

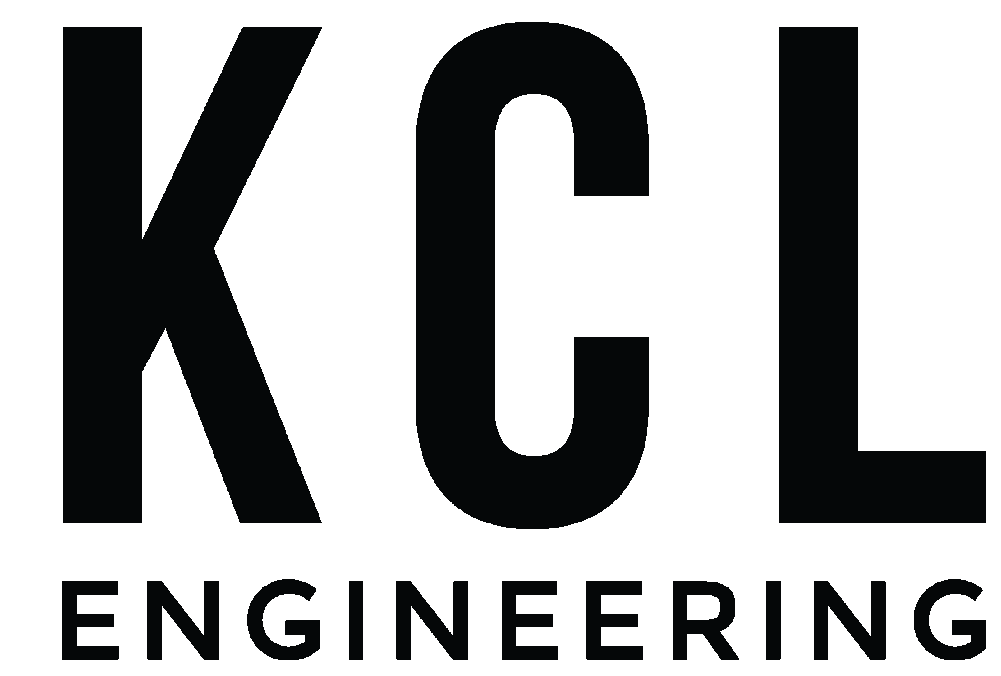
STATE OF IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES  
IOWA MEDICAL CLASSIFICATION CENTER  
ELECTRICAL UPGRADES  
PROJECT #: 9353.00  
100% CD  
02/21/2025



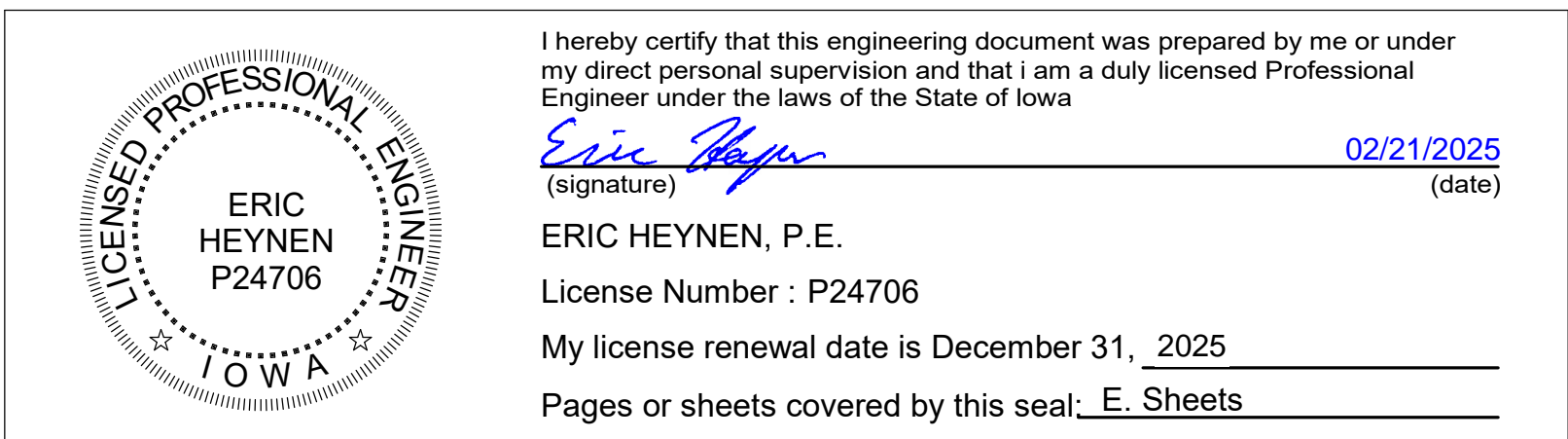
OWNER  
IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES  
109 SE 13TH STREET  
DES MOINES, IA 50319  
OWNER PROJECT NUMBER: 9353.00



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Drawing Name:  
TITLE SHEET

Drawing #:  
AG00



INSTALLATION NOTES - ELECTRICAL

- BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BID.
- INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
- RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE GENERAL AND APPROXIMATE LOCATIONS. LAYOUTS DO NOT ALWAYS SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED. NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. MODIFY CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT USE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
- BALANCE PANEL LOADS DURING INSTALLATION. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED TO ACCOMMODATE.
- PROVIDE TYPED PANEL DIRECTORY AT PROJECT COMPLETION FOR NEW PANELS AND EXISTING PANELS WITH CIRCUITS MODIFIED AS A RESULT OF THIS PROJECT. USE OWNER'S CURRENT ROOM NUMBERS AND EQUIPMENT NAMES.
- CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS, FLOORS, CEILINGS, AND ROOFS THAT ARE REQUIRED TO COMPLETE THEIR SCOPE OF WORK. SEAL PENETRATIONS IN ACCORDANCE WITH THE RATING OF THE AFFECTED ASSEMBLY. SEAL AND INSTALL FIRESTOPPING TO MATCH EXISTING ONSITE CONDITIONS.

DEVICE INSTALLATION AND MATERIALS - ELECTRICAL

- PROVIDE NORMAL WIRING DEVICES AS GRAY UNLESS OTHERWISE NOTED.
- PROVIDE DEVICES COVER PLATES AS STAINLESS STEEL. MATCH WIRING DEVICES COLOR.
- PROVIDE GFCI TYPE RECEPTACLES AT ALL LOCATIONS REQUIRED BY THE NEC.
- INSTALL WALL MOUNTED RECEPTACLES AT +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.

INSTALLATION NOTES - LIGHTING

- UNLESS NOTED OTHERWISE, CONNECT ALL EMERGENCY BATTERY FIXTURES WITH AN UN-SWITCHED LEG OF THE LIGHTING CIRCUIT THAT SERVES THE FIXTURES SPACE. MAINTAIN NORMAL SWITCHING SCHEME OF EMERGENCY FIXTURES UNDER NORMAL OPERATION. INSTALL PER EMERGENCY FIXTURE OR TRANSFER DEVICE INSTRUCTIONS.
- VERIFY CEILING TYPE (IE. GRID, GYP) WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO RELEASE OF LIGHTING FIXTURE EQUIPMENT PACKAGE. ADJUST FIXTURE TYPE, CONSTRUCTION, FLANGE, OR OTHER COORDINATION DETAILS AS REQUIRED FOR CEILING TYPE.
- LIGHTING CONTROLS SENSORS ARE SHOWN ON PLANS AT SUGGESTED LOCATIONS ONLY. VERIFY LOCATIONS WITH MANUFACTURER GUIDELINES AND INSTALLATION RECOMMENDATIONS. ADJUST LOCATIONS AS REQUIRED TO MEET MANUFACTURER GUIDELINES.
- PROVIDE LIGHTING CONTROLS AS A COMPLETE SYSTEM AND INCLUDE MATERIAL AND INSTALLATION FOR ALL POWER PACKS, ACCESSORIES, CONTROLLERS, AND WIRING REQUIRED FOR OPERATION.

BUILDING EQUIPMENT COORDINATION NOTES - ELECTRICAL

- PROVIDE DISCONNECTS RATED FOR EQUIPMENT AS REQUIRED AND AS INDICATED WITHIN EQUIPMENT CONNECTION SCHEDULE. COORDINATE DISCONNECT MOUNTING TO ALLOW EQUIPMENT REMOVAL WITHOUT DISCONNECT REMOVAL AND TO MINIMIZE WIRING WORK REQUIRED.
- PROVIDE HEAVY DUTY TYPE DISCONNECTS RATED FOR THE INSTALLED ENVIRONMENT. PROVIDE MINIMUM NEMA 3R RATED DISCONNECTS FOR EXTERIOR INSTALLATIONS OR AS NOTED.

ALTERNATE LIST-ELECTRICAL

- UPS BATTERY SYSTEM TYPE. BASE BID IS VRLA. ADD ALTERNATE FOR LITHIUM.
- ARC FLASH DATA COLLECTION AND LABELING FOR ENTIRE CAMPUS DATA COLLECTION.
  - COMPLETE INFORMATION ON PROJECT-SPECIFIC CHARACTERISTICS OF ACTUAL INSTALLED EQUIPMENT, PROTECTIVE DEVICES, FEEDERS, ETC. AS NECESSARY TO DEVELOP ASSOCIATED INPUT DATA FOR USE IN SYSTEM MODELING.
    - UTILITY SOURCE DATA: INCLUDE PRIMARY VOLTAGE, MAXIMUM AND MINIMUM THREE-PHASE AND LINE-TO-GROUND FAULT CURRENTS, IMPEDANCE, X/R RATIO, AND PRIMARY PROTECTIVE DEVICE INFORMATION.
    - OBTAIN UP-TO-DATE INFORMATION FROM UTILITY COMPANY.
    - TRANSFORMERS: INCLUDE PRIMARY AND SECONDARY VOLTAGE RATINGS, KVA RATING, WINDING CONFIGURATION, PERCENT IMPEDANCE, AND X/R RATIO.
  - PROTECTIVE DEVICES:
    - CIRCUIT BREAKERS: INCLUDE MANUFACTURER/MODEL, TYPE (E.G. THERMAL MAGNETIC, ELECTRONIC TRIP), FRAME SIZE, TRIP RATING, VOLTAGE RATING, INTERRUPTING RATING, AVAILABLE FIELD-ADJUSTABLE TRIP RESPONSE SETTINGS, AND FEATURES (E.G. ZONE SELECTIVE INTERLOCKING).
    - FUSES: INCLUDE MANUFACTURER/MODEL, TYPE/CLASS (E.G. CLASS J), SIZE/RATING, AND SPEED (E.G. TIME DELAY, FAST ACTING).
  - PROTECTIVE RELAYS: INCLUDE MANUFACTURER/MODEL, TYPE, SETTINGS, CURRENT/POTENTIAL TRANSFORMER RATIO, AND ASSOCIATED PROTECTIVE DEVICE.
  - CONDUCTORS: INCLUDE FEEDER SIZE, MATERIAL (E.G. COPPER, ALUMINUM), INSULATION TYPE, VOLTAGE RATING, NUMBER PER PHASE, RACEWAY TYPE, AND ACTUAL LENGTH.

LABELING

- KCL ENGINEERING WILL PREPARE ARC FLASH REPORT AND PROVIDE PRINTED LABELS TO CONTRACTOR FOR INSTALLATION ON ELECTRICAL EQUIPMENT.

UNIT PRICING - EXIT SIGNS

- EXIT SIGNS SHOWN ON DRAWINGS ARE IN LOCATIONS BASED OFF EXISTING DOCUMENTATION AND FIELD VERIFICATION. NOT ALL EXIT SIGNS SHOWN ON PLANS MAY BE AN EXISTING LOCATION, AND THERE MAY BE ADDITIONAL LOCATIONS NOT SHOWN ON PLANS.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL EXIT SIGN LOCATIONS AND REPLACE ANY EXIT SIGNS NOT SHOWN ON PLANS WITH NEW. CIRCUIT EXIT SIGN TO NEAREST LIGHTING INVERTER WITH AVAILABLE CAPACITY.
- PROVIDE SEPARATE LINE ITEM WITH UNIT PRICE FOR EXIT SIGN WITH EXPECTED 25' MC CABLING WHIP.

ELECTRICAL ABBREVIATIONS

A	DEVICE MOUNTED +48" ABOVE COUNTER TOP (VERIFY LOCATION)	NL	UNSWITCHED NIGHT LIGHTING CIRCUIT
AFF	ABOVE FINISHED FLOOR	NM	NONMETALLIC
ATS	AUTOMATIC TRANSFER SWITCH	NTS	NOT TO SCALE
C	CEILING	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CT	CURRENT TRANSFORMER	OFOI	OWNER FURNISHED CONTRACTOR INSTALLED
E	EXISTING ITEM TO REMAIN	R	REMOVED
EC	ELECTRICAL CONTRACTOR	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
EM	EMERGENCY LIGHT FIXTURE	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW
ER	NEW LOCATION OF EXISTING ITEM	SCCR	SHORT CIRCUIT CURRENT RATING
F	ROUGH IN FOR FUTURE DEVICE	TCC	TAMPER PROOF DEVICE
FAFP	FIRE ALARM ANNUNCIATOR PANEL	TV	TELEVISION
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL
FSD	FIRE SMOKE DAMPER	UPS	UNINTERRUPTIBLE POWER SUPPLY
G	GROUND FAULT CIRCUIT INTERRUPTER	V	VOLTS
GND	GROUND	VA	VOLT-AMPERES
KVA	KILO-VOLT-AMPERES	WG	WIREGUARD COVER
KW	KILOWATTS	WP	WEATHERPROOF DEVICE
MC	MECHANICAL CONTRACTOR	WR	WEATHER RESISTANT DEVICE
MCB	MAIN CIRCUIT BREAKER	+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR
MCP	MAIN DISTRIBUTION PANEL		
MLO	MAIN LUGS ONLY		
N	NEW DEVICE IN EXISTING LOCATION		

GENERAL NOTES - ELECTRICAL

- COORDINATE LOCATION/INSTALLATION ELECTRICAL WORK WITH OWNER AND CM. BEGIN INSTALLATION AND ROUGH-IN ONLY AFTER PROPER AND TIMELY COORDINATION. COORDINATE WITH EXISTING BUILDING STRUCTURE, ARCHITECTURE, MECHANICAL SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, EQUIPMENT ACCESS/CLEARANCE, ETC. REFER TO ALL ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- NEW CONDUIT AND PATHWAYS IN EXPOSED CEILING AREAS MUST BE INSTALLED AT 9' OR MORE ABOVE FLOOR UNLESS SPECIFICALLY NOTED.
- ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS AND CONTRACT DOCUMENTS. THE ELECTRICAL SCOPE OF WORK IS DEFINED BY THE COMPLETE SET OF CONTRACT DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO REFERENCING, ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS; MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS.
- NOTIFY OWNER BEFORE CREATING ANY SMOKE, HEAT, MOISTURE, STRONG FUMES OR DUST AROUND FIRE ALARM DEVICES.
- NOTIFY OWNER A MINIMUM OF 72 HOURS IN ADVANCE OF ANY WORK, SHUTDOWN, OR TRANSFER.
- NEW INVERTERS WILL NEED TO BE INSTALLED AFTER THE NEW PANELBOARDS ARE INSTALLED AND IN USE. NEW PANELS BRANCH CIRCUITS WILL BE USED TO FEED INVERTERS.

CODE NOTES - ELECTRICAL

- PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL STATE CODES.
- THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE IS THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH AHJ WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
- INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADAAG - AMERICANS WITH DISABILITIES ACT.

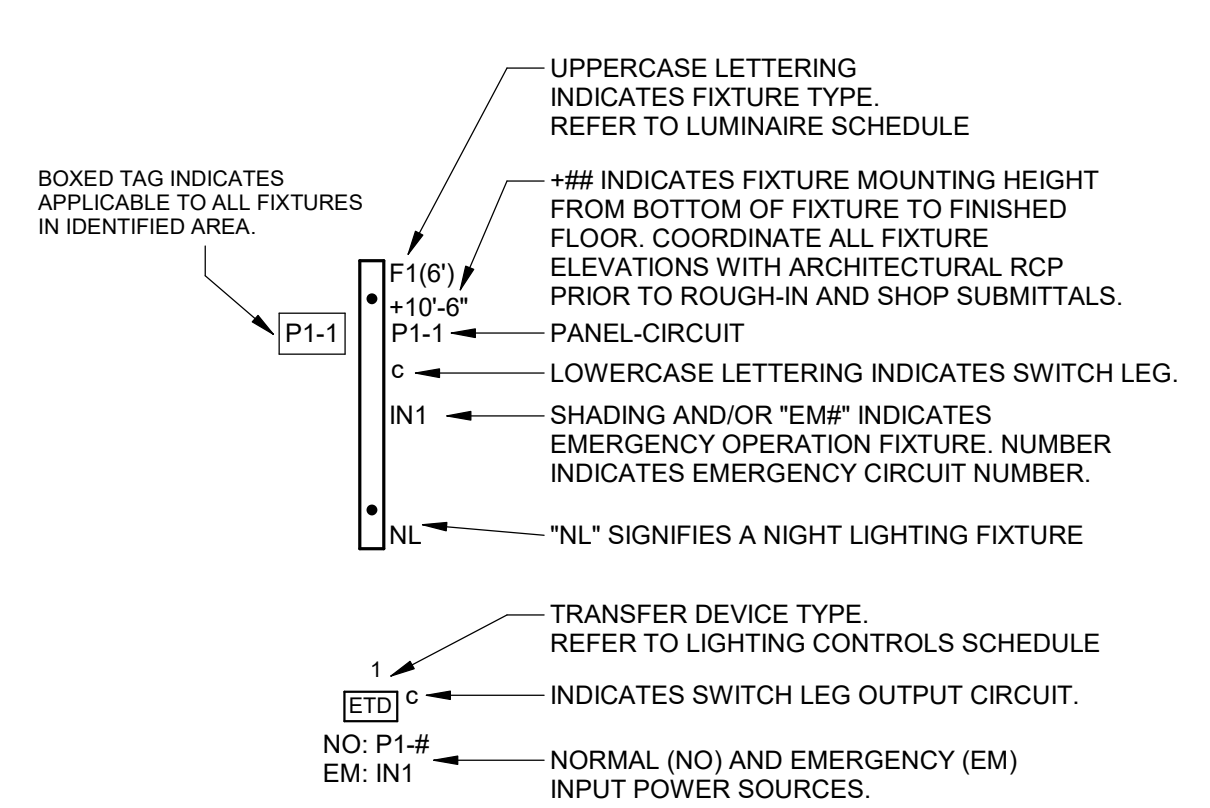
DEMOLITION AND RENOVATION NOTES - ELECTRICAL

- ELECTRICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE WORK BEGINS. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN. BECOME FAMILIAR WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK.
- PROVIDE EQUIPMENT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK PROVIDED UNDER THIS CONTRACT.
- IN OCCUPIED AREAS BEYOND THE DEMOLITION SCOPE, KEEP EXISTING SYSTEMS NOT AFFECTED BY PROJECT SCOPE OPERATIONAL THROUGH THE DURATION OF THE PROJECT. OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA. INFORM OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND ENSURE THAT THE SHUTDOWN IS MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- REMOVE CONDUITS, BOXES, ETC., AS REQUIRED BY WALL, CEILING, AND ADJACENT COMPONENTS DEMOLITION. REMOVE EXISTING WIRE UNLESS OTHERWISE NOTED.
- INSTALL NEW CONDUCTORS FOR NEW CIRCUITS IN REMODELED AREAS UNLESS SPECIFICALLY NOTED OTHERWISE. RETAIN EXISTING CONDUITS IN GOOD CONDITION WHERE APPROVED BY ENGINEER OR AS INDICATED.
- IDENTIFY DISCONNECTED BRANCH CIRCUIT LOCATION OR ITEM SERVED BEFORE DISCONNECTION. UPDATE PANEL/EQUIPMENT DIRECTORY ACCORDINGLY.
- MAINTAIN CIRCUITS SERVING AREAS BEYOND THE DEMOLITION AREA. EXTEND NEW WIRING AND BYPASS DEMOLISHED DEVICES TO MAINTAIN EXISTING CIRCUITS.
- KEEP EXISTING SYSTEMS OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT. CONTRACTORS WHO CUT IN-SERVICE CABLES ARE RESPONSIBLE FOR ALL DOWNTIME AND COSTS TO REPAIR.
- INSTALL BLANK COVER PLATES OVER OPENING AT REMOVED DEVICE LOCATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, CLOCKS, RECEPTACLES, SWITCHES, JUNCTION BOXES, ETC.
- PROVIDE CUTTING AND PATCHING OF EXISTING MATERIALS AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.
- MAINTAIN FULL FUNCTIONAL AND AESTHETIC INTEGRITY OF DEVICES IDENTIFIED TO BE REMOVED AND RELOCATED, AND HANDLE WITH APPROPRIATE CARE TO ALLOW FOR REINSTALLATION. REPLACE DEVICES DAMAGED DURING DEMOLITION WITH NEW AT CONTRACTOR'S EXPENSE.
- EQUIPMENT AND SYSTEM THAT ARE REMOVED REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE NOTED. DISPOSE OF ALL MATERIALS NOT SALVAGED BY THE OWNER.
- REMOVE AND REINSTALL CEILING TILES REQUIRED FOR THE WORK BEING DONE UNDER THIS CONTRACT. REPLACE CEILING TILES DAMAGED DURING CONSTRUCTION TO MATCH EXISTING.

LIGHTING SYMBOLS

	RECESSED LIGHT FIXTURE. LETTER INDICATES SWITCH LEG (TYPICAL). SHADING INDICATES EMERGENCY LIGHT (TYPICAL.)
	ROUND LIGHT FIXTURE - SURFACE MOUNTED
	SQUARE LIGHT FIXTURE - SURFACE MOUNTED
	PENDANT MOUNTED LIGHT FIXTURE
	ROUND APERTURE RECESSED DOWNLIGHT FIXTURE, ARROW INDICATES WALL WASH
	SQUARE APERTURE RECESSED DOWNLIGHT FIXTURE, ARROW INDICATES WALL WASH
	SURFACE MOUNTED STRIP FIXTURE
	LINEAR PENDANT MOUNTED FIXTURE
	INDUSTRIAL STRIP LIGHT FIXTURE
	WALL MOUNTED STRIP LIGHT FIXTURE
	COVE LIGHT FIXTURE
	CONTINUOUS WALL MOUNTED FIXTURE.
	TRACK LIGHTING. ELEVATION AS NOTED.
	EMERGENCY LIGHT FIXTURE, WALL MOUNT, +96" OR AS NOTED
	EMERGENCY LIGHT FIXTURE, CEILING MOUNT
	EXIT SIGN, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	EXIT SIGN, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	COMBINATION EXIT SIGN & EMERGENCY LIGHT, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	COMBINATION EXIT SIGN & EMERGENCY LIGHT, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	EXTERIOR LIGHT FIXTURE, WALL MOUNT +10', OR AS NOTED
	INTERIOR LIGHT FIXTURE, WALL MOUNT
	EXTERIOR POLE MOUNTED LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	BOLLARD LIGHT FIXTURE
	EXTERIOR FLOOD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	EMERGENCY REMOTE HEAD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	CEILING FAN
	SINGLE POLE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
	THREE WAY SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
	PILOT LIGHT SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
	DIMMER SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
	LIGHTING CONTROLS LOW VOLTAGE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	OCCUPANCY SENSOR, WALL MOUNT +48" OR AS NOTED, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	OCCUPANCY SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	DAYLIGHTING SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	LIGHTING CONNECTION, REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE DESCRIPTION
	EMERGENCY TRANSFER DEVICE
	LIGHTING CONTRACTOR
	RELAY
	PHOTOCELL
	ROOM/ZONE CONTROLLER, MOUNT ABOVE ACCESSIBLE CEILING
	WALL MOUNTED INVERTERS. "###" SHOWN FOR QUANTITY.

LIGHTING PLANS NOTATION KEY



GENERAL SYMBOLS

	CONDUIT SLEEVE
	CONDUIT UP, REFER TO TAG ON DRAWING FOR SIZE
	CONDUIT DOWN, REFER TO TAG ON DRAWING FOR SIZE
	JUNCTION BOX, CEILING OR FLOOR MOUNTED.
	JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
	KEYNOTE
	DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
	SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
	INTERIOR ELEVATION DRAWING REFERENCE TAG

POWER SYMBOLS

	TRANSFORMER
	PANELBOARD - SURFACE MOUNTED
	PANELBOARD - RECESSED IN WALL
	DISTRIBUTION PANELBOARD/SWITCHBOARD - SURFACE MOUNTED AS NOTED.
	GENERATOR
	FEEDER TAGS

CEILING TYPE LEGEND

	2' X 2' SUSPENDED ACOUSTICAL CEILING TILE
	2' X 4' SUSPENDED ACOUSTICAL CEILING TILE
	SUSPENDED GYPSUM BOARD CEILING
CEILINGS NOT NOTED OR SHOWN ARE OPEN TO STRUCTURE AND/OR CONCRETE	

\*\*NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT\*\*



IMCC ELECTRICAL UPGRADES

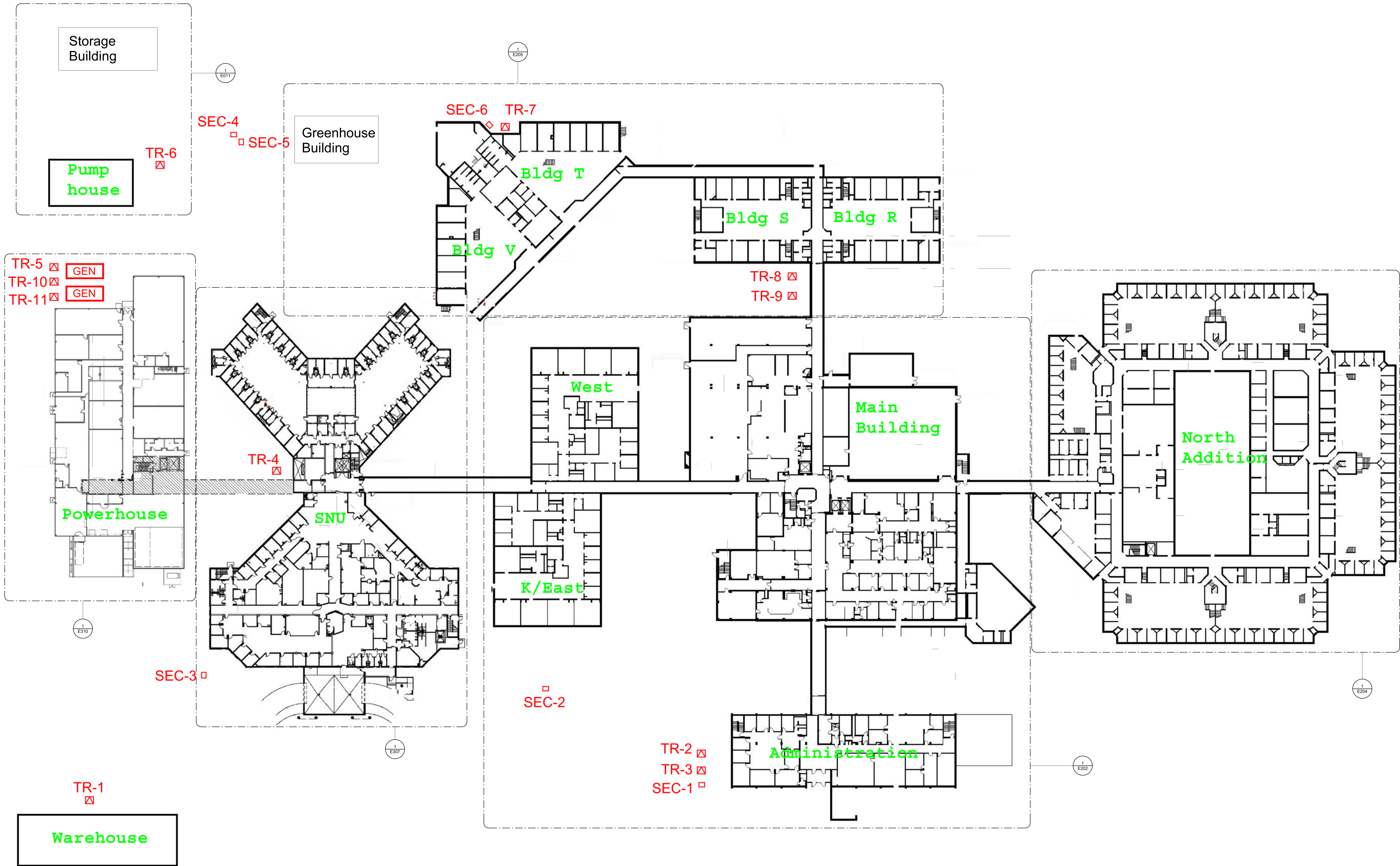
2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

Revision Date

Drawing Name:  
BUILDING LAYOUT

Drawing #:  
E010



1 OVERALL SITE PLAN  
NOT TO SCALE



IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00

Date: 02/21/2025

100% CD

#	Revision	Date
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Drawing Name:  
BUILDING LAYOUT -  
PUMPHOUSE AND  
SHED

Drawing #:

E011



1 PUMPHOUSE AND SHED - SITE PLAN  
NOT TO SCALE



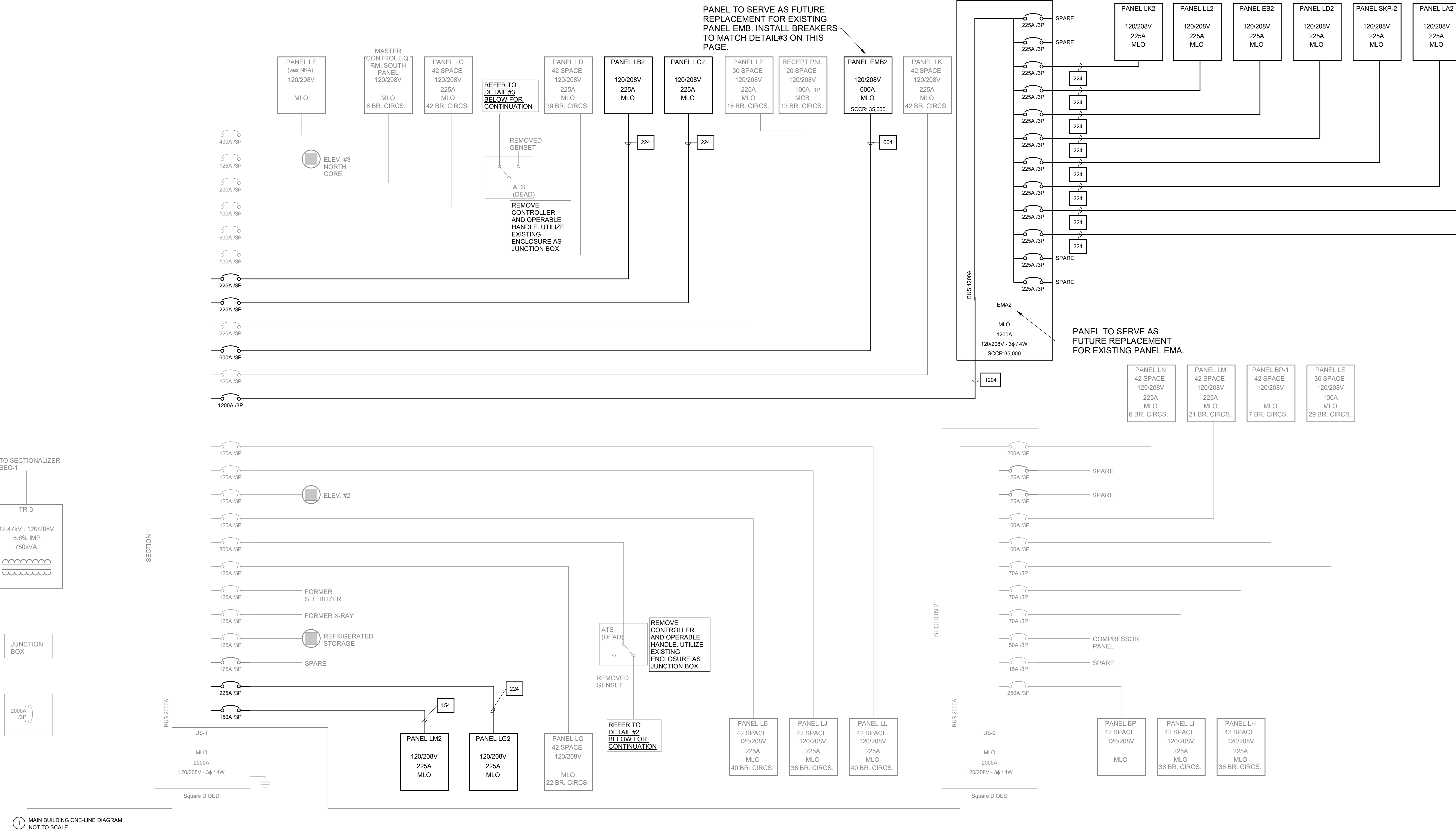
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# Revision Date

Drawing Name:  
MAIN, WEST, EAST, &  
ADMIN BUILDING  
ONE-LINE DIAGRAM

Drawing #:

E101



## RISER DIAGRAM GENERAL NOTES

- A. DIAGRAM INDICATES OVERALL LAYOUT OF ELECTRICAL DISTRIBUTION SYSTEM. REFER TO FLOOR PLANS FOR EQUIPMENT LOCATIONS.  
B. USE COPPER CONDUCTORS UNLESS OTHERWISE INDICATED.  
C. MATCH NEUTRAL CONDUCTOR SIZE TO THE PHASE CONDUCTORS UNLESS OTHERWISE NOTED.  
D. ALL WIRING SHALL BE IN RACEWAY AS NOTED. REFER TO SPECIFICATIONS FOR CONDUIT APPLICATION REQUIREMENTS.

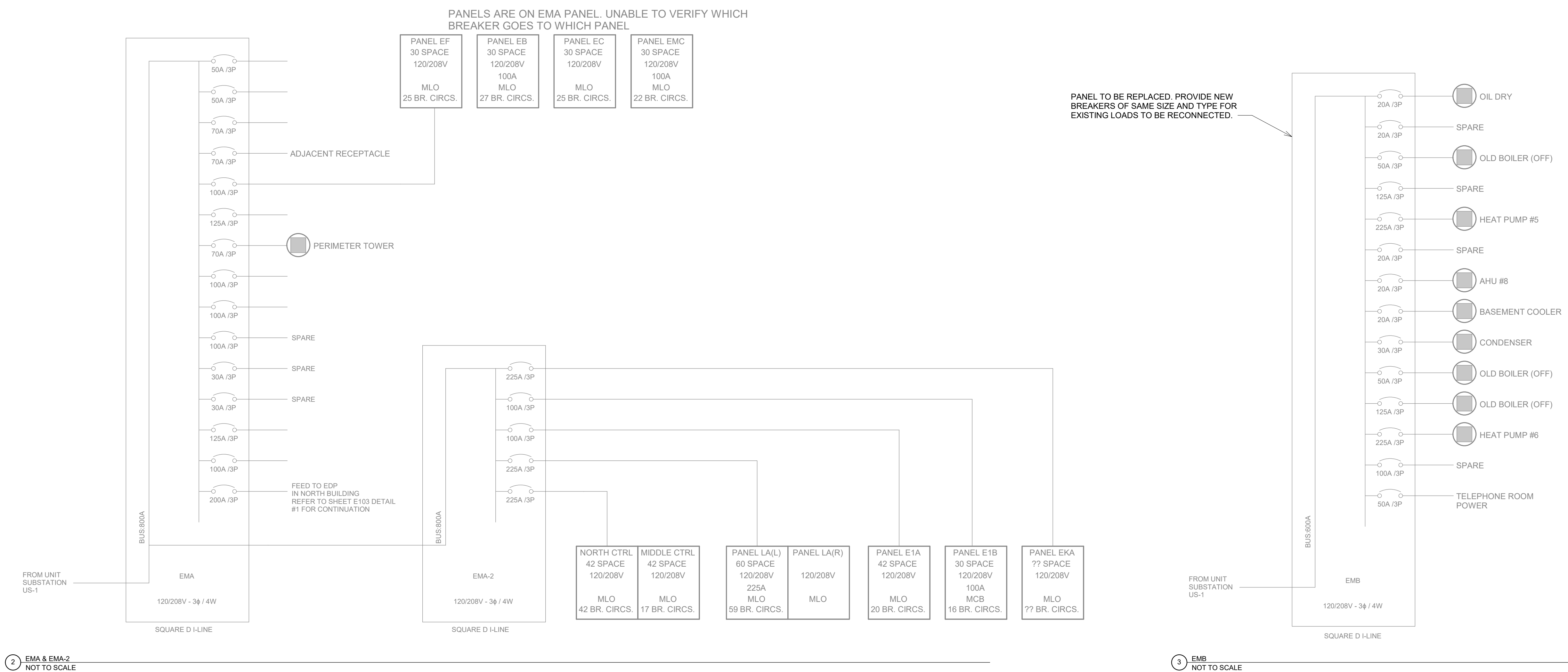
## ALTERNATE #2 NOTES

- A. INCLUDE EXISTING AND NEW PANELS, SWITCHBOARD, SWITCHGEAR, MCC, ETC. IN THE DATA COLLECTION REQUIREMENT PROVIDED ON SHEET E000.

## FEEDER SCHEDULE

NOTE: ALL CONDUCTORS THHN/THWN COPPER UNLESS OTHERWISE NOTED.

TAG	PHASE	GROUND	CONDUIT
53	1-SET (3) #6	#8	(1) 1"
104	1-SET (4) #3	#8	(1) 1 1/4"
105	1-SET (3) #2	#8	(1) 1 1/2"
154	1-SET (4) #10	#6	(1) 2"
224	1-SET (4) #4/0	#4	(1) 2 1/2"
604	2-SETS (4) 350 MCM	#1	(2) 3 1/2"
1204	3-SETS (4) 600 MCM	3/0	(3) 4"



IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
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Revision Date

Drawing Name:  
NORTH BUILDING AND  
R&S UNIT ONE-LINE  
DIAGRAM

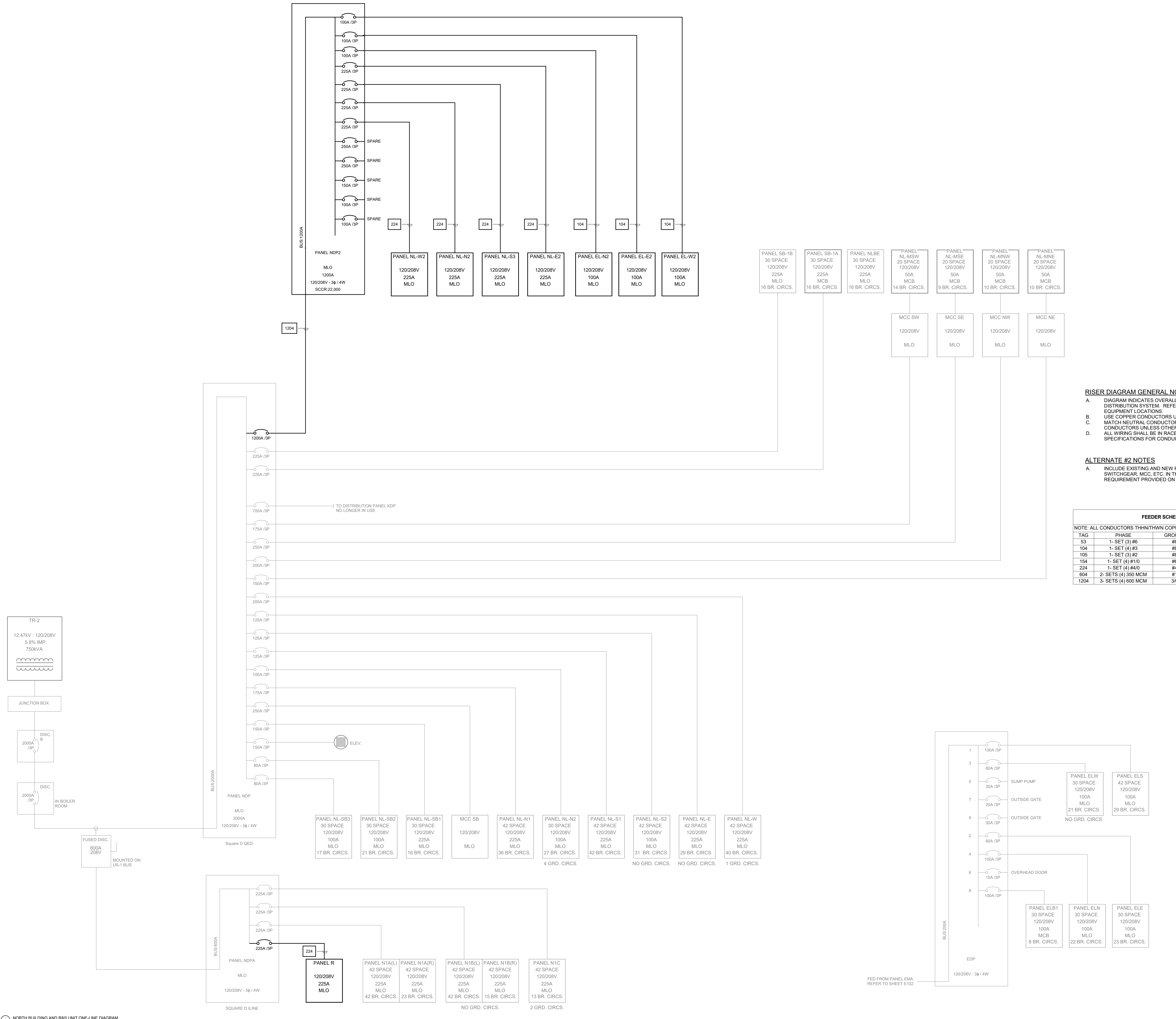
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E102

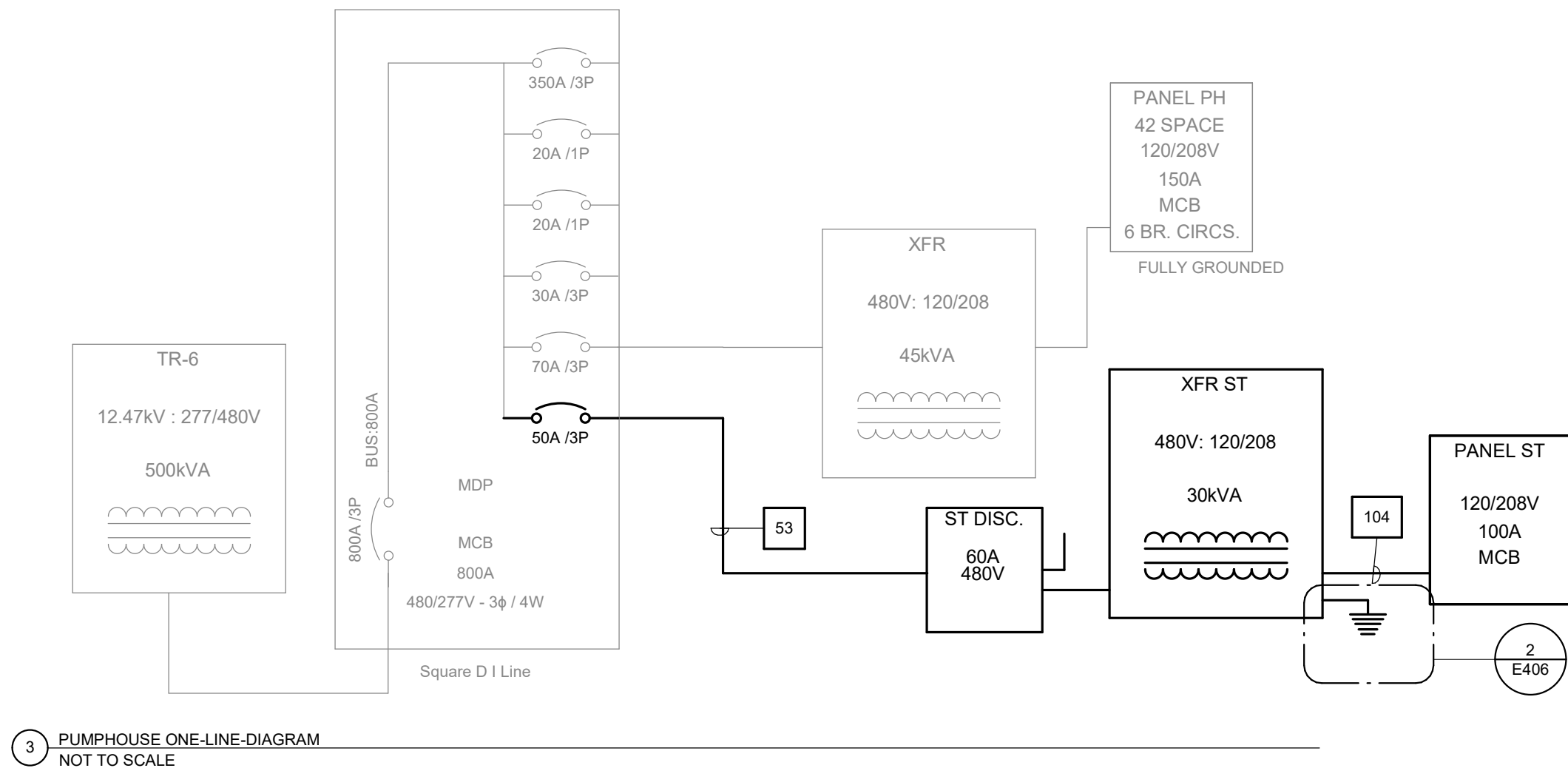
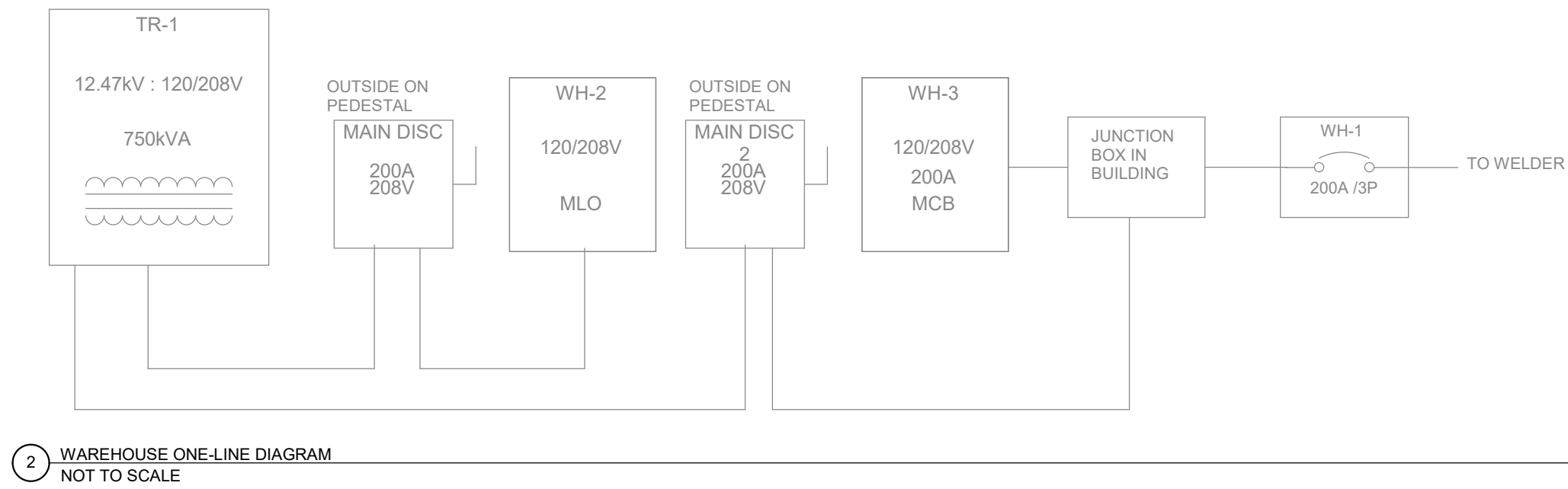
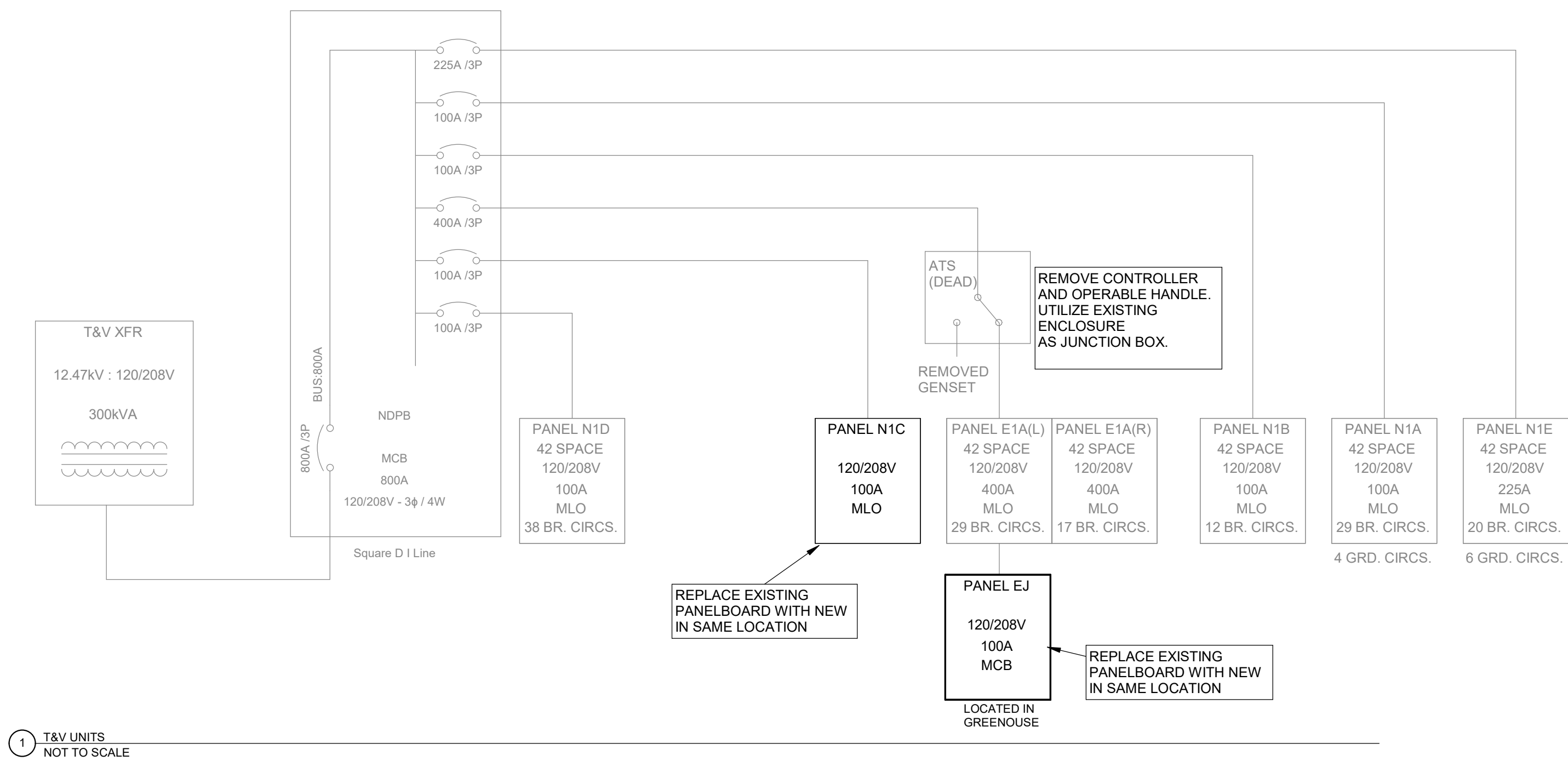
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1 NORTH BUILDING AND R&S UNIT ONE-LINE DIAGRAM  
NOT TO SCALE







RISER DIAGRAM GENERAL NOTES

- A. DIAGRAM INDICATES OVERALL LAYOUT OF ELECTRICAL DISTRIBUTION SYSTEM. REFER TO FLOOR PLANS FOR EQUIPMENT LOCATIONS.  
B. USE COPPER CONDUCTORS UNLESS OTHERWISE INDICATED.  
C. MATCH NEUTRAL CONDUCTOR SIZE TO THE PHASE CONDUCTORS UNLESS OTHERWISE NOTED.  
D. ALL WIRING SHALL BE IN RACEWAY AS NOTED. REFER TO SPECIFICATIONS FOR CONDUIT APPLICATION REQUIREMENTS.

ALTERNATE #2 NOTES

- A. INCLUDE EXISTING AND NEW PANELS, SWITCHBOARD, SWITCHGEAR, MCC, ETC. IN THE DATA COLLECTION REQUIREMENT PROVIDED ON SHEET E000.

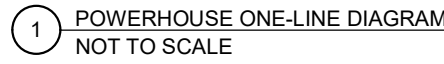
FEEDER SCHEDULE			
NOTE: ALL CONDUCTORS THHN/THWN COPPER UNLESS OTHERWISE NOTED.			
TAG	PHASE	GROUND	CONDUIT
53	1- SET (3) #6	#8	(1) 1"
104	1- SET (4) #3	#8	(1) 1 1/4"
105	1- SET (3) #2	#8	(1) 1 1/2"
154	1- SET (4) #10	#6	(1) 2"
224	1- SET (4) #4/0	#4	(1) 2 1/2"
604	2- SETS (4) 350 MCM	#1	(2) 3 1/2"
1204	3- SETS (4) 600 MCM	3/0	(3) 4"

2700 Coral Ridge Ave  
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Revision \_\_\_\_\_ Date \_\_\_\_\_

Drawing #:

# E104

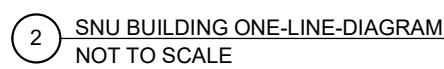


2 SNU BUILDING ONE-LINE-DIAGRAM  
NOT TO SCALE

- A. DIAGRAM INDICATES OVERALL LAYOUT OF ELECTRICAL DISTRIBUTION SYSTEM. REFER TO FLOOR PLANS FOR EQUIPMENT LOCATIONS.
- B. USE COPPER CONDUCTORS UNLESS OTHERWISE INDICATED.
- C. MATCH NEUTRAL CONDUCTOR SIZE TO THE PHASE CONDUCTORS UNLESS OTHERWISE NOTED.
- D. ALL WIRING SHALL BE IN RACEWAY AS NOTED. REFER TO SPECIFICATIONS FOR CONDUIT APPLICATION REQUIREMENTS

A. INCLUDE EXISTING AND NEW PANELS, SWITCHBOARD, SWITCHGEAR, MCC, ETC. IN THE DATA COLLECTION REQUIREMENT PROVIDED ON SHEET E000.

FEEDER SCHEDULE			
NOTE: ALL CONDUCTORS THHN/THWN COPPER UNLESS OTHERWISE NOTED.			
TAG	PHASE	GROUND	CONDUIT
53	1-SET (3) #3	#8	(1) 1"
104	1-SET (4) #6	#8	(1) 1 1/4"
105	1-SET (3) #2	#8	(1) 1 1/2"
106	1-SET (4) #10	#4	(1) 2"
224	1-SET (4) #4/0	#4	(1) 2 1/2"
604	2-SETS (4) 350 MCM	#1	(3) 3 1/2"
1204	3-SETS (4) 600 MCM	3/0	(3) 4"





IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

#	Revision	Date
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Drawing Name:  
MAIN, NORTH, & ADMIN  
- BASEMENT -  
ELECTRICAL

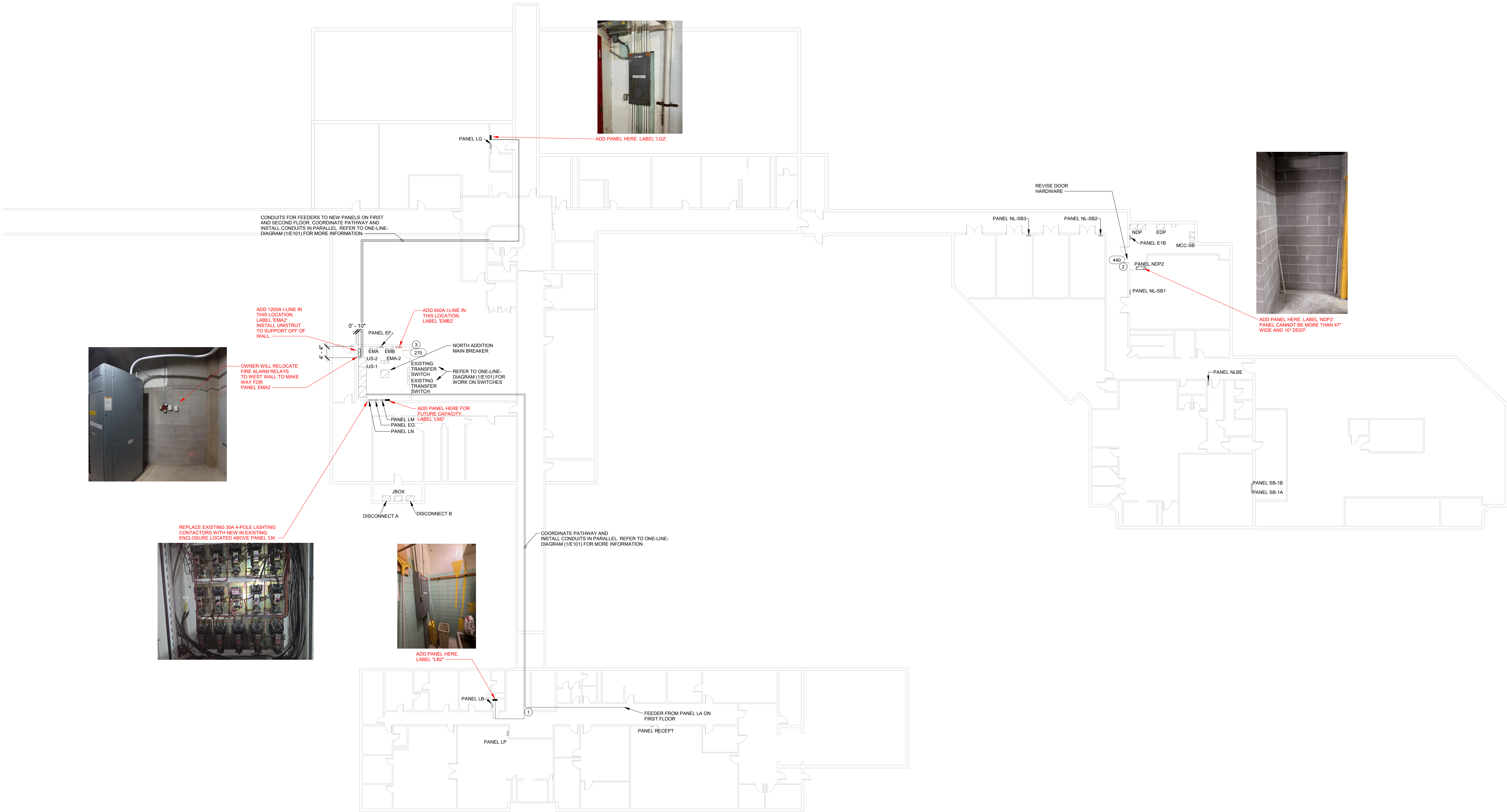
Drawing #:  
E201

POWER GENERAL NOTES

- A. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. PROVIDE FIRE RATED WALL CONDUIT SLEEVES AND FIRE STOPPING AT ALL WALL PENETRATIONS.
- B. INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" SHALLOW UNISTRUT. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- C. PROVIDE (1) SURFACE MOUNTED RECEPTACLE ON A DEDICATED 120V 20A BREAKER AT EACH NEW PANEL LOCATION FOR TESTING PURPOSES. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.

KEYNOTES

1. CONDUIT ROUTING IS DIAGRAMATIC ONLY. VERIFY EXACT ROUTING IN THE FIELD. PROVIDE JUNCTION BOXES AND/OR PULL BOXES AS REQUIRED.
2. DOOR 440: EXISTING DOOR AND FRAME TO REMAIN INTACT. INSTALL NEW SURFACE MOUNTED CLOSER AND STRIKE ON SOUTH DOOR. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
3. DOOR 270: EXISTING FRAME TO REMAIN ON DOOR. REMOVE DOOR AND HARDWARE. AND PATCH EXISTING FRAME WITH BONDO AND PAINT TO COVER EXISTING HINGE. PROVIDE NEW WOOD DOOR SLAB. SIZE TO MATCH EXISTING FRAME. DOOR PANEL THICKNESS TO BE 1-3/4" TO MATCH EXISTING FRAME. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. PREP FRAME AS REQUIRED FOR NEW DOOR, INCLUDING NEW HINGE LOCATIONS AND SURFACE MOUNTED STRIKE.



1 MAIN, ADMIN, & NORTH BASEMENT PLAN  
1/16" = 1'-0"



2700 Coral Ridge Ave  
Coralville, Iowa 52241

Date: 02/21/2025

5000

- A. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. PROVIDE FIRE RATED WALL CONDUIT SLEEVES AND FIRE STOPPING AT ALL WALL PENETRATIONS.
- B. INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" SHALLOW UNISTRUT. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- C. PROVIDE (1) SURFACE MOUNTED RECEPTACLE ON A DEDICATED 120V 20A BREAKER AT EACH NEW PANEL LOCATION FOR TESTING PURPOSES. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.

ES. RE  
© #

- 1 CONDUIT ROUTING IS DIAGRAMATIC ONLY. VERIFY EXACT ROUTING IN THE FIELD. PROVIDE JUNCTION BOXES AND/OR PULL BOXES AS REQUIRED.





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Coralville, Iowa 52241

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Date: 02/21/2025  
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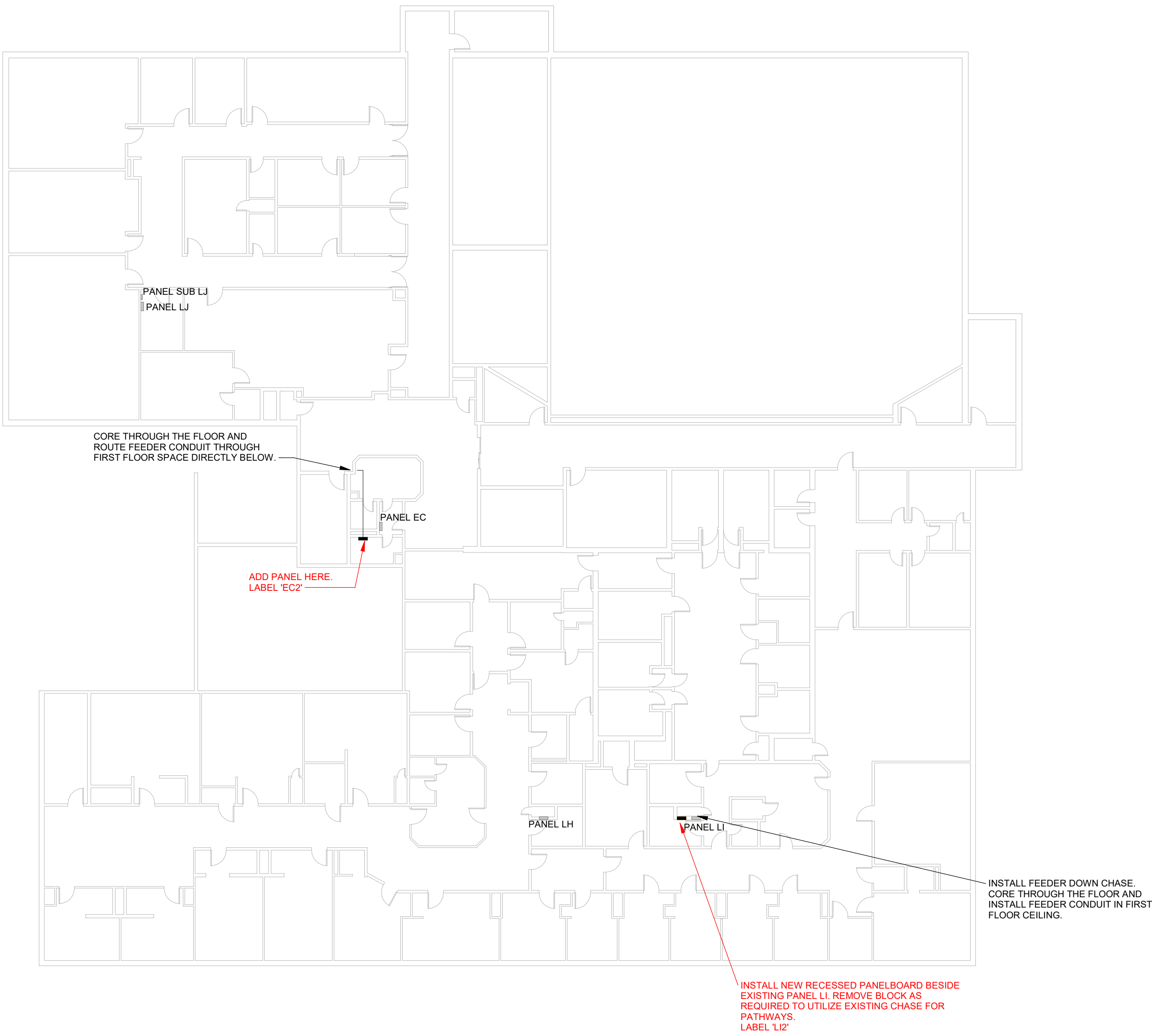
#	Revision	Date
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Drawing Name:  
MAIN BUILDING -  
SECOND FLOOR -  
ELECTRICAL

Drawing #:  
E203

POWER GENERAL NOTES

- A. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. PROVIDE FIRE RATED WALL CONDUIT SLEEVES AND FIRE STOPPING AT ALL WALL PENETRATIONS.
- B. INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" SHALLOW UNISTRUT. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- C. PROVIDE (1) SURFACE MOUNTED RECEPTACLE ON A DEDICATED 120V 20A BREAKER AT EACH NEW PANEL LOCATION FOR TESTING PURPOSES. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.



1 MAIN BUILDING SECOND FLOOR PLAN  
1/16" = 1'-0"



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Coralville, Iowa 52241

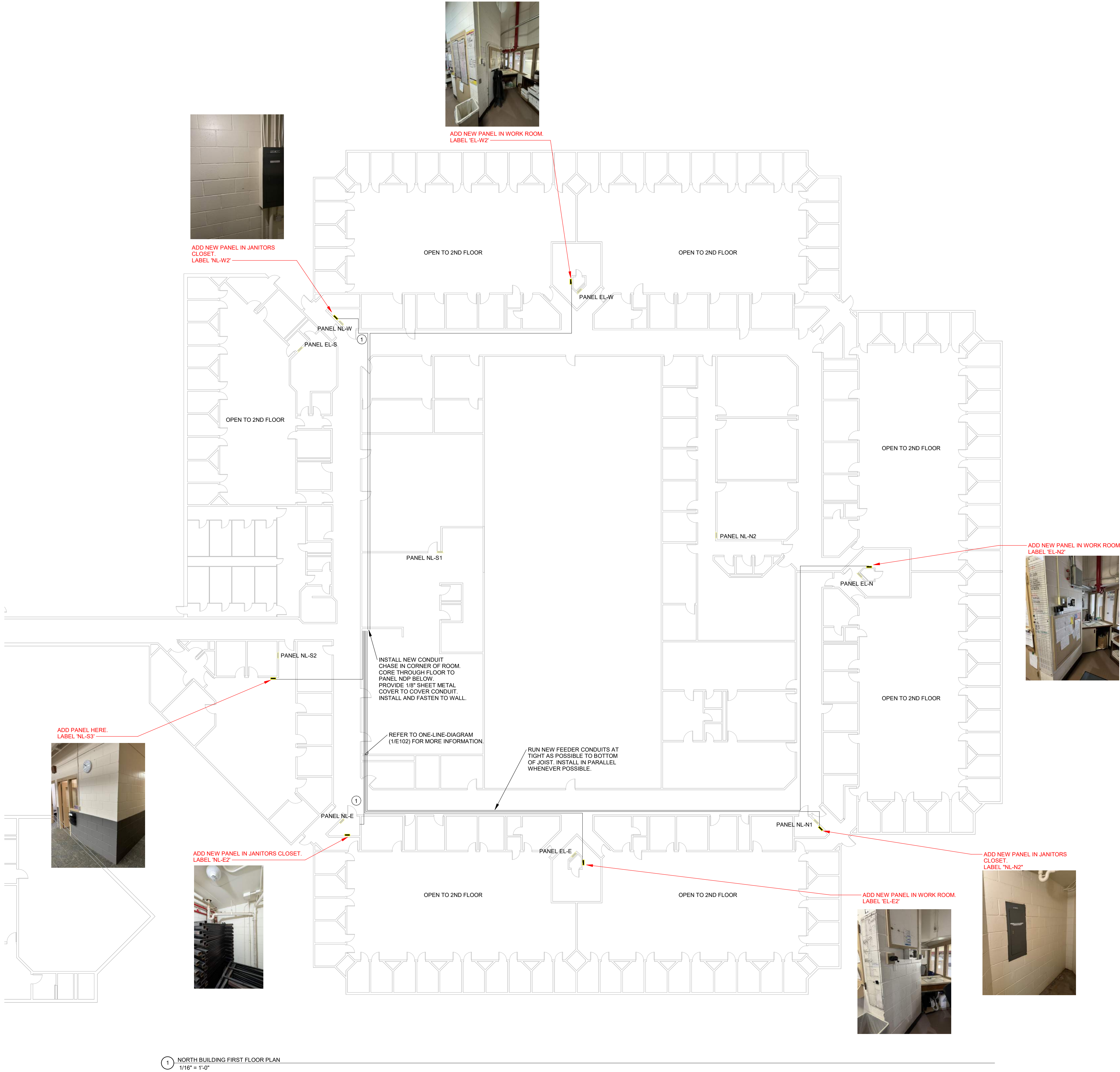
Project No: 9353.00  
Date: 02/21/2025  
100% CD

Revision Date

Drawing Name:  
NORTH BUILDING -  
FIRST FLOOR -  
ELECTRICAL

Drawing #:  
E204

- POWER GENERAL NOTES
- A. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. PROVIDE FIRE RATED WALL CONDUIT SLEEVES AND FIRE STOPPING AT ALL WALL PENETRATIONS.
- B. INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" SHALLOW UNISTRUT. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- C. PROVIDE (1) SURFACE MOUNTED RECEPTACLE ON A DEDICATED 120V 20A BREAKER AT EACH NEW PANEL LOCATION FOR TESTING PURPOSES. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- KEYNOTES
- 1 CONDUIT ROUTING IS DIAGRAMATIC ONLY. VERIFY EXACT ROUTING IN THE FIELD. PROVIDE JUNCTION BOXES AND/OR PULL BOXES AS REQUIRED.





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Project No: 9353.00  
Date: 02/21/2025  
100% CD

#	Revision	Date
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Drawing Name:  
R&S / T&V -  
ELECTRICAL

Drawing #:  
E205

POWER GENERAL NOTES

- A. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. PROVIDE FIRE RATED WALL CONDUIT SLEEVES AND FIRE STOPPING AT ALL WALL PENETRATIONS.
- B. INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" SHALLOW UNISTRUT. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.
- C. PROVIDE (1) SURFACE MOUNTED RECEPTACLE ON A DEDICATED 120V 20A BREAKER AT EACH NEW PANEL LOCATION FOR TESTING PURPOSES. REFER TO DETAIL 3/E405 FOR MORE INFORMATION.

RELOCATE PLUG TO BE  
INSTALLED ON THE SIDE OF THE  
NEW PANEL



REPLACE PANEL EJ WITH NEW IN SAME  
LOCATION USING EXISTING FEEDER  
CONDUCTORS.

PANEL SHOWN IN APPROXIMATE  
LOCATION IN GREENHOUSE BUILDING

PANEL EJ



REPLACE PANEL N1C WITH NEW IN  
SAME LOCATION USING EXISTING  
FEEDER CONDUCTORS.

OWNER TO EXTEND EXISTING  
CONDUCTORS/CONDUIT SERVING  
BRANCH CIRCUITS TO EXISTING PANEL  
'N1B' IN THIS SPACE.

PANEL NDPB  
PANEL N1A  
PANEL N1B

EXISTING ATS  
PANEL E1A-R  
PANEL E1A-L  
PANEL N1E

PANEL N1D



ADD PANEL HERE. LABEL 'R'.

PANEL R

1. INSTALL ABOVE ACT CEILING ON SECOND LEVEL

PANEL NDPA

PANEL N1B (R)  
PANEL N1B (L)  
PANEL N1A (R)

PANEL E1A  
PANEL N1C  
PANEL N1A (L)

2. GREENHOUSE BUILDING  
1/16" = 1'-0"

1. FIRST FLOOR R&S / T&V PLAN  
1/16" = 1'-0"



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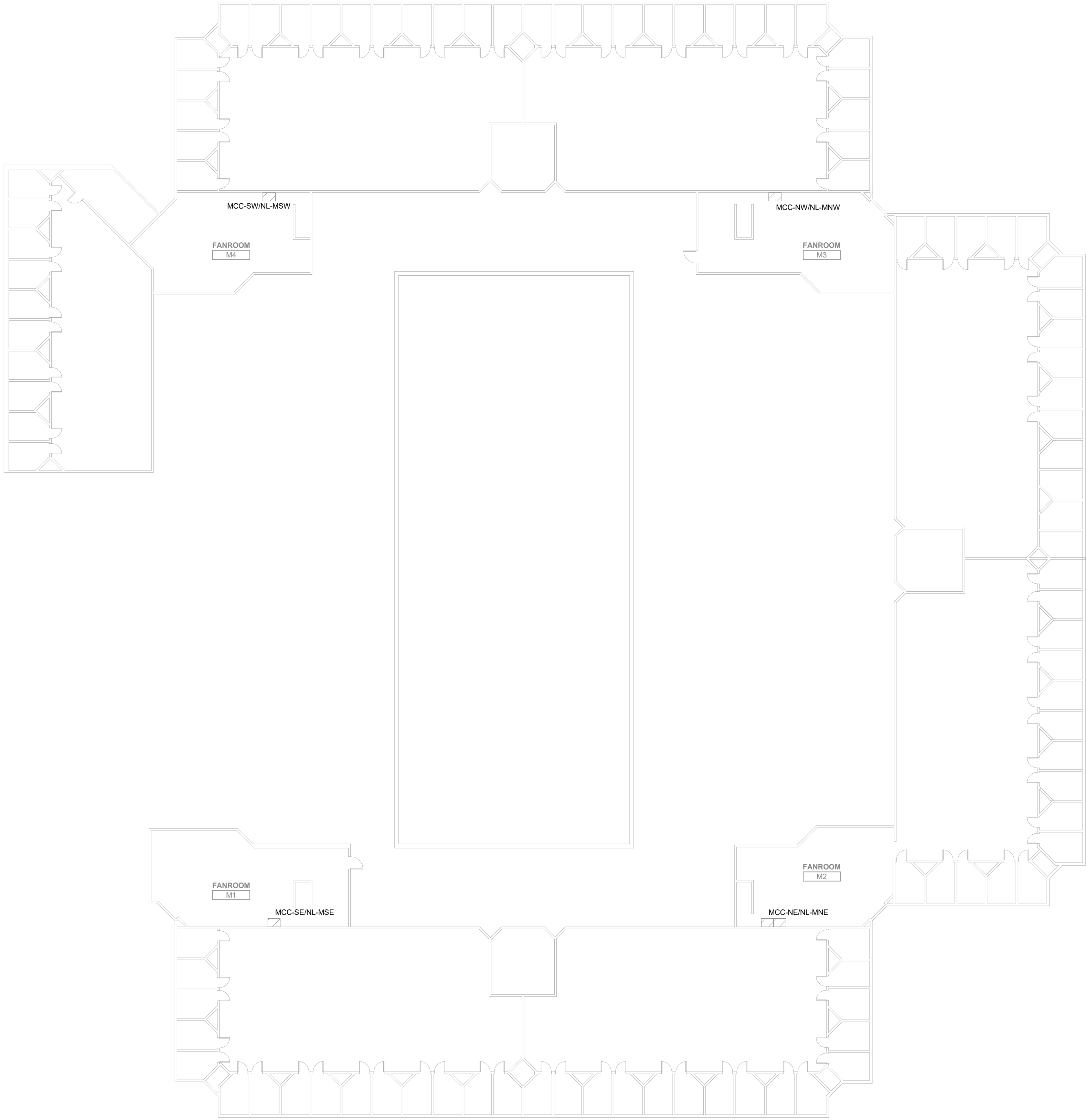
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Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

#	Revision	Date
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Drawing Name:  
NORTH BUILDING -  
SECOND FLOOR -  
ELECTRICAL

Drawing #:  
**E206**



1 NORTH BUILDING SECOND FLOOR PLAN  
1/16" = 1'-0"



2700 Coral Ridge Ave  
Coralville, Iowa 52241

#	Revision	Date
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Drawing #:

# E301

A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED LOCATIONS. INVERTERS TO BE INSTALLED SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT CIRCUIT. DESIGNATED 'N' ARE UNSWITCHED.

B. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9" OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO CONDUIT TO BE INSTALLED IF PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILING.

C. NEW CIRCUIT IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.

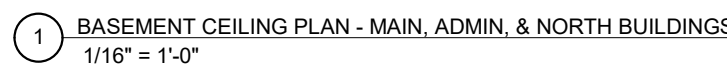
D. OWNER TO REPLACE ALL LAMPS IN DESIGNATION WITH INVERTER PRIOR TO FINAL CONNECTION WITH INVERTER.

E. ALL FIXTURES DESIGNATED AS 'N' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'N', IT IS CONNECTED TO THE EXISTING SWITCHED CIRCUIT.

F. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED PATTERN.

G. REPLACE ALL EXISTING EXIT SIGNS WITH NEW ON EXISTING LOCATIONS. ALL NEW EXIT SIGNS TO BE SHOWN ON DRAWING. IT IS THE RESPONSIBILITY OF THE ELECTRICAL ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY NEW EXIT SIGNS NOT SHOWN ON DRAWING. NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

- 1 FEED NEW LIGHTING INVERTERS 'IN1' AND 'IN2' FROM (2) INDIVIDUAL DEDICATED 20A/1P BREAKERS IN NEW PANEL 'LM2'.
- 2 FEED NEW LIGHTING INVERTER 'IN3' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'LB2'.
- 3 FEED NEW LIGHTING INVERTER 'IN8' FROM A NEW 20A/1P BREAKER INSTALLED IN EXISTING PANEL 'E1B'.
- 4 CONNECT DESIGNATED FIXTURES IN THIS SPACE TO EMERGENCY TRANSFER DEVICE AND LIGHTING INVERTER CIRCUIT. PRESERVE EXISTING SWITCHLEG FUNCTIONALITY IN THIS SPACE.
- 5 CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCHLEG





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Project No: 9353.00  
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Revision Date

Drawing Name:  
MAIN, WEST, EAST, &  
ADMIN BUILDING -  
FIRST FLOOR -  
EMERGENCY  
LIGHTING

Drawing #:

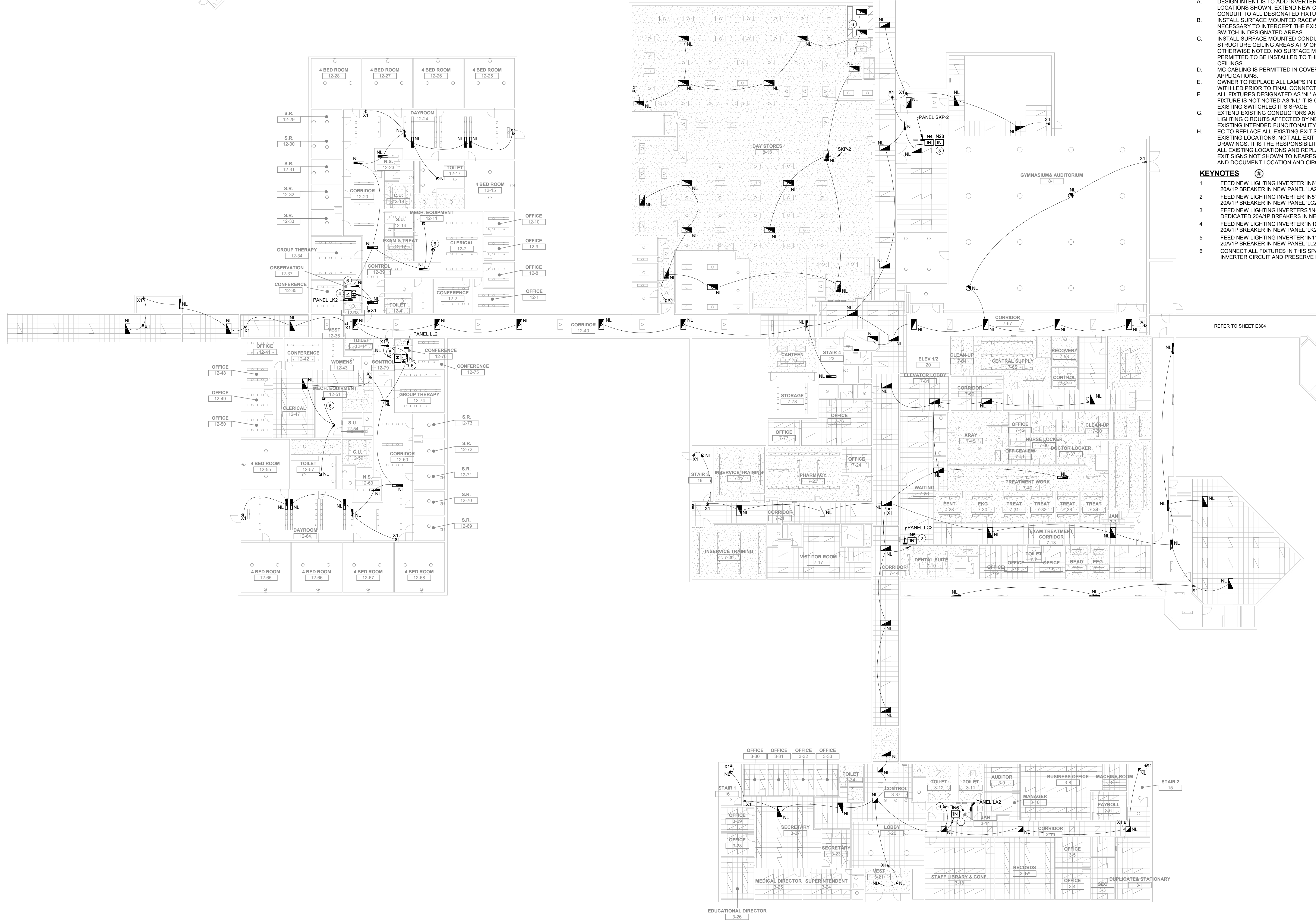
E302

LIGHTING GENERAL NOTES

- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

- 1 FEED NEW LIGHTING INVERTER 'IN6' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'LA2'.
- 2 FEED NEW LIGHTING INVERTER 'IN5' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'LC2'.
- 3 FEED NEW LIGHTING INVERTERS 'IN4' AND 'IN28' FROM DEDICATED 20A/1P BREAKERS IN NEW PANEL 'SKP-2'.
- 4 FEED NEW LIGHTING INVERTER 'IN10' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'LL2'.
- 5 FEED NEW LIGHTING INVERTER 'IN11' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'LL2'.
- 6 CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCHLEG.





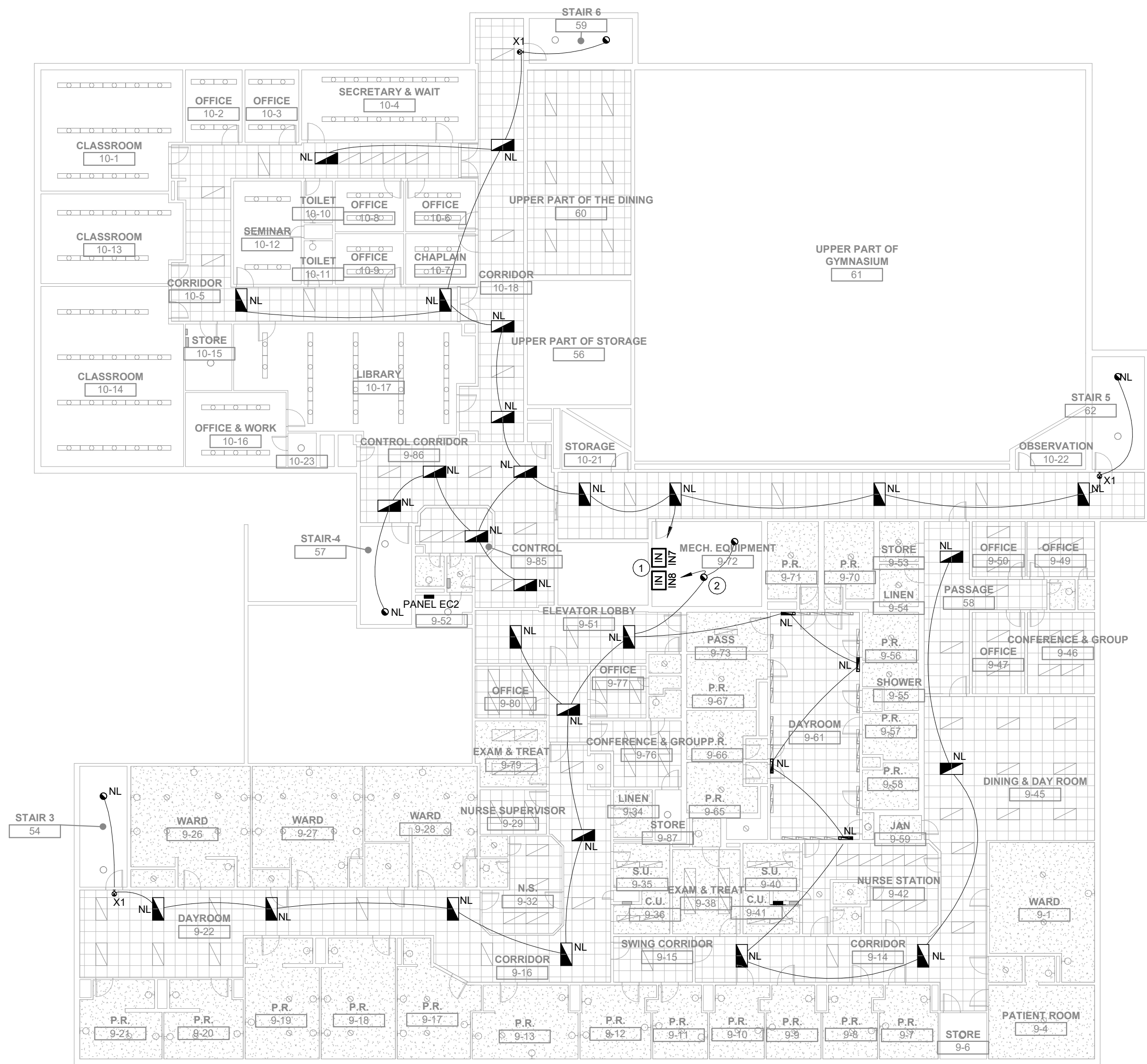
LIGHTING GENERAL NOTES

- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG ITS SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

④

- 1 FEED NEW LIGHTING INVERTER '1N7' AND '1N8' FROM A DEDICATED 20A/1P BREAKERS IN NEW PANEL 'EC2'.
- 2 CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCHLEG.



① SECOND FLOOR CEILING PLAN - MAIN BUILDING  
1/16" = 1'-0"

IMCC ELECTRICAL UPGRADES

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Coralville, Iowa 52241

Project No: 9353.00

Date: 02/21/2025

100% CD

Revision Date

Drawing Name:  
MAIN BUILDING -  
SECOND FLOOR -  
EMERGENCY  
LIGHTING

Drawing #:

E303

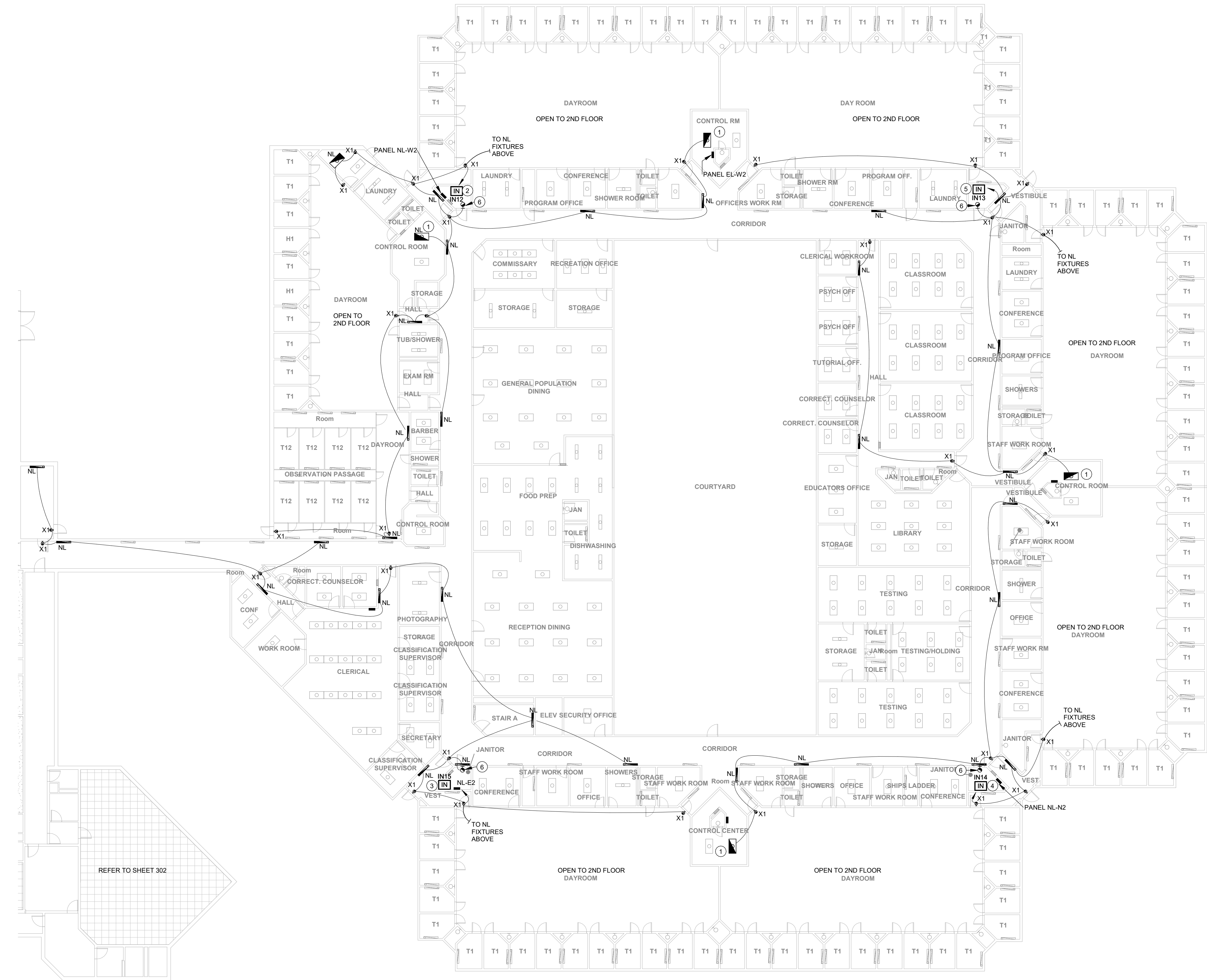


LIGHTING GENERAL NOTES

- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL', IT IS CONNECTED TO THE EXISTING SWITCH/LEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES ②

1. CONNECT (1) NEW LED LAMP IN THIS FIXTURE TO UNSWITCHED INVERTER CIRCUIT TO SERVE AS NIGHT LIGHT.
2. FEED NEW LIGHTING INVERTER 'IN12' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'NL-W2'.
3. FEED NEW LIGHTING INVERTER 'IN15' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'NL-E2'.
4. FEED NEW LIGHTING INVERTER 'IN14' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'NL-N2'.
5. FEED NEW LIGHTING INVERTER 'IN13' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'EL-W2'.
6. CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCH/LEG.



① FIRST FLOOR CEILING PLAN - NORTH BUILDING  
1/16" = 1'-0"



IMCC ELECTRICAL UPGRADES

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Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
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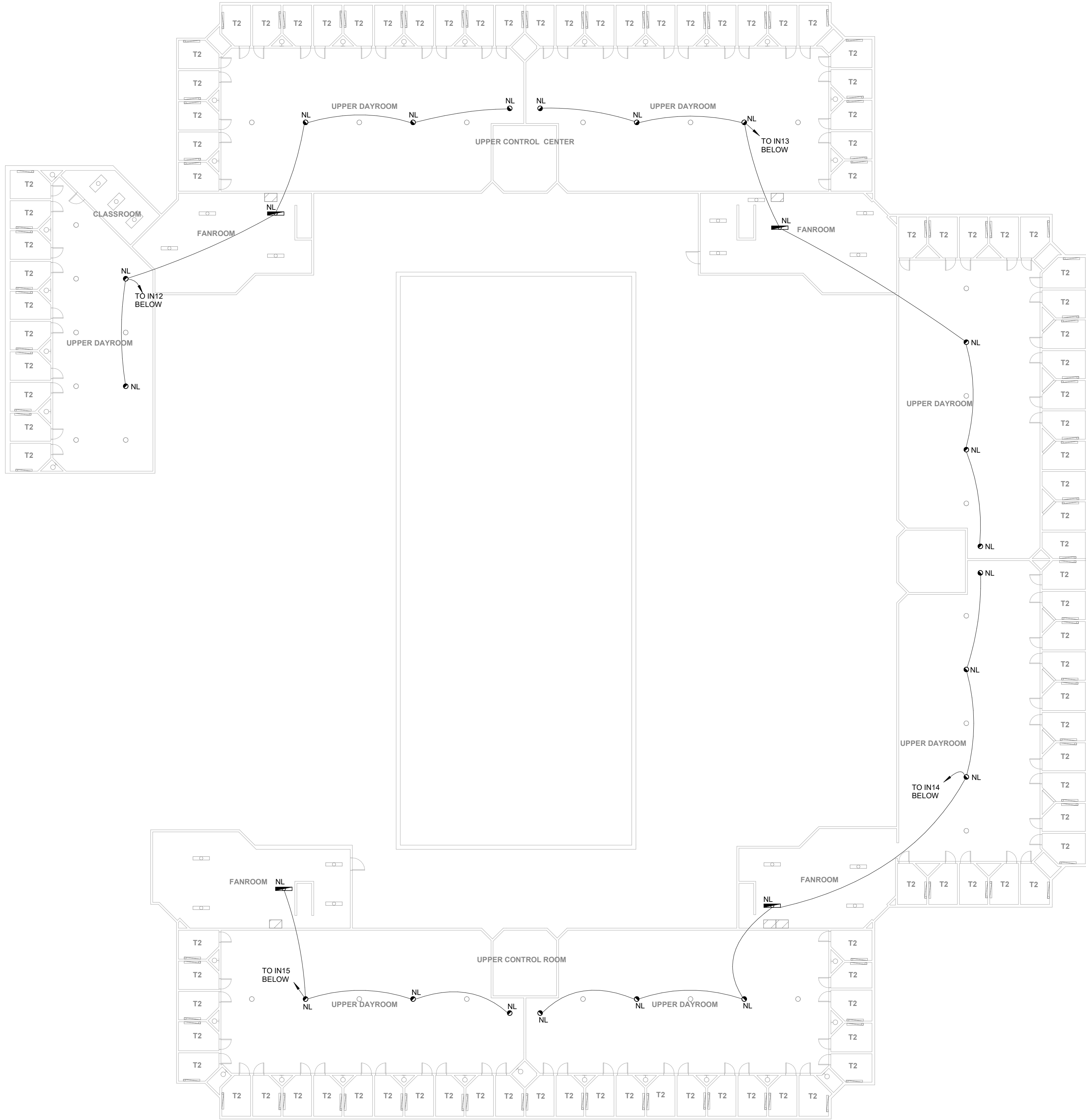
#	Revision	Date
1	Revision 1	Date 1

Drawing Name:  
NORTH BUILDING -  
SECOND FLOOR -  
EMERGENCY  
LIGHTING

Drawing #:  
E305

LIGHTING GENERAL NOTES

- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS NL ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS NL IT IS CONNECTED TO THE EXISTING SWITCH/LEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.



1 SECOND FLOOR CEILING PLAN - NORTH BUILDING  
1/16" = 1'-0"

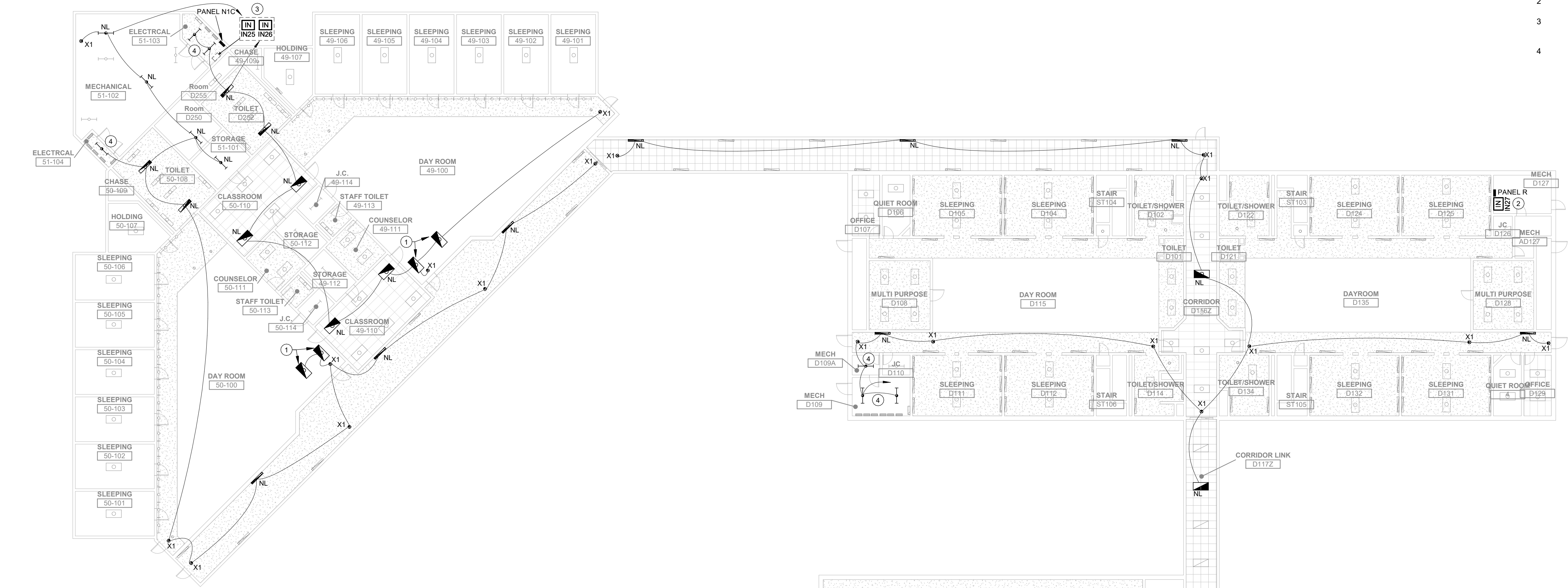


LIGHTING GENERAL NOTES

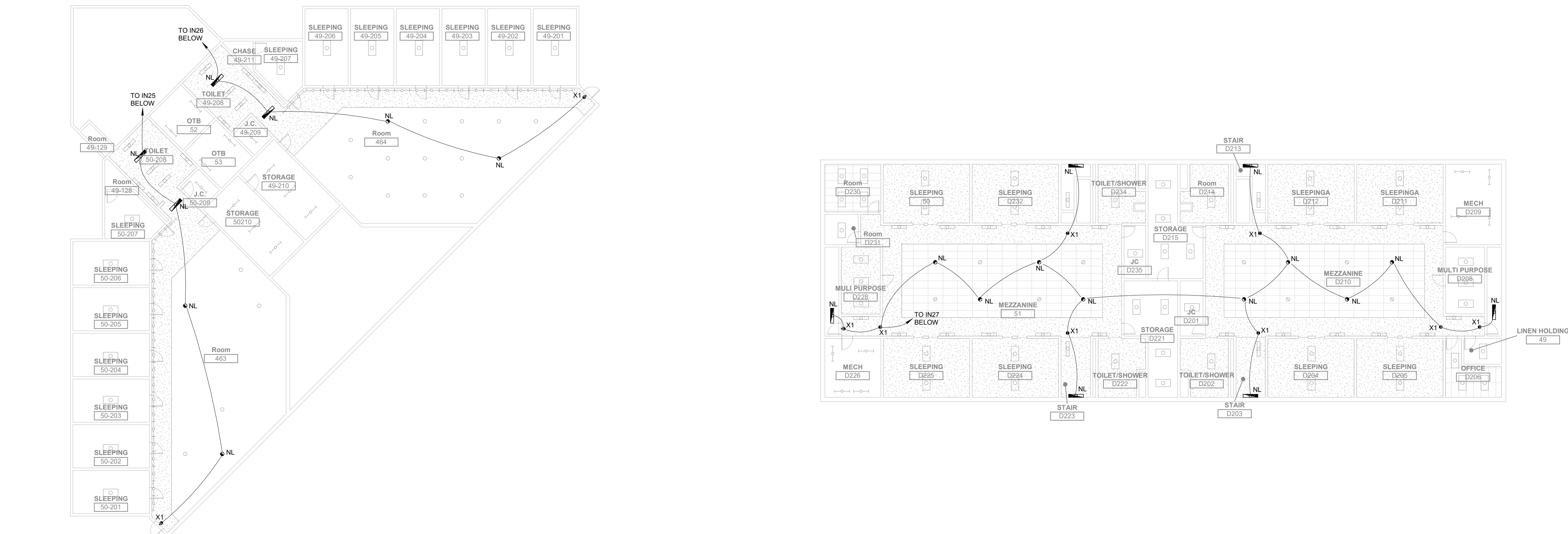
- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

1. CONNECT (1) NEW LED LAMP IN THIS FIXTURE TO UNSWITCHED INVERTER CIRCUIT TO SERVE AS NIGHT LIGHT.
2. FEED NEW LIGHTING INVERTER 'IN27' FROM A DEDICATED 20A/1P BREAKER IN NEW PANEL 'R'.
3. FEED NEW LIGHTING INVERTER 'IN25' AND 'IN26' FROM DEDICATED 20A/1P BREAKERS IN NEW PANEL 'N1C'. MOUNT TO WALL IN LOCATION SHOWN BY ARROW.
4. CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCHLEG.



1 FIRST FLOOR R&S / T&V PLAN - LIGHTING  
1/16\" = 1'-0"



2 SECOND FLOOR CEILING PLAN - R&S / T&V BUILDINGS  
1/16\" = 1'-0"



IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

#	Revision	Date
1	Revision 1	Date 1

Drawing Name:  
SNU BUILDING - FIRST  
FLOOR & BASEMENT -  
EMERGENCY  
LIGHTING & UPS  
REPLACEMENT

Drawing #:

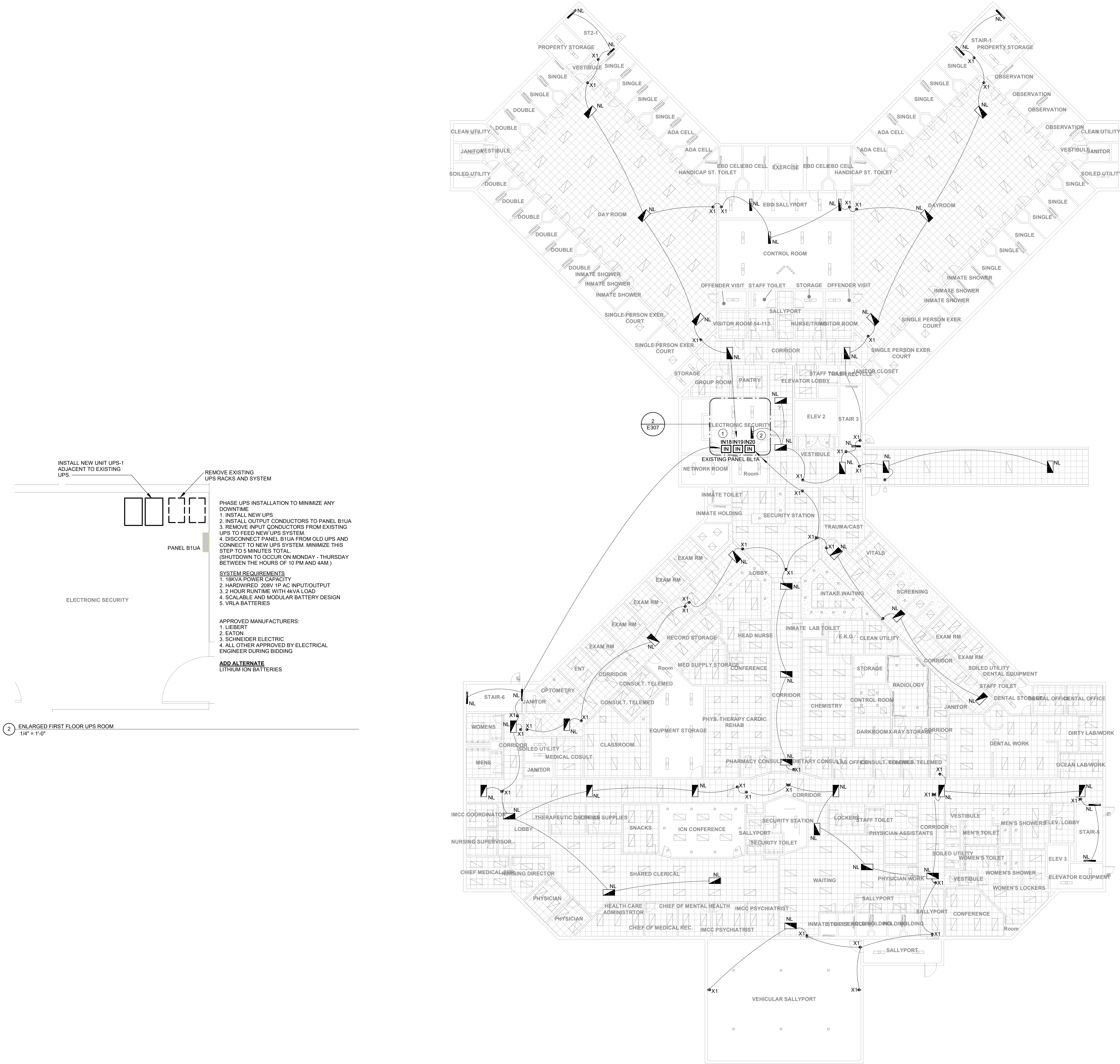
E307

LIGHTING GENERAL NOTES

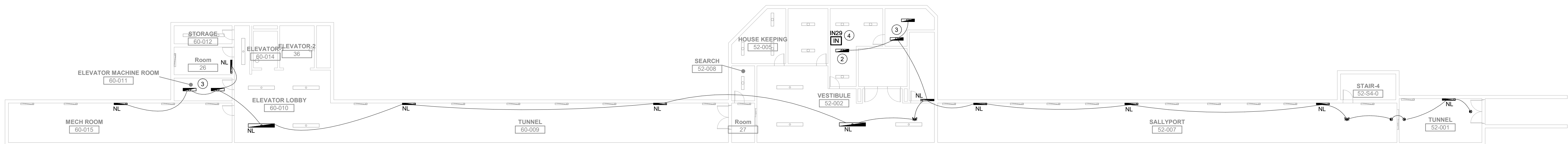
- DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

- FEED NEW LIGHTING INVERTER 'IN18', 'IN19', AND 'IN20' FROM DEDICATED 20A/1P SPARE BREAKERS IN EXISTING PANEL 'BL1A'.
- CONNECT DESIGNATED FIXTURES IN THIS SPACE TO EMERGENCY TRANSFER DEVICE AND LIGHTING INVERTER CIRCUIT. PRESERVE EXISTING SWITCHLEG FUNCTIONALITY IN THIS SPACE.
- CONNECT ALL FIXTURES IN THIS SPACE TO LIGHTING INVERTER CIRCUIT AND PRESERVE EXISTING SWITCHLEG.
- FEED NEW LIGHTING INVERTER 'IN29' FROM A DEDICATED 20A/1P BREAKER IN PANEL 'BL1A'. VERIFY VOLTAGES FOR ALL DESIGNATED FIXTURES IN THE BASEMENT LEVEL BEFORE CONNECTION TO LIGHTING INVERTER.



1 FIRST FLOOR CEILING PLAN - SNU BUILDING  
1/16" = 1'-0"



3 BASEMENT CEILING PLAN - SNU BUILDING AND POWERHOUSE  
1/16" = 1'-0"



IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

Revision Date

Drawing Name:  
SNU BUILDING -  
SECOND FLOOR -  
EMERGENCY  
LIGHTING & UPS  
REPLACEMENT

Drawing #:

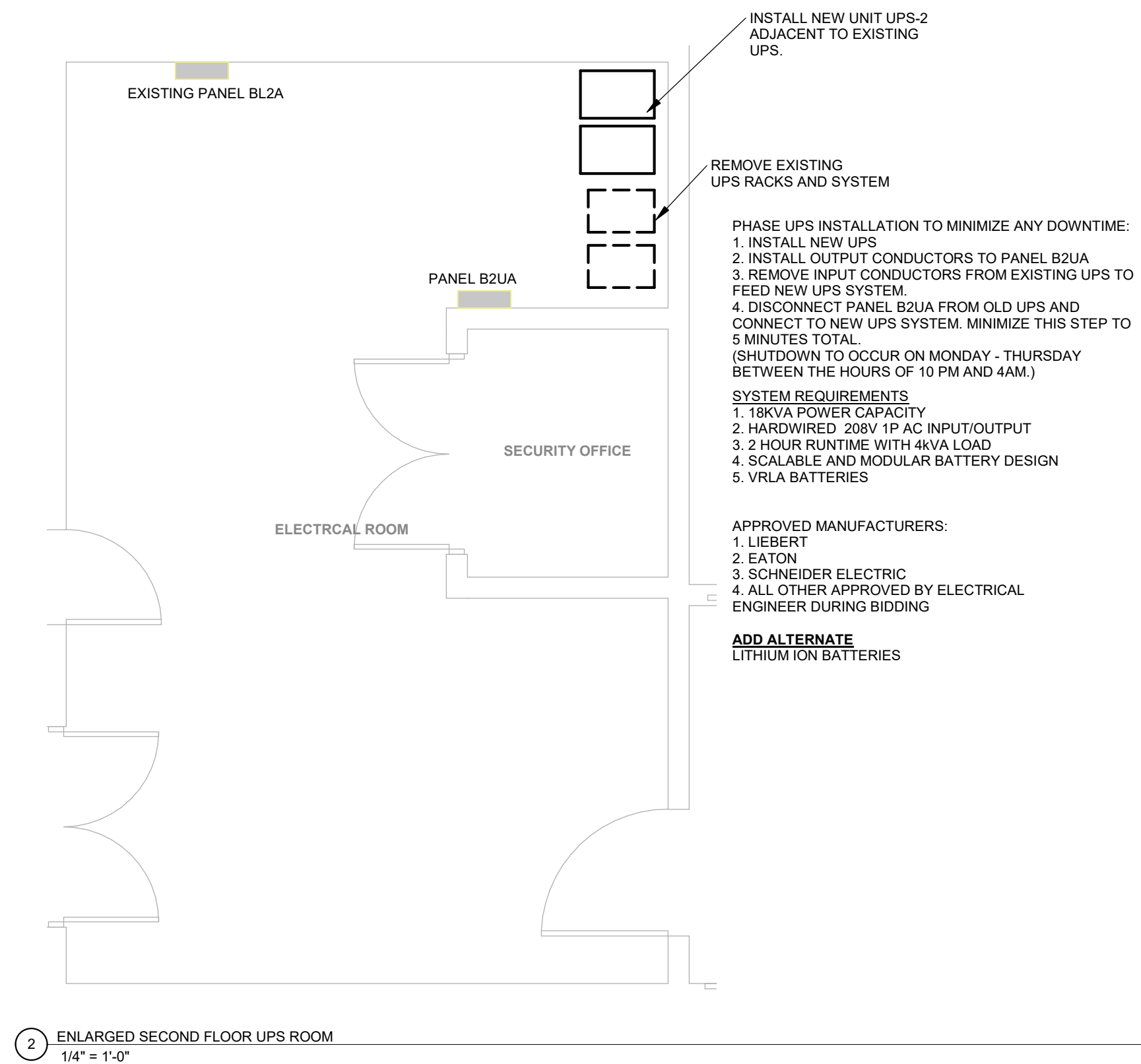
E308

LIGHTING GENERAL NOTES

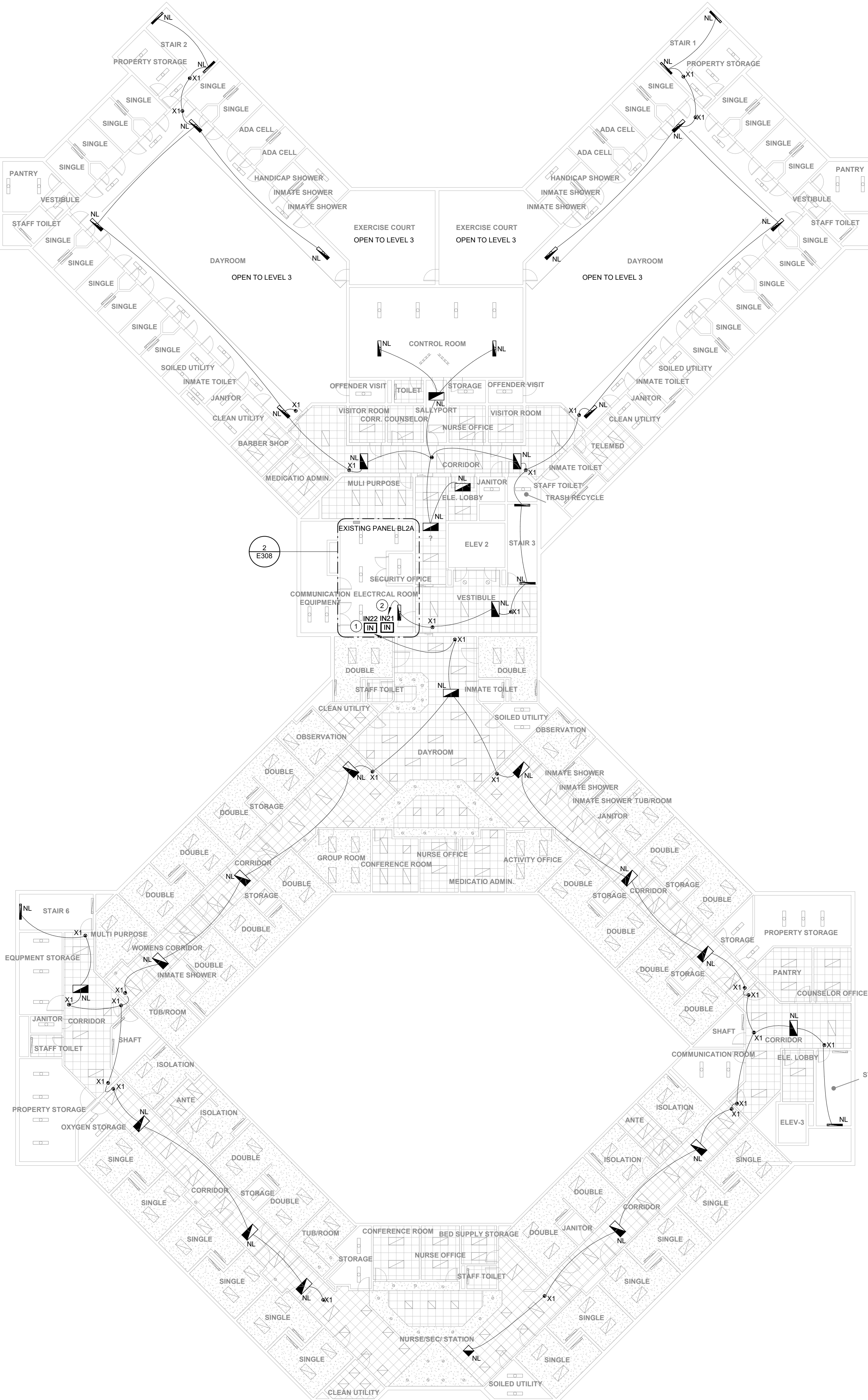
- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILING.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

- 1 FEED NEW LIGHTING INVERTER 'IN21' AND 'IN22' FROM DEDICATED 20A/1P SPARE BREAKERS IN EXISTING PANEL BL2A
- 2 CONNECT DESIGNATED FIXTURES IN THIS SPACE TO EMERGENCY TRANSFER DEVICE AND LIGHTING INVERTER CIRCUIT. PRESERVE EXISTING SWITCHLEG FUNCTIONALITY IN THIS SPACE.



1 SECOND FLOOR CEILING PLAN - SNU BUILDING  
1/16" = 1'-0"





IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

Revision Date

Drawing Name:  
SNU BUILDING - THIRD  
FLOOR - EMERGENCY  
LIGHTING & UPS  
REPLACEMENT

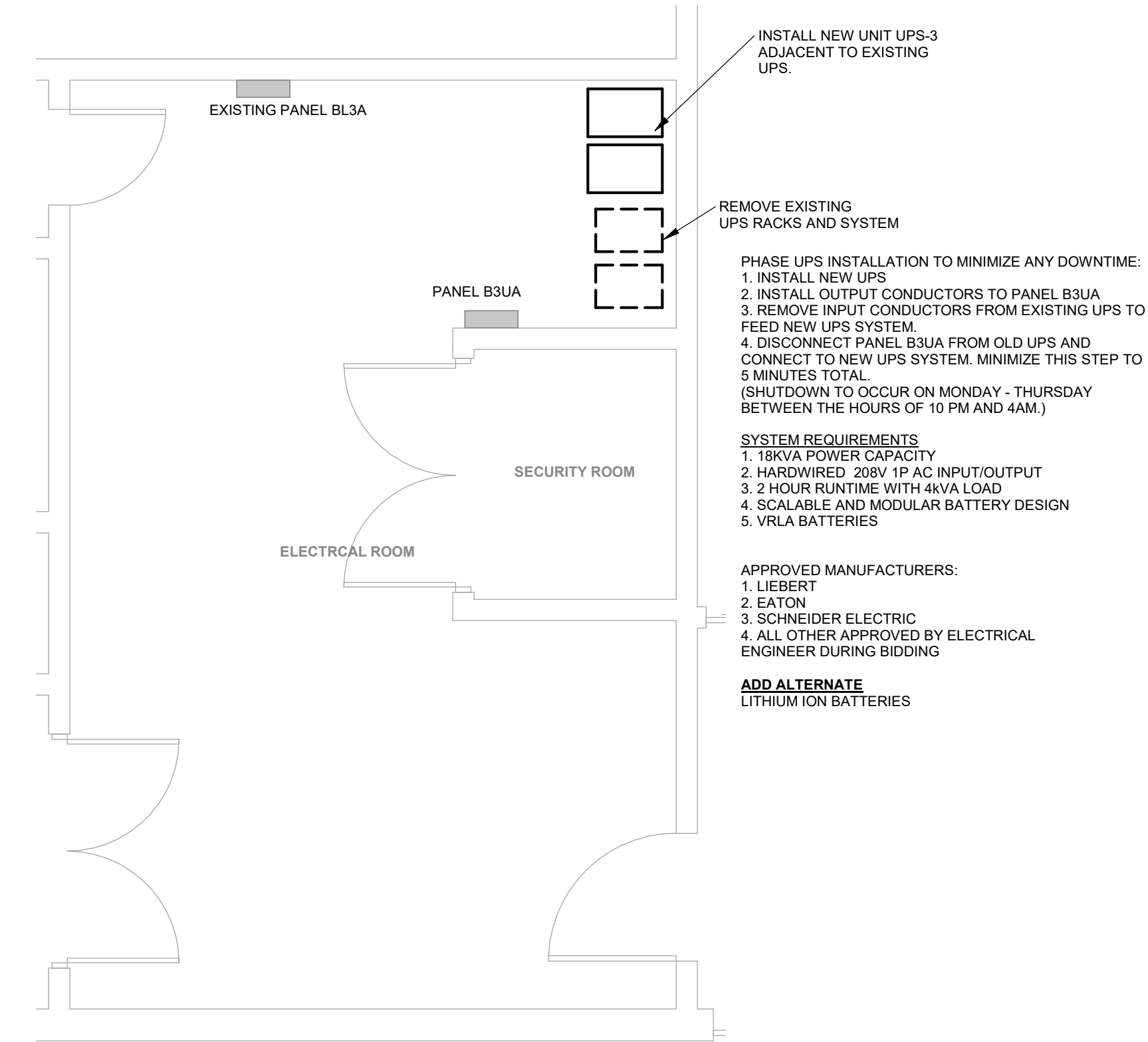
Drawing #:  
E309

LIGHTING GENERAL NOTES

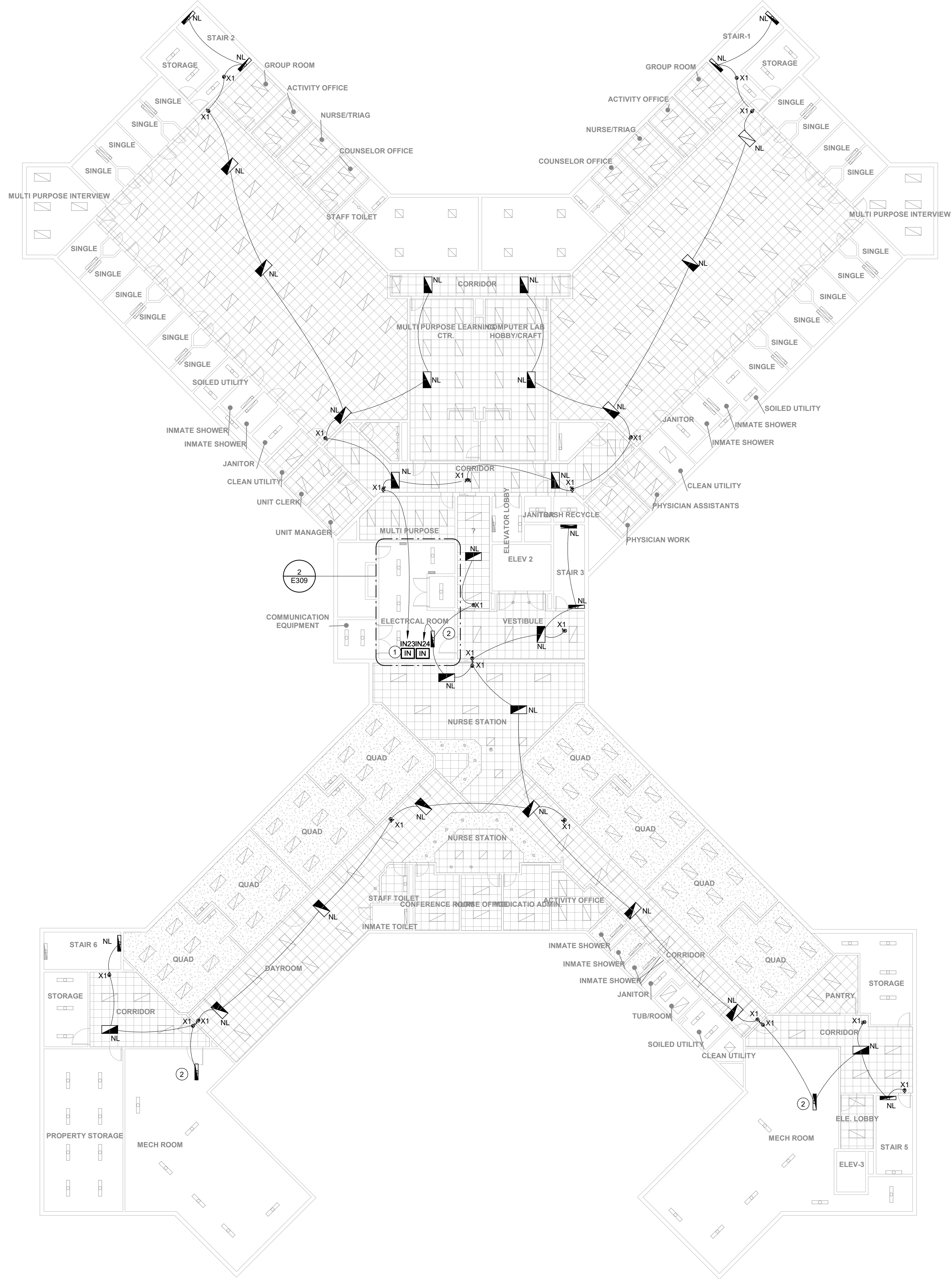
- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 9' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

- 1 FEED NEW LIGHTING INVERTER '1N23' AND '1N24' FROM DEDICATED 20A/1P SPARE BREAKERS IN EXISTING PANEL 'B3A'.
- 2 CONNECT DESIGNATED FIXTURES IN THIS SPACE TO EMERGENCY TRANSFER DEVICE AND LIGHTING INVERTER CIRCUIT. PRESERVE EXISTING SWITCHLEG FUNCTIONALITY IN THIS SPACE.



2 ENLARGED THIRD FLOOR UPS ROOM  
1/4" = 1'-0"



1 THIRD FLOOR CEILING PLAN - SNU BUILDING  
1/16" = 1'-0"

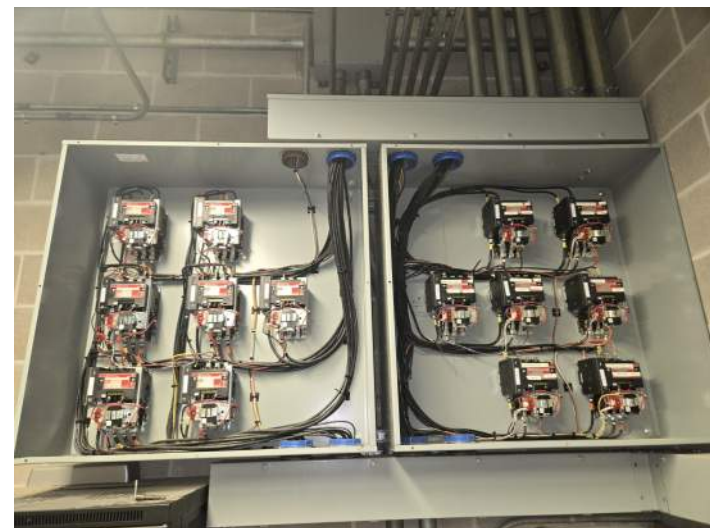


LIGHTING GENERAL NOTES

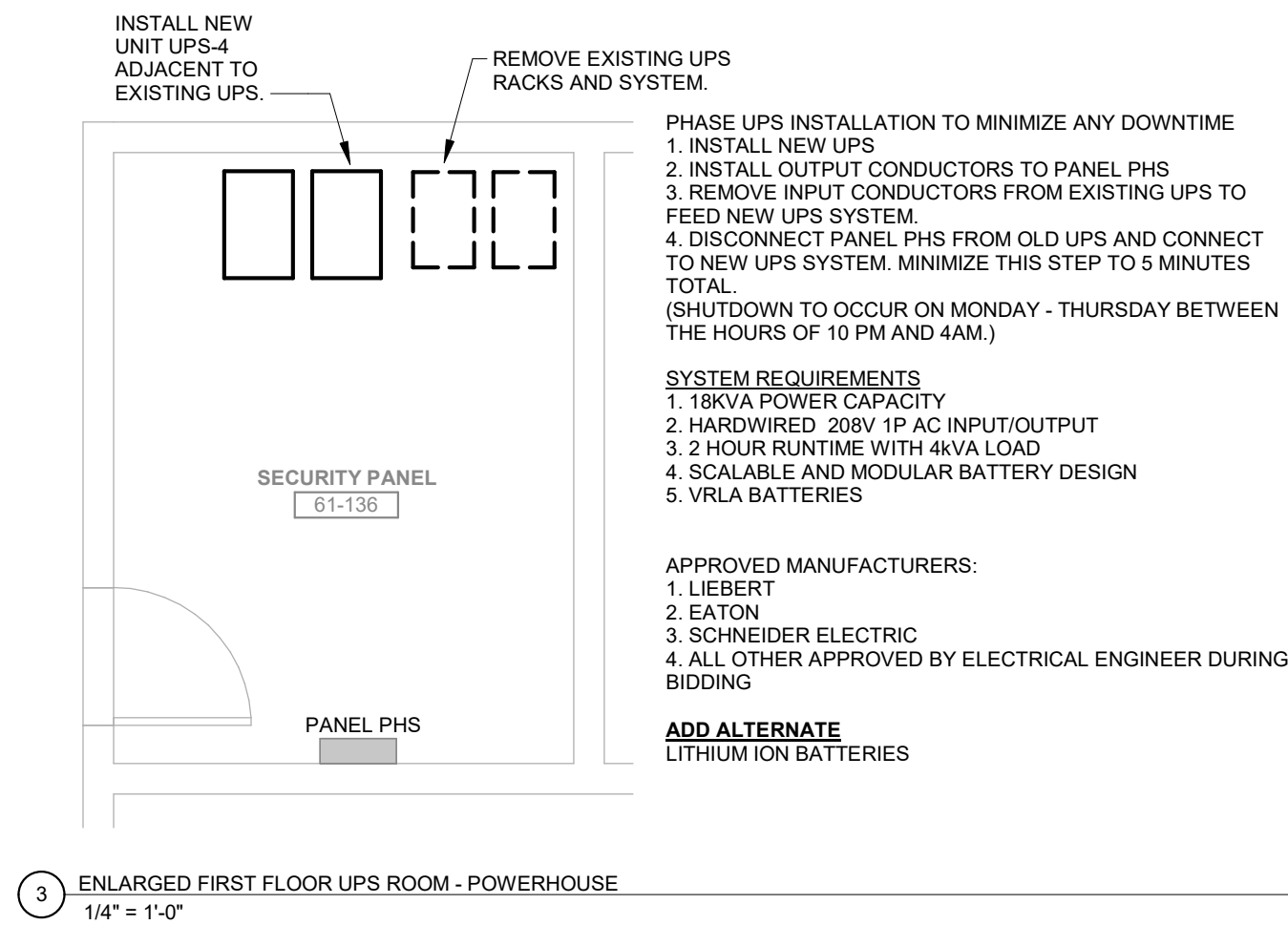
- A. DESIGN INTENT IS TO ADD INVERTERS IN APPROXIMATE LOCATIONS SHOWN. EXTEND NEW CONDUCTORS AND 1/2" CONDUIT TO ALL DESIGNATED FIXTURES ON DRAWINGS.
- B. INSTALL SURFACE MOUNTED RACEWAYS ON WALLS IF NECESSARY TO INTERCEPT THE EXISTING EMERGENCY LIGHT SWITCH IN DESIGNATED AREAS.
- C. INSTALL SURFACE MOUNTED CONDUIT IN EXPOSED STRUCTURE CEILING AREAS AT 8' OR ABOVE FLOOR UNLESS OTHERWISE NOTED. NO SURFACE MOUNTED CONDUIT IS PERMITTED TO BE INSTALLED TO THE BOTTOM OF COVERED CEILINGS.
- D. MC CABLING IS PERMITTED IN COVERED ACCESSIBLE CEILING APPLICATIONS.
- E. OWNER TO REPLACE ALL LAMPS IN DESIGNATED FIXTURES WITH LED PRIOR TO FINAL CONNECTION WITH INVERTER.
- F. ALL FIXTURES DESIGNATED AS 'NL' ARE UNSWITCHED. IF A FIXTURE IS NOT NOTED AS 'NL' IT IS CONNECTED TO THE EXISTING SWITCHLEG IT'S SPACE.
- G. EXTEND EXISTING CONDUCTORS AND CONDUIT IN EXISTING LIGHTING CIRCUITS AFFECTED BY NEW WORK TO PRESERVE EXISTING INTENDED FUNCTIONALITY.
- H. EC TO REPLACE ALL EXISTING EXIT SIGNS WITH NEW IN EXISTING LOCATIONS. NOT ALL EXIT SIGNS MAY BE SHOWN ON DRAWINGS. IT IS THE RESPONSIBILITY OF THE EC TO VERIFY ALL EXISTING LOCATIONS AND REPLACE WITH NEW. ADD ANY EXIT SIGNS NOT SHOWN TO NEAREST NEW INVERTER CIRCUIT AND DOCUMENT LOCATION AND CIRCUIT.

KEYNOTES

1. FEED NEW LIGHTING INVERTER 'IN16' AND 'IN17' FROM DEDICATED 20A/1P SPARE BREAKERS IN EXISTING PANEL THH.
2. CONNECT DESIGNATED FIXTURES IN THIS SPACE TO EMERGENCY TRANSFER DEVICE AND LIGHTING INVERTER CIRCUIT. PRESERVE EXISTING SWITCHLEG FUNCTIONALITY IN THIS SPACE.



REPLACE EXISTING 60A 4-POLE  
LIGHTING CONTACTORS WITH  
NEW IN EXISTING ENCLOSURE.



1 FIRST FLOOR CEILING PLAN - POWERHOUSE  
1/16" = 1'-0"

2 SECOND FLOOR CEILING PLAN - POWERHOUSE  
1/16" = 1'-0"



BRANCH PANEL: LB2												
LOCATION: J.C. 2-32				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000				
SUPPLY FROM: US-1				PHASES: 3				MAINS TYPE: MLO				
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A				
ENCLOSURE: TYPE 1												
NOTES:												
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION		
SPARE	1	-- 20 A	1	0	0		2	20 A -- 1		SPARE		
SPARE	1	-- 20 A	3		0	0	4	20 A -- 1		SPARE		
SPARE	1	-- 20 A	5			0	6	20 A -- 1		SPARE		
SPARE	1	-- 20 A	7	0	0		8	20 A -- 1		SPARE		
SPARE	1	-- 20 A	9		0	0	10	20 A -- 1		SPARE		
SPARE	1	-- 20 A	11			0	12	20 A -- 1		SPARE		
SPARE	1	-- 20 A	13	0	0		14	20 A -- 1		SPARE		
SPARE	1	-- 20 A	15		0	0	16	20 A -- 1		SPARE		
SPARE	1	-- 20 A	17			0	18	20 A -- 1		SPARE		
SPARE	1	-- 20 A	19	0	0		20	20 A -- 1		SPARE		
SPARE	1	-- 20 A	21		0	0	22	20 A -- 1		SPARE		
SPARE	1	-- 20 A	23			0	24	20 A -- 1		SPARE		
SPARE	1	-- 20 A	25	0	0		26	20 A -- 1		SPARE		
SPARE	1	-- 20 A	27		0	0	28	20 A -- 1		SPARE		
SPARE	1	-- 20 A	29			0	30	20 A -- 1		SPARE		
SPARE	1	-- 20 A	31	0	0		32	20 A -- 1		SPARE		
SPARE	1	-- 20 A	33		0	0	34	20 A -- 1		SPARE		
SPARE	1	-- 20 A	35			0	36	20 A -- 1		SPARE		
SPARE	1	-- 20 A	37	0	0		38	20 A -- 1		SPARE		
SPARE	1	-- 20 A	39		0	0	40	20 A -- 1		SPARE		
SPARE	1	-- 20 A	41			0	42	20 A -- 1		SPARE		
IN3	1		43	390			44					
			45				46					
			47				48					
			49				50					
			51				52					
RECEPTACLE	1	-- 20 A	53			0	54					
				390 VA	0 VA	0 VA						
				3 A	0 A	0 A						
LEGEND:												
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP												
"F" INDICATES RED LOCK-ON HASP												
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS					
LIGHTING	390 VA		125.00%		488 VA							
							TOTAL CONN. LOAD: 390 VA					
							TOTAL EST. DEMAND: 488 VA					
							TOTAL CONN.: 1 A					
							TOTAL EST. DEMAND: 1 A					
NOTES:												

BRANCH PANEL: LG2													
LOCATION: ELEVATOR EQUIPMENT 44				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000					
SUPPLY FROM: US-1				PHASES: 3				MAINS TYPE: MLO					
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A					
ENCLOSURE: TYPE 1													
NOTES:													
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0					2	20 A -- 1		SPARE
SPARE	1	-- 20 A	3			0	0			4	20 A -- 1		SPARE
SPARE	1	-- 20 A	5					0	0	6	20 A -- 1		SPARE
SPARE	1	-- 20 A	7	0	0					8	20 A -- 1		SPARE
SPARE	1	-- 20 A	9			0	0			10	20 A -- 1		SPARE
SPARE	1	-- 20 A	11					0	0	12	20 A -- 1		SPARE
SPARE	1	-- 20 A	13	0	0					14	20 A -- 1		SPARE
SPARE	1	-- 20 A	15			0	0			16	20 A -- 1		SPARE
SPARE	1	-- 20 A	17					0	0	18	20 A -- 1		SPARE
SPARE	1	-- 20 A	19	0	0					20	20 A -- 1		SPARE
SPARE	1	-- 20 A	21			0	0			22	20 A -- 1		SPARE
SPARE	1	-- 20 A	23					0	0	24	20 A -- 1		SPARE
SPARE	1	-- 20 A	25	0	0					26	20 A -- 1		SPARE
SPARE	1	-- 20 A	27			0	0			28	20 A -- 1		SPARE
SPARE	1	-- 20 A	29					0	0	30	20 A -- 1		SPARE
SPARE	1	-- 20 A	31	0	0					32	20 A -- 1		SPARE
SPARE	1	-- 20 A	33			0	0			34	20 A -- 1		SPARE
SPARE	1	-- 20 A	35					0	0	36	20 A -- 1		SPARE
SPARE	1	-- 20 A	37	0	0					38	20 A -- 1		SPARE
SPARE	1	-- 20 A	39			0	0			40	20 A -- 1		SPARE
SPARE	1	-- 20 A	41					0	0	42	20 A -- 1		SPARE
			43							44			
			45							46			
			47							48			
			49							50			
			51							52			
RECEPTACLE	1	-- 20 A	53					0		54			
				0 VA		0 VA		0 VA					
				0 A		0 A		0 A					
LEGEND:													
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP													
"F" INDICATES RED LOCK-ON HASP													
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS						
							TOTAL CONN. LOAD: 0 VA						
							TOTAL EST. DEMAND: 0 VA						
							TOTAL CONN.: 0 A						
							TOTAL EST. DEMAND: 0 A						
NOTES:													

BRANCH PANEL: LK2												
LOCATION: OBSERVATION 12-37				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000				
SUPPLY FROM: EMA2				PHASES: 3				MAINS TYPE: MLO				
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A				
ENCLOSURE: TYPE 1												
NOTES:												
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION		
SPARE	1	-- 20 A	1	0	0		2	20 A --	1	SPARE		
SPARE	1	-- 20 A	3		0	0	4	20 A --	1	SPARE		
SPARE	1	-- 20 A	5			0	6	20 A --	1	SPARE		
SPARE	1	-- 20 A	7	0	0		8	20 A --	1	SPARE		
SPARE	1	-- 20 A	9		0	0	10	20 A --	1	SPARE		
SPARE	1	-- 20 A	11			0	12	20 A --	1	SPARE		
SPARE	1	-- 20 A	13	0	0		14	20 A --	1	SPARE		
SPARE	1	-- 20 A	15		0	0	16	20 A --	1	SPARE		
SPARE	1	-- 20 A	17			0	18	20 A --	1	SPARE		
SPARE	1	-- 20 A	19	0	0		20	20 A --	1	SPARE		
SPARE	1	-- 20 A	21		0	0	22	20 A --	1	SPARE		
SPARE	1	-- 20 A	23			0	24	20 A --	1	SPARE		
SPARE	1	-- 20 A	25	0	0		26	20 A --	1	SPARE		
SPARE	1	-- 20 A	27		0	0	28	20 A --	1	SPARE		
SPARE	1	-- 20 A	29			0	30	20 A --	1	SPARE		
SPARE	1	-- 20 A	31	0	0		32	20 A --	1	SPARE		
SPARE	1	-- 20 A	33		0	0	34	20 A --	1	SPARE		
SPARE	1	-- 20 A	35			0	36	20 A --	1	SPARE		
SPARE	1	-- 20 A	37	0	0		38	20 A --	1	SPARE		
SPARE	1	-- 20 A	39		0	0	40	20 A --	1	SPARE		
SPARE	1	-- 20 A	41			0	42	20 A --	1	SPARE		
LIGHTING INVERTER 'N10'	1	20 A	43	560			44					
			45				46					
			47				48					
			49				50					
			51				52					
RECEPTACLE	1	-- 20 A	53			0	54					
				560 VA	0 VA	0 VA						
				5 A	0 A	0 A						
LEGEND:												
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP												
"F" INDICATES RED LOCK-ON HASP												
LOAD CLASSIFICATION	CONNECTED LOAD			DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS				
LIGHTING	560 VA			125.00%		700 VA		TOTAL CONN. LOAD: 560 VA				
								TOTAL EST. DEMAND: 700 VA				
								TOTAL CONN.: 2 A				
								TOTAL EST. DEMAND: 2 A				
NOTES:												



BRANCH PANEL: SKP-2										
LOCATION:			VOLTAGE: 120/208 WYE			SCCR RATING: 10,000				
SUPPLY FROM: EMA2			PHASES: 3			MAINS TYPE: MLO				
MOUNTING: SURFACE			WIRES: 4			MAINS RATING: 225 A				
ENCLOSURE: TYPE 1										
NOTES:										
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0		2	20 A -- 1		SPARE
SPARE	1	-- 20 A	3		0	0	4	20 A -- 1		SPARE
SPARE	1	-- 20 A	5			0	6	20 A -- 1		SPARE
SPARE	1	-- 20 A	7	0	0		8	20 A -- 1		SPARE
SPARE	1	-- 20 A	9		0	0	10	20 A -- 1		SPARE
SPARE	1	-- 20 A	11			0	12	20 A -- 1		SPARE
SPARE	1	-- 20 A	13	0	0		14	20 A -- 1		SPARE
SPARE	1	-- 20 A	15		0	0	16	20 A -- 1		SPARE
SPARE	1	-- 20 A	17			0	18	20 A -- 1		SPARE
SPARE	1	-- 20 A	19	0	0		20	20 A -- 1		SPARE
SPARE	1	-- 20 A	21		0	0	22	20 A -- 1		SPARE
SPARE	1	-- 20 A	23			0	24	20 A -- 1		SPARE
SPARE	1	-- 20 A	25	0	0		26	20 A -- 1		SPARE
SPARE	1	-- 20 A	27		0	0	28	20 A -- 1		SPARE
SPARE	1	-- 20 A	29			0	30	20 A -- 1		SPARE
SPARE	1	-- 20 A	31	0	0		32	20 A -- 1		SPARE
SPARE	1	-- 20 A	33		0	0	34	20 A -- 1		SPARE
SPARE	1	-- 20 A	35			0	36	20 A -- 1		SPARE
SPARE	1	-- 20 A	37	0	0		38	20 A -- 1		SPARE
SPARE	1	-- 20 A	39		0	0	40	20 A -- 1		SPARE
SPARE	1	-- 20 A	41			0	42	20 A -- 1		SPARE
LIGHTING INVERTER 'IN4'	1	20 A	43	845			44			
LIGHTING INVERTER 'IN2B'	1	20 A	45		935		46			
			47				48			
			49				50			
			51				52			
RECEPTACLE	1	-- 20 A	53			0	54			
				845 VA	935 VA	0 VA				
				8 A	9 A	0 A				
LEGEND:										
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP										
"F" INDICATES RED LOCK-ON HASP										
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
LIGHTING	1780 VA		125.00%		2225 VA		TOTAL CONN. LOAD: 1780 VA			
							TOTAL EST. DEMAND: 2225 VA			
							TOTAL CONN.: 5 A			
							TOTAL EST. DEMAND: 6 A			
NOTES:										

BRANCH PANEL: LA2										
LOCATION: CORRIDOR 30-20				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000		
SUPPLY FROM: EMA2				PHASES: 3				MAINS TYPE: MLO		
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A		
ENCLOSURE: TYPE 1										
NOTES:										
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0		2	20 A -- 1		SPARE
SPARE	1	-- 20 A	3		0	0	4	20 A -- 1		SPARE
SPARE	1	-- 20 A	5			0	6	20 A -- 1		SPARE
SPARE	1	-- 20 A	7	0	0		8	20 A -- 1		SPARE
SPARE	1	-- 20 A	9		0	0	10	20 A -- 1		SPARE
SPARE	1	-- 20 A	11			0	12	20 A -- 1		SPARE
SPARE	1	-- 20 A	13	0	0		14	20 A -- 1		SPARE
SPARE	1	-- 20 A	15		0	0	16	20 A -- 1		SPARE
SPARE	1	-- 20 A	17			0	18	20 A -- 1		SPARE
SPARE	1	-- 20 A	19	0	0		20	20 A -- 1		SPARE
SPARE	1	-- 20 A	21		0	0	22	20 A -- 1		SPARE
SPARE	1	-- 20 A	23			0	24	20 A -- 1		SPARE
SPARE	1	-- 20 A	25	0	0		26	20 A -- 1		SPARE
SPARE	1	-- 20 A	27		0	0	28	20 A -- 1		SPARE
SPARE	1	-- 20 A	29			0	30	20 A -- 1		SPARE
SPARE	1	-- 20 A	31	0	0		32	20 A -- 1		SPARE
SPARE	1	-- 20 A	33		0	0	34	20 A -- 1		SPARE
SPARE	1	-- 20 A	35			0	36	20 A -- 1		SPARE
SPARE	1	-- 20 A	37	0	0		38	20 A -- 1		SPARE
SPARE	1	-- 20 A	39		0	0	40	20 A -- 1		SPARE
SPARE	1	-- 20 A	41			0	42	20 A -- 1		SPARE
LIGHTING INVERTER 'IN6'	1	20 A	43	470			44			
			45				46			
			47				48			
			49				50			
			51				52			
RECEPTACLE	1	-- 20 A	53			0	54			
				470 VA	0 VA	0 VA				
				4 A	0 A	0 A				
LEGEND:										
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP										
"F" INDICATES RED LOCK-ON HASP										
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
LIGHTING	470 VA		125.00%		588 VA		TOTAL CONN. LOAD: 470 VA			
							TOTAL EST. DEMAND: 588 VA			
							TOTAL CONN.: 1 A			
							TOTAL EST. DEMAND: 2 A			
NOTES:										

BRANCH PANEL: LC2										
LOCATION: WAITING 7-26				VOLTAGE: 120/208 WYE				SCCR RATING: 22,000		
SUPPLY FROM: US-1				PHASES: 3				MAINS TYPE: MLO		
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A		
ENCLOSURE: TYPE 1										
NOTES:										
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0		2	20 A	-- 1	SPARE
SPARE	1	-- 20 A	3			0 0	4	20 A	-- 1	SPARE
SPARE	1	-- 20 A	5				6	20 A	-- 1	SPARE
SPARE	1	-- 20 A	7	0	0		8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9		0 0		10	20 A	-- 1	SPARE
SPARE	1	-- 20 A	11				12	20 A	-- 1	SPARE
SPARE	1	-- 20 A	13	0	0		14	20 A	-- 1	SPARE
SPARE	1	-- 20 A	15		0 0		16	20 A	-- 1	SPARE
SPARE	1	-- 20 A	17			0 0	18	20 A	-- 1	SPARE
SPARE	1	-- 20 A	19	0	0		20	20 A	-- 1	SPARE
SPARE	1	-- 20 A	21		0 0		22	20 A	-- 1	SPARE
SPARE	1	-- 20 A	23			0 0	24	20 A	-- 1	SPARE
SPARE	1	-- 20 A	25	0	0		26	20 A	-- 1	SPARE
SPARE	1	-- 20 A	27		0 0		28	20 A	-- 1	SPARE
SPARE	1	-- 20 A	29			0 0	30	20 A	-- 1	SPARE
SPARE	1	-- 20 A	31	0	0		32	20 A	-- 1	SPARE
SPARE	1	-- 20 A	33		0 0		34	20 A	-- 1	SPARE
SPARE	1	-- 20 A	35			0 0	36	20 A	-- 1	SPARE
SPARE	1	-- 20 A	37	0	0		38	20 A	-- 1	SPARE
SPARE	1	-- 20 A	39		0 0		40	20 A	-- 1	SPARE
SPARE	1	-- 20 A	41			0 0	42	20 A	-- 1	SPARE
LIGHTING INVERTER 'IN5'	1	20 A	43	864			44			
			45				46			
			47				48			
			49				50			
			51				52			
RECEPTACLE	1	-- 20 A	53			0	54			
				864 VA	0 VA	0 VA				
				7 A	0 A	0 A				
LEGEND:										
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP										
"F" INDICATES RED LOCK-ON HASP										
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
LIGHTING	864 VA		125.00%		1080 VA		TOTAL CONN. LOAD: 864 VA			
							TOTAL EST. DEMAND: 1080 VA			
							TOTAL CONN.: 2 A			
							TOTAL EST. DEMAND: 3 A			
NOTES:										

BRANCH PANEL: EC2									
LOCATION: 9-52			VOLTAGE: 120/208 WYE			SCCR RATING: 10,000			
SUPPLY FROM: EMA2			PHASES: 3			MAINS TYPE: MLO			
MOUNTING: SURFACE			WIRES: 4			MAINS RATING: 225 A			
ENCLOSURE: TYPE 1									
NOTES:									



BRANCH PANEL: NL-W2

LOCATION: JAN 174

VOLTAGE: 120/208 WYE

SCCR RATING: 10,000

SUPPLY FROM: NDP2

PHASES: 3

MAINS TYPE: MLO

MOUNTING: SURFACE

WIRES: 4

MAINS RATING: 225 A

ENCLOSURE: TYPE 1

NOTES:

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0					2	20 A	-- 1	SPARE
SPARE	1	-- 20 A	3			0	0			4	20 A	-- 1	SPARE
SPARE	1	-- 20 A	5					0	0	6	20 A	-- 1	SPARE
SPARE	1	-- 20 A	7	0	0					8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9			0	0			10	20 A	-- 1	SPARE
SPARE	1	-- 20 A	11					0	0	12	20 A	-- 1	SPARE
SPARE	1	-- 20 A	13	0	0					14	20 A	-- 1	SPARE
SPARE	1	-- 20 A	15			0	0			16	20 A	-- 1	SPARE
SPARE	1	-- 20 A	17					0	0	18	20 A	-- 1	SPARE
SPARE	1	-- 20 A	19	0	0					20	20 A	-- 1	SPARE
SPARE	1	-- 20 A	21			0	0			22	20 A	-- 1	SPARE
SPARE	1	-- 20 A	23					0	0	24	20 A	-- 1	SPARE
SPARE	1	-- 20 A	25	0	0					26	20 A	-- 1	SPARE
SPARE	1	-- 20 A	27			0	0			28	20 A	-- 1	SPARE
SPARE	1	-- 20 A	29					0	0	30	20 A	-- 1	SPARE
SPARE	1	-- 20 A	31	0	0					32	20 A	-- 1	SPARE
SPARE	1	-- 20 A	33			0	0			34	20 A	-- 1	SPARE
SPARE	1	-- 20 A	35					0	0	36	20 A	-- 1	SPARE
SPARE	1	-- 20 A	37	0	0					38	20 A	-- 1	SPARE
LIGHTING INVERTER 'INI2'	1	-- 20 A	39			690				40			
RECEPTACLE	1	-- 20 A	41					0		42			
				0 VA		690 VA		0 VA					
				0 A		6 A		0 A					

LEGEND:

"G" INDICATES GFCl TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP

"F" INDICATES RED LOCK-ON HASP

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LIGHTING	690 VA	125.00%	863 VA	
				TOTAL CONN. LOAD: 690 VA
				TOTAL EST. DEMAND: 863 VA
				TOTAL CONN.: 2 A
				TOTAL EST. DEMAND: 2 A

NOTES:

BRANCH PANEL: EL-E2

LOCATION: SORTING 30-30

SUPPLY FROM: NDP2

MOUNTING: SURFACE

ENCLOSURE: TYPE 1

VOLTAGE: 120/208 WYE

PHASES: 3

WIRES: 4

SCCR RATING: 10,000

MAINS TYPE: MLO

MAINS RATING: 100 A

NOTES:

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0					2	20 A	-- 1	SPARE
SPARE	1	-- 20 A	3			0	0			4	20 A	-- 1	SPARE
SPARE	1	-- 20 A	5					0	0	6	20 A	-- 1	SPARE
SPARE	1	-- 20 A	7	0	0					8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9			0	0			10	20 A	-- 1	SPARE
SPARE	1	-- 20 A	11					0	0	12	20 A	-- 1	SPARE
SPARE	1	-- 20 A	13	0	0					14	20 A	-- 1	SPARE
SPARE	1	-- 20 A	15			0	0			16	20 A	-- 1	SPARE
SPARE	1	-- 20 A	17					0	0	18	20 A	-- 1	SPARE
SPARE	1	-- 20 A	19	0	0					20	20 A	-- 1	SPARE
SPARE	1	-- 20 A	21			0	0			22	20 A	-- 1	SPARE
SPARE	1	-- 20 A	23					0	0	24	20 A	-- 1	SPARE
SPARE	1	-- 20 A	25	0	0					26	20 A	-- 1	SPARE
SPARE	1	-- 20 A	27			0	0			28	20 A	-- 1	SPARE
SPARE	1	-- 20 A	29					0	0	30	20 A	-- 1	SPARE
SPARE	1	-- 20 A	31	0	0					32	20 A	-- 1	SPARE
SPARE	1	-- 20 A	33			0	0			34	20 A	-- 1	SPARE
SPARE	1	-- 20 A	35					0	0	36	20 A	-- 1	SPARE
SPARE	1	-- 20 A	37	0	0					38	20 A	-- 1	SPARE
			39							40			
RECEPTACLE	1	-- 20 A	41					0		42			
				0 VA		0 VA		0 VA					
				0 A		0 A		0 A					

LEGEND:

"G" INDICATES GFCl TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP

"F" INDICATES RED LOCK-ON HASP

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
				TOTAL CONN. LOAD: 0 VA
				TOTAL EST. DEMAND: 0 VA
				TOTAL CONN.: 0 A
				TOTAL EST. DEMAND: 0 A

NOTES:

[illegible]



BRANCH PANEL: EJ					VOLTAGE: 120/208 SINGLE Ø					SCCR RATING: 10,000				
LOCATION: GREENHOUSE					PHASES: 1					MAINS TYPE: MCB				
SUPPLY FROM: E1A-L					WIRES: 3					MAINS RATING: 100 A				
MOUNTING: SURFACE										MCB RATING: 60 A				
ENCLOSURE: TYPE 3R														
NOTES:														
INSTALLED IN GREENHOUSE. LOAD CENTER REPLACEMENT. NEMA 3R, INTEGRAL SPD. VERIFY MAIN BREAKER WITH FEEDER FROM EL1(A). LOADS SHOWN ON PANEL ARE EXISTING. VERIFY VERBIAGE AND BREAKER SIZES IN PANEL SCHEDULE WITH OWNER.														
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION					
WEST OUTLETS (GFCI)	1	→ 20 A	1	0	0	2	20 A	→ 1	EAST OUTLETS (GFCI)					
WATER HEATER	2	→ 20 A	3		0	4	20 A	→ 1	EXIT LIGHTS					
SPARE	1	→ 20 A	5	0	0	6	20 A	→ 1	FLOOD LIGHTS					
VENT WINDOW	1	→ 20 A	7		0	8	20 A	→ 1	CIRCULATING FANS					
24V AC POWER	1	→ 20 A	9	0	0	10	40 A	→ 2	WATER HEATER					
LTS PANEL POWER	1	→ 20 A	11		0	12								
FAN JET MOTOR	1	→ 20 A	13	0	0	14	20 A	→ 2	EXHAUST FAN 1					
FAN JET LOUVER	1	→ 20 A	15		0	16								
LOUVER #2 & 3	1	→ 20 A	17	0	0	18	20 A	→ 2	EXHAUST FAN 2 EAST					
COOLING SUMP PUMP	1	→ 20 A	19		0	20								
HEATER FANS	1	→ 20 A	21	0	0	22	20 A	→ 2	EXHAUST FAN 3 WEST					
OUTSIDE CAMERA	1	→ 20 A	23		0	24								
TANK HEATER (GFCI)	1	→ 20 A	25	0	0	26	20 A	→ 1	SPARE					
SHADE SYSTEM	1	→ 20 A	27		0	28	20 A	→ 1	CORD REEL					
SPARE	1	→ 20 A	29	0	0	30	20 A	→ 1	OFFICE LIGHTS AND OUTLETS					
SPARE	1	→ 20 A	31		0	32	20 A	→ 1	SPARE (GFCI)					
SPARE	1	→ 20 A	33	0	0	34	20 A	→ 1	SPARE (GFCI)					
SPARE	1	→ 20 A	35		0	36	20 A	→ 1	SPARE (GFCI)					
SPARE	1	→ 20 A	37	0	0	38	20 A	→ 1	SPARE (GFCI)					
SPARE	1	→ 20 A	39		0	40	20 A	→ 1	SPARE (GFCI)					
SPARE	1	→ 20 A	41	0	0	42	20 A	→ 1	SPARE (GFCI)					
				0 VA		0 VA								
				0 A		0 A								
LEGEND:														
"G" INDICATES GFCI TYPE BREAKER. "L" INDICATES PROVIDE LOCKABLE HASP														
"F" INDICATES RED LOCK-ON HASP														
LOAD CLASSIFICATION	CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS							
							TOTAL CONN. LOAD: 0 VA							
							TOTAL EST. DEMAND: 0 VA							
							TOTAL CONN.: 0 A							
							TOTAL EST. DEMAND: 0 A							
NOTES:														

BRANCH PANEL: R													
LOCATION: MECH D127				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000					
SUPPLY FROM: NDPA				PHASES: 3				MAINS TYPE: MLO					
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A					
ENCLOSURE: TYPE 1													
NOTES:													
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0					2	20 A	-- 1	SPARE
SPARE	1	-- 20 A	3			0	0			4	20 A	-- 1	SPARE
SPARE	1	-- 20 A	5					0	0	6	20 A	-- 1	SPARE
SPARE	1	-- 20 A	7	0	0					8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9			0	0			10	20 A	-- 1	SPARE
SPARE	1	-- 20 A	11					0	0	12	20 A	-- 1	SPARE
SPARE	1	-- 20 A	13	0	0					14	20 A	-- 1	SPARE
SPARE	1	-- 20 A	15			0	0			16	20 A	-- 1	SPARE
SPARE	1	-- 20 A	17					0	0	18	20 A	-- 1	SPARE
SPARE	1	-- 20 A	19	0	0					20	20 A	-- 1	SPARE
SPARE	1	-- 20 A	21			0	0			22	20 A	-- 1	SPARE
SPARE	1	-- 20 A	23					0	0	24	20 A	-- 1	SPARE
SPARE	1	-- 20 A	25	0	0					26	20 A	-- 1	SPARE
SPARE	1	-- 20 A	27			0	0			28	20 A	-- 1	SPARE
SPARE	1	-- 20 A	29					0	0	30	20 A	-- 1	SPARE
SPARE	1	-- 20 A	31	0	0					32	20 A	-- 1	SPARE
SPARE	1	-- 20 A	33			0	0			34	20 A	-- 1	SPARE
SPARE	1	-- 20 A	35					0	0	36	20 A	-- 1	SPARE
LIGHTING	1	20 A	37	865						38			
			39							40			
RECEPTACLE	1	-- 20 A	41					0		42			
				865 VA		0 VA		0 VA					
				7 A		0 A		0 A					
LEGEND:													
"G" INDICATES GFCI TYPE BREAKER. "L" INDICATES PROVIDE LOCKABLE HASP													
"F" INDICATES RED LOCK-ON HASP													
LOAD CLASSIFICATION	CONNECTED LOAD			DEMAND FACTOR			ESTIMATED DEMAND			PANEL TOTALS			
LIGHTING	865 VA			125.00%			1081 VA			TOTAL CONN. LOAD: 865 VA			
										TOTAL EST. DEMAND: 1081 VA			
										TOTAL CONN.: 2 A			
										TOTAL EST. DEMAND: 3 A			
NOTES:													

BRANCH PANEL: LM2													
LOCATION: ELECTRIC EQUIP. 5-8				VOLTAGE: 120/208 WYE				SCCR RATING: 22,000					
SUPPLY FROM: US-1				PHASES: 3				MAINS TYPE: MLO					
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A					
ENCLOSURE: TYPE 1													
NOTES:													
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
SPARE	1	-- 20 A	1	0	0					2	20 A	-- 1	SPARE
SPARE	1	-- 20 A	3			0	0			4	20 A	-- 1	SPARE
SPARE	1	-- 20 A	5					0	0	6	20 A	-- 1	SPARE
SPARE	1	-- 20 A	7	0	0					8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9			0	0			10	20 A	-- 1	SPARE
SPARE	1	-- 20 A	11					0	0	12	20 A	-- 1	SPARE
SPARE	1	-- 20 A	13	0	0					14	20 A	-- 1	SPARE
SPARE	1	-- 20 A	15			0	0			16	20 A	-- 1	SPARE
SPARE	1	-- 20 A	17					0	0	18	20 A	-- 1	SPARE
SPARE	1	-- 20 A	19	0	0					20	20 A	-- 1	SPARE
SPARE	1	-- 20 A	21			0	0			22	20 A	-- 1	SPARE
SPARE	1	-- 20 A	23					0	0	24	20 A	-- 1	SPARE
SPARE	1	-- 20 A	25	0	0					26	20 A	-- 1	SPARE
SPARE	2	-- 30 A	27			0	0			28	20 A	-- 1	SPARE
			29					0	0	30	20 A	-- 1	SPARE
SPARE	2	-- 20 A	31	0	0					32	20 A	-- 1	SPARE
			33			0	0			34	20 A	-- 1	SPARE
SPARE	1	-- 20 A	35					0	0	36			
SPARE	1	-- 20 A	37	0	0					38	20 A	-- 3	SPARE
IN1	1	-- 20 A	39			495	0			40			
RECEPTACLE	1	-- 20 A	41					0	540	42	20 A	1	IN2
				0 VA		495 VA		540 VA					
				0 A		5 A		5 A					
LEGEND:													
"G" INDICATES GFCI TYPE BREAKER. "L" INDICATES PROVIDE LOCKABLE HASP													
"F" INDICATES RED LOCK-ON HASP													
LOAD CLASSIFICATION	CONNECTED LOAD			DEMAND FACTOR			ESTIMATED DEMAND			PANEL TOTALS			
LIGHTING	1035 VA			125.00%			1294 VA						
										TOTAL CONN. LOAD: 1035 VA			
										TOTAL EST. DEMAND: 1294 VA			
										TOTAL CONN.: 3 A			
										TOTAL EST. DEMAND: 4 A			
NOTES:													

BRANCH PANEL: EL-W2											
LOCATION: CONTROL RM AB1				VOLTAGE: 120/208 WYE				SCCR RATING: 10,000			
SUPPLY FROM: NDP2				PHASES: 3				MAINS TYPE: MLO			
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 100 A			
ENCLOSURE: TYPE 1											
NOTES:											



LOCATION: ELECTRIC EQUIP. 5-8  
SUPPLY FROM: US-1  
MOUNTING: SURFACE  
ENCLOSURE: TYPE 1

SCCR RATING: 35,000  
MAINS TYPE: MLO  
MAINS RATING: 1200 A

**NOTES:**

CKT	CIRCUIT DESCRIPTION	# OF POLES	FRAME SIZE	TRIP RATING	Load	REMARKS
1	LK2	3	400 A	225 A	560 VA	
2	LI2	3	400 A	225 A	630 VA	
3	LD2	3	400 A	225 A	0 VA	
4	SKP-2	3	400 A	225 A	1780 VA	
5	EB2	3	400 A	225 A	0 VA	
6	EC2	3	400 A	225 A	1445 VA	
7	LI2	3	400 A	225 A	0 VA	
8	LA2	3	400 A	225 A	470 VA	
9	SPARE	1	400 A	225 A	0 VA	
10	SPARE	1	400 A	225 A	0 VA	
11	SPACE	1	--	--	--	
12	SPACE	1	--	--	--	
13	SPACE	1	--	--	--	
14	SPACE	1	--	--	--	
TOTAL CONN. LOAD:					5075 VA	

**LEGEND:**

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	5075 VA	125.00%	6344 VA	
				TOTAL CONN. LOAD: 5075 VA
				TOTAL EST. DEMAND: 6344 VA
				TOTAL CONN.: 14 A
				TOTAL EST. DEMAND: 18 A

**NOTES:**

LOCATION: NORTH BUILDING ELEC RM  
SUPPLY FROM: NDP  
MOUNTING: SURFACE  
ENCLOSURE: TYPE 1

**SCCR RATING:** 35,000  
**MAINS TYPE:** MLO  
**MAINS RATING:** 1200 A

**NOTES:**

CKT	CIRCUIT DESCRIPTION	# OF POLES	FRAME SIZE	TRIP RATING	Load	REMARKS
1	NL-S3	3	400 A	225 A	0 VA	
2	NL-E2	3	400 A	225 A	605 VA	
3	EL-E2	3	200 A	100 A	0 VA	
4	NL-N2	3	400 A	225 A	605 VA	
5	EL-N2	3	200 A	100 A	0 VA	
6	EL-W2	3	200 A	100 A	560 VA	
7	NL-W2	3	400 A	225 A	690 VA	
8	SPARE	1	400 A	250 A	0 VA	
9	SPARE	1	400 A	250 A	0 VA	
10	SPARE	1	200 A	150 A	0 VA	
11	SPARE	1	200 A	100 A	0 VA	
12	SPARE	1	200 A	100 A	0 VA	
13	SPACE	1	--	--	--	
14	SPACE	1	--	--	--	
TOTAL CONN. LOAD:					2450 VA	

**LEGEND:**

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	2460 VA	125.00%	3075 VA	
				TOTAL CONN. LOAD: 2460 VA
				TOTAL EST. DEMAND: 3075 VA
				TOTAL CONN.: 7 A
				TOTAL EST. DEMAND: 9 A

**NOTES:**

LOCATION: ELECTRIC EQUIP. 5-8  
SUPPLY FROM: US-1  
MOUNTING: SURFACE  
ENCLOSURE: TYPE 1

SCCR RATING: 35,000  
MAINS TYPE: MLO  
MAINS RATING: 600 A

**NOTES:**

CIRCUIT DESCRIPTION		P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION	
SPARE	1	--	20 A	1	0	0					2	20 A	--	1	SPARE
SPARE	1	--	20 A	3			0	0			4	30 A	--	1	SPARE
SPARE	1	--	50 A	5					0	0	6	50 A	--	1	SPARE
SPARE	1	--	125 A	7	0	0					8	125 A	--	1	SPARE
SPARE	1	--	225 A	9			0	0			10	225 A	--	1	SPARE
SPARE	1	--	20 A	11					0	0	12	100 A	--	1	SPARE
SPARE	1	--	20 A	13	0	0					14	50 A	--	1	SPARE
					0 VA		0 VA		0 VA						

**LEGEND:**

"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP  
"F" INDICATES RED LOCK-ON HASP

[illegible]

**NOTES:**



LIGHTING FIXTURE SCHEDULE

NOTES:

- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
- INCLUDE A MINIMUM 1 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
- VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
- AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: MICHAEL LORTZ

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
X1	LITHONIA	LQM-S-W-3-R-120/277-M6	THERMOPLASTIC EXIT SIGN, UNIVERSAL MOUNTINGS. PROVIDE SEPARATE LINE ITEM WITH UNIT PRICE FOR EXIT SIGN WITH 25' MC CABLING WHIP TO NEAREST LIGHTING INVERTER CIRCUIT.	WHITE	RED LED	120 V	5 VA	DUAL-LITE, OR AS APPROVED BY ENGINEER

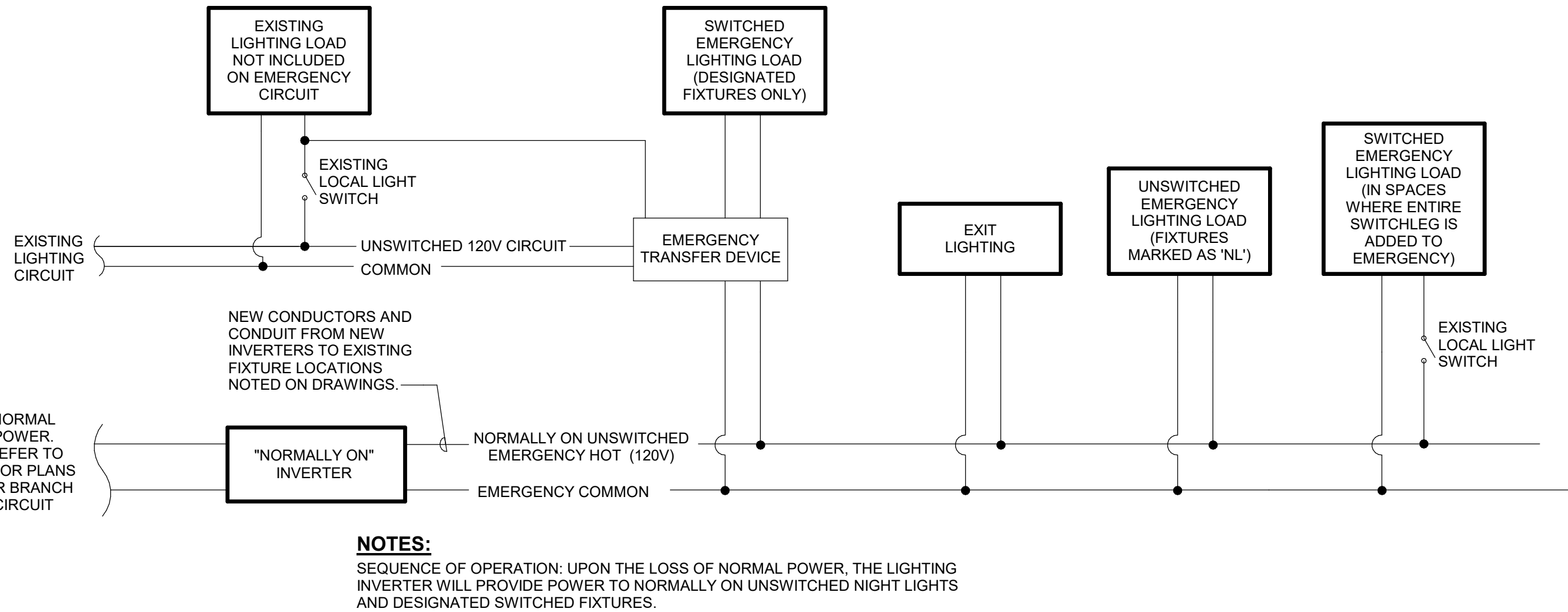
LIGHTING INVERTER SCHEDULE

NOTES:

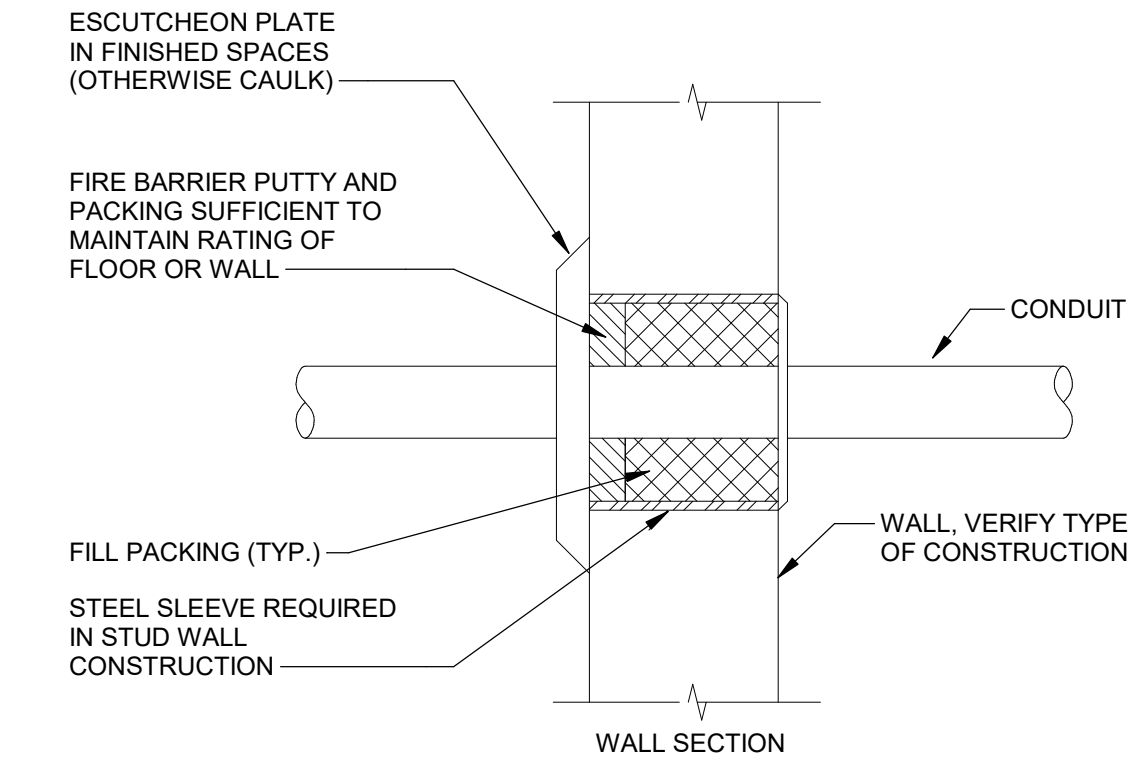
- PRODUCTS SHALL BE U.L. OR SIMILARLY LISTED. PRODUCTS MUST BE UL 924 LISTED.
- PROVIDE PRODUCT WITH MINIMUM 3 YEAR FULL WARRANTY.
- BATTERIES SHALL BE SIZED TO PROVIDE A MINIMUM 90 MINUTE RUN TIME FOR THE RATED LOAD LISTED.
- CONTRACTOR IS RESPONSIBLE FOR ALL MISC. HARDWARE NECESSARY TO INSTALL AND SUPPORT THE EQUIPMENT.

DESIGNED BY: MAL

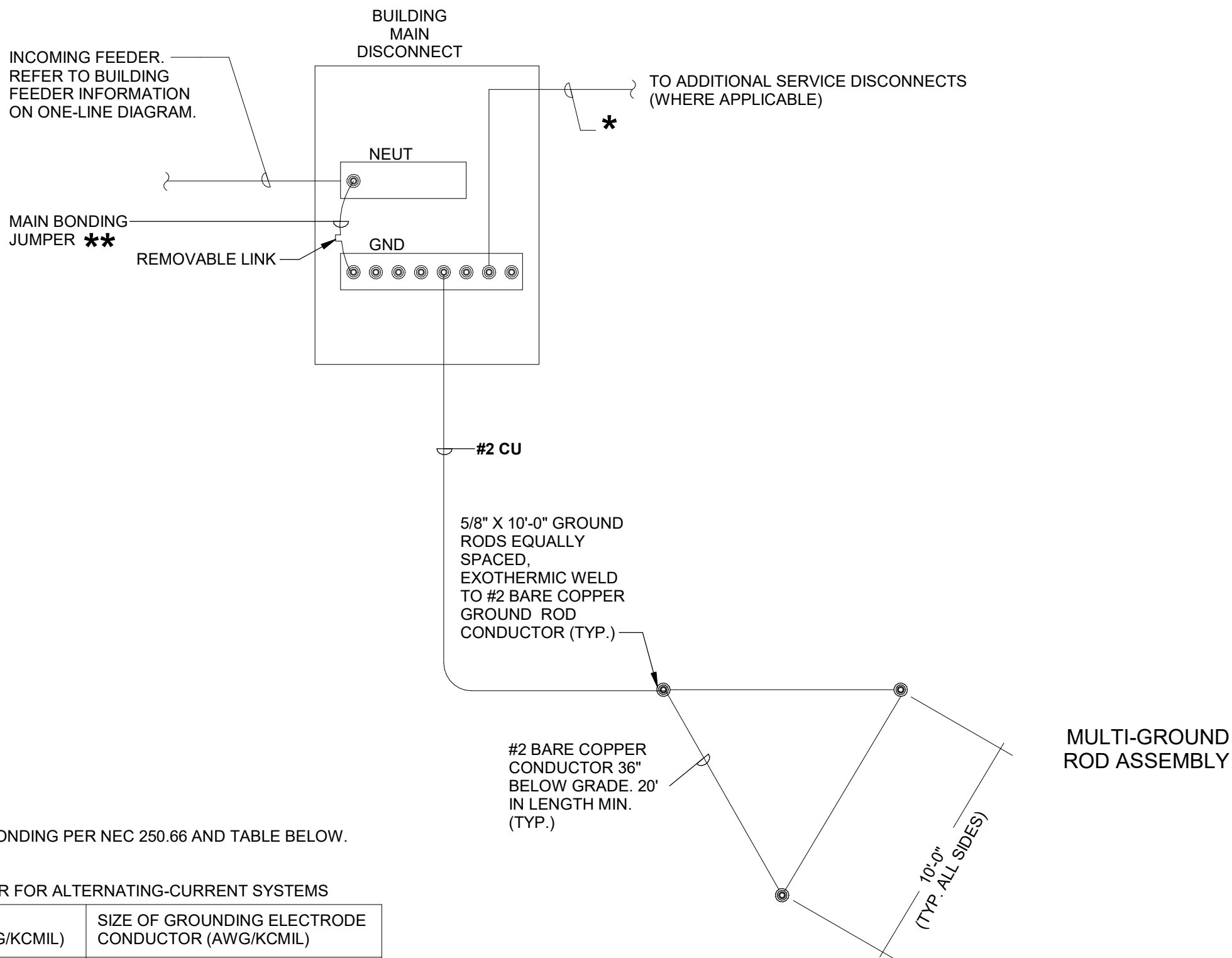
TYPE	MANUFACTURER	MODEL	DESCRIPTION	NORMAL ON / NORMAL OFF	VOLTAGE	LOAD-VA	APPROVED EQUALS
IN1-29	HUBBELL DUAL-LITE	LG-1150-S-I	1150W SINGLE PHASE EMERGENCY CENTRAL INVERTER. NORMALLY ON OPERATION. DELIVERS RATED OUTPUT 120VAC POWER FOR A MINIMUM 90 MINUTES OF OPERATION. NEAR INSTANTANEOUS TRANSFER TIME. INTEGRAL 20A/1P OUTPUT CIRCUIT BREAKER. INTEGRAL PUSH TO TEST BUTTON. VRLA LEAD CALCIUM BATTERIES WITH 10 YEAR TYPICAL BATTERY LIFE. PROVIDE WITH A TOTAL OF (2) EXTRA COMPLETE BATTERY REPLACEMENTS TO SERVE AS OWNER MAINTENANCE INVENTORY.	NORMAL ON	120 V	1150 VA	LIGHTALARMS, IOTA, OR AS APPROVED BY ENGINEER



1 LIGHTING INVERTER - EMERGENCY LIGHTING DETAIL  
NOT TO SCALE



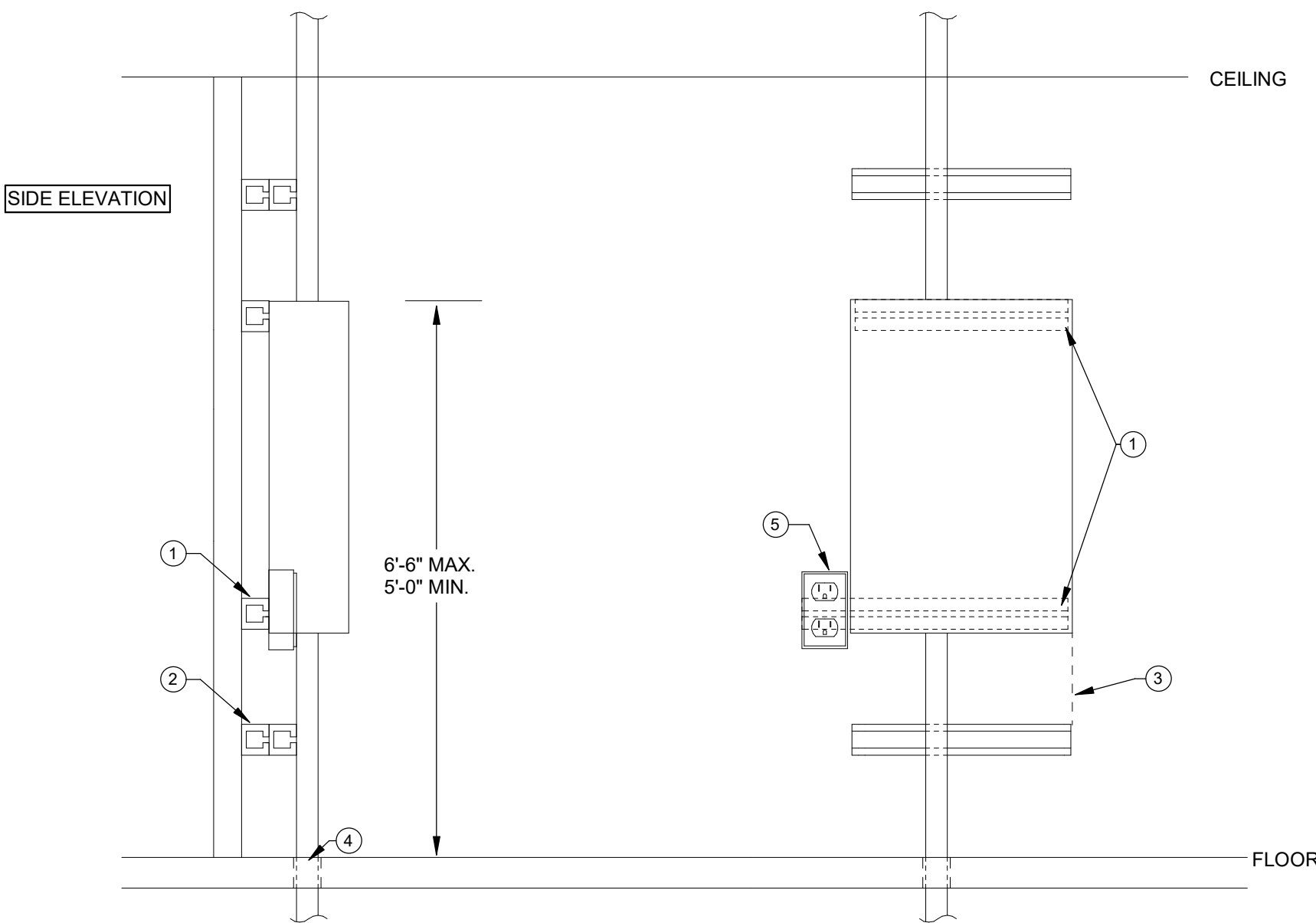
4 CONDUIT FIREWALL PENETRATION DETAIL  
NOT TO SCALE



NOTES:

- ALL AVAILABLE GROUNDING ELECTRODES WHICH ARE PRESENT AT THE BUILDING OR STRUCTURE SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM (GES). ADDITIONAL CODE-REQUIRED GROUNDING CONNECTIONS NOT SHOWN SHALL BE PROVIDED. CONNECTIONS WHICH ARE ENCASED, UNDERGROUND, OR INACCESSIBLE SHALL BE EXOTHERMIC WELD.
- ALL BONDING JUMPERS CONNECTING GROUNDING ELECTRODES TO THE GES SHALL BE SIZED EQUAL TO THE GROUNDING ELECTRODE CONDUCTOR (GEC) IN ACCORDANCE WITH NEC 250.53(C). OTHER BONDING JUMPERS SHALL BE SIZED AS OTHERWISE DESCRIBED IN NEC ARTICLE 250. CONDUCTORS SHALL BE BARE COPPER UNLESS OTHERWISE NOTED.
- REFER TO SPECIFICATIONS FOR ADDITIONAL PRODUCT AND MATERIAL REQUIREMENTS. GROUNDING AND BONDING METHODS AND MATERIALS SHALL COMPLY WITH NEC ARTICLE 250.

2 WAREHOUSE GROUNDING ELECTRODE SYSTEM  
NOT TO SCALE



KEYNOTES:

- INSTALL ALL NEW SURFACE MOUNTED PANELS ON 7/8" UNISTRUT.
- INSTALL STACKED 7/8" UNISTRUT OR 1-1/4" UNISTRUT FOR CONDUIT OFFSET.
- UNISTRUT SHALL NOT BE WIDER THAN THE PANELBOARD ON OPPOSITE SIDE OF RECEPTACLE.
- CONDUIT CORED THROUGH FLOOR. ASSUME ALL PENETRATIONS ARE 2 HOURS AND PROVIDE FIRESTOPPING PER SPECIFICATIONS.
- INSTALL RECEPTACLE DEVICE ADJACENT TO NEW PANELBOARDS ON UNISTRUT. INSTALL 20A 1P BREAKER IN LOWEST LEFT SIDE BREAKER SPACE TO FEED RECEPTACLE.

3 TYPICAL PANEL INSTALLATION ELEVATIONS  
NOT TO SCALE



IMCC ELECTRICAL UPGRADES

2700 Coral Ridge Ave  
Coralville, Iowa 52241

Project No: 9353.00  
Date: 02/21/2025  
100% CD

#	Revision	Date
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Drawing Name:  
POWERHOUSE  
BUILDING

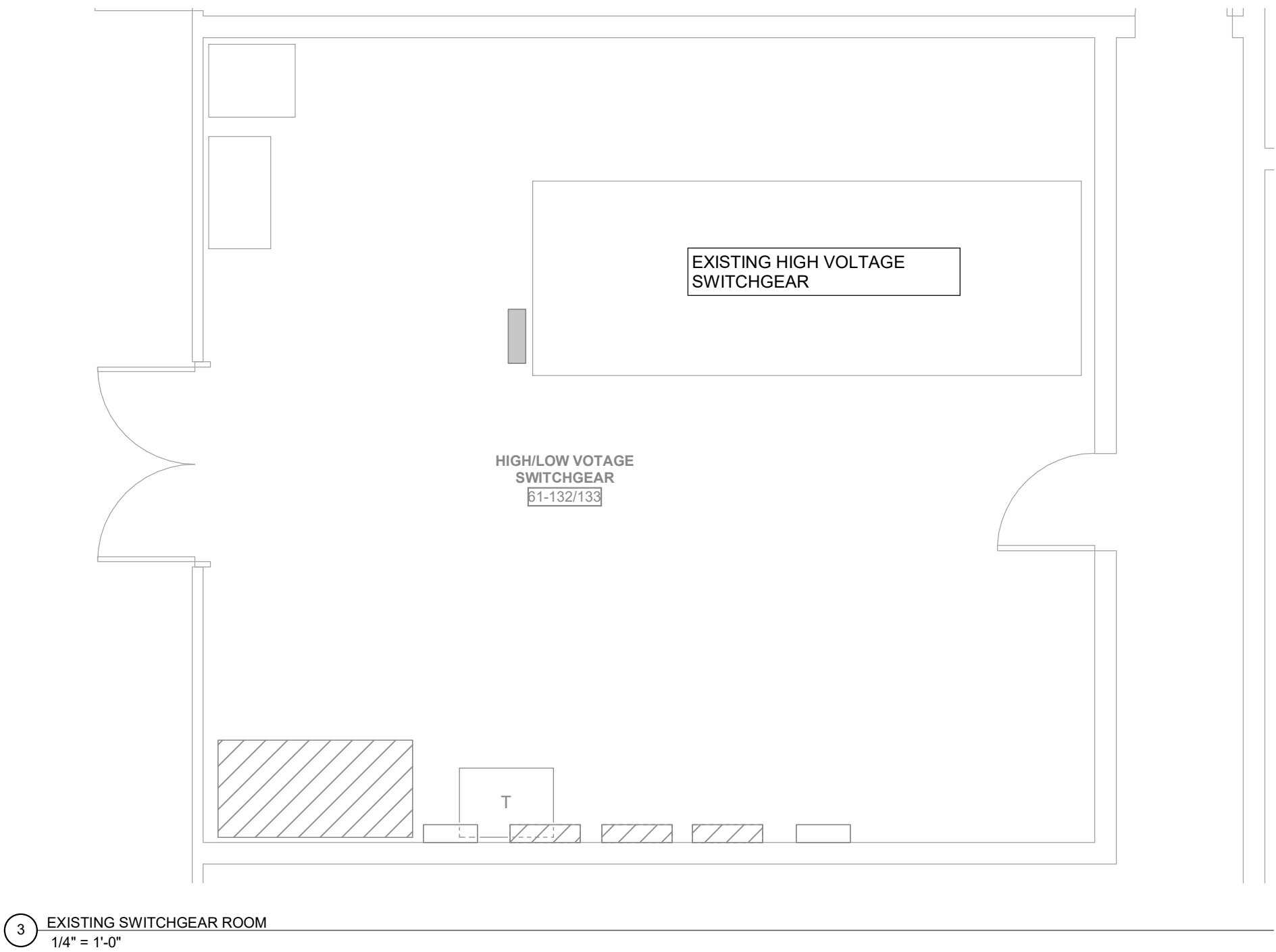
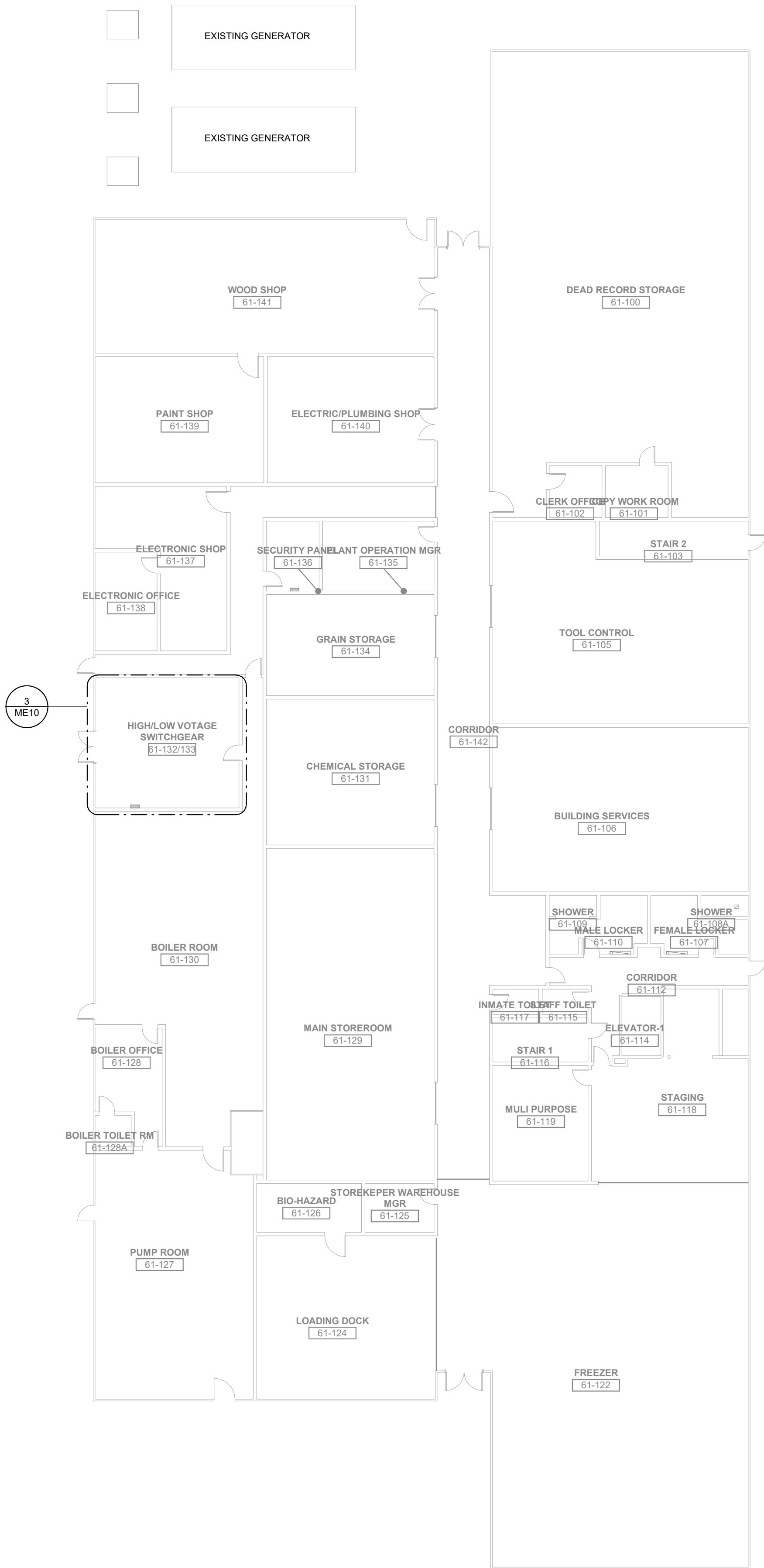
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ME10

POWER GENERAL NOTES

- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC.
- B. THE OWNER SHALL HAVE THE FIRST CHOICE TO ACCEPT EXISTING DEVICES AND EQUIPMENT BEING REMOVED AND NOT REUSED.



1 POWERHOUSE BUILDING  
1/16" = 1'-0"



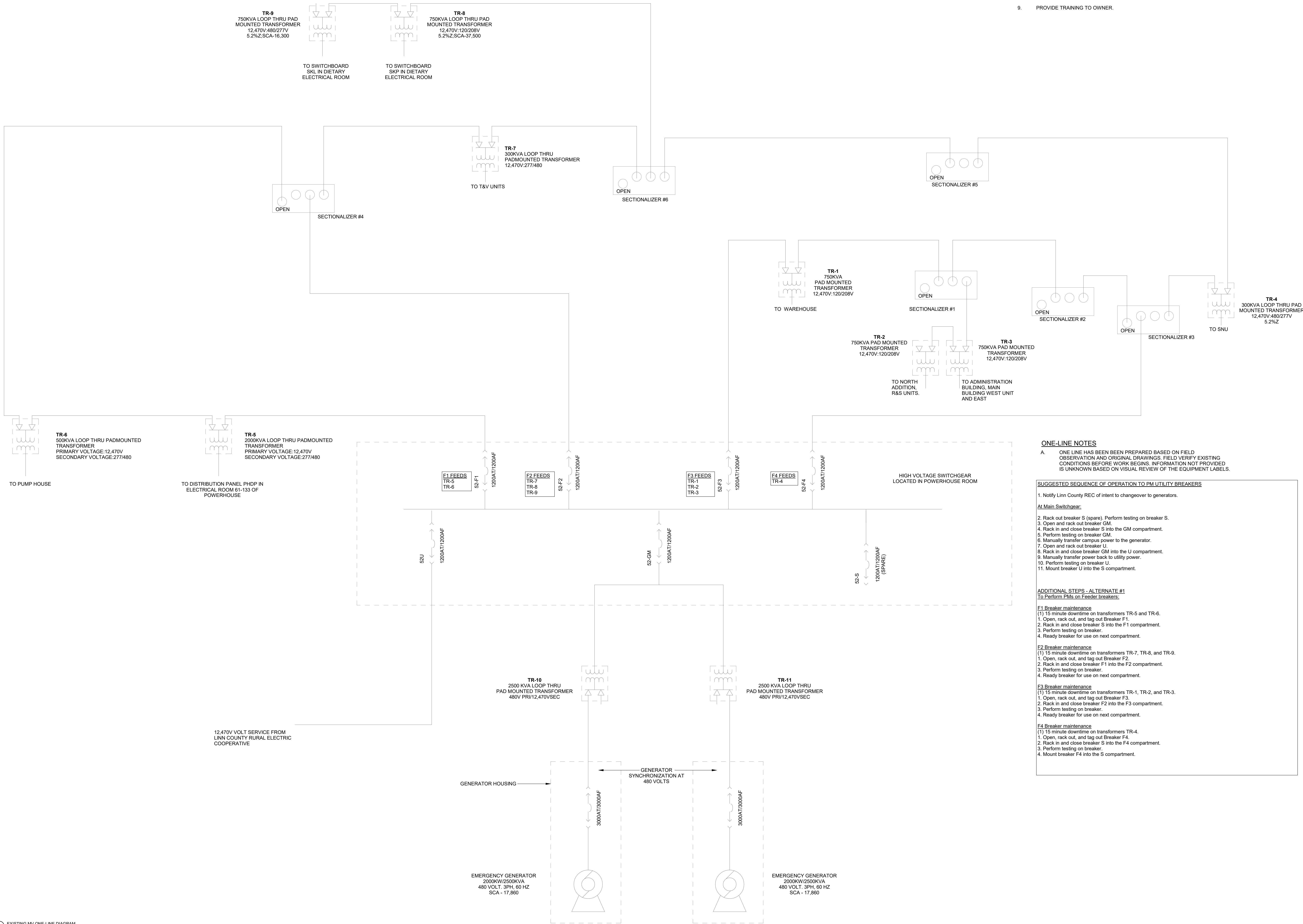


SCOPE OF PROJECT

- PROJECT CONSISTS OF REPLACEMENT OF THE EXISTING CUMMINS MEDIUM VOLTAGE CONTROL SYSTEM, GENERATOR CONTROLS, AND THEIR ASSOCIATED CONDUIT/WIRING.
- ALTERNATE INCLUDED FOR BATTERY REPLACEMENT.
- THE CONTRACTOR WILL ARRANGE FOR SITE ACCESS, STORAGE, AND PARKING.
- OWNER HAS PURCHASED THE CUMMINS CONTROL SYSTEM. CONTRACTOR TO INSTALL OWNER PROVIDED EQUIPMENT.
- THE EXISTING SYSTEM IS CONTROLLED BY A CUMMINS PLC BASED CONTROL SYSTEM (DMC). THE DMC CONTROLS THE UTILITY MAIN CIRCUIT BREAKER AND GENERATOR BREAKER.
- EACH GENERATOR IS EQUIPPED WITH AN INTERNAL CIRCUIT BREAKER, AND ITS CONTROLLER CONTINUOUSLY MONITORS THE STATUS OF THIS BREAKER, INCLUDING ITS OPEN, CLOSED, OR FAILED CONDITION. THE GENERATOR'S CONTROLLER ALSO COMMUNICATES WITH THE CONTROLLERS OF THE OTHER GENERATOR, AND ONCE SYNCHRONIZED WITH THE COMMON GENERATOR BUS, IT WILL CLOSE THE CIRCUIT BREAKER.

SEQUENCE OF PROJECT

- INSTALL CONCRETE PAD, PATHWAYS, AND CONDUCTORS FOR CONTROL SYSTEM.
- INSTALL NEW CIRCUIT FOR CONTROL SYSTEM.
- INSTALL OWNER PROVIDED CUMMINS CONTROL SYSTEM ON NEW PAD. CONNECT SYSTEM TO BATTERIES (REFER TO ALTERNATE). NEW BATTERY CONTROLS PROVIDED BY CONTRACTOR.
- UPGRADE GENERATOR CONTROLS ON GENERATOR #1.
- MANUALLY TRANSFER SWITCHGEAR OFF OF CONTROLLER. SWITCHGEAR TO BE POWERED VIA UTILITY DURING CONTROL WORK.
- TRANSFER EXISTING MEDIUM VOLTAGE CONTROLS TO THE NEW SYSTEM. REUSE EXISTING CABINET AS A PULL BOX TO MINIMIZE DOWNTIME/TRANSFER.
- UPGRADE GENERATOR CONTROLS ON GENERATOR #2.
- PROVIDE ALL TESTING TO CONFIRM PROPER OPERATION OF NEW AND EXISTING EQUIPMENT.
- PROVIDE TRAINING TO OWNER.



ONE-LINE NOTES

- A. ONE LINE HAS BEEN BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE WORK BEGINS. INFORMATION NOT PROVIDED IS UNKNOWN BASED ON VISUAL REVIEW OF THE EQUIPMENT LABELS.

SUGGESTED SEQUENCE OF OPERATION TO PM UTILITY BREAKERS

- Notify Linn County REC of intent to changeover to generators.

At Main Switchgear:

- Rack out breaker S (spare). Perform testing on breaker S.
- Open and rack out breaker GM.
- Rack in and close breaker S into the GM compartment.
- Perform testing on breaker GM.
- Manually transfer campus power to the generator.
- Open and rack out breaker U.
- Rack in and close breaker GM into the U compartment.
- Manually transfer power back to utility power.
- Perform testing on breaker U.
- Mount breaker U into the S compartment.

ADDITIONAL STEPS - ALTERNATE #1

To Perform PMs on Feeder breakers.

F1 Breaker maintenance

- (1) 15 minute downtime on transformers TR-5 and TR-6.
- Open, rack out, and tag out Breaker F1.
- Rack in and close breaker S into the F1 compartment.
- Perform testing on breaker.
- Ready breaker for use on next compartment.

F2 Breaker maintenance

- (1) 15 minute downtime on transformers TR-7, TR-8, and TR-9.
- Open, rack out, and tag out Breaker F2.
- Rack in and close breaker F1 into the F2 compartment.
- Perform testing on breaker.
- Ready breaker for use on next compartment.

F3 Breaker maintenance

- (1) 15 minute downtime on transformers TR-1, TR-2, and TR-3.
- Open, rack out, and tag out Breaker F3.
- Rack in and close breaker F2 into the F3 compartment.
- Perform testing on breaker.
- Ready breaker for use on next compartment.

F4 Breaker maintenance

- (1) 15 minute downtime on transformers TR-4.
- Open, rack out, and tag out Breaker F4.
- Rack in and close breaker S into the F4 compartment.
- Perform testing on breaker.
- Mount breaker F4 into the S compartment.