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D	<p>GENERAL:</p> <p>THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS AND ALL OTHER EQUIPMENT REQUIRED TO INSTALL ALL THE WORK SHOWN AND SPECIFIED. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION THAT IS REQUIRED. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM INSTALLATION AND AS MAY BE REQUIRED TO PLACE ALL EQUIPMENT IN PROPER WORKING ORDER. THE DRAWINGS AND SPECIFICATIONS INDICATE THE INTENT OF THE DESIGN AND ONE TO BE CONSIDERED AS DIAGRAMMATIC ONLY. ALL MATERIALS SHALL BE NEW AND SHALL BE UL APPROVED WHERE APPLICABLE. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND DETERMINE THE COMPLETE SCOPE OF THE WORK TO BE INCLUDED IN HIS BID. ALL WORK SHALL BE OF FIRST CLASS WORKMANSHIP AND SHALL CONFORM WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND/OR CODES.</p> <p>DO NOT SCALE THE DRAWING. REFER TO ACTUAL CONDITIONS AT THE SITE FOR DETAILS AND EXACT LOCATIONS OF EQUIPMENT.</p> <p>ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED PER THE NATIONAL ELECTRICAL CODE (NEC) - 2017 EDITION.</p> <p>EQUIPMENT WITH DAMAGED OR SCRATCHED PAINT SURFACES SHALL BE TOUCHED UP WITH FACTORY MATCHING PAINT OR COMPLETELY REPAINTED.</p>
	<p>WORK SHALL BE CONTINUOUS ON A DAY-TO-DAY BASIS UNTIL PROJECT IS COMPLETED TO MINIMIZE THE DISRUPTIONS.</p> <p>ALL DEFECTIVE WORK OR DAMAGED EQUIPMENT SHALL BE REPLACED AT NO ADDITIONAL COST. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE.</p> <p>ALL ELECTRICAL WORK SHALL BE INSTALLED IN A SUITABLE MANNER AND LOCATION REQUIRED FOR SERVICING OF ALL EQUIPMENT.</p> <p>THIS CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL ELECTRICALLY OPERATED EQUIPMENT TO BE INSTALLED AS PART OF THIS PROJECT.</p> <p>TESTING AND ADJUSTING:</p> <p>AT THE COMPLETION OF WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL PLACE THE NEW INSTALLATION IN PROPER OPERATION, ADJUST EQUIPMENT AND MAKE NECESSARY CORRECTIONS. FAULTY EQUIPMENT OR POOR WORKMANSHIP SHALL BE REPAIRED OR REPLACED. THE SYSTEM SHALL BE COMPLETE, SHALL OPERATE PROPERLY AND SHALL BE FREE OF DEFECTS.</p> <p>CONTINUITY OF SERVICES:</p> <p>IF IT BECOMES NECESSARY TO TEMPORARILY INTERRUPT ELECTRICAL SERVICE TO ANY PORTION OF THE BUILDING, THE CONTRACTOR SHALL SUBMIT A REQUEST FOR A TEMPORARY INTERRUPTION TO THE OWNER SEVEN (7) DAYS IN ADVANCE OF THE REQUESTED INTERRUPTION. ALL LIFE SAFETY SYSTEM SHALL BE MAINTAINED FUNCTIONAL THROUGHOUT THE CONSTRUCTION PERIOD.</p> <p>PAINTING:</p> <p>PAINT SUPPORTS AND IRON AND STEEL WORK INSTALLED UNDER THIS PROJECT. PAINT WITH TWO COATS OF RUST-OLEUM RUST PREVENTATIVE PAINT. FIRST COAT SHALL BE X-60 RED PRIMER AND SECOND COAT SHALL BE SATIN ENAMEL IN COLORS AS SELECTED BY THE ARCHITECT. AT LOCATIONS WHERE IT IS NECESSARY TO CUT AND PATCH EXISTING CONSTRUCTION, PAINTING AT EACH LOCATION SHALL BE PERFORMED UNDER THIS CONTRACT. NEW FINISHES SHALL MATCH EXISTING.</p> <p>EXCAVATION AND BACKFILL:</p> <p>THE CONTRACTOR SHALL DO ALL EXCAVATING REQUIRED FOR THE INSTALLATION OF UNDERGROUND CONDUITS AND WIRING. EXTERIOR UNDERGROUND CONDUITS SHALL BE INSTALLED WITH TOP NOT LESS THAN 2'-6" BELOW FINISHED GRADE LINE. CONDUITS SHALL BE INSTALLED AT DEPTH REQUIRED TO PROPERLY ENTER BUILDING. FURNISH AND INSTALL PLASTIC WARNING SHEETS ABOVE ALL UNDERGROUND ELECTRICAL INSTALLATIONS AS HEREINAFTER SPECIFIED. AFTER THE UNDERGROUND CONDUITS AND CABLE, ETC. ARE INSTALLED AND TESTED, THE CONTRACTOR SHALL BACKFILL ALL EXCAVATIONS WITH SELECTED EARTH PLACED IN LAYERS NOT EXCEEDING 6" IN THICKNESS WITH EACH LAYER THOROUGHLY COMPACTED. ALL BACKFILL SHALL BE CLEAN AND FREE OF ROCKS, STONES OR OTHER DEBRIS. ALL SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, INCLUDING PAVED OR UNPAVED AREAS, STREETS, ROADWAYS AND TURF TO THE SATISFACTION OF THE ARCHITECT. FINAL GRADING, FINISHING, PAVING AND SEEDING OF ALL EXCAVATED AREAS SHALL BE INCLUDED UNDER THIS CONTRACT. ALL BACKFILL IN PAVED PARKING AREAS SHALL BE #2B, OR APPROVED EQUAL, CLEAN, CRUSHED STONE BROUGHT UP TO THE PAVING BASE MUTUAL ELEVATION.</p> <p>CONCRETE WORK:</p> <p>FURNISH AND INSTALL ALL CONCRETE WORK AS SHOWN AND AS REQUIRED. INCLUDE IN THE CONTRACT ALL CONCRETE WORK, SUCH AS THE CONCRETE BASES FOR THE LIGHTING STANDARDS, WOOD POLES AND PIPE BOLLARDS, CONCRETE ENCASEMENT FOR CONDUITS AND ALL OTHER CONCRETE WORK REQUIRED FOR A COMPLETE INSTALLATION AS SHOWN AND HEREIN SPECIFIED. PROPORTIONS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE STANDARD "RECOMMENDED PRACTICE FOR THE DESIGN OF CONCRETE MIXES ACI 211.1." CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. AT THE AGE OF 28 DAYS. AT LEAST ONE STANDARD TEST CYLINDERS SHALL BE TAKEN AND FORWARDED TO AN APPROVED LABORATORY FOR TESTING. METAL REINFORCEMENT SHALL BE DEFORMED STEEL BARS OR COLD-DRAWN STEEL WIRE, OR FABRICATED FORMS OF THESE MATERIALS.</p> <p>IDENTIFICATION:</p> <p>EACH PIECE OF ELECTRICAL EQUIPMENT PROVIDED AS PART OF THIS PROJECT SHALL BE IDENTIFIED BY A MICARTA IDENTIFICATION TAG PERMANENTLY ATTACHED TO THE EQUIPMENT WITH SELF-THREADING STAINLESS STEEL SCREWS AND SHALL INDICATE BY NAME THE EQUIPMENT AND THE CIRCUIT THAT SERVES SUCH EQUIPMENT. LETTERING ON IDENTIFICATION TAGS SHALL BE A MINIMUM OF 1/4" IN HEIGHT.</p> <p>MAINTENANCE AND OPERATING MANUALS:</p> <p>PROVIDE THREE SETS OF "OPERATING AND MAINTENANCE MANUALS, FOR ALL EQUIPMENT SPECIFIED UNDER UNDER THESE SPECIFICATIONS.</p> <p>AS-BUILT DRAWINGS:</p> <p>AS THE WORK PROGRESSES, THE CONTRACTOR SHALL RECORD, IN THE FORM OF MARK-UPS OF THE CONTRACT DRAWINGS, ALL CHANGES AND DEVIATIONS FROM THE ORIGINAL DESIGN OF THE CONTRACT DRAWINGS. IT IS MANDATORY THAT THE FIELD PERSONNEL ON THE JOBSITE RECORD ALL CONSTRUCTION CHANGES, REVISIONS, AND MODIFICATIONS THAT ARE AVAILABLE TO THEM FOR THE LIFE OF THE PROJECT. MEASUREMENTS SHALL INCLUDE ELEVATIONS AND SUFFICIENT OFFSET MEASUREMENTS TO DEFINITELY LOCATE ALL CONDUIT AND OTHER EQUIPMENT INSTALLED OR CONSTRUCTED UNDER THE CONTRACT. FOUR (4) SETS OF MARKED-UP DRAWINGS SHALL BE DELIVERED TO THE ARCHITECT BEFORE FINAL ACCEPTANCE AND APPROVAL.</p> <p>SUBMISSION:</p> <p>IN ADDITION TO THE REQUIREMENTS OF DIVISION 1, THE CONTRACTOR SHALL PROVIDE: PRODUCT DATA AND SHOP DRAWINGS FOR ALL MATERIALS PROPOSED FOR INSTALLATION UNDER THIS CONTRACT; THE PRODUCT DATA AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE SUCH EQUIPMENT IS DELIVERED TO THE SITE. THE CONTRACTOR SHALL SUBMIT SAMPLES AS MAY BE REQUIRED BY THE ARCHITECT OF ANY ARTICLE OR MATERIALS TO BE USED UNDER THIS CONTRACT, WHICH SAMPLES, IF APPROVED, MAY BE USED ON THE WORK AFTER SERVING THEIR PURPOSE AS SAMPLES. IDENTIFY SUBMITTALS WITH THE FOLLOWING INFORMATION PERMANENTLY ADHERED TO OR NOTED ON EACH SEPARATE COMPONENT OF EACH SUBMITTAL AND ALSO NOTED ON THE TRANSMITTAL FORM. MARK EACH COPY OF EACH SUBMITTAL IDENTICALLY, WITH THE FOLLOWING:</p> <ol style="list-style-type: none">PROJECT TITLE AND LOCATION.THE DRAWING NUMBER OR NUMBERS OF THE DRAWING OR DRAWINGS BY WHICH THE PROPOSED EQUIPMENT IS INDICATED.THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE SUPPLIER AND THE ASSOCIATED MANUFACTURER.SUBMITTALS PRESENTED ON SHEETS 8-1/2" BY 14" OR LESS SHALL BE PRESENTED AS PART OF A BOUND VOLUME. <p>RACEWAYS:</p> <p>ALL WIRING SHALL BE INSTALLED WITHIN CONDUIT. CONDUITS INSTALLED BELOW GRADE SHALL BE SCHEDULE 40 PVC. THE CONTRACTOR SHALL MAKE A TRANSITION TO ELECTRICAL METALLIC TUBING OR RIGID STEEL CONDUIT PRIOR TO RISING ABOVE GRADE. ALL ELBOWS INSTALLED IN CONJUNCTION WITH THE SCHEDULE 40 PVC CONDUIT SHALL BE RIGID STEEL CONDUIT FITTINGS AND OF THE LONG SWEEP TYPE. CONDUIT RUNS INDICATED ARE DIAGRAMMATIC. EMT SHALL BE ASSEMBLED WITH COMPRESSION TYPE FITTINGS. CONDUITS SHALL BE INSTALLED PERPENDICULAR AND/OR PARALLEL TO WALLS. CONTRACTOR SHALL FURNISH AND INSTALL ALL FITTINGS, BOXES, ETC. NECESSARY FOR A COMPLETE WIRING SYSTEM. CONDUITS INSTALLED EXPOSED UPON THE BUILDING SHALL BE PAINTED IN A COLOR AS SELECTED BY THE OWNER.</p> <p>WIRING WITHIN THE BUILDING SHALL BE IN RIGID STEEL OR ELECTRIC METALLIC TUBING IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE REQUIREMENTS, EXCEPT AS SPECIFIED OTHERWISE. CONDUIT RUNS INDICATED ARE DIAGRAMMATIC. CONDUITS SHALL BE INSTALLED PERPENDICULAR AND/OR PARALLEL TO WALLS IN A NEAT AND WORKMANLIKE MANNER. CONTRACTOR SHALL FURNISH AND INSTALL ALL FITTINGS, BOXES, HANGERS, AND STRUCTURAL SUPPORTING MEMBERS NECESSARY TO INSTALL THE COMPLETE WIRING SYSTEM. EMT SHALL BE ASSEMBLED WITH COMPRESSION TYPE FITTINGS EFCOR OR APPROVED EQUAL. ALL CONDUITS AND TUBING SHALL BE SECURELY FASTENED IN PLACE WITH GALVANIZED MALLEABLE OR STAMPED STEEL CLAMPS, HANGER RINGS, INSERTS OR OTHER APPROVED SUPPORTS. ALL SUPPORTS SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT. ALL CONDUITS SHALL BE CONCEALED EXCEPT WHERE NOTED OTHERWISE. INSTALL FLEXIBLE CONDUIT AT ALL MOTORS AND VIBRATING EQUIPMENT TO PREVENT TRANSMISSION OF NOISE AND VIBRATION. FOR EXTERIOR CONNECTIONS ARE LIQUIDTIGHT FLEX CONDUIT.</p> <p>FLEXIBLE CONDUIT:</p> <p>SHORT LENGTHS OF GALVANIZED FLEXIBLE CONDUIT (MAXIMUM OF 18" IN LENGTH) SHALL BE USED AT CONNECTIONS TO MOTOR OPERATED EQUIPMENT AND SHORT LENGTHS OF CONCEALED FLEXIBLE CONDUIT (MAXIMUM OF 6'-0" IN LENGTH) MAY BE USED AT FINAL CONNECTIONS TO RECESSED FIXTURES. FLEXIBLE CONDUIT TO EQUIPMENT IN WET LOCATIONS SHALL BE PVC PLASTIC COVERED AND THE INSTALLATIONS SHALL BE MOISTURETIGHT. FLEXIBLE CONDUIT TO EQUIPMENT IN EQUIPMENT ROOMS AND FOOD PREPARATION AREAS, WHERE FLEXIBLE CONDUITS ARE INSTALLED AT LOCATIONS BELOW 5'-0" ABOVE FINISHED FLOORS, SHALL BE PVC PLASTIC COVERED AND THE INSTALLATIONS SHALL BE SUITABLE FOR WET LOCATIONS.</p> <p>PULL AND OUTLET BOXES:</p> <p>FURNISH AND INSTALL METAL PULL BOXES AND OUTLET BOXES WHERE SHOWN AND AS MAY BE REQUIRED TO FACILITATE THE PULLING OF WIRES. BOXES SHALL BE OF GALVANIZED SHEET STEEL OF SUCH DESIGN, CONSTRUCTION AND DIMENSIONS SO AS TO COMPLY WITH THE NEC AND TO BEST ADAPT TO THE RESPECTIVE LOCATION, NUMBER, SIZE, AND ARRANGEMENT OF CONDUIT CONNECTING THERETO, AND SHALL BE PROVIDED WITH SUITABLE COVERS. SECURELY FASTENED TO BOX WITH MACHINE SCREWS. BOXES SHALL BE CONSTRUCTED IN COMPLIANCE WITH NEMA OS 1.</p>

CONDUCTORS:

FEEDER CONDUCTORS SHALL BE ALUMINUM ALLOY, TYPE THHN/THWN COMPLIANT WITH UL STANDARD 83 AND ASTM B800 AND B801. BRANCH CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN EXCEPT WHERE OTHER TYPES ARE REQUIRED BY THE NATIONAL ELECTRICAL CODE - 2017 EDITION. MINIMUM WIRE GAUGE SHALL BE #12 AWG EXCEPT WHERE NOTED OTHERWISE.

METAL-CLAD CABLE (TYPE MC) SHALL NOT BE USED.

PROVIDE COLOR CODING FOR SERVICE, FEEDER, BRANCH, CONTROL, AND SIGNALING CIRCUIT CONDUCTORS. COLOR SHALL BE GREEN FOR GROUNDING CONDUCTORS AND WHITE FOR NEUTRALS. COLOR OF UNGROUNDED CONDUCTORS IN DIFFERENT VOLTAGE SYSTEMS SHALL BE AS FOLLOWS:

<u>120/240 VOLT, 1-PHASE</u> (1) PHASE A BLACK (2) PHASE B RED	<u>120/208 VOLT, 3-PHASE</u> (1) PHASE A BLACK (2) PHASE B RED (3) PHASE C BLUE	<u>277/480 VOLT, 3-PHASE</u> (1) PHASE A BROWN (2) PHASE B ORANGE (3) PHASE C YELLOW
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PANEL BOARDS:

PANEL BOARDS SHALL COMPLY WITH NEMA PB-1 AND UL 61. PANEL BOARDS SHALL BE PROVIDED WITH FULL SIZE PHASE, NEUTRAL AND GROUND BUSES. PANEL BOARDS SHALL BE SUITABLE FOR STANDARD BOLT-ON TYPE CIRCUIT BREAKERS AND ARRANGED FOR VOLTAGE, PHASES AND INTERRUPTING CAPACITIES INDICATED. PANEL BOARDS SHALL BE EQUIPPED WITH TYPE-WRITTEN CIRCUIT DIRECTORIES. FURNISH AND INSTALL UL LISTED LUGS AND CONNECTORS AS REQUIRED SUITABLE FOR THE CONDUCTORS INSTALLED. PANEL BOARD ENCLOSURES SHALL BE NEMA TYPE 1.

MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:

1. EATON CORPORATION

2. GENERAL ELECTRIC COMPANY

3. SIEMENS INDUSTRY, INC. ENERGY MANAGEMENT DIVISION

4. SQUARE D; BY SCHNEIDER ELECTRIC

5. APPROVED EQUAL

PANEL BOARD CIRCUIT BREAKERS:

CIRCUIT BREAKERS SHALL BE STANDARD BOLT ON TYPE. INTERRUPTING RATINGS SHALL EXCEED AVAILABLE RMS FAULT CURRENT AND SHALL BE OF THE SAME MANUFACTURER AS EXISTING PANEL. MULTI-POLE CIRCUIT BREAKERS SHALL HAVE COMMON TYPE ELEMENTS. GROUND FAULT TYPE CIRCUIT BREAKERS SHALL PROVIDE A MINIMUM PROTECTION OF FIVE (5) MILLIAMPS GROUND FAULT PROTECTION AND TRIPPING.

RELAYS:

RELAYS, WHERE INDICTED ON THE DRAWINGS, SHALL BE HEAVY DUTY INDUSTRIAL TYPE RATED AT 600 VAC AND BE EQUIPPED WITH THE REQUIRED NUMBER OF POLES. RELAYS SHALL BE OF A TYPE THAT ALLOWS FOR ADDING CONTACT CARTRIDGES, ADDER DECKS TO INCREASE THE NUMBER OF POLES (MAXIMUM OF 12), MECHANICAL LATCH ATTACHMENT, PNEUMATIC TIME DELAY, OR A SOLID STATE TIMER AS REQUIRED TO ACCOMPLISH THE SPECIFIC CONTROL SEQUENCES. RELAYS SHALL BE ALLEN-BRADLEY CO. BULLETIN NO. 700, OR APPROVED EQUAL, AND SHALL BE INSTALLED IN A NEMA 1 ENCLOSURE.

ELECTRICAL DEVICES

MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY HUBBELL WIRING DEVICES, PASS & SEYMOUR, COOPER WIRING DEVICES, LEVITON, OR EQUAL APPROVED BY ARCHITECT. ALL SUPPLIED WIRING DEVICES SHALL BE BY A SINGLE MANUFACTURER. COMPLY WITH NEMA STANDARD WD 1, "GENERAL PURPOSE WIRING DEVICES." DEVICES SHALL BE IVORY OR BROWN AS SELECTED BY THE ARCHITECT.

RECEPTACLES

RECEPTACLES SHALL BE STRAIGHT-BLADE AND LOCKING TYPE. COMPLY WITH UL STANDARD 498, ANSI C73.12 AND FED. SPEC. W-C-596F. RECEPTACLES SHALL BE NEMA 5-20R, FLUSH WALL WITH GROUND BLADE, HUBBELL CATALOG NO. HBL 5352, P&S CATALOG NO. PS5362, COOPER WIRING DEVICES CATALOG NO. 5352, OR LEVITON CATALOG NO. 5362. RECEPTACLES INDICATED TO BE INSTALLED IN "WET" LOCATIONS, SHALL BE FURNISHED AND INSTALLED WITHIN A CORROSION RESISTANT HEAVY METAL HINGED COVER. PROVIDE HUBBELL CATALOG NOS. HBL 5352 AND 5206 WO, PASS & SEYMOUR CATALOG NOS. PS5362 AND WIUC10SC, COOPER WIRING DEVICES CATALOG NOS. 5352 AND 989, OR LEVITON CATALOG NOS. 5352 AND 4970. COVERPLATE SHALL BE HINGED AND GASKETED WITH A HINGED COVER FOR BOTH RECEPTACLES.

GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLES: UL STANDARD 943, "GROUND FAULT CIRCUIT INTERRUPTERS," FEED-THROUGH TYPE, WITH INTEGRAL NEMA 5-20R DUPLEX RECEPTACLE ARRANGED TO PROTECT CONNECTED DOWNSTREAM RECEPTACLES ON THE SAME CIRCUIT. DESIGN UNITS FOR INSTALLATION IN A 2-3/4-INCH DEEP OUTLET BOX WITHOUT AN ADAPTER. GROUND FAULT INTERRUPTER TYPE RECEPTACLES SHALL BE OF THE TERMINAL OR FEED-THROUGH TYPE AND SHALL BE P. & S. CATALOG NO. 2094, LEVITON CATALOG NO. 8899, OR COOPER WIRING DEVICES CATALOG NO. XGF20. WHERE GFCI RECEPTACLES ARE INSTALLED AT THE IN WET LOCATIONS, PROVIDED WITH A P. & S. CATALOG NO. WIUC10SC, LEVITON CATALOG NO. 4992 COVER, OR COOPER WIRING DEVICES CATALOG NO. 1966 COVER.

WALL PLATES

WALL PLATES: SINGLE AND COMBINATION TYPES THAT MATE AND MATCH WITH CORRESPONDING WIRING DEVICES. FEATURES INCLUDE THE FOLLOWING:

MATERIAL: 0.04-INCH-THICK, TYPE 302, SATIN-FINISHED STAINLESS STEEL, EXCEPT AS OTHERWISE INDICATED.

PLATE-SECURING SCREWS: METAL WITH STAINLESS STEEL HEADS COLORED TO MATCH PLATE FINISH.

WIRING DEVICE INSTALLATION

INSTALL DEVICES AND ASSEMBLIES PLUMB AND SECURE.

INSTALL WALL PLATES WHEN PAINTING IS COMPLETE.

ARRANGEMENT OF DEVICES: EXCEPT AS OTHERWISE INDICATED, MOUNT FLUSH, WITH LONG DIMENSION VERTICAL, AND GROUNDING TERMINAL OF RECEPTACLES ON TOP. GROUP ADJACENT SWITCHES UNDER SINGLE, MULTIGANG WALL PLATES.

PROTECT DEVICES AND ASSEMBLIES DURING PAINTING.

RECEPTACLES INDICATED TO BE LOCATED ON THE ROOF, SUCH OUTLETS SHALL BE HOUSED IN A CAST ALUMINUM WEATHERPROOF BOX WHICH SHALL BE CONDUIT MOUNTED 2'-0" ABOVE THE FINISHED ROOF AND SHALL BE SUPPORTED IN ACCORDANCE WITH ARTICLE 370-23 OF THE NATIONAL ELECTRICAL CODE.

RECEPTACLES INDICATED TO BE INSTALLED IN UNFINISHED AREAS AND NOT LOCATED ALONG WALLS OR PARTITIONS SHALL BE MOUNTED ON CONDUIT EXTENSIONS APPROXIMATELY 6" ABOVE FLOOR.

RECEPTACLES IN SHOP AREAS SHALL BE LOCATED APPROXIMATELY 42" ABOVE THE FINISHED FLOOR, OR AS DIRECTED BY THE ARCHITECT. RECEPTACLES IN AUTOMOTIVE SHOP AREAS SHALL NOT BE LOCATED LESS THAN 24" ABOVE FLOOR.

WIRING DEVICE IDENTIFICATION

COMPLY WITH THE FOLLOWING:

SWITCHES: WHERE 3 OR MORE SWITCHES ARE GANGED, AND ELSEWHERE WHERE INDICATED, IDENTIFY EACH SWITCH WITH APPROVED LEGEND ENGRAVED ON WALL PLATE.

RECEPTACLES: IDENTIFY THE PANELBOARD AND CIRCUIT NUMBER FROM WHICH SERVED. USE MACHINE-PRINTED, DURABLE WIRE MARKERS OR TAGS WITHIN OUTLET BOXES.

WIRING DEVICE FIELD QUALITY CONTROL.

TESTING: TEST WIRING DEVICES FOR PROPER POLARITY AND GROUND CONTINUITY. OPERATE EACH OPERABLE DEVICE AT LEAST 6 TIMES.

SAFETY SWITCHES:

SAFETY SWITCHES SHALL BE OF THE FUSIBLE OR NON-FUSIBLE TYPE AS INDICATED, QUICK-MAKE, QUICK-BREAK IN NEMA TYPE 1 SHEET STEEL ENCLOSURE. SWITCHES SHALL BE HORSEPOWER RATED AND OF SIZE AND NUMBER OF POLES AS INDICATED ON THE DRAWINGS. SAFETY SWITCHES SHALL BE OF TYPE HAVING A DIRECT MECHANICAL LINKAGE BETWEEN CONTACTS AND OPERATING HANDLE. SAFETY SWITCHES SHALL BE THE CUTLER-HAMMER TYPE GF GENERAL DUTY TYPE, GENERAL ELECTRIC, SQUARE D, OR EQUAL AS APPROVED BY THE ARCHITECT. FUSES FOR ALL SWITCHES SHALL BE OF THE UL CLASS RK1 LOW PEAK TYPE AS MANUFACTURED BY THE BUSSMANN MFG. DIVISION OF COOPER INDUSTRIES, OR EQUAL AS APPROVED BY THE ARCHITECT. FUSES FOR MOTORS SHALL BE SIZED TO CONFORM WITH THE MOTOR RUNNING CURRENT AND IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE FUSE MANUFACTURER. WHERE SWITCHES ARE LOCATED AT THE EXTERIOR OF THE BUILDING OR IN WET LOCATIONS, THEY SHALL BE PROVIDED WITH NEMA 3R WEATHERTIGHT ENCLOSURES.

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Sheet Title:
ELECTRICAL SPECIFICATIONS

Project Number: 2022-0204.01

Drawn By: FTR

Checked By: JCS

Date: 12/23/22

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Drawing Number

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