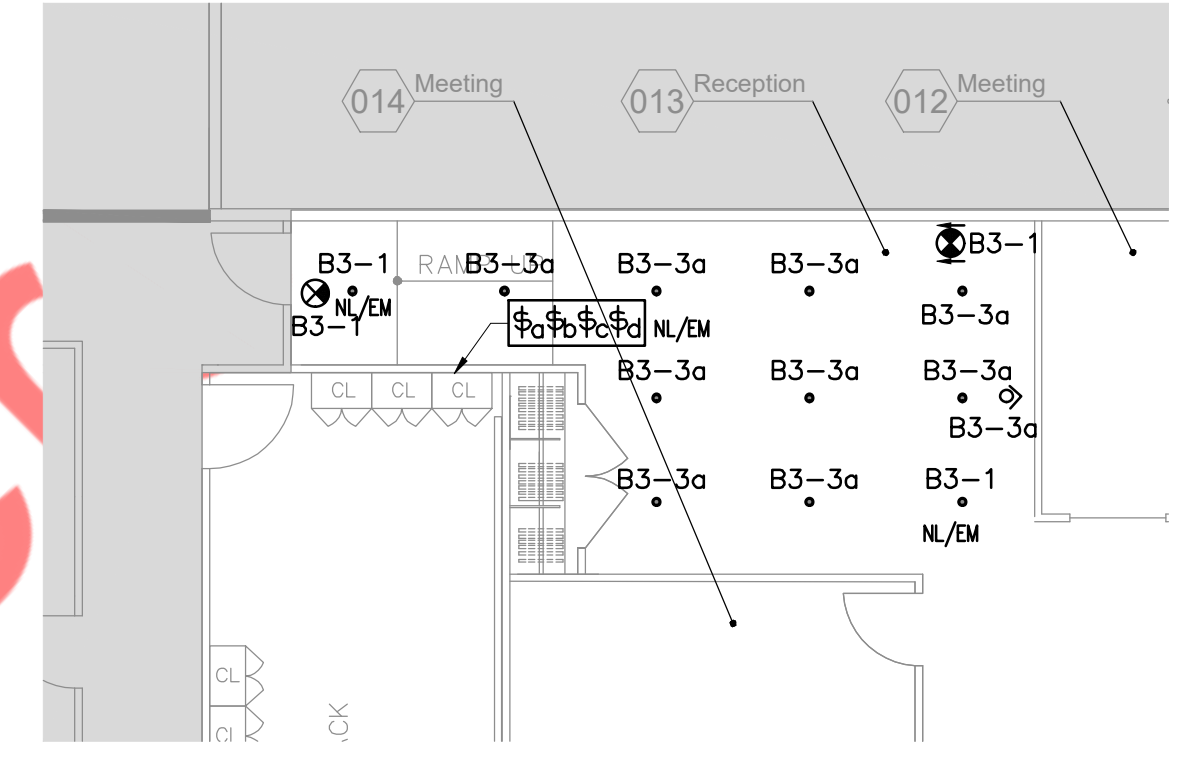




CIRCUIT LEGEND
 ALL CIRCUITS SHOWN ON THIS DWG. SHALL BE CONNECTED TO EXISTING PANELBOARDS WITH THE FOLLOWING PREFIXES, U.O.N.:

- LP3B1 (DENOTES CIRCUIT # WITH PREFIX 'B')
- UP3B3 (DENOTES CIRCUIT # WITH PREFIX 'B3')
- UP3B4 (DENOTES CIRCUIT # WITH PREFIX 'B4')
- UPS PNL 3A (DENOTES CIRCUIT # WITH PREFIX '3A')
- UPS PNL 3B (DENOTES CIRCUIT # WITH PREFIX '3B')



2 ALTERNATE RECEPTION AREA LIGHTING PLAN
 SCALE: 1/8" = 1'-0"

1 PARTIAL 3RD FLOOR LIGHTING PLAN
 SCALE: 1/8" = 1'-0"

DRAWING NOTES:

1. REFER TO NEC TABLE 310.15(B)(16) FOR AMPACITIES OF CONDUCTORS. 75°C TERMINALS, 40°C AMBIENT TEMPERATURE.
2. ALL WIRING SHALL BE PROPERLY IDENTIFIED PER NEC 310.12 AND AS REQUIRED.
3. WHERE MORE THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY IS USED, NEC TABLE 10.15(B)(2)(A) DERATING FACTORS SHALL BE APPLIED. IN ADDITION, CONDUIT FILL SHALL COMPLY WITH NEC 344.22 AND 352.22 RESPECTIVELY.
4. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL LUMINAIRES AND SWITCHES, AND FOR ALL FINISHED CEILING HEIGHTS.
5. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL LIGHTING FIXTURE AND CONTROL DEVICES, AND FOR FINAL CEILING AND WALL HEIGHTS AND LAYOUTS.
6. REFER TO ARCHITECTURAL PLANS FOR FINAL LUMINAIRE AND LAMPING SPECIFICATIONS.
7. SUBMIT COLOR OPTIONS FOR ALL LIGHTING FIXTURES AND CONTROL DEVICES FOR SELECTION BY ARCHITECT.
8. COORDINATE FIXTURE STYLE WITH CEILING SYSTEM THE FIXTURE IS TO BE INSTALLED IN OR ON. LAY-IN FIXTURE FRAME STYLE SHALL MATCH THE CEILING GRID/ SYSTEM. SURFACE MOUNTED FIXTURES SHALL MAINTAIN THE

9. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM NAMES AND NUMBERS.
10. FOR CLARITY, SOME FIXTURE & SWITCH INTERCONNECTING WIRING IS NOT EXPLICITLY SHOWN. CONTRACTOR SHALL USE SWITCHING DESIGNATIONS, HOME RUN REFERENCES, AND APPLICABLE DETAILS TO DERIVE THE COMPLETE SCOPE OF LIGHTING WIRING INTENT.
11. HOMERUNS ARE SHOWN IN LOCATIONS FOR DRAWING CLARITY. CONTRACTOR MAY CHOOSE TO FEED POWER FROM OTHER LOCATIONS AS LONG AS FUNCTIONAL INTENT IS MAINTAINED, AND FIELD DRAWINGS APPROPRIATELY MARKED.
12. NUMBER(S) SHOWN AT LIGHTING FIXTURES AND ASSOCIATED JUNCTION BOXES INDICATES CIRCUIT NUMBERS IN PANELBOARD. PROVIDE WIRE AND CONDUIT TO INTERCONNECT EQUIPMENT AND ASSOCIATED CONTROL DEVICES WITH SAME CIRCUIT NUMBERS AND RUN TO PANELBOARD.
13. ALL BRANCH CIRCUITS ASSIGNED TO LIGHTING FIXTURES SHALL BE CIRCUITED TO EXISTING PANELBOARD "UP3B3", U.O.N.
14. CIRCUITING FOR LIGHTING FIXTURES IN ROOMS WITH TOGGLE SWITCHES SHALL BE CONTROLLED BY DESIGNATED SWITCHES. IF SPECIFIC DESIGNATION IS NOT INDICATED, ALL LIGHTING FIXTURES IN ROOM/AREA SHALL BE CONTROLLED BY THE SWITCH INDICATED.

15. BRANCH CIRCUITS FOR DIMMER CONTROLLED LIGHTING FIXTURES SHALL BE PROVIDED WITH A SEPARATE NEUTRAL CONDUCTOR FOR EACH PHASE CONDUCTOR.
16. LIGHTING FIXTURES PROVIDED WITH EMERGENCY BATTERY PACKS AND INDICATED WITH SWITCH CONTROL SHALL BE WIRED WITH BATTERY CHARGING/SENSING CIRCUIT WIRED AHEAD OF SWITCH CONTROL.
17. WIRING OF LIGHTING FIXTURES AND EXIT LIGHTS TO EXISTING CIRCUITS SHALL BE LIMITED TO THE FOLLOWING:
 - a. 3600 WATTS ON A 20A, 277 VOLT CIRCUIT.
18. LIGHTING BRANCH CIRCUIT RACEWAY SYSTEM SHALL NOT BE USED FOR RECEPTACLE/POWER CIRCUIT WIRING.
19. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTORS FOR ALL LIGHTING FIXTURES AS REQUIRED. GROUND CONDUCTORS MAY NOT BE EXPLICITLY SHOWN ON CERTAIN WIRING DESIGNATIONS.
20. ALL WIRING TO BE #12AWG WITH #12AWG GND UNLESS OTHERWISE NOTED OR REQUIRED DUE TO CONDUCTOR DERATING FOR MORE THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY OR CABLE ASSEMBLY.
21. CONDUCTORS OR CABLES INSTALLED IN CONDUIT EXPOSED TO DIRECT SUNLIGHT ON

- OR ABOVE ROOFTOPS SHALL BE DERATED AND SIZE-ADJUSTED IN ORDER TO COMPLY WITH NEC 310.15(B)(2)(C).
22. ALL EXPOSED WIRING SHALL BE IN EMT CONDUIT. CONCEALED WIRING, AND WIRING IN DROP CEILING CAVITIES SHALL BE PERMITTED TO BE MC CABLE WITH LISTED FITTINGS AND GROUNDING ARMOR UNLESS OTHERWISE NOTED.
23. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL ROUGH-IN EQUIPMENT AND APPURTENANCES PER NEC (MIN). CONTRACTOR SHALL SUBMIT COLOR OPTIONS FOR ANY AND ALL WIRING DEVICES AND DEVICE PLATES FOR SELECTION BY ARCHITECT.
24. FINAL CONDUIT/CABLE ROUTING SHALL BE DETERMINED IN-FIELD, AND PRIOR TO THE COMMENCEMENT OF WORK, COORDINATED WITH OTHER TRADE CONTRACTORS AND THE TENANT.
25. COORDINATE ALL WORK WITH ALL INVOLVED TRADE CONTRACTORS, EQUIPMENT VENDORS, UTILITIES, AND THE OWNER AS REQUIRED. BASE BID ACCORDINGLY.
26. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
27. FEED NEW EMERGENCY MEANS-OF-EGRESS AND EXIT LIGHTING FIXTURE UNITS FROM EXISTING PANELBOARD UP3B3 AS REQUIRED. POWER SHALL BE UNSWITCHED, AND WITHOUT AUTOMATIC AND/OR

- MANUAL CONTROLS. PROVIDE LISTED BREAKER BLOCKING DEVICE AT EXISTING PANELBOARD IN ORDER TO AVOID UNAUTHORIZED BREAKER OPERATION. REFER TO ELECTRICAL DETAILS FOR FURTHER REQUIREMENTS.
28. CONTRACTOR SHALL CONDUCT ALL NECESSARY EMERGENCY LIGHTING TEST(S) FOR THE AUTHORITY HAVING JURISDICTION.
29. ALL WIRING AND EQUIPMENT WITHIN DROP CEILING SPACES, AND/OR WITHIN DUCTS, PLENUMS, AND OTHER AIR-HANDLING SPACES SHALL BE LISTED FOR PLENUM USE, AND SHALL CONFORM WITH NEC 300.22.
30. IN CASES WHERE EXISTING PANELBOARD FACILITIES ARE BEING USED, CONTRACTOR SHALL FIELD VERIFY AVAILABLE PANELBOARD/CIRCUIT SPACE, AND MAKE ANY AND ALL MODIFICATION(S) AS REQUIRED TO ACCOMMODATE NEW BRANCH CIRCUIT REQUIREMENTS AS INTENDED.
31. CONTRACTOR SHALL MEASURE PHASE LOADS (TRUE RMS) OF EXISTING PANELBOARDS UTILIZED TO COMPLETE THE CONTRACT WORK, AND BALANCE NEW LOAD AS REQUIRED.
32. REFER TO ONE LINE DIAGRAM, ELECTRICAL PANELBOARD SCHEDULES, ELECTRICAL DETAILS, AND LEGENDS FOR ADDITIONAL REQUIREMENTS THAT MAY APPLY.
33. REFER TO DWG. E-001.00 FOR ELECTRICAL GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS, DWG. E-002.00 FOR ELECTRICAL NOTES, AND DWGS. E-003.00 & E-004 FOR ELECTRICAL SPECIFICATIONS.

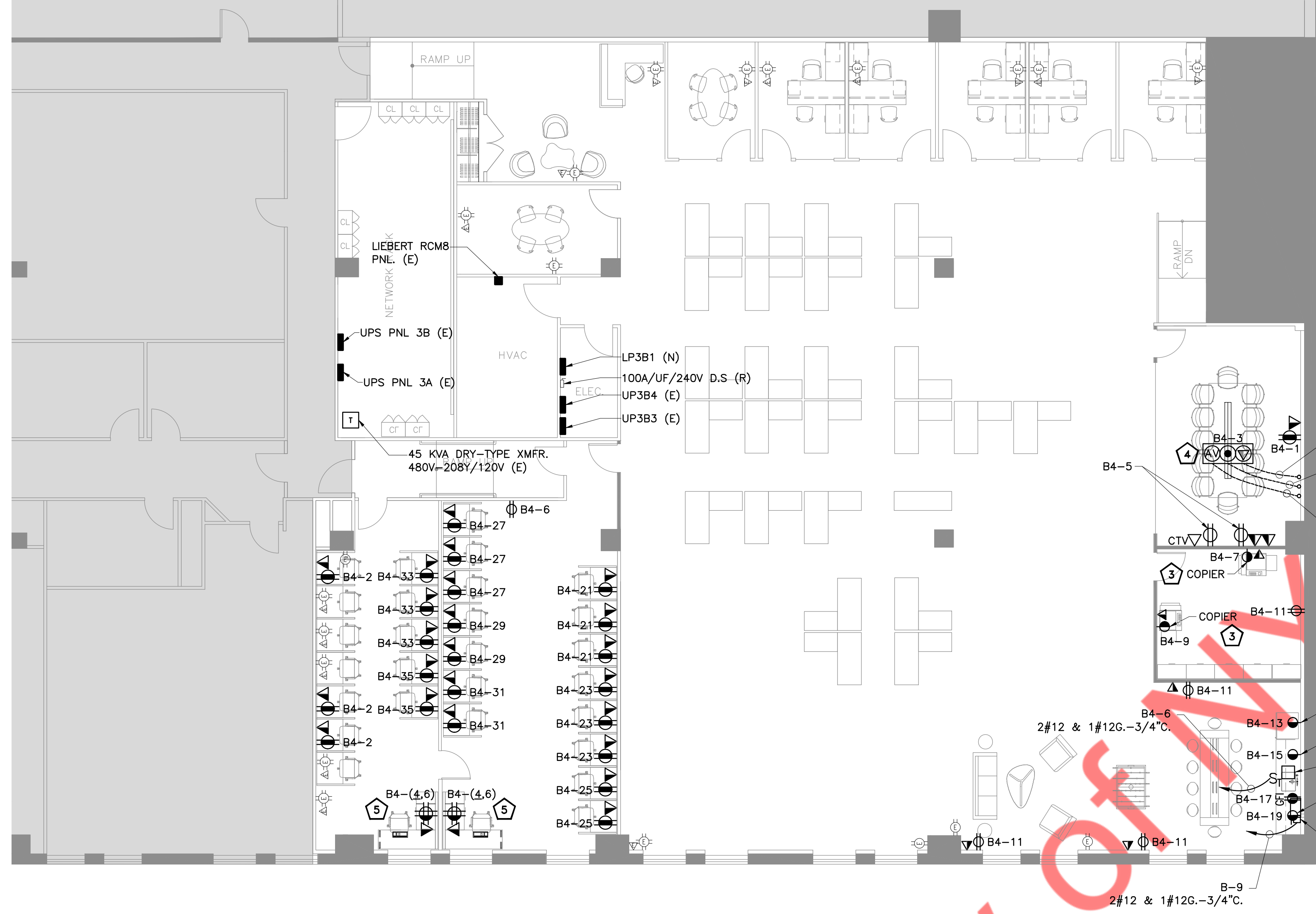
KEYED WORK NOTES:

- 1 FOR ALL EXISTING LIGHTING FIXTURES TO REMAIN & BE RELOCATED, CONTRACTOR SHALL TAKE DOWN, CLEAN, RE-LAMP & RE-BALLAST, AND RE-INSTALL FIXTURES AS INDICATED ON PLAN.
- 2 FOR LOCATIONS OF ALL ELECTRICAL PANELBOARDS, REFER TO DWG. E-102.00.

CIRCUIT LEGEND

ALL CIRCUITS SHOWN ON THIS DWG. SHALL BE CONNECTED TO EXISTING PANELBOARDS WITH THE FOLLOWING PREFIXES, U.O.N.:

LP3B1 (DENOTES CIRCUIT # WITH PREFIX 'B')
UP3B3 (DENOTES CIRCUIT # WITH PREFIX 'B3')
UP3B4 (DENOTES CIRCUIT # WITH PREFIX 'B4')
UPS PNL 3A (DENOTES CIRCUIT # WITH PREFIX '3A')
UPS PNL 3B (DENOTES CIRCUIT # WITH PREFIX '3B')



1 PARTIAL 3RD FLOOR POWER PLAN

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

POWER NOTES:

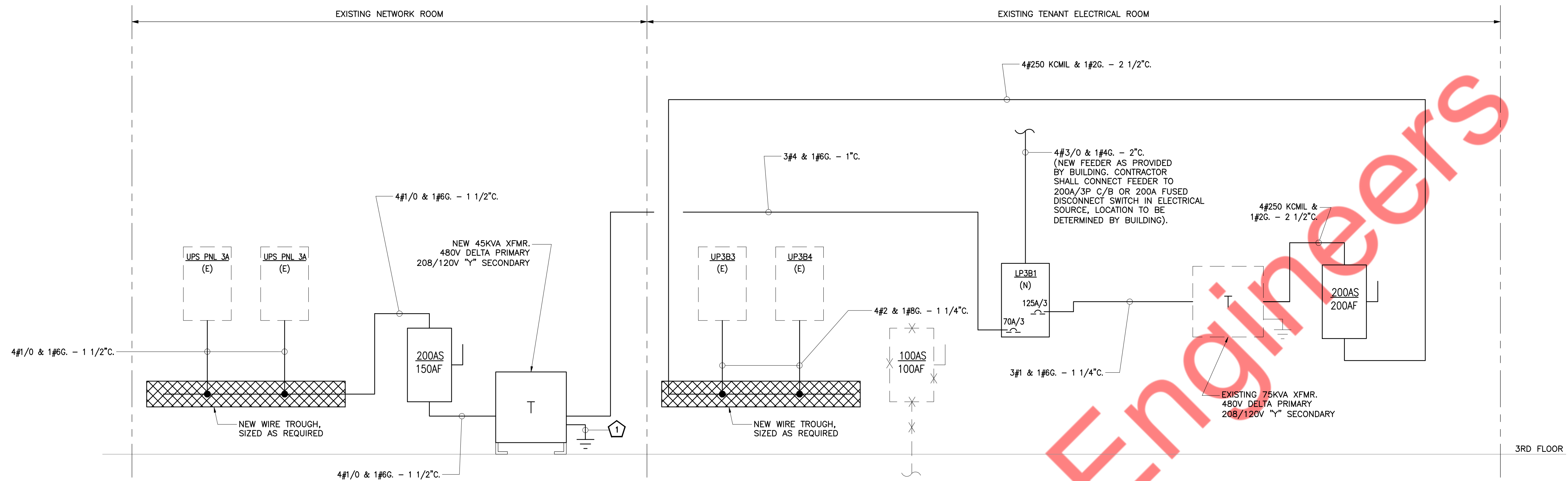
- CONTRACTOR SHALL SUBMIT COLOR OPTION FOR ALL WIRING DEVICES AND DEVICE PLATES FOR SELECTION BY ARCHITECT.
- COORDINATE FINAL MEANS AND METHODS, AND SCOPE OF WORK WITH THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND THE PLUMBING DRAWINGS. BASE BID ACCORDINGLY.
- CONTRACTOR SHALL SUPPLY AND INSTALL ALL ELECTRICAL ROUGH IN EQUIPMENT AND APPURTENANCES PER NEC (MIN). CONTRACTOR SHALL SUBMIT COLOR OPTIONS FOR ANY AND ALL WIRING DEVICES PLATES FOR SELECTION BY ARCHITECT.
- CONTRACTOR SHALL PROVIDE ROUGH-IN BOX, RACEWAY, TELE/DATA DEVICES, CABLING, FACEPLATES, AND DRAG LINE AS REQUIRED. COORDINATE FINAL PROVISIONS WITH OWNER'S END USER. ALL TELE/DATA CABLING SHALL BE ASSUMED CAT-6, U.O.N. PULL ALL CABLING TO TELE/DATA CLOSET AND TEST (RING OUT) FOR CONTINUITY. PROVIDE CABLING TEST REPORT TO TENANT. COORDINATE FINAL PROVISIONS WITH OWNER'S END USER.
- COORDINATE ALL WORK WITH ALL INVOLVED TRADE CONTRACTORS, EQUIPMENT VENDORS, UTILITIES, AND THE OWNER AS REQUIRED. BASE BID ACCORDINGLY.
- FINAL CONDUIT/CABLE ROUTING SHALL BE DETERMINED IN FIELD, AND PRIOR TO THE COMMENCEMENT OF WORK, COORDINATED WITH OTHER TRADE CONTRACTORS AND THE OWNER.
- REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL ELECTRICAL DEVICES, AND FOR FINAL CEILING AND WALL HEIGHTS AND LAYOUTS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ROOM NAMES AND NUMBERS.
- REFER TO NEC TABLE 310.15(B)(16) FOR AMPACITIES OF CONDUCTORS. 75°C TERMINALS, 40°C AMBIENT TEMPERATURE.
- ALL WIRING SHALL BE PROPERLY IDENTIFIED PER NEC 310.12 AND AS REQUIRED.

- REFER TO APPLICABLE EQUIPMENT VENDOR EQUIPMENT SHOP DRAWINGS FOR FINAL RATINGS AND/OR CHARACTERISTICS OF NEW SPECIAL EQUIPMENT DEVICES THAT REQUIRES PROVISIONS BY THE ELECTRICAL CONTRACTOR. BASE BID ACCORDINGLY.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- HOMERUNS ARE SHOWN IN LOCATIONS FOR DRAWING CLARITY. CONTRACTOR MAY CHOOSE TO FEED POWER FROM OTHER LOCATIONS AS LONG AS FUNCTIONAL INTENT IS MAINTAINED, AND FIELD DRAWINGS MARKED ACCORDINGLY.
- NUMBER(S) SHOWN AT RECEPTACLES, JUNCTION BOXES AND EQUIPMENT INDICATES CIRCUIT NUMBERS IN PANELBOARD. PROVIDE WIRE AND CONDUIT TO INTERCONNECT EQUIPMENT AND DEVICES WITH SAME CIRCUIT NUMBERS AND RUN TO PANELBOARD.
- ALL BRANCH CIRCUITS ASSIGNED TO RECEPTACLES, JUNCTION BOXES AND EQUIPMENT SHALL BE CIRCUITED TO EXISTING PANELBOARDS "UP3B3" AND "UP3B4", U.O.N.
- BRANCH CIRCUITS SERVING PERSONAL COMPUTERS SHALL BE PROVIDED WITH DEDICATED NEUTRAL CONDUCTORS THAT DO NOT SERVE CIRCUITS SUPPLYING OTHER LOADS. NEUTRAL CONDUCTORS SERVING THREE (3) PERSONAL COMPUTER BRANCH CIRCUITS SHALL BE #10 AWG.
- BRANCH CIRCUITS FOR PERSONAL COMPUTER (ISOLATED GROUND) RECEPTACLES SHALL BE PROVIDED WITH AN ISOLATED GROUND CONDUCTOR CONNECTED TO THE RECEPTACLE GROUND LUG AND THE PANELBOARD GROUND BUS.
- BRANCH CIRCUIT RACEWAYS SERVING MOTOR LOADS, PANTRY RECEPTACLES AND COPIERS SHALL BE PROVIDED WITH A GROUND CONDUCTOR.
- PROVIDE INSULATED GROUNDING CONDUCTORS AS REQUIRED FOR ALL EQUIPMENT, LIGHTING FIXTURES, AND RECEPTACLES ETC. GROUND CONDUCTORS MAY NOT BE EXPLICITLY SHOWN IN ALL ILLUSTRATED WIRING DESIGNATIONS.

- ALL EXPOSED WIRING SHALL BE IN EMT CONDUIT. CONCEALED WIRING, AND WIRING IN DROP CEILING CAVITIES SHALL BE PERMITTED TO BE MC CABLE WITH LISTED FITTINGS AND GROUNDING ARMOR UNLESS INDICATED OTHERWISE.
- WHERE MORE THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY IS USED, NEC TABLE 310.15(B)(2)(A) DERATING FACTORS SHALL BE APPLIED. IN ADDITION, CONDUIT FILL SHALL COMPLY WITH NEC 344.22 AND 352.22 RESPECTIVELY.
- CONDUCTORS OR CABLES INSTALLED IN CONDUIT EXPOSED TO DIRECT SUNLIGHT ON OR ABOVE ROOFTOPS SHALL BE DERATED AND SIZE-ADJUSTED IN ORDER TO COMPLY WITH NEC 310.15(B)(2)(C).
- ALL WIRING AND EQUIPMENT WITHIN DROP CEILING SPACES, AND/OR WITHIN DUCTS, PLENUMS, AND OTHER AIR-HANDLING SPACES SHALL BE LISTED FOR PLENUM USE, AND SHALL CONFORM WITH NEC 300.22.
- IN CASES WHERE EXISTING PANELBOARD FACILITIES ARE BEING USED, CONTRACTOR SHALL FIELD VERIFY AVAILABLE PANELBOARD/CIRCUIT SPARES, AND MAKE ANY AND ALL MODIFICATION(S) AS REQUIRED TO ACCOMMODATE NEW BRANCH CIRCUIT REQUIREMENTS AS INTENDED.
- CONTRACTOR SHALL MEASURE PHASE LOADS (TRUE RMS) OF NEW AND EXISTING PANEL BOARDS UTILIZED TO COMPLETE THE CONTRACT WORK, AND BALANCE NEW LOAD AS REQUIRED.
- REFER TO ONE-LINE DIAGRAM, PANELBOARD SCHEDULES, ELECTRICAL DETAILS AND LEGENDS FOR ADDITIONAL REQUIREMENTS THAT MAY APPLY.
- REFER TO DWG. E-001.00 FOR ELECTRICAL GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS AND DWGS. E-002.00 & E-003.00 FOR ELECTRICAL SPECIFICATIONS.

KEYED WORK NOTES:

- CONTRACTOR SHALL CHOP & CHASE FLOOR SLAB AS REQUIRED TO ACCOMMODATE 3/4" CONDUIT FOR POWER, 1" EMPTY CONDUIT FOR TELE/DATA CABLING AND 1" EMPTY CONDUIT FOR AV CABLING TO MULTI-SERVICE FLUSH FLOOR BOX.
- CONTRACTOR SHALL COORDINATE EXACT RECEPTACLE TYPE FOR ALL PANTRY EQUIPMENT WITH PETCARE RX FACILITIES DEPARTMENT.
- CONTRACTOR SHALL COORDINATE EXACT RECEPTACLE TYPE FOR COPIER WITH PETCARE RX FACILITIES DEPT.
- MULTI-SERVICE FLUSH FLOOR BOX WITH SEPARATE POWER, DATA & AV COMPARTMENTS, WITH POWER & DATA OUTLETS AS SHOWN ON THE DRAWINGS AND AV DEVICES(S) AS SPECIFIED BY OTHERS. FOR TELEPHONE, DATA OR TELE/DATA OUTLETS AND AV DEVICES PROVIDE SEPARATE 1" EMPTY CONDUITS, CHOPPED & CHASED IN FLOOR AS INDICATED IN KEYED NOTE 1. ROUTE TO NEAREST COLUMN/WALL & RUN UP TO CEILING AND TERMINATE WITH 90° ELBOW & BUSHING. SERVICE FITTING PLATE FOR TELE/DATA AS INDICATED BY SYMBOL AND AS REQUIRED BY TENANT'S TELE/DATA SYSTEM. CONTRACTOR'S BASE BID SHALL BE BASED ON WIREMOLD LEGRAND REB4 SERIES. ARCHITECT TO SELECT COVERPLATE FOR FLOOR BOX. REFER TO ELECTRICAL SPECIFICATIONS FOR ALL ADDITIONAL INFORMATION.
- UNDERLINED CIRCUIT NUMBERS SHOWN AT SPLIT WIRED QUAD RECEPTACLES SHALL SERVE THE PERSONAL COMPUTER RECEPTACLES (TP). LABEL RECEPTACLES IN THE APPROPRIATE MANNER.



ELECTRICAL ONE-LINE DIAGRAM
N.T.S.

PANEL: LP3B1 (N)
 277/480 VOLTS, 3 PHASE, 4 WIRE
 MCB 200A BUS 200A MIN. INTERRUPTING RATING 22KAIC
 SURFACE MOUNTED

CKT. NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD (KVA)	PER PHASE (KVA)			LOAD (KVA)	DESCRIPTION OF LOAD	TRIP AMPS	CKT. NO.								
				A	B	C												
1	20	EMERGENCY & EXIT LIGHTING	1.26	-	///	///	-	SPARE	20	2								
3	20	GENERAL LIGHTING	3.25	///	-	///	-	SPARE	20	4								
5	20	GENERAL LIGHTING	2.8	///	-	-	-	SPARE	20	6								
7	20	GENERAL LIGHTING	3.0	-	///	///	-	SPARE	20	8								
9	20	GENERAL LIGHTING	1.5	-	-	///	-	SPARE	20	10								
11	20	HWH-1	3.0	-	-	-	-	SPARE	20	12								
13	70	45KVA XFMR. (N)	15.0	///	///	///	25.0	75KVA XFMR. (E)	125	14								
15			15.0	///	-	///	25.0		16									
17	3P		15.0	///	-	-	25.0		3P	18								
TOTAL LTG			10.3	X 1.0 DEM =			10.3	TOTAL DEMAND			96.4	X 1.25 SPARE =			120.5			
TOTAL EQUIP.			123	X .7 DEM =			86.1	TOTAL LOAD			120.5	KVA			144.9	AMPS		
TOTAL RECEPT.			-	X .5 DEM =			-											

KEYED WORK NOTES:
 ① 1#4G, - 3/4" TO BUILDING STEEL. PROVIDE ADDITIONAL GROUNDING AS REQUIRED TO MEET N.E.C. REQUIREMENTS.

