

GENERAL NOTES:

- 1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE FOLLOWING CODES:
- NATIONAL ELECTRICAL CODE 2017 (NFPA 70)
- STANDARDS FOR ELECTRICAL SAFETY AT WORK PLACE (NFPA 70E)
- UNDERWRITER'S LABORATORIES
- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- INSULATED POWER CABLE ENGINEERS ASSOCIATION
- OSHA
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- AMERICAN WITH DISABILITY ACT
- AMERICAN NATIONAL STANDARDS INSTITUTE
- ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES, INCLUDING ANY RULES AND REGULATIONS ESTABLISHED BY THE UTILITY COMPANY AND TOWN CONSTRUCTION DEPARTMENT.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO SUBMITTING HIS BID, TO VISIT THE SITE AND INSPECT THE ENTIRE AREA OF THE WORK. THE CONTRACTOR SHALL COMPLETELY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS AFFECTING THE WORK. IF IN THE EXECUTION OF THE WORK, EXTRA WORK IS NECESSARY DUE TO THE CONTRACTOR'S FAILURE TO BE FAMILIAR WITH EXISTING CONDITIONS, SUCH EXTRA WORK SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY.
5. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADE CONTRACTORS THE SCOPE OF ELECTRICAL WORK. ALSO COORDINATE ALL ELECTRICAL WORK AND POWER SHUTDOWNS WITH THE OWNER AND THE OTHER CONTRACTORS.
7. THE ELECTRICAL CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, LABOR, SERVICES AND MATERIAL REQUIRED FOR THE COMPLETE ELECTRICAL SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. ALL MATERIALS SHALL BE NEW AND SHALL BEAR THE UNDERWRITER'S LABORATORY LABEL WHEREVER SUCH A LISTING APPLIES.
8. UPON COMPLETION OF ALL THE WORK, FURNISH THE OWNER WITH CERTIFICATES OF APPROVAL FROM THE LOCAL AUTHORITIES HAVING JURISDICTION AND/OR AS MAY BE DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL PAY ALL FEES.
9. INCLUDE THE COST OF ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND SATISFACTORY SYSTEM.
10. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CUTTING AND PATCHING ASSOCIATED WITH ELECTRICAL WORK.
11. THE OWNER RESERVES THE RIGHT TO RELOCATE, PRIOR TO INSTALLATION, ALL EQUIPMENT, DEVICES, COMPONENTS, AND OUTLETS TO A MAXIMUM DISTANCE OF TEN (10) FEET IN ANY DIRECTION FROM THE LOCATION INDICATED ON THE DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
12. THE ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY OTHERS. UN, AND SHALL SUPPLY AND INSTALL ANY REQUIRED SAFETY DISCONNECT SWITCHES AND STARTERS WHEN NOT PROVIDED WITH THE EQUIPMENT. ALL CONTROL WIRING FOR THE EQUIPMENT SHALL BE BY OTHERS. WAC UNITS WITH GREATER THAN 2000 OHM SHALL BE EQUIPPED WITH DUST DETECTOR, REMOVE TEST SWITCH AND LED ALARM INDICATOR LIGHT AND SHALL BE WIRED TO BUILDING FIRE ALARM SYSTEM.
13. FURNISH AND INSTALL ALL SUPPORTS, HANGERS AND MISCELLANEOUS METALS, SUCH AS GALVANIZED IRON PIPE STANCHIONS, RACKS, FITTINGS, ETC., REQUIRED FOR PROPER INSTALLATION OF THE WORK. ALL MISCELLANEOUS RACKS AND FITTINGS SHALL BE GALVANIZED, AND SHALL BE EITHER KINBOFF CHANNEL, POWER STRUT OR UNISTRUT, UNLESS OTHERWISE SPECIFIED.
14. LOCATIONS OF EXISTING AND NEW EQUIPMENT AND CABLE TERMINATIONS IN CONNECTION WITH THE NEW EQUIPMENT ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD WITH OWNER'S APPROVAL. ALL ELECTRICAL ROUTING AND FINAL TERMINATION LOCATION SHALL BE COORDINATED WITH THE OWNER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION.
15. PROVIDE NAMEPLATES ON ALL ELECTRICAL EQUIPMENT AND WIRING DEVICES. NAMEPLATES SHALL BE 1/2" HEIGHT ENGRAVED BLACK LETTERS ON WHITE BACKGROUND. THREE LAYER LAMINATED PLASTIC WITH ADHESIVE BACKING STATING THE EQUIPMENT AND WIRING DEVICE SOURCE AND CIRCUIT DESIGNATION.
16. THE CONTRACTOR SHALL PROVIDE 250 AND 600 VOLT NEMA 1 DISCONNECT SWITCHES WHERE INDICATED ON THE DRAWINGS. SWITCHES SHALL BE FUSIBLE UN. SWITCHES INSTALLED OUTDOORS SHALL BE IN NEMA 3R ENCLOSURE. SWITCHES SHALL HAVE FRONT OPERABLE HANDLES. UL APPROVED, CLASS RK5 REJECTION TYPE FUSE HOLDERS UN, ARC SHUNTS AND PADLOCKING PROVISIONS FOR THE HANDLE AND COVER. PROVIDE ONE SET OF BUSSMAN TYPE FRN-R (250 VOLT) AND FR3-R (600V) FUSES AS REQUIRED WITH EACH SWITCH. SWITCHES SHALL BE MANUFACTURED BY EATON CORPORATION OR APPROVED EQUAL.
17. LOCATIONS OF ELECTRICAL EQUIPMENT AND DEVICES ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. ALSO SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHTING FIXTURES AND MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.
18. THE ELECTRICAL CONTRACTOR SHALL SUBMIT FOR ENGINEER'S APPROVAL DETAILED SHOP DRAWINGS FOR ALL EQUIPMENT SPECIFIED, AS WELL AS DETAILED INSTALLATION LAYOUTS.
19. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM FOR SHORTS, GROUNDS, AND PROPER OPERATION IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
20. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL PROVIDE THREE SETS OF "AS-BUILT" DRAWINGS IN HARD COPIES, AND IN AUTOCAD FORMAT 2010 INCLUDING PENIS SPECIFICATION USED. AUTOCAD DRAWINGS XREFS SHALL BE BOUND, PUNGED AND AUDITED. THESE DRAWINGS SHALL PROVIDE AN ACCURATE AND COMPLETE RECORD OF ALL WORK INSTALLED.
21. SCHOOL WILL BE IN OPERATION DURING CONSTRUCTION. CONTINUITY OF ELECTRICAL SYSTEMS MUST BE MAINTAINED. ALL SHUTDOWNS AND EQUIPMENT RELOCATIONS NEED TO BE COORDINATED WITH THE PROJECT MANAGER IN CHARGE AND/OR OWNER.

GENERAL NOTES CONT'D:

- 22. EQUIPMENT INSTALLED ON WALLS SHALL BE INSTALLED ON METAL CHANNEL SUPPORTING UNITS BOLTED TO FLOOR OR BUILDING STRUCTURE. CABLE INSTALLATION BELOW CEILING AND ABOVE ACCESSIBLE CEILING SPACE SHALL BE IN TRAPEZE HANG SECURED AT EVERY 5 FEET INTERVAL.
23. ALL POWER RECEPTACLES AND LIGHTING SWITCHES SHALL BE SPECIFICATION GRADE.
24. MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER OF DEVICE FOR WALL RECEPTACLES AND COMMUNICATION OUTLET BOXES EXCEPT MOUNTED ABOVE COUNTERTOP:
- LIGHTING SWITCHES 42" AFF
- MOTOR STARTERS AND POWER DISCONNECT SWITCHES 48" AFF
- NOT HIGHER THAN 78" AFF TO TOP BREAKER, BOTTOM OF PANEL ENCLOSURE NOT LESS THAN 24" AFF
25. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POWER, LOW VOLTAGE AND COMMUNICATION SIGNALS TO SCHOOL AND OTHER LOCATIONS NOT AFFECTED BY HIS WORK DURING CONSTRUCTION.
26. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO START OF WORK AND NOTIFY THE OWNER OR HIS REPRESENTATIVE OF ANY DISCREPANCIES OR PROBLEMS THAT WILL INTERFERE WITH THE SATISFACTORY COMPLETION OF THE WORK.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SERVICE FOR ALL UTILITIES THAT WILL BE BREACHED DUE TO HIS CONTRIBUTION OPERATIONS.
28. PROVIDE BARRICADES, WARNING SIGNS AND LIGHTS AT AREAS SUBJECT TO PUBLIC, PERSONNEL AND TRAFFIC ACTIVITIES. KEEP CONSTRUCTION DEBRIS CLEAR OF TRAFFIC AREAS.
29. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE REGULATIONS AND GUIDELINES SET FORTH BY ALL AGENCIES HAVING JURISDICTION OVER THE WORK.
30. THE CONTRACTOR SHALL SUBMIT THE INFORMATION TO THE OWNER OR HIS REPRESENTATIVE FOR APPROVAL OF ELECTRICAL SYSTEM SHUTDOWN SCHEDULES.
31. TEMPORARY POWER IS TO BE PROVIDED BY CONTRACTOR AND BE AVAILABLE IN THE FIELD FOR OTHER TRADES AND IS HIS RESPONSIBILITY TO FURNISH EQUIPMENT BEFORE COMPLETION OF WORK.
32. CONTRACTOR SHALL VISIT THE SITE SPECIFICALLY INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS, AND BY SUBMITTING HIS BID ACCEPT CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK.
33. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
34. EXCEPT WHERE SPECIFICALLY DIMENSIONED OR OTHERWISE LOCATED BY PERMIT DETAILS, THE ROUTING OF CONDUITS OR CABLES AS SHOWN ON THE DRAWINGS SHALL BE REPRODUCED AS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS DUE TO EXISTING FIELD CONDITIONS. PROVIDE REQUIRED FITTINGS, CONDULETS, ELBOWS AND PULL BOXES.
35. IN ORDER TO EXECUTE THE WORK, ALL WALL CUTS SHALL BE PATCHED AND FINISHED SIMILAR TO ADJACENT SPACES.
36. CONTRACTOR SHALL RUN BUILDING INTERIOR CONDUIT OR CABLE CONCEALED IN HUNG CEILING AND WALLS.
37. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ALL DIMENSIONS SHALL BE REPRODUCED AS SHOWN ON THE DRAWINGS. REPRESENTATIVE AND RESOLVED BEFORE THE WORK IS DONE.
38. ALL SPARE CONDUITS SHALL BE PROVIDED WITH A 1/2" GAUGE STEEL WIRE OR EQUIVALENT PULL WIRE WITH A MINIMUM OF 200 POUND PULLING TENSION.
39. ALL UNUSED ENTRANCE CONDUITS MUST BE CAPPED/PLUGGED AND INSTALLED WITH PULL WIRES.
40. ALL METALLIC CONDUIT AND SLEEVES MUST BE REMOVED, BUSHED, AND CAPPED WHEN PLACED.
41. NEUTRAL SHARING OR COMMON NEUTRAL WIRING IS PROHIBITED.
42. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR SHALL BE PROVIDED. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL QUALITY.
43. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO ANY CHANGES BEING MADE.
44. THE OWNER OR HIS REPRESENTATIVE HAS THE RIGHT TO REJECT ANY PART OF THE WORK IF IT DOES NOT MEET THE REQUIREMENTS OF THE INDUSTRY STANDARD UNAUTHORIZED OR WORK DONE CONTRARY TO THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
45. THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF ONE YEAR UNON AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
46. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
47. THE CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WORKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.

GENERAL NOTES CONT'D:

- 48. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
49. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE SCHOOL BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
50. ONCE ELECTRICAL DRAWINGS ARE APPROVED BY THE BUILDING DEPARTMENT FOR CONSTRUCTION, ANY DESIGN MODIFICATIONS AND ALTERATIONS MADE BY THE CONTRACTOR FROM THE ELECTRICAL DRAWINGS WITHOUT THE ENGINEER OF RECORD KNOWLEDGE ARE DONE AT CONTRACTOR'S RISK. THE ENGINEER OF RECORD SHALL NOT BE HELD RESPONSIBLE FOR THE CONSEQUENCES OF ANY SUCH CHANGES.
51. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONTACTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
52. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
53. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING SCHOOL BUILDING.
54. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER.
55. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS TO CONTRIM THE EXACT FINAL LOCATION OF THEIR RESPECTIVE EQUIPMENT, SUPPLY POWER AND MAKE CONNECTIONS TO MOTORS, STARTERS, ETC. DURING ELECTRICAL CONNECTIONS AS INDICATED ON THE ONE-LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL WIRING DIAGRAMS, FIELD WIRING, SIZE AND LOCATION OF EQUIPMENT. UNLESS PROVIDED BY EQUIPMENT MANUFACTURER, DISCONNECT SWITCHES, STARTERS, VFDs, POWER AND CONTROL WIRING, FIELD WIRING, CONTROL DEVICES, WIRPS AND CONDUITS FOR MECHANICAL, PLUMBING AND AUXILIARY SYSTEMS OPERATIONS SHALL BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN MANUFACTURER'S SHOP DRAWINGS OF EQUIPMENT PROVIDED BY OTHER TRADES PRIOR TO ROUTING IN THE CONDUITS/WIRING TO EQUIPMENT, CONTROL AND FIELD DEVICES.
1. ALL CONDUITS SHALL BE GROUNDED AND SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER AND IN ACCORDANCE WITH REQUIREMENTS OF THE NEC.
2. RUN AND ARRANGEMENT OF CONDUIT SHALL BE AS INDICATED, BUT MAY BE MODIFIED AS REQUIRED TO SUIT FIELD CONDITIONS OR TO AVOID INTERFERENCE WITH WORK OF OTHER TRADES.
3. CONDUIT SHALL RUN AT RIGHT ANGLES OR PARALLEL TO BUILDING LINES AND SHALL BE NEATLY BACKED AND SECURELY FASTENED. PULL BOXES AS PER NEC REQUIREMENTS SHALL BE PROVIDED, WHERE REQUIRED, TO FACILITATE THE INSTALLATION OF CABLES.
4. CONDUIT TERMINATIONS AT SHEET METAL ENCLOSURES LOCATED IN DRY, INDOOR NON-HAZARDOUS AREAS SHALL BE MADE USING DOUBLE LOCKNUTS AND INSULATED BUSHINGS. FOR ENCLOSURES LOCATED OUTDOORS, OR IN WET AREAS, CONDUIT SHALL BE TERMINATED USING GASKETED, TREADED CONDUIT HUBS.
5. MINIMUM CONDUIT SIZE SHALL BE 3/4".
6. FURNISH AND INSTAL EXPANSION FITTINGS WHERE CONDUIT PASS THROUGH STRUCTURAL EXPANSION JOINTS.
7. ELECTRICAL METAL TUBING SHALL BE USED IN ALL DRY LOCATIONS. IN WET LOCATIONS CONDUIT SHALL BE RIGID GALVANIZED STEEL. THE MINIMUM SIZE FOR CONDUITS SHALL BE 3/4". FLEXIBLE STEEL CONDUITS OR TYPE MC CABLE MAY BE USED FOR CONNECTION TO RECESSED LIGHTING FIXTURES. TYPE MC CABLE MAY BE USED TO SUPPLY RECEPTACLES IN DRY PARTITION WALL.
8. ARRANGEMENT OF CONDUIT AND EQUIPMENT SHALL BE AS INDICATED SUBJECT TO SUCH MODIFICATION AS REQUIRED TO AVOID INTERFERENCE.
9. INDOOR CONDUIT SHALL BE CONCEALED TO THE MAXIMUM POSSIBLE EXTENT IN EXISTING BUILDINGS. INDOOR CONDUIT IN RENOVATED AND EXISTING AREAS SHALL BE RUN FULLY CONCEALED.
10. PANELS AND DISCONNECT SWITCHES SHALL BE INSTALLED ON WALLS OR ON METAL CHANNEL SUPPORTING UNITS BOLTED TO FLOOR OR BUILDING STRUCTURE.
11. PENETRATED FORMED WALLS AND FLOORS SHALL BE STUFF/MESHED WITH FIRE STOPPING MATERIALS.
12. THE MINIMUM WIRE SIZE SHALL BE #12 AWG FOR POWER AND LIGHTING, UN; #14 AWG FOR CONTROL.
13. SINGLE CONDUCTOR WIRE SHALL BE COPPER WITH THHN/THWN, 600V INSULATION UN, SIZE LARGER THAN #10 SHALL BE STRANDED.

CONDUITS AND WIRE NOTES CONT'D:

- 14. ALL BRANCH CIRCUIT PANEL, BOARD AND DISTRIBUTION PANEL BOARDS SHALL BE SURFACE MOUNTED. FACTORY PAINTED COPPER BUSES, HINGED DOOR, COMBINATION LATCH AND LOCK, AND DIRECTOR CARD MOUNTED UNDER GLASS OR HEAVY DUTY NON-YELLOWING PLASTIC. CIRCUIT BREAKERS SHALL BE THEMO-MAGNETIC, BOLT-ON TYPE, OF THE SIZE AND KINDS NOTED IN THE PANEL BOARD SCHEDULES. CIRCUIT BREAKERS OF TWO AND THREE POLES SHALL HAVE A COMMON TRIP-HANDLES ARE PERMITTED. MINIMUM CIRCUIT BREAKER SYMMETRICAL INTERRUPTING CAPACITY SHALL BE 22,000 AMPERES UN, FULLY RATED AT 120/208VAC, 3-PHASE FULL SIZE NEUTRAL AND GROUND BUSES, AND MINIMUM CIRCUIT BREAKER SYMMETRICAL INTERRUPTING CAPACITY SHALL BE 14,000 AMPERES UN, FULLY RATED AT 277/480VAC, 3-PHASE FULL SIZE NEUTRAL AND GROUND BUSES, WHERE CIRCUIT BREAKERS ARE TO BE USED AS SWITCHES FOR LIGHTING CIRCUITS. BREAKERS SHALL BE APPROVED FOR SWITCHING DUTY AND SHALL BE MARKED 'SWD'.
15. ALL CIRCUIT NUMBERS SHOWN ON THE PLANS ARE FOR INDICATION PURPOSES ONLY. THE CONTRACTOR SHALL ARRANGE ALL CIRCUITS ON THE PANEL BOARD SO AS TO BALANCE ALL LOADS ON ALL PHASES, A LEGIBLE TYPERITTEN DIRECTORY-CARD, HAND WRITING IS PROHIBITED. SHALL BE PROVIDED IN ALL NEW AND EXISTING PANEL BOARDS AFFECTED BY DEMOLITION AND RENOVATION WORK TO INCLUDE DIRECTORY DATE IN EACH PANEL TO INDICATE THE LOADS ACTUALLY INSTALLED. UPDATED AND NEW PANEL BOARD DIRECTORY SHALL BE SUBJECT FOR OWNER'S REPRESENTATIVE REVIEW AND APPROVAL PRIOR TO REPLACING THE OLD DIRECTORY IN DESIGNATED PANELBOARD AND FOR THE NEW PANEL BOARDS AND DISTRIBUTION PANEL BOARDS. TYPICAL.
16. ALL WIRING DEVICES (SWITCHES AND RECEPTACLES) SHALL BE PROVIDED AS INDICATED ON THE PLANS AND AS IDENTIFIED IN THE SYMBOL LIST. ALL DEVICES SHALL BE COMMERCIAL SPECIFICATION GRADE. BACK AND SIDE WIRED WITH SEPARATE GROUNDING SCREWS, EXCEPT WHERE OTHERWISE SPECIFIED FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES REFER TO ELECTRICAL DRAWINGS OTHERWISE IT SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO INSTALLATION. OUTLET BOXES IN DRY INDOOR LOCATIONS SHALL BE GALVANIZED STAMPED STEEL TYPE (MINIMUM OF 4-INCH SQUARE), OUTLET BOXES IN WET INTERIOR AND EXTERIOR LOCATIONS SHALL BE IN CAST ALUMINUM (NEMA 3R CONSTRUCTION), EACH BOX SHALL BE OF THE SIZE AND STYLE REQUIRED FOR THE NUMBER OF WIRES AND THE DEVICE TO BE CONTAINED WITHIN.
17. ALL CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:
NEUTRAL CONDUCTORS WHITE
GROUND CONDUCTORS GREEN
ISOLATED GROUND CONDUCTORS GREEN WITH YELLOW TRACER
SYSTEM VOLTAGE
PHASE CONDUCTORS
0A BLACK
0B RED
0C BLUE
250-VOLTS AND BELOW BLACK BROWN ORANGE YELLOW
250-600 VOLTS
18. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE UL APPROVED CABLE AND CONDUIT SUPPORT, SECURE AND SUPPORT ALL ELECTRICAL CABLES AND CONDUITS IN CEILING SPACE, CONCEALED WALLS AND IN EXPOSED AREAS. ELECTRICAL CABLE AND CONDUIT SUPPORT SPACING SHALL BE INSTALLED PER NEC. ELECTRICAL CABLE AND CONDUIT SUPPORT SHALL BE ATTACHED AND SECURED AT BUILDING STRUCTURAL MEMBERS, USING THE CEILING GRID, LIGHTING FIXTURE, PIPING AND OTHER MISCELLANEOUS EQUIPMENT SUPPORTS TO ATTACH AND SECURE ELECTRICAL CABLE AND CONDUIT SUPPORT IS STRICTLY PROHIBITED. DO NOT WRAP CABLES AROUND BUILDING STRUCTURAL MEMBERS FOR SUPPORTING THE CABLES.

SYMBOLS:

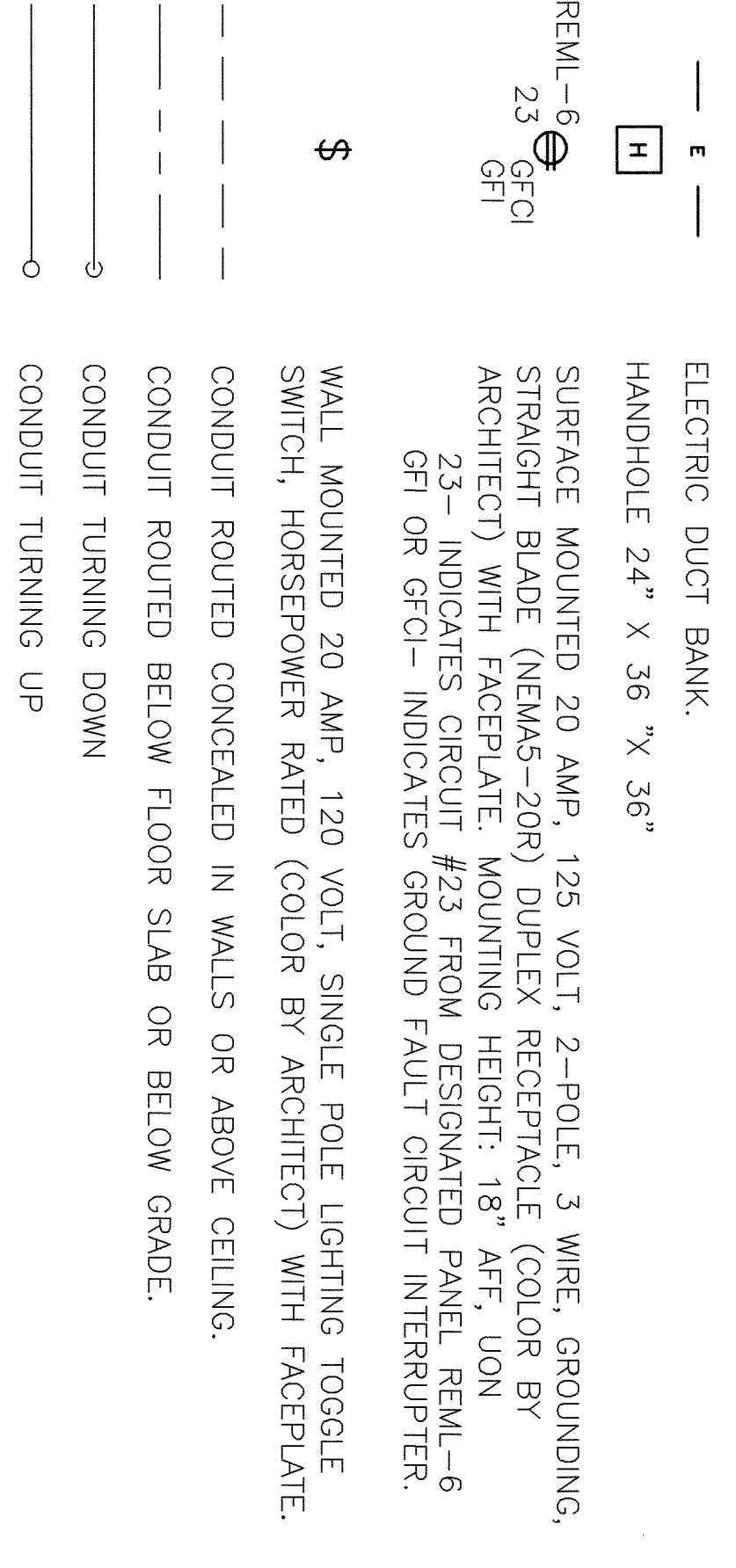


Table with columns: REVISION, NO., DATE, DESCRIPTION, and a revision history table with columns: NO., DATE, DESCRIPTION, BY, DATE.

PROJECT INFORMATION: PROJECT: PISCATAWAY HIGH SCHOOL BLEACHERS, FIELD LIGHTING & STORAGE FACILITY REPLACEMENT. CLIENT: STATE OF NEW JERSEY. CONTRACT NO.: 1500000001. PROJECT NO.: 1500000001.

GENERAL NOTES CONDUIT WIRE AND GROUNDING NOTES

EI Associates ARCHITECTS & ENGINEERS, P.A. PROJECT MANAGER: ROBERT E. MARSHALL, P.E. PROFESSIONAL ENGINEER LICENSE NO. NJ 38891. ELECTRICAL. E00