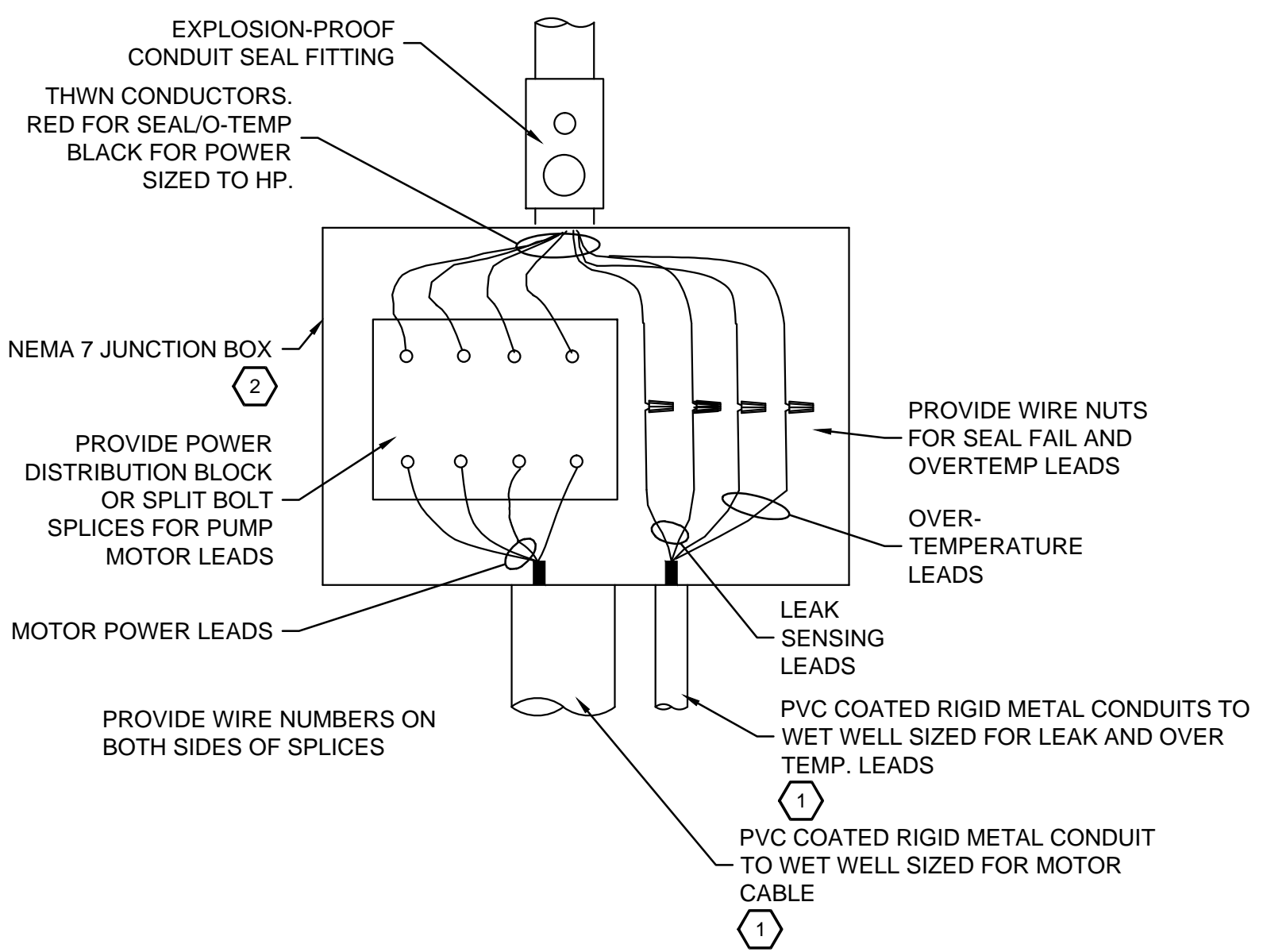
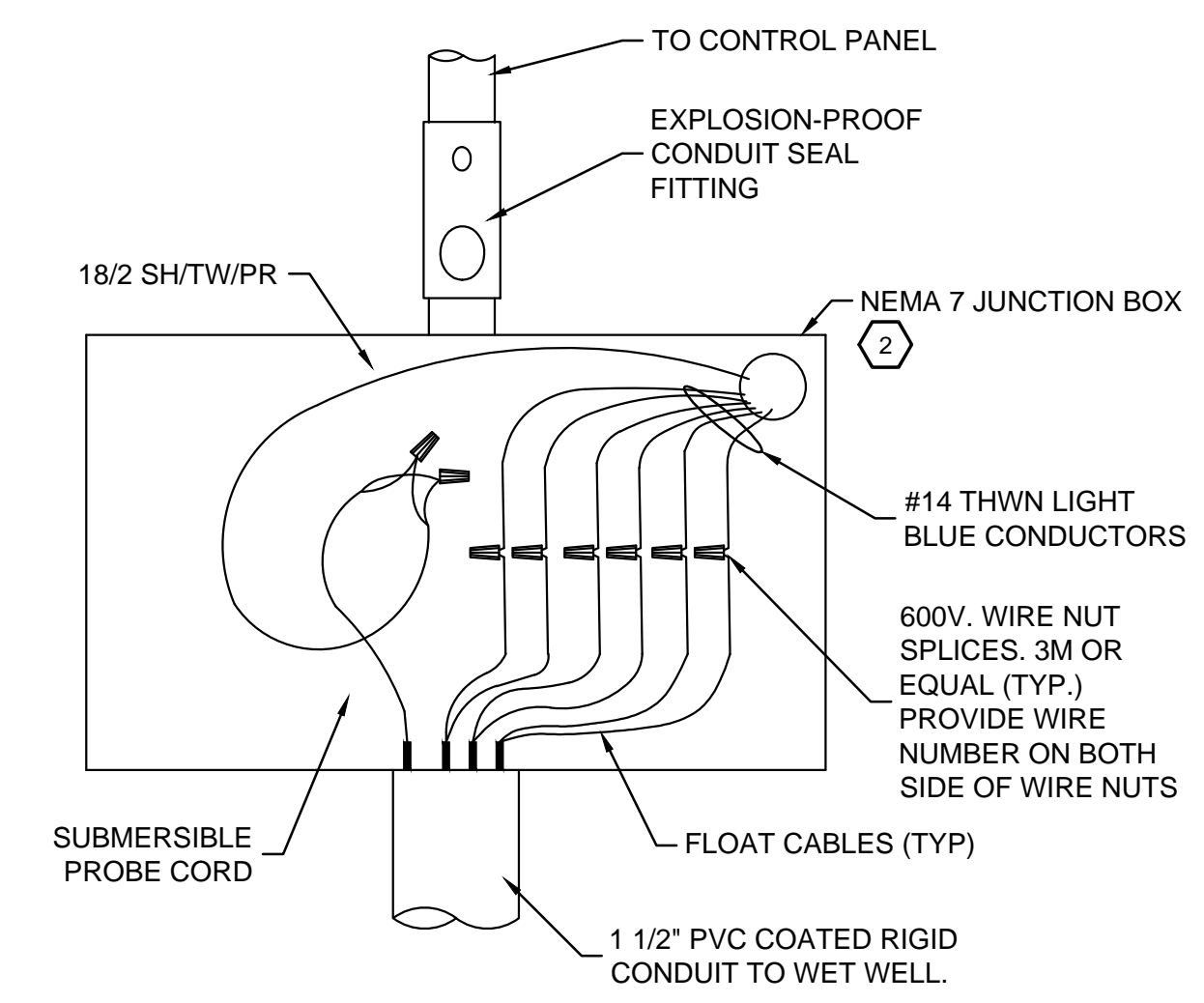


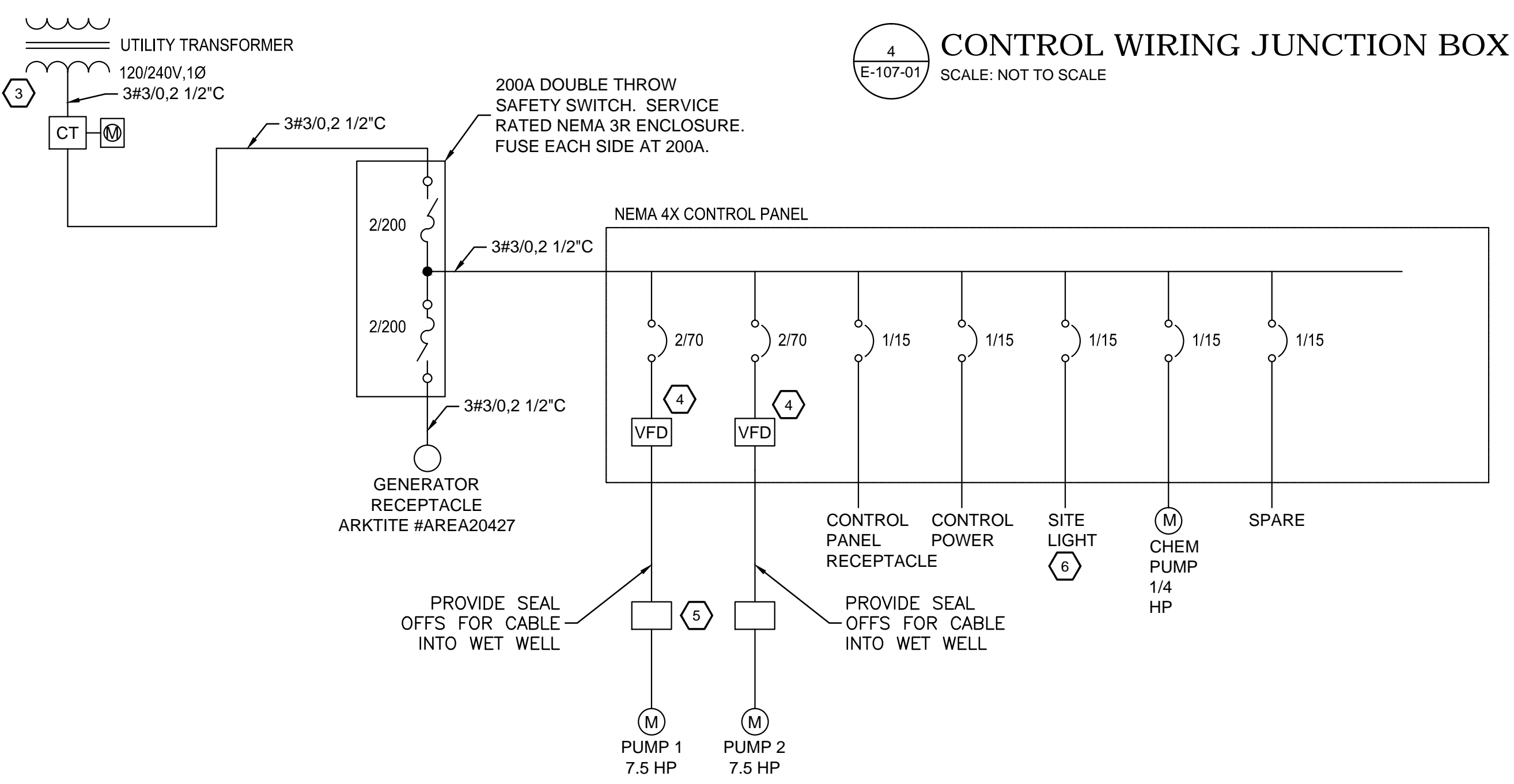
9/26/2014 12:42 PM G:\CITY UTILITIES\WATER RESOURCES\SHARED CAD FILES\STANDARDS & MANUALS\CADD STANDARDS & MANUALS\CADD SHEET DRAWINGS\EXHIBIT CADD5-17 - ELECTRICAL.DWG



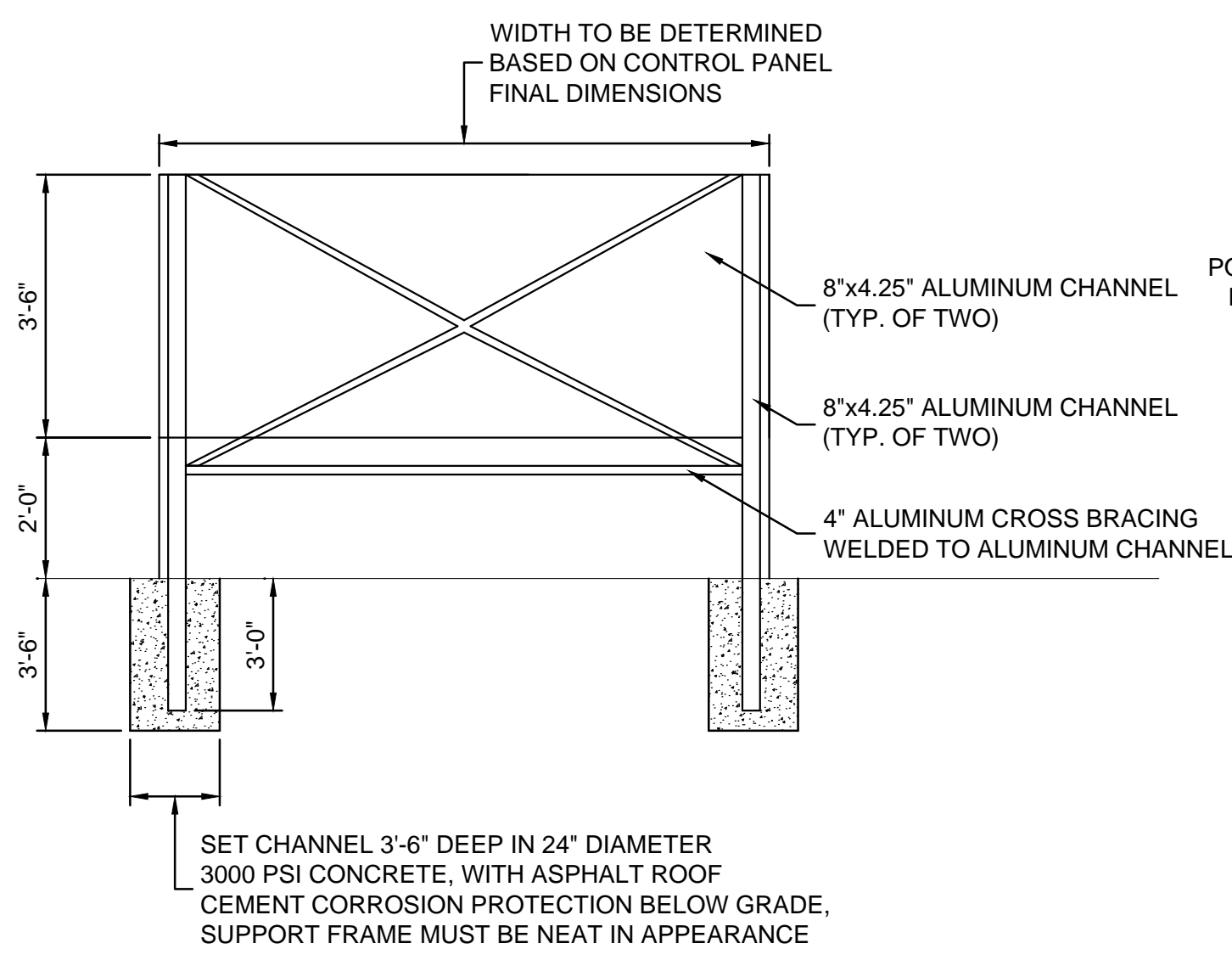
5 MOTOR LEAD JUNCTION BOX
E-107-01 SCALE: NOT TO SCALE



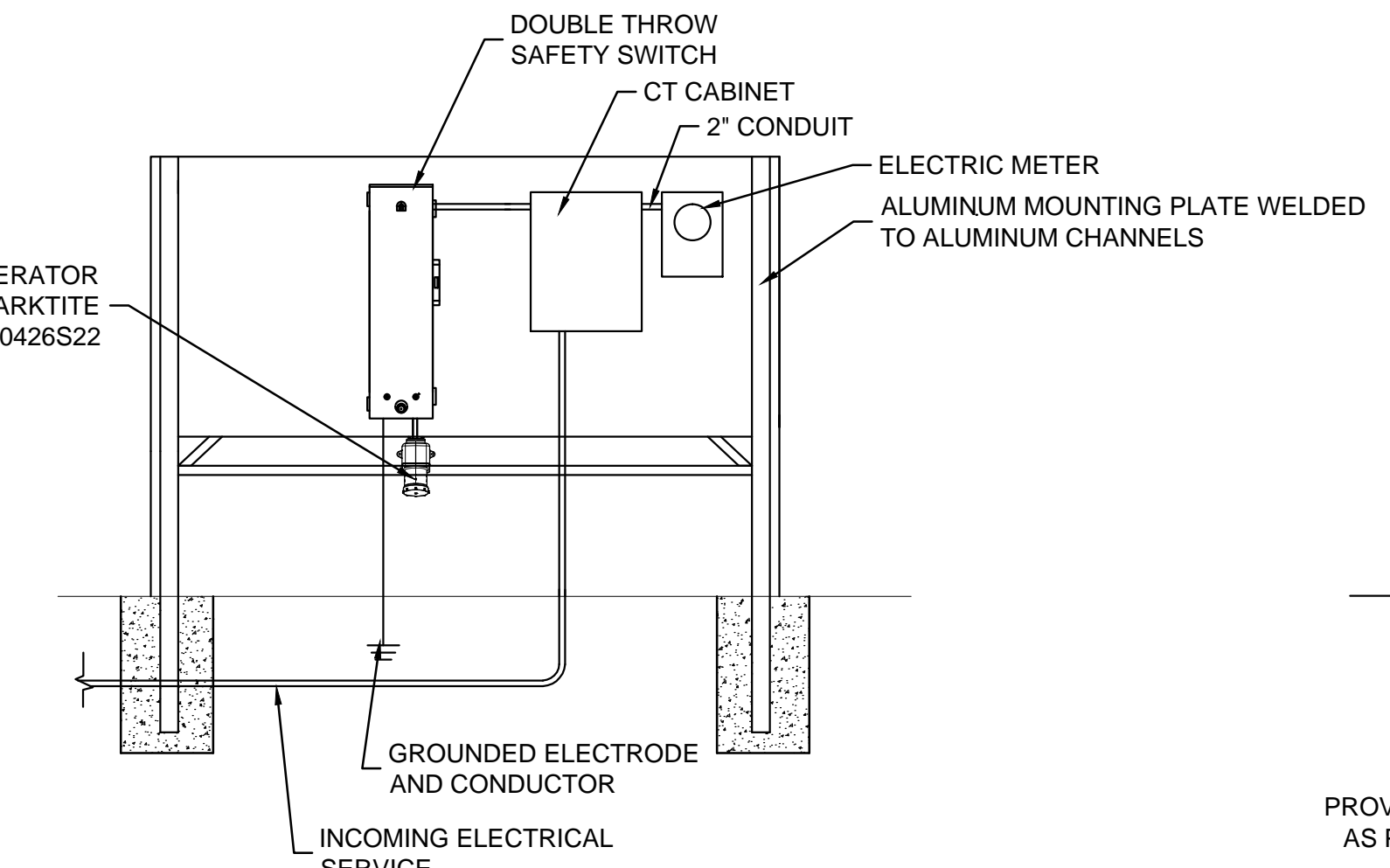
4 CONTROL WIRING JUNCTION BOX
E-107-01 SCALE: NOT TO SCALE



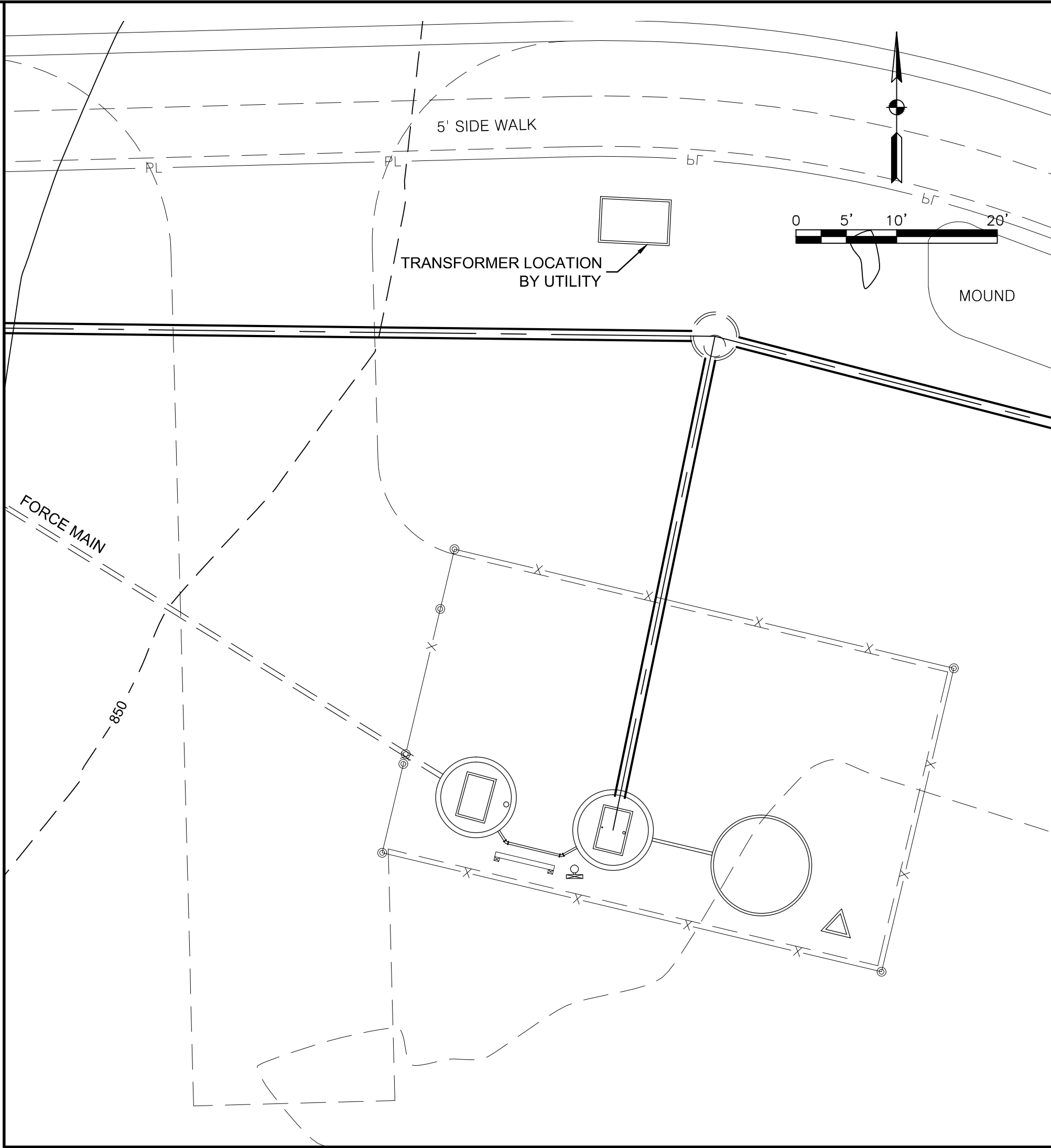
3 SINGLE LINE DIAGRAM
E-107-01 SCALE: NOT TO SCALE



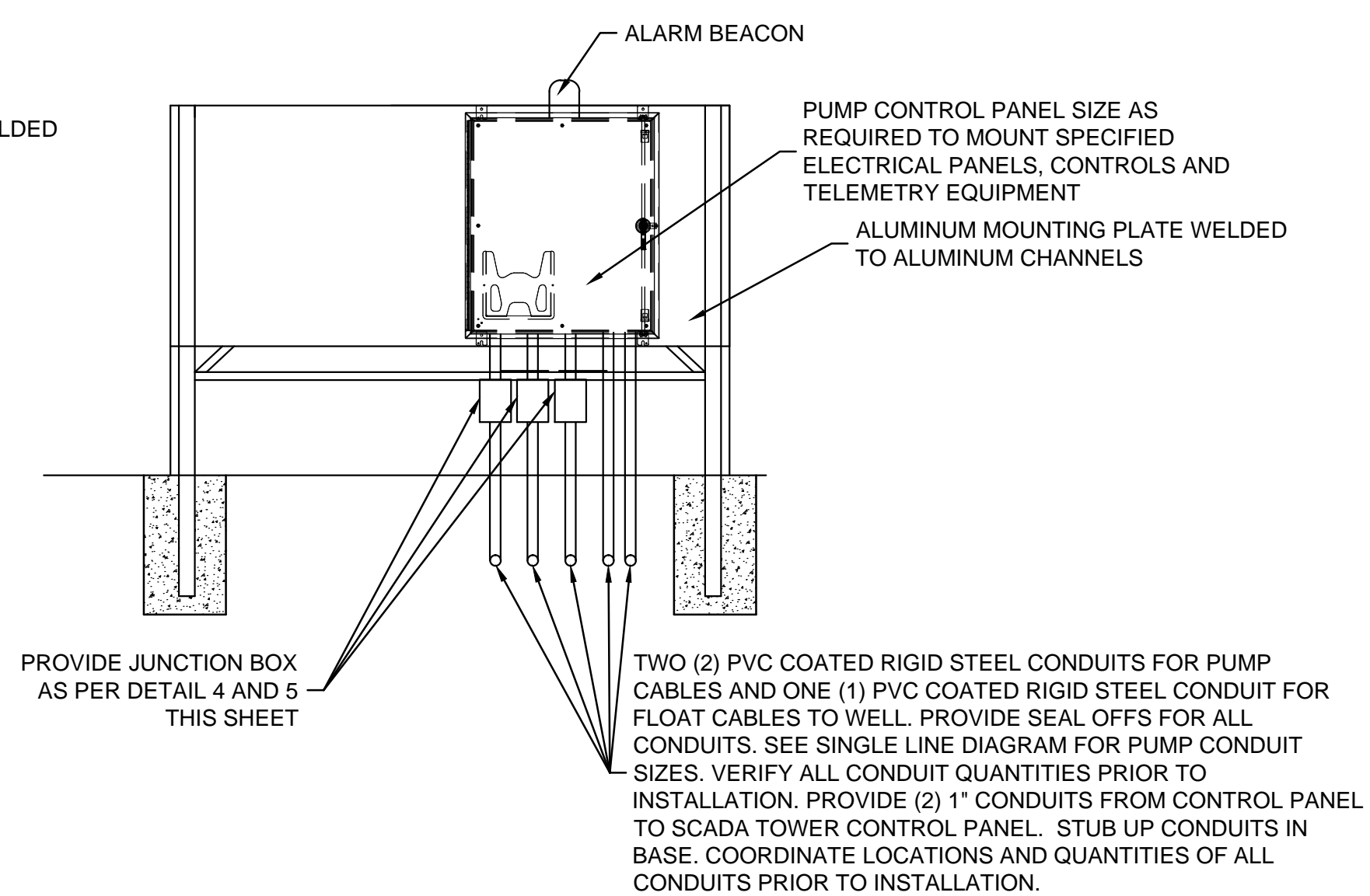
1 ELECTRICAL PANEL MOUNTING DETAILS
E-107-01 SCALE: NOT TO SCALE



2 POLE BASE
E-107-01 SCALE: NOT TO SCALE



6 ELECTRICAL SITE PLAN
E-107-01 SCALE: 1" = 10'



7 TELEMETRY TOWER
E-107-01 SCALE: NOT TO SCALE

GENERAL SHEET NOTES

- REFER TO ELECTRICAL SPECIFICATIONS FOR EQUIPMENT INSTALLATION REQUIREMENTS.
- CONTRACTORS TO COORDINATE THEIR WORK WITH ALL OTHER TRADES ON SITE. EXTRAS WILL NOT BE GIVEN FOR FORESEEABLE WORK COORDINATION.
- PROTECT ALL EXISTING EQUIPMENT AND FINISHES FROM DUST, DEBRIS AND DAMAGE.
- ALL WORK TO BE IN ACCORDANCE TO INDIANA AND NATIONAL ELECTRIC CODES.
- ALL EQUIPMENT IS SHOWN IN APPROXIMATE LOCATIONS. VERIFY EXACT LOCATION ON SITE.
- EXCEPT WHERE NOTED OTHERWISE, SIZE BRANCH CIRCUIT CONDUCTORS WITHIN THE FOLLOWING MAXIMUM LENGTH LIMITS: (MEASURE CENTER OF THE LOAD FOR LIGHTING AND MOST REMOTE OUTLET FOR RECEPTACLE CIRCUITS).

CIRCUIT BREAKER	CIRCUIT LENGTH	CONDUCTOR SIZE
120V, 20A	65 FEET	#12
	110 FEET	#10
	165 FEET	#8
	270 FEET	#6
- PROVIDE #12 AWG MINIMUM FOR ALL 120 VOLT CIRCUITS. PROVIDE ADDITIONAL DERATING PER NEC SECTION 310 FOR ALL HOME RUNS WITH MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY.
- ALL 120 VOLT BRANCH CIRCUITS SHALL BE WIRED WITH 2#12, 1#12G, 3/4" C UNLESS OTHERWISE NOTED ON DRAWINGS.
- ALL HARDWARE REQUIRED TO ANCHOR ELECTRICAL PANELING EQUIPMENT TO MOUNTING PLATE SHALL BE STAINLESS STEEL.
- CONTRACTOR TO USE J & K COMMUNICATION TO PERFORM PROPAGATION STUDY WHICH WILL DETERMINE HEIGHT/TYPE OF ANTENNA.

SHEET KEYNOTES

- CONTRACTOR MAY SUBSTITUTE PVC SCH 80 CONDUIT FOR RIGID METAL CONDUIT IF APPROVED BY ELECTRICAL INSPECTOR. ALL EXPOSED CONDUIT STILL MUST BE RIGID METAL.
- ONLY INTRINSICALLY SAFE CONDUCTORS SHALL BE PERMITTED WITHIN THIS JUNCTION BOX AND CONDUITS.
- PROVIDE NEW ELECTRICAL SERVICE, 120/240V, 1Ø. COORDINATE ALL WORK WITH UTILITY PRIOR TO INSTALLATION.
- PROVIDE VFD IN CONTROL PANEL FOR LIFT STATION PUMPS. SINGLE PHASE INPUT, 3-PHASE OUTPUT. ALLEN BRADLEY #20AB054, POWERFLEX 70
- PROVIDE NEMA 7 JUNCTION BOX FOR WIRE TERMINATION AS SHOWN IN DETAILS 4 AND 5.
- PROVIDE NEW LIGHT AND POLE. INVUE #VXS-B02-LED-E1-T3-BZ-PC, OR EQUAL BY LITHONIA (2) 21 LED BAR, SHOEBOX, BRONZE FINISH, INTEGRAL PHOTOCCELL, 15" SQUARE STEEL POLE ON CONCRETE BASE PER DETAIL 2. CIRCUIT TO BREAKER IN CONTROL PANEL.
- SCADA TOWER FOUNDATION. PROVIDE (2) 1" CONDUITS FROM TOWER PANEL TO CONTROL PANEL. CONDUITS SHALL RUN THROUGH FOUNDATION, NOT ON TOP. COORDINATE LOCATION WITH TOWER SUPPLIER. PROVIDE (3) 1" CONDUITS IN SLAB FOR TOWER GROUNDING CONDUCTORS. COORDINATE EXACT LOCATION WITH TOWER SUPPLIER. CONDUITS SHALL 90° OUT OF SIDE OF FOUNDATION TO NEAREST SIDE OF SLAB AND SHALL STUB OUT 1". ALL CONDUITS SHALL HAVE PULLWIRES.

PLANS PREPARED BY:
FORT WAYNE
CITY UTILITIES ENGINEERING
CITIZENS SQUARE
200 E. BERRY ST., STE 250
FORT WAYNE, IN 46802

PROJECT NAME:
CAN BE MULTIPLE LINES
(PROJECT LIMITS)

PREPARED FOR:
FORT WAYNE
CITY UTILITIES ENGINEERING
CITIZENS SQUARE
200 E. BERRY ST., STE 250
FORT WAYNE, IN 46802

**30% PLANS
NOT FOR
CONSTRUCTION**

REVISION	DATE	REVISION NOTES
7	12/31/13	REVISION NOTES
6	12/31/13	REVISION NOTES
5	12/31/13	REVISION NOTES
4	12/31/13	REVISION NOTES
3	12/31/13	REVISION NOTES
2	12/31/13	REVISION NOTES
1	12/31/13	REVISION NOTES

W.O. NO: #####
DWG NO: ##-####
SURVEYED BY:
SURVEYOR NAME
DRAWN BY:
CADD TECH NAME
DESIGNED BY:
DESIGNER NAME
CHECKED BY:
CHECKED BY NAME
APPROVED BY:
APPROVED BY NAME
DATE: 8/18/14

SHEET TITLE:
**EXHIBIT CADD5-16
ELECTRICAL**

E-107-01
SHEET 17 OF 17