

GENERAL NOTES

- FINAL CONNECTIONS TO LIGHT FIXTURES SHALL BE MADE WITH GREENFIELD FLEXIBLE CONDUIT. MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL BE 6'-0".
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHT FIXTURES. CONTRACTORS TO COORDINATE LOCATIONS OF LIGHTING, SPEAKERS, AIR DIFFUSERS, GRILLES, SPRINKLER HEADS & THE LIKE, WITH REFLECTED CEILING LAYOUTS AS REQUIRED & DIRECTED BY THE ARCHITECT.
- ALL DEVICES, EQUIPMENT, FIXTURES, & THE LIKE, MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.
- REFER TO MECHANICAL, PLUMBING, AND FIRE PROTECTION PLANS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE LOCATION OF DISCONNECT SWITCH ASSOCIATED WITH EACH PIECE OF EQUIPMENT WITH RESPECTIVE CONTRACTOR AND INSTALL IN ACCORDANCE WITH THE NEC.
- REFER TO DIVISION 15 (21, 22 & 23) SPECIFICATIONS, HVAC, PLUMBING AND FIRE PROTECTION PLANS FOR ADDITIONAL ELECTRICAL WORK REQUIREMENTS & COORDINATION.
- ALL RECEPTACLES SHOWN BACK-TO-BACK IN WALLS SHALL BE SEPARATED HORIZONTALLY BY 9" MINIMUM.
- WHERE OPEN WIRING METHODS FOR LOW VOLTAGE SYSTEMS ARE PERMITTED BY THE CONTRACT DOCUMENTS, OWNER AND LOCAL AUTHORITY, THE CABLE/CONDUIT INSULATION SHALL BE RATED PER NEC FOR ENVIRONMENT (I.E. PLENUM RATED, ETC.) BEING INSTALLED.
- BRANCH CIRCUIT CONDUCTOR SIZES (& CONDUITS) SHALL BE INCREASED FROM THOSE INDICATED ON THE PLANS TO PREVENT EXCESSIVE VOLTAGE DROP. BRANCH CIRCUITS SHALL BE INSTALLED WITH WIRES OF SUFFICIENT SIZE SO THAT VOLTAGE DROP BETWEEN THE PANEL & THE LOADS DO NOT EXCEED A LIMIT OF 3%.
- REGARDLESS OF THE TEMPERATURE RATING OF THE CONDUCTOR INSULATION, ALL CONDUCTOR AMPACITY RATINGS FOR THIS PROJECT SHALL BE DETERMINED FROM THE 75°C CONDUCTOR TEMPERATURE RATINGS INDICATED IN THE NEC TABLES WHERE EQUIPMENT OR DEVICES ARE PROVIDED WITH TERMINALS RATED FOR 60°C. WHERE AMPACITY RATING OF THE 75°C CONDUCTOR SHALL BE LIMITED TO ITS ASSOCIATED 60°C RATING AS INDICATED IN THE NEC TABLES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO INCREASE THE CONDUCTORS AND CONDUIT SIZE AS REQUIRED.
- ALL 120V AND 277V BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRAL CONDUCTORS. SHARED NEUTRALS WILL NOT BE PERMITTED FOR MULTI-CIRCUIT INSTALLATIONS. WHERE MULTIPLE CIRCUITS ARE RUN IN A COMMON RACEWAY, THE AMPACITY OF THE CONDUCTORS SHALL BE PROPERLY DERATED & CONDUIT SHALL BE SIZED PER CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN SIX (6) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT. REFERENCE NEC ARTICLE AND TABLE 310.15(B)(3)(a).
- ALL CONDUITS SHALL CONTAIN A GROUND CONDUCTOR SIZED PER NEC TABLE #250.122. IN ADDITION, WHERE AN ISOLATED, INSULATED GROUND IS REQUIRED, A SEPARATE GROUND CONDUCTOR WITH GREEN INSULATION SHALL BE RUN FROM THE PANEL GROUND BUS TO THE ISOLATED GROUND CONNECTION OF THE DEVICE. IN NO CASE SHALL THE SYSTEM GROUND (CONDUCTOR & ASSOCIATED OUTLET BOXES, CONDUIT & BUILDING STEEL) BE ALLOWED TO CONTACT THE ISOLATED GROUND (CONDUCTOR & DEVICE), WHERE CIRCUIT CONDUCTORS ARE INCREASED IN SIZE FOR ANY REASON (I.E. VOLTAGE DROP, DERATING, ETC.). THE GROUND CONDUCTOR SIZE SHALL BE INCREASED PROPORTIONATELY (ACCORDING TO CIRCULAR MIL AREA) FROM THE SIZE REQUIRED BY NEC TABLE #250.122.
- ELECTRICAL INSTALLATION REQUIREMENTS FOR ALL HVAC, PLUMBING, FIRE PROTECTION, SPECIAL SYSTEMS AND OWNER EQUIPMENT BEING FURNISHED BY OTHERS SHALL BE REVIEWED AND COORDINATED WITH OTHER TRADES PRIOR TO ROUGH-IN. OBTAIN EQUIPMENT SHOP DRAWINGS FROM INSTALLER/SUPPLIER/CONTRACTOR/OWNER FURNISHING EQUIPMENT, AS REQUIRED, FOR REVIEW AND COORDINATION. CONTACT ARCHITECT/ENGINEER WITH ANY DISCREPANCIES FOUND BETWEEN CONSTRUCTION DRAWINGS AND EQUIPMENT BEING FURNISHED PRIOR TO ROUGH-IN.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL ACCESS PANELS, AS REQUIRED FOR SERVICING AND TESTING, FOR EQUIPMENT AND/OR DEVICES FURNISHED UNDER HIS CONTRACT. THE GENERAL CONTRACTOR SHALL INSTALL ACCESS PANELS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF EACH ACCESS PANEL WITH THE ARCHITECT AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN.
- ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID ALL CUTTING, TRENCHING AND PATCHING ASSOCIATED WITH THE ELECTRICAL INSTALLATION.
- ALL PENETRATIONS IN OR THROUGH FIRE RATED ASSEMBLIES ASSOCIATED WITH THE ELECTRICAL INSTALLATION SHALL BE FIRE STOPPED USING A UL APPROVED METHOD. FURNISH AND INSTALL UL LISTED FIRE RATED MATERIALS AND EQUIPMENT SUCH AS BOXES, PUDDY PADS, ENDOTHERMIC MAT, LIGHT FIXTURES WITH RATED ENCLOSURES, ETC... TO COMPLY WITH CODE FOR PROJECT CONDITIONS. FURNISH AND INSTALL SLEEVES, WHERE REQUIRED, UL APPROVED METHOD FOR FIRE STOPPING SHALL MEET OR EXCEED FIRE RATING OF STRUCTURE BEING PENETRATED. REFERENCE ARCHITECTURAL PLANS FOR FIRE RATED STRUCTURES.
- NO CONDUIT, BOXES, WIRING, OR CABLES SHALL BE INSTALLED WITHIN 1 1/2" OF THE LOWEST POINT OF THE UNDERSIDE OF THE ROOF DECKING, NOR SHALL THEY BE INSTALLED CONCEALED WITHIN METAL-CORRUGATED ROOF DECKING. FOR EXISTING INSTALLATIONS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AND/OR REWORK EXISTING CONDUIT, BOXES, WIRING, AND CABLING THAT IS NOT IN COMPLIANCE WITH THIS REQUIREMENT.
- ALL ELECTRICAL EQUIPMENT AND DEVICES FOR THIS PROJECT MUST BE UL LISTED. DEVICES, EQUIPMENT, SYSTEMS SHALL BE INSTALLED PER N.E.C. REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS.
- THE DESIGN INTENT IS ALL DEVICES SHALL BE RECESSED MOUNTED, UNLESS OTHERWISE NOTED. THE DEVICE BACK BOX AND RACEWAY BEING FURNISHED SHALL BE RATED TO COMPLY WITH NEC PER THE APPLICATION. WHERE MOUNTED WITHIN A FIRE RATED WALL OR STRUCTURE, FURNISH AND INSTALL UL APPROVED FIRE STOPPING ASSEMBLIES AND MATERIALS TO MAINTAIN RATING OF WALL OR STRUCTURE. WHEN THERE IS NO AVAILABLE OPTION BUT TO INSTALL A SURFACE MOUNTED DEVICE, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE DESIGN INTENT IS ALL CONDUIT, CABLES, RACEWAYS AND PATHWAYS SHALL BE CONCEALED FROM SIGHT WITHIN THE BUILDING CONSTRUCTION, UNLESS OTHERWISE NOTED. THE CONDUIT, CABLES, RACEWAYS AND PATHWAYS BEING FURNISHED SHALL BE RATED TO COMPLY WITH NEC PER THE APPLICATION. WHEN THERE IS NO AVAILABLE OPTION BUT TO INSTALL A VISIBLE CONDUIT, CABLE, RACEWAY OR PATHWAY, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- ALL CONDUIT AND CABLING SHALL BE PROPERLY SUPPORTED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. FOR EXISTING INSTALLATIONS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AND/OR REWORK EXISTING CONDUIT AND/OR CABLING THAT IS NOT IN COMPLIANCE WITH THIS REQUIREMENT.
- CONTRACTOR SHALL FIELD VERIFY SLAB ON GRADE FLOOR CONSTRUCTION TYPE PRIOR TO CUTTING. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR CUT A STRUCTURAL FLOOR SLAB THICKER THAN FOUR (4") INCHES WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER OF RECORD. NOTIFY ENGINEER OF RECORD OF ANY SLAB THICKNESS GREATER THAN FOUR (4") INCHES PRIOR TO PROCEEDING WITH ANY SAW CUTTING.
- IN OTHER THAN DWELLING UNITS, ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS, INSTALLED IN LOCATIONS IDENTIFIED IN 210-8(B)(1) THROUGH (B)(12) SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL, WHERE DEVICES IS READILY ACCESSIBLE. THE DEVICE SHALL BE PROVIDED WITH INTEGRAL GROUND FAULT PROTECTION, WHERE DEVICE IS NOT READILY ACCESSIBLE AND/OR NOT AVAILABLE WITH INTEGRAL GROUND FAULT PROTECTION, THE BRANCH CIRCUIT BREAKER SERVING THE DEVICE(S) SHALL BE GROUND FAULT TYPE.
- IN THE CASE OF CONFLICT BETWEEN DRAWINGS, NOTES, AND SPECIFICATIONS, OR AMONG DRAWINGS, THE STRICTEST PROVISION OR LARGER QUANTITY SHALL GOVERN.

ELECTRICAL ABBREVIATIONS

| | |
|------------|---|
| A | AMPS |
| AC | AIR CONDITIONING UNIT |
| AFC | ABOVE FINISH COUNTER |
| AFF | ABOVE FINISH FLOOR |
| AFG | ABOVE FINISH GRADE |
| AHU | AIR HANDLING UNIT |
| AIC | ASYMMETRICAL INTERRUPTING CURRENT |
| ARCH. | ARCHITECTURAL |
| A.T. | AMP TRIP |
| ATS | AUTOMATIC TRANSFER SWITCH |
| AWG | AMERICAN WIRE GAGE |
| BKR | BREAKER |
| BLDG. | BUILDING |
| C | CONDUIT |
| CATV | CABLE TELEVISION |
| CCTV | CLOSED CIRCUIT TELEVISION |
| CH | CHILLER |
| CONTR | CONTRACTOR |
| CU | COOLING TOWER |
| CT | COPPER |
| CHU | CABINET UNIT HEATER |
| DE | DUAL ELEMENT |
| DN | DOWN |
| DS | DISCONNECT SWITCH |
| DWG. | DRAWING |
| (E) EXIST. | EXISTING |
| EBB | ELECTRIC BASEBOARD |
| E.C. | ELECTRICAL CONTRACTOR |
| EF | EXHAUST FAN |
| EH | ELECTRIC HEATER |
| ELEC. | ELECTRICAL |
| EM | EMERGENCY |
| EMT | ELECTRICAL METALLIC TUBING |
| EOR | ENGINEER OF RECORD |
| EQ | EQUAL |
| ETR | EXISTING TO REMAIN |
| EUH | ELECTRIC UNIT HEATER |
| EW | ELECTRIC WATER COOLER |
| EWL | ELECTRIC WATER HEATER |
| F | FUSE |
| FA | FIRE ALARM |
| FACP | FIRE ALARM CONTROL PANEL |
| FC | FAN COIL UNIT |
| FLUOR | FLUORESCENT |
| FPB | FAN POWER BOX (VAV) |
| F.P.C. | FIRE PROTECTION CONTRACTOR |
| FS | FLOW SWITCH |
| FT | FOOT CUFF |
| G.C. | GENERAL CONTRACTOR |
| GFI | GROUND FAULT INTERRUPTING PROTECTION |
| GND | GROUND |
| HID | HIGH INTENSITY DISCHARGE |
| HOA | HAND-OFF-AUTOMATIC |
| HP | HORSEPOWER |
| HPS | HIGH PRESSURE SODIUM |
| HVAC | HEATING, VENTILATION, AIR CONDITIONING |
| IG | ISOLATED GROUND |
| INCAND. | INCANDESCENT |
| JB | JUNCTION BOX |
| KCMIL | ONE THOUSAND CIRCULAR MILS |
| K.E.C. | KITCHEN EQUIPMENT CONTRACTOR |
| KVA | KILOWATT AMPERE |
| KW | KILOWATT |
| LTG | LIGHTING |
| MATV | MASTER ANTENNA TV |
| MAU | MAKE-UP AIR UNIT |
| MAX | MAXIMUM |
| MCB | MAIN CIRCUIT BREAKER |
| MCC | MOTOR CONTROL CENTER |
| M.C. | MECHANICAL CONTRACTOR |
| MECH. | MECHANICAL |
| MFR | MANUFACTURER |
| MH | METAL HALIDE |
| MIN | MINIMUM |
| MLO | MAIN LUGS ONLY |
| MOD | MOTOR OPERATED DAMPER |
| MSB | MAIN SWITCHBOARD |
| MTD | MOUNTED |
| NEC | NATIONAL ELECTRICAL CODE |
| NF | NON FUSED |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| NIC | NOT IN CONTRACT |
| NL | NIGHTLIGHT |
| NTS | NOT TO SCALE |
| Ø or PH | PHASE |
| P | POLE |
| PB | PULL BOX |
| P.C. | PLUMBING CONTRACTOR |
| PNL | PANEL |
| PRE | POWER ROOF EXHAUSTER |
| PVC | POLYVINYL CHLORIDE |
| RTL | ROOF TOP UNIT |
| SPKR | SPEAKER |
| SPST | SINGLE POLE SINGLE THROW |
| TIE | MULTIPLE OUTLETS WIRED ON SAME BRANCH CIRCUIT |
| TR | TAMPER RESISTANT |
| TS | TAMPER SWITCH |
| TIB | TELEPHONE TERMINAL BOARD |
| TV | TELEVISION |
| TY | TYPICAL |
| UH | GAS FIRED UNIT HEATER |
| UL | UNDERWRITER'S LABORATORY |
| UNO | UNLESS NOTED OTHERWISE |
| UV | UNIT VENTILATOR |
| V | VOLTS |
| W | WATTS |
| WP | WEATHER-PROOF TYPE DEVICE (NEMA 3R RATED) |
| WR | WEATHER-RESISTANT TYPE DEVICE (NEMA 3R RATED) |
| XFMR | TRANSFORMER |

LIGHTING FIXTURE SCHEDULE NOTES:

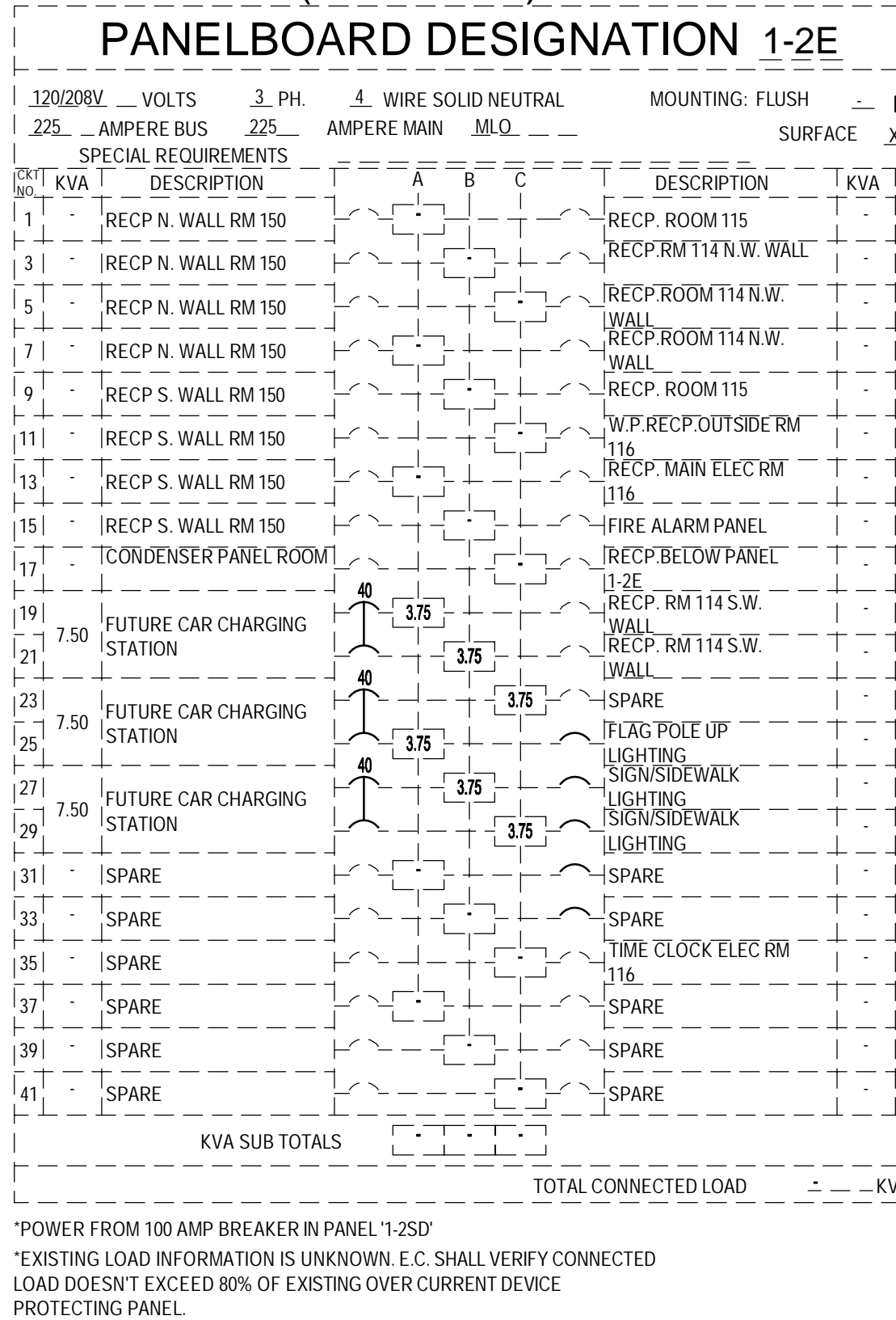
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND/OR ROOM FINISH SCHEDULE TO DETERMINE PROPER TYPE OF LIGHT FIXTURE REQUIRED FOR THE CEILING CONSTRUCTION PRIOR TO ORDERING THE FIXTURES & PROVIDE FIXTURES THAT ARE COMPATIBLE WITH THE CEILING SYSTEM.
- REFER TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF LIGHT FIXTURES.
- PROJECT-SPECIFIC PHOTOMETRIC CALCULATIONS MAY BE REQUIRED FOR SOME FIXTURE TYPES AS PART OF SHOP DRAWING SUBMITTALS AS DETERMINED BY THE ENGINEER.
- BASIS-OF-DESIGN LIGHT FIXTURE PACKAGE IS INDICATED IN LIGHTING FIXTURE SCHEDULE. UNLESS OTHERWISE NOTED, AN ALTERNATE LIGHT FIXTURE PACKAGE MAY BE SUBMITTED PROVIDED THAT THE LIGHT FIXTURES SUBMITTED MEET OR EXCEED THE QUALITY, PERFORMANCE, AND AESTHETICS OF THE BASIS-OF-DESIGN LIGHT FIXTURES AS DETERMINED BY ENGINEER AND ARCHITECT. LIGHT FIXTURES MUST BE REVIEWED AND APPROVED BY THE ENGINEER, ARCHITECT, AND OWNER PRIOR TO ACCEPTANCE. PROJECT-SPECIFIC PHOTOMETRIC CALCULATIONS MAY BE REQUIRED TO CONFIRM PERFORMANCE OF ALTERNATE LIGHT FIXTURE PACKAGE.
- WHERE LIGHT FIXTURES ARE NOTED TO HAVE EMERGENCY BACKUP, THE EMERGENCY BACKUP SHALL PROVIDE A MINIMUM OF NINETY (90) MINUTES OF CODE REQUIRED EMERGENCY LIGHTING. EACH EMERGENCY BACKUP PROVIDED SHALL PRODUCE THE MAXIMUM LUMEN OUTPUT AVAILABLE FOR THE FIXTURE.
- WHERE APPLICABLE, ALL EMERGENCY BACKUP CONFIGURATIONS SHALL INCLUDE AN INDEPENDENT SECONDARY DRIVER WITH AN INTEGRAL RELAY TO IMMEDIATELY DETECT AC POWER LOSS, MEETING INTERPRETATIONS OF NEC - 700.16.
- ALL LIGHTING FIXTURE(S) ON EMERGENCY CIRCUITS INDICATED TO BE CONTROLLED WITH FIXTURES ON NORMAL POWER SHALL BE FORCED ON AT FULL OUTPUT UPON LOSS OF NORMAL POWER OR ACTIVATION OF FIRE ALARM SYSTEM. PROVIDE UL924 EMERGENCY RELAY/POWER PACK AND WIRE TO FIRE ALARM RELAY MODULE AS REQUIRED. WHERE EMERGENCY CIRCUITS ARE ROUTED THROUGH THE LOW VOLTAGE LIGHTING CONTROL SYSTEM, THAT SYSTEM SHALL BE UL924 LISTED TO FORCE THE LIGHTS ON (REFER TO LOW VOLTAGE LIGHTING CONTROL SYSTEM DIAGRAM NOTES). IN AREAS WITH LOCAL LIGHTING CONTROLS, THE LOCAL CONTROLS SHALL BE PROVIDED WITH UL924 EMERGENCY POWER PACKS TO FORCE THE LIGHTS ON.
NOTE: SOME AREAS/FIXTURES HAVE MULTIPLE TYPES OF CONTROL.
- VERIFY VOLTAGE REQUIREMENTS WITH RESPECT TO PLAN CIRCUITING, PANEL SCHEDULES, REMOTE POWER SUPPLIES, AND CONTROLS.
- COORDINATE DIMMING DRIVER TYPE WITH LIGHTING CONTROLS PRIOR TO ORDERING. DIMMING DRIVERS SHALL BE CAPABLE OF DIMMING DOWN TO 1% UNLESS OTHERWISE NOTED.
- ALL FIXTURE FINISHES ARE TO BE SELECTED BY ARCHITECT.
- ALL LIGHTING FIXTURES ARE TO BE PROVIDED WITH REQUIRED HARDWARE FOR MOUNTING AND ANY AUXILIARY DRIVERS/DEVICES/ACCESSORIES FOR A FULLY FUNCTIONING LIGHT FIXTURE.
- ALL PENETRATIONS IN OR THROUGH FIRE RATED ASSEMBLIES ASSOCIATED WITH THE ELECTRICAL INSTALLATION (INCLUDING LIGHT FIXTURES) SHALL BE FIRE STOPPED USING A UL LISTED APPROVED METHOD (MEETING OR EXCEEDING RATING OF STRUCTURE PENETRATED AS INDICATED ON ARCHITECTURAL PLANS) TO COMPLY WITH CODE FOR PROJECT CONDITIONS.
NOTE: CONTRACTOR SHALL FURNISH, INSTALL, AND WIRE ADDITIONAL EXIT SIGNS TYPE "xxx" AND EMERGENCY LIGHTING FIXTURE TYPE "xxx" FOR ADDITIONAL FIXTURES THAT MAY BE REQUIRED BY THE AUTHORITY HAVING JURISDICTION. TURNOVER ANY UNUSED FIXTURES TO THE OWNER. QUANTITY OF ADDITIONAL FIXTURES SHALL BE 5% OF EACH TYPE, MINIMUM OF ONE (1) OF EACH TYPE.

| TYPE | LOAD (VA) | LAMPS | | MANUFACTURER | CATALOG NUMBER | DESCRIPTION |
|--------------|-----------|-------|-------------|--|--|---|
| | | NO. | TYPE | | | |
| XA □ □ | 166 | 48 | LED | COOPER LIGHTING SOLUTIONS MCGRAW EDISON | GLEON-SA3C-740-U-SL3-HS5 | GALLEON AREA AND ROADWAY LUMINAIRE (3) 70CR, 400K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD |
| YB □ □ | 166 | 48 | LED | COOPER LIGHTING SOLUTIONS MCGRAW EDISON | GLEON-SA3C-740-U-T4W | GALLEON AREA AND ROADWAY LUMINAIRE (3) 70CR, 400K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS |
| XD □ □ | 113 | 32 | LED | COOPER LIGHTING SOLUTIONS MCGRAW EDISON | GLEON-SA2C-740-U-SL3-HS5 | GALLEON AREA AND ROADWAY LUMINAIRE (3) 70CR, 400K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD |
| XE □ □ | 113 | 32 | LED | COOPER LIGHTING SOLUTIONS MCGRAW EDISON | GLEON-SA2C-740-U-T4W | GALLEON AREA AND ROADWAY LUMINAIRE (3) 70CR, 400K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS |
| A ○ | 71.6 | 1 | LED | ARCHITECTURAL AREA LIGHTING | UCM2-ANG-36L-615-K7-5W-CL | UNIVERSE MEDIUM - LED TYPE V W ANGLED HOOD |
| AA ○ | 120 | 1 | HALIDE | STERNER ANNAPOLIS | M011-100-M-120 | EXISTING TO REMAIN LIGHT FIXTURE. 42" HIGH X 7" DIAMETER DARK BRONZE FINISHED BOLLARD WITH EXTRUDED ALUMINUM BODY, INJECTION MOLDED HIGH IMPACT LOUVERS, 120 VOLT BALLAST, 100 WATT METAL HALIDE LAMP AND SYMMETRIC LIGHT DISTRIBUTION. SPAULDING #M011-100-M-120 OR STERNER ANNAPOLIS. |
| B □ | 190 | 1 | MH | PHILLIPS | 103-FT-U-175MH | EXISTING TO REMAIN LIGHT FIXTURE. 9'x7'x18" WALL MOUNTED FIXTURE WITH DARK BRONZE HOUSING, 10% UPLIGHT, 120/277 VOLT BALLAST, 175 WATT METAL HALIDE LAMP AND MOUNTED AT 11'-0" AFF. |
| C ○ | 7 | 1 | LED | NITE STAR II | B.NISIL LED-666.NSP- A9-B2W-12-11-360SL | BKSSL NITE STAR II NARROW SPOT LED FIXTURE FOR FLAGPOLE. |
| D ○ | 150 | 1 | FLUORESCENT | HYDREL | #4300-277-JB1-P OR EQUAL BY HYDREL | EXISTING TO REMAIN LIGHT FIXTURE. 4-1/4" C x 4-9/16" LONG GROUND LEVEL MOUNTED FLUORESCENT SIGN LIGHT FIXTURE WITH EXTRUDED ALUMINUM DARK BRONZE HOUSING, DOUBLE SWIVEL MOUNTING, ARCHITECTURAL JUNCTION BOX, 277 VOLT LOW TEMPERATURE BALLAST AND R40T12SP35 LAMP. |
| ⊕ c | 7500 | N/A | N/A | CHARGE POINT | CT4011-1830 MM (6) SINGLE PORT BOLLARD MOUNT | 6' SINGLE PORT AC VOLTAGE 208/240V, 40A DUAL POLE CT4000 LEVEL 2 COMMERCIAL CHARGING STATION. |

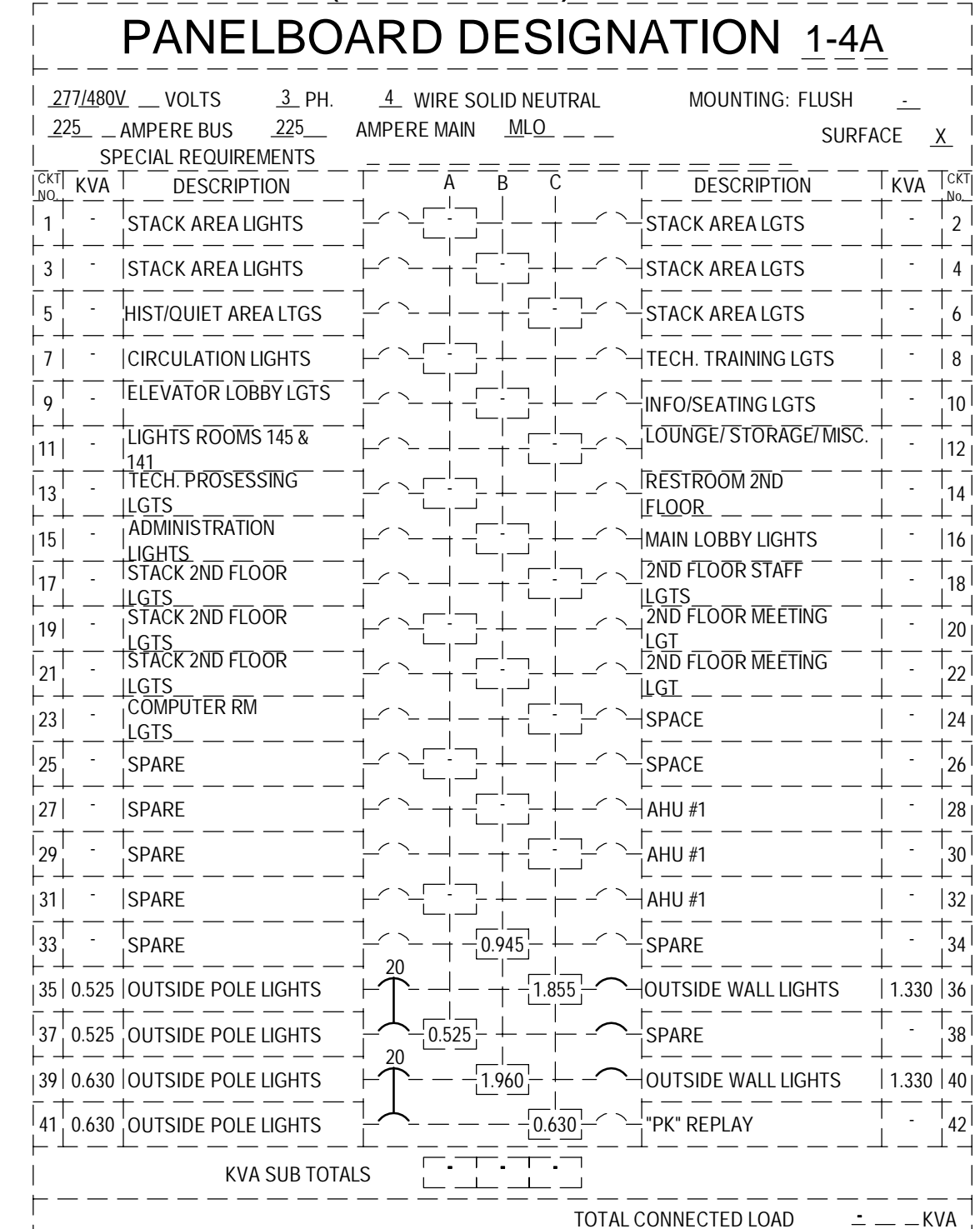
PANELBOARD NOTES

- ALL BREAKERS SHALL BE 20A/1P, UNLESS NOTED OTHERWISE.
 - ALL BREAKERS SHALL BE HACR RATED.
- NOTE: NOT ALL NOTES BELOW MAY APPLY TO THIS PROJECT.
- "1" INDICATES BREAKER SHALL BE "SWD" RATED.
 - "2" INDICATES BREAKER SHALL BE COMBINATION "ARC-FAULT / GFI" TYPE.
 - "3" INDICATES BREAKER SHALL BE "GFI" TYPE, WITH RATING AS REQUIRED BY NEC PER APPLICATION. PROVIDE 5mA RATING FOR PERSONNEL PROTECTION. PROVIDE 30mA RATING FOR EQUIPMENT PROTECTION.
 - "4" INDICATES BREAKER SHALL BE SHUNT-TRIP TYPE.
 - "5" INDICATES BREAKER TO BE "ARC-FAULT" TYPE.
 - "6" INDICATES BREAKER TO HAVE LOCK-ON CLIP.
 - "7" INDICATES BREAKER TO HAVE LOCK-ON CLIP AND RED MARKING.
 - "8" INDICATES CIRCUIT TO HAVE REMOTE 5mA GFI PROTECTION MODULE MOUNTED IN JUNCTION BOX WITH HINGED COVER ADJACENT TO PANELBOARD. MODULE SHALL BE LABELED AS TO THE CIRCUIT AND EQUIPMENT THAT IS BEING PROTECTED.
 - "9" INDICATES BRANCH CIRCUIT ROUTED THROUGH EMERGENCY LIGHTING INVERTER.
 - "10" INDICATES TO FURNISH AND INSTALL HANDLE TIES FOR MULTIPLEXED CIRCUITS.
 - "11" INDICATES TO FURNISH AND INSTALL NEW BRANCH CIRCUIT USING EXISTING BREAKER.
 - "12" INDICATES TO FURNISH AND INSTALL NEW BREAKER. BREAKER SHALL MATCH EXISTING PANELBOARD MANUFACTURER, TYPE, AND AIC RATING.
 - "13" INDICATES TO USE EXISTING SPARE BREAKER FOR NEW BRANCH CIRCUIT.
 - "C-F" INDICATES DESIGNATION OF RELAY / LIGHTING CONTROL SYSTEM MODULE CONTROLLING CIRCUIT. SEE LIGHTING CONTROL DETAILS.
 - "RP-F" INDICATES DESIGNATION OF RELAY / LIGHTING CONTROL SYSTEM MODULE CONTROLLING CIRCUIT. SEE LIGHTING CONTROL DETAILS.

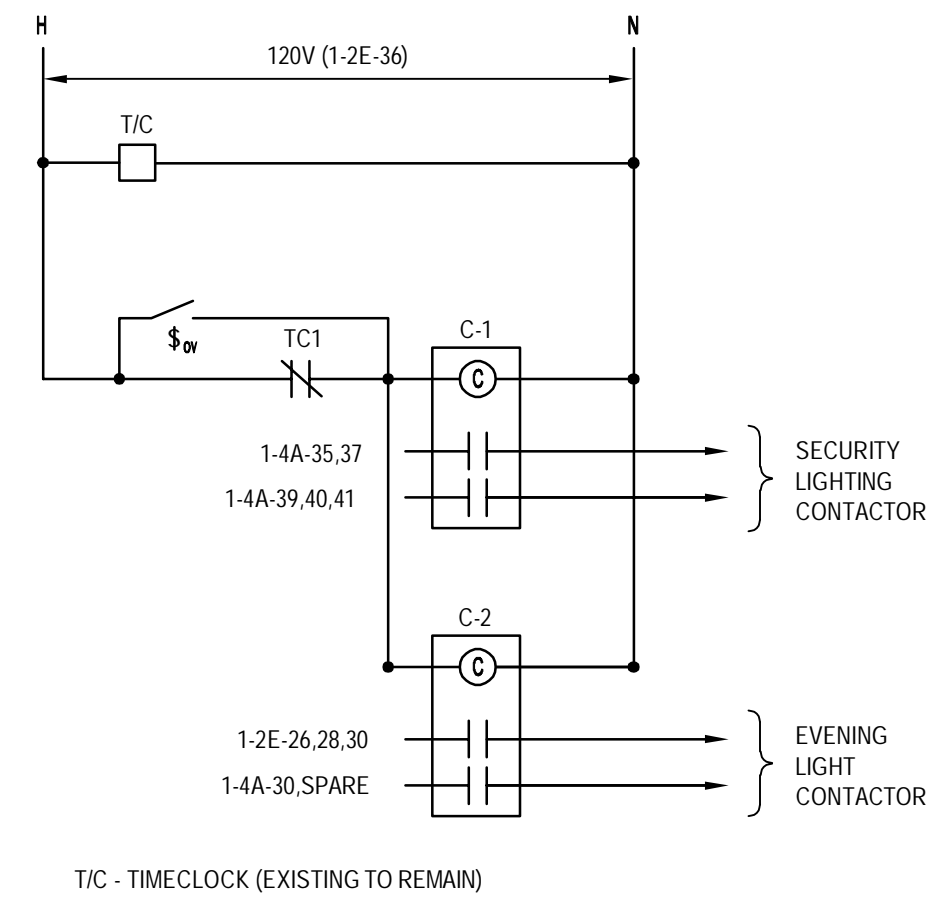
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EXISTING SITE LIGHTING CONTROL DIAGRAM



CONTACTOR SCHEDULE

| DESIGNATION | CONTACT AMPERE RATING | NO. OF POLES | CONTACT VOLTAGE RATING | COIL VOLTAGE RATING | FUNCTION | CONTROL | NOTES |
|-------------|-----------------------|--------------|------------------------|---------------------|-----------------------------|----------------|---------|
| C-1 | 20A | 2 | 277V | 120V | SECURITY LIGHTING CONTACTOR | 1-4A-35,37 | 1,2,3,5 |
| C-1 | 20A | 3 | 277V | 120V | SECURITY LIGHTING CONTACTOR | 1-4A-39,40,41 | 1,2,3,4 |
| C-2 | 20A | 3 | 120V | 120V | EVENING LIGHTING CONTACTOR | 1-4A-26,28,30 | 1,2,3,4 |
| C-2 | 20A | 2 | 277V | 120V | EVENING LIGHTING CONTACTOR | 1-4A-36, SPARE | 1,2,3,4 |