

GENERAL ELECTRICAL NOTES

- GENERAL REQUIREMENTS:**
 - ELECTRICAL CONTRACTOR IS TO FURNISH AND PAY FOR ALL LABOR, MATERIAL, EQUIPMENT, PERMITS & FEES REQUIRED FOR THE COMPLETE INSTALLATION OF ALL SYSTEMS IN THIS SECTION OF WORK.
 - ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH NEC AND ALL OTHER APPLICABLE CODES, E.C. IS TO COORDINATE W/ G.C. IN REGARD TO PROJECT TIMELINE, WORK HOURS, AS WELL AS ANY BONDING OR INSURANCE REQUIREMENTS.
 - ALL ELECTRICAL & LIGHTING EQUIPMENT SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, SUPPORTS, CONTROLS, ETC FOR A FULLY FUNCTIONING SYSTEM REGARDLESS OF PRESENCE ON PLANS.
 - ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD WARRANTY. IF LONGER, EXISTING EQUIPMENT IS EXCLUDED FROM WARRANTY REQUIREMENT.
 - THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.
 - NO SCALE DRAWINGS FOR MEASUREMENT. IF PRECISE DIMENSIONS ARE NEEDED, ELECTRONIC DRAWINGS ARE AVAILABLE UPON REQUEST FROM ARCH/ENGINEER FOR PREPARATION OF COORDINATION DRAWINGS BY CONTRACTOR.
 - INFORMATION GIVEN IN SCHEDULES INCLUDES BOTH DESCRIPTION OF PRODUCT AND MANUFACTURER'S MODEL #. IF CONFLICT IS PRESENT BETWEEN DESCRIPTION AND MODEL #, DESCRIPTION SHALL TAKE PRECEDENT. IN CASE OF CONFLICT BETWEEN THE PLANS AND NOTES/SPECIFICATIONS OR CONFLICT BETWEEN INFORMATION PRESENTED ON THE PLANS OR IN THE NOTES/SPECIFICATIONS, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
 - BEFORE BID E.C. IS RESPONSIBLE FOR CLARIFYING W/ G.C. ANY CONFUSION IN REGARDS TO RESPONSIBILITY OF WORK TO BE PERFORMED OR MATERIALS TO BE PROVIDED. THE SUBMITAL OF THE BID BY THE CONTRACTOR WILL BE HELD AS PROOF THAT THE CONTRACTOR UNDERSTANDS THOROUGHLY AND COMPLETELY THE SCOPE OF THE WORK INVOLVED, AND HAS INCLUDED ON THE BID ALL THE NECESSARY ITEMS TO CARRY OUT THIS SECTION OF WORK.
 - AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER CONTRACT IS SIGNED, THE E.C. SHALL PROVIDE SUBMITTALS OF EQUIPMENT HE/SH INTENDS TO PURCHASE FOR REVIEW AND COMMENT BY THE ENGINEER. ENGINEER IS TO APPROVE SUBMITTALS BEFORE EQUIPMENT IS ORDERED.
 - ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
 - E.C. IS TO REVIEW COMPLETE DRAWING SET. E.C. IS RESPONSIBLE FOR WORK EXPLICITLY SHOWN AND WORK IMPLIED, UNLESS OTHERWISE NOTED. FINAL ELECTRICAL CONNECTION TO ALL EQUIPMENT, FURNITURE (I.E. CUBICLES, WORKSTATIONS, ETC) IS THE RESPONSIBILITY OF THE E.C..

II. DIVISION OF WORK:

- ALL ROOF WORK INCLUDING PENETRATIONS, OPENINGS, FLASHING, CURB INSTALLS, ETC. ARE TO BE PERFORMED BY ROOFING CONTRACTOR. E.C. IS RESPONSIBLE FOR PROVIDING ANY ROOF CURBS, EQUIPMENT RAILS, VENTS, ETC. AND COMMUNICATING ALL REQ'S WITH G.C. & ROOFING CONTRACTOR.
- ALL LOW VOLTAGE WIRING RELATED TO MECHANICAL EQUIPMENT AND SYSTEMS IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR (ANY LOW VOLTAGE FIRE ALARM WIRING TO BE BY E.C.). ALL HIGH VOLTAGE CONNECTIONS TO MECHANICAL EQUIPMENT, TO BE PROVIDED AND INSTALLED BY E.C. (SEE EQUIPMENT SCHEDULE FOR DISCONNECT RESPONSIBILITY).
- G.C. TO BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ACCESS DOORS (WALL, FLOOR, CEILING) RELATED TO ELECTRICAL SYSTEM. E.C. RESPONSIBLE FOR COMMUNICATING TO G.C. SIZE AND LOCATION OF REQ ACCESS DOOR(S).
- ELECTRICAL CONTRACTOR IS TO EMPLOY THE SERVICES OF THE G.C. FOR CUTTING AND PATCHING OF WALLS, FLOORS & CEILINGS RELATED TO THE INSTALLATION OF ELECTRICAL EQUIPMENT & SYSTEMS.
- G.C. RESPONSIBLE FOR PAINTING OF ANY EXPOSED CONDUIT, WIRE, BOXES ETC. E.C. RESPONSIBLE FOR CLEANING AND PREPARING ITEMS FOR PAINT, COORDINATE W/ G.C..
- G.C. TO BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ACCESS PLATFORMS, GUARD RAILS, LADDERS, CONCRETE PADS, E.C. TO COMMUNICATE REQ'S TO G.C..
- E.C. TO COORDINATE W/ G.C. PRIOR TO BID REGARDING HIRING OF FIRE ALARM, DATA/IT & SECURITY SUB-CONTRACTORS (IF APPLICABLE).

III. MATERIALS:

- ALL MATERIAL, DEVICES, APPURTEANES, AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITERS LABORATORIES, INC., AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
- PROVIDE HANGERS & SUPPORTS APPROVED FOR USE BY NEC.
- ALL FIRE SEALANTS TO BE U.L. LISTED AND APPROVED FOR USE W/ APPROPRIATE U.L. PENETRATION DETAIL.
- ELECTRICAL BOXES IN RATED WALLS MUST BE METAL OR LISTED FOR USE IN RATED WALLS. ONLY SINGLE AND DOUBLE GANG BOXES ARE TO BE USED IN RATED WALLS. LARGER BOXES ARE NOT ALLOWED AS THEY EXCEED THE 16 SQUARE INCH MAXIMUM BOX OPENING ALLOWED IN RATED WALLS PER NEC 300.21
- CONDUCTORS SHALL BE COPPER RATED AT NOT LESS THAN 400 VOLTS. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL WIRE #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER MAY BE SOLID OR STRANDED, UNLESS OTHERWISE NOTED. CONDUIT INSULATION SHALL BE TYPE THHN UNLESS OTHERWISE NOTED. ALL EXTERIOR CABLE OR OTHER WIRE EXPOSED TO SUNLIGHT SHALL BE RATED FOR EXTERIOR USE & SUNLIGHT RESISTANT.
- ALL WIRING SHALL BE INSTALLED IN GALVANIZED RIGID CONDUIT, INTERMEDIATE METAL CONDUIT, OR EMT, EXCEPT AS ALLOWED BELOW. EMT SHALL NOT BE USED IN OR UNDER CONCRETE SLABS, OR IN MASONRY WALLS. USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. PVC NOT TO BE USED IN PATIENT CARE AREAS. MINIMUM CONDUIT SIZE TO BE 1/2" TYPE MC AND AC CABLE MAY BE USED WHERE PERMISSIBLE BY NEC. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO VIBRATING EQUIPMENT AND LUMINAIRES, BUT SHALL NOT EXCEED 6" LENGTH.
- IN ASSEMBLY OCCUPANCIES OF OVER 100 PEOPLE WIRING MATERIALS AND METHODS SHALL COMPLY WITH NEC SEC 518 AND THE WIRING METHOD/MATERIAL ITSELF SHALL QUALIFY AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.118 OR SHALL CONTAIN AN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122, NO NM CABLE ALLOWED.
- RACEWAY SYSTEMS SERVING PATIENT CARE AREAS IN HEALTH CARE FACILITIES SHALL INCLUDE AN INSULATING GROUNDING CONDUCTOR AND THE METAL RACEWAY SHALL MEET THE REQUIREMENTS OF AN INDEPENDENT GROUNDING CONDUCTOR (NEC 250.118).
- METAL CONDUIT COUPLINGS TO BE COMPRESSION TYPE OR THREADED WHEN ACCESSIBLE TO BUILDING OCCUPANTS. METAL CONDUIT COUPLINGS MAY BE SET SCREW TYPE WHEN CONCEALED IN BUILDING STRUCTURE OR LOCATED MORE THAN 10' AFT. PLASTIC CONDUIT COUPLINGS TO BE SOCKET GLUED TYPE.
- FUSES 0 - 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSSMANN, UNLESS NOTED OTHERWISE.
- ALL TERMINALS/LUGS SHALL BE 60/75° RATED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
- RECEPTACLES IN COMMERCIAL AREAS SHALL BE 20 AMP COMMERCIAL SPECIFICATION GRADE EQUAL TO HUBBELL SERIES. GROUND FAULT RECEPTACLES SHALL BE EQUAL TO COOPER VGF SERIES. IN RESIDENTIAL UNITS ALL RECEPTACLES ON 20 AMP CIRCUITS SHALL BE 20 AMP. ALL 15A/20A 120V RECEPTACLES IN RESIDENTIAL UNITS SHALL BE TAMPER PROOF, EQUAL TO COOPER TR SERIES.











- LIGHTING SWITCHES IN COMMERCIAL AREAS SHALL BE 20 AMP COMMERCIAL SPECIFICATION GRADE EQUAL TO HUBBELL SERIES. LIGHT SWITCHES IN RESIDENTIAL UNITS SHALL BE 15 AMP.
- ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 0° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
- ANY RECESSED LIGHT FIXTURES INSTALLED IN INSULATED CEILINGS OR WALLS ARE TO BE "0° RATED" AND "AIR TIGHT" MEETING THE REQUIREMENTS OF ASTM 385 AND 2018 NCECC SEC. C402.5.8 FOR COMMERCIAL PROJECTS & R402.4.4 FOR RESIDENTIAL PROJECTS.
- ANY MULTI-WIRE BRANCH CIRCUITS ARE TO PROVIDED WITH MULTI-POLE BREAKERS.
- GROUNDING CONDUCTORS SERVING PATIENT CARE AREAS IN HEALTHCARE FACILITIES ARE TO BE INSULATED AND MEET ALL OTHER REQUIREMENTS OF NEC 517.13.

IV. COORDINATION:

- THE ELECTRICAL CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL OTHER TRADES TO AVOID CONFLICTS. ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- E.C. TO COORDINATE ELEVATION OF WALL MOUNTED LIGHTS (INTERIOR & EXTERIOR) W/ ARCHITECT/ARCH PLANS.
- E.C. TO COORDINATE W/ F.C. & M.C. REGARDING POWER AND FIRE ALARM CONNECTIONS TO MECHANICAL AND PLUMBING EQUIPMENT.
- E.C. TO VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- E.C. TO VERIFY DEVICE PLATE COLOR AND MATERIAL WITH ARCHITECT PRIOR TO PURCHASE.

V. EXECUTION:

- E.C. TO FOLLOW MANUFACTURER'S INSTRUCTIONS WHEN INSTALLING ELECTRICAL EQUIPMENT. ENSURE PROPER ACCESS AND CLEARANCES ARE MAINTAINED. IF CONFLICT EXISTS BETWEEN THESE PLANS AND MFG INSTRUCTIONS CONTACT ENGINEER.
- E.C. IS TO ENSURE THAT THEIR INSTALLATION OF NEW CONDUITS, PIPES, DUCTWORK, AND SIMILAR DOES NOT BLOCK ACCESS TO NEW OR EXISTING AREA EQUIPMENT AND THAT THE FOREMENTIONED DOES NOT INTERFERE WITH THE REQUIRED SERVICE CLEARANCE OF NEW OR EXISTING EQUIPMENT. COORDINATE WITH OTHER TRADE CONTRACTORS AND CONTACT ENGINEER IF UNCERTAINTY EXISTS REGARDING EQUIPMENT SERVICE CLEARANCE REQUIREMENTS.
- A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- PROVIDE A FULWIRE IN ALL EMPTY CONDUITS.
- PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES. WHITE LETTERS ON BLACK BACKGROUND.
- ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTER-FLASHED IN A WATERPROOF MANNER.
- SEAL ALL PENETRATIONS OF SMOKE PARTITIONS OR FIRE RATED WALLS, CEILING, FLOORS IN ACCORDANCE W/ APPROPRIATE U.L. PENETRATION DETAIL AND NC BUILDING CODE.
- PENETRATIONS OF NON-RATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.
- ANY NOTCHING, DRILLING, BORING OR OTHER ALTERATION TO BUILDING STRUCTURE SHALL BE PERFORMED IN A CODE APPROVED METHOD AND NOT THREATEN THE INTEGRITY OF THE BUILDING STRUCTURE.
- SUPPORT ALL CONDUIT AND EQUIPMENT IN ACCORDANCE W/ NEC. ANY SUSPENDED MATERIALS SHALL BE DIRECTLY SUPPORTED BY THE BUILDING STRUCTURE. DO NOT ATTACH ANYTHING TO THE ROOF DECK.
- PENETRATIONS OF ALL EXTERIOR WALLS, FLOORS AND CEILINGS SHALL BE SEALED IN AN AIR TIGHT MANNER AND IN ACCORDANCE W/ 2018 NCECC C402.5.1.1 FOR COMMERCIAL PROJECTS & R402.4.2 FOR RESIDENTIAL PROJECTS.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.). UPON COMPLETION OF WORK THE ELECTRICAL CONTRACTOR SHALL CLEAN, WASH, ETC. ALL ITEMS AND EQUIPMENT WITHIN HIS SCOPE OF WORK AND LEAVE ALL ITEMS BRIGHT AND CLEAN.
- UNLESS OTHERWISE INDICATED THE ELECTRICAL CONTRACTOR AT HIS/HER DISCRETION MAY COMBINE MULTIPLE CIRCUITS INTO A SINGLE CONDUIT AND DE-RATE WIRE. COMBINING AND DE-RATING IS TO BE DONE IN STRICT ACCORDANCE W/ NEC.
- DEVICES INCLUDING GFCI PROTECTION MUST HAVE THEIR TESTING MEANS READILY ACCESSIBLE. PROVIDE REMOTE TESTING MEANS OR GFCI BREAKER FOR GFCI RECEPTACLES AND SIMILAR DEVICES WHICH ARE NOT READILY ACCESSIBLE (I.E. BEHIND EQUIPMENT, AT CEILING, ETC.). (NEC 210.8).
- COORDINATE WITH THE CABLE TV AND TELEPHONE UTILITIES FOR SERVICE ENTRANCE AND CABLEING REQUIREMENTS PRIOR TO ANY PURCHASING. INSTALLATION MUST COMPLY WITH THEIR RESPECTIVE REGULATIONS AND REQUIREMENTS.
- ALL EXIT & EMERGENCY LIGHTS ARE TO BE CIRCUITED TO UN-SWITCHED LEG OF LOCAL NORMALLY ON LIGHTING CIRCUIT.
- RECEPTACLE, LIGHT SWITCHES AND OTHER CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE W/ ANSI A17.11 & A AND AREA REQ'S CONCERNING HEIGHT AND ACCESSIBILITY. FHA REQ'S TO BE FOLLOWED FOR MULTI-FAMILY AND RESIDENTIAL PROJECTS.
- E.C. IS TO CONFIRM EXACT ELECTRICAL NAMEPLATE DATA, OF ALL PLUMBING, MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO, MCA, MOCIP, VOLTAGE & PHASE BEFORE BEGINNING WORK.
- CEILING MOUNTED ELECTRICAL FIXTURES SHALL BE A MINIMUM OF 80 INCHES ABOVE THE FINISHED FLOOR UNLESS ABOVE COUNTERTOPS OR SIMILAR FIXED OBSTRUCTIONS.
- E.C. TO IDENTIFY AND PERMANENTLY MARK BOXES, ENCLOSURES, EXPOSED CABLE, AND RACEWAY SYSTEMS SERVING EMERGENCY SYSTEMS IN ACCORDANCE TO NEC 700.10. E.C. TO ALSO PROVIDE CLEARLY IDENTIFIED LABEL OF EMERGENCY BRANCH CIRCUIT AT PANEL (NEC 700.12)(7)(2)(4).
- CORRUGATED STAINLESS STEEL TUBING (CSST) GAS PIPING SYSTEMS AND PIPING SYSTEMS CONTAINING ONE OR MORE SEGMENTS OF CSST SHALL BE BONDED TO THE ELECTRICAL SERVICE GROUNDING ELECTRODE IN ACCORDANCE TO 2018 NCECC SEC. 310.1.1. EXISTING NON CSST PIPING SYSTEMS SHALL BE BONDED WHEN CSST IS ADDED TO THE SYSTEM REGARDLESS OF THE LENGTH OF CSST ADDED.
- ALL WORK IN/TROUGH REQUIRED FIRE RATED WALLS, BARRIERS, AND PARTITIONS SHALL COMPLY WITH 2018 NCECC/IBC SEC 714. OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY U.L. AND 2018 NCECC/IBC SEC 714.
- BACK-TO-BACK BOXES IN 1" OR 2" HOUR RATED WALLS WITHIN 24" OF EACH OTHER SHALL BE PROTECTED BY (1) OF THE FOLLOWING, OR EQUAL: METAL-CLAD BOX GUARD (METAL BOXES ONLY), METACALUL COVER GUARD, OR METACALUL PUTTY PADS.
- OPENINGS IN REQUIRED FIRE RATED WALLS, PARTITIONS, AND BARRIERS THAT REMAIN DUE TO DEMOLITION OF ELECTRICAL DEVICES AND SIMILAR SHALL BE PATCHED BACK IN A WAY THAT MAINTAINS THE FIRE RATING AND INTEGRITY OF THE ASSEMBLY.
- CEILING MOUNTED OCCUPANCY SENSORS ARE TO BE MOUNTED AT LEAST 4' FROM OUTLETS, GRILES, FANS, AND OTHER SIMILAR SOURCES OF VIBRATION. COORDINATE INSTALLATION LOCATION WITH M.C..
- E.C. TO UPSIZE ANY WIRE RUNS EXCEEDING 65 OR 120 FEET DEPENDING ON LOAD. SEE VOLTAGE DROP SCHEDULE (THIS SHEET) FOR 120V BRANCH CIRCUIT WITH LOADS UP TO 16A.

MARK	MANUF.	CATALOG NUMBER	LAMP DATA		VOLTS	BALLAST DATA		INPUT WATTS	MOUNTING
			NO.	TYPE		NO.	TYPE		
A1	LITHONIA	2GT4L	-	LED	MVOLT	1	DRIVER	30	LAY-IN
A2	LITHONIA	2GT4L	-	LED	MVOLT	1	DRIVER	42	LAY-IN
A4	LITHONIA	2GT4L	-	LED	MVOLT	1	DRIVER	30	LAY-IN
B1	LITHONIA	2AV4L	-	LED	MVOLT	1	DRIVER	38	LAY-IN
B2	LITHONIA	2AV4L	-	LED	MVOLT	1	DRIVER	38	LAY-IN
C1	LITHONIA	LDN6	-	LED	MVOLT	1	DRIVER	13	RECESSED
C3	LITHONIA	LDN6	-	LED	MVOLT	1	DRIVER	21	RECESSED
C4	LITHONIA	LDN6	-	LED	MVOLT	1	DRIVER	13	RECESSED
C5	JUNO	6RLS-G2	1	LED	120	1	DRIVER	10	SURFACE
CL	ILLUMINATION	EF600	-	LED	MVOLT	1	DRIVER	12/FT	SURFACE
D1	MARK LIGHTING	S4JD	-	LED	MVOLT	1	DRIVER	70	SUSPENDED
E1	LITHONIA	ZL1D	-	LED	MVOLT	1	DRIVER	30	SURFACE
E2	LITHONIA	ZL1D	-	LED	MVOLT	1	DRIVER	17	WALL
E3	LITHONIA	ZL1D	-	LED	MVOLT	1	DRIVER	60	SURFACE
E4	LITHONIA	ZL1D	-	LED	MVOLT	1	DRIVER	30	SURFACE
F1	MARK LIGHTING	SL4L	-	LED	MVOLT	1	DRIVER	84	RECESSED
G1	LITHONIA	ZL1D	-	LED	MVOLT	1	DRIVER	41	SURFACE
H1	LITHONIA	DMW2	-	LED	MVOLT	1	DRIVER	27	SURFACE
J1	-	-	-	-	120	-	-	50 MAX	WALL
K1	LITHONIA	6BPMW	-	LED	120	1	DRIVER	15	RECESSED
L1	-	-	-	-	120	-	-	50 MAX	WALL
M1	LITHONIA	6BPMW	-	LED	120	1	DRIVER	15	RECESSED
N	-	-	-	LED	120	1	DRIVER	5 MAX	RECESSED WALL
O1	LITHONIA	LDN4	-	LED	MVOLT	1	DRIVER	9	RECESSED
P1	BEGA	66R92	-	LED	120	1	DRIVER	12	SURFACE
Q	-	-	-	LED	120	1	DRIVER	30 MAX	RECESSED
R1	SYLVANIA	BOLLARD LEDLUM4044	-	LED	MVOLT	1	DRIVER	38	BOLLARD
S1	WAC LIGHTING	LED-T24	-	-	120	1	DRIVER	3/FT	COVE
T	-	-	-	LED	120	1	DRIVER	23 MAX	RECESSED
U	LITHONIA	EPANL 2X4	-	LED	MVOLT	1	DRIVER	28	LAY-IN
U2	LITHONIA	EPANL 2X4	-	LED	MVOLT	1	DRIVER	48	LAY-IN
V	BROWNLEE LIGHTING	7329	-	LED	120	1	DRIVER	23	WALL
W	JUNO LIGHTING GROUP	LMS	-	LED	120	1	DRIVER	3	RECESSED WALL
X	KASON	1810LX6000	-	LED	120-277	1	DRIVER	58	SURFACE
	LITHONIA	EDGR	1	LED	120, 277	-	-	3	RECESSED
	LITHONIA	EDGR	1	LED	120, 277	-	-	3	RECESSED
	LITHONIA	EDG	1	LED	120, 277	-	-	3	WALL
 AC	LITHONIA	EDGR	1	LED	120, 277	-	-	3	RECESSED
 AC	LITHONIA	EDG	1	LED	120, 277	-	-	3	WALL
 AC	LITHONIA	EDGR	1	LED	120, 277	-	-	3	RECESSED
	LITHONIA	LHQM LED	2	1.5W	120, 277	-	-	3.0	WALL
	LITHONIA	LHQM LED	2	1.5W	120, 277	-	-	3.0	CEILING
	BARRON LIGHTING GROUP	TR-W8-BR-CL	2	6W XENON	120, 277	-	-	-	WALL
	EELP	EM16-LP	2	3.5W LED	120	-	-	7	SURFACE
EMG-RV	-	-	-	-	120, 277	-	-	MFG	CONCEALED
EMG-BATT	-	-	-	-	120, 277	-	-	MFG	CONCEALED

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BUILDING LIGHTING SYSTEM COMMISSIONING

I. GENERAL REQUIREMENTS:

- BUILDING SYSTEMS TO BE COMMISSIONED IN ACCORDANCE WITH 2018 NCECC SECTION C405.
- DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA ARE TO BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

II. COMMISSIONING SCOPE:

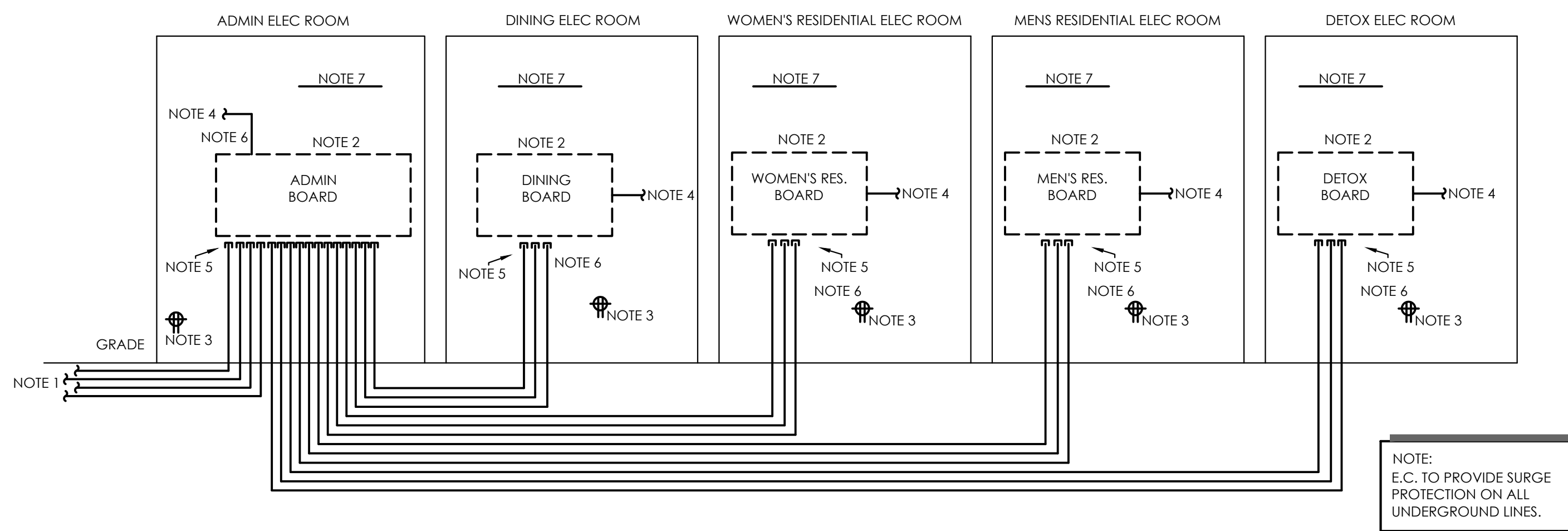
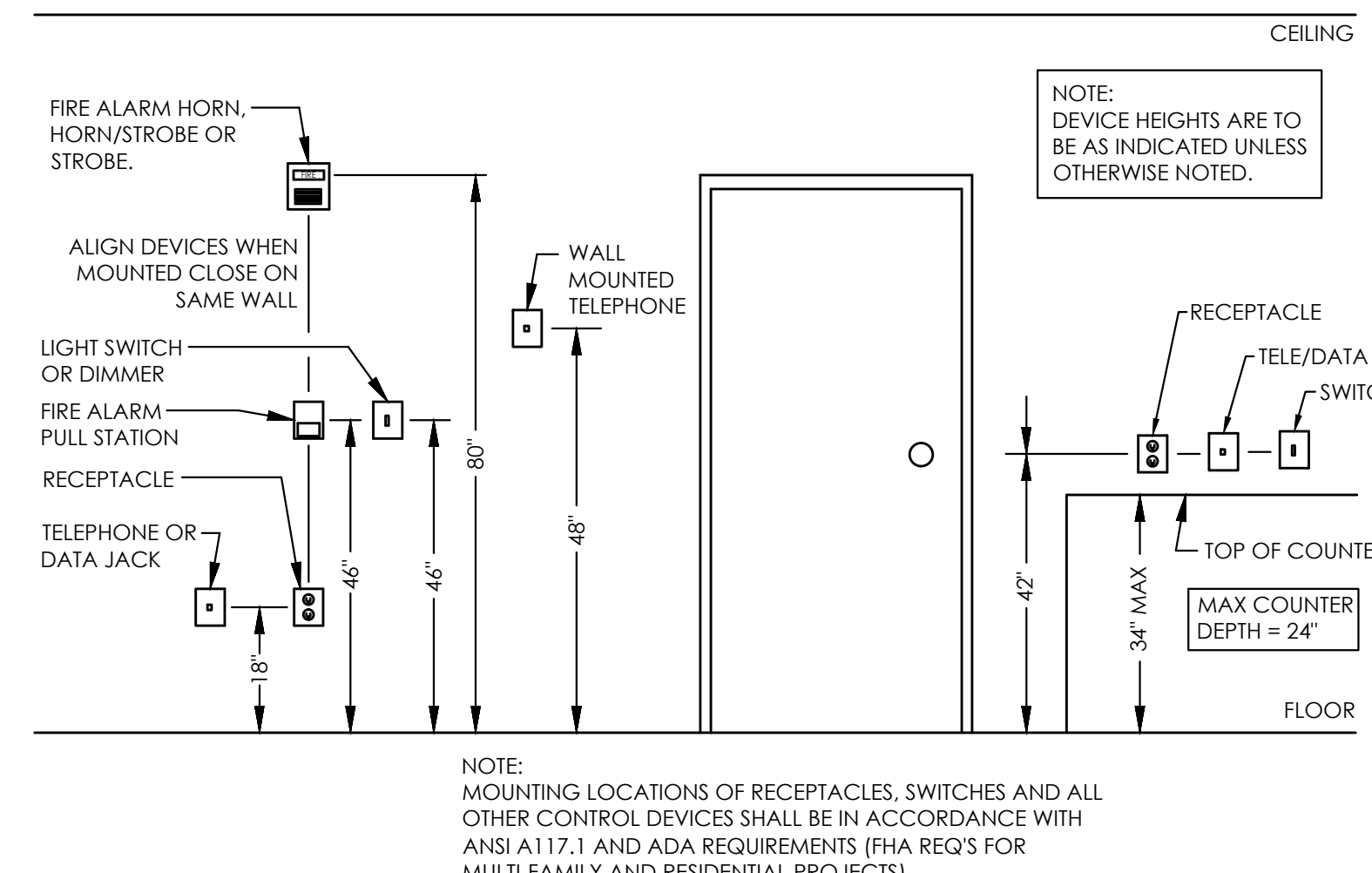
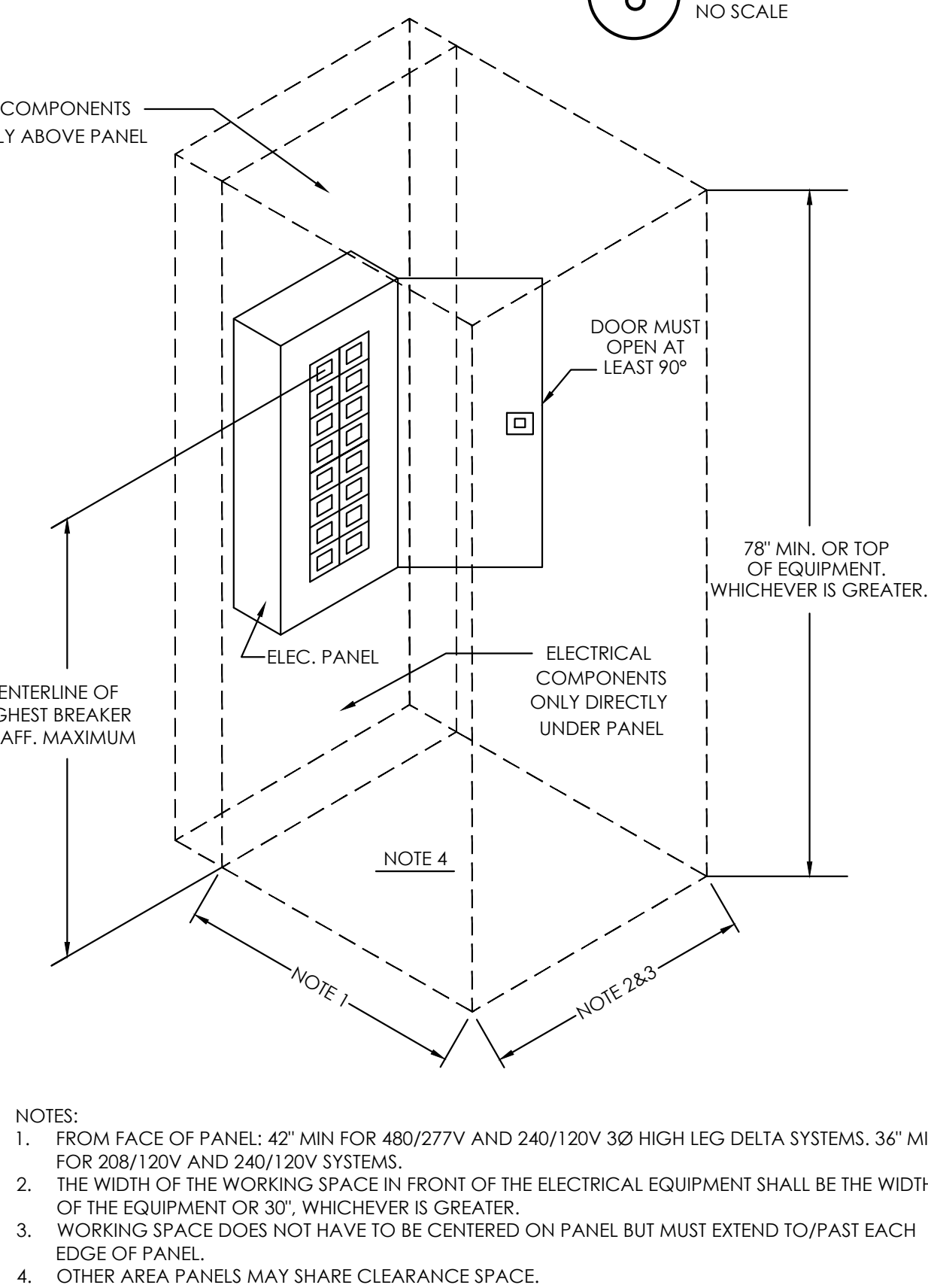
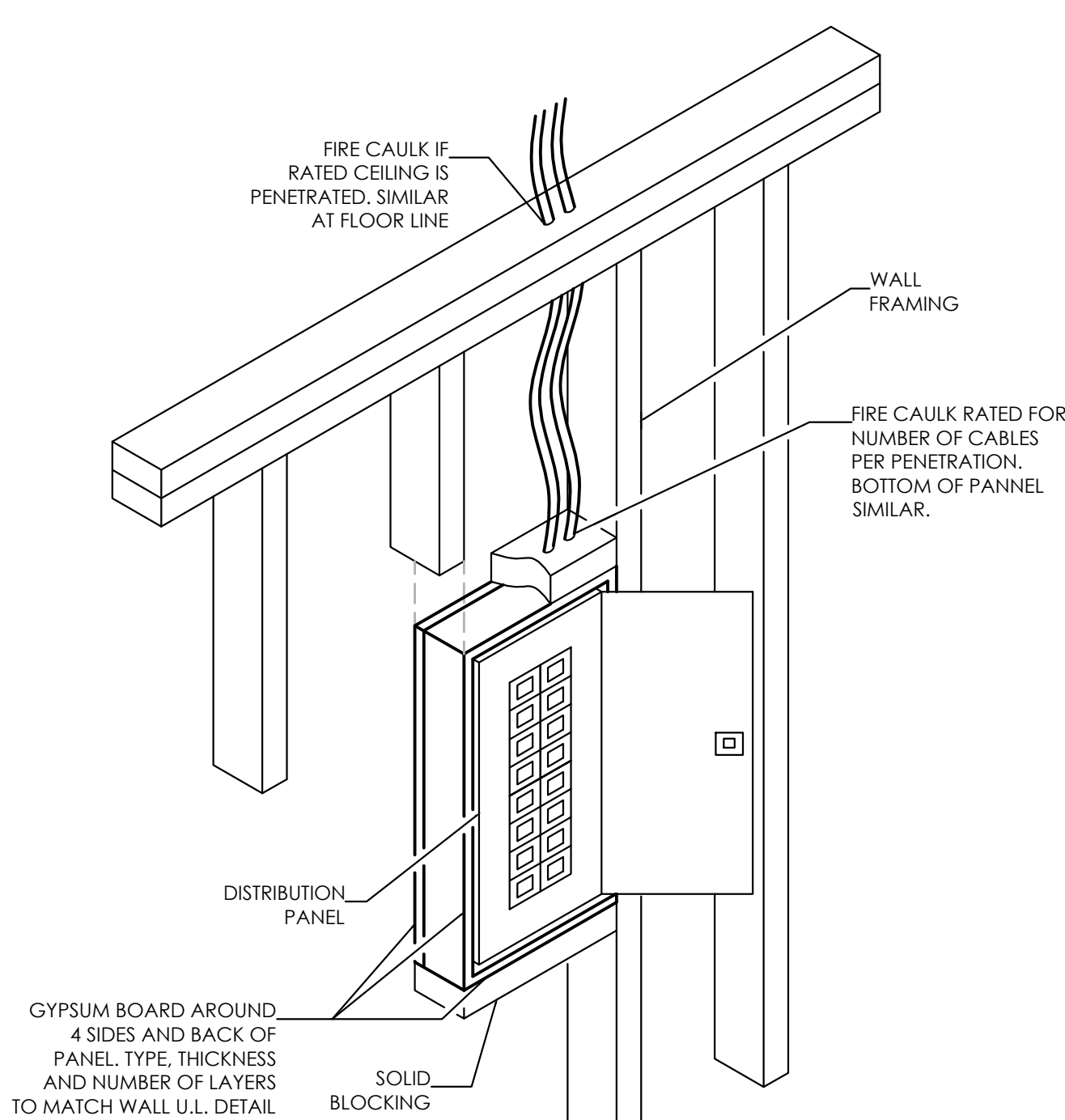
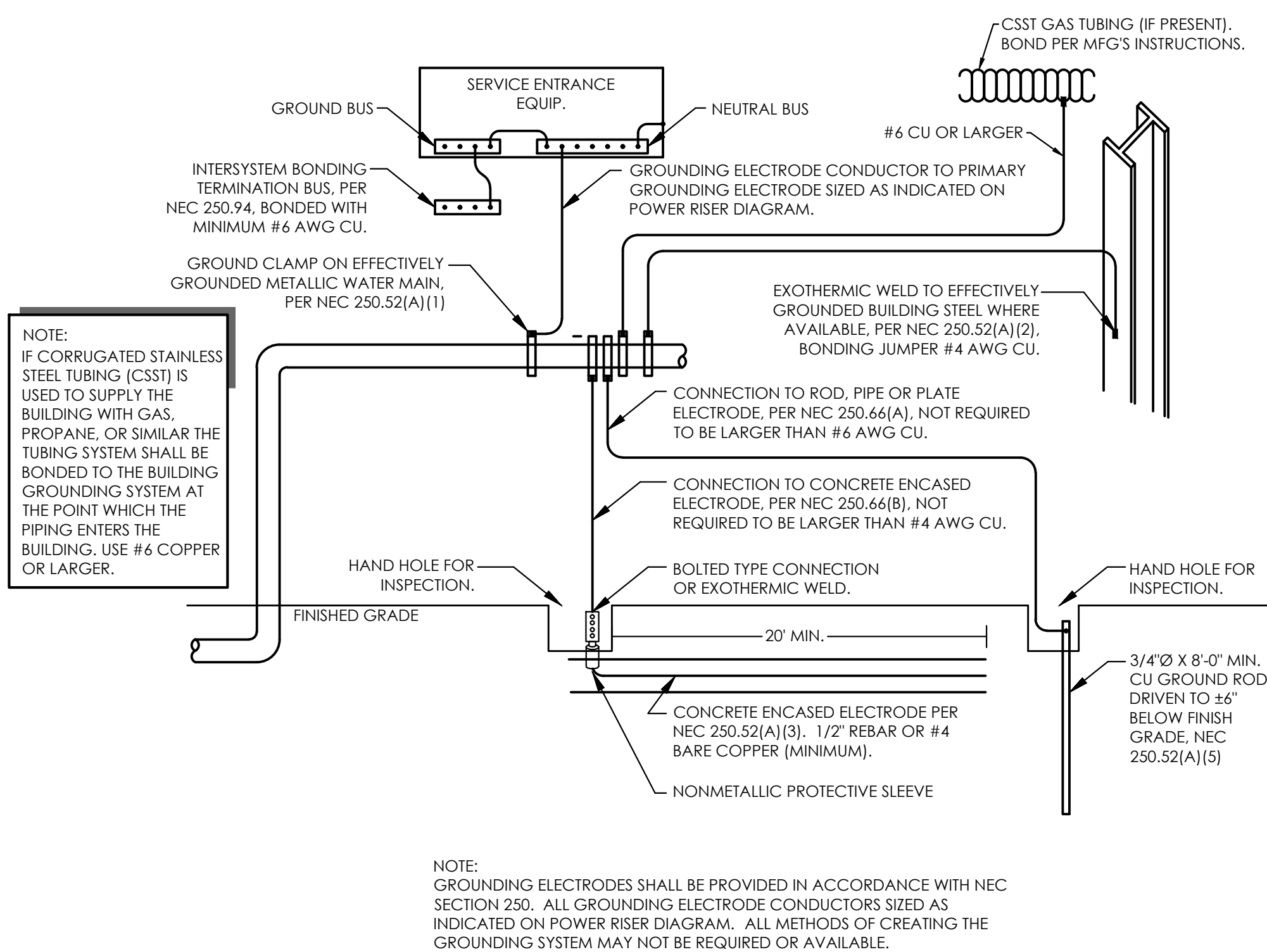
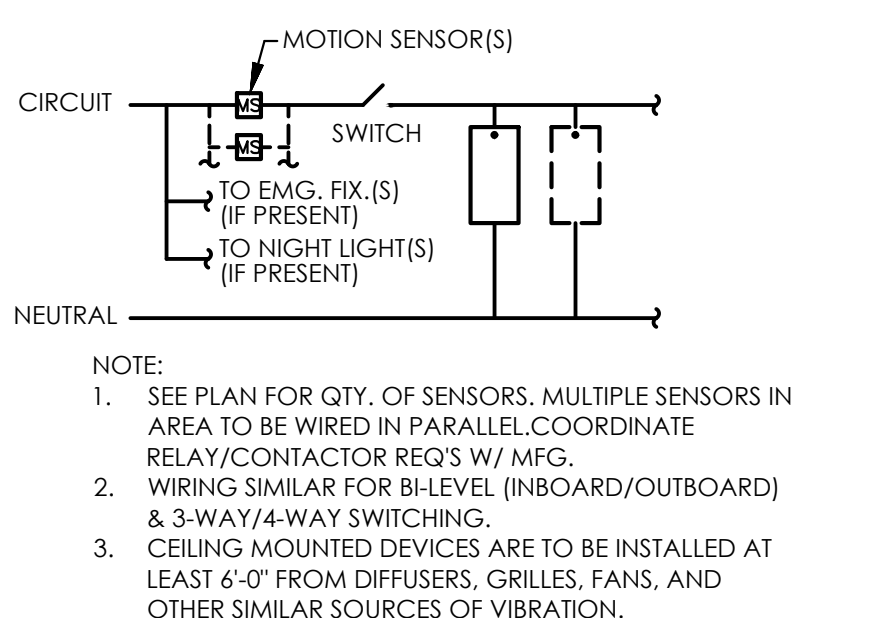
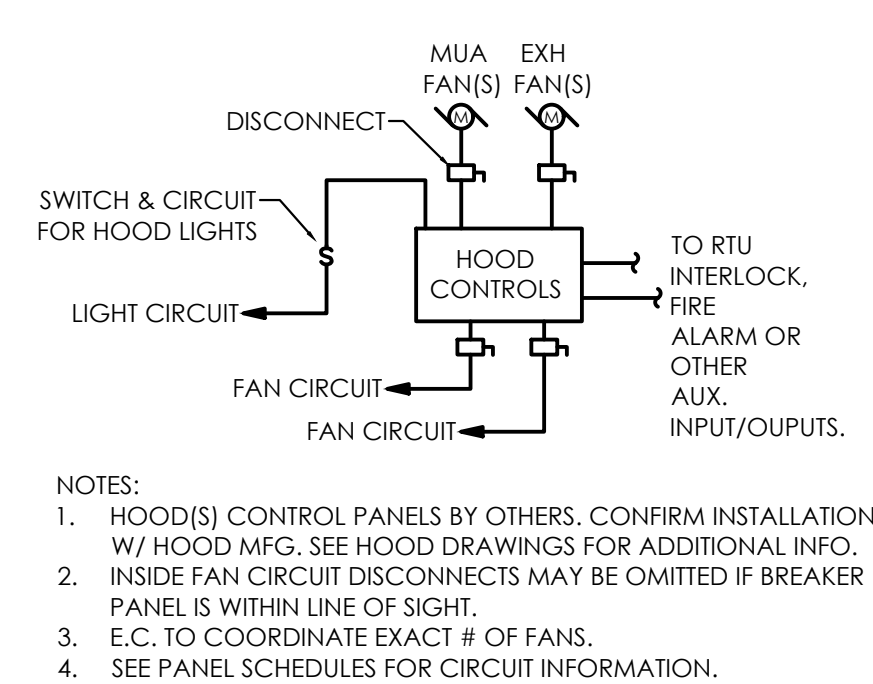
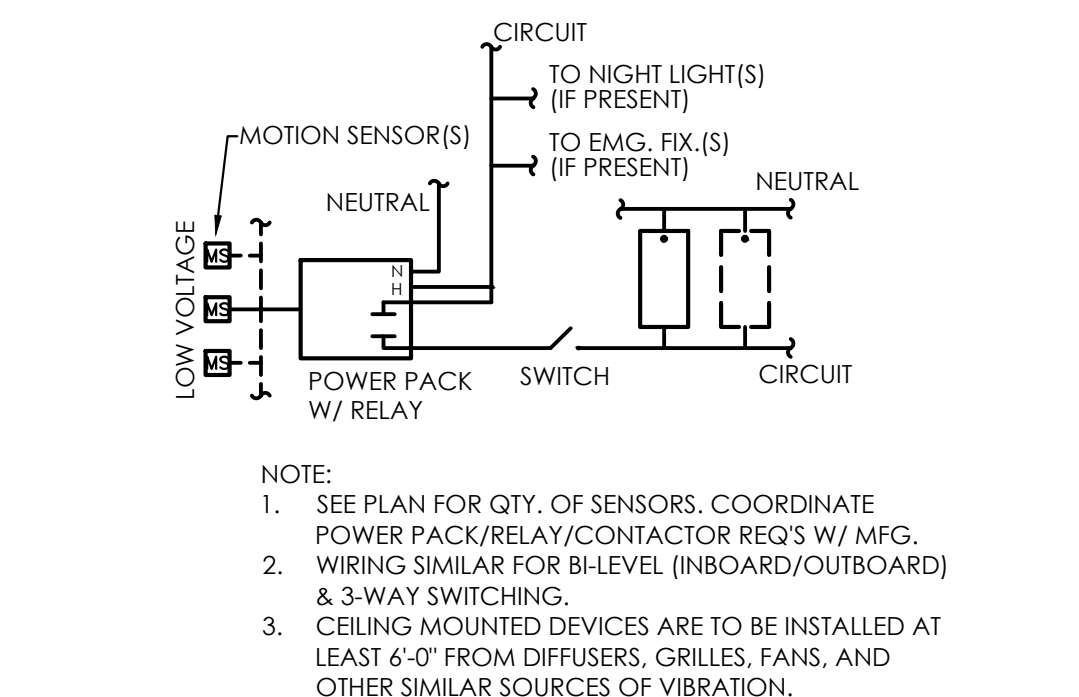
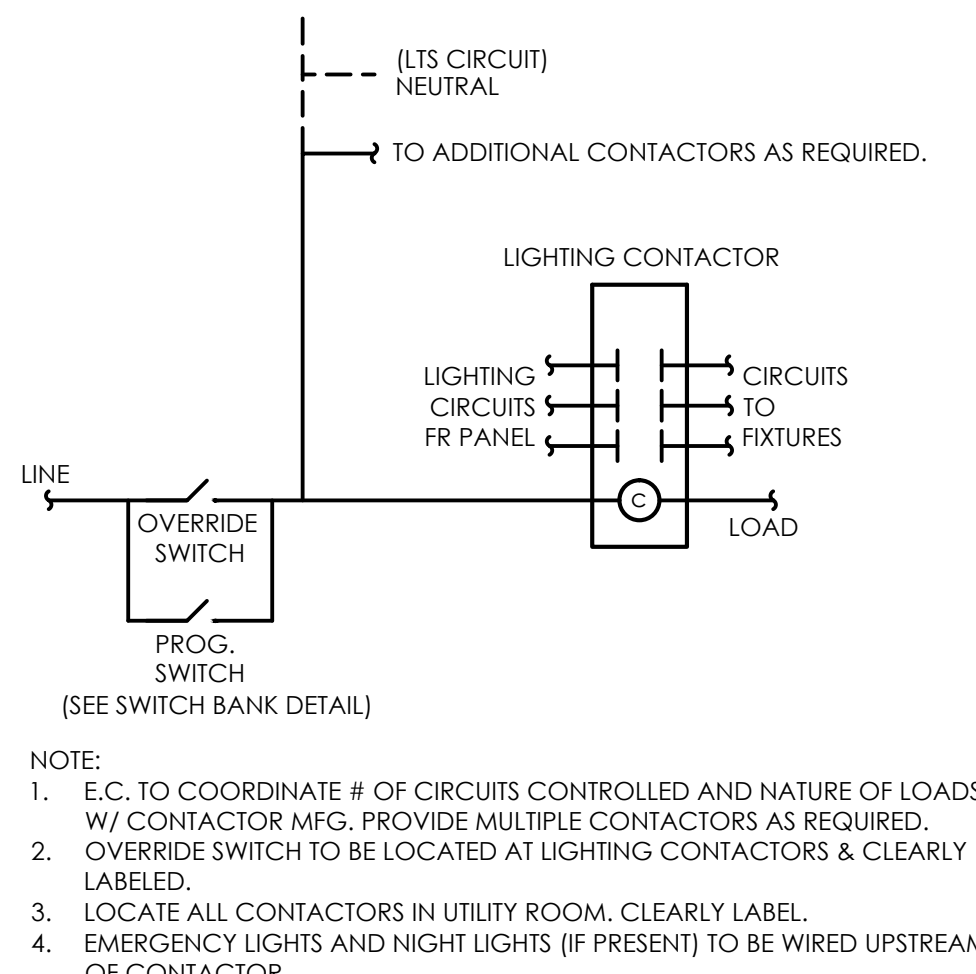
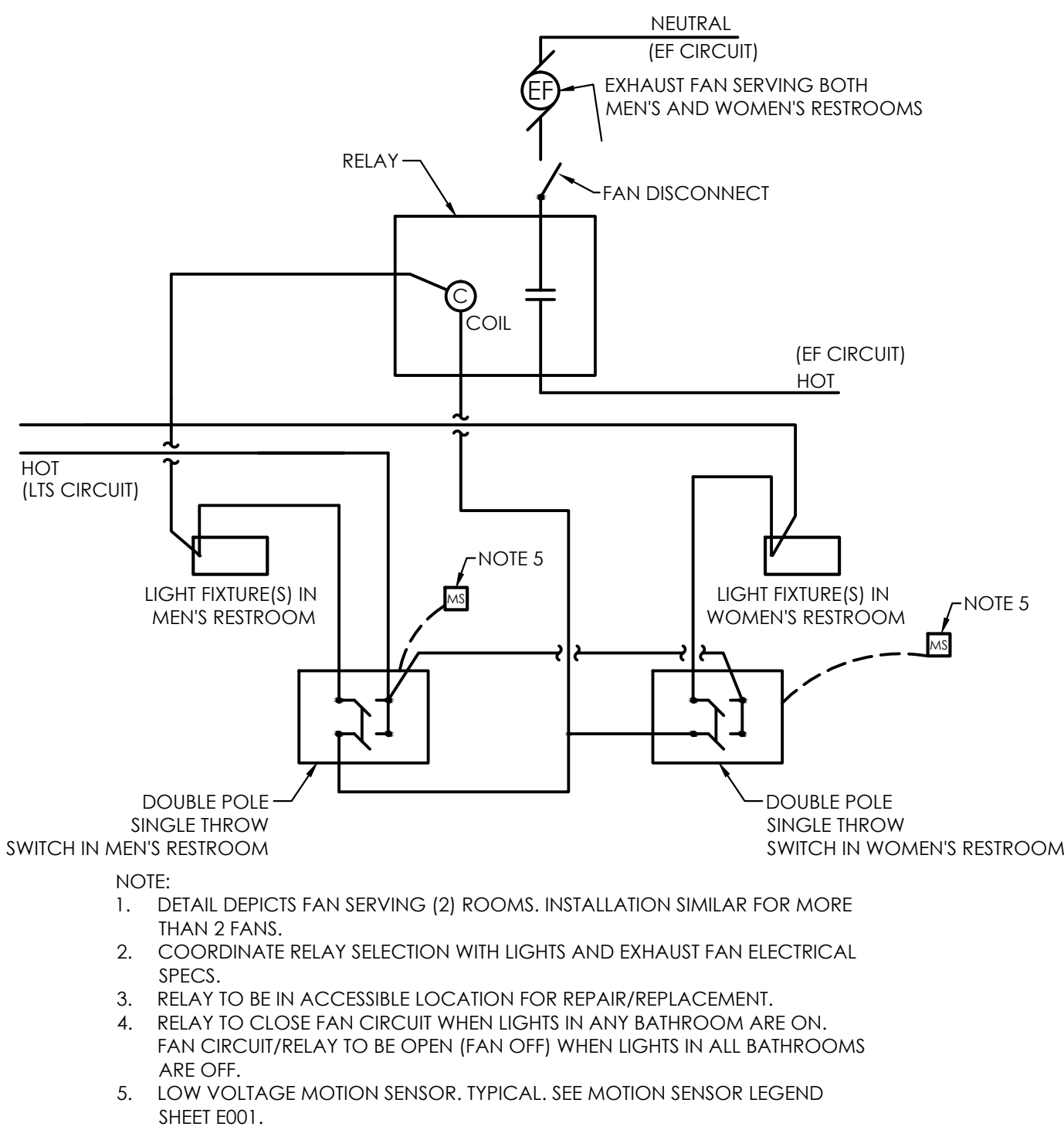
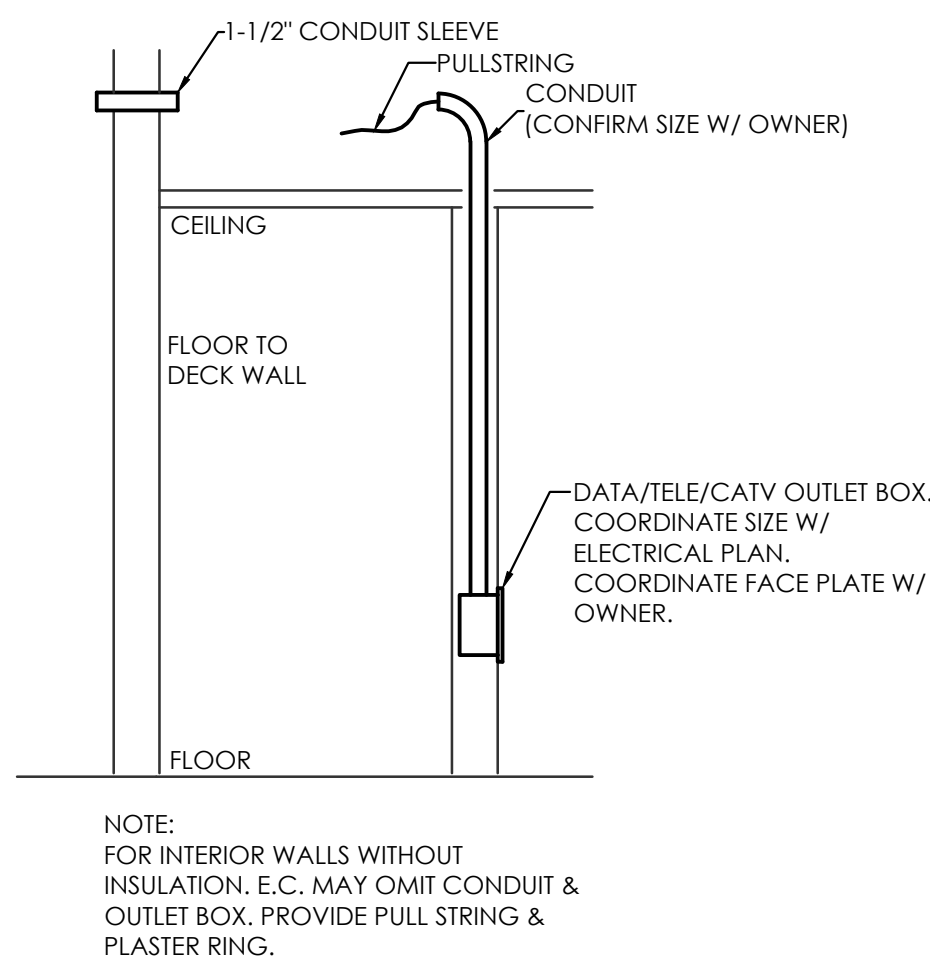
- THE FOLLOWING MARKED SYSTEMS WILL BE COMMISSIONED IN THIS PROJECT:

SYSTEM	EQUIPMENT
ELECTRICAL	OCCUPANCY SENSOR CONTROLS
	TIME-SWITCH CONTROLS
	DAYLIGHT RESPONSIVE CONTROLS

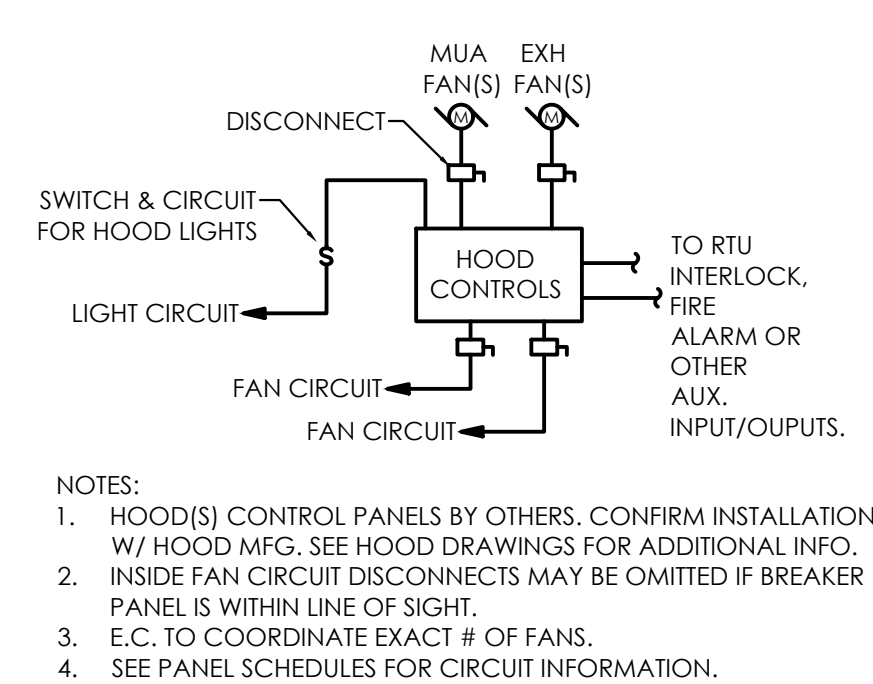
III. COMMISSIONING PROCEDURE:

- OCCUPANCY SENSORS:
 - CERTIFY THAT THE SENSOR HAS BEEN LOCATED AND AIMED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS
 - FOR EACH SENSOR TO BE TESTED, VERIFY THE FOLLOWING:
 - STATUS INDICATOR (AS APPLICABLE) OPERATES CORRECTLY.
 - THE CONTROLLED LIGHTS TURN OFF OR DOWN TO THE PERMITTED LEVEL WITHIN THE REQUIRED TIME.
 - FOR AUTO-ON OCCUPANCY SENSORS, THE LIGHTS DO TURN ON TO THE PERMITTED LEVEL WHEN SOMEONE ENTERS THE SPACE.
- AUTOMATIC TIME SWITCHES:
 - CONFIRM THAT THE AUTOMATIC TIME SWITCH CONTROL IS PROGRAMMED WITH APPROPRIATE WEEKDAY, WEEKEND, AND HOLIDAY (AS APPLICABLE) SCHEDULES.
 - DOCUMENT FOR THE AGENCY AUTOMATIC TIME SWITCH PROGRAMMING INCLUDING WEEKDAY, WEEKEND, HOLIDAY SCHEDULES AS WELL AS ALL SET-UP AND PREFERENCE PROGRAM SETTINGS.
 - VERIFY THE CORRECT TIME AND DATE IS PROPERLY SET IN THE TIME SWITCH.
 - VERIFY THAT ANY BATTERY BACK-UP (AS APPLICABLE) IS INSTALLED AND ENERGIZED.
 - VERIFY THAT THE OVERRIDE TIME LIMIT IS SET TO NO MORE THAN 2 HOURS.
 - SIMULATE OCCUPIED CONDITION, VERIFY AND DOCUMENT THE FOLLOWING:
 - ALL LIGHTS CAN BE TURNED ON AND OFF BY THEIR RESPECTIVE AREA CONTROL SWITCH.
 - VERIFY THE SWITCH ONLY OPERATES LIGHTING IN THE ENCLOSED SPACE IN WHICH THE SWITCH IS LOCATED.
 - SIMULATE UNOCCUPIED CONDITION, VERIFY AND DOCUMENT THE FOLLOWING:
 - ALL NON-EXEMPT LIGHTING TURNS OFF.
 - MANUAL OVERRIDE SWITCH ALLOWS ONLY THE LIGHTS IN THE ENCLOSED SPACE WHERE THE OVERRIDE SWITCH IS LOCATED TO TURN ON OR REMAIN ON UNTIL THE NEXT SCHEDULED SHUT OFF OCCURS.
- DAYLIGHT CONTROLS:
 - ALL CONTROL DEVICES (PHOTOCONTROLS) HAVE BEEN PROPERLY LOCATED, FIELD CALIBRATED AND SET FOR APPROPRIATE SET POINTS AND THRESHOLD LIGHT LEVELS.
 - DAYLIGHT CONTROLLED LIGHTING LOADS ADJUST TO APPROPRIATE LIGHT LEVELS IN RESPONSE TO AVAILABLE DAYLIGHT, THE LOCATION WHERE CALIBRATION ADJUSTMENTS ARE MADE IS READILY ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL.
- MANUALS:
 - VERIFY AN OPERATING AND MAINTENANCE MANUAL IS PROVIDED AND INCLUDES THE FOLLOWING:
 - SUBMITTAL DATA INDICATING ALL SELECTED OPTIONS FOR EACH PIECE OF LIGHTING EQUIPMENT AND LIGHTING CONTROLS
 - OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF LIGHTING EQUIPMENT, REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY IDENTIFIED.
 - A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.
 - A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SET POINTS.

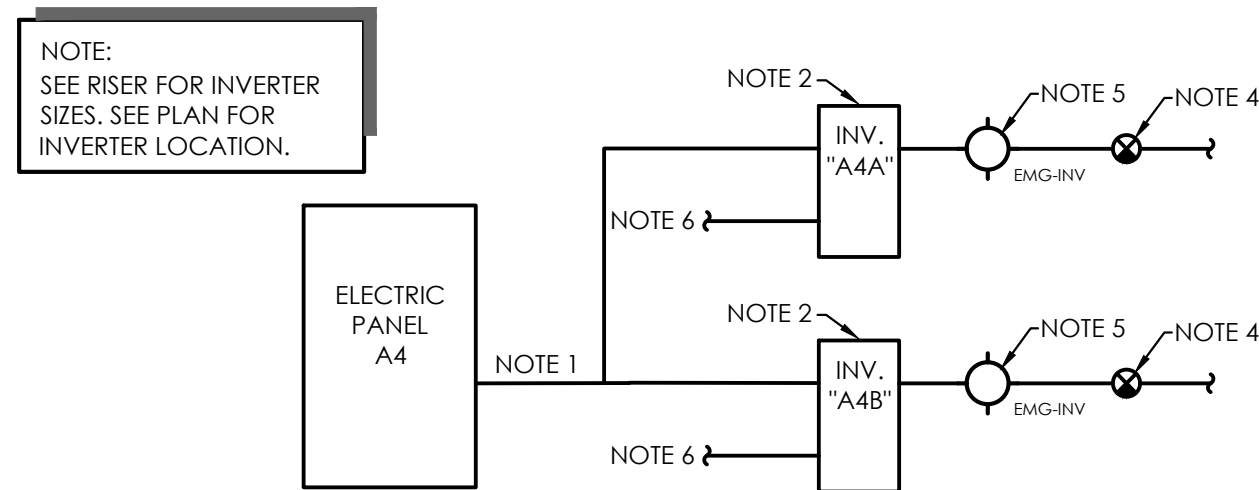
NOTE:
DINING/SHELTER AND
ADMIN BUILDINGS ARE
OVER 10,000 SQ FT AND
WILL REQUIRE
COMMISSIONING.



- NOTES:**
- (4) 4" CONDUITS PROVIDED UNDER SLAB/GROUND TO PROPERTY LINE W/ PULL STRING. CLEARLY LABEL AND COORDINATE EXACT TERMINATION LOCATION AND DETAILS WITH OWNER AND TELEPHONE UTILITY.
 - 3/4" FINISH GRADE PLYWOOD BACKBOARD PAINTED WITH FLAME RETARDANT PAINT. COORDINATE SIZE & EXACT LOCATION W/ OWNER.
 - PROVIDE 120V QUAD RECEPTACLE ON A DEDICATED CIRCUIT FOR TELEPHONE AND DATA BOARD (SEE POWER PLANS).
 - PROVIDE #6 CU GROUNDING/BONDING CONDUCTOR IN 3/2" CONDUIT TO INTERSYSTEM BONDING TERMINATION (BT) AT BUILDING ELECTRICAL SERVICE. BOND CONDUIT/CONDUCTOR AT EACH END OF CONDUIT IF METAL RACEWAY IS USED. INSTALL PER NEC 250.94 & NEC 800.100. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
 - PROVIDE (3) 4" CONDUITS W/ PULL STRING. CLEARLY LABEL. SEE PLANS FOR LOCATIONS.
 - PROVIDE SURGE PROTECTION/ LIGHTNING PROTECTION ON LINES RUN BETWEEN BUILDINGS. COORDINATE W/ OWNER AND UTILITY PROVIDERS.
 - CABLE RACKS ABOVE CEILING FROM TELE/DATA ROOMS TO EACH ROOM IN BUILDING. COORDINATE W/ OWNER AND UTILITY PROVIDERS.



DETOX BUILDING

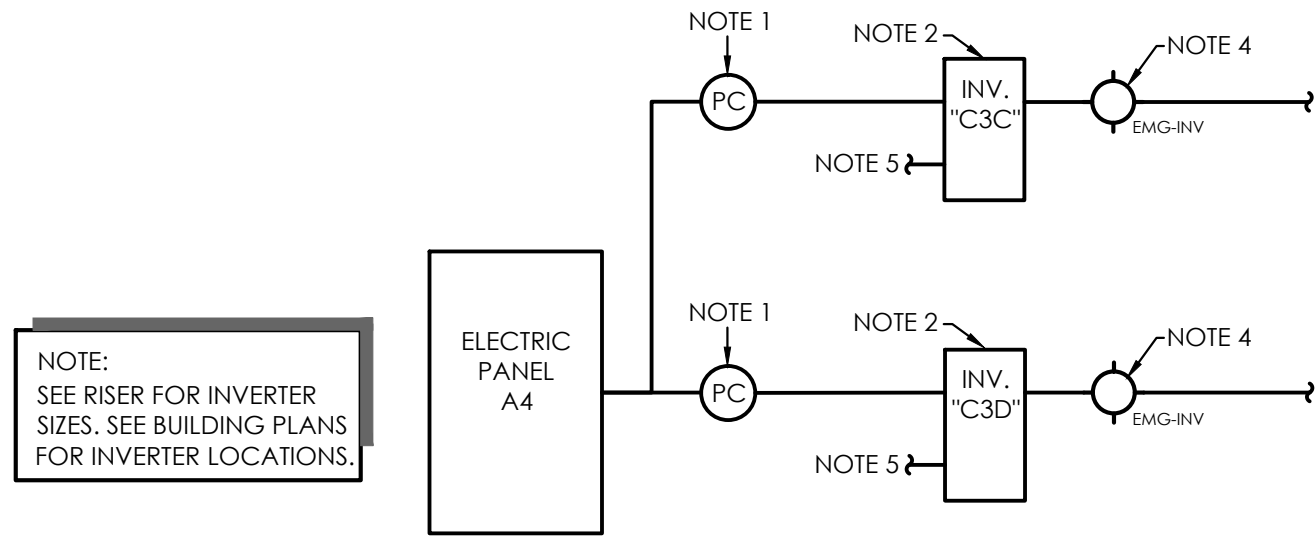


- NOTE:
1. AREA LIGHTING CIRCUIT.
 2. EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP. SEE RISER FOR SPEC.
 3. NOT USED.
 4. EXIT SIGNS WIRED TO INVERTER.
 5. AREA NIGHT LIGHT(S) TO BE USED AS EMERGENCY LIGHT.
 6. HOT LEG TO INVERTER FOR MONITORING.

11 EMERGENCY LIGHTING INVERTER DETAIL

NO SCALE

DETOX BUILDING

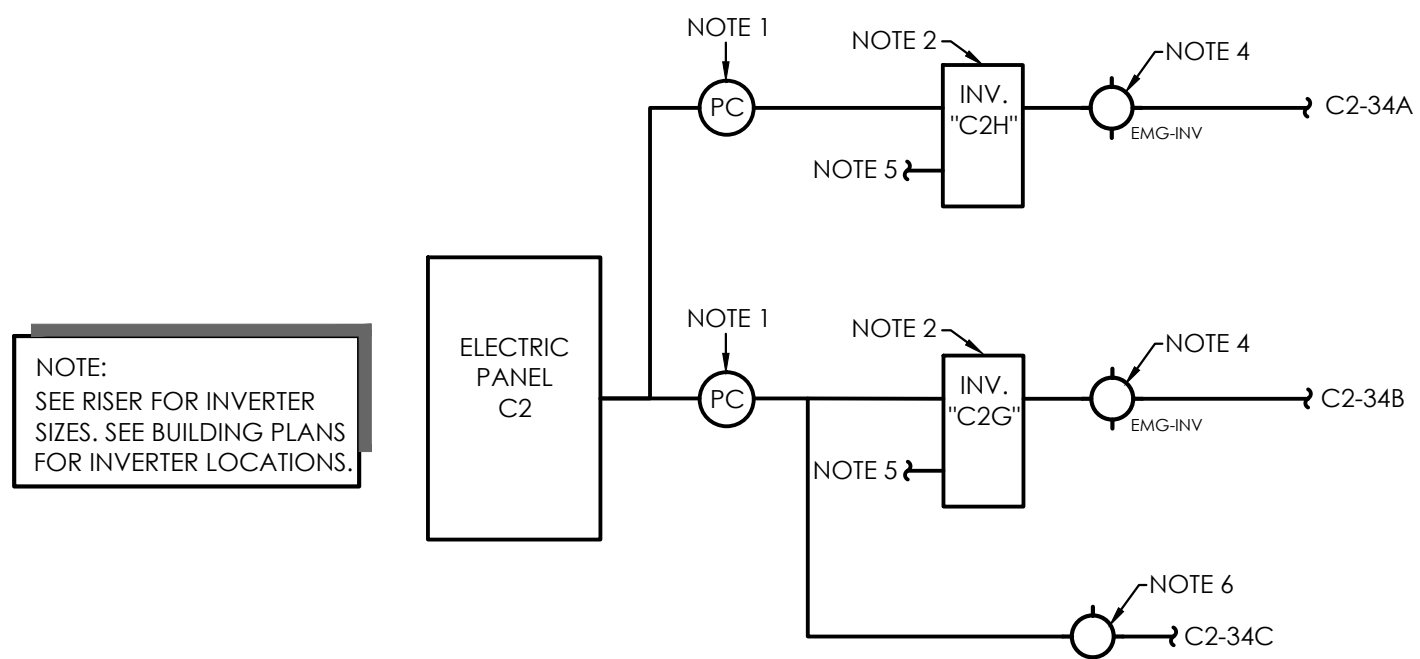


- NOTE:
1. BUILDING PHOTOCELL ON NORTH SIDE OF BUILDING. (2) EMERGENCY CIRCUITS MAY NOT SHARE SINGLE PHOTOCELL.
 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.

10 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE

SITE LIGHTING

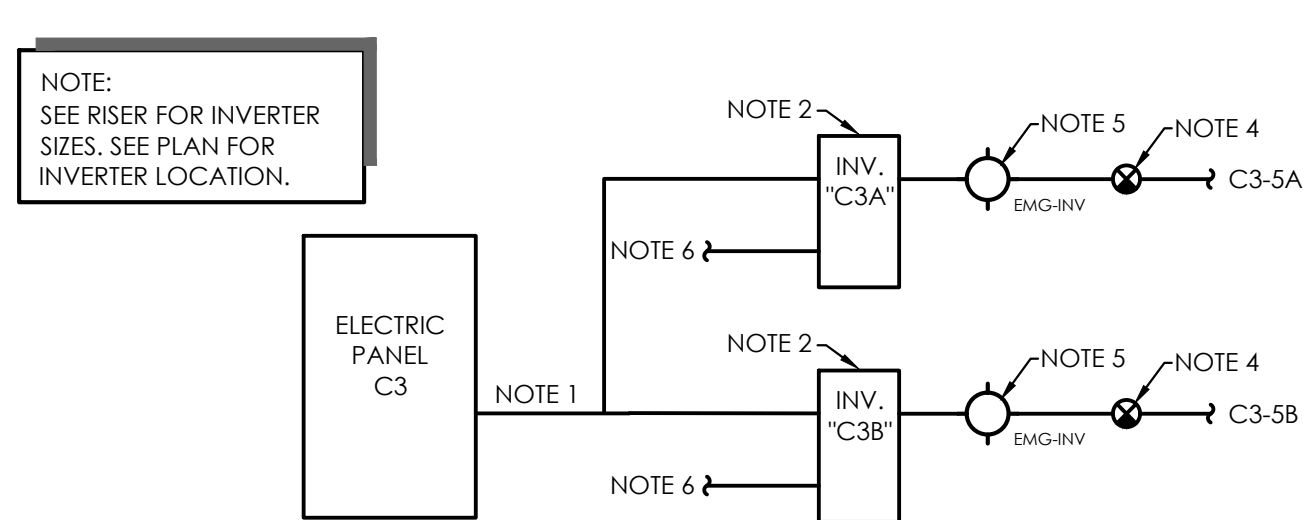


- NOTE:
1. BUILDING PHOTOCELL ON NORTH SIDE OF BUILDING. (2) EMERGENCY CIRCUITS MAY NOT SHARE SINGLE PHOTOCELL.
 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.
 6. NON-EMERGENCY FIXTURES.

9 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE

RESIDENTIAL BUILDING

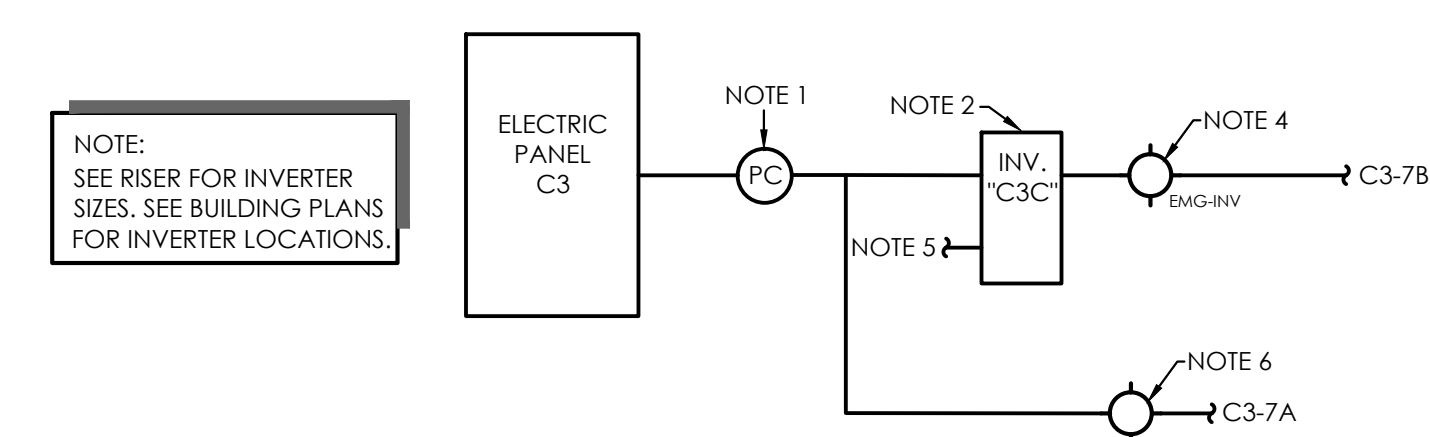


- NOTE:
1. AREA LIGHTING CIRCUIT.
 2. EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP. SEE RISER FOR SPEC.
 3. NOT USED.
 4. EXIT SIGNS WIRED TO INVERTER.
 5. AREA NIGHT LIGHT(S) TO BE USED AS EMERGENCY LIGHT.
 6. HOT LEG TO INVERTER FOR MONITORING.

8 EMERGENCY LIGHTING INVERTER DETAIL

NO SCALE

RESIDENTIAL BUILDING

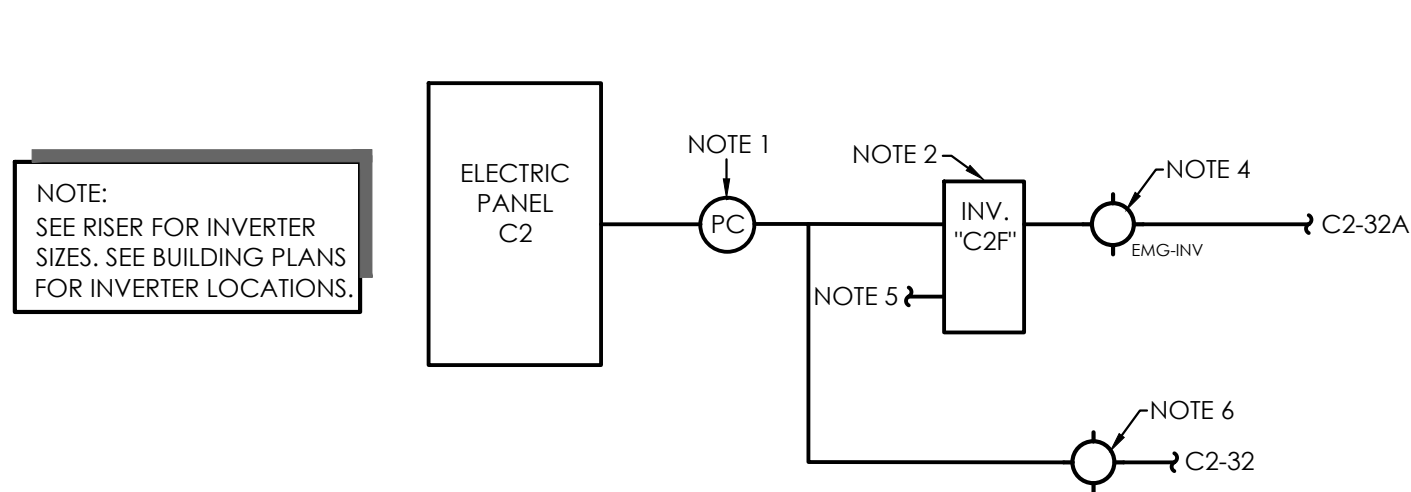


- NOTE:
1. BUILDING PHOTOCELL ON NORTH SIDE OF BUILDING. (2) EMERGENCY CIRCUITS MAY NOT SHARE SINGLE PHOTOCELL.
 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.
 6. NON-EMERGENCY FIXTURES.

6 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE

SITE LIGHTING

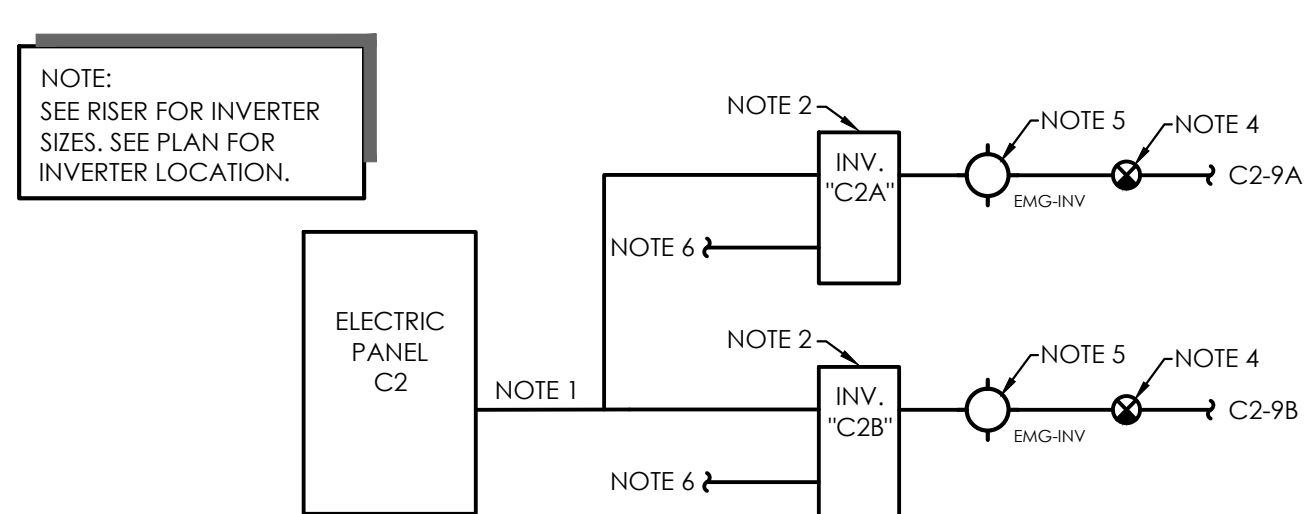


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 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.
 6. NON-EMERGENCY FIXTURES.

6 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE

DINING BUILDING

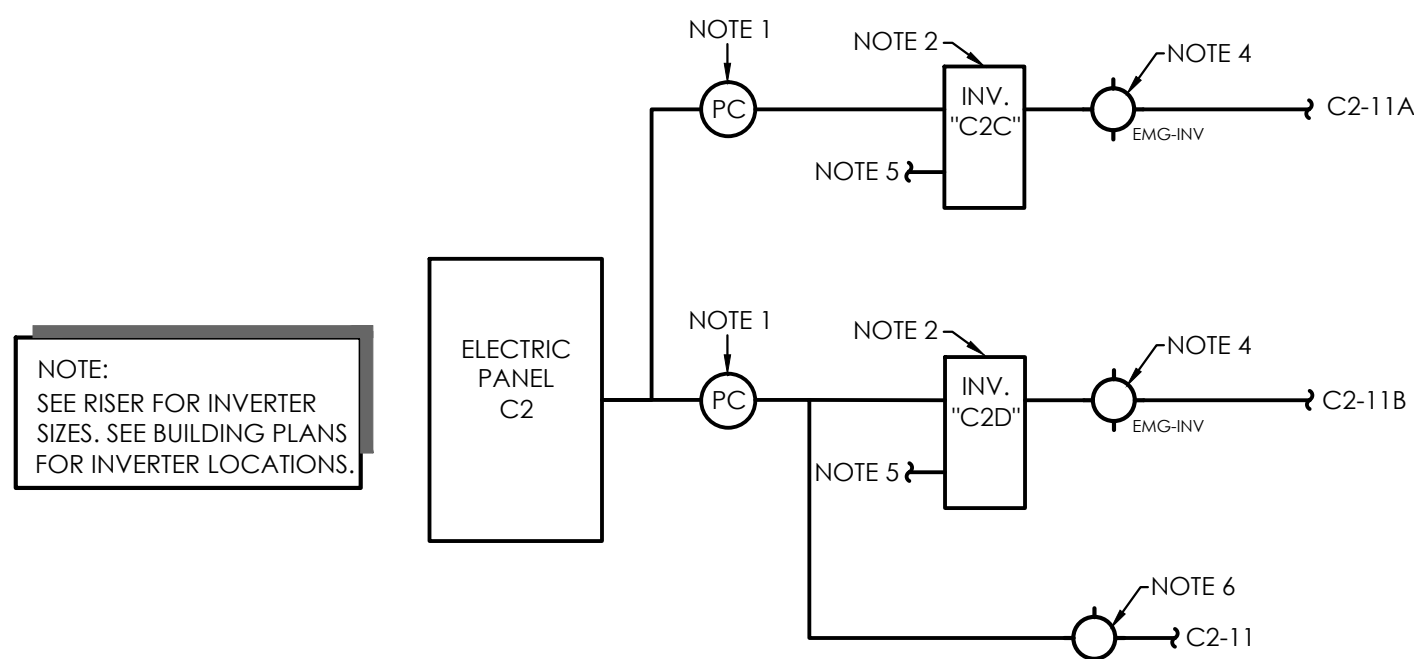


- NOTE:
1. AREA LIGHTING CIRCUIT.
 2. EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP. SEE RISER FOR SPEC.
 3. NOT USED.
 4. EXIT SIGNS WIRED TO INVERTER.
 5. AREA NIGHT LIGHT(S) TO BE USED AS EMERGENCY LIGHT.
 6. HOT LEG TO INVERTER FOR MONITORING.

5 EMERGENCY LIGHTING INVERTER DETAIL

NO SCALE

DINING BUILDING

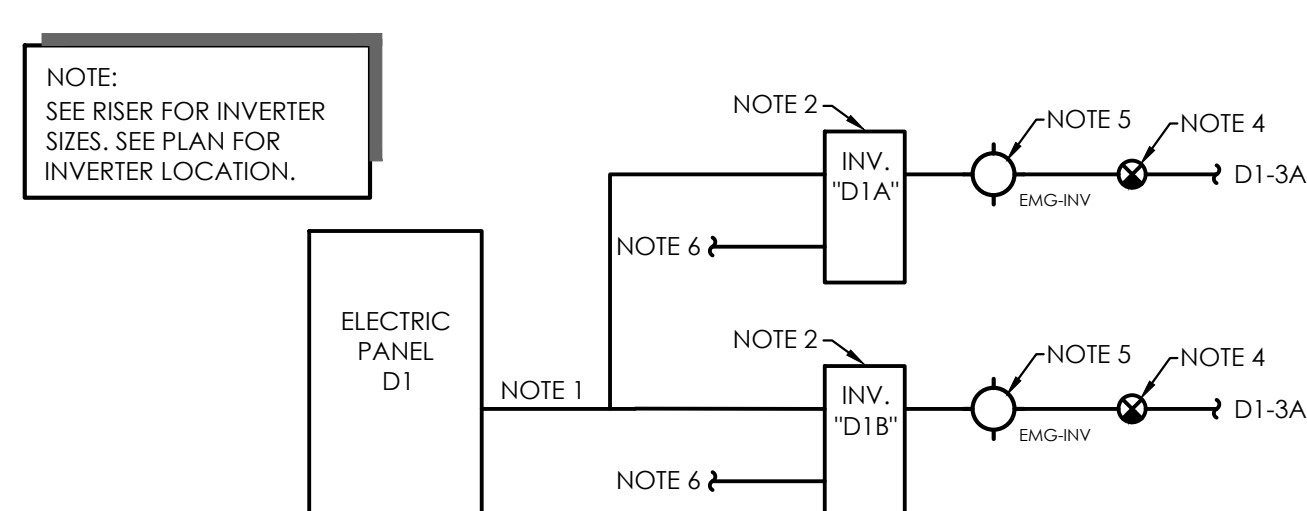


- NOTE:
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 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.

4 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE

ADMIN BUILDING

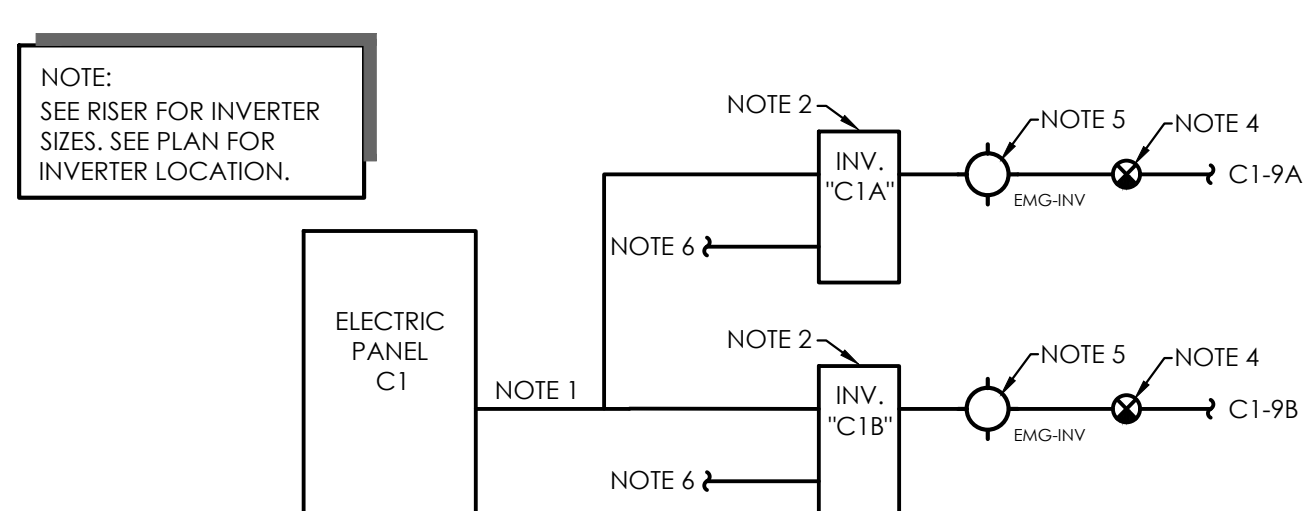


- NOTE:
1. AREA LIGHTING CIRCUIT.
 2. EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP. SEE RISER FOR SPEC.
 3. NOT USED.
 4. EXIT SIGNS WIRED TO INVERTER.
 5. AREA NIGHT LIGHT(S) TO BE USED AS EMERGENCY LIGHT.
 6. HOT LEG TO INVERTER FOR MONITORING.

3 EMERGENCY LIGHTING INVERTER DETAIL

NO SCALE

ADMIN BUILDING

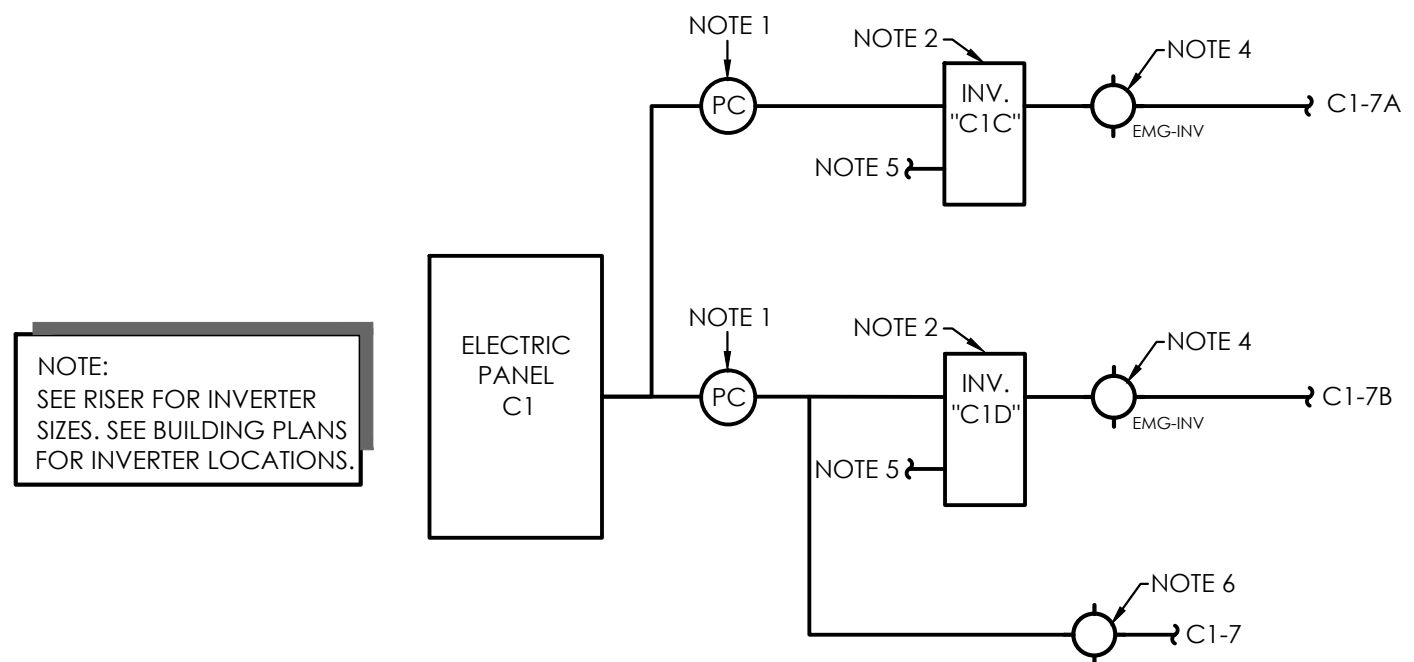


- NOTE:
1. AREA LIGHTING CIRCUIT.
 2. EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP. SEE RISER FOR SPEC.
 3. NOT USED.
 4. EXIT SIGNS WIRED TO INVERTER.
 5. AREA NIGHT LIGHT(S) TO BE USED AS EMERGENCY LIGHT.
 6. HOT LEG TO INVERTER FOR MONITORING.

2 EMERGENCY LIGHTING INVERTER DETAIL

NO SCALE

ADMIN BUILDING



- NOTE:
1. BUILDING PHOTOCELL ON NORTH SIDE OF BUILDING. (2) EMERGENCY CIRCUITS MAY NOT SHARE SINGLE PHOTOCELL.
 2. PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 3. EXIT SIGNS.
 4. EMERGENCY FIXTURES.
 5. HOT LEG TO INVERTER FOR MONITORING.
 6. NON-EMERGENCY FIXTURES.

1 EMERGENCY LIGHTING INVERTER & PHOTOCELL DETAIL

NO SCALE



Client

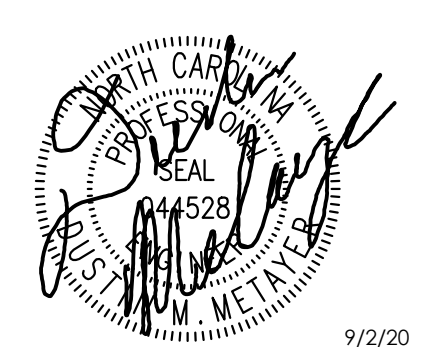


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NORTH CAROLINA**

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SITE PLAN

Professional Seals



No. Description Date

CONSTRUCTION DOCUMENT SET 08/25/20

Sheet Title

**ELECTRICAL
DETAILS**

Sheet Number

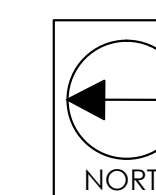
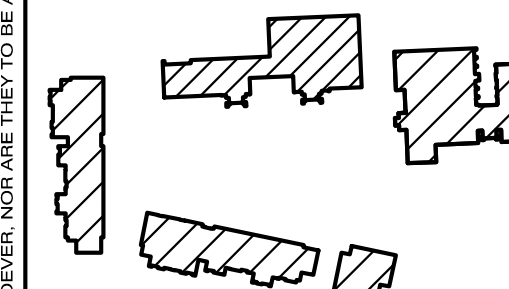
E003



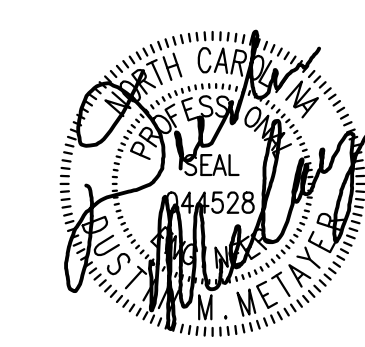
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seals



9/2/20

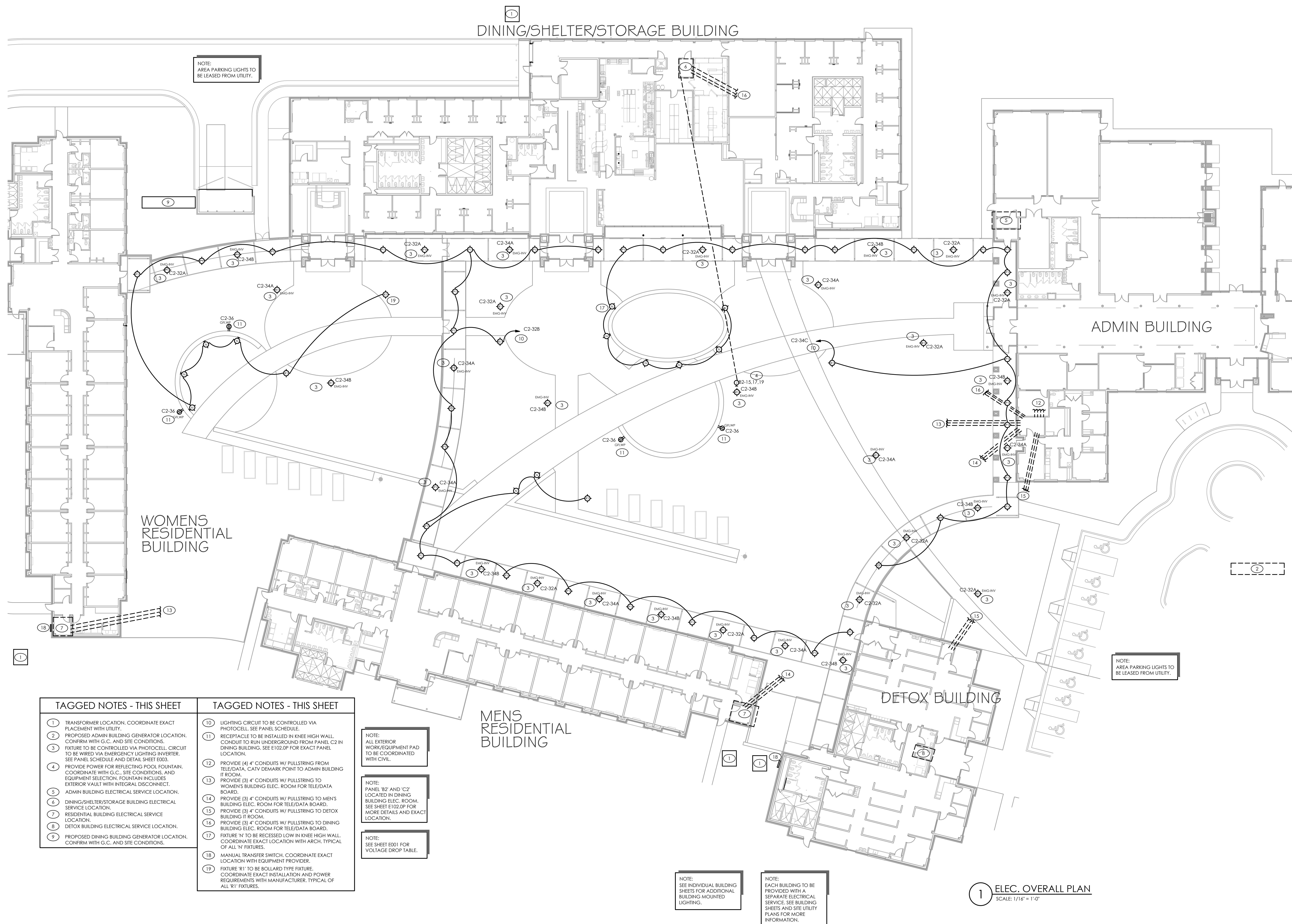
No.	Description	Date
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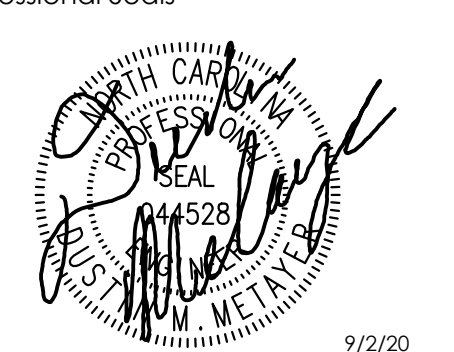
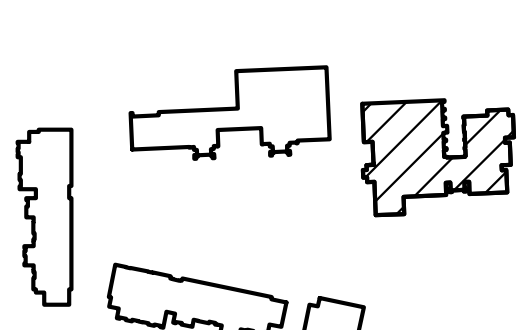
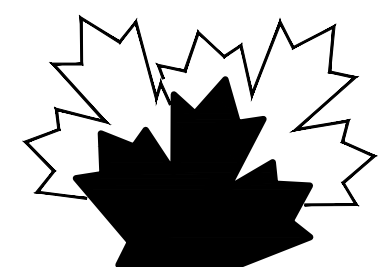
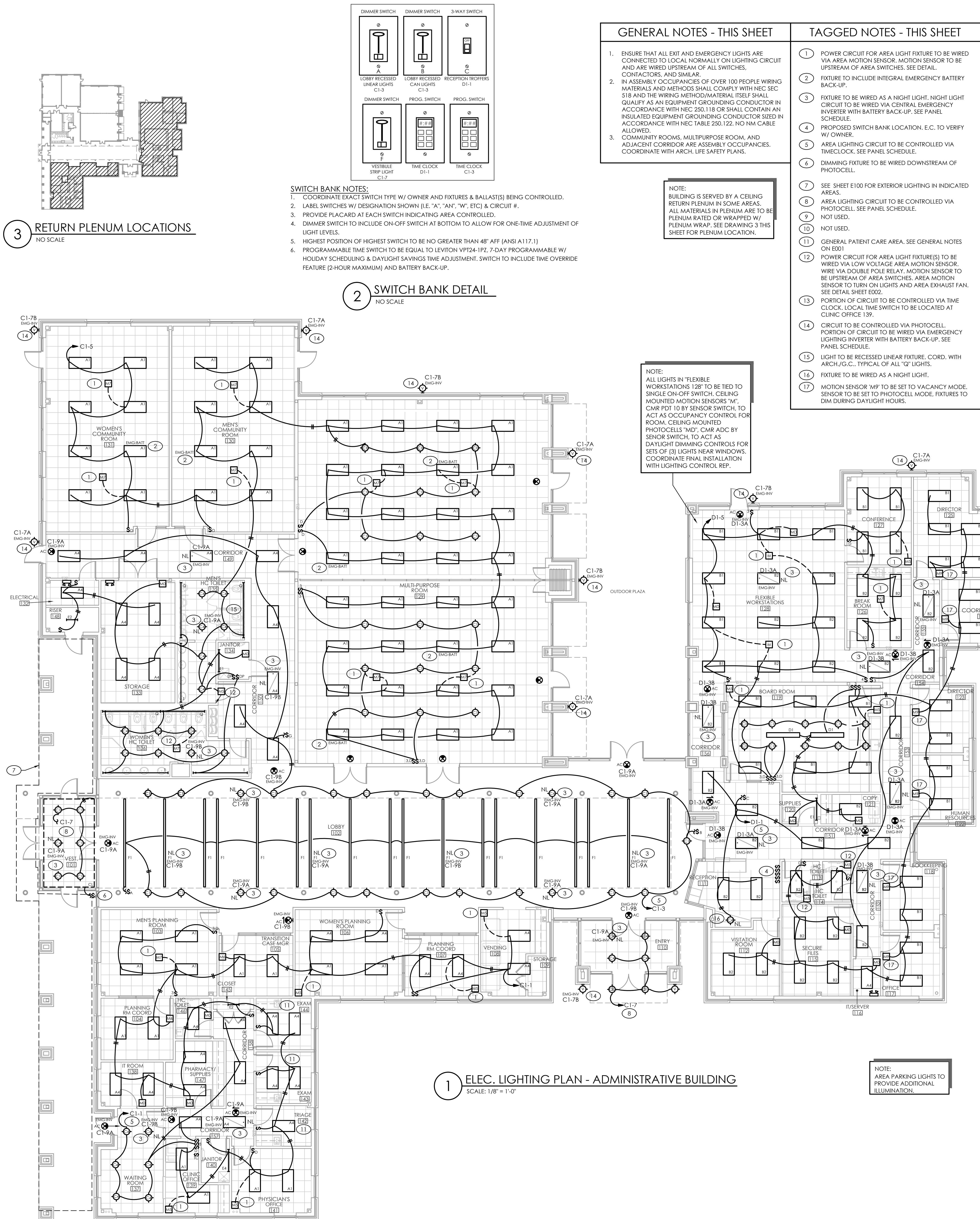
CONSTRUCTION DOCUMENT SET 08/25

Sheet Title

ELECTRICAL
SITE LIGHTING
AND POWER
PLAN

Sheet Number
E100







MAPLE
ENGINEERING, PLLC

708 ST. HARYS ST.
RALEIGH, NC 27605 - LIC.#: P-0990
P-913-341-4247 P-919-890-3797
PLUMBING MECHANICAL ELECTRICAL

Client

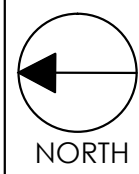
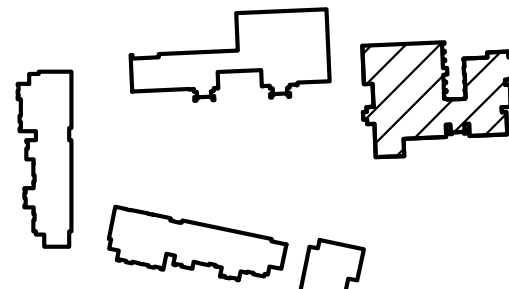
THE HEALING PLACE OF
NEW HANOVER COUNTY
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA



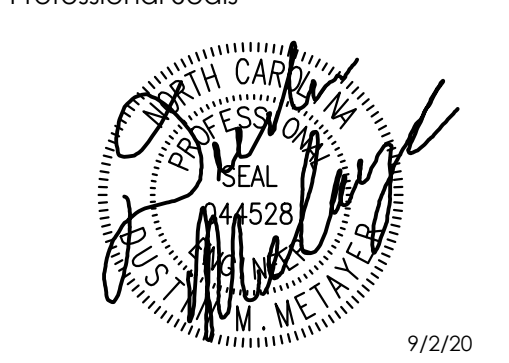
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seal



No. Description Date

CONSTRUCTION DOCUMENT SET 08/25/20

Sheet Title

ADMIN
BUILDING
MECHANICAL
EQUIPMENT
CONNECTIONS
PLAN

Sheet Number

E101.0M

NOTE:
BUILDING IS SERVED BY A CEILING
RETURN PLENUM IN SOME AREAS.
ALL MATERIALS IN PLENUM ARE TO BE
PLENUM RATED OR WRAPPED W/
PLENUM WRAP. SEE DRAWING 2 THIS
SHEET FOR PLENUM LOCATION.

GENERAL NOTES - THIS SHEET

1. FINAL CONNECTION TO ALL EQUIPMENT/FURNITURE BY E.C..
2. SEE SHEET E101.0P FOR ADDITIONAL POWER IN BUILDING.
3. IN ASSEMBLY OCCUPANCIES OF OVER 100 PEOPLE WIRING MATERIALS AND METHODS SHALL COMPLY WITH NEC SEC 518 AND THE WIRING METHOD/MATERIAL ITSELF SHALL QUALIFY AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.118 OR SHALL CONTAIN AN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122. NO NM CABLE ALLOWED.
4. COMMUNITY ROOMS, MULTIPURPOSE ROOM, AND ADJACENT CORRIDOR ARE ASSEMBLY OCCUPANCIES. COORDINATE WITH ARCH. LIFE SAFETY PLANS.

TAGGED NOTES - THIS SHEET

- 1 PROVIDE WEATHERPROOF, GFCI RECEPTACLE ON ROOF. ENSURE WITHIN 25' AND LINE OF SIGHT OF ALL SURROUNDING ROOFTOP EQUIPMENT
- 2 PROVIDE POWER FOR EXHAUST FAN ON ROOF. FAN TO OPERATE WHEN LIGHTS ARE ON IN MEN'S 135 OR WOMEN'S 136.
- 3 PROVIDE POWER FOR DAMPER ABOVE CEILING. COORDINATE WITH M.C., 120V BY E.C., LOW VOLTAGE TRANSFORMER AND FINAL CONNECTIONS BY M.C..
- 4 PROVIDE POWER FOR EXHAUST FAN ON ROOF. FAN TO OPERATE WHEN LIGHTS ARE ON IN HC TOILET 113 OR HC TOILET 114.
- 5 AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT. E.C. TO INSTALL HIGH VOLTAGE WIRING. PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
- 6 E.C. TO PROVIDE POWER ADJACENT TO AIR HANDLERS FOR CONDENSATE PUMP. COORDINATE EXACT LOCATION WITH M.C..

2 RETURN PLENUM LOCATIONS

NO SCALE

1 ELEC. POWER PLAN - ADMINISTRATIVE BUILDING

SCALE: 1/8" = 1'-0"

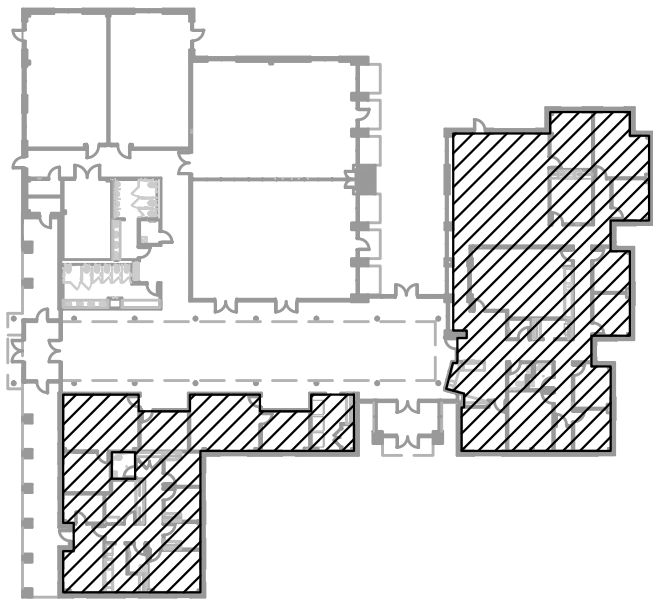
GENERAL NOTES - THIS SHEET

- SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
- FINAL CONNECTION TO ALL EQUIPMENT/FURNITURE BY E.C..
- SEE SHEET E101.0M FOR ADDITIONAL MECHANICAL EQUIPMENT ELECTRICAL WORK IN BUILDING AND ALL ROOF POWER.
- IN ASSEMBLY OCCUPANCIES OF OVER 100 PEOPLE WIRING MATERIALS AND METHODS SHALL COMPLY WITH NEC SEC 518 AND THE WIRING METHOD/MATERIAL ITSELF SHALL QUALIFY AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.118 OR SHALL CONTAIN AN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122. NO NM CABLE ALLOWED.
- COMMUNITY ROOMS, MULTIPURPOSE ROOM, AND ADJACENT CORRIDOR ARE ASSEMBLY OCCUPANCIES. COORDINATE WITH ARCH. LIFE SAFETY PLANS.
- ALL OFFICE AND IT WIRING TO BE COORDINATED WITH STRUCTURED CABLING GUIDELINES, ARCHITECT AND ADDITIONAL LOW VOLTAGE CONTRACTOR.
- COORDINATE FURNITURE AND FINAL POWER LOCATIONS WITH ARCH..

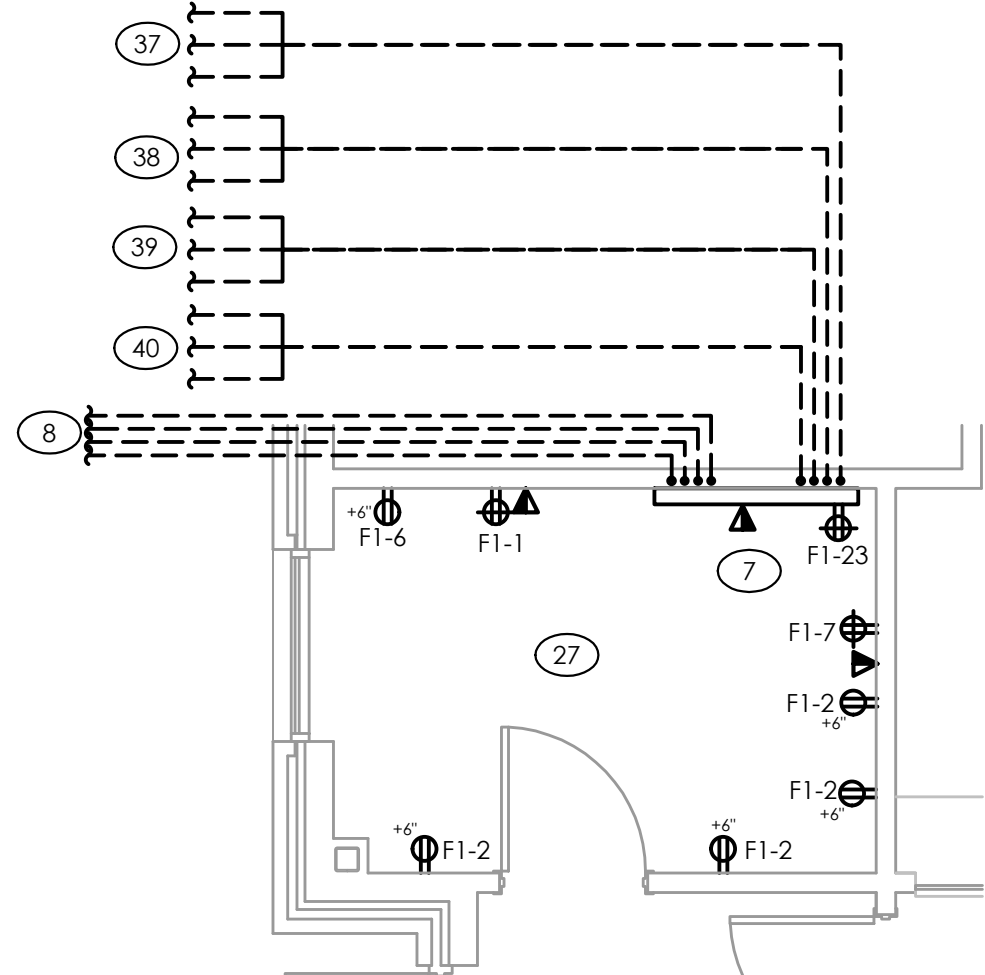
TAGGED NOTES - THIS SHEET

- ELECTRICAL PANEL(S). SEE RISER.
- GENERAL PATIENT CARE AREA. SEE GENERAL WIRING NOTES ON EDD1
- PROVIDE POWER FOR HOT BOX HEAT TAPE. COORDINATE WITH CIVIL DRAWINGS.
- COORDINATE POWER CONNECTION AND LOCATION WITH FURNITURE PROVIDER
- PROVIDE FLOOR BOX FOR POWER AND DATA. ROUTE CONDUIT BELOW FLOOR. COORDINATE BOX LOCATION WITH ARCHITECT AND G.C..
- PROVIDE MOTOR RATED SWITCH FOR PROJECTOR SCREEN. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT PROVIDER.
- PROVIDE 8x8", 3/4" THICK FIRE RATED PLYWOOD FOR TELE/DATA BOARD. PROVIDE BONDING BUSBAR TO BOND ALL TELE/DATA EQUIPMENT. ALL BONDING CABLE SHALL BE A MINIMUM OF #6 AWG CU.
- PROVIDE (4) 4" CONDUITS W/ PULL STRING TO TELE/DATA & CATV DEMARK POINTS. COORDINATE W/ G.C. AND OWNER.
- AUTOMATIC TRANSFER SWITCH AND SERVICE DISCONNECT. SEE RISER. MAINTAIN ALL WORKING CLEARANCES.
- PROVIDE POWER FOR 4G DIALER.
- PROVIDE POWER FOR FIRE ALARM CONTROL PANEL.
- (4) STACKED EMERGENCY LIGHTING INVERTER/ BATTERY BACK-UP HIGH IN STORAGE 133. SEE LIGHTING PLAN, PANEL SCHEDULES, AND RISER FOR MORE INFORMATION.
- PROVIDE POWER FOR WATER HEATER. COORDINATE WITH P.C..
- PROVIDE POWER FOR UNDER SINK WATER HEATER. PROVIDE LOCKABLE BREAKER AT PANEL. SEE PANEL SCHEDULES.
- PROVIDE POWER FOR ABOVE CEILING POWER PROJECTOR SCREEN.
- CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
- PROVIDE JUNCTION BOX FOR HDMI ROUTING. COORDINATE ROUTING AND EXACT REQUIREMENTS WITH ARCH/G.C..
- PROVIDE RECESSED LOW VOLTAGE MEDIA PLATE EQUIVALENT TO MONOPRICE RECESSED LOW VOLTAGE MEDIA WALL PLATE W/ DUPLEX RECEPTACLE IN WHITE. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ARCH/G.C..
- PROVIDE POWER FOR CEILING MOUNTED PROJECTOR. COORDINATE EXACT LOCATION WITH ARCH/G.C..
- PROVIDED FLOOR RECEPTACLE AND DATA FOR MOVABLE POWERED PODIUM. FLOOR BOX TO BE LOCATED 15' PLAN NORTH OF ROOM CENTERLINE. COORDINATE EXACT HORIZONTAL LOCATION WITH ARCH/G.C.. COORDINATE CONDUIT ROUTING WITH G.C..
- PROVIDE DEDICATED POWER AND DATA FOR COPIER. COORDINATE EXACT ELECTRICAL SPECS W/ OWNER.
- COORDINATE FINAL BREAK ROOM EQUIPMENT W/ OWNER.
- DOOR TO SWING OUT AND BE EQUIPPED WITH PANIC HARDWARE.
- (2) EMERGENCY LIGHTING INVERTER/BATTERY BACK-UP HIGH IN SPACE. SEE LIGHTING PLAN, PANEL SCHEDULES, AND RISER FOR MORE INFORMATION. ROUTE CONDUIT BELOW FLOOR AS SHOWN.
- PROVIDE RECEPTACLE AND DEDICATED CIRCUIT FOR VENDING MACHINE. COORDINATE WITH EQUIPMENT SUPPLIER.
- COORDINATE EXACT POWER REQUIREMENTS IN IT ROOM WITH OWNER AND IT EQUIPMENT PROVIDER.
- PROVIDE POWER FOR WATER CLOSET AUTO FLUSH. COORDINATE LOCATION AND REQUIREMENTS W/ P.C..
- PROVIDE POWER FOR URINAL AUTO FLUSH. COORDINATE LOCATION AND REQUIREMENTS W/ P.C..
- SEE SITE PLAN FOR GENERATOR LOCATION. COORDINATE EXACT LOCATION WITH G.C., CIVIL AND UTILITY.
- PROVIDE 120V CIRCUIT AT GENERATOR FOR BATTERY CHARGER. COORDINATE WITH GENERATOR SUPPLIER. NOT USED.
- WALL MOUNTED GENERATOR TAP BOX. SEE RISER.
- PROVIDE GFI RECEPTACLE BELOW SINK FOR DISHWASHER.
- SEE ENLARGEMENT FOR WORK IN THIS AREA.
- PROVIDE RECEPTACLE FOR LAVATORY POWER JUST BELOW SINK. COORDINATE W/ P.C..
- PROVIDE (3) 4" CONDUITS W/ PULL STRING TO MEN'S RESIDENTIAL IT CLOSET. COORDINATE W/ G.C. AND OWNER. SEE SITE PLAN.
- PROVIDE (3) 4" CONDUITS W/ PULL STRING TO WOMEN'S RESIDENTIAL IT CLOSET. COORDINATE W/ G.C. AND OWNER. SEE SITE PLAN.
- PROVIDE (3) 4" CONDUITS W/ PULL STRING TO DETOX BUILDING IT CLOSET. COORDINATE W/ G.C. AND OWNER. SEE SITE PLAN.
- PROVIDE (3) 4" CONDUITS W/ PULL STRING TO DINING/SHOWER BUILDING IT CLOSET. COORDINATE W/ G.C. AND OWNER. SEE SITE PLAN.
- COORDINATE POWER AND DATA WITH FURNITURE SUPPLIER AND ARCHITECT.
- PROVIDE EMPTY CONDUIT WITH PULL STRING TO TV FOR HDMI CABLE. COORDINATE EXACT LOCATION AND TERMINATION POINT WITH OWNER AND ARCH.
- PROVIDE WHIP FOR DATA AND POWER. COORDINATE CONDUIT ROUTING AND REQUIREMENTS WITH G.C. AND OWNER. COORDINATE POWER TO OFFICE FURNITURE WITH SUPPLIER. (1) CIRCUIT TO FEED NO MORE THAN (3) WORKSTATIONS.

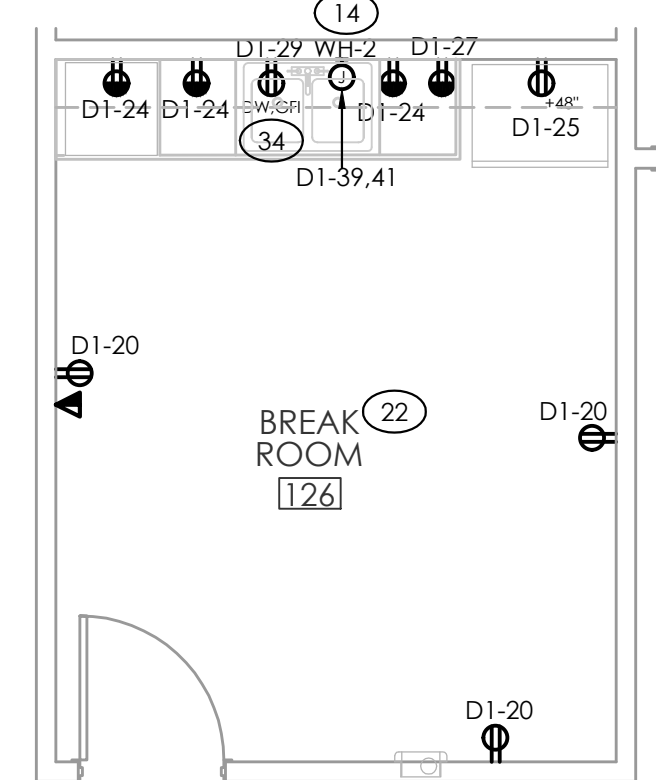
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PLENUM WRAP. SEE DRAWING 4 THIS
SHEET FOR PLENUM LOCATION.



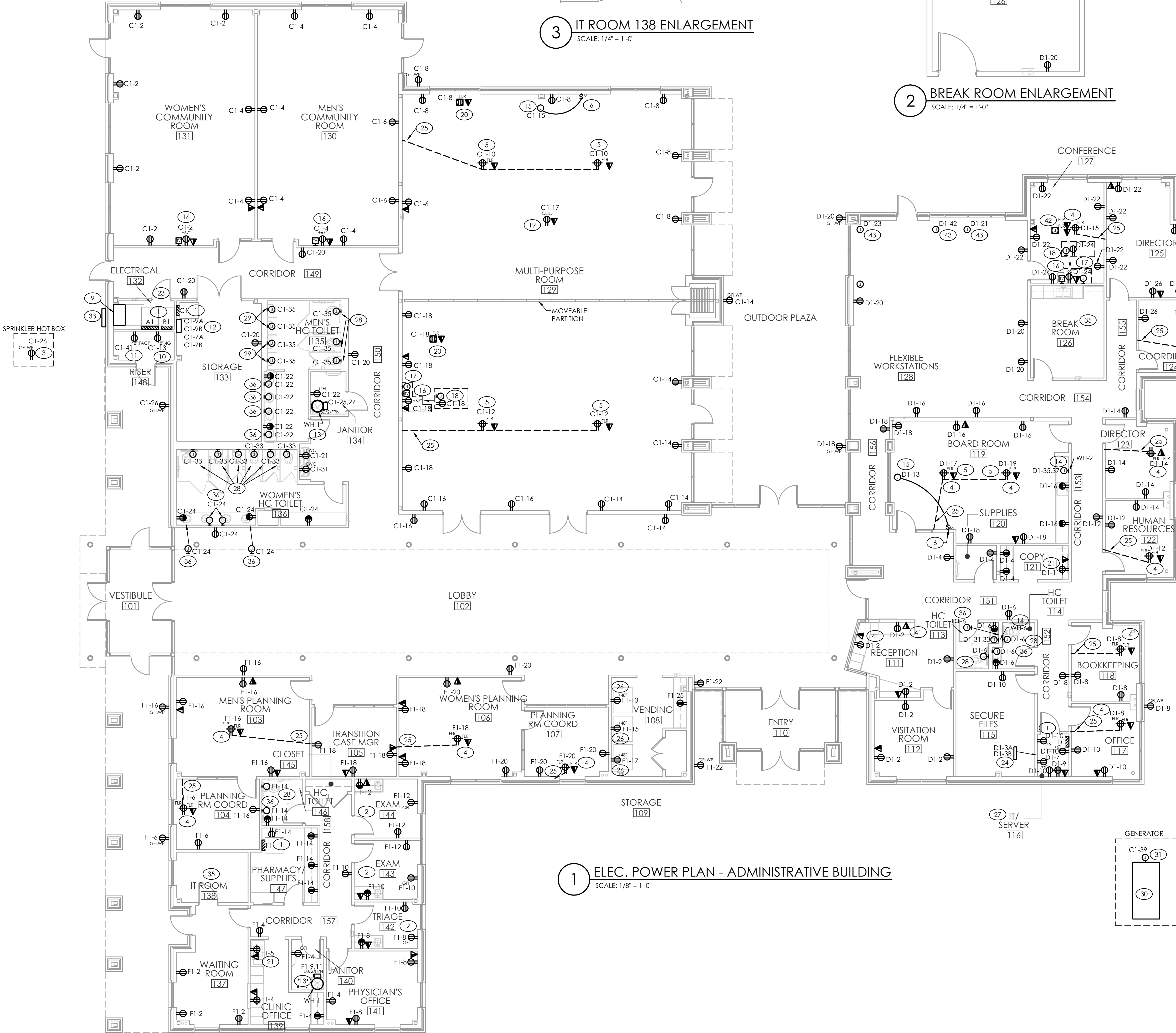
4 RETURN PLENUM LOCATIONS
NO SCALE



3 IT ROOM 138 ENLARGEMENT
SCALE: 1/4" = 1'-0"



2 BREAK ROOM ENLARGEMENT
SCALE: 1/4" = 1'-0"



1 ELEC. POWER PLAN - ADMINISTRATIVE BUILDING
SCALE: 1/8" = 1'-0"



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ENGINEERING, PLLC

708 ST. HARYS ST.
RALEIGH, NC 27605 LIC.#: P-0990
P-919-341-4247 P-919-890-3797
PLUMBING MECHANICAL ELECTRICAL

Project
THE HEALING PLACE OF
NEW HANOVER COUNTY
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

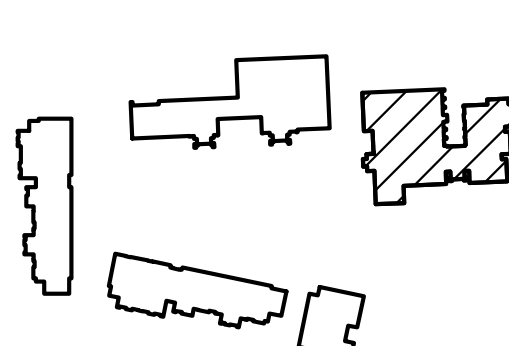
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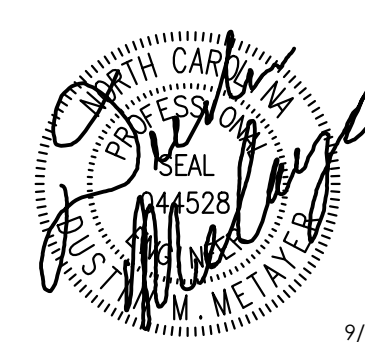
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seals



No. Description Date

CONSTRUCTION DOCUMENT SET 08/25/20

Sheet Title

ELECTRICAL
ADMIN
BUILDING
POWER
PLAN

Sheet Number

E101.0P

GENERAL NOTES - THIS SHEET

1. ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUITS AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.
2. ALL PROGRAM BED AREA WALLS ARE PARTIAL HEIGHT. SEE ARCHITECTURE PLANS.

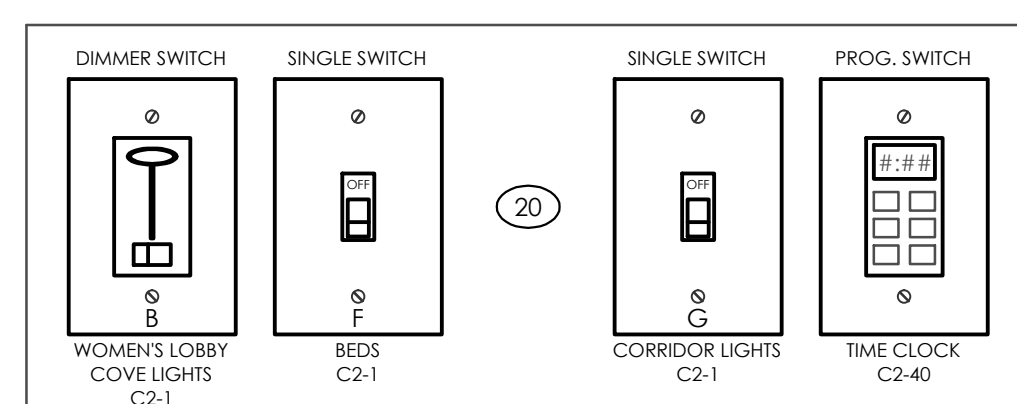
FIRE RATING LEGEND

 1-HR WALL
 1-HR WALL/
SMOKE WALL
 SMOKE
PARTITION

TAGGED NOTES - THIS SHEET

- 1 POWER CIRCUIT FOR AREA LIGHT FIXTURE TO BE WIRED VIA AREA MOTION SENSOR. MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. SEE DETAIL.
- 2 FIXTURE TO BE WIRED AS A NIGHT LIGHT. NIGHT LIGHT CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
- 3 FIXTURE TO INCLUDE INTEGRAL EMERGENCY BATTERY BACK-UP.
- 4 FIXTURE TO BE CONTROLLED VIA PHOTOCELL.
- 5 LIGHTING CIRCUIT TO BE WIRED VIA EMERGENCY INVERTER WITH BATTERY BACKUP. SEE PANEL SCHEDULE AND DETAIL.
- 6 NOT USED.
- 7 PROVIDE DAYLIGHTING SENSOR WITH AUTOMATIC DIMMING CONTROL. SENSOR TO CONTROL LIGHTS NEAR WINDOWS.
- 8 PROPOSED SWITCH BANK LOCATION (1 OF 2). E.G. TO VERIFY WJ OWNER.
- 9 LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. SEE PANEL SCHEDULE.
- 10 HOOD PROVIDED WITH INTEGRAL LIGHTING.
- 11 COORDINATE FIXTURE T' LOCATION AND INSTALLATION WITH OWNER AND FIXTURE SUPPLIER.
- 12 FIXTURE TO BE WIRED AS A NIGHT LIGHT.
- 13 PROPOSED SWITCH BANK LOCATION (2 OF 2). E.G. TO VERIFY WJ OWNER.
- 14 FIXTURE TO BE MOUNTED ABOVE EGGS CRATE LOUVERS IN BATHROOMS.
- 15 LIGHTING CIRCUIT TO BE CONTROLLED VIA TIME CLOCK. SEE PANEL SCHEDULE.
- 16 SWITCHES TO BE KEY LOCK TYPE SWITCH.
- 17 MOTION SENSOR TO BE SET TO 20 MINUTE TIMER.
- 18 LIGHT TO BE RECESSED LINEAL LIGHTING. CORD, WITH ARCH/G/C.C., TYPICAL OF ALL "Q" LIGHTS.
- 19 POWER CIRCUIT FOR AREA LIGHT FIXTURES TO BE WIRED VIA LOW VOLTAGE AREA MOTION SENSOR. WIRE VIA DOUBLE POLE EMT MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. AREA MOTION SENSOR TO TURN ON LIGHTS AND AREA EXHAUST FAN. SEE DETAIL SHEET 6000.
- 20 FIXTURE "C" IS COVE LIGHT. CORD, INSTALL WITH ARCH/G/C.C., TYPICAL OF ALL "C" FIXTURES.
- 21 PROPOSED SWITCH BANK LOCATION IS IN RATED WALL BOXES FOR AREA DEVICES TO BE NO LARGER THAN 12 INCH (TWO-GANG BOX). ENSURE THERE ARE NO MORE THAN 100 SQIN OF BOXES IN ANY 100 SQFT AREA.
- 22 PROGRAM BEDS ON OPPOSITE SIDE OF ROOM. ALL PROGRAM BEDS ON A SINGLE SWITCH. NOT USED.
- 23 NIGHT LIGHT FIXTURE TO BE WIRED VIA TIME CLOCK TO TURN ON NIGHT LIGHTS FROM SUNSET TO SUNRISE. COORDINATE EXACT SCHEDULE WITH BUILDING OWNER. LIGHTS TO BE OFF DURING THE DAYTIME.
- 24 PROGRAMMABLE TIME SWITCH TO BE WIRED TO LIGHTING CONTACTOR. SEE DETAIL. SWITCH TO BE AULUS LEVITON VENDOR. PROGRAMMABLE W/ HOLIDAY SCHEDULING & DAYLIGHT SAVINGS TIME ADJUSTMENT. SWITCH TO BE AULUS LEVITON VENDOR. 2-HOUR MAXIMUM AND BATTERY BACK-UP.

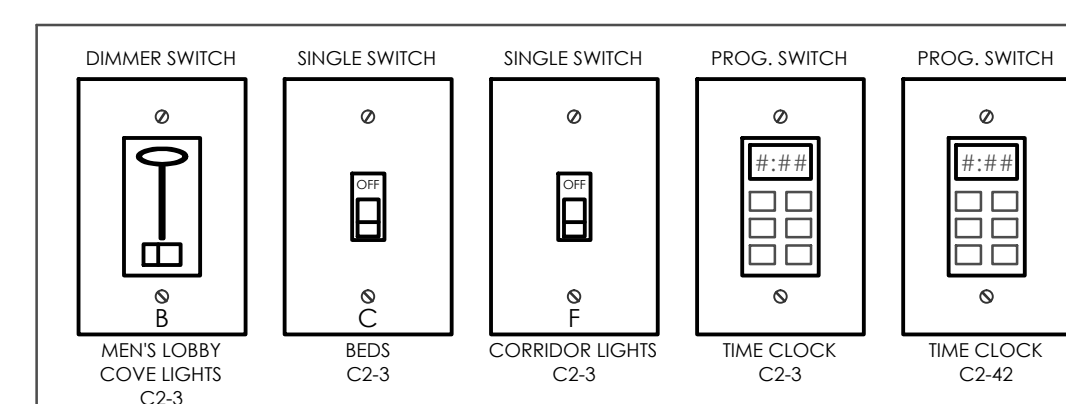
NOTE:
"W" FIXTURES ARE TO BE
RECESSED MOUNTED IN
PARTIAL HEIGHT WALLS.
COORDINATE LOCATION
AND ROUTING WITH
OWNER AND G.C..



SWITCH BANK NOTES:

1. COORDINATE EXACT SWITCH TYPE W/ OWNER AND FIXTURES & BALLAST(S) BEING CONTROLLED.
2. LABEL SWITCHES W/ DESIGNATION SHOWN (I.E. "A", "AN", "W", ETC) & CIRCUIT #.
3. PROVIDE PLACARD AT EACH SWITCH INDICATING AREA AND CIRCUIT.
4. DIMMER SWITCH TO INCLUDE ON-OFF SWITCH AT BOTTOM TO ALLOW FOR ONE-TIME ADJUSTMENT OF LIGHT LEVELS.
5. HIGHEST POSITION OF HIGHEST SWITCH TO BE NO GREATER THAN 48" AFF (ANSI A117.1).
6. PROGRAMMABLE TIME SWITCH TO BE WIRED TO LIGHTING CONTACTOR. SEE DETAIL. SWITCH TO BE EQUAL TO LEVITON VPT24-1P2, 7-DAY PROGRAMMABLE W/ HOLIDAY SCHEDULING & DAYLIGHT SAVINGS TIME ADJUSTMENT. SWITCH TO INCLUDE TIME OVERRIDE FEATURE (2-HOUR MAXIMUM) AND BATTERY BACK-UP.

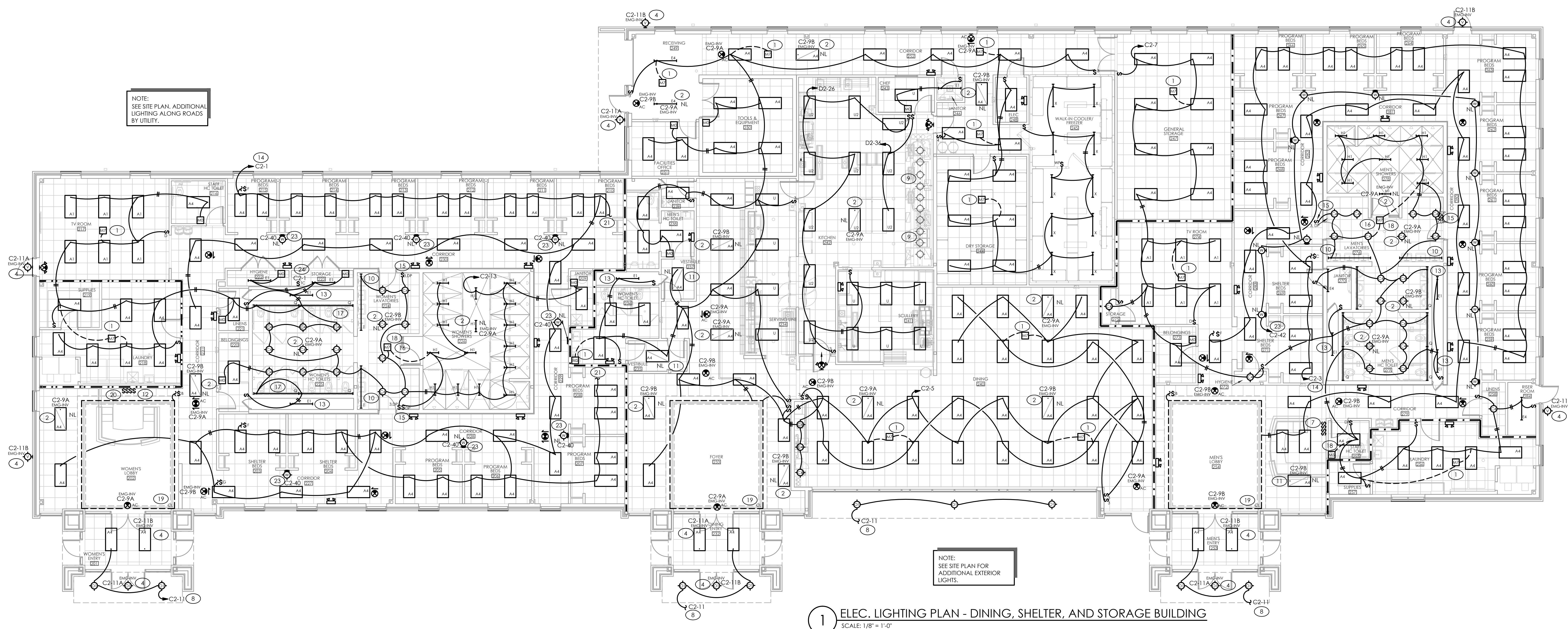
3 SWITCH BANK DETAIL (2 OF 2)
NO SCALE



SWITCH BANK NOTES:

2. COORDINATE EACH SWITCH TYPE W/ OWNER AND FIXTURES & BALLASTS) BEING CONTROLLED.
3. LABEL SWITCHES W/ DESIGNATION SHOWN (IE: "A", "ANT", "W", "ETC") & CIRCUIT #.
4. PROVIDE PLACARD AT EACH SWITCH INDICATING AREA CONTROLLED.
5. DIMMER SWITCH TO INCLUDE ON-OFF SWITCH AT BOTTOM TO ALLOW FOR ONE-TIME ADJUSTMENT OF LIGHT LEVELS.
6. HIGHEST POSITION OF HIGHEST SWITCH TO BE NO GREATER THAN 48" AFF [ANSI A17.1].
7. PROGRAMMABLE TIME SWITCH TO BE WIRED TO LIGHTING CONTRACTOR. SEE DETAIL SWITCH TO BE EQUAL TO LISTED VPT72-1P2. DETAIL PROGRAMMABLE HOLIDAY SCHEDULING, 5 DAYLIGHT SAVINGS TIME ADJUSTMENT, SWITCH TO INCLUDE TIME OVERRIDE FEATURE (2 HOUR MAXIMUM) AND BATTERY BACK-UP.

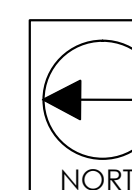
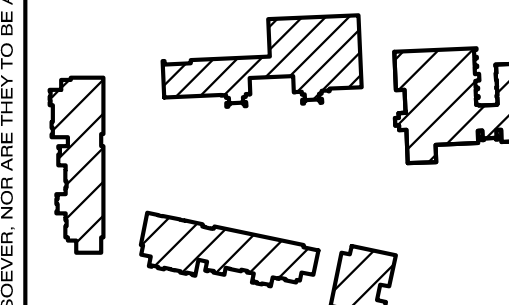
2 SWITCH BANK DETAIL (1 OF 2)
NO SCALE



1 ELEC. LIGHTING PLAN - DINING, SHELTER, AND STORAGE BUILDING
SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

SITE PLAN



Professional Seals



9/2/20

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Sheet Title

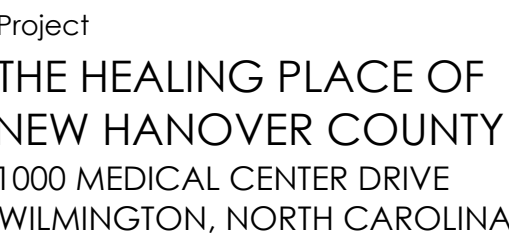
ELECTRICAL
DINING
BUILDING
LIGHTING
PLAN

Sheet Number

E102.0L

FIRE RATING LEGEND

— ■ — ■ —	1-HR WALL
— ■ ■ — ■ ■ —	1-HR WALL/ SMOKE WALL
— ■ ■ ■ ■ ■ —	SMOKE PARTITION



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SD-1801-E102.0P.DWG

FIRE RATING LEGEND	
---	1-HR WALL
- - -	1-HR WALL/ SMOKE WALL
- - - -	SMOKE PARTITION



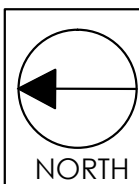
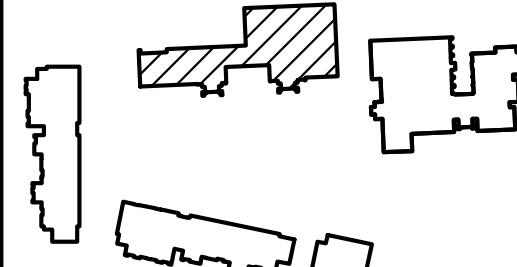
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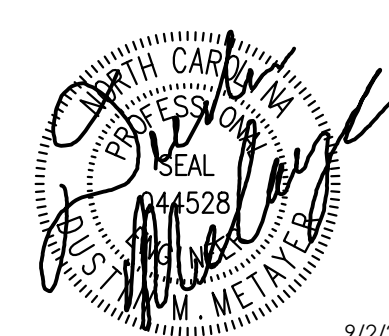
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NORTH CAROLINA**

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SITE PLAN



Professional Seals



No. Description Date

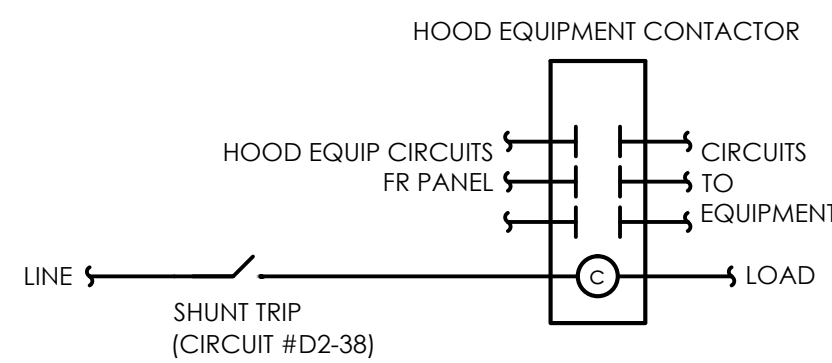
CONSTRUCTION DOCUMENT SET 08/25/20

Sheet Title

**ELECTRICAL
DINING
BUILDING
POWER
ENLARGEMENTS**

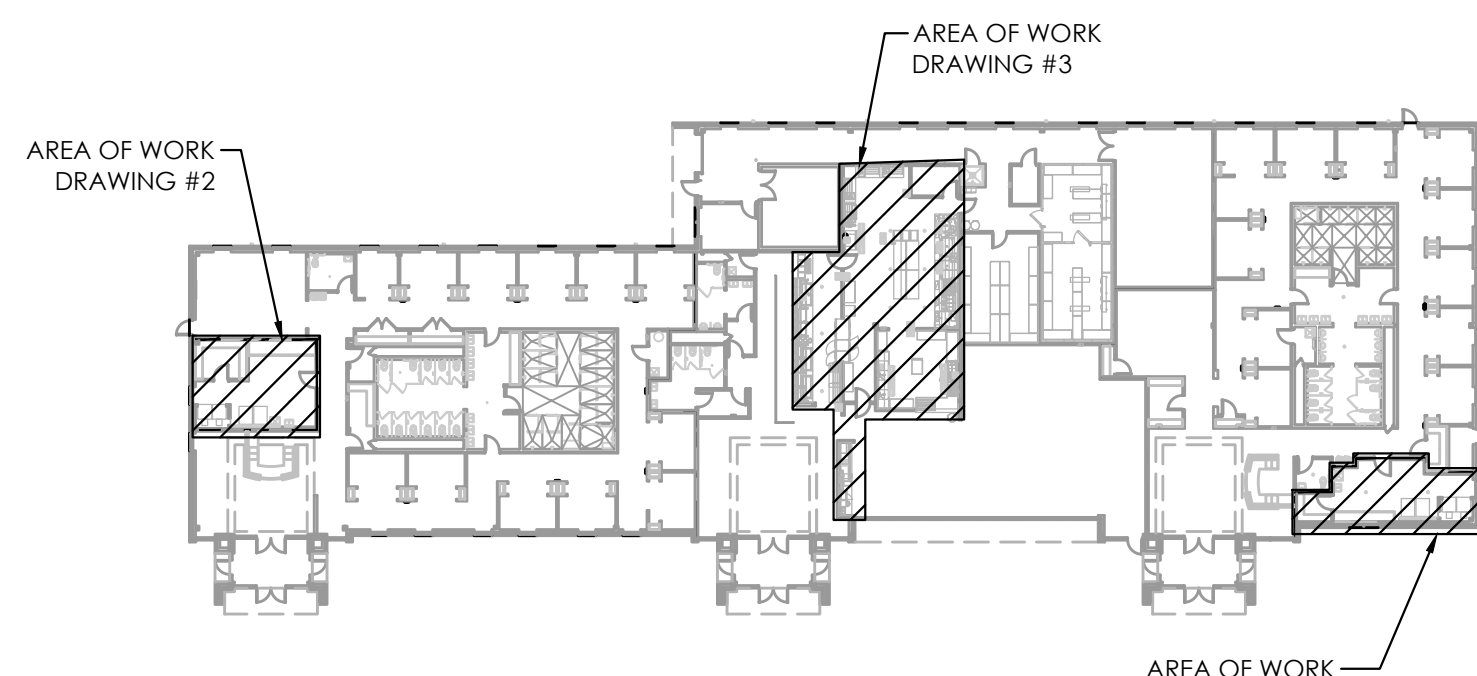
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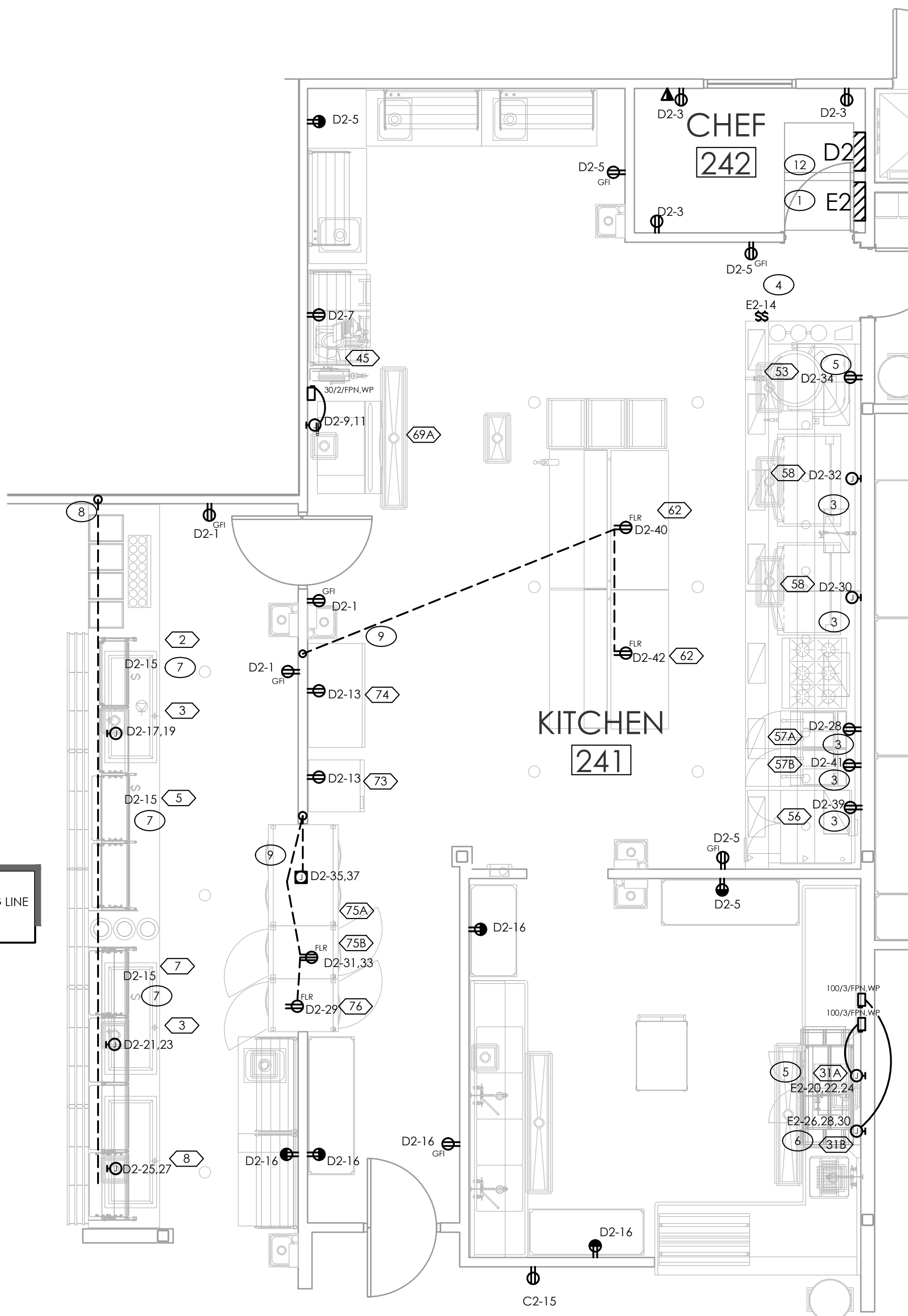


- NOTE:
- E.C. TO COORDINATE # OF CIRCUITS CONTROLLED AND NATURE OF LOADS W/ CONTACTOR MFG. PROVIDE MULTIPLE CONTACTORS AS REQUIRED.
 - LOCATE ALL CONTACTORS AT PANEL SERVED, CLEARLY LABEL.
 - CONTACTOR IS TO OPEN UPON ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM.

4 HOOD EQUIP. CONTACTOR DETAIL (HC)
NO SCALE



K KEY PLAN
NO SCALE



NOTE:
POWER FOR SERVING LINE
EQUIPMENT IS TO BE
BELOW COUNTER.

EQUIPMENT SCHEDULE					
ITEM #	DESCRIPTION	VOLT	PHASE	AMPS	DIR. CONN. PLUG
2	CAFETERIA, BUFFET SHIELD (WITH LIGHT)	120	1	0.6	X -
3	DROP-IN, HOT/COLD WELLS	208	1	19.2	X -
5	CAFETERIA, BUFFET SHIELD (WITH LIGHT)	120	1	0.6	X -
7	CAFETERIA, BUFFET SHIELD (WITH LIGHT)	120	1	0.6	X -
8	DROP-IN, HOT/COLD WELLS	208	1	19.2	X -
11	ICE MAKER/ DISPENSER	120	1	12.9	X -
13	DISPENSER, MILK	120	1	1.5	- X
14	ICED TEA BREWER	120	1	14.0	- X
15	COFFEE MAKER, INSULATED SERVER, AUTOMATIC	208	1	25.6	X -
17	FOOD WARMER, ELECTRIC	120	1	6.0	- X
18	TOASTER, CONVEYOR	208	1	13.4	- X
20	OVEN, MICROWAVE	120	1	13.4	- X
28	AIR CURTAIN, UNHEATED	208	1	33.0	X -
31A	WAREWASHER, RACK CONVEYER	208	3	78.0	X -
31B	WAREWASHER, RACK CONVEYER, BOOSTER	208	3	58.0	X -
45	SUCER, FOOD	120	1	2.8	- X
53	KETTLE, STEAM JACKETED, GAS, TILT	120	1	5.0	- X
56	OVEN, CONVECTION, GAS	115	1	6.0	- X
57A	FRYER, DEEP FAT, GAS WITH FILTER	115	1	6.1	- X
57B	FRYER, DEEP FAT, GAS WITH FILTER	115	1	6.1	- X
58	TILT SKILLET	120	1	10.0	X -
62	REFRIGERATOR, UNDERCOUNTER	120	1	8.5	- X
69A	ICE MAKER W/O BIN	208	1	14.2	X -
73	FREEZER, REACH-IN	120	1	7.2	- X
74	REFRIGERATOR, REACH-IN	120	1	5.8	- X
75A	CABINET, HEATED, PASS-THRU	208	1	14.4	X -
75B	CABINET, HEATED, PASS-THRU	208	1	7.2	- X
76	REFRIGERATOR, PASS-THRU	120	1	4.8	- X
81	FILTER, WATER	120	1	0.8	- X

NOTE:
E.C. TO VERIFY EXACT TYPE, QTY, LOCATION OF EQUIPMENT ELECTRICAL CONNECTIONS BEFORE BEGINNING WORK. E.C. TO ALSO VERIFY ACTUAL EQUIPMENT NAMEPLATE VALUES. FINAL CONNECTION TO EQUIPMENT BY E.C..

3 ELEC. POWER PLAN - KITCHEN ENLARGEMENT
SCALE: 1/4" = 1'-0"

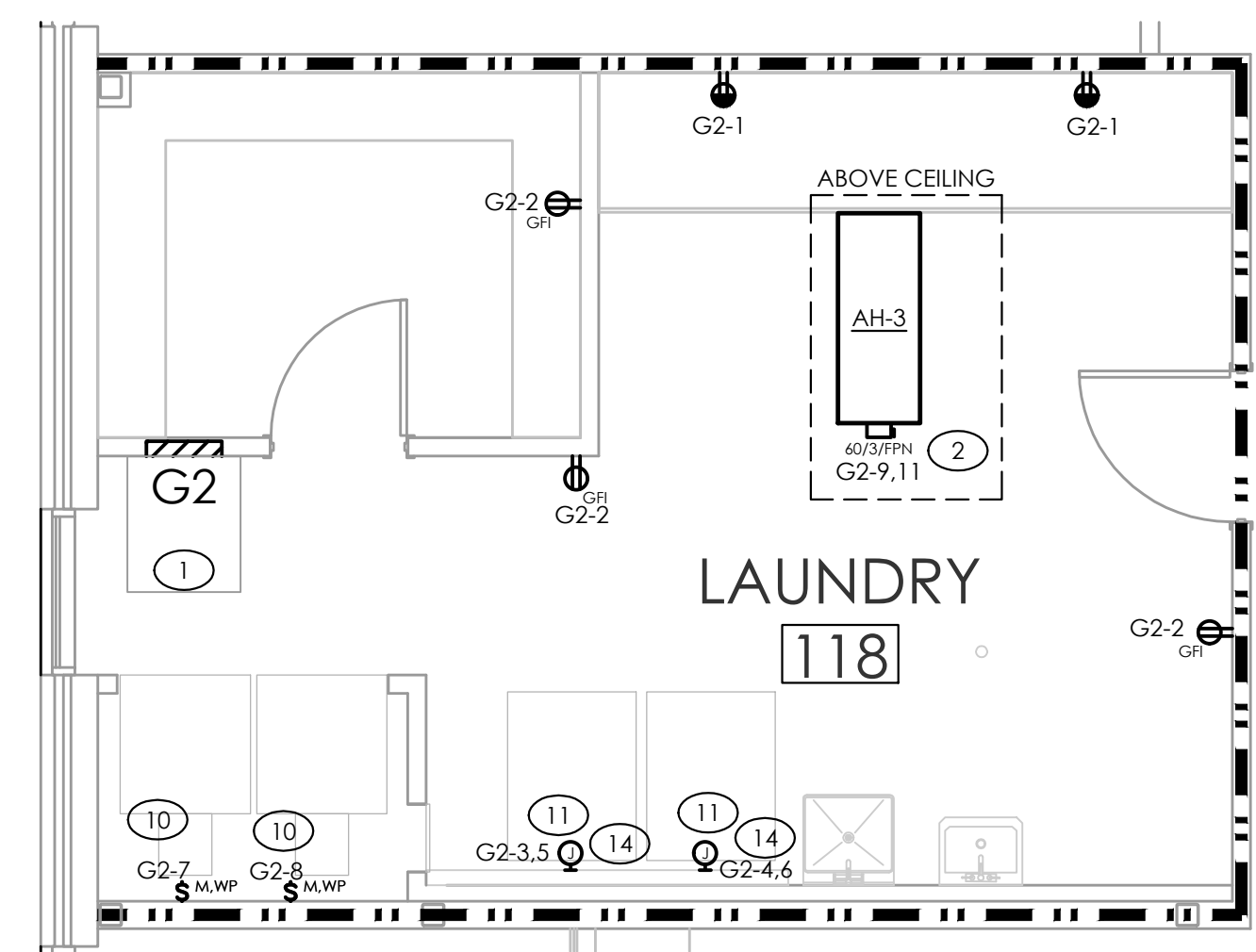
GENERAL NOTES - THIS SHEET

- SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
- E.C. TO COORDINATE EXACT LOCATION AND INSTALLATION OF ALL KITCHEN EQUIPMENT W/ OWNER.
- CONDUITS ENTERING WALK-IN FREEZER AND/OR COOLER ARE TO BE SEALED IN ACCORDANCE W/ NEC 300.7.
- FINAL CONNECTION TO ALL EQUIPMENT/FURNITURE BY E.C..
- SEE E102.0P FOR POWER REQUIREMENT IN REMAINDER OF BUILDING AND HOOD FANS ON ROOF.

TAGGED NOTES - THIS SHEET

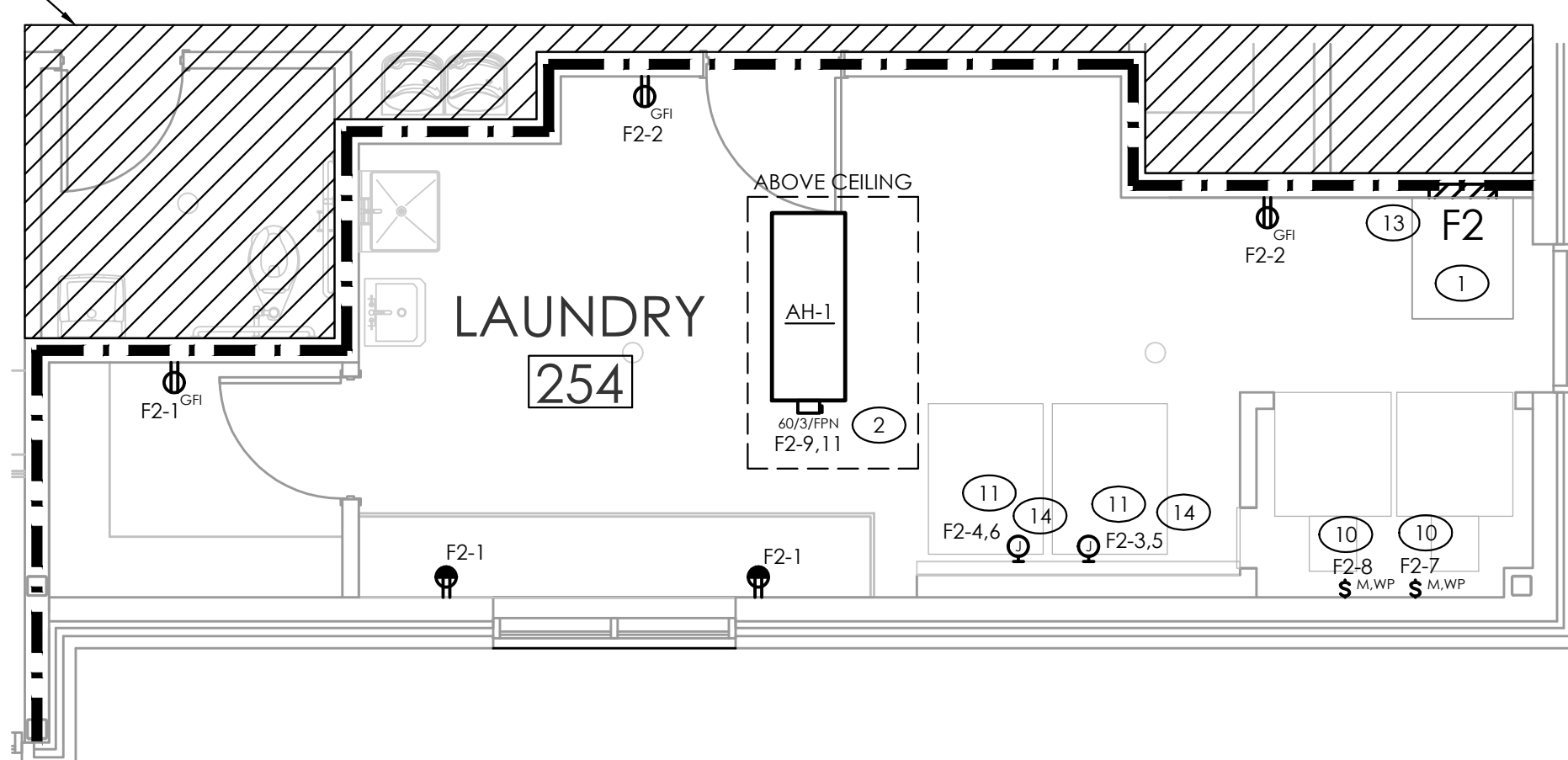
- ELECTRICAL PANEL(S), SEE RISER.
- PROVIDE POWER FOR AIR HANDLER ABOVE CEILING. COORDINATE WITH M.C..
- EQUIPMENT UNDER HOOD TO BE WIRED TO SHUNT TRIP CONTACTOR. SEE DETAIL AND PANEL SCHEDULE.
- PROVIDE POWER FOR HOOD LIGHTS AND CONTROLS.
- PROVIDE POWER COMMERCIAL DISHWASHER.
- PROVIDE POWER COMMERCIAL DISHWASHER BOOSTER.
- BUFFET LIGHTS PROVIDED WITH INTEGRAL SWITCHING.
- POWER FOR SERVING LINE TO BE ROUTED THROUGH KNEE WALL AS SHOWN.
- POWER FOR SERVING LINE TO BE ROUTED DOWN WALL AND UNDER FLOOR AS SHOWN.
- PROVIDE POWER FOR COMMERCIAL GAS DRYER. COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER. SWITCHES TO BE ACCESSIBLE IN CHASE.
- PROVIDE POWER FOR COMMERCIAL WASHER. COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER.
- ENSURE 6" SPACE BETWEEN DOOR AND WALL FOR PANEL. COORD. W/ ARCH..
- PANEL IN RATED WALL. SEE DETAIL.
- EQUIPMENT LINE OF SIGHT TO PANEL. BREAKER TO SERVE AS EQUIPMENT DISCONNECT.

2 ELEC. POWER PLAN - LAUNDRY 118 ENLARGEMENT
SCALE: 1/4" = 1'-0"



SEE SHEET E102.0P
FOR WORK IN THIS AREA

1 ELEC. POWER PLAN - LAUNDRY 254 ENLARGEMENT
SCALE: 1/4" = 1'-0"

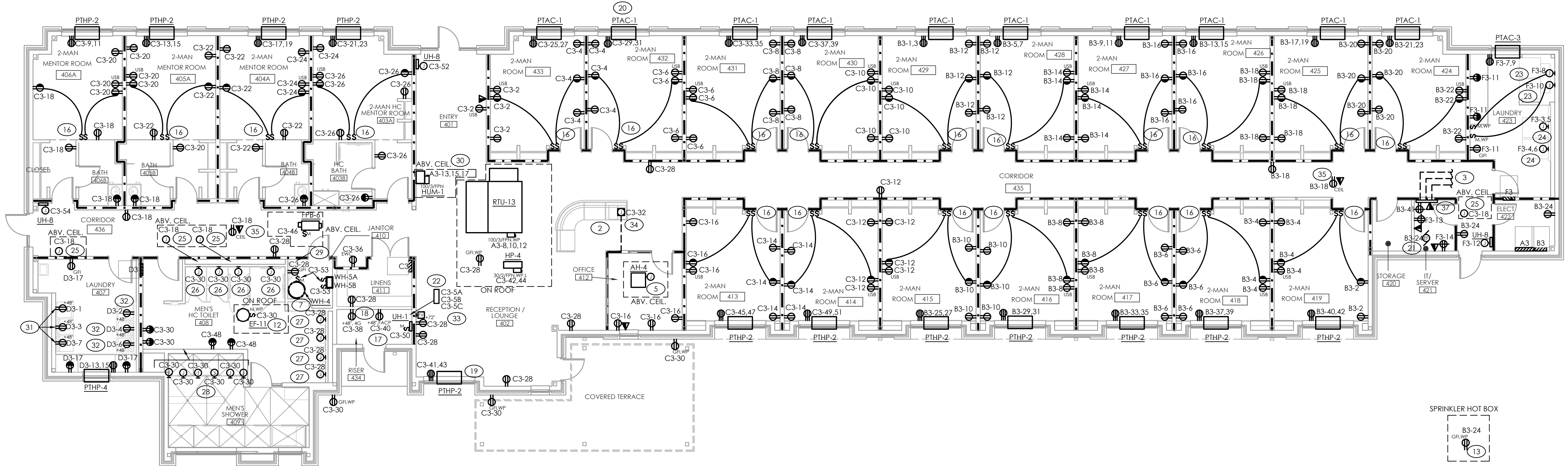


GENERAL NOTES - THIS SHEET

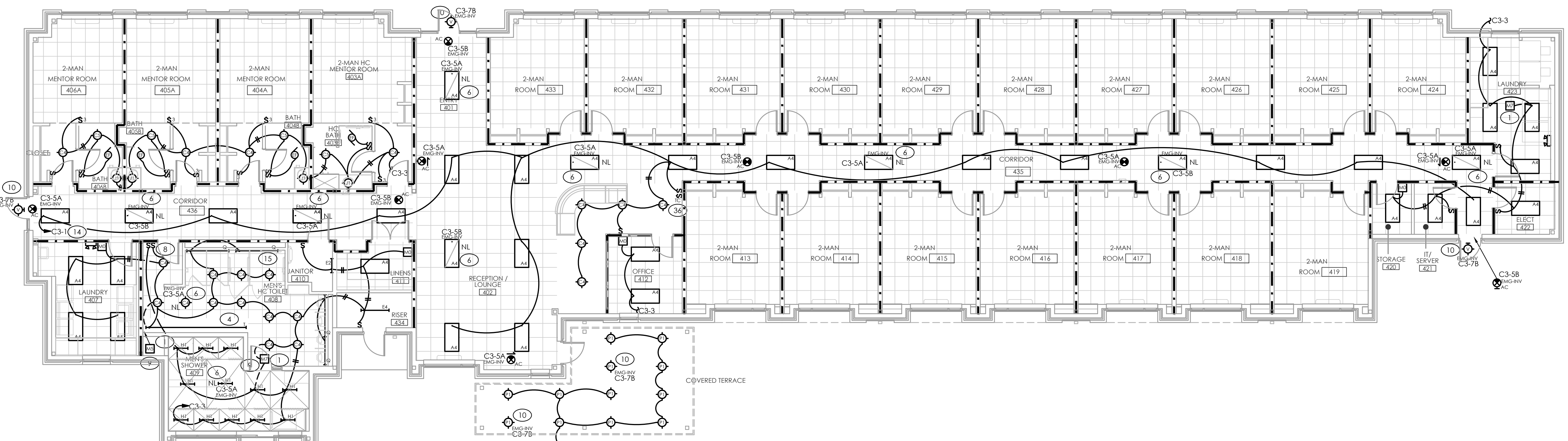
1. ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.
2. SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
3. FINAL CONNECTION TO ALL EQUIPMENT/FURNITURE BY E.C..
4. OUTLETS LABELED "USB" TO INCLUDE INTEGRAL UNIVERSAL SERIAL BUS PORT, SIMILAR TO LEGRAND TM826USB.
5. COORDINATE EXACT 120V POWER AND RECEPTACLES WITH ARCHITECT AND FINAL FURNITURE LOCATIONS.
6. ALL OUTLETS IN ROOMS TO BE OFFSET WHEN BACK TO BACK.
7. COORDINATE LOCATION OF BESIDE SWITCH FOR RECEPTACLE WITH ARCH.
8. COORDINATE EXACT IF POWER NEEDS WITH STATE OF NORTH CAROLINA STRUCTURED CABLING GUIDELINES, ARCHITECT AND LOW VOLTAGE CONTRACTOR.

TAGGED NOTES - THIS SHEET

- 1 POWER CIRCUIT FOR AREA LIGHT FIXTURE TO BE WIRED VIA AREA MOTION SENSOR. MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. SEE DETAIL.
- 2 COORDINATE POWER AT RECEPTION WITH ARCHITECT AND FURNITURE LAYOUT.
- 3 PROVIDE (3) 4" CONDUITS W/ PULL STRING FROM MAIN ADMIN BUILDING IT ROOM. SEE SITE PLAN COORDINATE W/ G.C. AND OWNER.
- 4 FIXTURE "T" TO BE RECESSED COVE. COORDINATE WITH ARCHITECT. TYPICAL ALL "T" LIGHTS.
- 5 AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT. E.C. TO INSTALL HIGH VOLTAGE WIRING. PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
- 6 FIXTURE TO BE WIRED AS A NIGHT LIGHT. NIGHT LIGHT CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
- 7 (2) TANKLESS WATER HEATERS STACKED. PROVIDE SWITCH FOR EACH WATER HEATER.
- 8 SWITCHES TO BE KEY LOCK TYPE SWITCH. CORD. W/ BUILDING OWNER.
- 9 MOTION SENSOR TO BE ON 20 MINUTE TIMER.
- 10 LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
- 11 LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. SEE PANEL SCHEDULE.
- 12 ROOF EXHAUST FAN TO BE ON WHEN LIGHTS IN EITHER BATHROOM ARE ON. SEE DETAIL FOR WIRING INFORMATION.
- 13 PROVIDE POWER TO WEATHER PROOF GFI RECEPTACLE AT HOT BOX FOR HEAT PUMP. COORDINATE EXACT LOCATION W/ CIVIL.
- 14 LIGHTING CIRCUIT TO BE CONTROLLED VIA TIME CLOCK. SEE PANEL SCHEDULE.
- 15 LIGHT TO BE RECESSED LINEAR FIXTURE. CORD. WITH ARCH./G.C.. TYPICAL OF ALL "Q" LIGHTS.
- 16 SWITCH TO CONTROL BOTTOM HALF OF RECEPTACLE SHOWN.
- 17 PROVIDE POWER FOR FIRE ALARM CONTROL PANEL.
- 18 PROVIDE POWER FOR 4G DIALER.
- 19 PROVIDE POWER FOR PTHP VIA 208V RECEPTACLE. TYPICAL OF ALL PTHP'S.
- 20 PROVIDE POWER FOR PTAC VIA 208V RECEPTACLE. TYPICAL OF ALL PTAC'S.
- 21 EXHAUST FAN TO BE WIRED VIA AREA T-STAT. COORDINATE W/ M.C.. T-STAT PROVIDED BY M.C..
- 22 (3) EMERGENCY LIGHTING INVERTER/BATTERY BACK-UP HIGH IN RISER ROOM. SEE LIGHTING PLAN, PANEL SCHEDULES, AND RISER FOR MORE INFORMATION.
- 23 PROVIDE POWER FOR COMMERCIAL GAS DRYER. COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER.
- 24 PROVIDE POWER FOR COMMERCIAL WASHER. COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER. EQUIPMENT IS IN LINE OF SIGHT OF PANEL.
- 25 PROVIDE POWER FOR FIRE SMOKE DAMPER. WIRE VIA FIRE ALARM RELAY.
- 26 PROVIDE POWER FOR WATER CLOSET AUTOFLUSH. COORDINATE LOCATION AND REQUIREMENTS W/ P.C..
- 27 PROVIDE POWER FOR AUTOFLUSH. COORDINATE LOCATION AND REQUIREMENTS W/ P.C..
- 28 PROVIDE POWER FOR LAVATORY. JUST BELOW SINK. COORDINATE W/ P.C..
- 29 E.C. TO PROVIDE POWER ADJACENT TO WATER HEATERS FOR REIRC PUMPS. COORDINATE EXACT LOCATION WITH P.C..
- 30 PROVIDE POWER FOR HUMIDIFIER ABOVE CEILING. COORDINATE WITH M.C..
- 31 PROVIDE POWER FOR RESIDENTIAL GAS DRYER.
- 32 PROVIDE POWER FOR RESIDENTIAL WASHER.
- 33 PROVIDE POWER AND DATA FOR WALL MOUNTED TELEVISION AND CABLE BOX IN CABINET BELOW WALL. COORDINATE WITH ARCHITECT.
- 34 PROVIDE JUNCTION BOX IN FLOOR FOR POWER AND DATA. COORDINATE POWER BELOW FLOOR WITH G.C..
- 35 PROVIDE POWER AND DATA AT CEILING FOR WIFI-BOOSTER.
- 36 TIME CLOCK FOR HALLWAY LIGHTING CIRCUIT C3-1 WITH 2-HOUR OVERRIDE.
- 37 PROVIDE FIRE RATED PLYWOOD FOR TEL/DATA BOARD. PROVIDE #4 CU BONDING WIRE TO BUILDING GROUNDING SYSTEM.



2 ELEC. POWER PLAN - MENS RESIDENTAL BUILDING
SCALE: 1/8" = 1'-0"



1 ELEC. LIGHTING PLAN - MENS RESIDENTAL BUILDING
SCALE: 1/8" = 1'-0"

FIRE RATING LEGEND	
---	1-HR WALL
---	1-HR WALL/ SMOKE WALL
---	SMOKE PARTITION

Project
**THE HEALING PLACE OF
NEW HANOVER COUNTY**
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

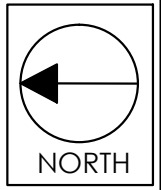
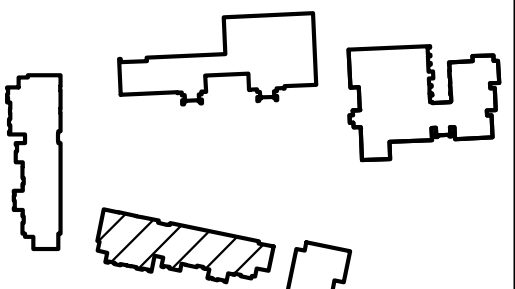
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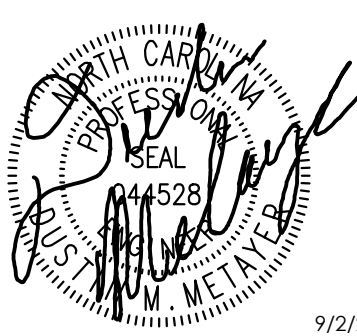
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NORTH CAROLINA**

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SITE PLAN



Professional Seals



No. Description Date

CONSTRUCTION DOCUMENT SET 08/25/20

Sheet Title

**ELECTRICAL
MENS RESIDENTAL
BUILDING PLANS**

Sheet Number

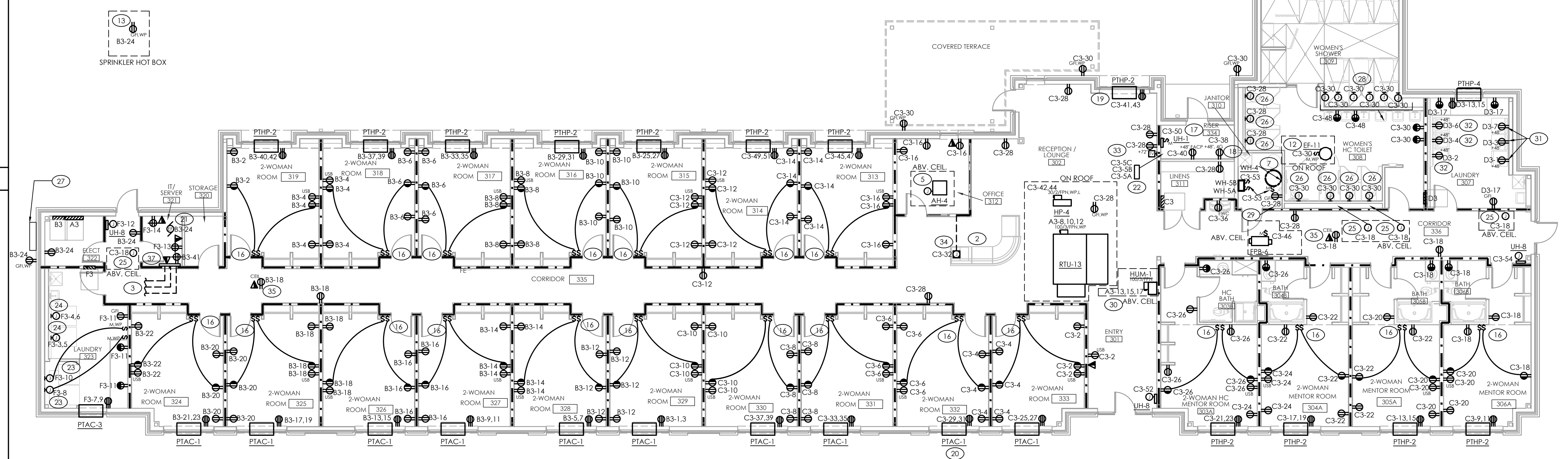
E103.0

GENERAL NOTES - THIS SHEET

1. ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.
2. SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
3. FINAL CONNECTION TO ALL EQUIPMENT/FURNITURE BY E.C..
4. OUTLETS LABELED "USB" TO INCLUDE INTEGRAL UNIVERSAL SERIAL BUS PORT, SIMILAR TO LEGRAND 11422AUS5.
5. COORDINATE EXACT 120V POWER AND RECEPTACLES WITH ARCHITECT AND FINAL FURNITURE LOCATIONS.
6. ALL OUTLETS IN ROOMS TO BE OFFSET WHEN BACK TO BACK.
7. COORDINATE LOCATION OF SWITCH FOR BEDSIDE RECEPTACLE WITH ARCH.
8. COORDINATE EXACT 11 POWER NEEDS WITH STATE OF NORTH CAROLINA STRUCTURED CABLING GUIDELINES, ARCHITECT AND LOW VOLTAGE CONTRACTOR.

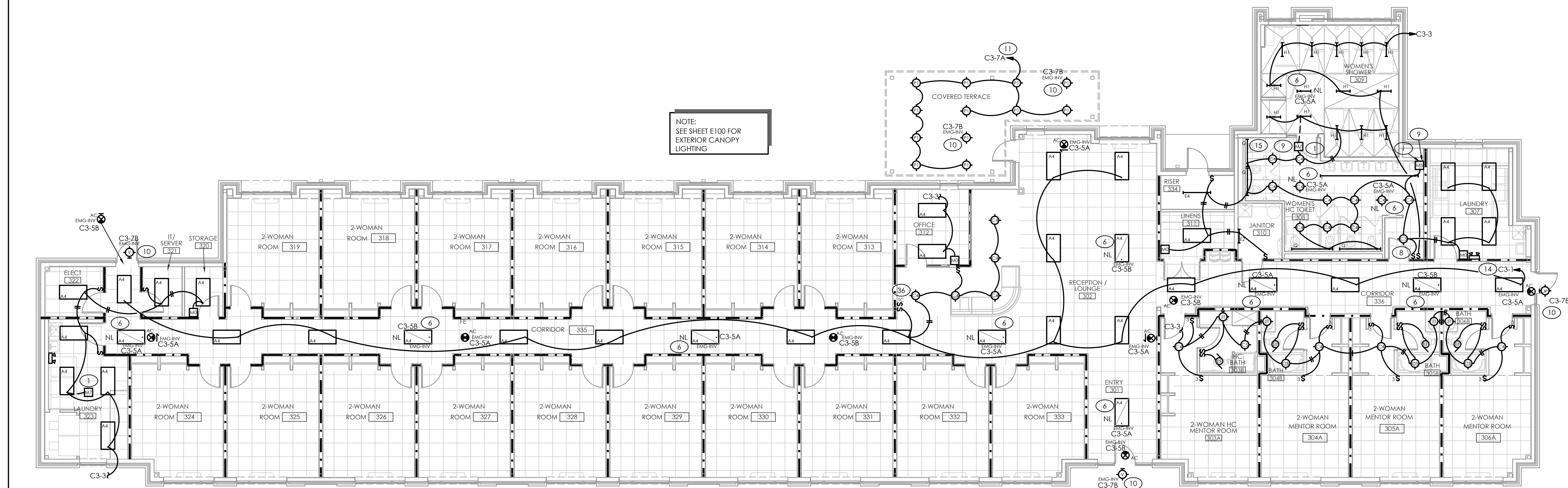
TAGGED NOTES - THIS SHEET

1. POWER CIRCUIT FOR AREA LIGHT FIXTURE TO BE WIRED VIA AREA MOTION SENSOR, MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. SEE DETAIL.
2. COORDINATE POWER AT RECEPTION WITH ARCHITECT AND FURNITURE LAYOUT.
3. PROVIDE (3) 4" CONDUITS W/ PULL STRING FROM MAIN ADMIN BUILDING 11 ROOM. SEE SITE PLAN, COORDINATE W/ G.C. AND OWNER.
4. FIXTURE "T" TO BE RECESSED COVE, COORDINATE WITH ARCHITECT. TYPICAL ALL "T" LIGHTS.
5. AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT, E.C. TO INSTALL HIGH VOLTAGE WIRING, PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
6. FIXTURE TO BE WIRED AS A NIGHT LIGHT, NIGHT LIGHT CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
7. (2) TANKLESS WATER HEATERS STACKED, PROVIDE SWITCH FOR EACH WATER HEATER.
8. SWITCHES TO BE KEY LOCK TYPE SWITCH, CORD. W/ BUILDING OWNER.
9. MOTION SENSOR TO BE ON 20 MINUTE TIMER.
10. LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL, CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
11. LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL, SEE PANEL SCHEDULE.
12. ROOF EXHAUST FAN TO BE ON WHEN LIGHTS IN EITHER BATHROOM ARE ON, SEE DETAIL FOR WIRING INFORMATION.
13. PROVIDE POWER TO WEATHER PROOF GFI RECEPTACLE AT HOT BOX FOR HEAT TAPE, COORDINATE EXACT LOCATION W/ CIVIL.
14. LIGHTING CIRCUIT TO BE CONTROLLED VIA TIME CLOCK, SEE PANEL SCHEDULE.
15. LIGHT TO BE RECESSED LINEAR FIXTURE, CORD. WITH ARCH./G.C., TYPICAL OF ALL "Q" LIGHTS.
16. SWITCH TO CONTROL BOTTOM HALF OF RECEPTACLE SHOWN.
17. PROVIDE POWER FOR FIRE ALARM CONTROL PANEL.
18. PROVIDE POWER FOR 4G DIALER.
19. PROVIDE POWER FOR PTHP VIA 208V RECEPTACLE, TYPICAL OF ALL PTHP'S.
20. PROVIDE POWER FOR PTAC VIA 208V RECEPTACLE, TYPICAL OF ALL PTAC'S.
21. EXHAUST FAN TO BE WIRED VIA AREA T-STAT, COORDINATE W/ M.C., T-STAT PROVIDED BY M.C..
22. (3) EMERGENCY LIGHTING INVERTER/BATTERY BACK-UP HIGH IN RISER ROOM, SEE LIGHTING PLAN, PANEL SCHEDULES, AND RISER FOR MORE INFORMATION.
23. PROVIDE POWER FOR COMMERCIAL GAS DRYER, COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER.
24. PROVIDE POWER FOR COMMERCIAL WASHER, COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT SUPPLIER, EQUIPMENT IS IN LINE OF SIGHT OF PANEL.
25. PROVIDE POWER FOR FIRE SMOKE DAMPER, COORDINATE WITH M.C.
26. PROVIDE POWER FOR WATER CLOSET AUTOFLOSH, COORDINATE LOCATION AND REQUIREMENTS W/ P.C.
27. SERVICE ENTRANCE RATED MANUAL TRANSFER SWITCH, SEE RISER.
28. PROVIDE POWER FOR LAVATORY JUST BELOW SINK, COORDINATE W/ P.C.
29. E.C. TO PROVIDE POWER ADJACENT TO WATER HEATERS FOR RECIRC PUMPS, COORDINATE EXACT LOCATION WITH P.C.
30. PROVIDE POWER FOR HUMIDIFIER ABOVE CEILING, COORDINATE WITH M.C.
31. PROVIDE POWER FOR RESIDENTIAL GAS DRYER.
32. PROVIDE POWER FOR RESIDENTIAL WASHER.
33. PROVIDE POWER AND DATA FOR WALL MOUNTED TELEVISION AND CABLE BOX IN CABINET BELOW WALL, COORDINATE WITH ARCHITECT.
34. PROVIDE JUNCTION BOX IN FLOOR FOR POWER AND DATA, COORDINATE POWER BELOW FLOOR WITH G.C.
35. PROVIDE POWER AND DATA AT CEILING FOR WIFI-BOOSTER.
36. TIME CLOCK FOR HALLWAY LIGHTING CIRCUIT C3-1 WITH 24-HOUR OVERRIDE.
37. PROVIDE FIRE RATED PLYWOOD FOR TELE/BOARD, PROVIDE #6 CU BONDING WIRE TO BUILDING GROUNDING SYSTEM.



2 ELEC. POWER PLAN - WOMENS RESIDENTAL BUILDING

SCALE: 1/8" = 1'-0"



1 ELEC. LIGHTING PLAN - WOMENS RESIDENTAL BUILDING

SCALE: 1/8" = 1'-0"

FIRE RATING LEGEND
1-HR WALL
1-HR RISE
SMOKE WALL
*STAFF CORRIDOR AND WALLS
ARE SMOKE PARTITIONS

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1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

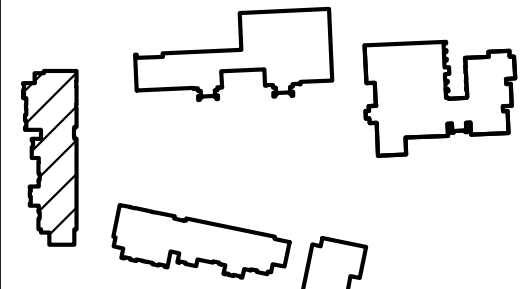
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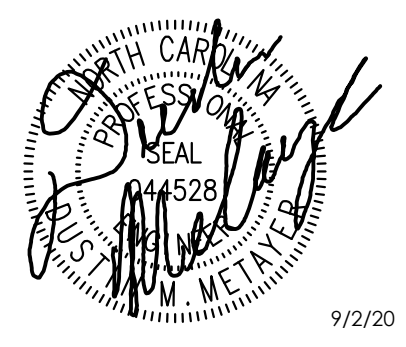
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SITE PLAN



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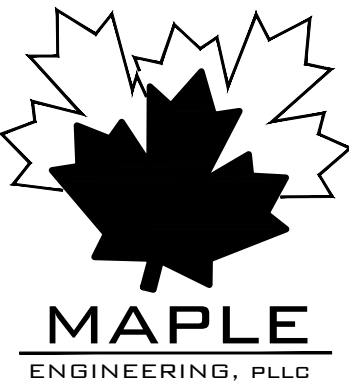
Sheet Title

ELECTRICAL
WOMENS RESIDENTIAL
BUILDING PLANS

Sheet Number

E103.1

FIRE RATING LEGEND
1-HR WALL
1-HR FIRE / SMOKE WALL
STAFF CORRIDOR AND WALLS ARE SMOKE PARTITIONS

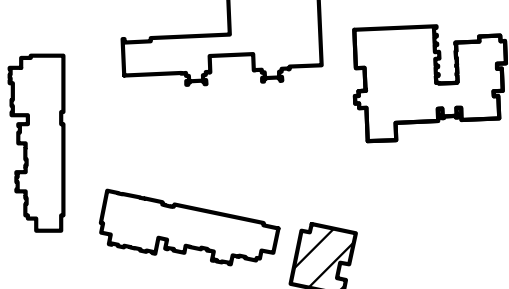


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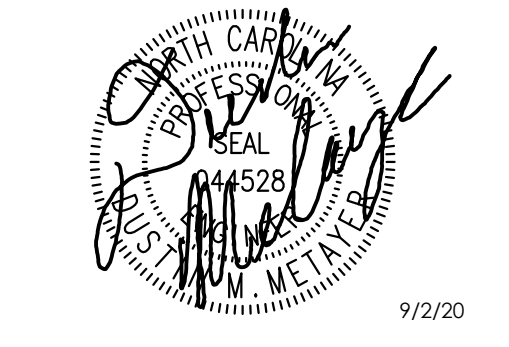


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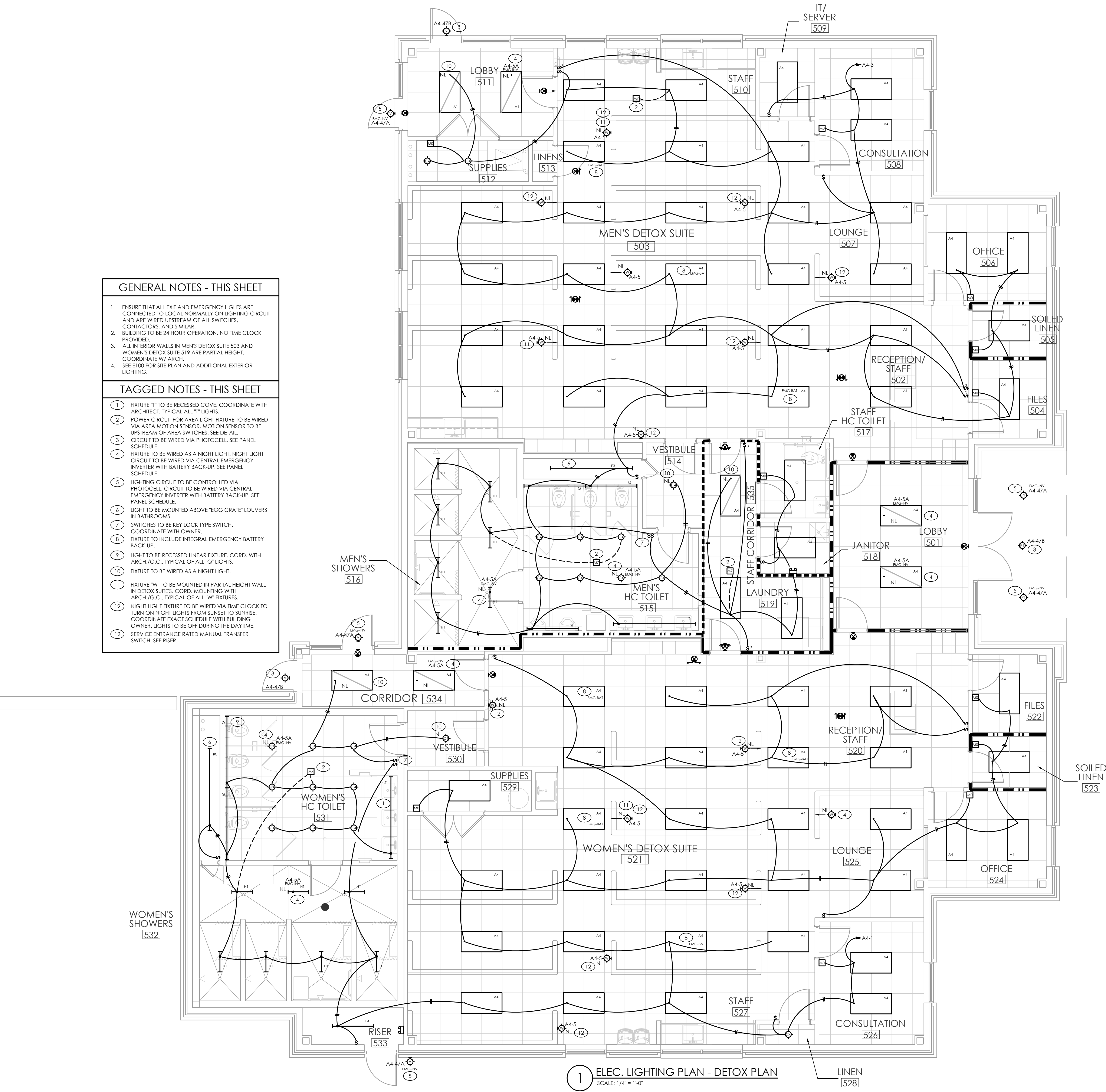
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Sheet Title
**ELECTRICAL
DETOX
BUILDING
LIGHTING
PLAN**

Sheet Number

E104.0L

- GENERAL NOTES - THIS SHEET**
1. ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.
 2. BUILDING TO BE 24 HOUR OPERATION. NO TIME CLOCK PROVIDED.
 3. ALL INTERIOR WALLS IN MEN'S DETOX SUITE 503 AND WOMEN'S DETOX SUITE 519 ARE PARTIAL HEIGHT. COORDINATE W/ ARCH.
 4. SEE E100 FOR SITE PLAN AND ADDITIONAL EXTERIOR LIGHTING.
- TAGGED NOTES - THIS SHEET**
1. FIXTURE "T" TO BE RECESSED COVE. COORDINATE WITH ARCHITECT. TYPICAL ALL "T" LIGHTS.
 2. POWER CIRCUIT FOR AREA LIGHT FIXTURE TO BE WIRED VIA AREA MOTION SENSOR. MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. SEE DETAIL.
 3. CIRCUIT TO BE WIRED VIA PHOTOCELL. SEE PANEL SCHEDULE.
 4. FIXTURE TO BE WIRED AS A NIGHT LIGHT. NIGHT LIGHT CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
 5. LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. CIRCUIT TO BE WIRED VIA CENTRAL EMERGENCY INVERTER WITH BATTERY BACK-UP. SEE PANEL SCHEDULE.
 6. LIGHT TO BE MOUNTED ABOVE "EGG CRATE" LOUVERS IN BATHROOMS.
 7. SWITCHES TO BE KEY LOCK TYPE SWITCH. COORDINATE WITH OWNER.
 8. FIXTURE TO INCLUDE INTEGRAL EMERGENCY BATTERY BACK-UP.
 9. LIGHT TO BE RECESSED LINEAR FIXTURE. CORD. WITH ARCH/G.C.. TYPICAL OF ALL "Q" LIGHTS.
 10. FIXTURE TO BE WIRED AS A NIGHT LIGHT.
 11. FIXTURE "W" TO BE MOUNTED IN PARTIAL HEIGHT WALL IN DETOX SUITES. CORD. MOUNTING WITH ARCH/G.C.. TYPICAL OF ALL "W" FIXTURES.
 12. NIGHT LIGHT FIXTURE TO BE WIRED VIA TIME CLOCK TO TURN ON NIGHT LIGHTS FROM SUNSET TO SUNRISE. COORDINATE EXACT SCHEDULE WITH BUILDING OWNER. LIGHTS TO BE OFF DURING THE DAYTIME. SERVICE ENTRANCE RATED MANUAL TRANSFER SWITCH. SEE RISER.





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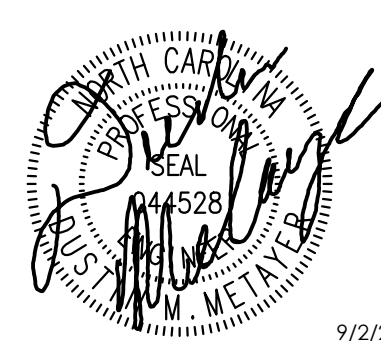


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SITE PLAN

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Sheet Title

ELECTRICAL
PANEL
SCHEDULES-
ADMIN BUILDING

Sheet Number

E201

PANEL "C1" LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 200 AMP BREAKER @ PANEL "A1"				
LIGHTS (2480 SQFT @ 3.5 W/SQFT, 4567 SQFT @ 1 W/SQFT, 3913 SQFT @ .5 W/SQFT, 447 SQFT @ .25 W/SQFT-CONN. LOAD)		15.3	1.25	19.1
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	1.8	0.5	0.9
	ELEC HEAT	1.0	1.0	1.0
	LARGEST MOTOR	7.0	1.25	8.8
HVAC & R	REMAINDER	0.0	1.0	0.0
	WATER HEATER (ELECTRIC)	4.5	1.25	5.6
FACP, 4G, PROJECTOR SCREEN, PROJECTOR, PODIUM, (2)EWC, TOILETS POWER		7.0	1.0	7.0
TOTALS		46.6		52.4
TOTAL AMPS @ 208 V 3 PHASE				145.4

PANEL "F1" LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 100 AMP BREAKER @ PANEL "A1"				
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	0.0	0.5	0.0
	ELEC HEAT	0.0	1.0	0.0
	LARGEST MOTOR	2.0	1.25	2.5
HVAC & R	REMAINDER	0.0	1.0	0.0
	WATER HEATER (ELECTRIC)	4.5	1.25	5.6
COPIER, IT EQUIPMENT, (3) VENDING MACHINES, TELE/DATA, ICE MAKER		6.0	1.0	6.0
TOTALS		22.5		24.1
TOTAL AMPS @ 208 V 3 PHASE				67.0

PANEL: F1				
VOLTAGE: 208Y/120V		3 PHASE, 4 WIRE		
AMPS: 100-MLO		SURFACE MOUNTED		
-DESCRIPTION-		NEMA 1		
#3 IT EQUIPMENT	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	1
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	3
#3 COPIER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	5
#3 IT EQUIPMENT	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	7
WH-1	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	10	30	9
#3 VENDING MACHINE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	10
#3 VENDING MACHINE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	17
AH/HP-6	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	12	15	21
TELE/DATA BOARD	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	23
ICE MAKER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	25
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	27
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	29
TOTAL CONNECTED KVA:		22.5	DEMAND KVA:	
PANEL RMS SYM. AMPS:		SEE RISER	DEMAND AMPS:	

- PANEL SHALL BE EQUAL TO SQUARE D NO.
- PROVIDE HACR BREAKERS FOR HVAC & REFRIGERATION EQUIPMENT.
- VERIFY BREAKER AND WIRE SIZE REQUIREMENTS WITH EQUIPMENT NAMEPLATE BEFORE BEGINNING WORK.

PANEL "B1" LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 400 AMP BREAKER @ PANEL A1				
HVAC & R	ELEC HEAT	0.0	1.0	0.0
	LARGEST MOTOR	19.6	1.25	24.5
	REMAINDER	88.8	1.0	88.8
TOTALS		108.4		113.3
TOTAL AMPS @ 208 V 3 PHASE				314.5

PANEL: C1				
VOLTAGE: 208Y/120V		3 PHASE, 4 WIRE		
AMPS: 200-MLO		SURFACE MOUNTED		
-DESCRIPTION-		NEMA 1		
TC	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	1
LTS: CLINIC/PLANNING	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	3
LTS: LOBBY/RESTROOMS	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	3
LTS: MULTI/COMMUNITY	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	3
LTS: EXTERIOR/INV	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	7
LTS: EMG-INVERTER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	9
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	11
4G-DIALER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	10
#7 PROJECTOR SCREEN	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	15
#7 PROJECTOR	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	17
PODIUM	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	19
EWC	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	21
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	23
WH-1	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	10	30	27
UH-1	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	29
EWC	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	31
WOMENS TOILETS	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	35
MENS TOILETS	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	35
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	37
#7 GENERATOR CHARGER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	41
TOTAL CONNECTED KVA:		36.0	DEMAND KVA:	
PANEL RMS SYM. AMPS:		SEE RISER	DEMAND AMPS:	

- PANEL SHALL BE EQUAL TO SQUARE D NO.
- PROVIDE HACR BREAKERS FOR HVAC & REFRIGERATION EQUIPMENT.
- GFI - PROVIDE GFCI BREAKER FOR CIRCUIT. GFCI RECEPTACLES MAY BE USED IN LIEU OF GFCI BREAKERS SO LONG AS THE DEVICE(S) CONFORM TO NEC CODE REQUIREMENTS FOR GFCI PROTECTION & ACCESSIBILITY.
- TC - CIRCUIT THROUGH 7-DAY PROGRAMMABLE ASTRONOMICAL TIME SWITCH WITH AUTO-DUSK, AUTO-DAWN FEATURE EQUAL TO LEVITON VPT24-1P2. SWITCH TO INCLUDE MANUAL OVERRIDE AND BATTERY BACK-UP.
- PC - CIRCUIT THROUGH PHOTOCELL LOCATED ON NORTH FACE OF BUILDING.
- CIRCUIT BREAKER SHALL HAVE RED IDENTIFICATION AND INCLUDE LOCK-ON ATTACHMENT. BREAKER TO BE LOCKED IN ON POSITION. NEC 760.41.
- VERIFY BREAKER AND WIRE SIZE REQUIREMENTS WITH EQUIPMENT NAMEPLATE BEFORE BEGINNING WORK.
- WIRE PORTION OF CIRCUIT VIA EMERGENCY LIGHTING INVERTER. SEE RISER FOR INVERTER DETAILS. PROVIDE LOCK-ON BREAKER ATTACHMENT. E.C. TO IDENTIFY AND PERMANENTLY MARK MATERIALS ACCORDING TO NEC 700.10. E.C. TO ALSO CLEARLY LABEL BRANCH CIRCUIT AT PANEL (NEC 700.12(F)(2)(4)).
- LO - INDICATES LOCK-ON ATTACHMENT REQUIRED.

PANEL: B1				
VOLTAGE: 208Y/120V		3 PHASE, 4 WIRE		
AMPS: 400-MLO		SURFACE MOUNTED		
-DESCRIPTION-		NEMA 1		
RTU-1	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	3	90	3
RTU-2	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	3	90	3
RTU-3	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	3	90	3
RTU-6	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	3	90	3
RTU-5	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	6	50	3
TOTAL CONNECTED KVA:		108.4	DEMAND KVA:	
PANEL RMS SYM. AMPS:		SEE RISER	DEMAND AMPS:	

- PANEL SHALL BE EQUAL TO SQUARE D NO.
- PROVIDE HACR BREAKERS FOR HVAC & REFRIGERATION EQUIPMENT.

PANEL "A1" LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 800 AMP ATS				
LIGHTS (5454 SQFT @ 3.5 W/SQFT, 4567 SQFT @ 1 W/SQFT, 4901 SQFT @ .5 W/SQFT, 447 SQFT @ .25 W/SQFT- CONN. LOAD)		26.2	1.25	32.8
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	25.2	0.5	12.6
	ELEC HEAT	1.0	1.0	1.0
	LARGEST MOTOR	19.6	1.25	24.5
HVAC & R	REMAINDER	99.8	1.0	99.8
	WATER HEATER (ELECTRIC)	29.7	1.25	37.1
TELE/DATA, IT, COPIER, PROJECTOR SCREEN, (2) WORKSTATIONS, FRIDGE, DISHWASHER, MICROWAVE, COPIER, IT EQUIPMENT, (3) VENDING MACHINES, FACP, 4G, PROJECTOR SCREEN, PROJECTOR, PODIUM, (2)EWC, TOILET POWER		19.2	1.0	19.2
TOTALS		230.7		237.0
TOTAL AMPS @ 208 V 3 PHASE				657.8

PANEL: A1				
VOLTAGE: 208Y/120V		3 PHASE, 4 WIRE		
AMPS: 800-MLO		SURFACE MOUNTED		
-DESCRIPTION-		NEMA 1		
PANEL "B1"	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	500	400	3
PANEL "C1"	POLE	WIRE SIZE	BRK SIZE	CTY #
	3	3/0	200	3
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	15
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	15
SPACE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	-	-	17
TOTAL CONNECTED KVA:		212.5	DEMAND KVA:	
PANEL RMS SYM. AMPS:		SEE RISER	DEMAND AMPS:	

- PANEL SHALL BE EQUAL TO SQUARE D LINE.

PANEL: D1				
VOLTAGE: 208Y/120V		3 PHASE, 4 WIRE		
AMPS: 200-MLO		SURFACE MOUNTED		
-DESCRIPTION-		NEMA 1		
LTS: CORRIDOR	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	1
LTS: EMG-INVERTER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	3
LTS: OFFICE/BOARD	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	5
#5 IT EQUIPMENT	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	7
#5 COPIER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	11
#5 PROJECTOR SCREEN 119	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	13
#5 CONFERENCE ROOM FLR	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	15
#5 BOARD ROOM FLR REC	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	17
#5 BOARD ROOM FLR REC	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	19
#5 FLEXIBLE WORKSTATIONS	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	21
#5 FLEXIBLE WORKSTATIONS	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	23
GFI BREAK ROOM FRIDGE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	25
MICROWAVE	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	27
DISHWASHER	POLE	WIRE SIZE	BRK SIZE	CTY #
	1	12	20	29
L WH-6	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	10	25	31
L WH-2 BOARD ROOM	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	6	40	33
L WH-2 BREAK ROOM	POLE	WIRE SIZE	BRK SIZE	CTY #
	2	6	40	35
TOTAL CONNECTED KVA:		15.1	13.2	17.3
PANEL RMS SYM. AMPS:		SEE RISER	DEMAND AMPS:	



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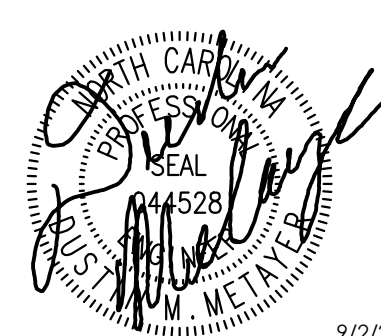


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SITE PLAN

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Sheet Title

ELECTRICAL
PANEL
SCHEDULE-
MEN'S RESIDENTIAL
BUILDING

Sheet Number

E203

PANEL "C3" LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 200 AMP BREAKER @ PANEL "A3"				
LIGHTS (14625SQFT @ 2 W/SQFT, 2069 @ .3 W/SQFT > CONN. LOAD)		4.0	1.25	5.0
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	5.6	0.5	2.8
HVAC & R	ELEC HEAT	27.0	1.0	27.0
	LARGEST MOTOR	1.5	1.25	1.9
	REMAINDER	2.6	1.0	2.6
(3) WATER HEATERS (GAS)		1.2	1.25	1.5
EWC, FACP, 4G DIALER		2.4	1.0	2.4
TOTALS		54.3		53.2
TOTAL AMPS @ 208 V 3 PHASE				147.6

MEN'S RESIDENTIAL BLDG STORAGE ROOM												3 PHASE, 4 WIRE		
PANEL: C3												SURFACE MOUNTED		
LOAD PER PHASE												NEMA 1		
-DESCRIPTION-												-DESCRIPTION-		
1C	#7	LO.#7,PC	POLE	WIRE SIZE	BRK SIZE	CRT #	A	B	C	CRT #	WIRE SIZE	POLE	REC: 433	
			1	12	20	1	1.2	0.4		2	20	12	1	
			1	12	20	3		0.8	1.2	4	20	12	1	
			1	12	20	5				6	20	12	1	
			1	12	20	7	0.2	1.2		8	20	12	1	
			2	12	15	9		1.1	0.8	10	20	12	1	
			2	12	15	11				12	20	12	1	
			2	12	15	13	1.2	1.2		14	20	12	1	
			2	12	15	15		1.1	1.0	16	20	12	1	
			2	12	15	17				18	20	12	1	
			2	12	15	19	1.2	1.2		20	20	12	1	
			2	12	15	21		1.2	1.2	22	20	12	1	
			2	12	15	23			1.1	1.2	24	20	12	1
			2	12	15	25	1.2	1.2	0.8	26	20	12	1	
			2	12	15	27		1.1	1.0	28	20	12	1	
			2	12	15	29				30	20	12	1	
			2	12	15	31	1.2	0.8		32	20	12	1	
			2	12	15	33		1.2	0	34	20	-	1	
			2	12	15	35			1.1	0.8	36	20	12	1
			2	12	15	37	1.2	0.8		38	20	12	1	
			2	12	15	39			1.1	0.8	40	20	12	1
			2	12	15	41				1.1	0.7	42		
			2	12	15	43	1.2	0.8		44	15	12	2	
			2	12	15	45		1.1	1.5	46	20	12	1	
			2	12	15	47			1.2	0.4	48	20	12	1
			2	12	15	49	1.2	1.0		50	20	12	1	
			2	12	15	51		1.1	1.0	52	20	12	1	
			1	12	20	53			1.2	1.0	54	20	12	1
			TOTAL CONNECTED KVA:							53.4		DEMAND KVA:		
PANEL RMS SYM. AMPS: SEE RISER									DEMAND AMPS:			147.6		

- PANEL SHALL BE EQUAL TO SQUARE D NQ.
- L - INDICATES LOCK-OFF ATTACHMENT REQUIRED (ATTACHMENT TO MEET NEC REQ'S FOR APPLIANCE DISCONNECT)
- PROVIDE HACR BREAKERS FOR HVAC & REFRIGERATION EQUIPMENT.
- TC - CIRCUIT THROUGH 7-DAY PROGRAMMABLE ASTRONOMICAL TIME SWITCH WITH AUTO-DUSK, AUTO-DAWN FEATURE EQUAL TO LEVITON VPT24-1P2 SWITCH TO INCLUDE MANUAL OVERRIDE AND BATTERY BACK-UP.
- PC - CIRCUIT THROUGH PHOTOCELL LOCATED ON NORTH FACE OF BUILDING.
- CIRCUIT BREAKER SHALL HAVE RED IDENTIFICATION AND INCLUDE LOCK-ON ATTACHMENT, BREAKER TO BE LOCKED IN ON POSITION, NEC 760.41
- WIRE PORTION OF CIRCUIT VIA EMERGENCY LIGHTING INVERTER. SEE RISER FOR INVERTER DETAILS. PROVIDE LOCK-ON BREAKER ATTACHMENT, E.C. TO IDENTIFY AND PERMANENTLY MARK MATERIALS ACCORDING TO NEC 700.10, E.C. TO ALSO CLEARLY LABEL BRANCH CIRCUIT AT PANEL (NEC 700.12)(F)(2)(4).
- NOT USED.
- GFI - PROVIDE GFCI BREAKER FOR CIRCUIT. GFCI RECEPTACLES MAY BE USED IN LIEU OF GFCI BREAKERS SO LONG AS THE DEVICE(S) CONFORM TO NEC CODE REQUIREMENTS FOR GFCI PROTECTION & ACCESSIBILITY.
- LO - INDICATES LOCK-ON ATTACHMENT REQUIRED.
- FPB-6 PRESENT IN ONLY MEN'S RESIDENTIAL, FPB-6 TO HAVE 15 AMP BREAKER, FPB-8 PRESENT ONLY IN WOMEN'S RESIDENTIAL, FPB-8 TO HAVE 20 AMP BREAKER.

PANEL B3 LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 200 AMP BREAKER @ PANEL "A3"				
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	1.2	0.5	0.6
HVAC & R	ELEC HEAT	27.1	1.0	27.1
	LARGEST MOTOR	0.2	1.25	0.3
	REMAINDER	2.2	1.0	2.2
LAUNDRY EQUIPMENT	WASHERS	5.0	1.0	5.0
	DRYERS # OF ELECTRIC DRYERS: 0	2.8	1.0	2.8
TELE/DATA BOARD, HOT BOXES		0.8	1.0	0.8
TOTALS		49.3		48.8
TOTAL AMPS @ 208 V 3 PHASE				135.3

RESIDENTIAL BLDG ELEC. ROOM												3 PHASE, 4 WIRE			
PANEL: B3												SURFACE MOUNTED			
LOAD PER PHASE												NEMA 1			
-DESCRIPTION-												-DESCRIPTION-			
1C	#7	LO.#7,PC	POLE	WIRE SIZE	BRK SIZE	CRT #	A	B	C	CRT #	WIRE SIZE	POLE	REC: 419		
			2	12	15	1	1.1	0.4		2	20	12	1		
			3				1.2	0.8		4	20	12	1		
			3						1.1	1.2	6	20	12	1	
			3				1.2	0.8		4	20	12	1		
			2	12	15	5				10	20	12	1		
			2	12	15	7		1.1	1.2	8	20	12	1		
			2	12	15	9			1.2	1.2	12	20	12	1	
			2	12	15	11				12	20	12	1		
			2	12	15	13	1.2	0.8		14	20	12	1		
			2	12	15	15		1.1	1.2	16	20	12	1		
			2	12	15	17				18	20	12	1		
			2	12	15	19	1.2	1.2		20	20	12	1		
			2	12	15	21		1.1	0.8	22	20	12	1		
			2	12	15	23			1.2	0.4	24	20	12	1	
			2	12	15	25	1.1	0		26	-	-	1		
			2	12	15	27		1.2	0	28	-	-	1		
			2	12	15	29				1.1	0	30	20	-	1
			2	12	15	31	1.2	3.8		32	20	-	1		
			2	12	15	33		1.1	5.5	34	60	4	3		
			2	12	15	35			1.2	1	36				
			2	12	15	37	1.1	0		38	20	-	1		
			2	12	15	39			1.2	1.1	40				
			1	12	20	41			0.4	1.2	42	15	12	2	
			TOTAL CONNECTED KVA:							15.3	18.6	15.4	DEMAND KVA: 48.8		
PANEL RMS SYM. AMPS:							49.3			DEMAND AMPS: 135.3					
SEE RISER															

- PANEL SHALL BE EQUAL TO SQUARE D NQ.
- PROVIDE HACR BREAKERS FOR HVAC & REFRIGERATION EQUIPMENT.

PANEL A3 LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 400 AMP HACR				
LIGHTS (8620 SQFT @ 2 W/SQFT >> CONN. LOAD)		4.0	1.25	5.0
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	17.4	0.5	8.7
HVAC & R	ELEC HEAT	57.1	1.0	57.1
	LARGEST MOTOR	20.1	1.25	25.1
	REMAINDER	6.7	1.0	6.7
(3) WATER HEATERS (GAS)		1.2	1.25	1.5
LAUNDRY EQUIPMENT	WASHERS	10.4	1.0	10.4
	DRYERS # OF ELECTRIC DRYERS: 0	8.2	1.0	8.2
EWC, FACP, 4G DIALER, TELE/DATA BOARD, HOT BOXES, HUMIDIFIER		21.2	1.0	21.2
TOTALS		156.3		153.9
TOTAL AMPS @ 208 V 3 PHASE				427.3

MEN'S RESIDENTIAL BLDG ELEC. ROOM												3 PHASE, 4 WIRE		
PANEL: A3												SURFACE MOUNTED		
LOAD PER PHASE												NEMA 1		
-DESCRIPTION-												-DESCRIPTION-		
	POLE	WIRE SIZE	BRK SIZE	CNTR	A	B	C	WIRE SIZE	BRK SIZE	WIRE SIZE	POLE			
AMPS: 600-MLO					15.3	5.2			2					
PANEL "B3"	3	3/0	200	3	3	18.6	5.2		60	4	3	PANEL "D3"		
					7	15.4	4.2	6						
PANEL "C3"	3	3/0	200	3	17.4	6.7			90	2	3	RTU-13		
				11		17.2	6.7	12						
HUMIDIFIER	3	3	80	13	6.0	0			14	-	-	1	SPACE	
				15		6.0	0		16	-	-	1	SPACE	
				17			6.0	0	18	-	-	1	SPACE	
TOTAL CONNECTED KVA:					51.6			53.9		49.5		DEMAND KVA: 153.9		
PANEL RMS SYM. AMPS:					SEE Riser					DEMAND AMPS: 427.3				



MAPLE
ENGINEERING, PLLC

708 ST. MARYS ST.
RALEIGH, NC 27605 LIC.#: P-0990
P-9119-341-4247 P-9119-890-37797
PLUMBING MECHANICAL ELECTRICAL

Project

**THE HEALING PLACE OF
NEW HANOVER COUNTY**
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

Client

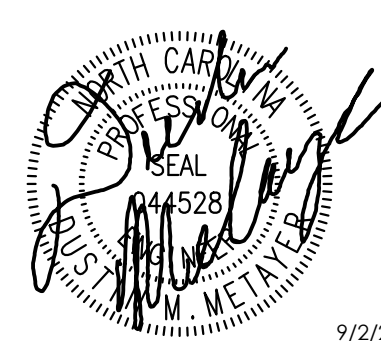


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SITE PLAN

Professional Seals



No. Description Date

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Sheet Title

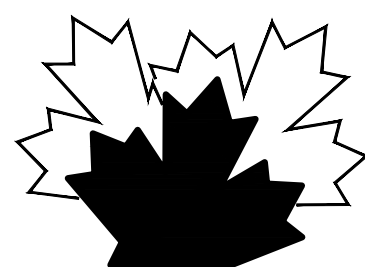
**ELECTRICAL
PANEL
SCHEDULE-
WOMEN'S RESIDENTIAL
& DETOX
BUILDINGS**

Sheet Number

E204

PANEL A4 LOAD SUMMARY				
LOAD TYPE		KVA CONN.	DEM. FACT.	KVA DEM.
LOADS ON 40 AMP BREAKER @ A4				
LIGHTS (5585 SQFT @ 3.5 W/SQFT > CONN. LOAD)		19.5	1.25	24.4
RECEPTACLES	1st 10 KVA	10.0	1.0	10.0
	REMAINDER	6.8	0.5	3.4
	ELEC HEAT	1.2	1.0	1.2
	LARGEST MOTOR	7.8	1.25	9.7
HVAC & R	REMAINDER	13.3	1.0	13.3
	WATER HEATER (ELECTRIC & GAS)	8.9	1.25	11.1
LAUNDRY EQUIPMENT	WASHERS	2.5	1.0	2.5
	DRYERS	1.4	1.0	1.4
	# OF ELECTRIC DRYERS: 0			
	UNIT HEATERS, EWCS	3.4	1.3	4.3
TOTALS		74.8		81.3
TOTAL AMPS @ 208 V 3 PHASE			225.8	

DETOL BLDG ELEC ROOM										3 PHASE, 4 WIRE				
VOLTAGE: 208Y/120V										PANEL: A4				
AMPS: 400-MLO										SURFACE MOUNTED				
-DESCRIPTION-										NEMA 1				
LOAD PER PHASE										-DESCRIPTION-				
POLE		WIRE SIZE	BK SIZE	CT #	A			B		C		CT #	BK SIZE	WIRE SIZE
1		12	20	1	1.3	2.6					2			
2		12	20	1	1.3	2.6					2			
3		12	20	1	1.3	2.6					2			
4		12	20	1	1.3	2.6					2			
5		12	20	1	1.3	2.6					2			
6		12	20	1	1.3	2.6					2			
7		12	20	1	1.3	2.6					2			
8		12	20	1	1.3	2.6					2			
9		12	20	1	1.3	2.6					2			
10		12	20	1	1.3	2.6					2			
11		12	20	1	1.3	2.6					2			
12		12	20	1	1.3	2.6					2			
13		12	20	1	1.3	2.6					2			
14		12	20	1	1.3	2.6					2			
15		12	20	1	1.3	2.6					2			
16		12	20	1	1.3	2.6					2			
17		12	20	1	1.3	2.6					2			
18		12	20	1	1.3	2.6					2			
19		12	20	1	1.3	2.6					2			
20		12	20	1	1.3	2.6					2			
21		12	20	1	1.3	2.6					2			
22		12	20	1	1.3	2.6					2			
23		12	20	1	1.3	2.6					2			
24		12	20	1	1.3	2.6					2			
25		12	20	1	1.3	2.6					2			
26		12	20	1	1.3	2.6					2			
27		12	20	1	1.3	2.6					2			
28		12	20	1	1.3	2.6					2			
29		12	20	1	1.3	2.6					2			
30		12	20	1	1.3	2.6					2			
31		12	20	1	1.3	2.6					2			
32		12	20	1	1.3	2.6					2			
33		12	20	1	1.3	2.6					2			
34		12	20	1	1.3	2.6					2			
35		12	20	1	1.3	2.6					2			
36		12	20	1	1.3	2.6					2			
37		12	20	1	1.3	2.6					2			
38		12	20	1	1.3	2.6					2			
39		12	20	1	1.3	2.6					2			
40		12	20	1	1.3	2.6					2			
41		12	20	1	1.3	2.6					2			
42		12	20	1	1.3	2.6					2			
43		12	20	1	1.3	2.6					2			
44		12	20	1	1.3	2.6					2			
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46		12	20	1	1.3	2.6					2			
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Project
**THE HEALING PLACE OF
NEW HANOVER COUNTY**
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

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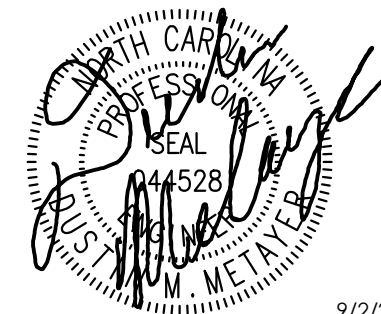


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SITE PLAN

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No. Description Date

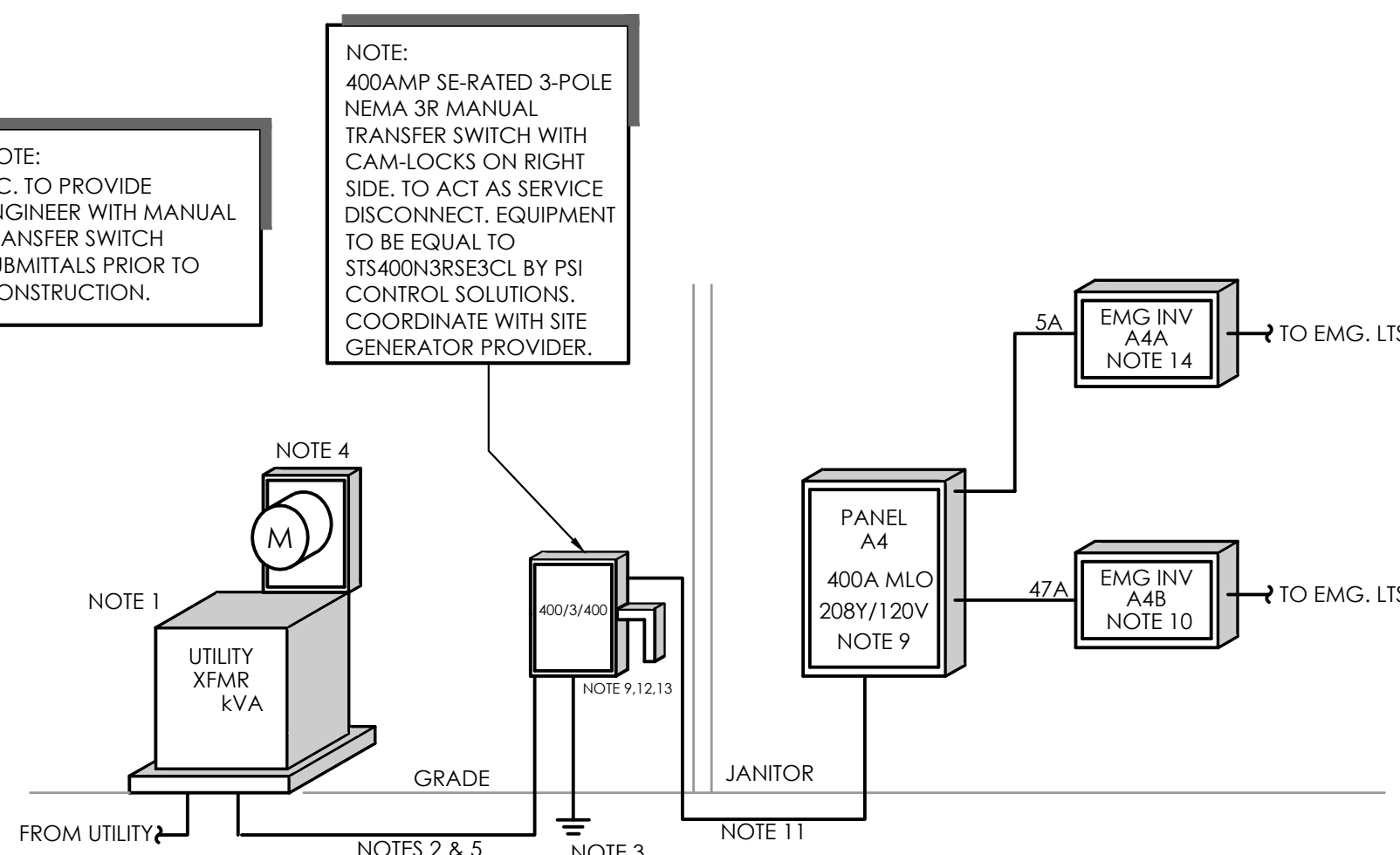
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Sheet Title

**ELECTRICAL
RISERS**

Sheet Number

E205



3 ELECTRICAL POWER RISER - DETOX BUILDING

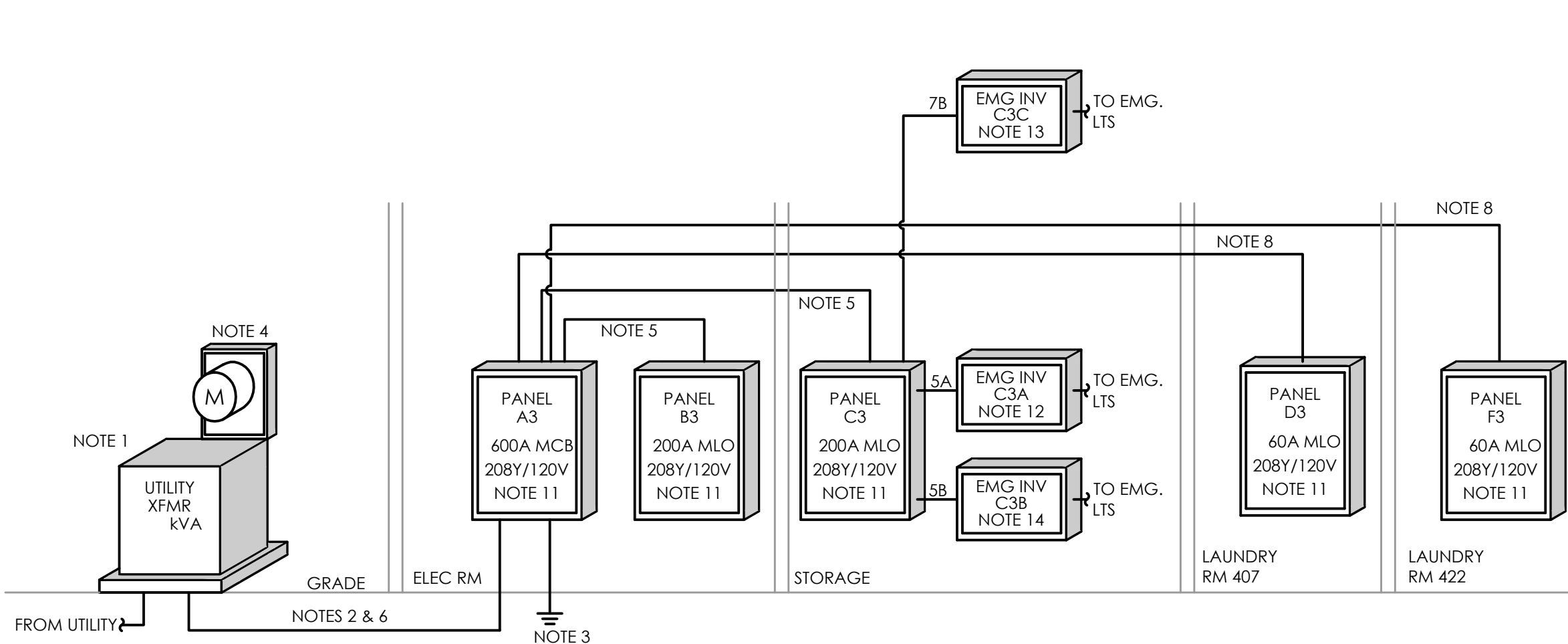
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RISER DIAGRAM NOTES:

- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C., CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- #1/0 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- TRANSFORMER MOUNTED METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- (4)500KCMIL CU, 3" CONDUIT.
- PROVIDE PLACARD AT PANEL(S)/DISCONNECT(S) INDICATING PANEL SERVED.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S), (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 65,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- (4)500KCMIL CU #3 CU GND, 3" CONDUIT.
- 208Y/120V, 400 AMP MANUAL TRANSFER SWITCH. SWITCH TO BE SERVICE ENTRANCE RATED AND ACT AS SERVICE DISCONNECT LOCATION. INCLUDES MANUAL 3 POSITION "ON-OFF-EMERGENCY" TRANSFER WITH LOCK-OUT FUNCTION. WITH NEMA 3R ENCLOSURE. MTS TO INCLUDE MANUAL SIDE CONNECT CAM LOCKS FOR ROLL UP GENERATOR CONNECTION.
- SERVICE ENTRANCE RATED WEATHERPROOF DISCONNECT SIZED AND FUSED AS INDICATED.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.

INVERTER "A4A" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
A4	4	30	120
H1	2	27	54
C4	2	21	42
TOTAL			216

INVERTER "A4B" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
V	3	23	69
P1	3	12	36
TOTAL			105



2 ELECTRICAL POWER RISER - MEN'S RESIDENTIAL BUILDING

NO SCALE

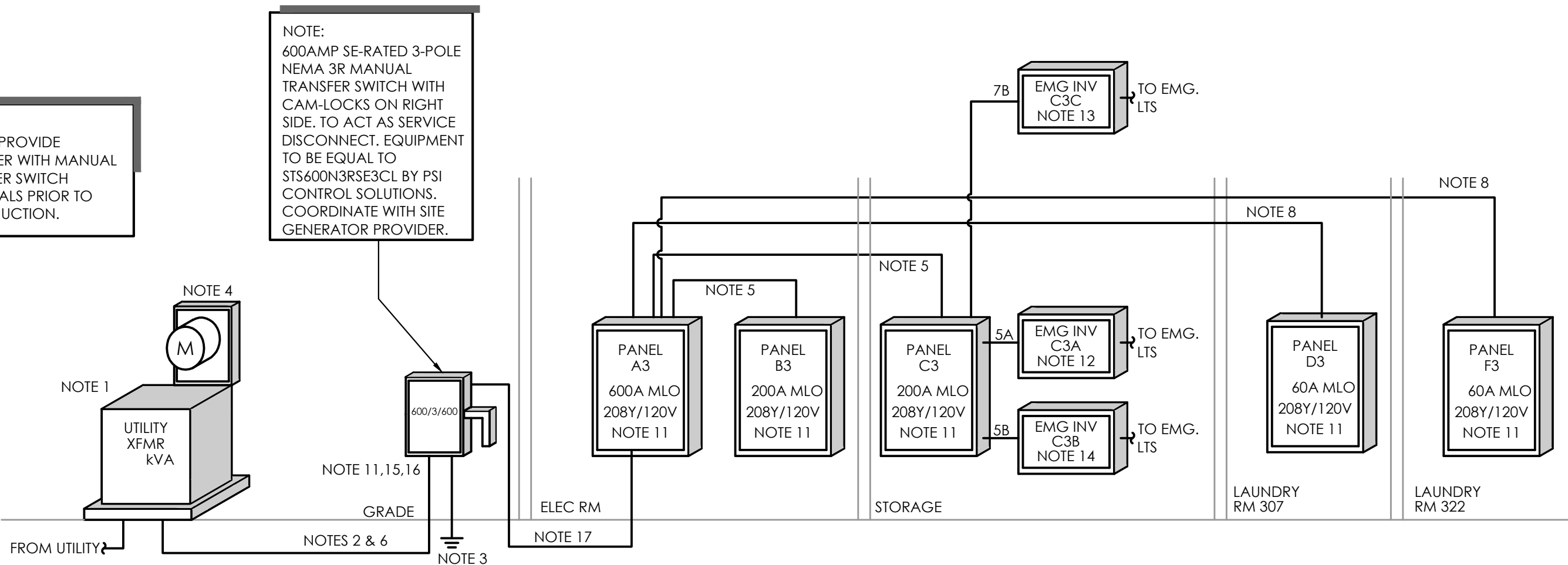
RISER DIAGRAM NOTES:

- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C., CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- #2/0 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- TRANSFORMER MOUNTED METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- (4) #3/0 CU, #4 CU GND, 2" CONDUIT.
- (2) SETS OF 350 kcmil CU, 3" CONDUIT.
- NOT USED.
- (4) #4 CU, #10 CU GND, 1 1/4" CONDUIT.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S), (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 65,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.

INVERTER "C3A" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
A4	5	30	150
C3	1	21	21
H1	1	27	27
EXIT SIGN	5	3	15
TOTAL			213

INVERTER "C3B" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
A4	3	30	90
EXIT SIGN	3	3	9
TOTAL			99

INVERTER "C3C" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
V	3	21	63
P1	2	12	24
TOTAL			87



1 ELECTRICAL POWER RISER - WOMEN'S RESIDENTIAL BUILDING

NO SCALE

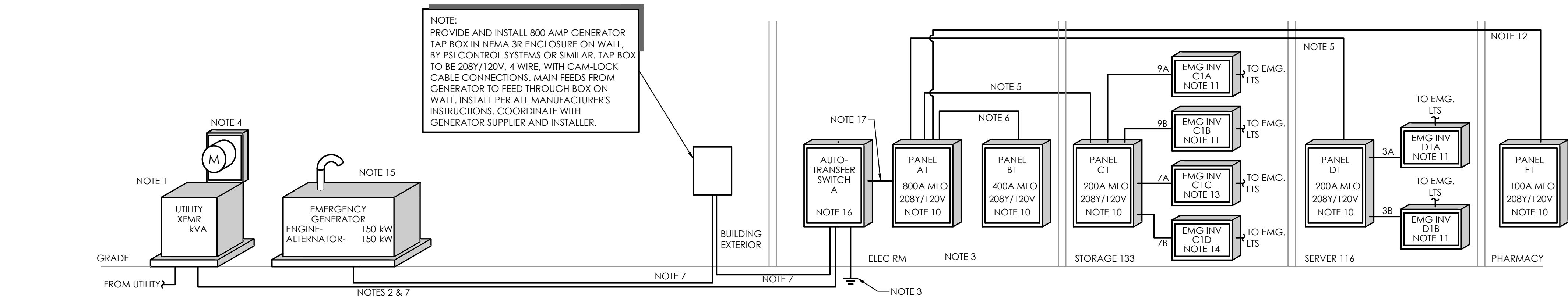
RISER DIAGRAM NOTES:

- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C., CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- #2/0 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- TRANSFORMER MOUNTED METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- (4) #3/0 CU, #4 CU GND, 2" CONDUIT.
- (2) SETS OF 350 kcmil CU, 3" CONDUIT.
- NOT USED.
- (4) #4 CU, #10 CU GND, 1 1/4" CONDUIT.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S), (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 65,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.
- 208Y/120V, 600 AMP MANUAL TRANSFER SWITCH. SWITCH TO BE SERVICE ENTRANCE RATED AND ACT AS SERVICE DISCONNECT LOCATION. INCLUDES MANUAL 3 POSITION "ON-OFF-EMERGENCY" TRANSFER WITH LOCK-OUT FUNCTION. WITH NEMA 3R ENCLOSURE. MTS TO INCLUDE MANUAL SIDE CONNECT CAM LOCKS FOR ROLL UP GENERATOR CONNECTION.
- SERVICE ENTRANCE RATED WEATHERPROOF DISCONNECT SIZED AND FUSED AS INDICATED.
- (2) SETS OF 350 KCMIL CU, #1 CU GND, 3" CONDUIT.

INVERTER "C3A" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
A4	5	30	150
C3	1	21	21
H1	1	27	27
EXIT SIGN	5	3	15
TOTAL			213

INVERTER "C3B" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
A4	3	30	90
EXIT SIGN	3	3	9
TOTAL			99

INVERTER "C3C" CALC			
FIXTURE	QTY	WATTAGE	TOTAL
V	3	21	63
P1	2	12	24
TOTAL			87



2 ELECTRICAL POWER RISER - ADMIN BUILDING

NO SCALE

RISER DIAGRAM NOTES:

- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C.. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- #2/0 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- TRANSFORMER MOUNTED METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- (4) #3/0 CU, #6 CU GND, 2" CONDUIT.
- (4) 500 kcmil CU, #3 CU GND, 3" CONDUIT.
- (2) SETS OF (4) 500 kcmil CU, 4" CONDUIT.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S). (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 65,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.
- (4) #1 CU, #8 CU GND, 1 1/2" CONDUIT.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-125-SM 125 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- NEW 208V/3 PHASE 150KW DIESEL GENERATOR WITH STANDARD 150KW ALTERNATOR, 5.7L ENGINE, 10A BATTERY CHARGER, ENGINE COOLANT HEATER, INTEGRAL 800A MAIN CIRCUIT BREAKER FOR OVER CURRENT PROTECTION AND EQUIPMENT DISCONNECT, IN LEVEL 2 ACOUSTIC EXTERIOR ENCLOSURE. GENERATOR TO BE PER UL2200 AND EPA CERTIFIED.
- NEW 800A 208Y/120V SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH. ATS TO SERVE AS MAIN SERVICE DISCONNECT. SEE BOX NOTES.
- (2) SETS OF (4) 500 kcmil CU, 1/0 CU GND, 4" CONDUIT.

GENERATOR CONTROL PANEL NOTES

- GENERATOR CONTROL PANEL TO BE EQUAL TO GENERAC H-100, WITH HTS TRANSFER SWITCH FUNCTION MONITORING AND CONTROL.
- CONTROL PANEL TO MEET REQUIREMENTS OF NFPA 99 AND 110.
- WITH DIGITAL MICROPROCESSOR, FULL SYSTEM STATUS DISPLAY, PROGRAMMABLE INPUTS AND OUTPUTS, AND BUILT IN PLC FOR SPECIAL APPLICATIONS.
- INCLUDING ENGINE FUNCTION MONITORING AND CONTROL.

AUTOMATIC TRANSFER SWITCH NOTES

- ATS TO BE 800A, 208Y/120V, SERVICE ENTRANCE RATED 3-POLE, IN NEMA 1 ENCLOSURE.
- OPEN TRANSITION, WITH INPHASE TRANSFER.
- TO INCLUDE ATC-300+ MICROPROCESSOR BASED CONTROLS.
- ATS TO BE UL 1008 LISTED AND CSA CERTIFIED.

STANDBY GENERATOR NOTES

- GENERATOR IS STAND-BY ONLY AND NOT CODE REQUIRED. ALL REQUIRED LIFE SAFETY OF BUILDING, INCLUDING EGRESS LIGHTING AND EXIT SIGNS, ARE WIRED TO SEPERATE SYSTEMS.
- GENERATOR TO BE MOUNTED ON MINIMUM 705 GALLON DIESEL SUBTANK, PER UL142 REQUIREMENT. GENERATOR RUN TIME AT FULL LOAD TO BE NO LESS THAN 48 HOURS.
- TO INCLUDE REMOTE EMERGENCY STOP SWITCH, AND 21 LIGHT ANNUNCIATOR, TO BE INSTALLED NEAR ATS IN ELECTRICAL ROOM.
- GENERATOR AND ALL EXTERIOR EQUIPMENT TO BE 150MPH WIND LOAD CERTIFIED.

NOTE: GENERATOR ENCLOSURE TO INCLUDE MANUFACTURER'S ENCLOSURE HEATER TO MAINTAIN TEMPERATURES ABOVE 40°F PER NFPA 7.7.6.

NOTE: COORDINATE EXACT LOCATION OF NEW TRANSFORMER, GENERATOR, AND SERVICE DISCONNECT EXTERIOR TAP BOX WITH CIVIL, G.C., AND UTILITY.

INVERTER "C1A" CALC

FIXTURE	QTY	WATTAGE	TOTAL
F1	2	84	168
A4	2	30	60
C4	3	13	39
EXIT SIGN	4	3	12
TOTAL			279

INVERTER "C1B" CALC

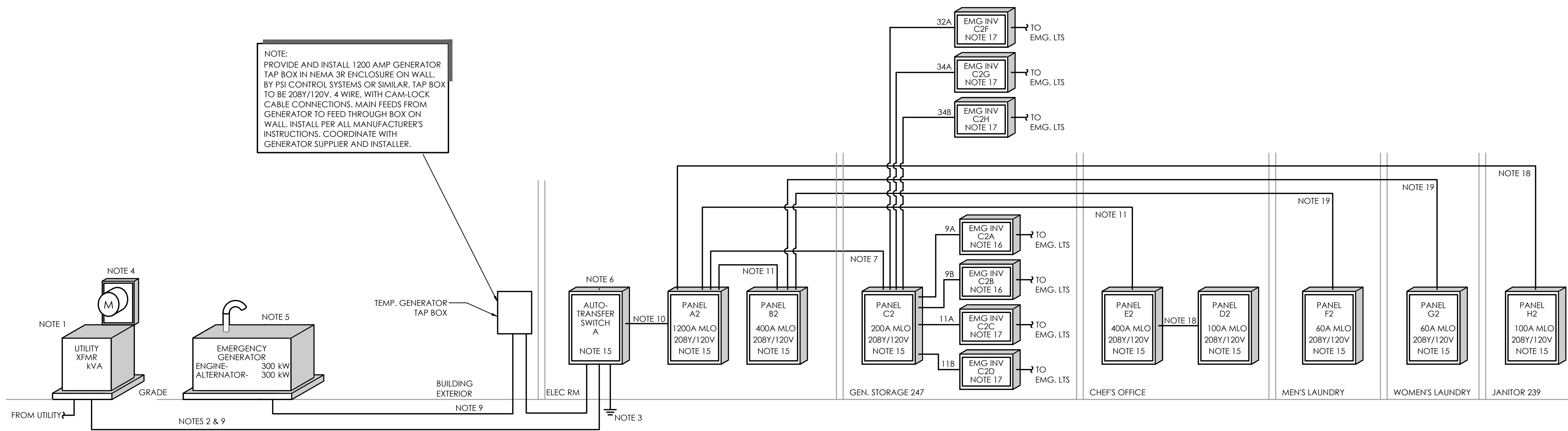
FIXTURE	QTY	WATTAGE	TOTAL
A4	1	30	30
C4	3	13	39
F1	2	84	168
EXIT SIGN	4	3	12
TOTAL			249

INVERTER "C1C" CALC

FIXTURE	QTY	WATTAGE	TOTAL
V	6	23	138
TOTAL			138

INVERTER "C1D" CALC

FIXTURE	QTY	WATTAGE	TOTAL
V	5	23	115
TOTAL			115



1 ELECTRICAL POWER RISER - DINING/SHELTER/STORAGE BUILDING

NO SCALE

RISER DIAGRAM NOTES:

- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C.. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- #3/0 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- TRANSFORMER MOUNTED METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- NEW 208V/3 PHASE 300KW DIESEL GENERATOR WITH STANDARD 300KW ALTERNATOR, 10.7L ENGINE, 10A BATTERY CHARGER, ENGINE COOLANT HEATER, INTEGRAL 1200A MAIN CIRCUIT BREAKER FOR OVER CURRENT PROTECTION AND EQUIPMENT DISCONNECT, IN LEVEL 2 ACOUSTIC EXTERIOR ENCLOSURE. GENERATOR TO BE PER UL2200 AND EPA CERTIFIED.
- NEW 1200A 208Y/120V, 3-POLE SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH. ATS TO SERVE AS MAIN SERVICE DISCONNECT. SEE BOX NOTES.
- (4) #3/0 CU, #6 CU GND, 2" CONDUIT.
- NOT USED.
- (4) SETS OF (4) 350 kcmil CU, 3" CONDUIT.
- (4) SETS OF (4) 350 kcmil CU, #3/0 CU GND, 3" CONDUIT.
- (4) 500 kcmil CU, #3 CU GND, 3" CONDUIT.
- PROVIDE PLACARD AT PANEL(S)/DISCONNECT(S) INDICATING PANEL SERVED.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S). (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 65,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. NORMALLY ON. SEE DETAIL FOR MORE INFORMATION.
- EMERGENCY LIGHTING INVERTER WITH BATTERY BACK-UP EQUAL TO IOTA IIS-375-I 375 WATT MODEL. SWITCHED INPUT. SEE DETAIL FOR MORE INFORMATION.
- (4) #1 CU, #8 CU GND, 1 1/2" CONDUIT.
- (4) #4CU, #10 CU GND, 1 1/4" CONDUIT.

INVERTER "C2A" CALC

FIXTURE	QTY	WATTAGE	TOTAL
H1	2	27	54
A4	4	30	120
C4	2	13	26
E4	1	30	30
U2	1	48	48
EXIT SIGN	7	3	21
TOTAL			299

INVERTER "C2B" CALC

FIXTURE	QTY	WATTAGE	TOTAL
C4	2	13	26
A4	8	30	240
EXIT SIGN	7	3	21
TOTAL			287

INVERTER "C2C" CALC

FIXTURE	QTY	WATTAGE	TOTAL
O1	2	9	18
V	2	21	42
P1	4	12	48
TOTAL			108

INVERTER "C2D" CALC

FIXTURE	QTY	WATTAGE	TOTAL
O1	1	9	9
V	3	21	63
P1	4	12	48
TOTAL			120

INVERTER "C2F" CALC

FIXTURE	QTY	WATTAGE	TOTAL
P1	4	12	48
R1	3	100	300
TOTAL			348

INVERTER "C2G" CALC

FIXTURE	QTY	WATTAGE	TOTAL
P1	3	12	36
R1	3	100	300
TOTAL			336

INVERTER "C2H" CALC

FIXTURE	QTY	WATTAGE	TOTAL
P1	4	12	48
R1	3	100	300
TOTAL			348

7 FIRE ALARM DEVICE MATRIX ADMIN BUILDING
NO SCALE

5 FIRE ALARM DEVICE MATRIX DINING/ SHELTER BUILDING
NO SCALE

2 FIRE ALARM DEVICE MATRIX DETOX BUILDING
NO SCALE

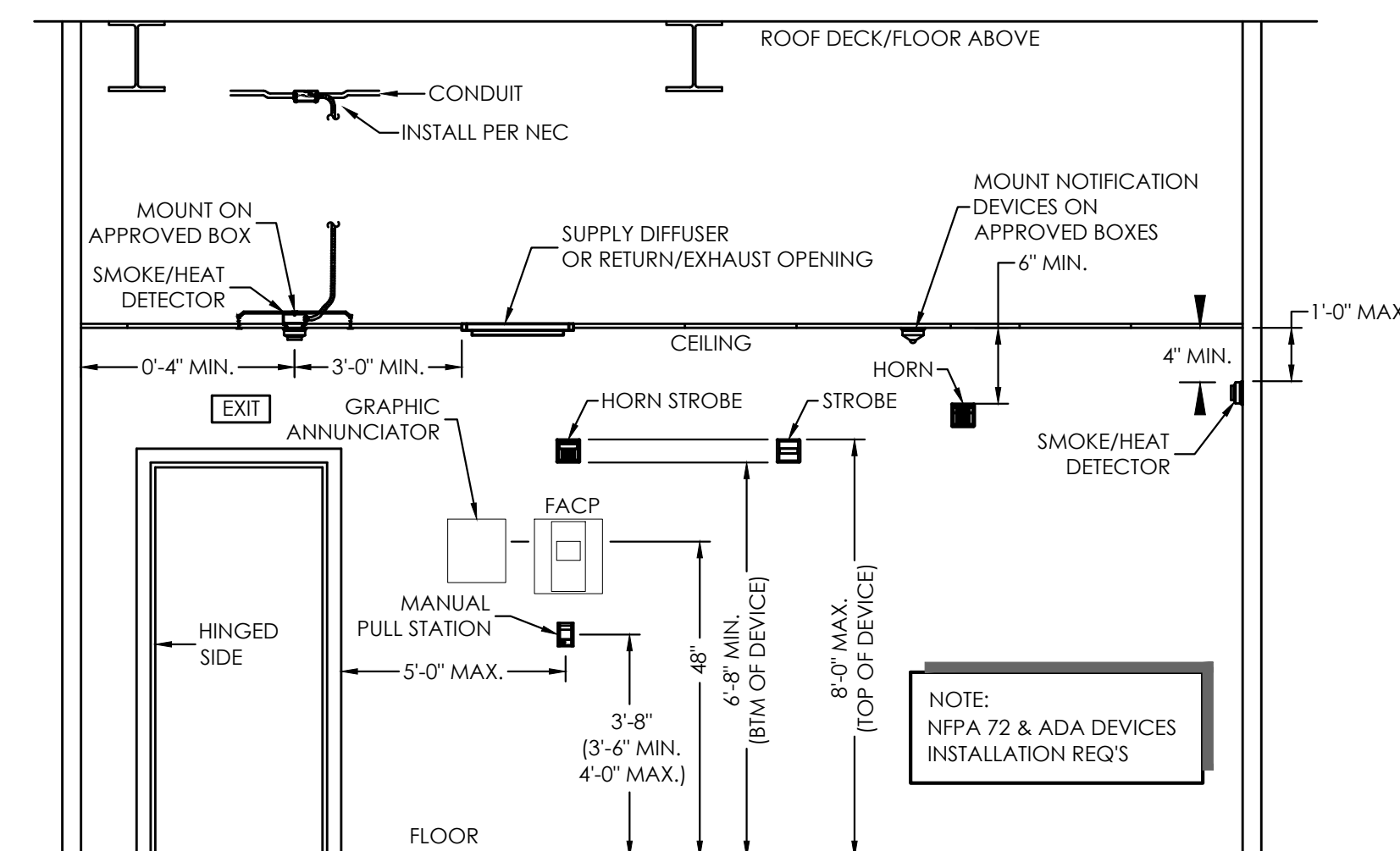
1 FIRE ALARM DEVICE MATRIX RESIDENTIAL BUILDINGS
NO SCALE

RISER NOTES:

1. FIRE ALARM CONTROL PANEL TO BE EQUAL TO FIRE-LITE M59200UDLS W/ FIRE-LITE IPC DIGITAL CELLULAR FIRE COMMUNICATOR W/ BATTERY BACK-UP (POWER AND TELE LINES FOR DEVICE MUST BE IN CONDUIT, SEE MANUFACTURER'S INSTRUCTIONS) AND ANNUNCIATOR PANEL, PROVIDE FCP254-F58 POWER SUPPLIES AS REQUIRED.
2. ENSURE ALL DEVICES/APPLIANCES USED ARE COMPATIBLE WITH FACP. PROVIDE ALL PROGRAMMING AND FINAL CONNECTION BY A FACTORY TRAINED TECHNICIAN.
3. RELAYS FOR SMOKE DAMPERS AND HVAC SHUT DOWN. SEE PLANS.

4 FIRE ALARM RISER DIAGRAM
NO SCALE

NOTE:
NOTIFICATION DEVICES IN
SLEEPING AREAS ARE TO
BE LOW FREQUENCY TYPE



3 FIRE ALARM DEVICE LOCATIONS

FIRE ALARM SYMBOL LEGEND	
	FIRE ALARM CONTROL UNIT
	DIGITAL ALARM COMMUNICATOR TRANSMITTER
	FIRE ALARM ANNUCIATOR
	WATER FLOW SWITCH
	LOW TEMPERATURE SWITCH
	HIGH PRESSURE SWITCH
	PRESSURE DETECTOR/SWITCH
	VALVE SUPERVISORY SWITCH
	HEAT DETECTOR/SENSOR (X= TYPE)
	PULL STATION/FIRE ALARM
	SMOKE DETECTOR/SENSOR (DEFAULT PHOTOELECTRIC TYPE)
	SMOKE DETECTOR IN ADA UNIT. PROVIDE INTELLIGENT LOW FREQUENCY SOUNDER BASE WITH TEMPORAL 3 TONE EQUAL TO "SYSTEM SENSOR 8200S-LF". PROVIDE COMPATIBLE PHOTOELECTRIC SMOKE DETECTOR/SENSOR.
	DUCT SMOKE DETECTOR [NFPA 72, SECTION 17.7.5.5]
	AUDIBLE ONLY APPLIANCE (WALL MOUNTED)
	VISUAL ONLY APPLIANCE (WALL MOUNTED)
	AUDIBLE/VISUAL APPLIANCE (WALL MOUNTED)
	VISUAL ONLY APPLIANCE (CEILING MOUNTED)
	AUDIBLE ONLY APPLIANCE (CEILING MOUNTED)
	AUDIBLE/VISUAL APPLIANCE (CEILING MOUNTED)
	MAGNETIC DOOR HOLDER [SUPPLIED WITH DOOR HARDWARE]. CONNECT TO LOCAL SMOKE DETECTOR.
	ANSUL HOOD SYSTEM "ALARM" OUTPUT.
	FIRE ALARM RELAY. COORDINATE FAI OPEN/FAIL CLOSED REQUIREMENTS AND VOLTAGES WITH APPLICATION.
	GAS DETECTOR (X = GAS TYPE EX. CARBON MONOXIDE)
	SPRINKLER BELL (WALL MOUNTED)

GENERAL FIRE ALARM NOTES

1. THE FIRE ALARM CONTRACTOR IS TO BE HELD TO THE SAME REQUIREMENTS AS THE ELECTRICAL CONTRACTOR. FIRE ALARM CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND ELECTRICAL "GENERAL NOTES" BEFORE COMPLETING BID.
2. FIRE ALARM CONTRACTOR IS TO PROVIDE FIRE ALARM SHOP DRAWINGS INCLUDING DEVICE CUTSHEETS, BATTERY & VOLTAGE DROP CALCULATIONS AND WIRING LAYOUT TO LOCAL AHJ PRIOR TO BEGINNING WORK.
3. AUDIBLE FIRE ALARM NOTIFICATION APPLIANCES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 dbA ABOVE THE AMBIENT SOUND PRESSURE LEVEL OR 5 dbA ABOVE THE BACKGROUND SOUND LEVEL DURING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, AT ALL LOCATIONS WITHIN THE OCCUPABLE SPACE (TYPICAL AVERAGE AMBIENT SOUND PRESSURE LEVELS ARE GIVEN IN NFPA 72 TABLE 4.1.4.3). THE MINIMUM SOUND PRESSURE LEVEL SHALL BE 75 dbA IN OCCUPANCY GROUPS R-1 AND I-1, 90 dbA IN MECHANICAL EQUIPMENT ROOMS, AND 60 dbA IN ALL OTHER OCCUPANCIES. THE MINIMUM SOUND PRESSURE LEVEL SHALL BE 15 dbA AT THE MINIMUM HEARING DISTANCE FROM ANY AUDIBLE APPLIANCE.
4. IF THREE OR MORE FIRE ALARM SYSTEM VISUAL NOTIFICATION APPLIANCES ARE LOCATED WITHIN AN OBSERVERS FIELD OF VIEW (135°) AND WITHIN 55'-0" OF THE OBSERVER, THEN THE DEVICES SHALL BE SYNCHRONIZED.
5. FIRE ALARM DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND 'ADA'.
6. ALL FIRE ALARM WIRING SHALL BE IN CONDUIT OR AS ALLOWED BY NEC OR LOCAL AHJ.
7. ELECTRICAL CONTRACTOR SHALL PROVIDE A FIRE ALARM LAYOUT PLAN AT THE FACP.
8. TESTING OF THE FIRE ALARM SYSTEM SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

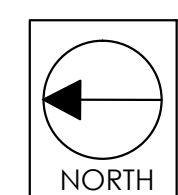
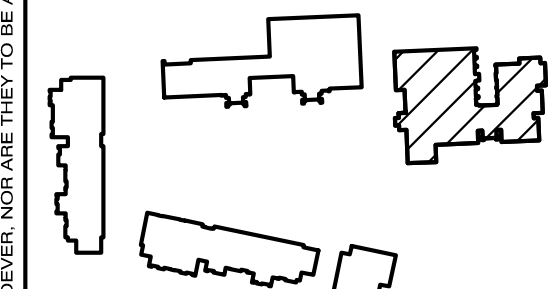
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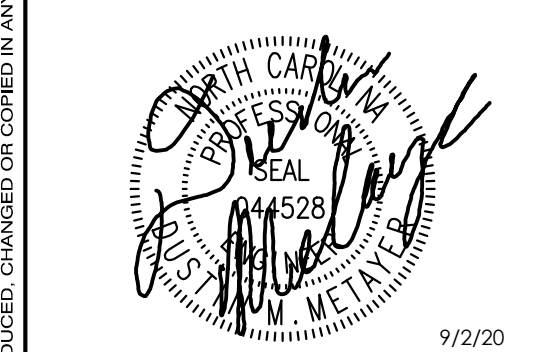
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seals



No.	Description	Date
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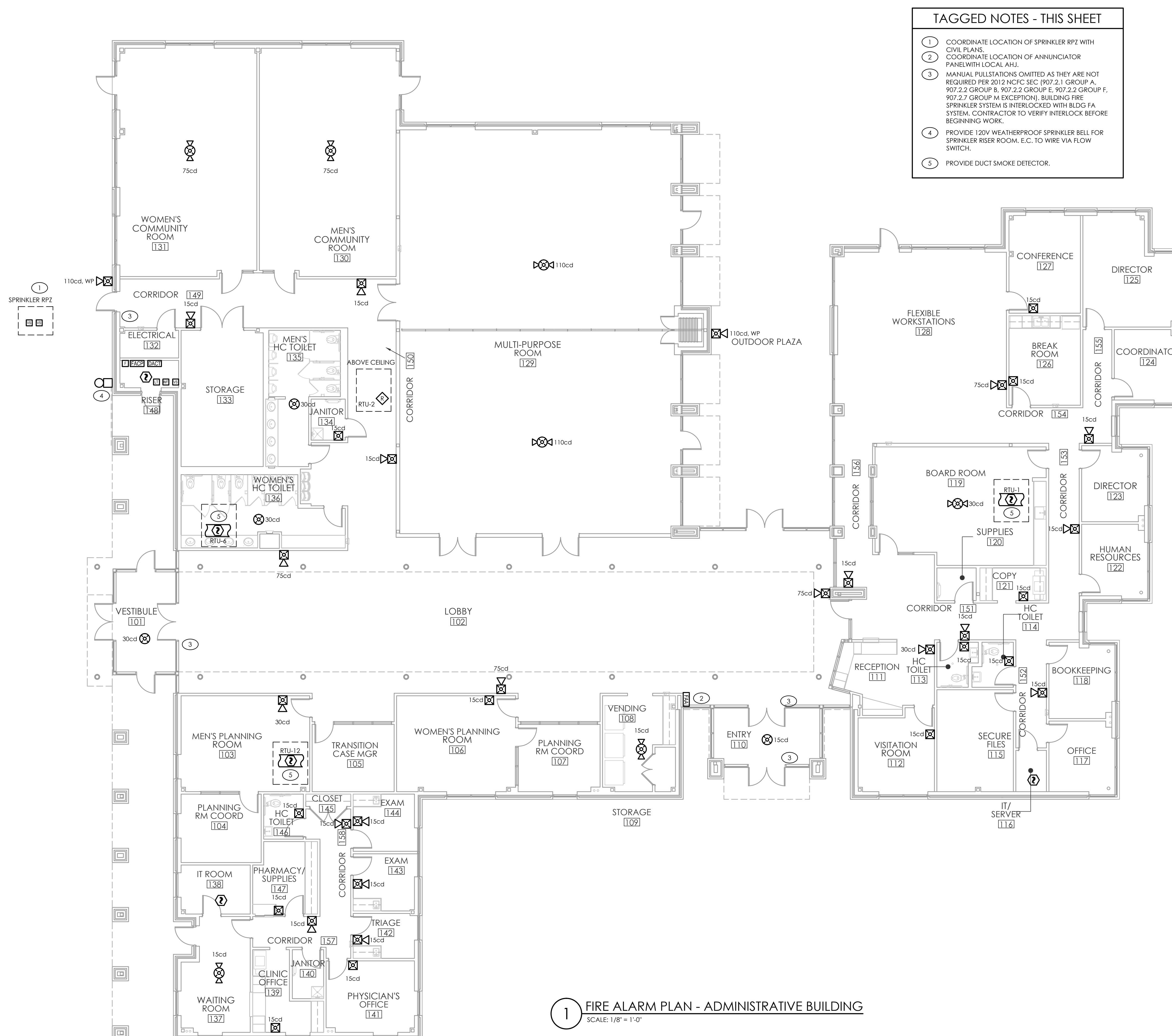
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Sheet Title

FIRE ALARM
ADMIN
BUILDING
PLAN

Sheet Number

FA101.0



1 FIRE ALARM PLAN - ADMINISTRATIVE BUILDING
SCALE: 1/8" = 1'-0"

Project
THE HEALING PLACE OF
NEW HANOVER COUNTY
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

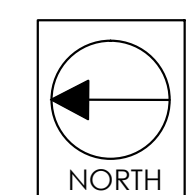
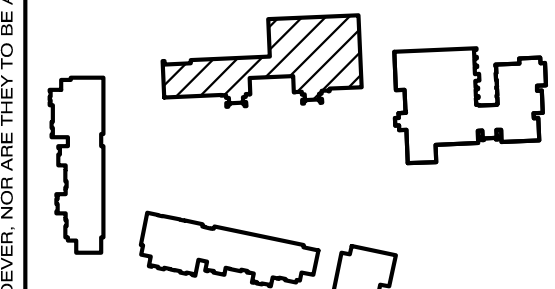
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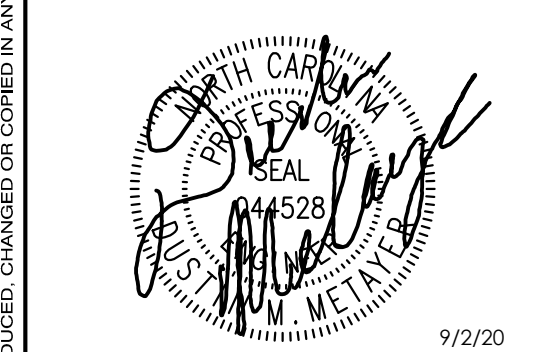
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seals



9/2/20

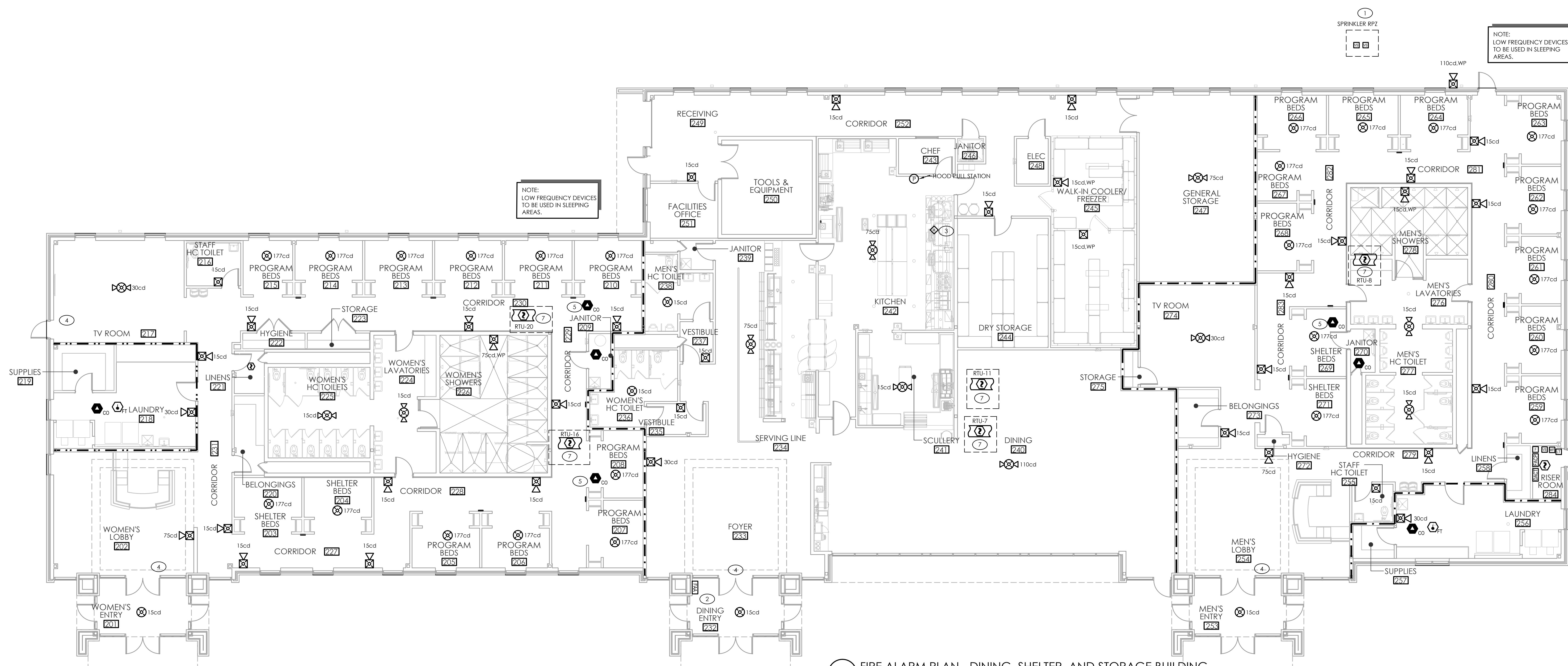
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Sheet Title

FIRE ALARM
DINING
BUILDING
PLAN

Sheet Number

FA102.0



1 FIRE ALARM PLAN - DINING, SHELTER, AND STORAGE BUILDING
SCALE: 1/8" = 1'-0"

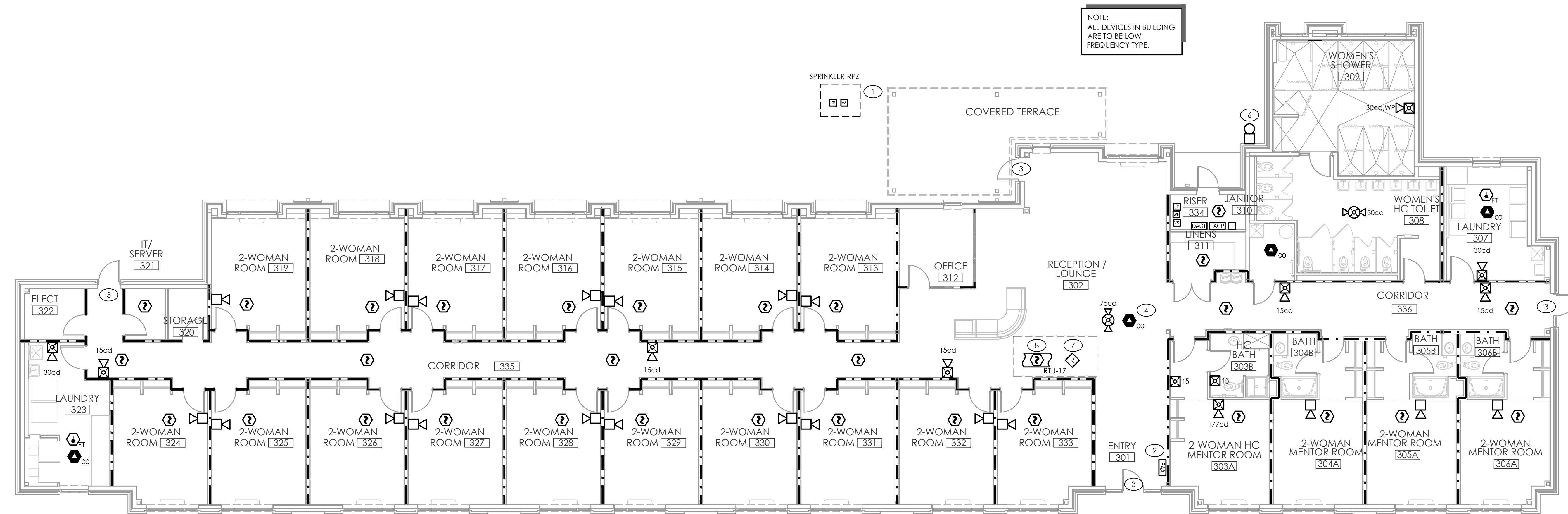
SCALE: 1/8" = 1'-0"

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FIRE RATING LEGEND	
---	1-HR FIRE
---	SMOKE WALL
---	STAFF CORRIDOR AND WALLS ARE SMOKE PARTITIONS

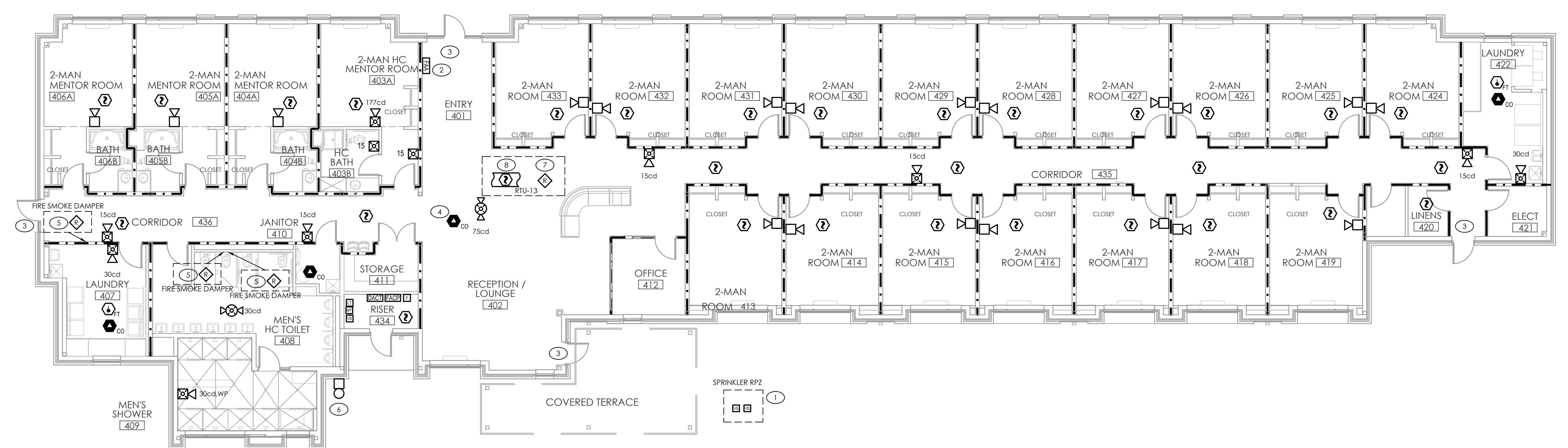
- TAGGED NOTES - THIS SHEET**
- COORDINATE LOCATION OF SPRINKLER RPZ WITH CIVIL PLANS.
 - COORDINATE LOCATION OF ANNUNCIATOR PANEL WITH LOCAL AHJ.
 - MANUAL PULL STATIONS OMITTED AS THEY ARE NOT REQUIRED PER 2012 NCFC SEC 907.2.1 GROUP A, 907.2.2 GROUP B, 907.2.2 GROUP E, 907.2.2 GROUP F, 907.2.7 GROUP M EXCEPTION. BUILDING FIRE SPRINKLER SYSTEM IS INTERLOCKED WITH BLDG-FA SYSTEM. CONTRACTOR TO VERIFY INTERLOCK BEFORE BEGINNING WORK.
 - PROVIDE CARBON MONOXIDE DETECTOR 5'-0" FROM FIRST SUPPLY GRILLE OFF MAIN DUCT IN AREA CORRIDOR. COORDINATE W/ I.M.C.
 - PROVIDE FIRE ALARM CONNECTION TO AREA SMOKE DAMPER. DAMPER HAS INTEGRAL SMOKE DETECTION. MONITOR FOR ALARM AND TROUBLE CONDITIONS.
 - PROVIDE 120V WEATHERPROOF SPRINKLER BELL FOR SPRINKLER RISER ROOM. E.C. TO WIRE VIA FLOW SWITCH.
 - PROVIDE FIRE ALARM RELAY FOR RTU SHUT DOWN, RTU TO SHUT DOWN UPON ACTIVATION OF FIRE ALARM. COORDINATE RELAY LOCATION W/ G.C..
 - PROVIDE DUCT SMOKE DETECTOR.

NOTE:
ALL DEVICES IN BUILDING
ARE TO BE LOW
FREQUENCY TYPE.



2 FIRE ALARM PLAN - WOMENS RESIDENTIAL BUILDING
SCALE: 1/8" = 1'-0"

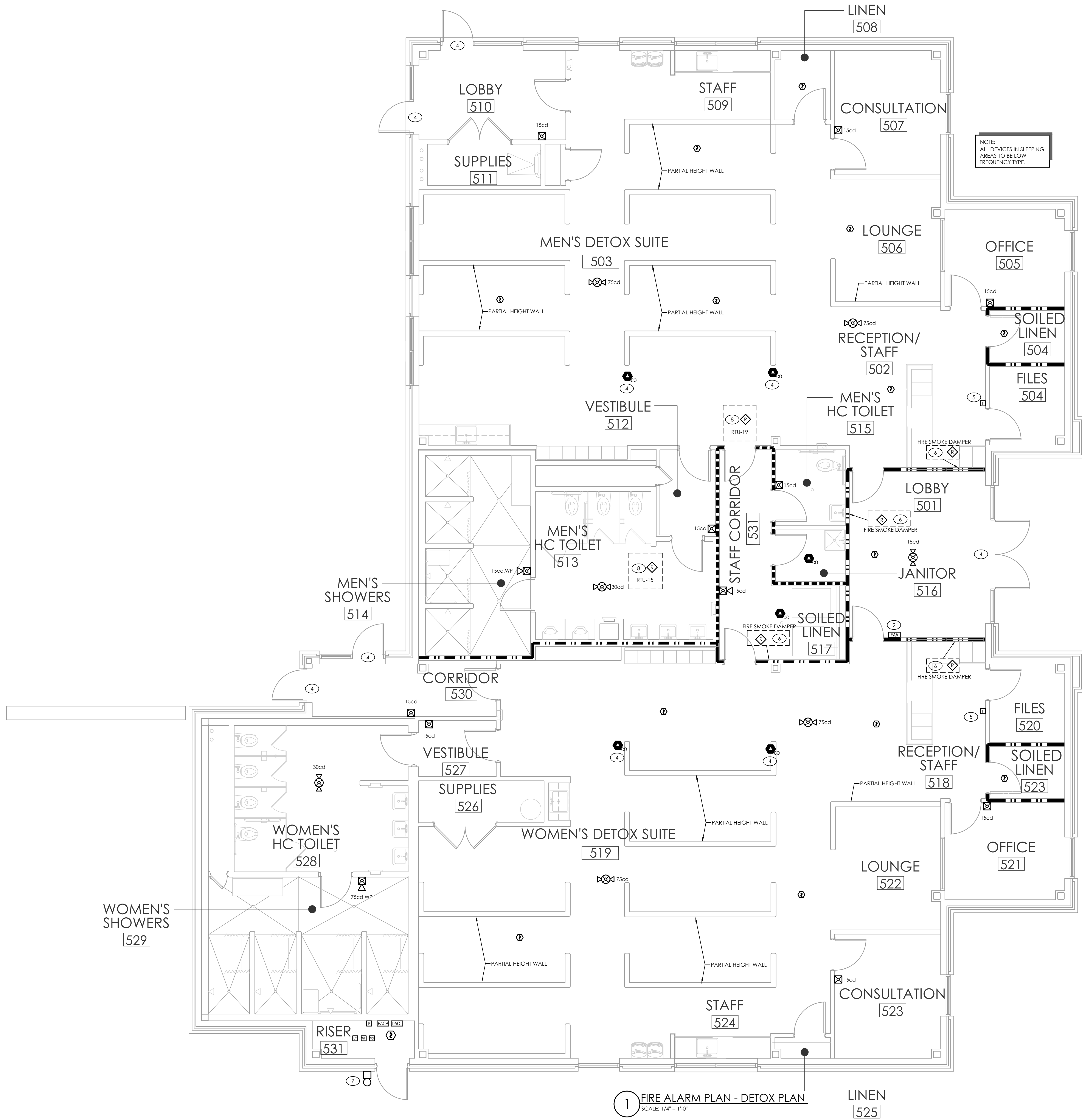
NOTE:
ALL DEVICES IN BUILDING
ARE TO BE LOW
FREQUENCY TYPE.



1 FIRE ALARM PLAN - MENS RESIDENTIAL BUILDING
SCALE: 1/8" = 1'-0"

No.	Description	Date
1	CONSTRUCTION DOCUMENT SET	08/25/20

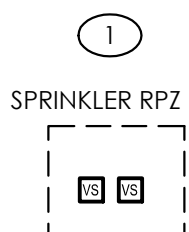
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1 FIRE ALARM PLAN - DETOX PLAN
SCALE: 1/4" = 1'-0"

FIRE RATING LEGEND	
---	1-HR WALL
-.-.-	1-HR FIRE/ SMOKE WALL
*STAFF CORRIDOR AND WALLS ARE SMOKE PARTITIONS	

- TAGGED NOTES - THIS SHEET
- 1 COORDINATE LOCATION OF SPRINKLER RPZ WITH CIVIL PLANS.
 - 2 COORDINATE LOCATION OF ANNUNCIATOR PANEL WITH LOCAL AHJ.
 - 4 MANUAL PULLSTATIONS OMITTED AS THEY ARE NOT REQUIRED PER 2018 NCFC. BUILDING FIRE SPRINKLER SYSTEM IS INTERLOCKED WITH BLDG FA SYSTEM. CONTRACTOR TO VERIFY INTERLOCK BEFORE BEGINNING WORK.
 - 4 PROVIDE CARBON MONOXIDE DETECTOR 5'-0" FROM FIRST SUPPLY GRILLE OFF MAIN DUCT IN AREA. COORDINATE WITH M.C..
 - 5 PROVIDE FIRE ALARM PULL STATION.
 - 6 PROVIDE FIRE ALARM CONNECTION TO AREA SMOKE DAMPER. DAMPER HAS INTEGRAL SMOKE DETECTOR. MONITOR FOR ALARM AND TROUBLE CONDITIONS.
 - 7 PROVIDE 120V WEATHERPROOF SPRINKLER BELL FOR SPRINKLER RISER ROOM. E.C. TO WIRE VIA FLOW SWITCH.
 - 8 PROVIDE FIRE ALARM RELAY FOR RTU SHUT DOWN. RTU TO SHUT DOWN UPON ACTIVATION OF FIRE ALARM. COORDINATE RELAY LOCATION W/ G.C..



708 ST. MARYS ST
RALEIGH, NC 27605 LIC.#: P-0990
P-013-341-4247 P-019-890-3797
PLUMBING MECHANICAL ELECTRICAL

Project
THE HEALING PLACE OF
NEW HANOVER COUNTY
1000 MEDICAL CENTER DRIVE
WILMINGTON, NORTH CAROLINA

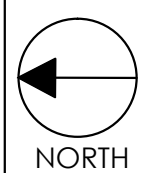
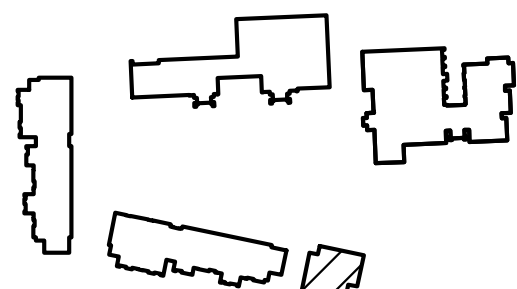
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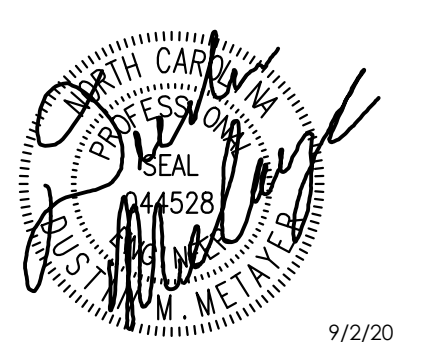
NEW HANOVER COUNTY,
NORTH CAROLINA

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SITE PLAN



Professional Seals



No.	Description	Date
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CONSTRUCTION DOCUMENT SET	08/25/20
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Sheet Title

FIRE ALARM
DETOX
BUILDING
PLAN

Sheet Number

FA104.0