SCOPE OF WORK
THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NEW MATERIALS AS INDICATED ON THE DRAWINGS, AND/OR IN THESE SPECIFICATIONS, AND ALL ITEMS REQUIRED TO MAKE ASSOCIATED PORTION OF THE ELECTRICAL WORK A FINISHED AND WORKING

ALL WORK THAT WILL PRODUCE EXCESSIVE NOISE OR INTERFERENCE WITH NORMAL BUILDING OPERATIONS, AS DETERMINED BY THE OWNER, SHALL BE SCHEDULED WITH THE OWNER. IT MAY BE NECESSARY TO SCHEDULE SUCH WORK DURING UNOCCUPIED HOURS. SCHEDULE OVERTIME HOURS FOR THE FOLLOWING WORK.

CONFORM TO ALL REQUIREMENTS OF THE ILLINOIS COMMUNITY COLLEGE BOARD CODES, LAWS, ORDINANCES, AND OTHER REGULATIONS HAVING JURISDICTION OVER THIS INSTALLATION.

IF THE CONTRACTOR NOTES, AT THE TIME OF BIDDING, THAT ANY PARTS OF THE DRAWINGS OR SPECIFICATIONS DO NOT COMPLY WITH THE CODES OR REGULATIONS, CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING, REQUESTING A

PERMITS AND FEES PROCURE ALL APPLICABLE PERMITS AND LICENSES. ABIDE BY LOCAL AND STATE LAWS, REGULATIONS, AND ORDINANCES. PAY ALL CHARGES FOR PERMITS OR LICENSES. PAY ALL FEES AND TAXES IMPOSED BY STATE, MUNICIPAL, AND OTHER REGULATORY BODIES. PAY ALL CHARGES ARISING OUT OF REQUIRED INSPECTIONS BY AN AUTHORIZED BODY. PAY ALL CHARGES ARISING OUT OF REQUIRED CONTRACT DOCUMENT REVIEWS ASSOCIATED WITH THE PROJECT AND AS INITIATED BY THE OWNER OR AUTHORIZED

WHERE APPLICABLE, ALL FIXTURES, EQUIPMENT AND MATERIALS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES, INC. OR A NATIONALLY RECOGNIZED TESTING ORGANIZATION.

THE DRAWINGS FOR THE ELECTRICAL WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF THE WORK AND TO INDICATE THE GENERAL ARRANGEMENTS AND LOCATIONS OF EQUIPMENT, OUTLETS, ETC., AND THE APPROXIMATE SIZES OF EQUIPMENT. CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF EQUIPMENT AND ROUGH-INS, AND THE EXACT ROUTING OF RACEWAYS SO AS TO BEST FIT THE LAYOUT OF THE JOB. CONDUIT ENTRY POINTS FOR ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO,

NOTED IN THE CONTRACT DOCUMENTS. CONSTRUCTION DRAWINGS FOR THIS PROJECT HAVE BEEN PREPARED UTILIZING REVIT. CONTRACTORS AND SUBCONTRACTORS MAY REQUEST ELECTRONIC MEDIA FILES OF THE CONTRACT DRAWINGS. THE ELECTRONIC CONTRACT DOCUMENTS CAN BE USED FOR PREPARATION OF SHOP DRAWINGS AND AS-BUILT DRAWINGS ONLY. THE INFORMATION MAY NOT BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT.

PANELBOARDS, SWITCHBOARDS, SWITCHGEAR AND UNIT SUBSTATIONS, SHALL BE DETERMINED BY THE CONTRACTOR UNLESS

PROVIDE MINIMUM ONE-YEAR WARRANTY FOR ALL FIXTURES, EQUIPMENT, MATERIALS, AND WORKMANSHIP. REFER TO SUBSECTIONS FOR ADDITIONAL WARRANTY REQUIREMENTS.

MAINTAIN AT THE JOB SITE A SEPARATE AND COMPLETE SET OF ELECTRICAL DRAWINGS AND SPECIFICATIONS WITH ALL CHANGES MADE TO THE SYSTEMS CLEARLY AND PERMANENTLY MARKED IN COMPLETE DETAIL. MARK DRAWINGS TO INDICATE APPROVED SUBSTITUTIONS, CHANGE ORDERS, AND ACTUAL EQUIPMENT AND MATERIALS USED. ALL CHANGE ORDERS, RFI RESPONSES, CLARIFICATIONS, AND OTHER SUPPLEMENTAL INSTRUCTIONS SHALL BE MARKED ON THE DOCUMENTS. RECORD DOCUMENTS THAT MERELY REFERENCE THE EXISTENCE OF THE ABOVE ITEMS ARE NOT ACCEPTABLE. RECORD CHANGES DAILY AND KEEP THE MARKED DRAWINGS AVAILABLE FOR THE ARCHITECT/ENGINEER'S EXAMINATION AT ANY NORMAL WORK TIME.

UPON COMPLETING THE JOB AND BEFORE FINAL PAYMENT IS MADE, PROVIDE REPRODUCIBLE DRAWINGS COMPLETED IN AUTOCAD TO THE ARCHITECT/ENGINEER.

THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS PRIOR TO THE OWNER'S FINAL ACCEPTANCE OF THE PROJECT. CLEAN ALL FOREIGN PAINT, GREASE, OIL, DIRT, LABELS, STICKERS, ETC. FROM ALL EQUIPMENT. REMOVE ALL RUBBISH, DEBRIS, ETC., ACCUMULATED DURING CONSTRUCTION FROM THE PREMISES.

26 05 03 THROUGH PENETRATION FIRESTOPPING

MANUFACTURER: COMPANY SPECIALIZING IN MANUFACTURING PRODUCTS SPECIFIED IN THIS SECTION.

INSTALLER: INDIVIDUALS PERFORMING WORK SHALL BE CERTIFIED BY THE MANUFACTURER OF THE SYSTEM SELECTED FOR INSTALLATION.

PERFORMANCE REQUIREMENTS ROUGH-PENETRATION FIRESTOP SYSTEMS WITH RATINGS DETERMINED PER UL 1479.

PROVIDE AT FIRE-RESISTANCE-RATED WALLS INCLUDING FIRE PARTITIONS, FIRE BARRIERS, AND SMOKE BARRIERS.

PROVIDE AT FIRE-RESISTANCE-RATED HORIZONTAL ASSEMBLIES INCLUDING FLOORS, FLOOR/CEILING ASSEMBLIES, AND CEILING MEMBRANES OF ROOF/CEILING ASSEMBLIES.

FOR FIRESTOP SYSTEMS EXPOSED TO LIGHT. TRAFFIC, MOISTURE, OR PHYSICAL DAMAGE, PROVIDE PRODUCTS THAT, AFTER CURING. DO NOT DETERIORATE WHEN EXPOSED TO THESE CONDITIONS BOTH DURING AND AFTER CONSTRUCTION.

FOR FIRESTOP SYSTEMS EXPOSED TO VIEW, PROVIDE PRODUCTS WITH FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS

THAN 25 AND 450, AS DETERMINED PER ASTM E 84.

FOR FIRESTOP SYSTEMS IN AIR PLENUMS, PROVIDE PRODUCTS WITH FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS THAN 25 AND 50, AS DETERMINED PER ASTM E 84.

WARRANTY SHALL COVER REPAIR OR REPLACEMENT OF FIRESTOP SYSTEMS WHICH FAIL IN JOINT ADHESION, COHESION, ABRASION RESISTANCE, WEATHER RESISTANCE, EXTRUSION RESISTANCE, MIGRATION RESISTANCE, STAIN RESISTANCE, GENERAL DURABILITY, OR APPEAR TO DETERIORATE IN ANY MANNER NOT CLEARLY SPECIFIED BY THE MANUFACTURER AS AN INHERENT QUALITY OF THE MATERIAL.

3M, HILTI, RECTORSEAL METACAULK, TREMCO, JOHNS-MANVILLE, STI, SPEC SEAL, AD, LEGRAND FLAMESTOPPER.

ALL FIRESTOPPING MATERIALS SHALL BE FREE OF ASBESTOS, LEAD, PCB'S, AND OTHER MATERIALS THAT WOULD REQUIRE HAZARDOUS WASTE REMOVAL.

FIRESTOPPING SHALL BE FLEXIBLE TO ALLOW FOR NORMAL PENETRATING ITEM MOVEMENT DUE TO EXPANSION AND CONTRACTION. PROVIDE FIRESTOPPING SYSTEMS CAPABLE OF SUPPORTING FLOOR LOADS WHERE SYSTEMS ARE EXPOSED TO POSSIBLE FLOOR LOADING OR TRAFFIC.

PROVIDE FIRESTOPPING SYSTEMS CLASSIFIED BY UL OR LISTED BY WARNOCK HERSEY FOR PENETRATIONS THROUGH ALL FIRE RATED CONSTRUCTION. FIRESTOPPING SYSTEMS SHALL BE SELECTED FROM THE UL OR LISTED BY WARNOCK HERSEY FIRE

RESISTANCE DIRECTORY CATEGORY XHEZ BASED ON SUBSTRATE CONSTRUCTION AND PENETRATING ITEM SIZE AND MATERIAL

IN EXISTING CONSTRUCTION, PROVIDE FIRESTOPPING OF OPENINGS PRIOR TO AND AFTER INSTALLATION OF PENETRATING ITEMS.

CLEAN EXCESS FILL MATERIALS ADJACENT TO OPENINGS AS WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS THAT ARE APPROVED IN WRITING BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURERS AND THAT DO NOT CAUSE DAMAGE.

ALL PENETRATIONS SHALL BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE TO ENSURE PROPER INSTALLATION. PROVIDE AND INSTALL LABELS ADJACENT TO EACH FIRESTOPPING LOCATION. LABEL SHALL BE PROVIDED BY THE FIRESTOP SYSTEM SUPPLIER AND CONTAIN THE FOLLOWING INFORMATION IN A CONTRASTING COLOR: 1. THE WORDS "WARNING - THROUGH PENETRATION FIRESTOP SYSTEM - DO NOT DISTURB. NOTIFY BUILDING MANAGEMENT OF ANY 2. FIRESTOP SYSTEM SUPPLIER: UL OR LISTED BY INTERTEK / WARNOCK HERSEY SYSTEM NUMBER: DATE INSTALLED: CONTRACTOR

26 05 05 ELECTRICAL DEMOLITION FOR REMODELING

ASSOCIATED STARTERS, CONTROLLERS, RACEWAYS, WIRING, ETC.

THE DRAWINGS ARE INTENDED TO INDICATE THE SCOPE OF WORK REQUIRED AND DO NOT INDICATE EVERY BOX, CONDUIT, OR WIRE THAT MUST BE REMOVED. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND VERIFY EXISTING CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING EQUIPMENT REMOVED BY OTHER TRADES AND REMOVING ALL

VERIFY THAT ABANDONED WIRING AND EQUIPMENT SERVE ONLY ABANDONED EQUIPMENT OR FACILITIES. EXTEND CONDUIT AND WIRE TO FACILITIES AND FOUIPMENT THAT WILL REMAIN IN OPERATION FOLLOWING DEMOLITION. EXTENSION OF CONDUIT AND WIRE

NAME AND PHONE NUMBER; MANUFACTURER'S REPRESENTATIVE NAME, ADDRESS, AND PHONE NUMBER.

TO EQUIPMENT SHALL BE COMPATIBLE WITH THE SURROUNDING AREA. EXTENDED CONDUIT AND CONDUCTORS SHALL MATCH

COORDINATE SCOPE OF WORK WITH ALL OTHER CONTRACTORS AND THE OWNER AT THE PROJECT SITE. SCHEDULE REMOVAL OF EQUIPMENT AND ELECTRICAL SERVICE TO AVOID CONFLICTS.

BID SUBMITTAL SHALL MEAN THE CONTRACTOR HAS VISITED THE PROJECT SITE AND HAS VERIFIED EXISTING CONDITIONS AND SCOPE OF WORK.

PREPARATION

PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS. ASSUME ALL EQUIPMENT AND SYSTEMS MUST REMAIN OPERATIONAL UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.

OBSERVATIONS DURING ALL OUTAGES, REQUIREMENTS AS DICTATED BY CODES, AND OWNER'S INSURANCE CARRIER. SERVICE CHANGEOVER SHALL BE COMPLETED ON AN OVERTIME BASIS.

DISCONNECT AND REMOVE DEVICES THAT ARE TO BE DEMOLISHED. REMOVE CONDUIT, SUPPORTS, AND CONDUCTORS BACK TO SOURCE. BACK BOX AND CONDUIT MOUNTED IN WALLS THAT ARE TO REMAIN CAN BE ABANDONED IN PLACE. PROVIDE APPROPRIATE COVER PLATE FOR ALL ABANDONED BACK BOXES PER WIRING DEVICES SPECIFICATION.

THIS CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCURRED IN REPAIR, RELOCATIONS, OR REPLACEMENT OF ANY CABLES, CONDUITS, OR OTHER SERVICES IF DAMAGED WITHOUT PROPER INVESTIGATION.

CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT THAT REMAIN OR ARE TO BE REUSED.

PROVIDE TYPED PANEL DIRECTORIES SHOWING REVISED CIRCUITING ARRANGEMENTS. CLEAN EXPOSED PANEL SURFACES AND CHECK TIGHTNESS OF ELECTRICAL CONNECTIONS. REPLACE DAMAGED CIRCUIT BREAKERS AND PROVIDE CLOSURE PLATES FOR

FLECTRICAL ITEMS REMOVED REMAIN THE PROPERTY OF THE OWNER CONTRACTOR SHALL PLACE ITEMS RETAINED BY THE OWNER IN A LOCATION COORDINATED WITH THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF MATERIAL THE

26 05 13 WIRE AND CABLE

FEEDERS AND BRANCH CIRCUITS 8 AWG AND LARGER SHALL BE COPPER, STRANDED, 600 VOLT INSULATION, THHN.

FEEDERS AND BRANCH CIRCUITS 10 AWG AND SMALLER: COPPER, SOLID OR STRANDED, 600 VOLT INSULATION, THHN/THWN. NOTED ON THE DRAWINGS. MINIMUM SIZE #12 AWG.

CONDUCTORS TWISTED TOGETHER, SHIELDED, AND COVERED WITH PVC. MINIMUM SIZE #14 AWG. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DERATING AND SIZING CONDUCTORS AND CONDUITS TO EQUAL OR EXCEED THE AMPACITY OF NEC TABLE B.310.15(B)(2)(7), IF METHODS OR MATERIALS OTHER THAN THE BASIS OF DESIGN ARE USED. ALL WIRES IN OUTLET BOXES NOT CONNECTED TO FIXTURES OR OTHER DEVICES SHALL BE ROLLED UP, SPLICED IF CONTINUITY OF

CONTROL CABLE FOR CLASS 1, CLASS 2, AND CLASS 3 CIRCUITS SHALL BE COPPER, 600 VOLT INSULATION, RATED 60°C, INDIVIDUAL

USE SOLDERLESS, TIN-PLATED COPPER LUGS APPLIED WITH CIRCUMFERENTIAL CRIMP FOR COPPER TERMINATIONS #8 AWG AND LARGER. USE INDENTER CRIMP #10 AWG AND SMALLER.

26 05 27 SUPPORTING DEVICES

CIRCUIT IS REQUIRED, AND INSULATED.

APPROVED MANUFACTURERS: ALLIED, COOPER B-LINE, ERICO, HILTI, POWER FASTENERS.

SUPPORT CHANNELS SHALL BE PAINTED STEEL. PROVIDE GALVANIZED STAINLESS STEEL FOR WET/DAMP LOCATIONS. ALL HARDWARE TO BE CORROSION RESISTANT.

ANCHORS AND STRUCTURAL COMPONENTS SUPPORTS SHALL HAVE STRUCTURAL SAFETY FACTOR STRENGTH OF TWICE THE MAXIMUM SEISMIC FORCES TO WHICH THEY WILL BE SUBJECTED. THROUGH BOLTS SHALL COMPLY WITH ASTM A 325. WELDING LUGS SHALL COMPLY WITH MSS-SP-69, TYPE 57. BEAM CLAMPS FOR STRUCTURAL STEEL SHALL BE DOUBLE SIDED.

FASTEN CONCRETE ANCHORS PER THE REQUIREMENTS OF APPENDIX D OF ACI 318-11

FASTEN MASONRY ANCHORS WITH EXPANSION ANCHORS OR SELF-TAPPING MASONRY SCREWS.

DO NOT EXCEED 25 LBS. PER HANGER AND A MINIMUM SPACING OF 2'-0" ON CENTER WHEN ATTACHING TO METAL ROOF DECKING.

26 05 33 CONDUIT AND BOXES

ACCEPTABLE CONDUIT MANUFACTURERS: ALLIED, LTV, STEELDUCT, WHEATLAND TUBE CO, O-Z GEDNEY.

ACCEPTABLE FITTINGS MANUFACTURERS: APPLETON ELECTRIC, O-Z GEDNEY, ELECTROLINE, RACO, BRIDGEPORT, MIDWEST, REGAL, THOMAS & BETTS, CROUSE-HINDS, KILLARK

ELECTRICAL METALLIC TUBING (EMT), MINIMUM 3/4", SHALL BE USED IN FINISHED SPACES FOR ALL BRANCH CIRCUITS, PUMP FEEDERS INTERMEDIATE METALLIC CONDUIT (IMC), MINIMUM 3/4", SHALL BE USED FOR EXPOSED MECHANICAL AND PUMP FEEDERS, RIGID METALLIC CONDUIT (RMC) SHALL BE USED IN WET OR DAMP LOCATIONS,

FLEXIBLE METALLIC CONDUIT (FMC) SHALL BE USED FOR CONNECTIONS TO MOTORS AND LIGHT FIXTURES. LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC) WITH WATERTIGHT FITTINGS SHALL BE USED IN EXTERIOR OR WET/DAMP LOCATIONS. LENGTH OF CONDUIT SHALL NOT EXCEED 6'.

EMT AND IMC CONDUIT FITTINGS SHALL BE COMPRESSION TYPE.

CONDUIT AND CONDUCTOR SIZING SHALL BE COORDINATED TO LIMIT CONDUCTOR FILL TO LESS THAN 40%, MAINTAIN CONDUCTOR AMPERE CAPACITY AS REQUIRED BY THE NATIONAL ELECTRICAL CODE

CONDUIT SHALL NOT CONTAIN MORE FOUR (4) QUARTER BENDS (360°) BETWEEN PULL BOX POINTS. TELECOMMUNICATIONS CONDUITS SHALL HAVE NO MORE THAN TWO (2) 90° BENDS BETWEEN PULL BOX POINTS AND CONTAIN NO CONTINUOUS SECTIONS LONGER THAN

ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS. WHERE CONDUIT PENETRATES FIREWALLS AND FLOORS, SEAL WITH A UL LISTED SEALANT. SEAL INTERIOR OF CONDUIT AT EXTERIOR ENTRIES.

PROVIDE A POLYPROPYLENE PULL CORD WITH 2000 LBS. TENSILE STRENGTH IN EACH EMPTY CONDUIT.

EXPOSED CONDUIT ON EXTERIOR WALLS OR ABOVE ROOF WILL NOT BE ALLOWED.

GALVANIZED STEEL BOXES MAY BE USED IN CONCEALED OR EXPOSED INTERIOR LOCATIONS, ABOVE CEILINGS, AND MIN RECESSED STUDDED PARTITIONS

CAST BOXES SHALL BE USED IN EXTERIOR LOCATIONS, WET LOCATIONS, CONCRETE SLAB ON GRADE.

[ECONN]: ELECTRICAL CONNECTION TO EQUIPMENT AND MOTORS, SIZED PER NEC

26 05 53 ELECTRICAL IDENTIFICATION

COLORED ADHESIVE MARKING TAPE FOR BANDING RACEWAYS, WIRES, AND CABLES: 3 MILS THICK BY 2" WIDTH.

PRETENSIONED FLEXIBLE WRAPAROUND COLORED PLASTIC SLEEVES FOR CABLE IDENTIFICATION.

WIRE/CABLE DESIGNATION TAPE MARKERS: VINYL OR VINYL-CLOTH, SELF-ADHESIVE, WRAPAROUND, WITH PREPRINTED NUMBERS

CABLE TIES: NYLON, 0.18" WIDTH, 50-LB MINIMUM TENSILE STRENGTH.

ALUMINUM, WRAPAROUND MARKER BANDS: 1" WIDTH, 0.014 INCH THICK ALUMINUM BANDS WITH STAMPED OR EMBOSSED LEGEND, AND FITTED WITH SLOTS OR EARS FOR PERMANENTLY SECURING AROUND WIRE OR CABLE JACKET OR AROUND GROUPS OF

ENGRAVED. PLASTIC-LAMINATED LABELS. SIGNS AND INSTRUCTION PLATES: BLACK LETTERS ON WHITE FACE FOR NORMAL POWER WHITE LETTERS ON RED FACE FOR EMERGENCY POWER WHITE LETTERS ON GREEN FACE FOR GROUNDING SAFETY SIGNS: COMPLY WITH 29 CFR, CHAPTER XVII, PART 1910.145.

JUNCTION, PULL AND CONNECTION BOXES: PERMANENT MARKER.

APPLY DESIGNATION LABELS OF ENGRAVED PLASTIC LAMINATE FOR PUSHBUTTONS, PILOT LIGHTS, ALARM/SIGNAL COMPONENTS, AND SIMILAR ITEMS. EXCEPT WHERE LABELING IS SPECIFIED ELSEWHERE.

CONDUIT IDENTIFICATION: SELF-ADHESIVE VINYL LABELS PERMANENT MARKER AT 10 20 FOOT INTERVALS TO IDENTIFY ALL CONDUITS EXPOSED OR LOCATED ABOVE ACCESSIBLE CEILINGS. MATCH EXISTING CONDUIT AND JUNCTION BOX COLOR CODING.

WHERE CONDUIT LEAVES A SWITCHBOARD OR PANELBOARD, IDENTIFY EACH CONDUIT INDICATING LOAD SERVED.

CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

B PHASE - RED PHASE - BLUE

NEUTRAL - WHITE GROUND BOND - GREEN

EXISTING PANELBOARDS SHALL HAVE THEIR EXISTING PANEL SCHEDULES TYPED, WITH ALL CIRCUIT CHANGES, ADDITIONS, OR DELETIONS ALSO TYPED ON THE PANEL SCHEDULES. HANDWRITTEN MARKINGS SHALL NOT BE ACCEPTABLE.

26 28 16 DISCONNECT SWITCHES

SUBMIT SHOP DRAWINGS INCLUDING PRODUCT DATA, DIMENSIONS, WEIGHTS, PERFORMANCE, RATINGS, ENCLOSURE TYPE, CURRENT, VOLTAGE, AND SHORT-CIRCUIT RATINGS.

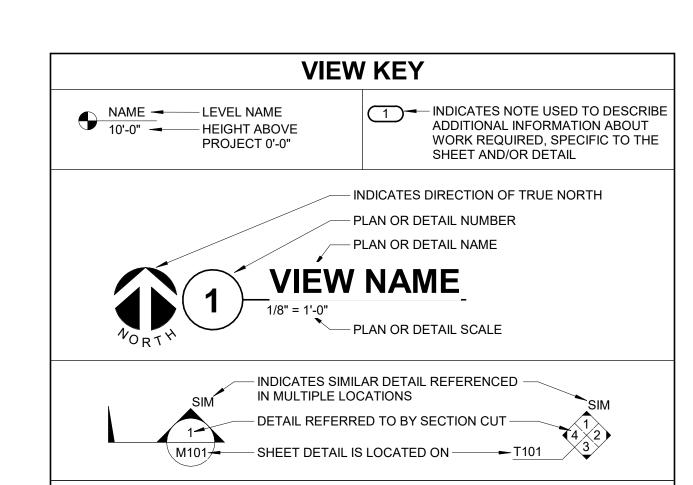
REFER TO DISCONNECT SCHEDULE ON DRAWINGS FOR ADDITIONAL INFORMATION.

ACCEPTABLE MANUFACTURERS: SQUARE D 3110 SERIES, EATON DH SERIES, ABB TH SERIES, SIEMENS HNF / HF SERIES

[DS-#]: NON-FUSIBLE SWITCH ASSEMBLIES, HEAVY DUTY TYPE, QUICK-MAKE, QUICK-BREAK, LOAD INTERRUPTER ENCLOSED KNIFE SWITCH, HANDLE LOCKABLE IN OFF POSITION.

ACCEPTABLE MANUFACTURERS: SQUARE D 2500 SERIES, EATON MS SERIES, SIEMENS MMS SERIES, ABB

[MX-#]: MANUAL SWITCH: NEMA ICS 2; AC GENERAL-PURPOSE CLASS A MANUALLY OPERATED, FULL-VOLTAGE CONTROLLER FOR FRACTIONAL HORSEPOWER INDUCTION MOTORS, WITHOUT THERMAL OVERLOAD UNIT, AND TOGGLE OPERATOR. ENCLOSURE: NEMA ICS 6; TYPE 1.



LINE TYPE AND TAG KEY:

S-SEP-1

NEW WORK BY THIS CONTRACTOR (WIDE LINE)

---- EXISTING TO BE REMOVED (SHORT DASHED PATTERN)

EXISTING TO REMAIN OR WORK BY OTHERS (NARROW LINE)

HALFTONING DOES NOT MODIFY SCOPE. **ELECTRICAL SYMBOL LIST** SYMBOL: TAG: **DESCRIPTION: SECTION** 26 05 33 ELECTRICAL CONNECTION MANUAL SWITCH. REFER TO DISC/STA 26 28 16 <u>MX-#</u>

DISCONNECT. REFER TO DISC/STA SCHEDULE

26 28 16

---- EXISTING TO BE REMOVED BY OTHERS (SHORT DASHED PATTERN)

	CONTRACTOR ABBREVIATION KEY	
ABBR:	DESCRIPTION:	
E.C.	ELECTRICAL CONTRACTOR	

ELECTRICAL ABBREVIATION KEY	
ABBR:	DESCRIPTION:
C TYP	CONDUIT TYPICAL
UNO	UNLESS NOTED OTHERWISE

30 A

208 V

208 V

ELECTRICAL GENERAL NOTES:

1. ##-### INDICATES ELECTRICAL EQUIPMENT DEFINED IN ELECTRICAL SCHEDULES OR SPECIFICATION. REFER TO DRAWINGS CONTAINING ELECTRICAL SCHEDULES. PERMANENT NAMEPLATE SHALL MATCH FINAL EQUIPMENT NOMENCLATURE, NOT ELECTRICAL EQUIPMENT TAG NAME, REFER TO SPECIFICATIONS.

DEVICE KEY:

DEVICE (E) #-# = PANEL NAME - CIRCUIT NUMBER

ELECTRICAL INSTALLATION NOTES:

1. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.

ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO 26 05 03 FOR ADDITIONAL INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.

4. ELECTRICAL INDENTIFICATION. REFER TO SPECIFICATION SECTION 26 05 53 FOR COLOR/LABEL REQUIREMENTS FOR CONDUIT, BOX, CABLE/WIRE, AND EQUIPMENT.

ELECTRICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL ELECTRICAL SHEETS AND TRADES.

EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.

NOT ALL EXISTING EQUIPMENT AND CONDUIT ARE SHOWN. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS WITH NEW WORK BEFORE

3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR CONDUITS BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.

4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS/HER WORK AND SHALL NOTIFY THE ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS/HER

5. WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

6. THE CONTRACTOR IS RESPONSIBLE FOR CUTTING, REMOVAL AND PATCHING OF ROOFS, WALLS, AND FLOORS ASSOCIATED WITH WORK.

ELECTRICAL SHEET INDEX

ELECTRICAL COVERSHEET SUB-VAULT D PLAN - ELECTRICAL

GRAND TOTAL: 2

NEMA 1

NEMA 1

DISCONNECT AND STARTER SCHEDULE NOTE: ALL DISCONNECTS (EXCEPT MANUAL STARTERS) SHALL BE HEAVY DUTY TYPE. **DISCONNECT TYPE: ACCESSORIES & OPTIONS** SA - STANDARD ACCESSORIES (INCLUDES * ITEMS) FU - FUSED PF - PHASE LOSS PROTECTION (5 HP OR GREATER, 3 PHASE MOTOR) NF - NON-FUSED *CT - CONTROL TRANSFORMER, FUSED 120V TO - MELTING THERMAL OVERLOADS (1 PHASE) CB - CIRCUIT BREAKER *EO - ELECTRONIC OVERLOAD (3 PHASE MOTORS) TS - 2 SPEED SELECTOR SWITCH IN DOOR *HA - HAND-OFF-AUTO IN DOOR GP - GREEN (OFF) PILOT LIGHT IN DOOR STARTER TYPE: *RP - RED (RUN) PILOT LIGHT IN DOOR FA - 4-CONVERTIBLE AUXILIARY CONTACTS FV - FULL VOLTAGE *TA - TWO CONVERTIBLE AUXILIARY CONTACTS EI - ELECTRICAL INTERLOCK (2)-N.O. & (2)-N.C YD - WYE - DELTA S/N - INSULATED NEUTRAL ASSEMBLY SS - START-STOP PUSHBUTTON IN DOOR RE - REVERSING HL - HANDLE PADLOCK HASP TW - 2 SPEED, 2 WINDING SW - 2 SPEED, 1 WINDING RV - REDUCED VOLTAGE AUTOXFMR SS - SOLID STATE MS - MANUAL STARTER MX - MANUAL SWITCH FS - FUSED SWITCH AMS-ASSEMBLED MOTOR STARTER **DISCONNECT TYPE &** RATING REQUIRED **ACCESSORIES &** ITEM TYPE RATING RATING VOLTAGE POLES SIZE TYPE ENCLOSURE OPTIONS **COMMENTS** MX NEMA 1 120 V

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JOLIET JUNIOR COLLEGE SUB-VAULT D -PLUMBING REVISIONS

PROFESSIONAL SEAL CONSULTANT KEY PLAN

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Revision / Issue

AGENCY APPROVAL

SHEET INFORMATION ISSUED FOR BID/CONSTRUCTION 23001895.00

ELECTRICAL COVERSHEET

SCALE As indicated

SHEET NUMBER

SHEET NOTES:

REFER TO SHEET E000 FOR GENERAL ELECTRICAL NOTES, ELECTRICAL INSTALLATION NOTES, ELECTRICAL RENOVATION NOTES, ELECTRICAL SPECIFICATION NOTES.

KEYNOTES:

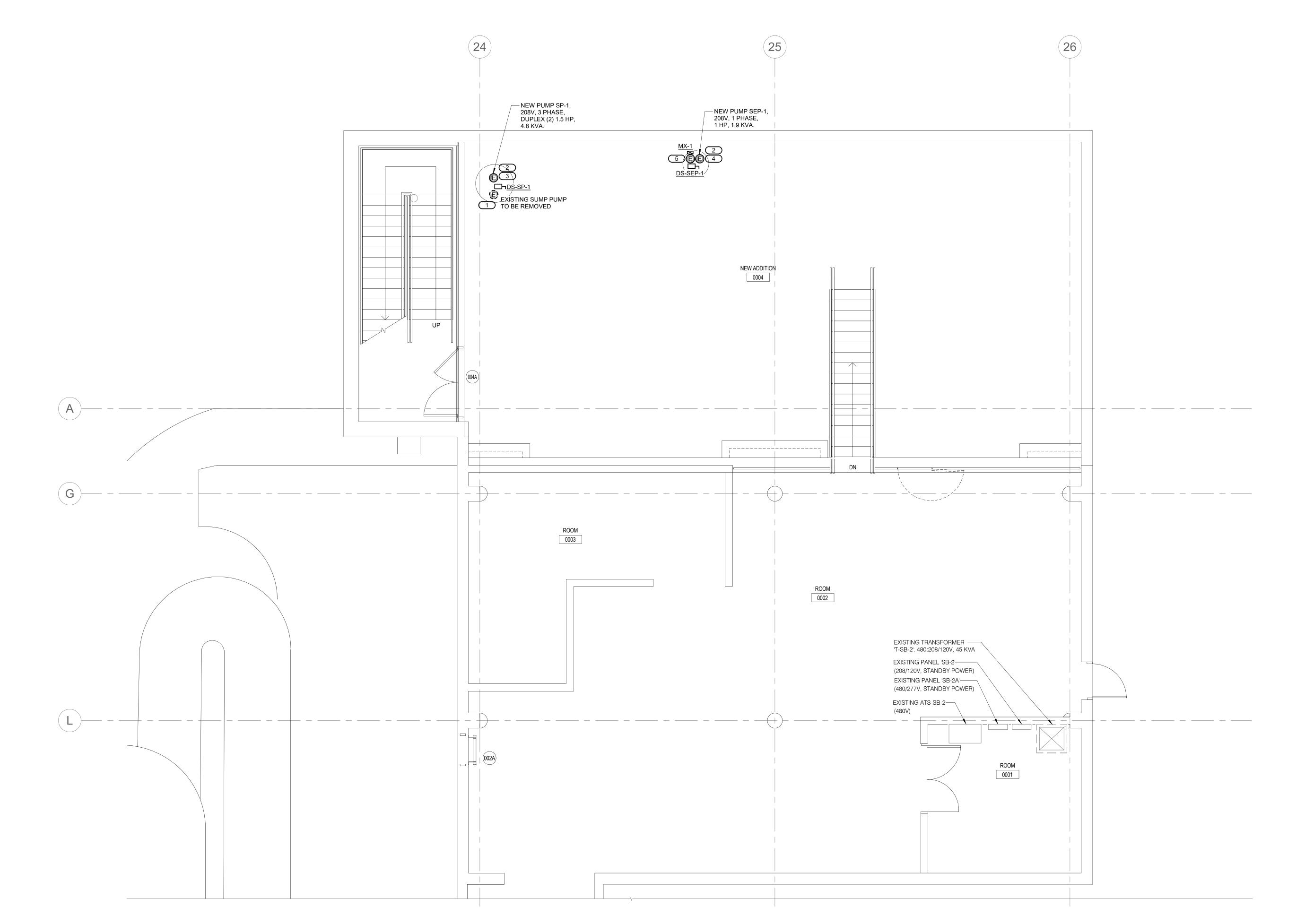
1. REMOVE CONDUIT AND WIRING FOR ONE 208V, SINGLE PHASE CIRCUIT BACK TO EXISTING PANEL 'SB-2'. ONE EXISTING 208V, 20A SINGLE PHASE CIRCUIT TO REMAIN. CIRCUIT TO BE USED FOR NEW SEP-1 PUMP. REFER TO KEYNOTE 4. REMOVE CONTROL PANEL AND ASSOCIATED CABLES BETWEEN CONTROL PANEL AND PUMPS. THE 120V, 20A CIRUIT FOR CONTROLS TO REMAIN. CIRCUITS TO BE INTERCEPTED AND USED FOR NEW SEP-1 HIGH WATER ALARM PANEL. REFER TO KEYNOTE 5.

2. CONNECT TO MANUFACTURER PROVIDED CONTROL PANEL. ROUTE CABLES FROM CONTROL PANEL TO THE PUMPS.

3. ROUTE BRANCH CIRCUIT (3#12 & 1#12 GND IN 3/4" C.) TO EXISTING PANEL 'SB-2'. PROVIDE NEW 20A/3P, 208V CIRCUIT BREAKER. PROVIDE ALL REQUIRED HARDWARE AND ACCESSORIES TO MAKE COMPLETE AND FUNCTIONAL SYSTEM. NEW CIRCUIT BREAKER SHALL MATCH EXISTING TYPE AND RATING.

INTERCEPT EXISTING 208V SINGLE PHASE, 20A CIRCUIT AND EXTEND TO NEW SEP-1 PUMP. MATCH CONDUIT AND WIRING MINIMUM (2#12 & 1#12 GND IN 3/4" C.)

5. INTERCEPT EXISTING 120V, 20A CIRCUIT AND EXTEND TO NEW PUMP HIGH WATER ALARM PANEL. MATCH EXISTING CONDUIT AND WIRING MINIMUM (2#12 & 1#12 GND IN 3/4" C.)



SUB-VAULT D PLAN - ELECTRICAL

1/4" = 1'-0"

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JOLIET JUNIOR COLLEGE SUB-VAULT D -

PROFESSIONAL SEAL

CONSULTANT

PLUMBING REVISIONS
1215 Houbolt Rd
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KEY PLAN

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Illinois Design Firm Registration #184.007637-0014

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REF. SCALE IN INCHES PROJECT #23001895.00

o. Date Revision / Issue

 SHEET INFORMATION

 Issue
 ISSUED FOR BID/CONSTRUCTION

 Date
 5/19/2023

 Project #
 23001895.00

 Drawn
 TB

 Checked
 JML

 Approved
 JML

SUB-VAULT D PLAN - ELECTRICAL

Scale: 1/4" = 1'-0"

E101