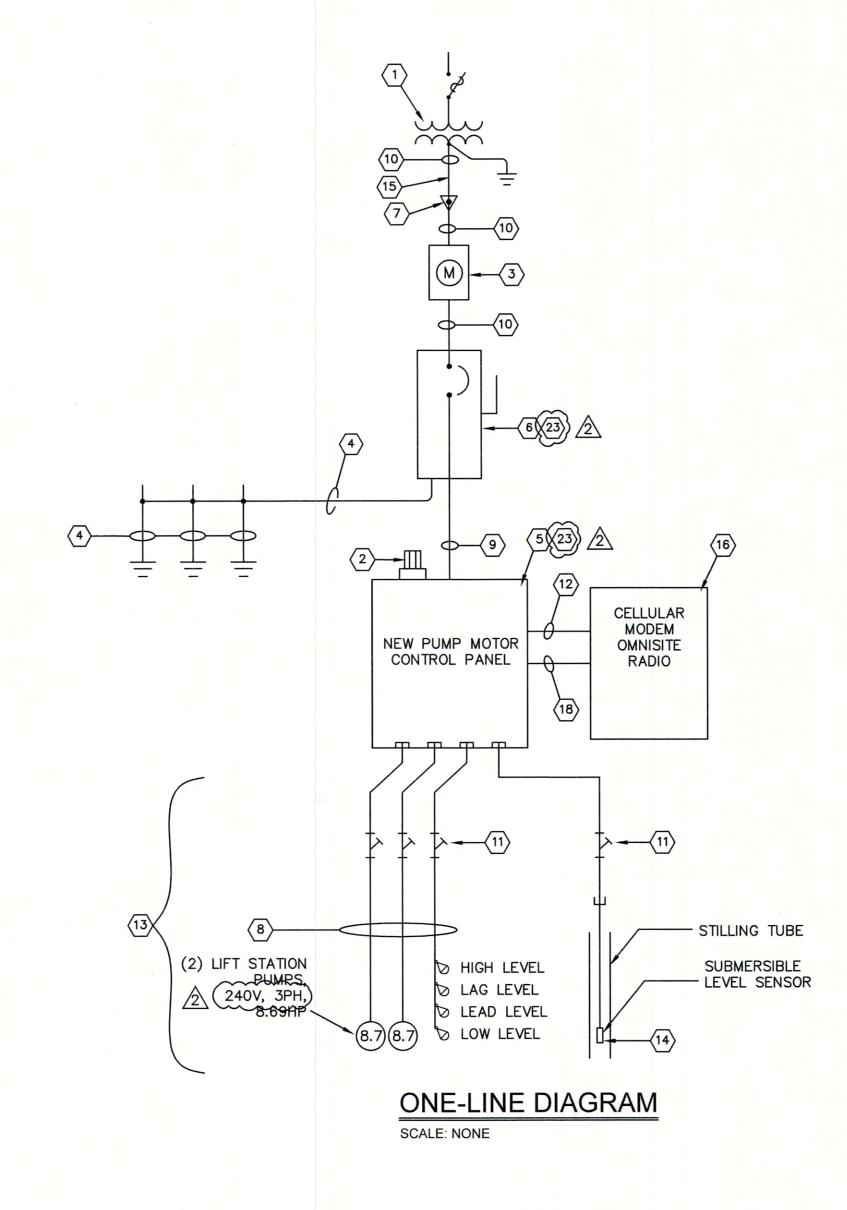
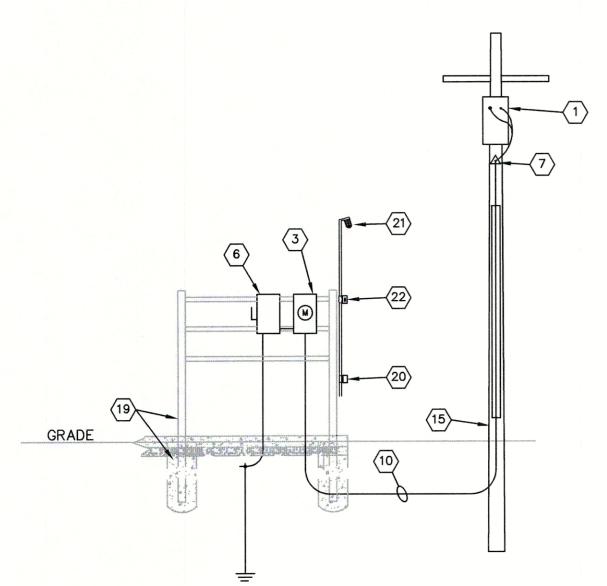
## SUBMERSIBLE LEVEL SENSOR - STILLING TUBE DETAIL, TYPICAL

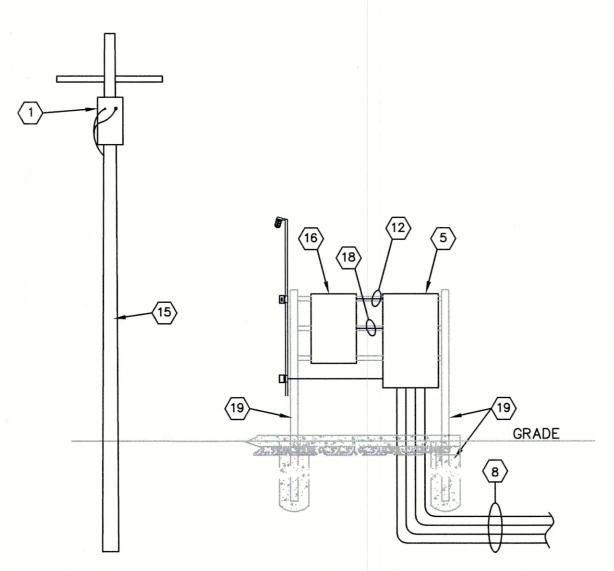
SCALE: NONE





ELECTRICAL E UIPMENT RACK ELEVATION DETAILS **FACING EAST** 

SCALE: NONE



ELECTRICAL E UIPMENT RACK ELEVATION DETAILS **FACING WEST** 

SCALE: NONE

## **GENERAL ELECTRICAL NOTES:**

- PROVIDE RIGID ALUMINUM FOR ALL CONDUITS INSTALLED ABOVE GRADE. PROVIDE SCH 80 PVC FOR ALL CONDUITS INSTALLED BELOW GRADE WITH PVC COATED, RIGID ELBOWS WHEN TURNING UP FROM BELOW GRADE. FOR CONDUITS FROM THE WET WELL, THESE SHALL BE PVC COATED, RIGID STEEL CONDUIT.
- 2. PROVIDE LINK SEAL WITH STAINLESS HARDWARE FOR ALL CONDUIT PENETRATIONS INTO LIFT STATION WET
- PROVIDE STAINLESS STEEL HARDWARE FOR ALL EQUIPMENT INSTALLED IN WET WELL; THIS INCLUDES BUT NOT LIMITED TO KELLEM'S CABLE GRIPS, CABLE RACKS, MOUNTING BRACKETS, BOLTS AND NUTS.
- 4. WET WELL CLASSIFICATION IS CLASS 1 DIVISION 2 GROUP D; ALL WIRING METHODS SHALL COMPLY.
- 5. WITHIN A 5' RADIUS OF ANY VENTED OPENING ATTACHED TO THE WET WELL SHALL BE CLASS 1 DIVISION 2 GROUP D RATED.

## ELECTRICAL KEYED NOTES:

- 1. EXISTING UTILITY CO. POWER POLE TO REMAIN, WITH NEW TRANSFORMER BANK BY UTILITY.
- HIGH LEVEL ALARM.
- NEW UTILITY METER. METER BASE FURNISHED AND INSTALLED BY CONTRACTOR. COORDINATE WITH UTILITY FOR BASE REQUIREMENTS. METER INSTALLED BY UTILITY.
- #4 THWN COPPER GROUND ELECTRODE CONDUCTOR, SLEEVE IN 3/4" CONDUIT, BOND TO (3) 3/4" x 8' COPPER-CLAD GROUND ROD. INSTALL GROUND ROD IN UNDISTURBED COHESIVE SOIL.
- 5. NEW PUMP MOTOR CONTROL PANEL, NEMA 4X, STAINLESS STEEL ENCLOSURE, SEE DETAIL.
- 6. NEW 200A, ENCLOSED CIRCUIT BREAKER, 120/240V, 3PH, 4W NEMA 4X LOCKABLE STAINLESS STEEL ENCLOSURE; SERVICE ENTRANCE RATED, UL LISTED, 42 KAIC. FULLY ADJUSTABLE LSI.
- NEW WEATHERHEAD (OZ GEDNEY #CT-150G) AND SPLICES (POLARIS STYLE BLOCKS WITH RUBBER TAPE AND SCOTCH #33 WRAPPED).
- NEW CONDUIT AND CABLES TO WET WELL: PUMP #1 POWER/SENSOR CABLE, FURNISHED WITH PUMP, INSTALLED BY CONTRACTOR PUMP #2 POWER/SENSOR CABLE, FURNISHED WITH PUMP, INSTALLED BY CONTRACTOR 4 FLOAT SWITCH CABLES, FURNISHED WITH FLOATS, INSTALLED BY CONTRACTOR ALL IN (3) 4" C. PER FCRWD STANDARDS.
- 9. 4-#1 CU, 1-#8 CU GND, 1-1/2" C.
- 10. 4-#1 CU, 1 1/2" C.
- 11. CROUSE-HINDS EYSR SEALOFF; NO SUBSTITUTIONS.
- 12. BELDEN 8719, 3/4" C.
- 13. ALL CONDUITS SHALL BE PVC COATED RIGID STEEL.
- 14. SUBMERSIBLE LEVEL SENSOR; SEE LEVEL SENSOR DETAIL.
- 15. EXISTING UTILITY POLE TO REMAIN.
- 16. NEW REMOTE TELEMETRY PANEL; OMNISITE RADIO, SEE SPECIFICATION.
- 17. (1) 4" C. PER FCRWD STANDARDS.
- 18. POWER FAIL, 2-#14 CU; HIGH LEVEL ALARM, 2-#14 CU; PUMP#1 WARNING STATUS (LEAK SEAL), 2-#14 CU; PUMP#2 WARNING STATUS (LEAK SEAL), 2-#14 CU; PUMP #1 FAIL STATUS (OL/HI TEMP), 4-#14 CU; PUMP #2 FAIL STATUS (OL/HI TEMP), 4-#14 CU; PUMP#1 RUN STATUS, 2-#14 CU; PUMP#2 RUN STATUS, 2-#14 CU; 1-#12 GND, IN 1"C.
- 19. WELDED HEAVY DUTY STAINLESS STEEL SUPPORT FRAME, USING 4" X 4" SQUARE VERTICAL POSTS, AND 2" X 1/2" STAINLESS STEEL UNISTRUT CROSS BARS. SET POSTS 36" DEEP IN 16" DIAMETER, 3000 PSI CONCRETE, WITH ASPHALT ROOF CEMENT CORROSION PROTECTION ON VERTICAL POSTS BELOW GRADE.
- 20. NEW WP/GFI 20A RECEPTACLE, 2-#12 CU, 1-#12 CU GND. SEE SHEET C5.6 WIRING DIAGRAM.
- 21. STANCHION MOUNTED, ENCLOSED AND GASKETED FIXTURE, GUARD, 120V, 22W LED, CROUSE-HINDS # V2LCHJ4/UNV1 OR EQUAL.

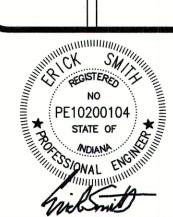
22. NEW WEATHERPROOF LIGHT SWITCH IN NEMA 4X ENCLOSURE.

23. HIGH-LEG DELTA SYSTEM; IDENTIFY THE HIGH-LEG WITH ORANGE TAPE IN ADDITION TO WARNING SIGNS. 

**REVISIONS** DESCRIPTION 3/23/18 FCRWD REVIEW **ENGINEERING** SIMS-DURKIN ASSOCIATES ENGINEERING COMPANY 1545 COUNTRY CLUB ROAD INDIANAPOLIS, INDIANA 46234

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CHECKED BY FEBRUARY 15, 2018 AS SHOWN

> ELECTRICAL ONE-LINE AND DETAILS

