

DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 00%		
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PERMIT		
BID		
AS-BUILT		

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR:HS	CHECKED: JBF
DESIGNED: VMD	DRAWN: VMD
CHIEF ENGINEER:	
SECTION HEAD:	
UNIT HEAD:	

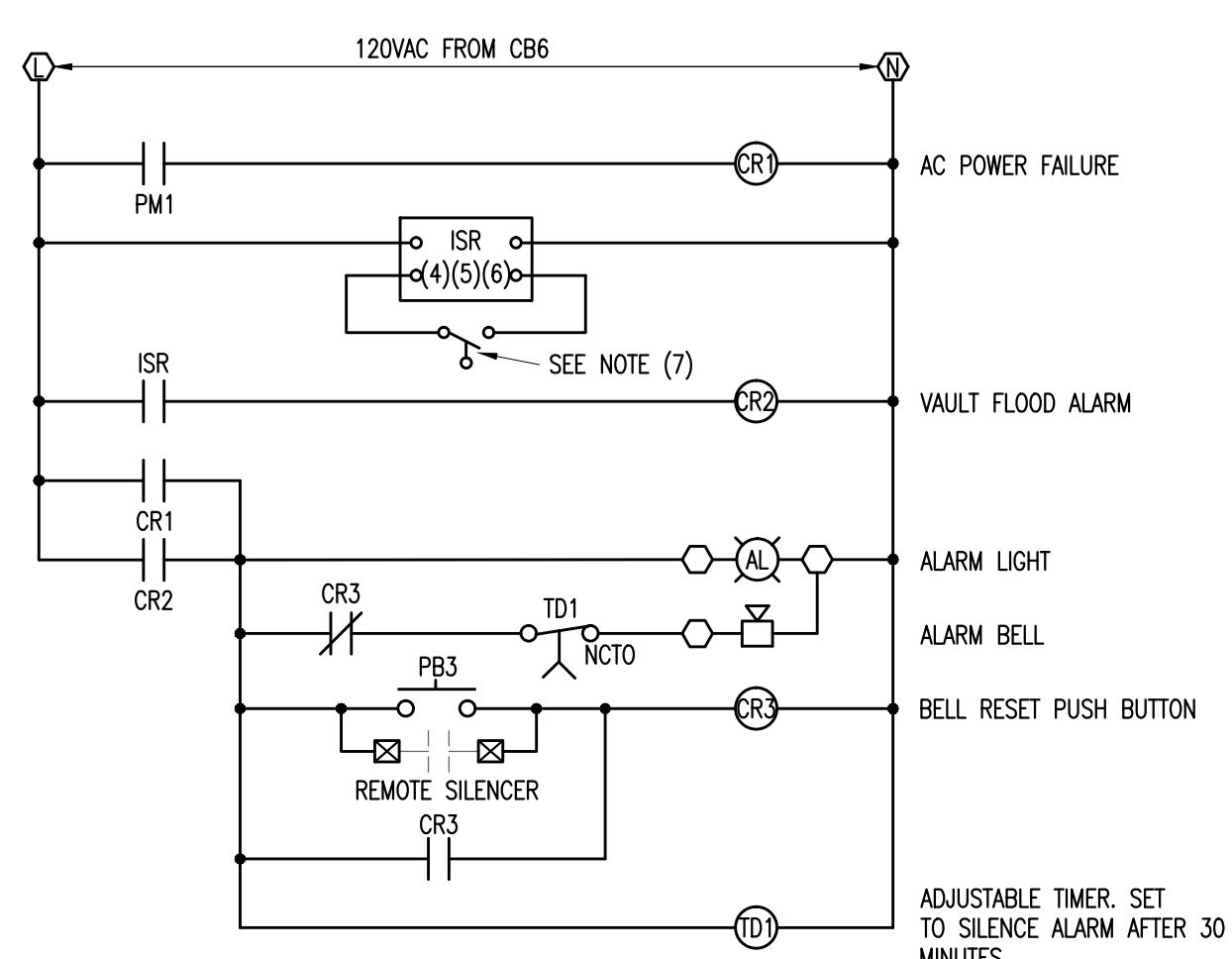
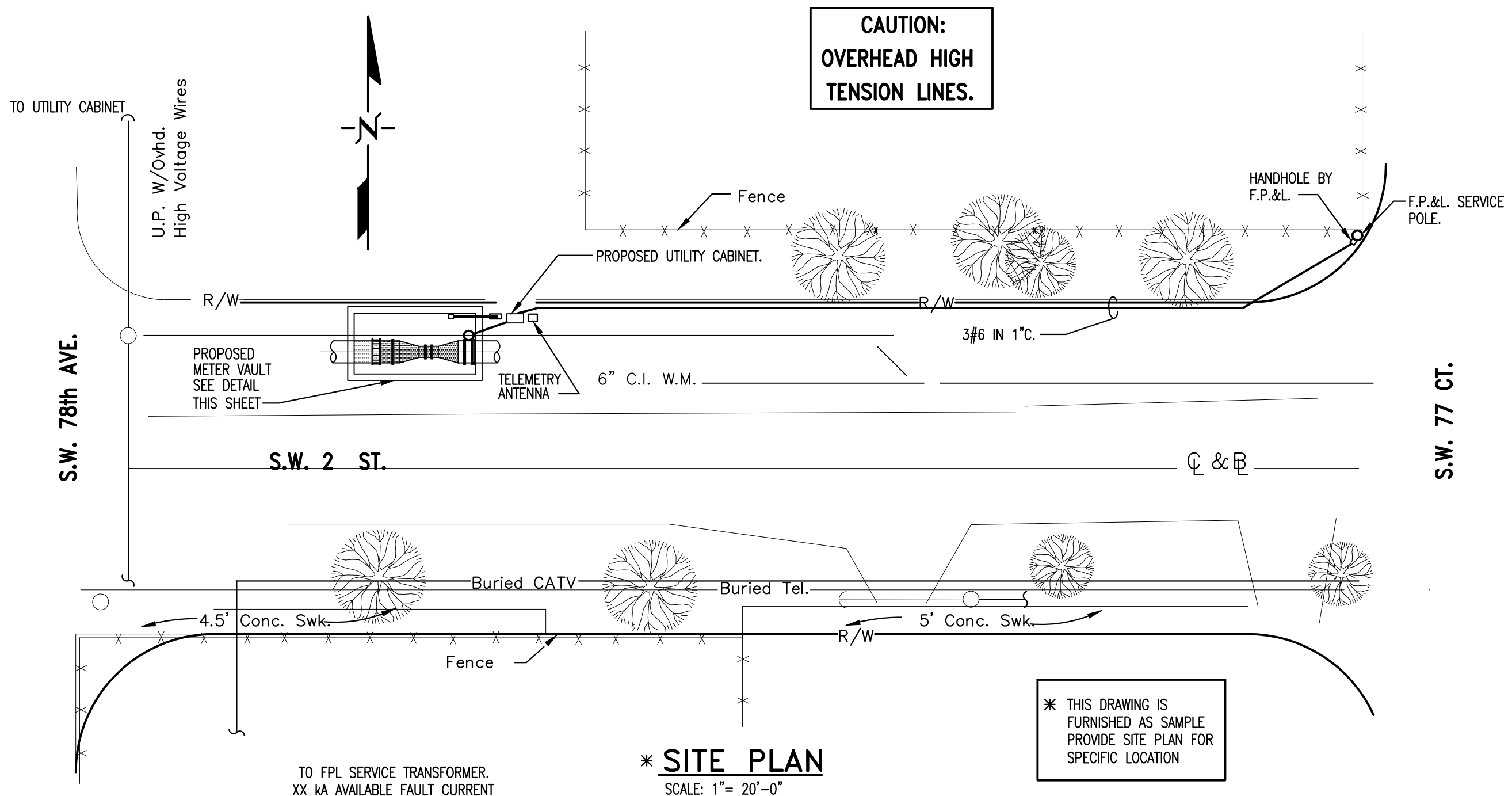
Xxxx Xxxxx, P.E.
Xxxxx Engineer
State of Florida-License No.00000
Date:

FILE NAME: E-1.DWG

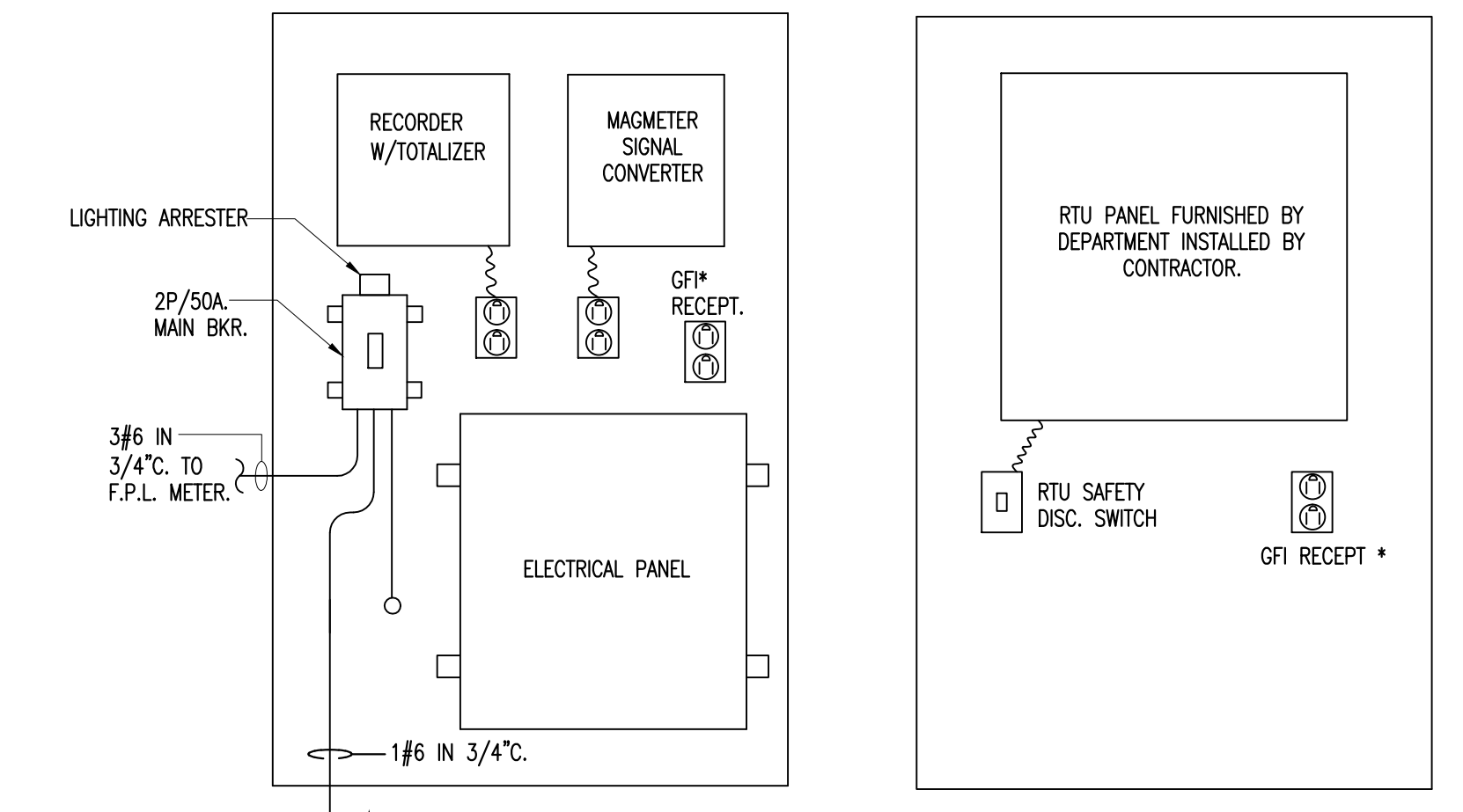
DATE: APR. 19, 2016 SCALE: AS SHOWN

SHEET E-1

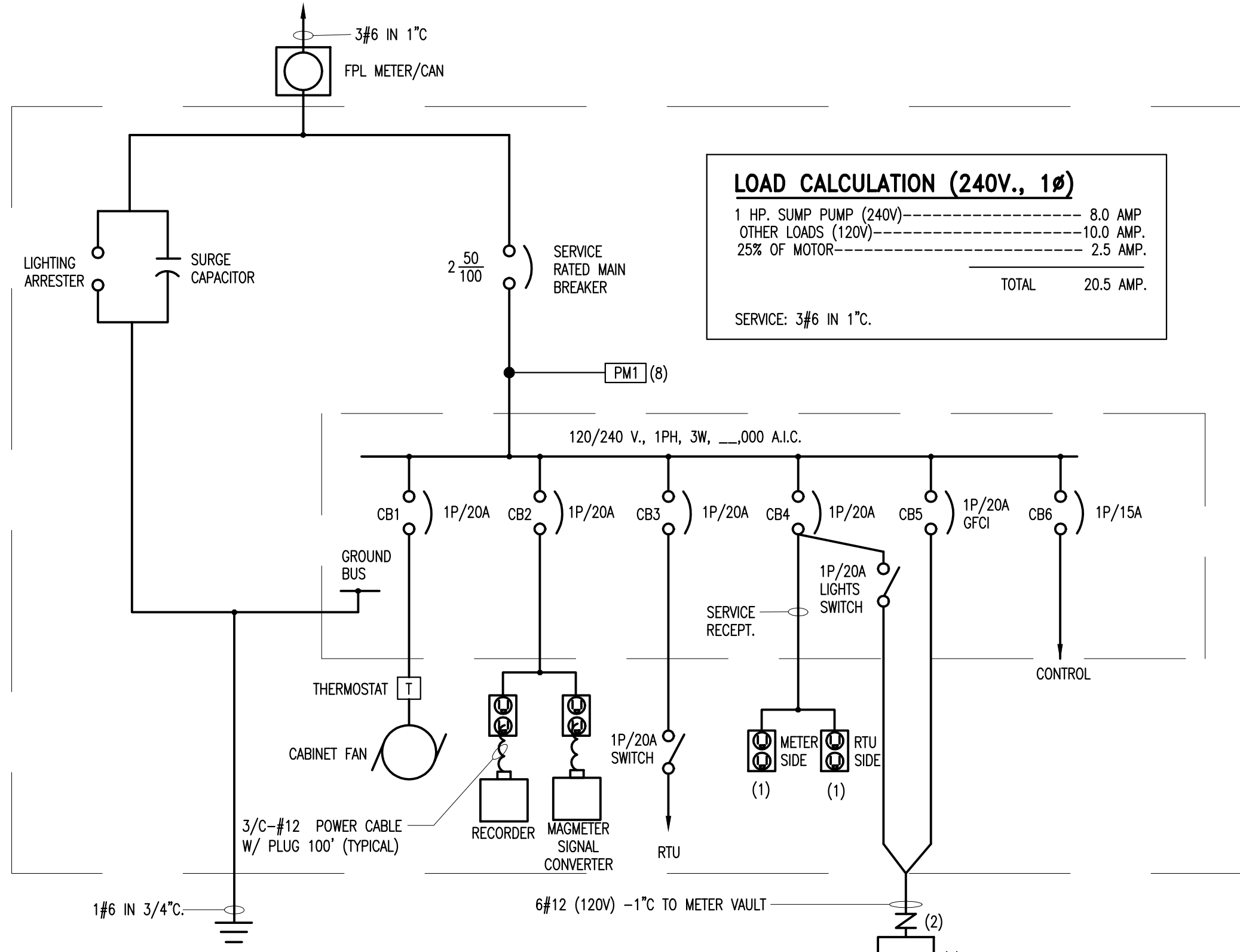
DWG. No. S-26264-D



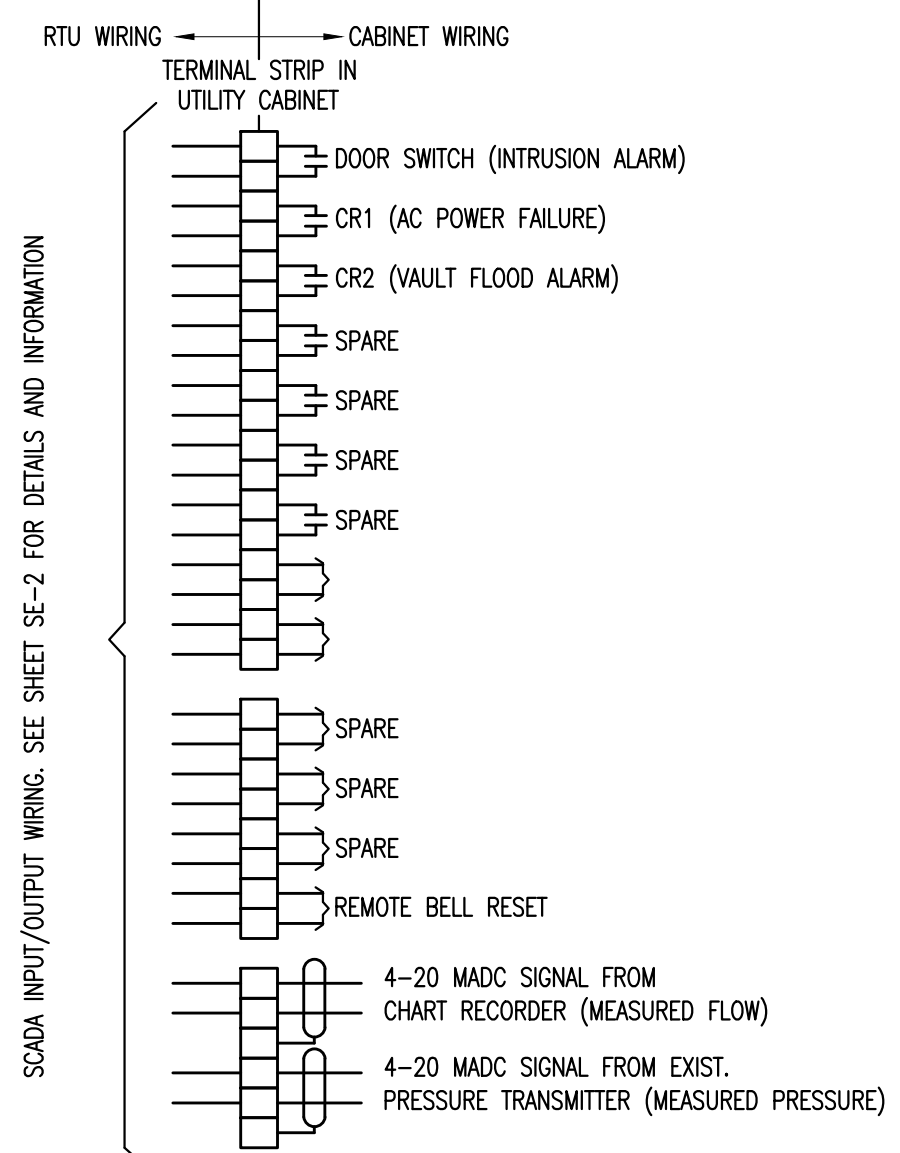
CONTROL WIRING DIAGRAM



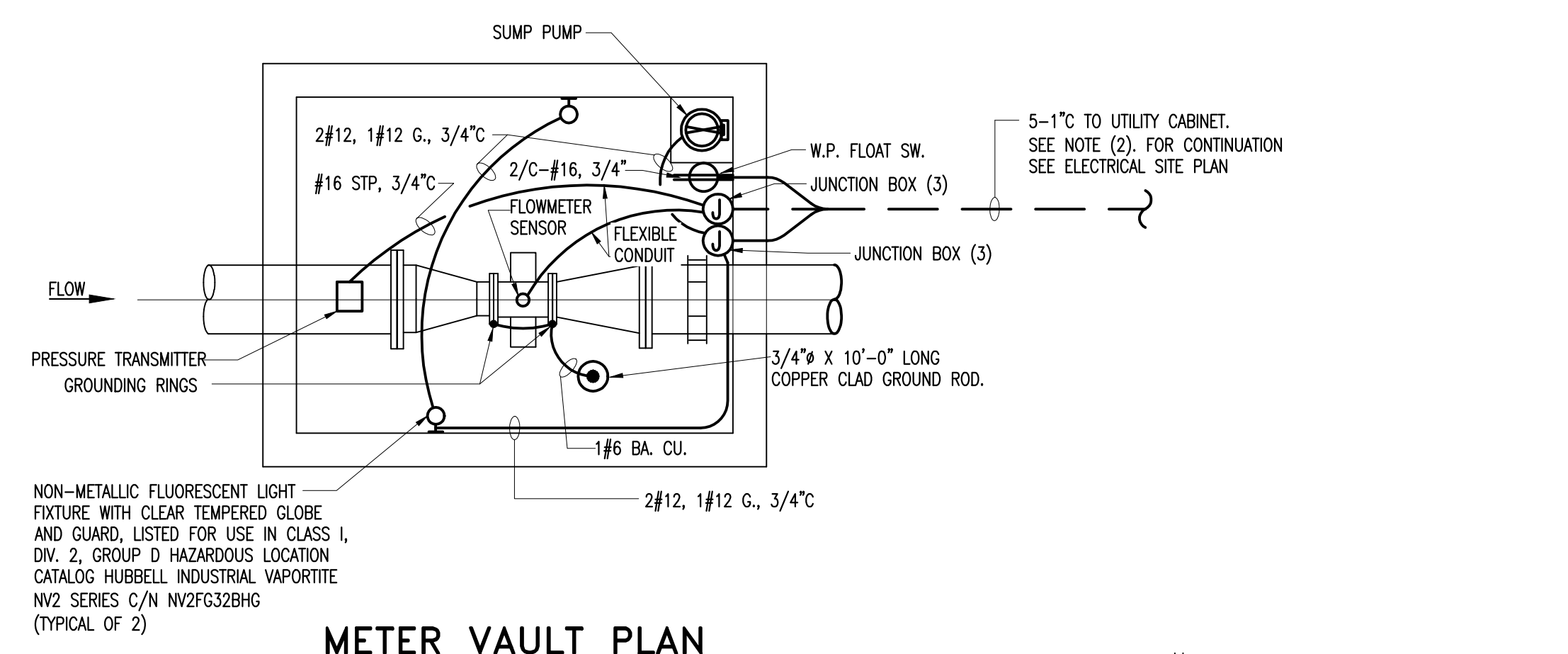
CABINET INTERIOR PANEL



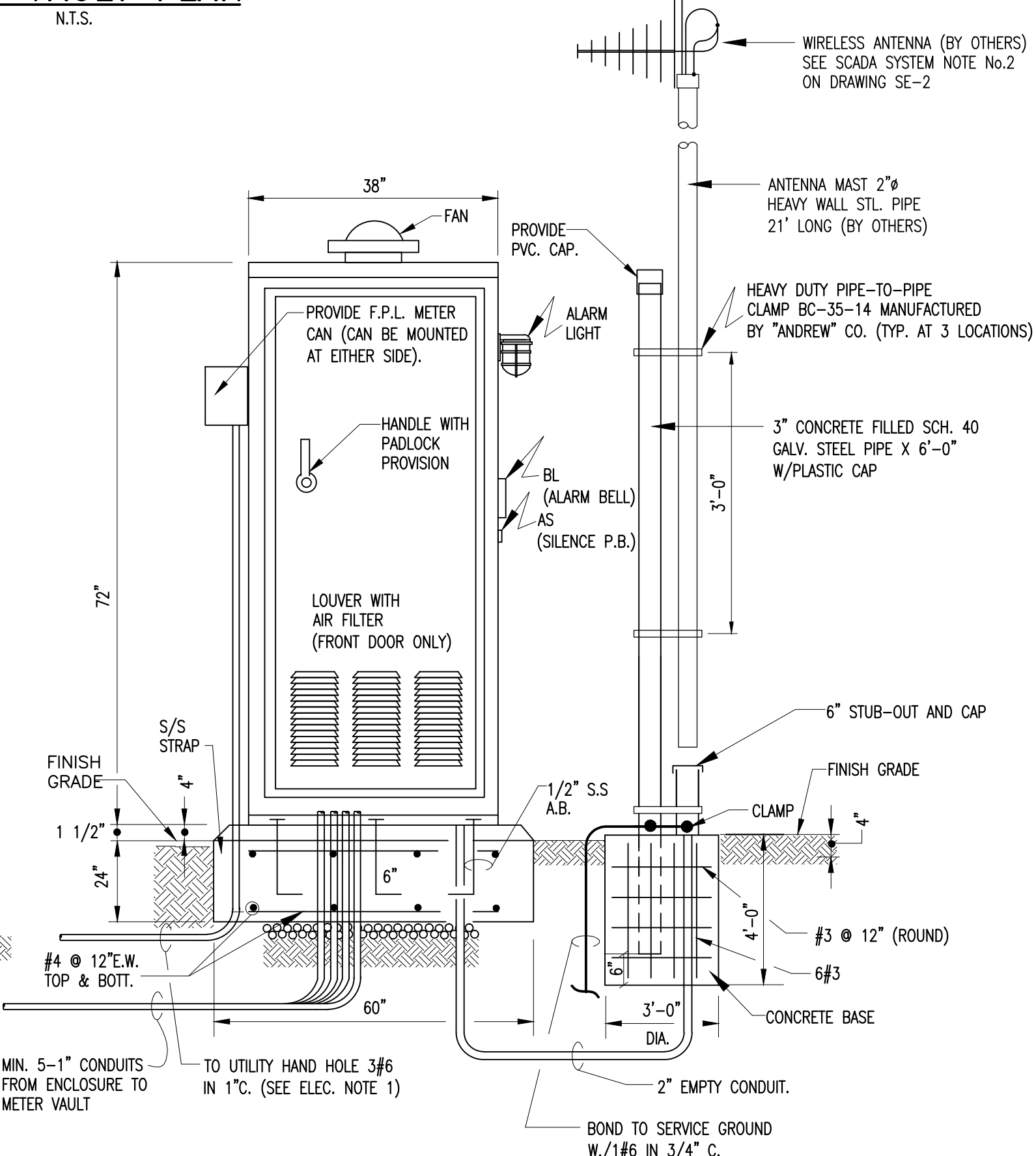
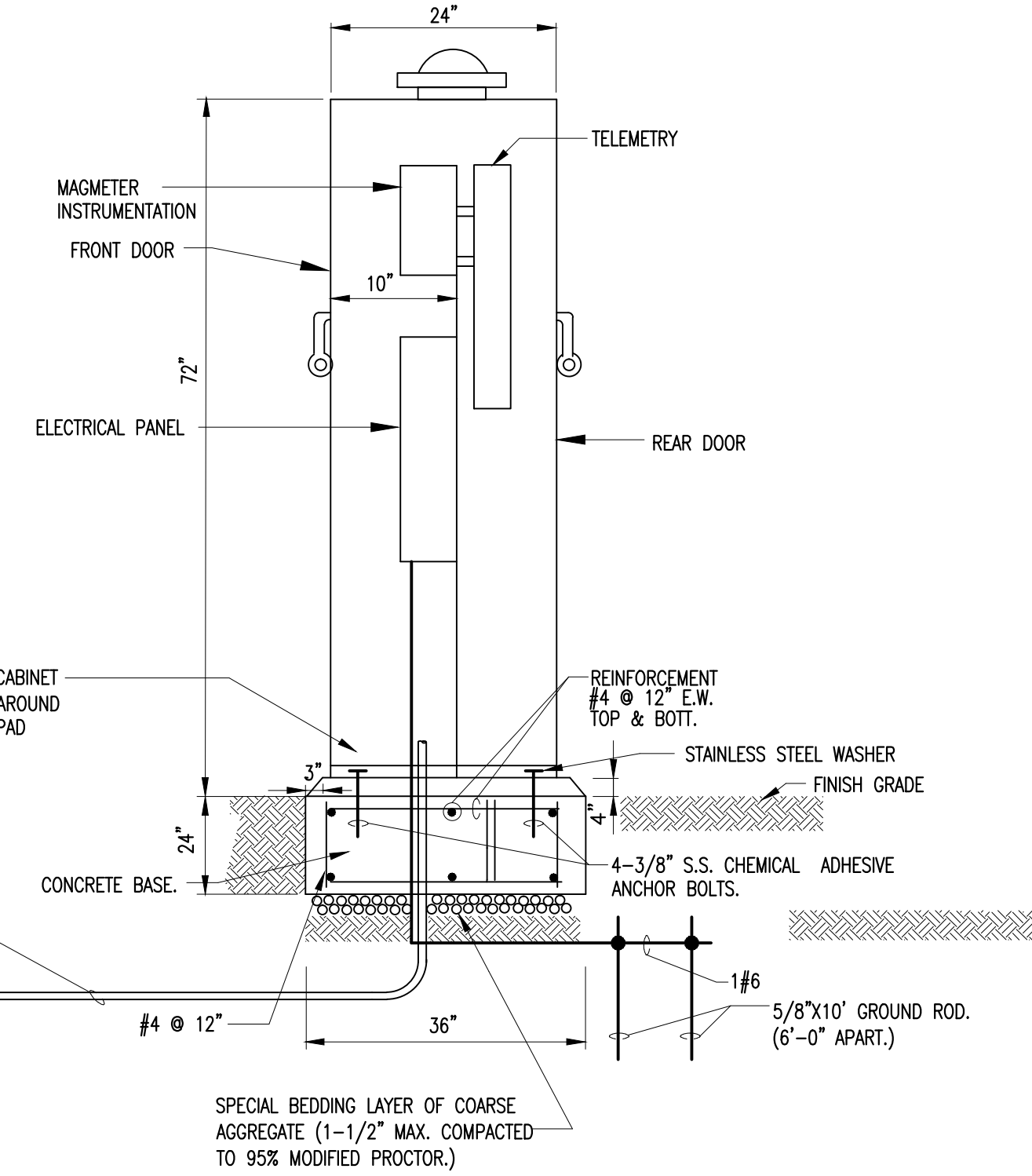
POWER SINGLE-LINE DIAGRAM



SCADA RTU WIRING



- CABINET SPECIFICATIONS:**
- MATERIALS:** 14 GAUGE STAINLESS STEEL, TYPE 316, WITH FRAMEWORK OF 1" ANGLES AND 3"x2" BASE ANGLES.
ANCHORING: SECURE TO CONCRETE BASE WITH SIX 3/8" S.S. CHEMICAL ADHESIVE ANCHOR BOLTS AND NUTS.
COATING: COAT BOTTOM WITH K-COAT BITUMASTIC No.50 BEFORE INSTALLATION ON CONCRETE SLAB.
SIGN: CAST OR STAMPED PLATE, WITH LEGEND "MIAMI-DADE WATER AND SEWER DEPARTMENT, TEL. 305-274-9271" IN CHARACTERS A MINIMUM OF 1/2" HIGH, ATTACH TO THE UPPER PORTION OF THE DOOR BY WELDING OR TAMPER-PROOF BOLTING.
FAN: 1/40 HP, 1050 RPM, 90-130 DEGREE THERMOSTAT RANGE, ALL ALUMINUM EXTERIOR-INTERIOR.
- ELECTRICAL/RTU NOTES:**
- 1- PROVIDE ELECTRICAL SERVICE AS PER F.P.L. STANDARDS. CONTACT THE DESIGNATED FPL AREA REPRESENTATIVE.
 - 2- RTU ANTENNA SHALL BE LOCATED AT A MINIMUM OF 12'-0" VERTICAL AND 7'-6" HORIZONTAL AWAY FROM FPL OVERHEAD POWER LINES.
 - 3- MINIMUM WIRE SIZE SHALL BE #12 IN 3/4".
 - 4- CONTRACTOR TO FURNISH AND INSTALL MOUNTING POLE AND EXTENSION, PROVIDE GROUND WIRING AND EMPTING CONDUIT.
 - 5- DEPARTMENT WILL INSTALL MAST AND ANTENNA.
 - 6- UTILITY CABINET SHORT CIRCUIT CURRENT RATING SHALL NOT BE LESS THAN THE FAULT CURRENT AVAILABLE AT THE CABINET LOCATION. CONTACT FPL REPRESENTATIVE IN THE AREA FOR AVAILABLE FAULT CURRENT DATA.
 - 7- THE UTILITY CABINET SHALL BE MARKED WITH A SHORT CIRCUIT CURRENT RATING AS ESTABLISHED IN NEC ARTICLE 409.110 (4)



UTILITY CABINET DETAIL

FRONT VIEW

SIDE VIEW

- SCOPE OF WORK**
- 1- PROVIDE A NEW UTILITY CABINET AND CONCRETE BASE
 - 2- PROVIDE NEW METER CAN AND GROUNDING SYSTEM
 - 3- PROVIDE NEW ANTENNA SUPPORT SYSTEM INCLUDING CONCRETE BASE
 - 4- PROVIDE NEW LIGHT FIXTURES, POWER AND CONTROL JUNCTION BOXES, AND FLOAT SWITCH IN THE METER VAULT
 - 5- INSTALL NEW UNDERGROUND SERVICE CONSISTING OF NEW 3#6 THIN COPPER IN 1" FROM METER CAN TO FPL PULL BOX. SEE SITE PLAN ON THIS SHEET
 - 6- INSTALL NEW UNDERGROUND CONDUITS FROM THE UTILITY CABINET TO THE NEW METER VAULT. PROVIDE 24" MIN. COVER
 - 7- CONNECT LOADS INSIDE METER VAULT AS INDICATED IN THE DRAWINGS. PROVIDE ALL REQUIRED RACEWAYS AND CONDUCTORS FOR A COMPLETE POWER AND CONTROL SYSTEM. COORDINATE NEW INSTALLATION WITH MD-HASD METERS INSTALLATION AND MAINTENANCE SECTION.
 - 8-

- KEY NOTES:**
- (1) CABINET GFI RECEPTACLES
 - (2) PROVIDE CONDUIT SEALS SUITABLE FOR CLASS I, DIV. 2 GROUP D HAZARDOUS LOCATION. SEAL SHALL BE THE FIRST FITTING AFTER THE CONDUIT ENTERS THE METER VAULT. TYPICAL FOR ALL CONDUITS ENTERING THE VAULT.
 - (3) PROVIDE A NEMA 7 & NEMA 4 CAST ALUMINUM CONDUIT OUTLET BOX WITH THREADED SCREW COVER AND GASKETING FOR A WATERTIGHT FIT. CATALOG APPLETON MODEL GRU OR APPROVED EQUAL. INSTALL TOP OF BOX 6 INCHES BELOW THE BOTTOM SIDE OF THE VAULT'S TOP SLAB. (TYPICAL OF 2)
 - (4) MFE, INC. INTRINSICALLY SAFE RELAY (ISR) AS CATALOG. NO. 030-120-118 OR APPROVED EQUAL.
 - (5) ALL INTRINSICALLY SAFE WIRING SHALL BE SEPARATED FROM NON-INTRINSICALLY SAFE IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504 OF THE NATIONAL ELECTRICAL CODE (NEC). REFER TO THIS DOCUMENT FOR INSTALLATION OF INTRINSICALLY SAFE WIRING.
 - (6) REFER TO UL CONTROL DRAWING NO. 0301 AND NOTES.
 - (7) FLOAT SWITCH FOR VAULT FLOOD ALARM. CATALOG ANCHOR SCIENTIFIC MODEL SM OR APPROVED EQUAL.
 - (8) SINGLE PHASE MONITOR. INSTALL 2 AMP. FAST ACTING FUSES IN SERIES WITH EACH OF THE INPUTS.