

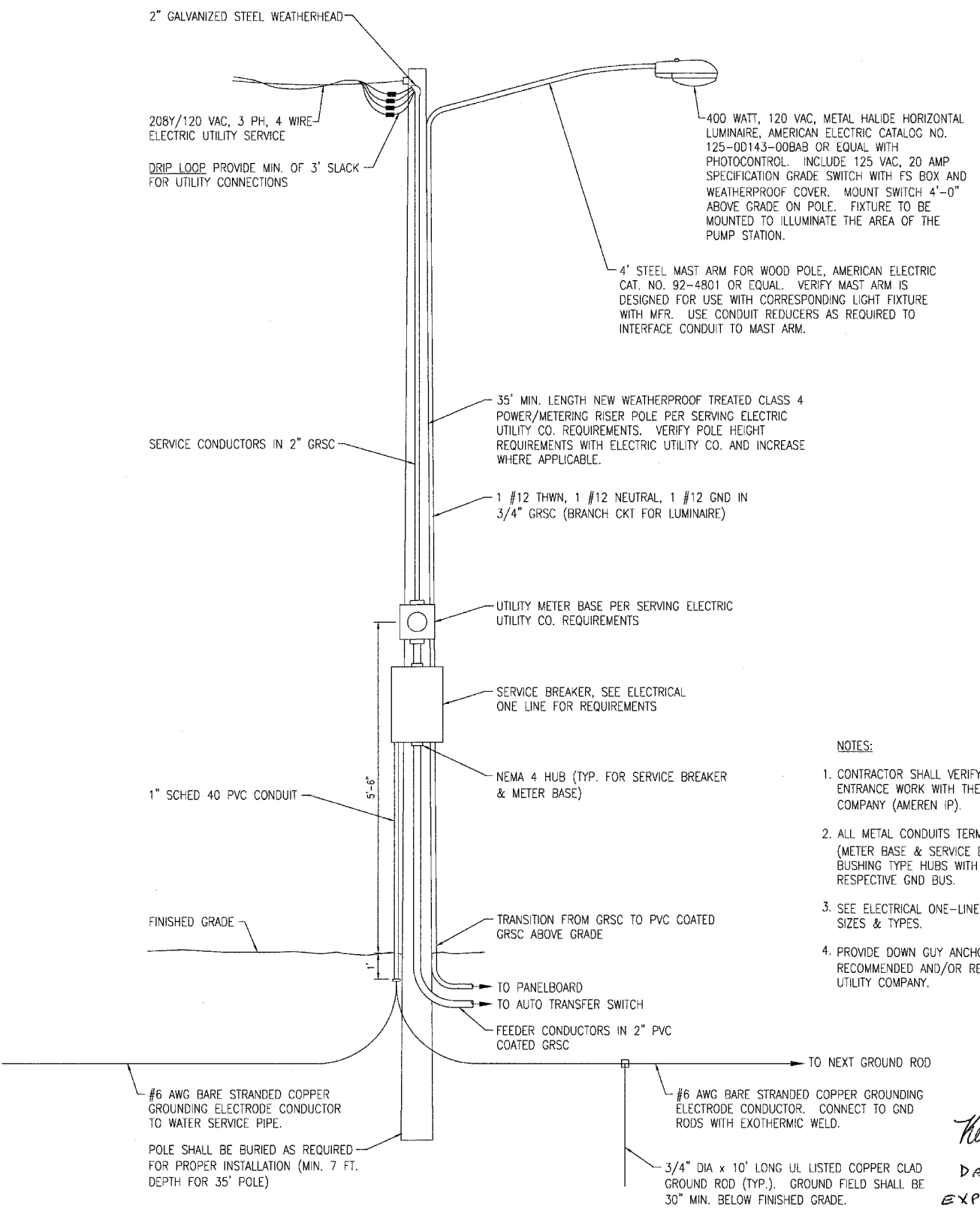
- NOTES:**
- PAD MOUNTING BOLTS BY CONTRACTOR ACCORDING TO MANUFACTURERS RECOMMENDATIONS FOR ITS ENCLOSURE, HOUSING, OR BASE MOUNTED FUEL TANK.
  - MINIMUM CONCRETE COVERAGE OVER REBAR TO BE 3" UNLESS OTHERWISE NOTED.
  - PAD SHALL HAVE A 1' MINIMUM PERIMETER AROUND THE GENERATOR SET BASE.
  - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF SLEEVES FOR CONDUITS IN THE PAD AS REQUIRED.

**GENERATOR SET PAD DETAIL**  
N.T.S.

PUMP STATION PANELBOARD SCHEDULE							
CKT #	DUTY	SIZE		SIZE	DUTY	CKT #	
1	AC SURGE PROTECTOR	30A,3P		100,3P	MAIN BREAKER	2	
3		---		---			4
5		---		---			6
7	PUMP CONTROL PANEL	60A,3P		20A,1P	GFCI RECEPT		8
9		---		15A,1P	POLE LIGHT		10
11		---		20A,1P	ENGINE BLOCK HEATER		12
13	VALVE VAULT SUMP PUMP	20A,1P		20A,1P	BATTERY CHARGER		14
15	BLANK			20A,1P	GENERATOR CONV. RECEPT		16
17	BLANK			15A,1P	SPARE		18
19	BLANK			20A,1P	SPARE		20
21	BLANK			30A,1P	SPARE		22
23	BLANK				BLANK		24

100 AMP, 208/120 VAC, 3 PHASE, 4 WIRE, 24 CIRCUIT PANELBOARD WITH 100 AMP, 3 POLE MAIN BREAKER RATED 10,000 AIC AT 240 VAC, IN A NEMA 3R & 12 ENCLOSURE WITH HINGED COVER. INCLUDE SEPARATE EQUIPMENT GROUND BARS. PANELBOARD SHALL BE SQUARE D CLASS 1630 CAT. NO. NQ00424M100CU WITH MH26WP ENCLOSURE, OR APPROVED EQUAL.

- NOTES:**
- INCLUDE UL LISTED PER UL 1449 AC SURGE PROTECTOR SUITABLE FOR 208/120 VAC, 3 PH, 4W PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 40 KA, 8x20 MICROSECOND WAVE, PER MODE, AND STATUS INDICATION LIGHTS, JOSLYN MODEL, 1455-21, OR APPROVED EQUAL. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE.
  - INCLUDE WEATHERPROOF PHENOLIC ENGRAVED LEGEND PLATES LABELED "FELL AVE. PUMP STATION PANELBOARD" AND "208/120 VAC, 3 PHASE, 4 WIRE".
  - VERIFY CIRCUIT BREAKERS ARE PROPERLY SIZED IN CONFORMANCE WITH THE RESPECTIVE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS & NEC. ADJUST CIRCUIT BREAKER SIZES WHERE APPLICABLE FOR RESPECTIVE EQUIPMENT FURNISHED.
  - ALL FEEDER/BRANCH CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE WITH 10,000 AIC (MIN.) AT 120/240 VAC (FOR 1 POLE & 2 POLE BKRS) & WITH 10,000 AIC AT 240 VAC FOR 3 POLE BKRS
  - ALL METAL CONDUIT TERMINATION IN THE PANELBOARD SHALL HAVE FITTINGS UL LISTED SUITABLE FOR GROUNDING.
  - FURNISH AND INSTALL A 120 VAC, 20 AMP, U.L. LISTED SPEC GRADE GFCI RECEPT. WITH CAST ALUMINUM FS BOX AND WEATHERPROOF (NEMA 3R) COVER AT PANELBOARD. BRANCH CIRCUIT SHALL BE 1 #12 THWN, 1 #12 NEUTRAL, 1 #12 GND IN 3/4" GRSC NIPPLE. WP COVER SHALL BE TAYMAC CAT. # 20550 OR EQUAL.



- NOTES:**
- CONTRACTOR SHALL VERIFY AND COORDINATE SERVICE ENTRANCE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY (AMEREN IP).
  - ALL METAL CONDUITS TERMINATING IN SERVICE EQUIPMENT (METER BASE & SERVICE BREAKER) SHALL HAVE GROUND BUSHING TYPE HUBS WITH BONDING JUMPERS TO THE RESPECTIVE GND BUS.
  - SEE ELECTRICAL ONE-LINE DIAGRAM FOR CONDUIT & WIRE SIZES & TYPES.
  - PROVIDE DOWN GUY ANCHOR FOR RISER POLE WHERE RECOMMENDED AND/OR REQUIRED BY THE SERVING ELECTRIC UTILITY COMPANY.

**SERVICE RISER POLE DETAIL**  
NOT TO SCALE



*Kevin M. Lightfoot*  
DATE: FEB 2, 2005  
EXPIRES: NOV. 30, 2005

ELECTRICAL DETAILS III			
FELL AVENUE BRIDGE REPLACEMENT			
DRAWN	MV 10/07/2004	DESIGNED	KNL 10/07/2004
CHECKED	KNL 10/09/2004	CHECKED	XXX
FILE:	03S2019	DATE:	2-2-05

