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Digitally Signed 11/18/2019

REV.	DATE	DESCRIPTION



CITY OF WICHITA  
 WICHITA, KANSAS  
 Consolidation of Lift Stations  
 Near 151st St. & W. Kellogg

**ELECTRICAL POWER PLAN**

JOB NO.: 17264967  
 DATE: NOV. 2019  
 DESIGNED BY: SAH  
 DRAWN BY: SAH

BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER  
**E3**

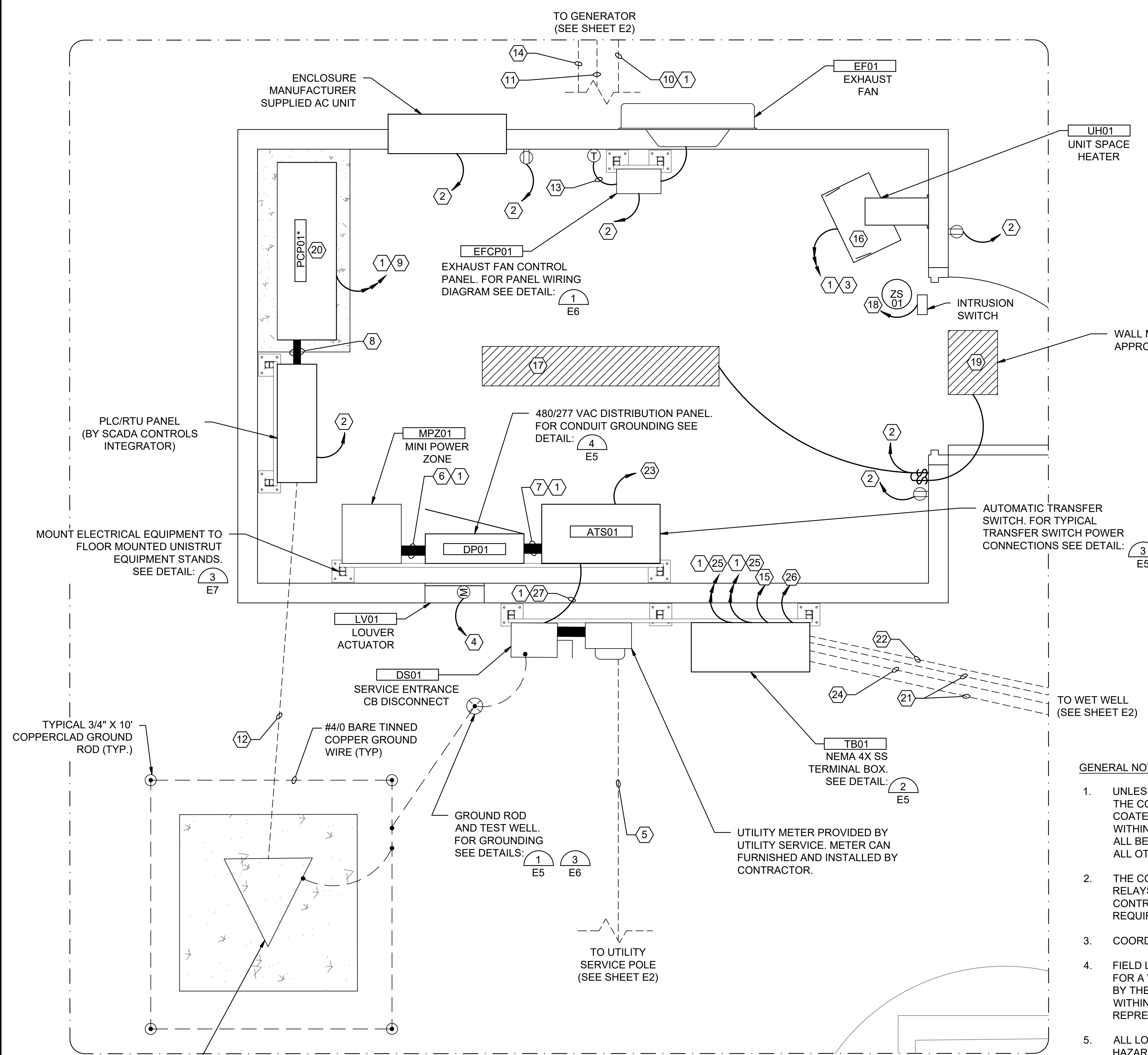
SHEET NUMBER **16 OF 36**

**KEY NOTES:**

- 1 SEE ONLINE ON SHEET E1 FOR CONDUIT AND CONDUCTOR SIZING.
- 2 (2-#12, #12 GND) 3/4"C, 120VAC. FROM MPZ01.
- 3 (3-#12, #12 GND) 3/4"C, 480VAC. FROM DP01.
- 4 (2-#14, #14 GND) 3/4"C, 120VAC. FROM EF01 FOR LOUVER ACTUATOR.
- 5 (4-#2) 2"C, 480VAC. FROM UTILITY TRANSFORMER.
- 6 480VAC POWER FROM DP01 TO MPZ01.
- 7 480VAC POWER FROM AT01 TO DP01.
- 8 (10-#14, 2-STP, #14 GND, 10-#14 SPARE) 2"C, I/O SIGNAL.
- 9 480VAC POWER FROM DP01 TO PUMP CONTROL PANEL PCP01.
- 10 FROM GENSET G01 TO AUTOMATIC TRANSFER SWITCH AT01.
- 11 (12-#14, #14 GND) 1" C, CONTROL. FROM AUTOMATIC TRANSFER SWITCH AT01 TO GENSET G01.
- 12 (RF CABLE) 2" C, SIGNAL. FROM ANTENNA TO PLC/RTU CONTROL PANEL.
- 13 PROVIDE CONDUIT AND CABLE AS REQUIRED BY THERMOSTAT MANUFACTURERS. MAKE ALL REQUIRED CONNECTIONS.
- 14 (4-#12, #12 GND) 1"C, 120VAC. FROM MPZ01 TO GENSET G01 FOR BATTERY CHARGER AND BLOCK HEATER.
- 15 (2-3 CONDUCTOR SHIELDED CABLE) 1"C, LEVEL TRANSDUCER SIGNAL TO PUMP CONTROL PANEL PCPC01.
- 16 UNIT SPACE HEATER. INSTALL ACCORDING TO MANUFACTURER'S INSTALLATION TIONS. MAKE ALL REQUIRED CONNECTIONS.
- 17 WALL MOUNT APPROXIMATELY 7'-3" A.F.F. MOUNT LITHONIA FEM-L48-4000LM-IMAFL-MD-120-GZ10-40K-80CRI-BSL520 LIGHT FIXTURE WITH EMERGENCY BATTERY BACKUP. COORDINATE FINISH WITH OWNER.
- 18 (2-#14, #14 GND) 3/4" C, SIGNAL. FROM INTRUSION ENTRY SWITCH TO PLC/RTU CONTROL PANEL.
- 19 LITHONIA DSXW1LED-10C-700-40K-T3M-MVOLT WITH EMERGENCY BATTERY BACKUP. COORDINATE FINISH WITH OWNER.
- 20 PUMP CONTROL PANEL PCP01 PROVIDED AS PART OF EQUIPMENT PACKAGE. SEE SPECIFICATIONS FOR PUMP STATION CONTROL PANEL DETAILS. MAKE ALL CONNECTIONS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 21 (MANUFACTURER'S SUPPLIED PUMP CORDS) 2" C, 480 VAC, FROM WET WELL THROUGH VENTRIB TROUGH TO JUNCTION BOX TB01.
- 22 (MANUFACTURER SUPPLIED CABLE) 2"C, SIGNAL. FROM LEVEL TRANSDUCER LE01 TO JUNCTION BOX TB01.
- 23 (6-#14, #14 GND, 6-#14 SPARE) 1"C, I/O SIGNAL. TO PLC/RTU PANEL.
- 24 (MANUFACTURER'S SUPPLIED CABLES) 2" C, SIGNAL. FROM FLOAT SWITCHES LS01/02/03/04/05 AT WETWELL TO TB01.
- 25 480VAC POWER FOR PUMP FROM PUMP CONTROL PANEL.
- 26 (8-#14, 2-STP, #14 GND) 1"C, FLOAT SWITCHES, PUMP SEAL, AND OVERTEMP SIGNALS TO PUMP CONTROL PANEL.
- 27 480VAC POWER FROM DISCONNECT SWITCH DS01 TO AUTOMATIC TRANSFER SWITCH AT01.

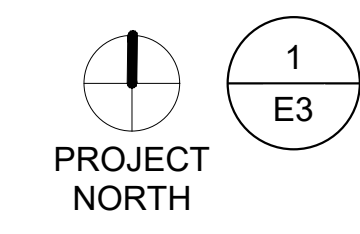
**GENERAL NOTES:**

1. UNLESS OTHERWISE NOTED, ALL CONDUIT AND PORTIONS OF THE CONDUIT SYSTEM SHALL BE SURFACE MOUNTED AND THE CONDUIT SYSTEM WITHIN THE UTILITY SHELTER SHALL BE GALVANIZED RIGID STEEL, ALL OTHERS SHALL BE PVC COATED RIGID STEEL. ALL BOXES, SUPPORTS, HANGERS, UNISTRUT AND ALL OTHER PORTIONS OF THE CONDUIT SYSTEM WITHIN THE UTILITY SHELTER SHALL BE GALVANIZED STEEL, ALL OTHERS SHALL BE PVC COATED OR STAINLESS STEEL. ALL BELOW GRADE CONDUIT FROM THE WET WELL TO THE ELECTRICAL ENCLOSURE SHALL BE PVC COATED RIGID STEEL, ALL OTHERS SHALL BE SCHEDULE 40 PVC WITH GALVANIZED ELBOWS.
2. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, WIRING, TERMINATIONS, DISCONNECTS, CONTROL RELAYS, CONTROL ENCLOSURES AND OTHER ITEMS AS NECESSARY FOR COMPLETE AND FUNCTIONAL LIFT STATION. THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS AND OTHER SECTIONS OF THE PLANS FOR ITEMS AS MAY BE REQUIRED.
3. COORDINATE ALL CONDUIT ROUTING WITH ENGINEER PRIOR TO INSTALLATION.
4. FIELD LOCATE FINAL LOCATIONS OF ALL DIRECT BURIED CONDUITS AND PULLBOXES. PROVIDE PULLBOXES AS REQUIRED FOR A WORKABLE INSTALLATION. ALL PULLBOXES SHALL BE APPROPRIATELY SIZED BY THE CONTRACTOR AS REQUIRED BY THE NUMBER OF CONDUITS IN THE DUCT BANK FOR A WORKABLE INSTALLATION WITH MINIMUM SIZES AS INDICATED WITHIN THE DETAILS. COORDINATE ALL WORK WITH APPLICABLE UTILITY COMPANIES, MATERIAL SUPPLIERS, AND OWNER REPRESENTATIVES.
5. ALL LOCATIONS WITHIN THE WET WELL AS INDICATED ON THIS PLAN SHEET SHALL BE CONSIDERED A CLASS 1, DIVISION 2 HAZARDOUS LOCATION AS DEFINED IN ACCORDANCE WITH NFPA 820.
6. CONTRACTOR SHALL STRICTLY ADHERE TO THE REQUIREMENTS IN NFPA 70, ARTICLE 500, HAZARDOUS (CLASSIFIED) LOCATIONS FOR ALL AREAS REFERENCED IN THE NOTE ABOVE. THIS INCLUDES PROVIDING APPROPRIATE SEAL FITTINGS ON CONDUITS AND CABLES ALONG WITH PROVIDING EXPLOSION PROOF EQUIPMENT, RATED FOR THE CLASSIFICATION REFERENCED ABOVE, WITHIN THE HAZARDOUS AREA IF LOCATED IN THE HAZARDOUS AREA.
7. USE CRIMPED OR BOLTED CONNECTIONS FOR ALL CONNECTIONS BETWEEN CONDUCTORS AND ENCLOSURE SYSTEM COMPONENTS. USE EXOTHERMIC WELDED CONNECTIONS FOR ALL UNDERGROUND PORTIONS OF THE SYSTEM WITH THE EXCEPTION OF GROUND ROD TEST WELLS.



**KELLOGG LIFT STATION POWER PLAN**

SCALE: 1" = 1'-0"



File: L:\2017\17264967 - LS 53 Replacement No. 1\Drawings\KLP-E3.dwg Last Save: 11/16/2019 9:42 AM Last saved by: SAHalsey  
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