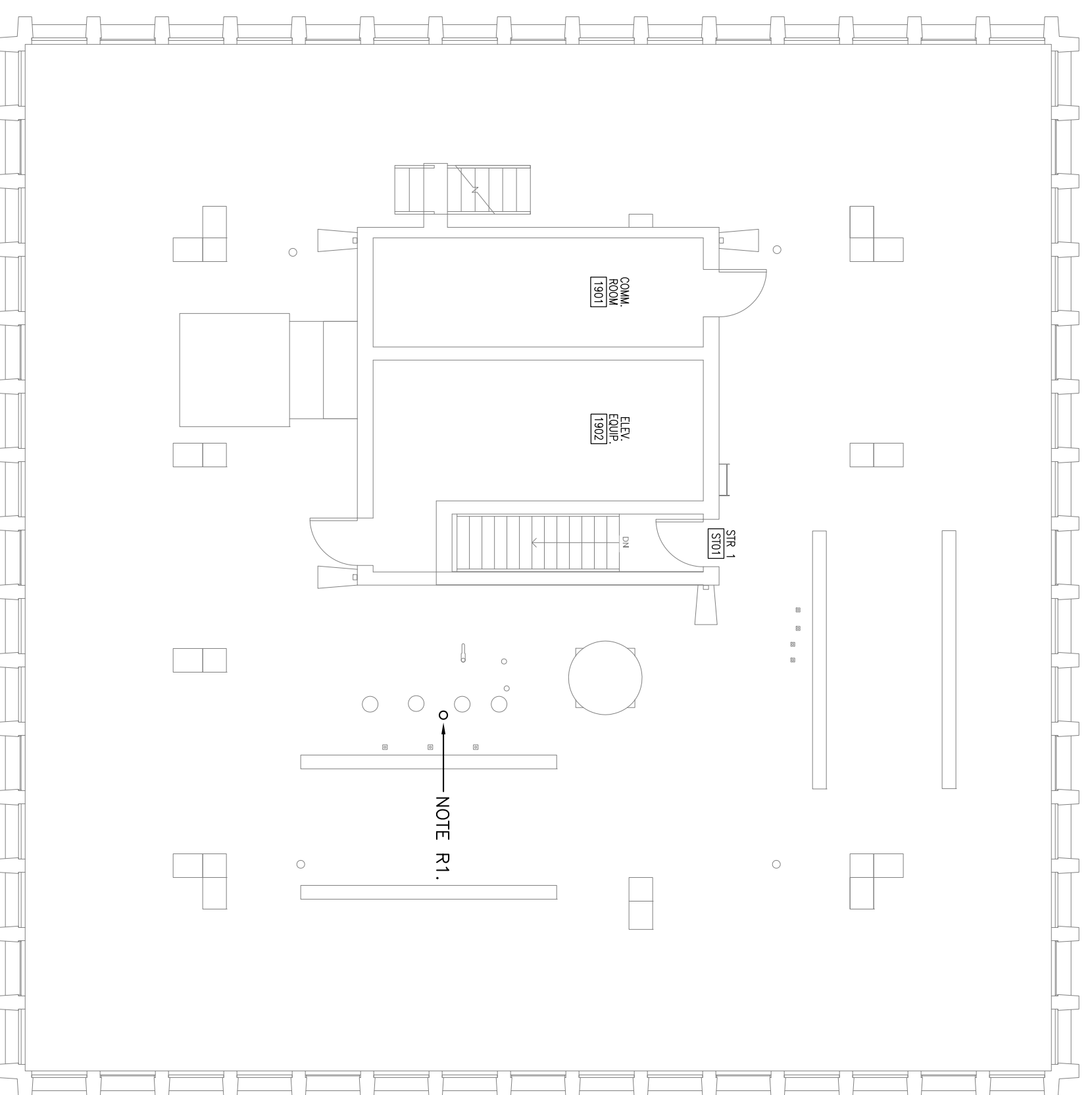
- COORDINATE ROOF PENETRATION LOCATIONS FOR FIRE ALARM AND POWER CONDUITS THAT SERVE HURL-1 WITH THE MECHANICAL AND ROOFING CONTRACTORS. WHERE CONDUITS SHALL BE EXTENDED TO HURL-1.



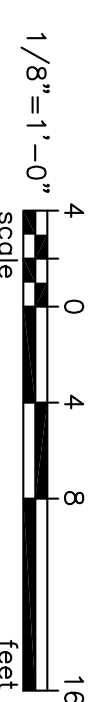
**2** FIRE ALARM DEMOLITION PLAN  
PENTHOUSE - PHASE A  
SCALE: 1/8" = 1'-0"



**1** FIRE ALARM DEMOLITION PLAN  
ROOF - PHASE A  
SCALE: 1/8" = 1'-0"



**3** FIRE ALARM RENOVATION PLAN  
ROOF - PHASE A  
SCALE: 1/8" = 1'-0"

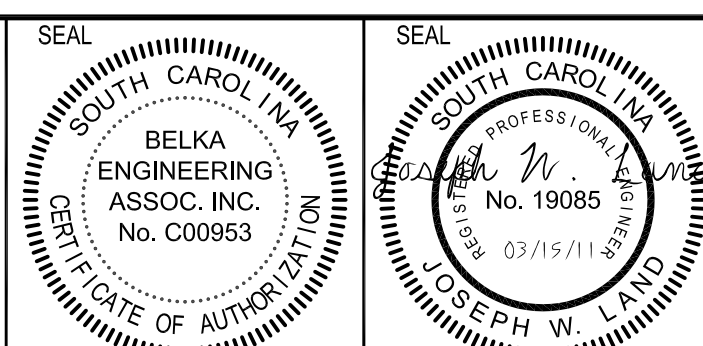


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DRAWING: DATE: 03/15/12 DRAWN BY: TSR CHECKED BY: JWL PROJECT TITLE: SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA BID DOCUMENTS



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SHEET: **E4.3A**

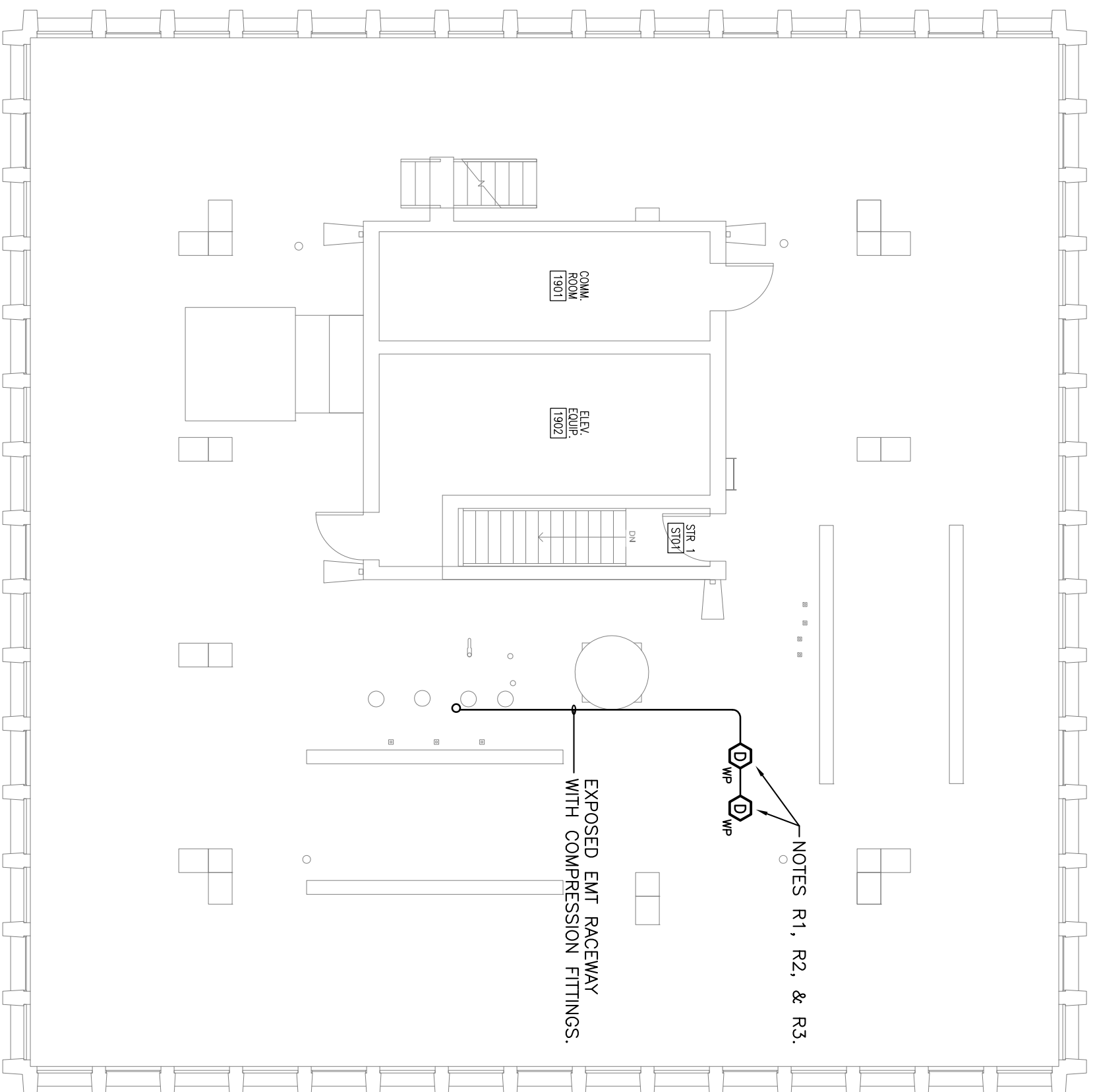
SHEET TITLE: FIRE ALARM PLANS - ROOF AND PENTHOUSE PHASE A

GENERAL RENOVATION NOTES

1. CONNECT NEW FIRE ALARM DEVICES TO NEW RISE/ RACEWAY CONDUITORS AND 24 VDC POWER CONDUCTORS (SEE FIRE ALARM RISE/ RACEWAY) AS APPLICABLE.
2. ALL NEW FIRE ALARM CABLES AND CONDUCTORS SHALL BE INSTALLED IN EMT ABOVE ACUSTICAL DROP CEILING. RISEWAYS SHALL BE CONDUITED.
3. COVER ON JUNCTION BOXES SHALL BE PAINTED RED IN COLOR.
4. PROVIDE TERMINAL BLOCKS FOR ALL WIRING SPLICES (INCLUDING SHIELDS).

RENOVATION NOTES

- R1. COORDINATE MOUNTING LOCATIONS FOR DUCT DETECTORS WITH THE FIRE ALARM SYSTEM MANUFACTURER (SMPLX) AND THE MECHANICAL CONTRACTOR.
- R2. PROVIDE ISOLATION RELAYS AND WIRING TO SHUT DOWN FAN MOTORS IN HRU-1 WHEN A DUCT DETECTOR GOES INTO ALARM. PROVIDE CUSTOM PROGRAMMING OF A THE SWITCH TO AUTOMATICALLY SHUTDOWN FANS IN HRU-1 WHEN THE SWITCH IS PRESSED.
- R3. RETEST FIRE ALARM SYSTEM PER NEPA 72 WHEN INSTALLATION OF DUCT DETECTORS ARE COMPLETE.



**FIRE ALARM RENOVATION PLAN**  
**ROOF - PHASE B**  
 SCALE: 1/8" = 1'-0"

1/8"=1'-0"  
 SCALE

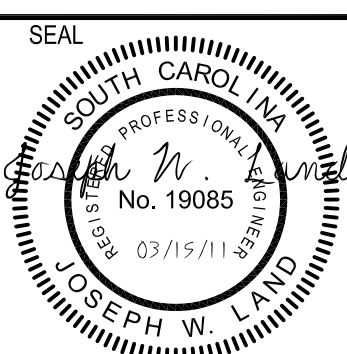
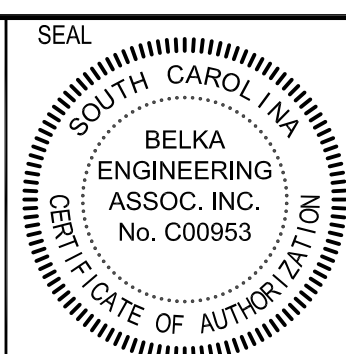
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DRAWING:	DATE:	DRAWN BY:	CHECKED BY:
	03/15/12	TSR	JWL

PROJECT TITLE:  
**SOUTH TOWER**  
**MECHANICAL RENOVATIONS**  
 UNIVERSITY OF SOUTH CAROLINA  
 STATE PROJECT NUMBER H27-6082-NA  
 BID DOCUMENTS



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SHEET TITLE:  
**FIRE ALARM PLAN -**  
**ROOF**  
**PHASE B**

SHEET:  
**E4.3B**

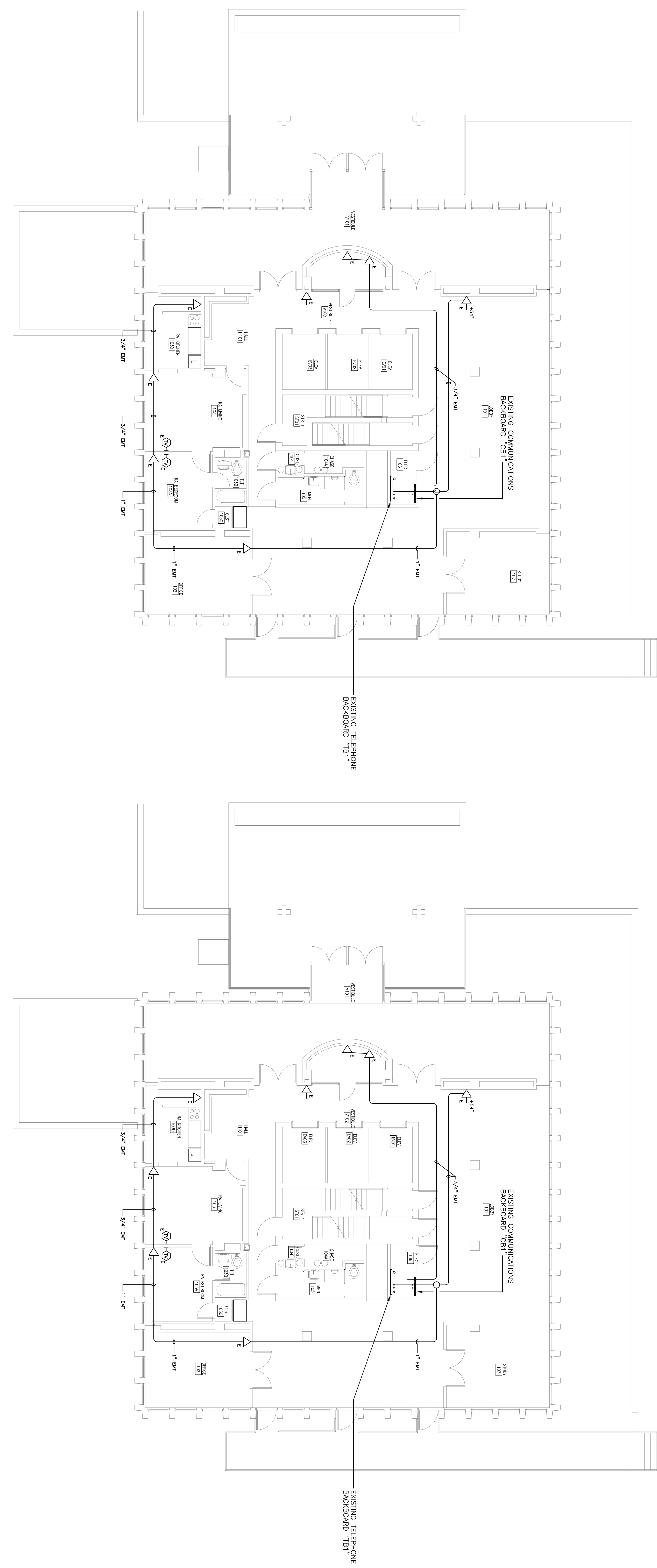


**GENERAL DEMOLITION NOTES**

- EXISTING COMMUNICATION DEVICES, RACEWAYS, JUNCTION BOXES, BACKBOXES, AND WIRING SHALL BE PROTECTED DURING DEMOLITION AND RENOVATION WORK - ANY DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.

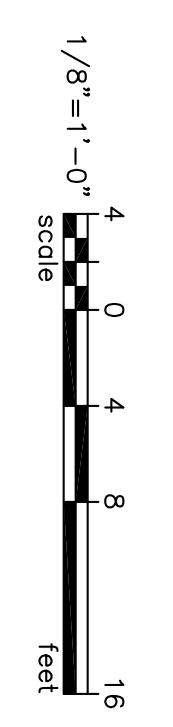
**NOTES**

- PHASE A WORK - NOTE TO CONTRACTORS:  
 1. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.  
 2. THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE REMOVAL OF ASBESTOS FROM THE EXISTING GYPSUM BOARD PARTITIONS IN THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE. THESE SPACES SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE FOR RE-ACCESS, I.E. AIR SAMPLING.  
 3. DURING THE PROCESS OF INSTALLING HANGERS, SPACERS, FIN COILS, METAL PAN, AND GYPSUM BOARD PARTITIONS TO THE EXISTING GYPSUM BOARD PARTITIONS OF THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE EXISTING GYPSUM BOARD PARTITIONS IN THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE. THESE SPACES SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE FOR RE-ACCESS, I.E. AIR SAMPLING.  
 4. DURING THE PROCESS OF INSTALLING UL RATED RACEWAYS AT CORRIDOR WALL, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE EXISTING GYPSUM BOARD PARTITIONS IN THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.



**1**  
 COMMUNICATION DEMOLITION PLAN  
 FIRST FLOOR - PHASE A  
 SCALE: 1/8" = 1'-0"

**2**  
 COMMUNICATION RENOVATION PLAN  
 FIRST FLOOR - PHASE A  
 SCALE: 1/8" = 1'-0"



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SHEET: <b>E5.1A</b>	SHEET TITLE: <b>COMMUNICATION PLANS - FIRST FLOOR PHASE A</b>	THIS DRAWING AND THE DESIGN THEREON ARE THE PROPERTY OF BELKA ENGINEERING & ASSOCIATES, INC. NO REPRODUCTION, COPYING, OR USE OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS PERMITTED AND ANY INFRINGEMENT WILL BE SUBJECT TO LEGAL ACTION.	DRAWING: _____	DATE: 03/15/12	DRAWN BY: TSR	CHECKED BY: JWJL	PROJECT TITLE: <b>SOUTH TOWER MECHANICAL RENOVATIONS UNIVERSITY OF SOUTH CAROLINA STATE PROJECT NUMBER H27-6082-NA</b>	SEAL: SOUTH CAROLINA ENGINEERING ASSOC. INC. No. C00953	SEAL: SOUTH CAROLINA ENGINEERING ASSOC. INC. No. 19085	Swygart & Associates CONSULTING ENGINEERS DBA Swygart & Assoc. Ltd. Telephone: (803) 791-9300 Post Office Box 11866 Facsimile: (803) 791-0830 Columbia, S.C. 29211 mail@swygart-associates.com
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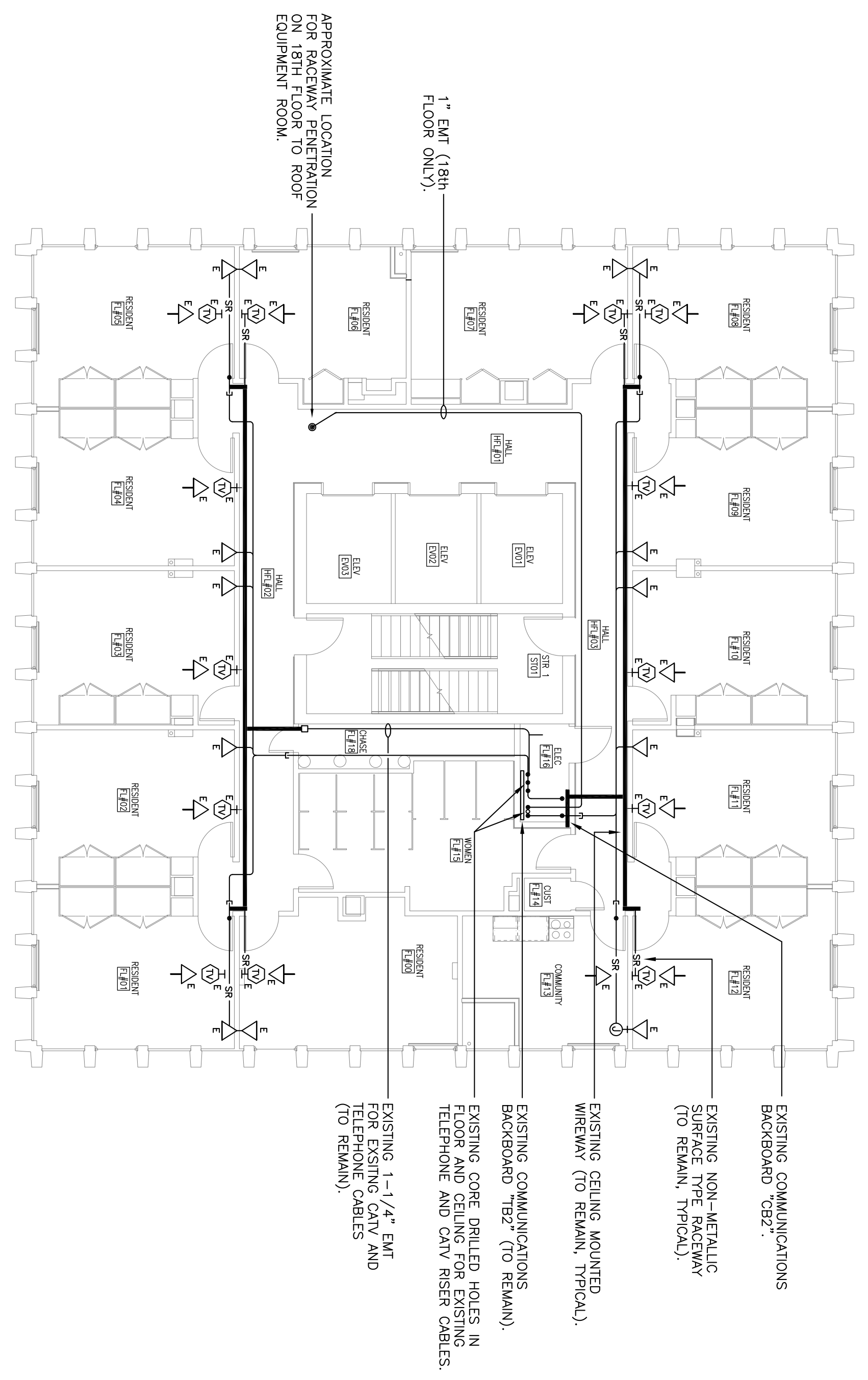
**GENERAL DEMOLITION NOTES**

- EXISTING COMMUNICATION DEVICES, FACEWAYS, JUNCTION BOXES, BACKBOXES, AND DAMAGE THAT OCCURS DURING DEMOLITION AND RENOVATION WORK SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.

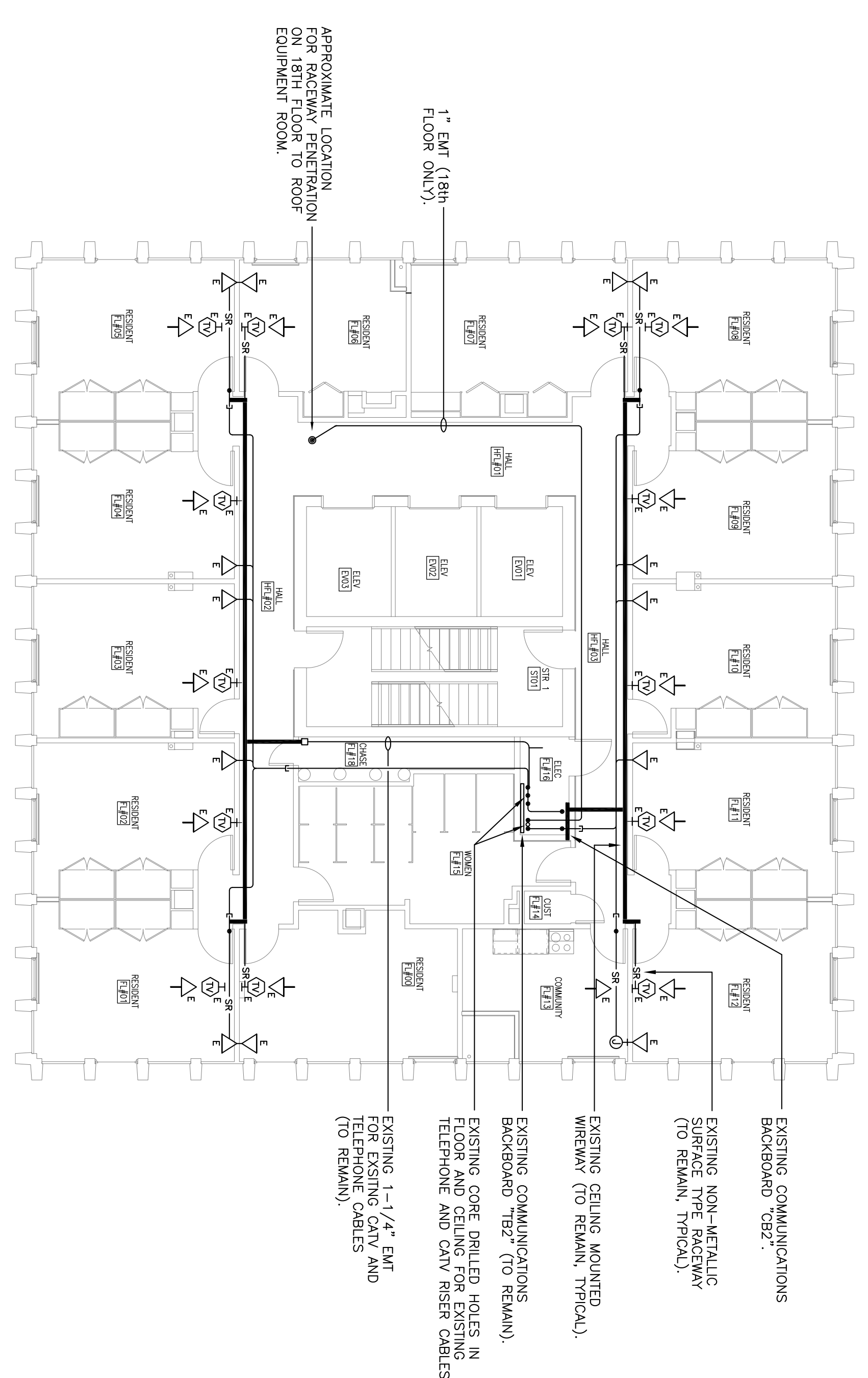
**NOTES**

PHASE A WORK — NOTE TO CONTRACTORS:  
 1. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED. THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE BATTERY CONTRACTOR.  
 2. THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL, CORRIDOR PARTITIONS, OR GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL NOT DISTURB THE EXISTING GYPSUM BOARD IN ANY FASHION. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD OR PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ASBESTOS CONTRACTOR.

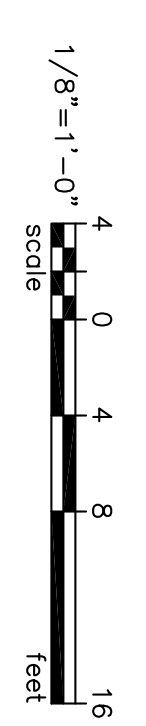
PHASE B WORK — NOTE TO CONTRACTORS:  
 3. DURING THE PROCESS OF INSTALLING HANGERS, SOFFITS, FAN COILS, METAL PAN COVERS, NEW PARTITIONS OR ANY OTHER MATERIAL OR EQUIPMENT AT THE CEILING OF THE EXISTING RESIDENT ROOMS ON FLOORS 2 THRU 18, THE CONTRACTOR SHALL NOT PENETRATE OR ATTACH TO THE EXISTING GYPSUM BOARD PARTITIONS. THE CONTRACTOR SHALL NOT REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE CEILING. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL NOT DISTURB THE EXISTING GYPSUM BOARD IN ANY FASHION. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD OR PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ASBESTOS CONTRACTOR.



**COMMUNICATION DEMOLITION PLAN**  
**TYPICAL 2ND-18TH FLOORS — PHASE A**  
 SCALE: 1/8" = 1'-0"



**COMMUNICATION RENOVATION PLAN**  
**TYPICAL 2ND-18TH FLOORS — PHASE A**  
 SCALE: 1/8" = 1'-0"



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**COMMUNICATION PLANS - 2ND-18TH FLOORS PHASE A**

DATE: 03/15/12  
 DRAWN BY: TSR  
 CHECKED BY: JWJ

REV.	DESCRIPTION	DATE	ORIG. BY	DRAWN BY

**SOUTH TOWER MECHANICAL RENOVATIONS**  
 UNIVERSITY OF SOUTH CAROLINA  
 STATE PROJECT NUMBER H27-6082-NA  
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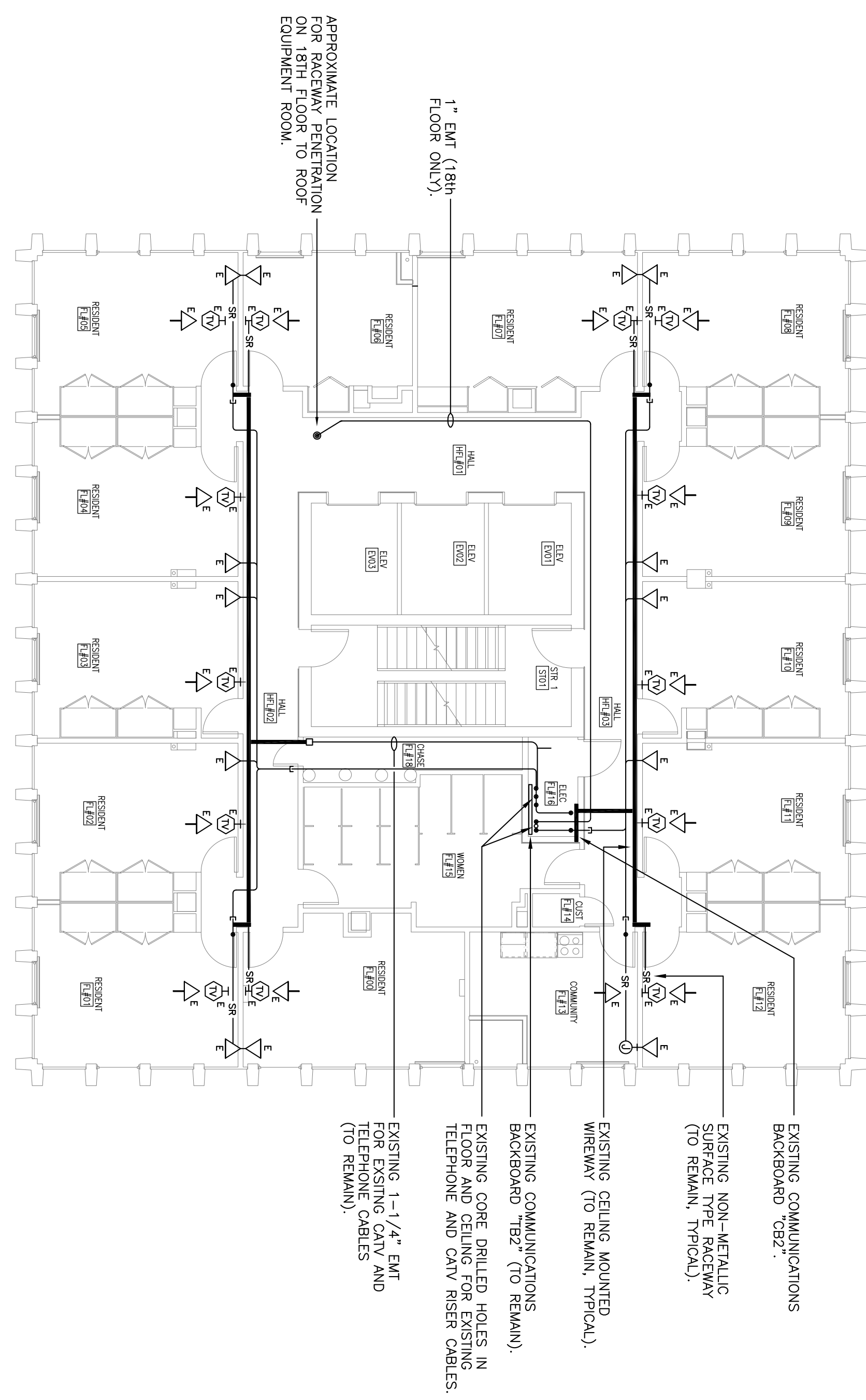
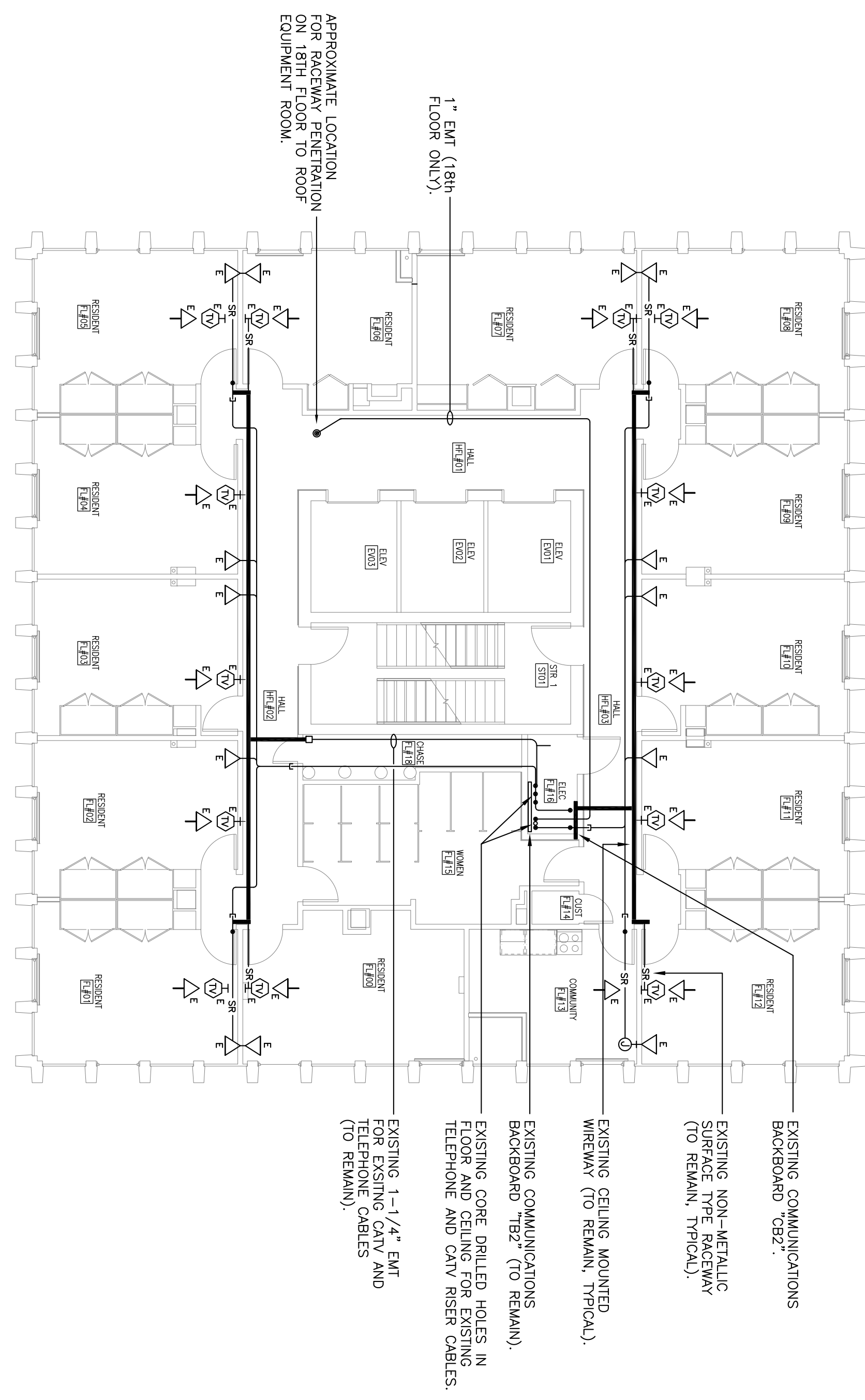
**GENERAL DEMOLITION NOTES**

- EXISTING COMMUNICATION DEVICES, RECEIVERS, JUNCTION BOXES, BACKBOXES, AND WIRING SHALL BE PROTECTED DURING DEMOLITION AND RENOVATION WORK - ANY DAMAGE OCCURS DURING DEMOLITION AND RENOVATION WORK SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.

**NOTES**

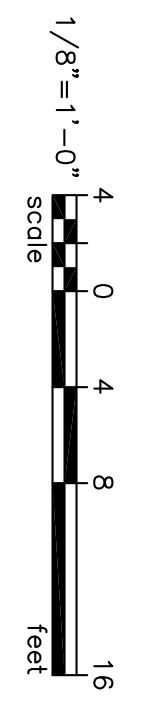
PHASE A WORK - NOTE TO CONTRACTORS:

- NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING Gypsum BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.
- THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE GYPSUM BOARD MATERIAL THAT IS TO REMAIN IN PLACE AFTER THE PARTIAL ABATEMENT OF ASBESTOS FROM THE BASEMENT AND GROUND LEVELS. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE GYPSUM BOARD MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE. THESE SPACES SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING HANGERS, SHEETS, RUN CHAINS, METAL PAN, AND GYPSUM BOARD PARTITIONS IN NEW ZONE, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE SPRAY APPLIED TEXTURED CEILING MATERIAL THAT IS TO REMAIN IN PLACE. CONTAMINATION OF THESE SPACES CAUSED BY DAMAGE TO THE CEILING MATERIAL SHALL BE CLEANED UP AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO, COSTS ASSOCIATED WITH CLEANING THESE SPACES FOR RE-ACCESS, I.E. AIR SAMPLING.
- DURING THE PROCESS OF INSTALLING UL RATED RECEIVERS AT CORRIDOR WALL PENETRATIONS, THE CONTRACTOR SHALL NOT COME IN CONTACT WITH THE EXISTING GYPSUM BOARD PARTITIONS. NO PENETRATIONS OR ATTACHMENTS TO THE EXISTING GYPSUM BOARD PARTITIONS WILL BE ALLOWED ONCE THE ASBESTOS ABATEMENT HAS BEEN COMPLETED BY THE ABATEMENT CONTRACTOR.



**1**  
**COMMUNICATION DEMOLITION PLAN**  
**TYPICAL 2ND-18TH FLOORS - PHASE B**  
 SCALE: 1/8" = 1'-0"

**2**  
**COMMUNICATION RENOVATION PLAN**  
**TYPICAL 2ND-18TH FLOORS - PHASE B**  
 SCALE: 1/8" = 1'-0"



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**5.2B**

SHEET TITLE:  
**COMMUNICATION PLANS - 2ND-18TH FLOORS PHASE B**

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**SOUTH TOWER MECHANICAL RENOVATIONS**  
 UNIVERSITY OF SOUTH CAROLINA  
 STATE PROJECT NUMBER H27-6082-NA  
 BID DOCUMENTS

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