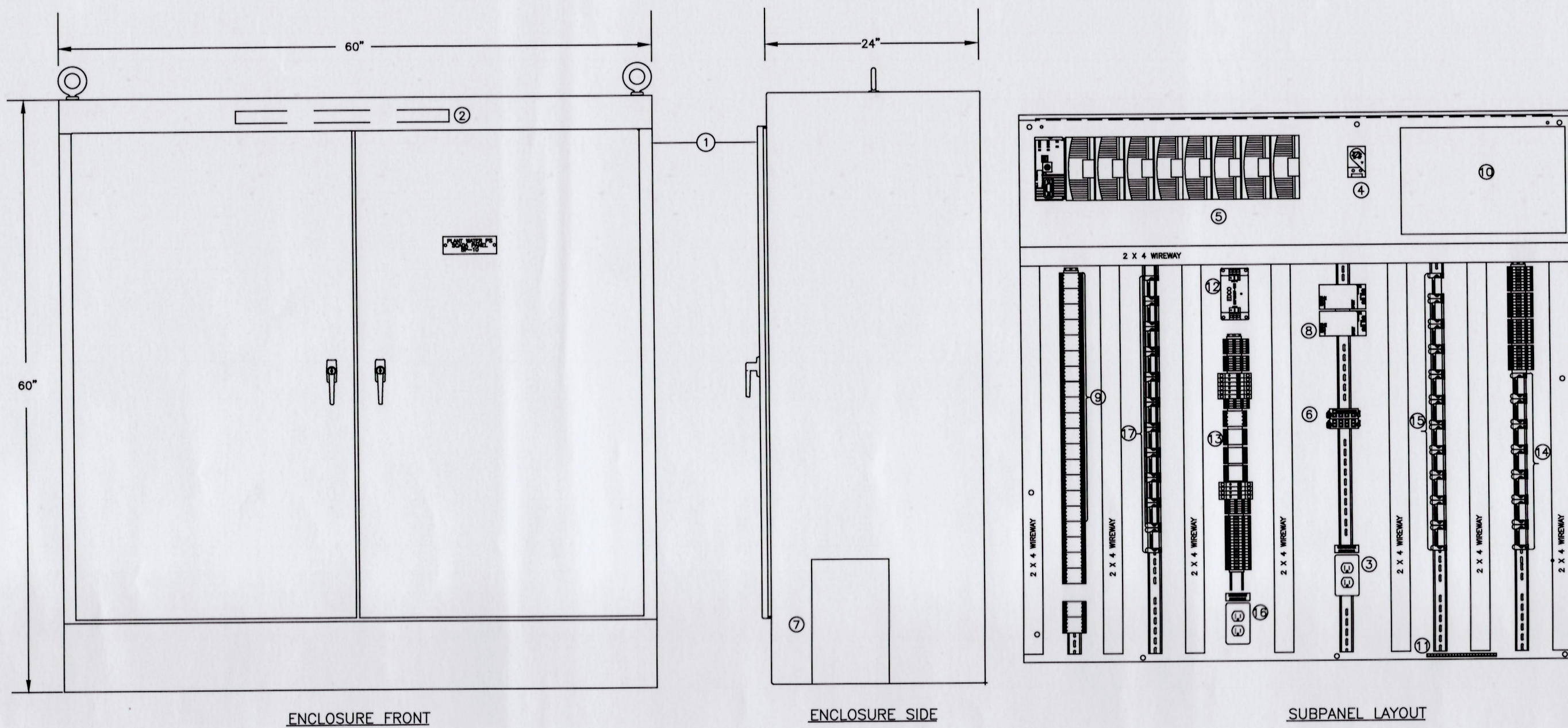




NOTES:

1. ENCLOSURE, NEMA 4X, WHITE POWDER COATED 60"H x 60"W x 24"D
2. FLUORESCENT LIGHT
3. UPS CONVENIENCE RECEPTACLE
4. TEMPERATURE SWITCH
5. PLC HARDWARE
6. ETHERNET NETWORK SWITCHES(SCADA SWITCH, WITH EXPANSION MODULE AS REQUIRED.
7. UPS
8. POWER SUPPLY, REDUNDANT, 24VDC
9. DC CONTROL RELAYS
10. FIBER OPTIC TERMINATION PATCH PANEL
11. GROUND CONNECTOR
12. AC LINE SURGE SUPPRESSOR
13. AC CONTROL RELAYS
14. SIGNAL ISOLATOR, 120VAC, 4-20MA IN/OUT
15. ANALOG SURGE SUPPRESSORS
16. CONVENIENCE RECEPTACLE
17. DISCRETE SURGE SUPPRESSORS

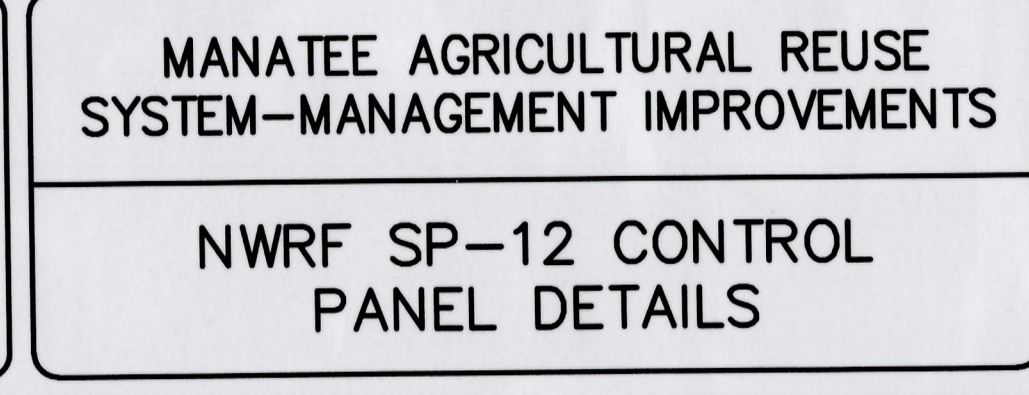
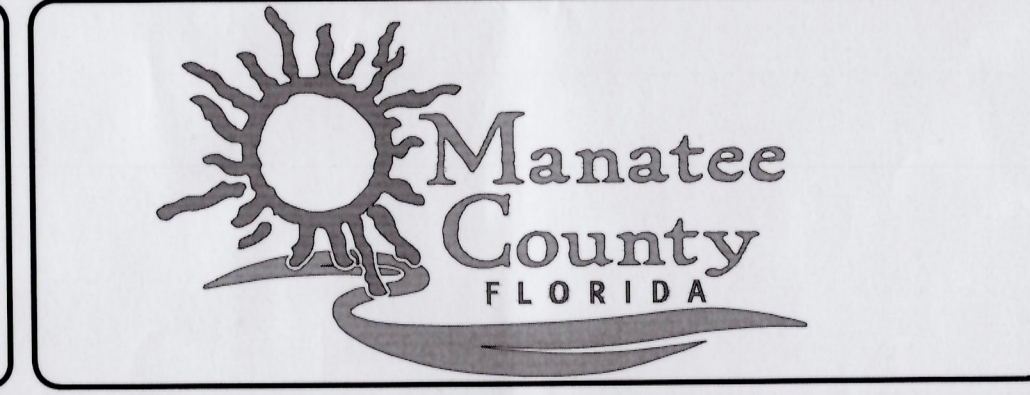
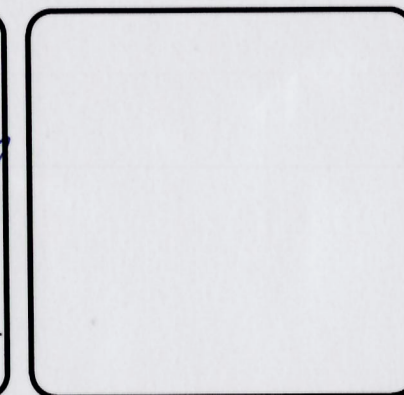
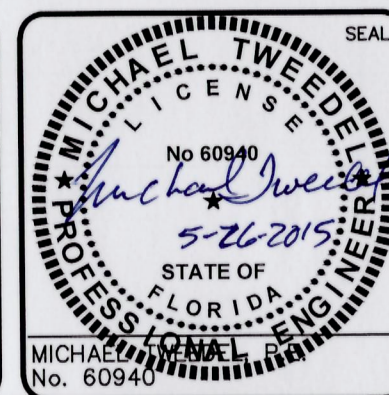
MISC. NOTES:

1. SUBPANEL TO BE POWDER EPOXY COATED WHITE.
2. PROVIDE WITH 4" CONCRETE HOUSEKEEPING PATH

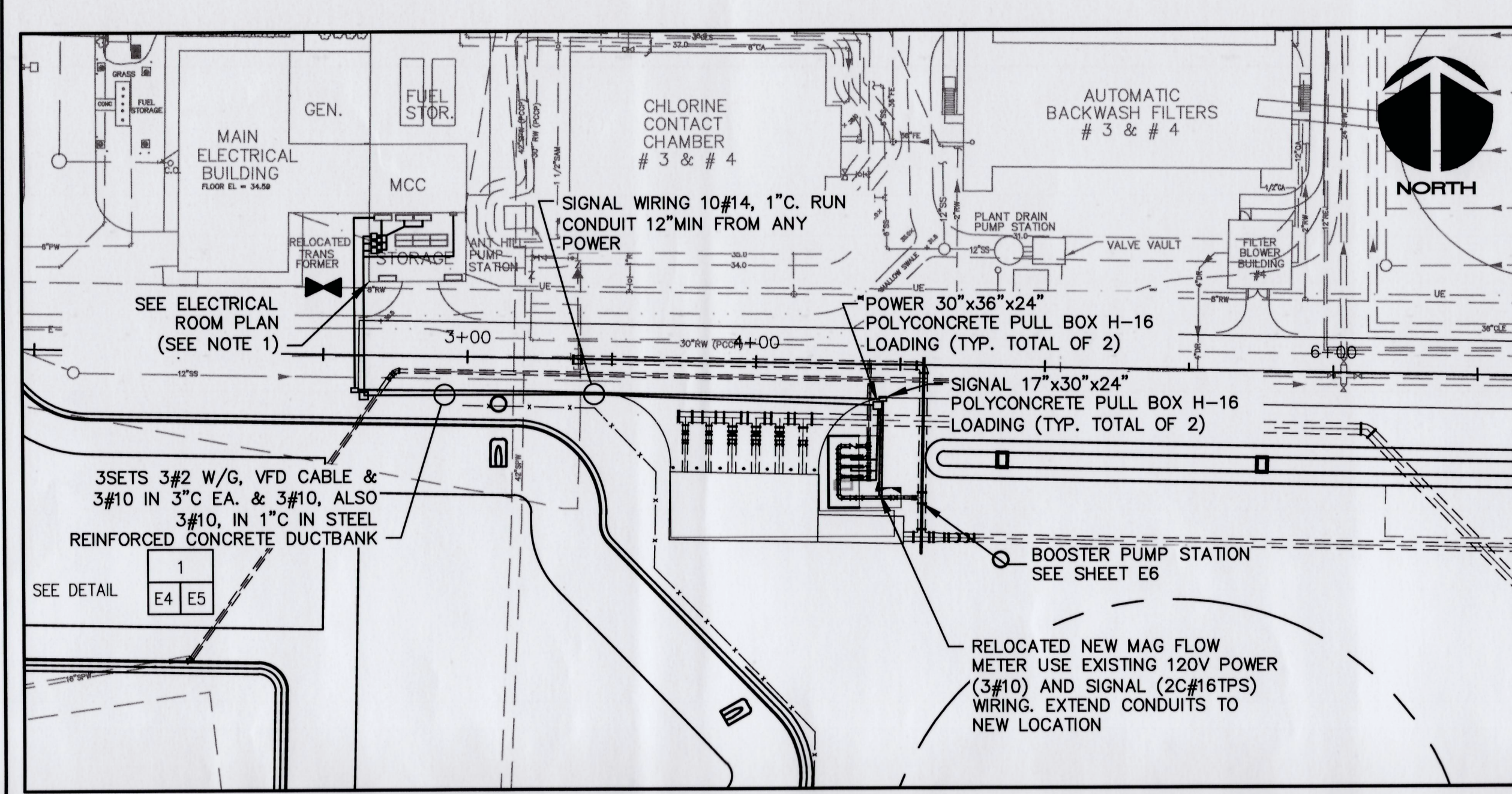
PLANT WATER BOOSTER PS SCADA PANEL (SP-10)
NOT TO SCALE

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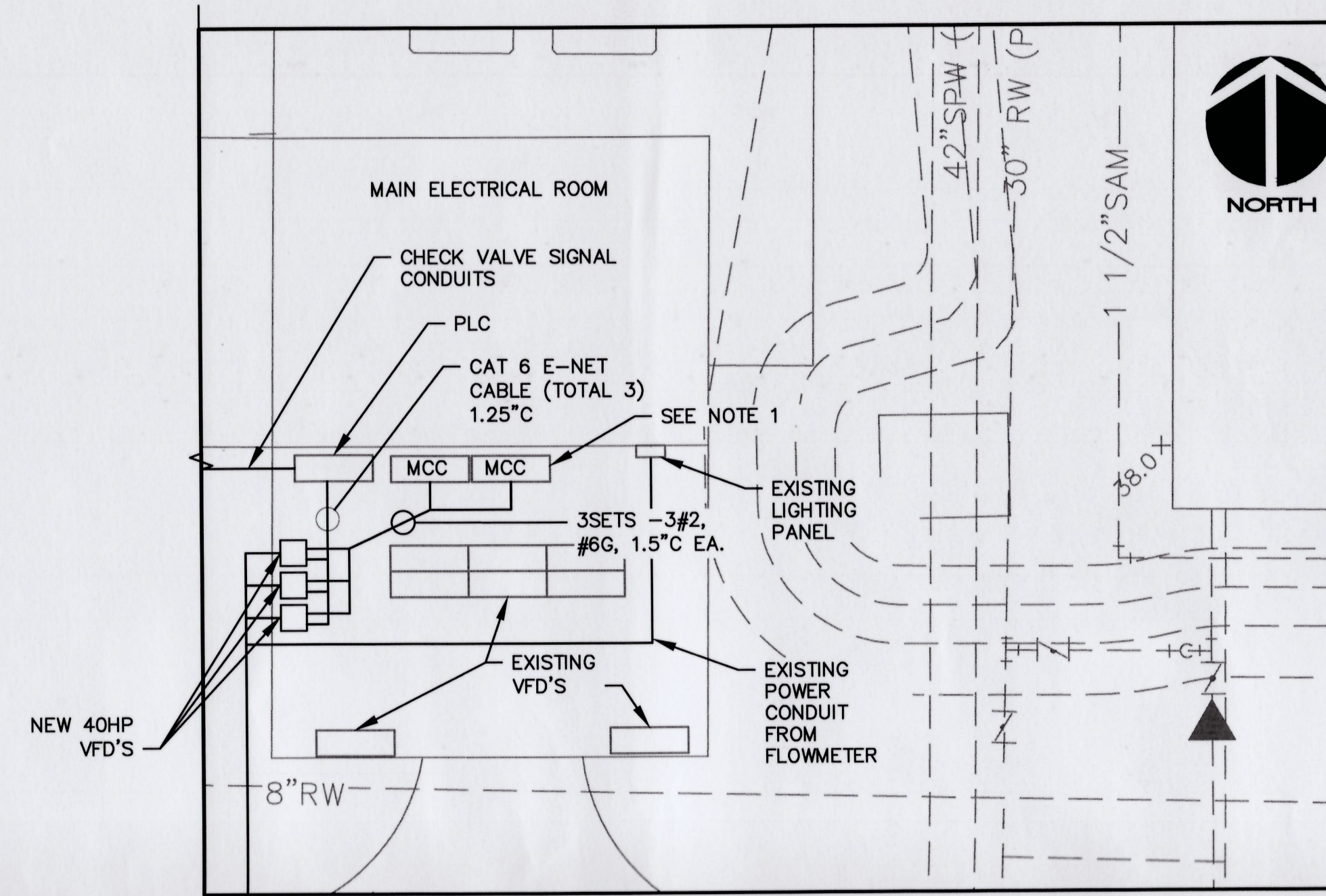
REV. NO.	DESCRIPTIONS	REVISIONS
ADDENDUM #4		MAY 2015



DATE: MARCH 2015	SCALE	MAC FILE NUMBER
MCE PROJ. # 1024-0164	HORIZONTAL: NA	DRAWING NUMBER
DRAWN: EEB	VERTICAL: NA	112
DESIGNED: EEB		
CHECKED: MDT		
PROJ. MGR. MSL		
STATUS: ISSUED FOR BID	REVISION	



ELECTRICAL SITE PLAN
1" = 40'



ELECTRICAL ROOM PLAN
1" = 10'

NOTES:

1. PROVIDE AND INSTALL 100A BREAKERS FOR NEW VFD'S IN MCC BUCKET SPACES. PROVIDE AS NECESSARY EQUIPPED BUCKET SPACES. MATCH EXISTING WITHSTAND RATING OF MCC.
2. REMOVE EXISTING BLOWER BREAKERS (TOTAL 3) FROM PANEL. REMOVE ALL WIRING FROM EXISTING BREAKERS TO VFD'S. ABANDON CONDUIT IN PLACE. PROVIDE & INSTALL NEW 40A BREAKERS FOR NEW VFD'S. MATCH EXISTING PANEL WITHSTAND RATING.
3. PROVIDE AND INSTALL 6PR FIBER OPTIC CABLE IN DIRECT BURIED PVC COATED RIDGED STEEL CONDUIT BETWEEN PLC'S SHOWN. PROVIDE AND TERMINATE BOTH ENDS IN NEMA 3R WALL MOUNTED FIBER PATCH PANEL. ALL FIBERS TO BE BROKEN OUT AND LANDED USING "ST" CONNECTORS. PROVIDE 1.5" CONDUIT BETWEEN PATCH PANEL AND PLC CABINETS. SEE SPECIFICATIONS SECTION 13330 FOR REQUIREMENTS OF THE FIBER CABLE SYSTEM.
4. PROVIDE GROUNDING SYSTEM PER SPECIFICATIONS. PROVIDE THREE GROUND RODS WITH ONE TEST POINT. SPACE ROD MINIMUM 25'-0" APART. TIE TO DUCTBANK AND MOTOR CASINGS AND DISCONNECT SWITCHES, AND TO GROUND SYSTEM IN ELECTRICAL ROOM.

EXISTING 480V
DISTRIBUTION PANEL
(SEE NOTE 2)

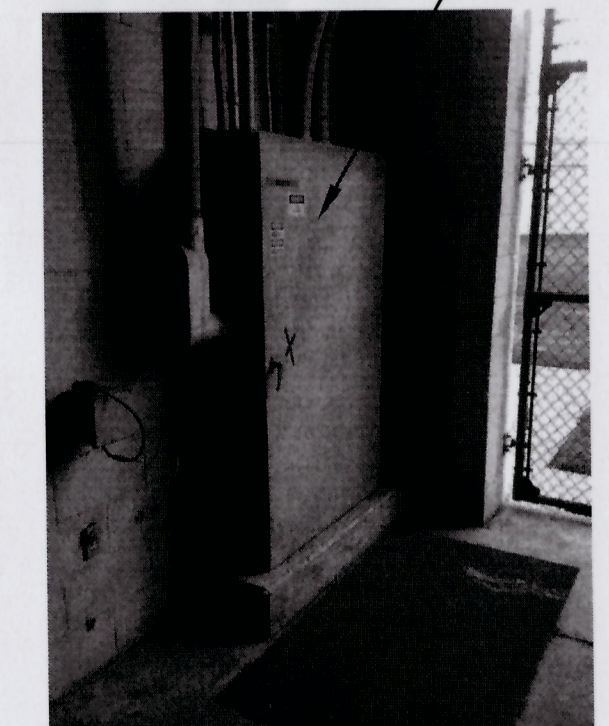
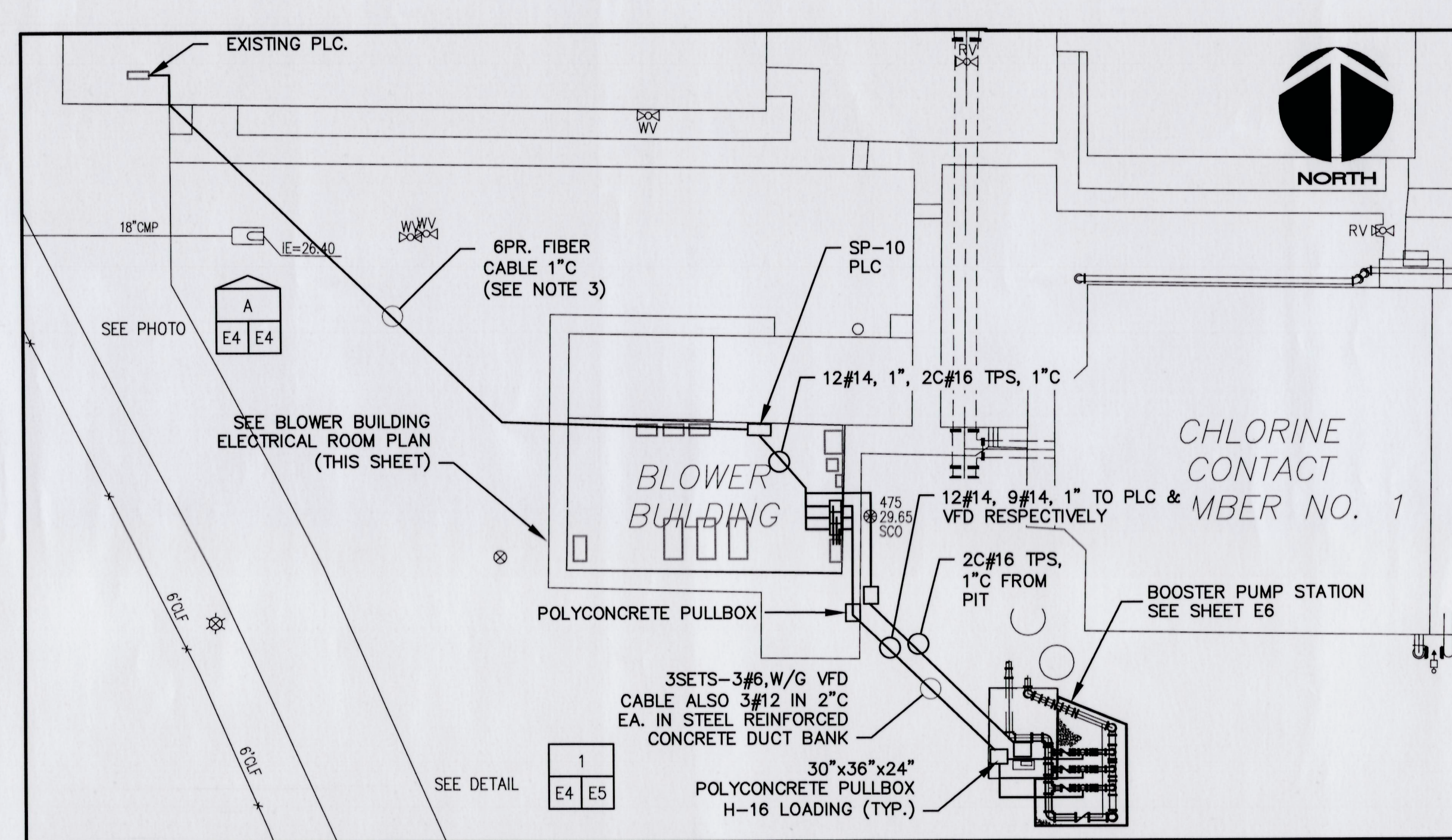
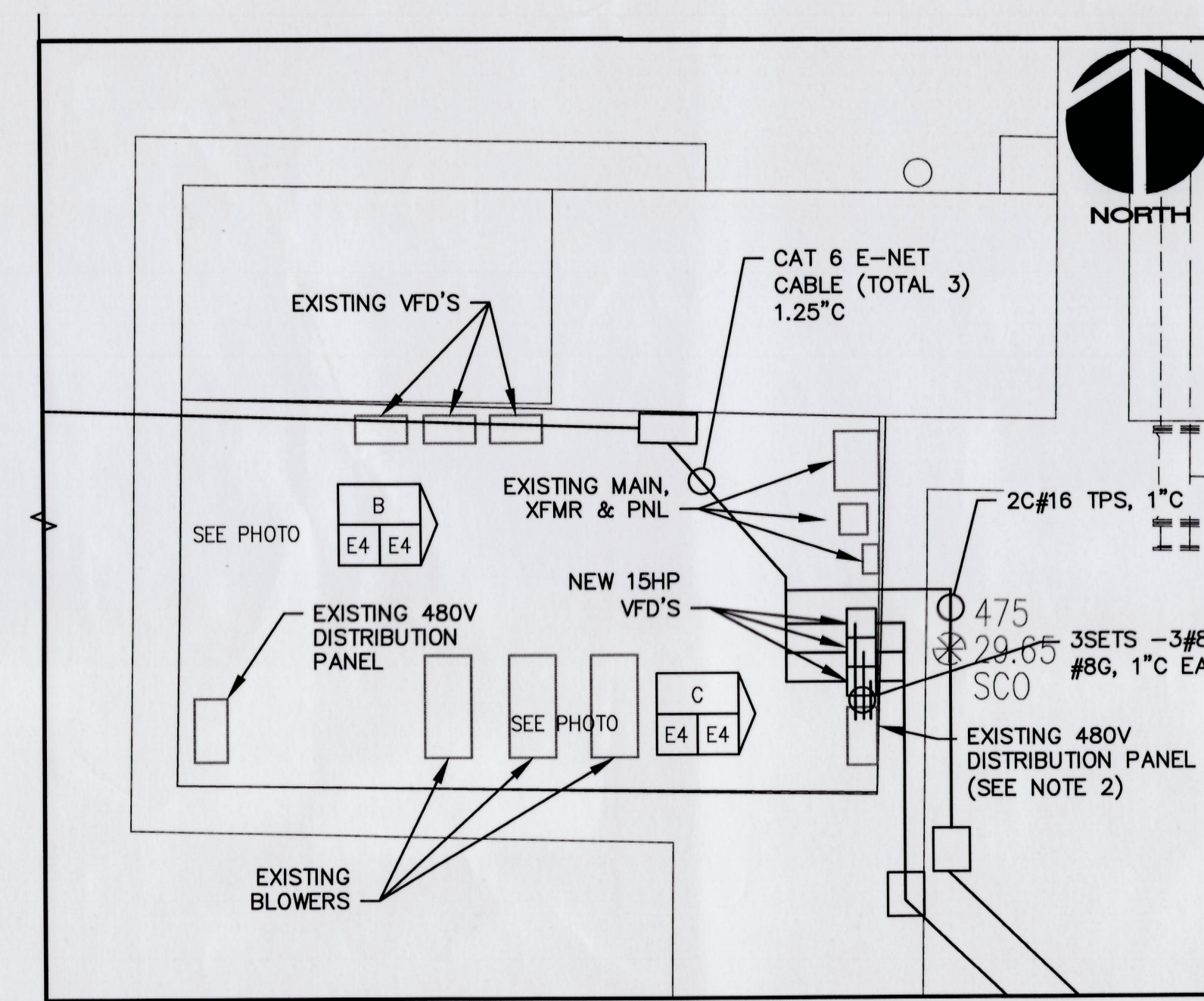


PHOTO C
E4 E4
NTS



ELECTRICAL PLAN
1" = 20'

SEWRF



BLOWER BUILDING ELECTRICAL PLAN
1" = 10'



PHOTO A
E4 E4
NTS

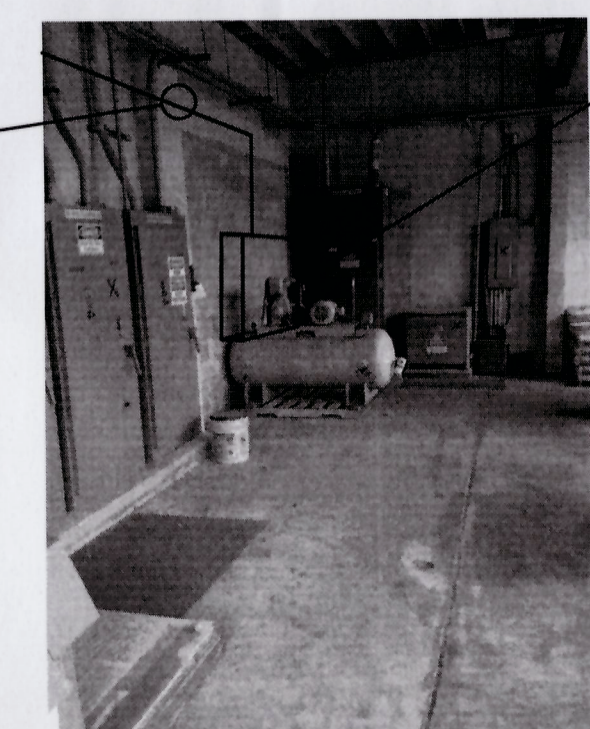


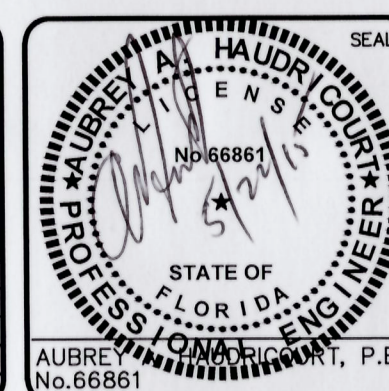
PHOTO B
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NEW PLC CABINET

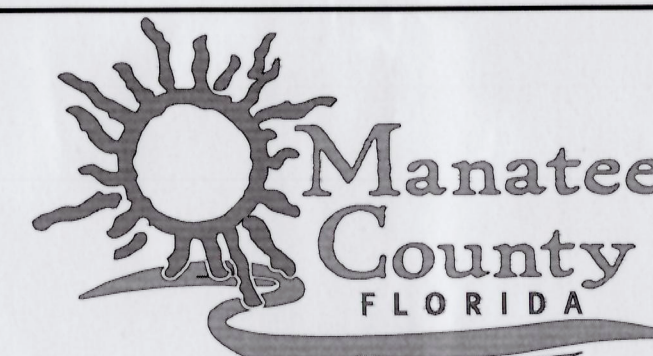
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REVNO.	DESCRIPTION	REVISIONS
1	ADDENDUM #4	MAY 2015



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**MANATEE AGRICULTURAL REUSE
SYSTEM-MANAGEMENT IMPROVEMENTS**
**SEWRF & NWRF ELECTRICAL SITE
PLANS AND ELECTRICAL ROOM
PLANS**

DATE: MARCH 2015	SCALE	M&C FILE NUMBER
MCE PROJ. # 1024-0164	HORIZONTAL: AS SHOWN	DRAWING NUMBER
DRAWN AAH	VERTICAL: E4	
DESIGNED AAH		
CHECKED DCW		
PROJ. MGR. MSL		
STATUS: ISSUED FOR BID	REVISION	

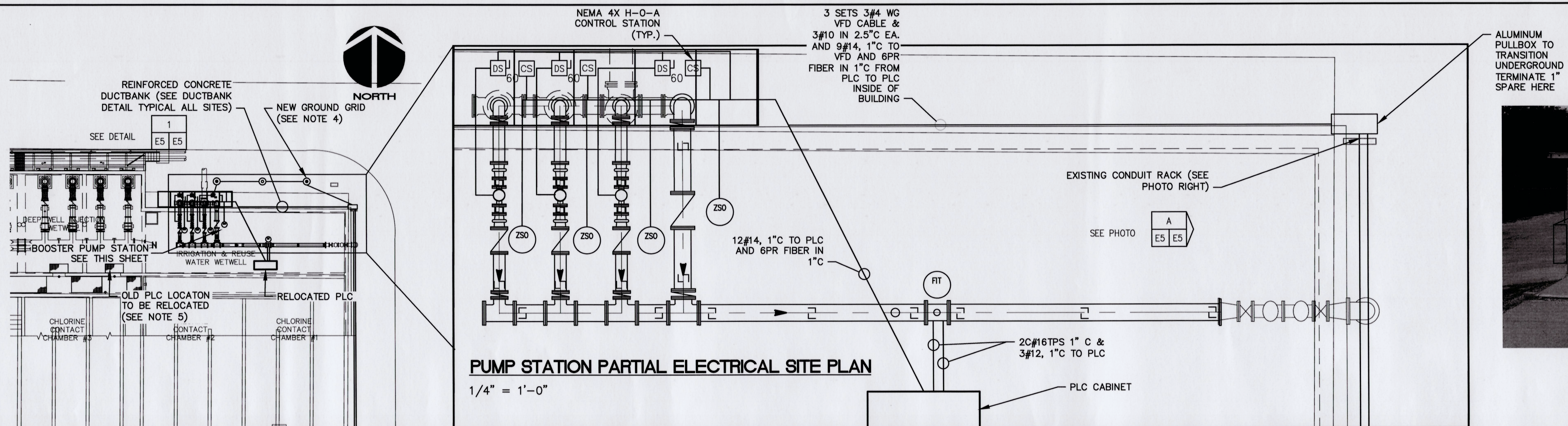
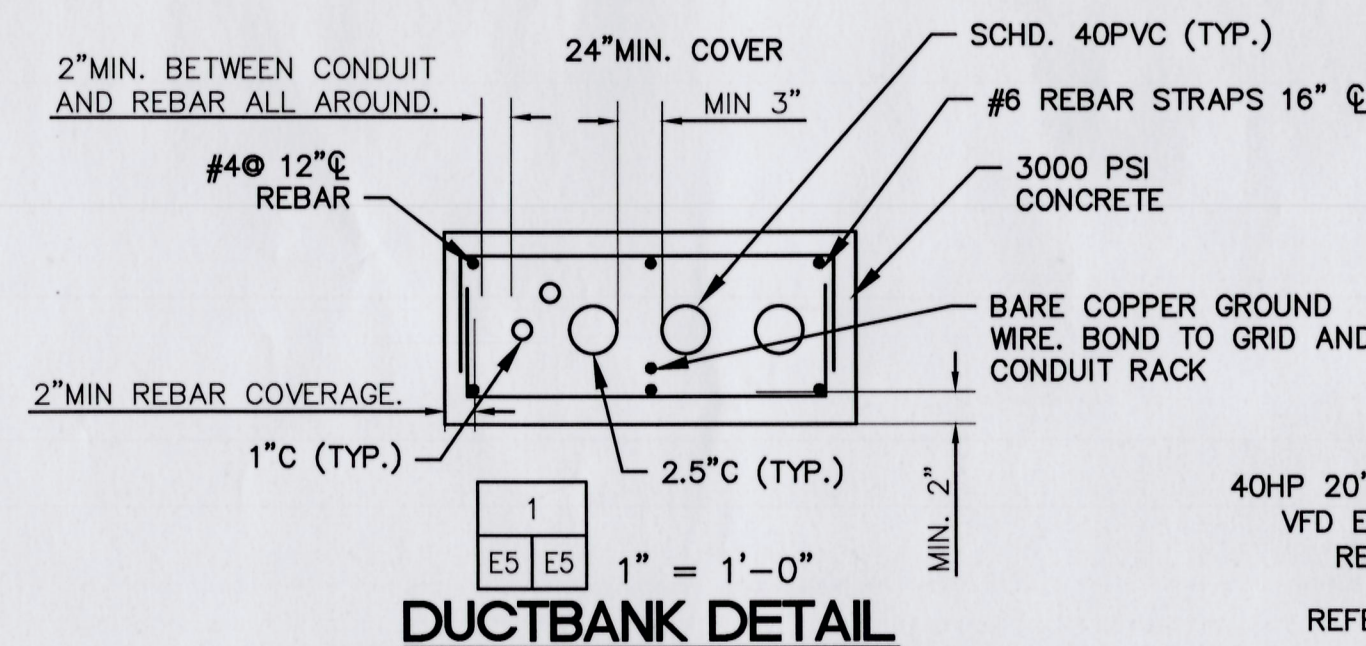


PHOTO A
NTS

NOTES:

1. INSTALL 3 SETS OF 2.5" CONDUIT W/ SHIELDED VFD CABLE, ABOVEGROUND, TO UNDERSIDE OF EXISTING CONDUIT RACK. SUPPLEMENT CONDUIT SUPPORT BY ADDING STRAPS TO UNDERSIDE OF CABLE TRAY. ALL CONDUIT TO BE ALUMINUM EXCEPT WHEN IN CONCRETE DUCTBANK WHERE SCH 40 PVC SHALL BE USED. PROVIDE ALUMINUM PULLBOXES AS NECESSARY. INSTALL PULLBOX TO TRANSITION UNDERGROUND.
2. INSTALL SIGNALS FROM CHECK VALVES TO PLC.
3. PROVIDE AND INSTALL 3-90A (HDL36090 OR EQUAL) BREAKERS IN FOR NEW VFD'S IN EXISTING DISTRIBUTION PANEL SPACES. MATCH EXISTING WITHSTAND RATING OF PANEL.
4. PROVIDE GROUNDING SYSTEM PER SPECIFICATIONS. PROVIDE THREE GROUND ROD WITH ONE TEST POINT. SPACE RODS MINIMUM 25'-0" APART. TIE TO DUCTBANK AND MOTOR CASINGS AND DISCONNECT SWITCHES, AND OVERHEAD RACK.
5. CONTRACTOR TO RELOCATE EXISTING PLC CABINET. CONTRACTOR TO EXTEND EXISTING 120V POWER TO NEW LOCATION (APPROXIMATELY 50') BY INTERCEPTING POWER CONDUIT AND RE-PULLING NEW WIRE TO NEW LOCATION (APPROXIMATELY 600')



1.5" FROM I-LINE PANEL

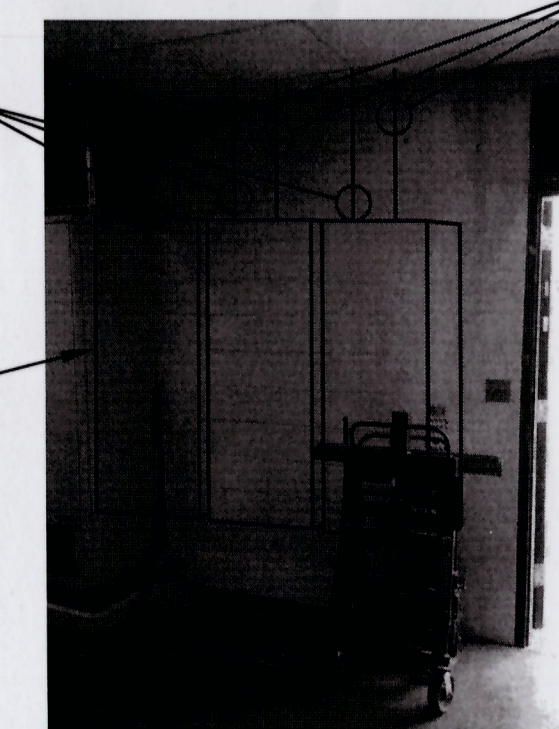


PHOTO B
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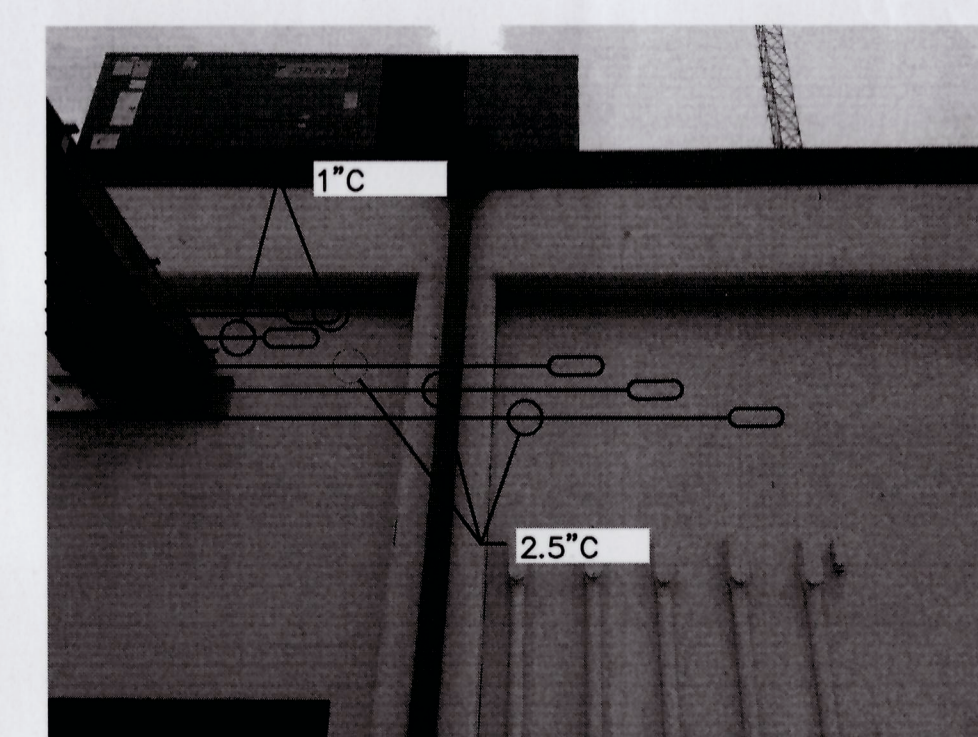
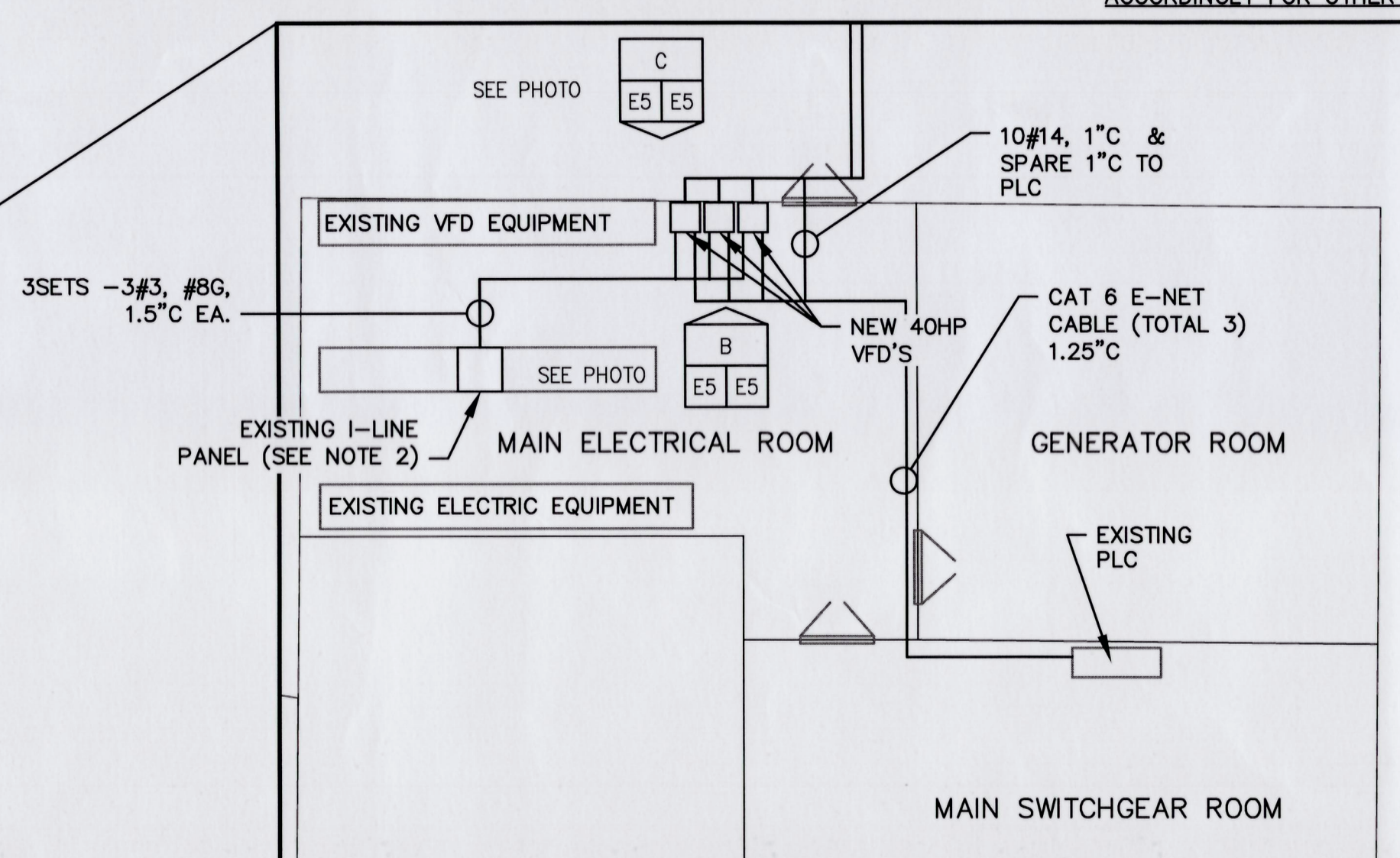
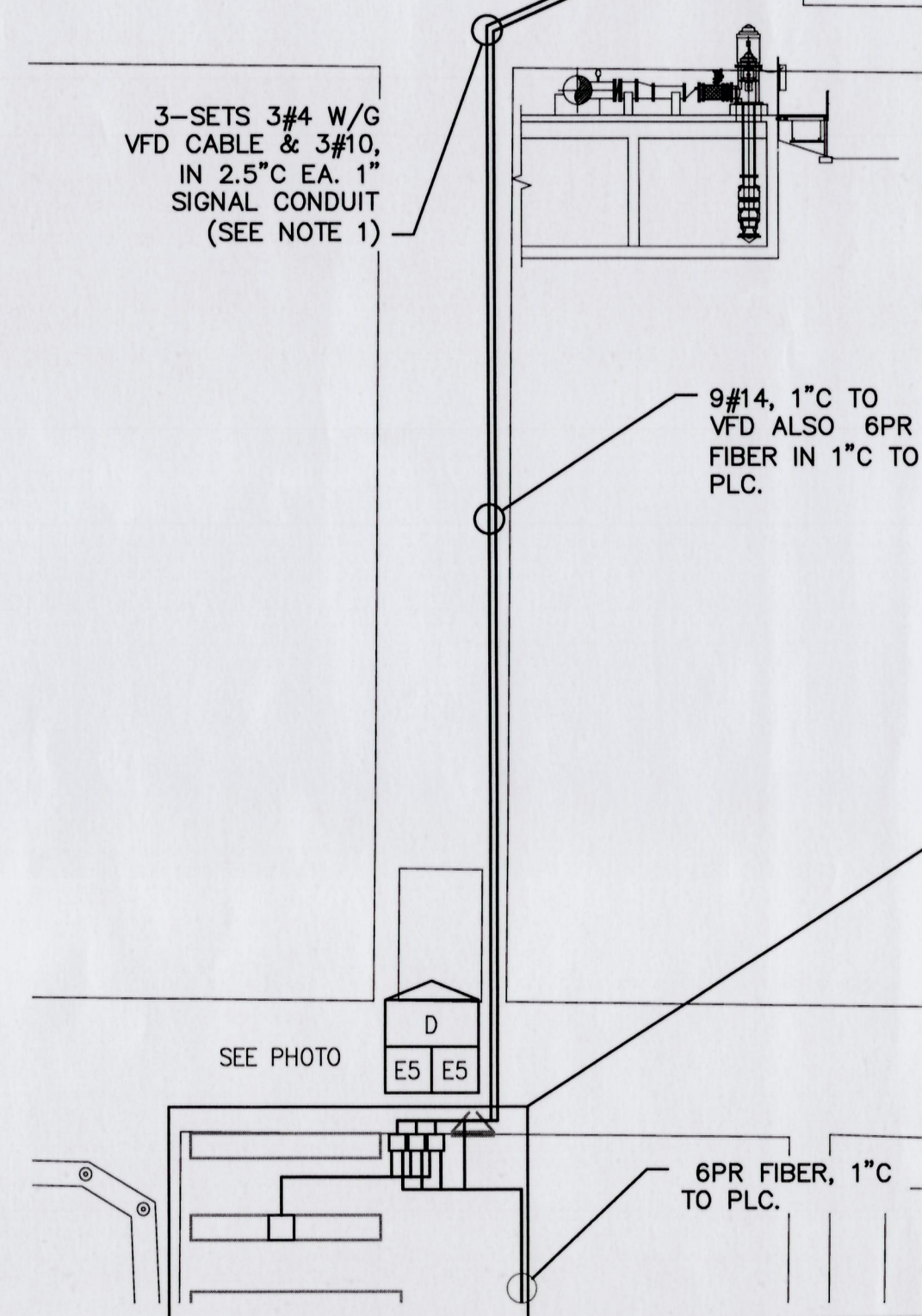


PHOTO C
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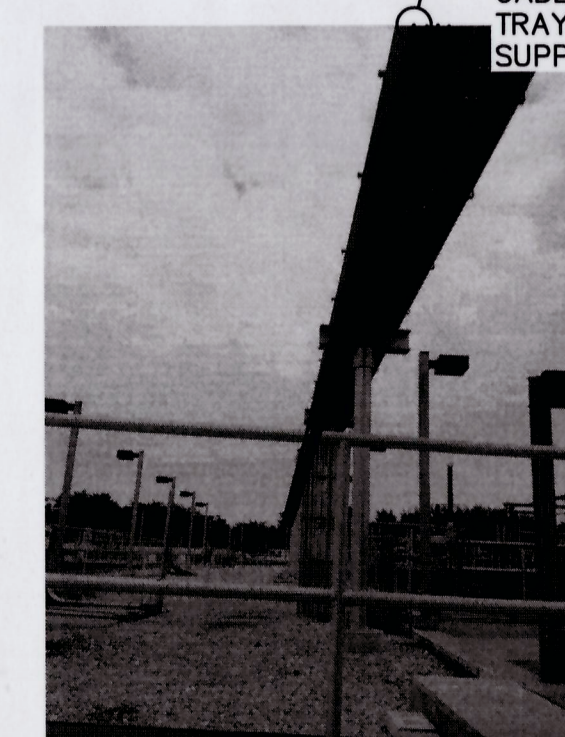
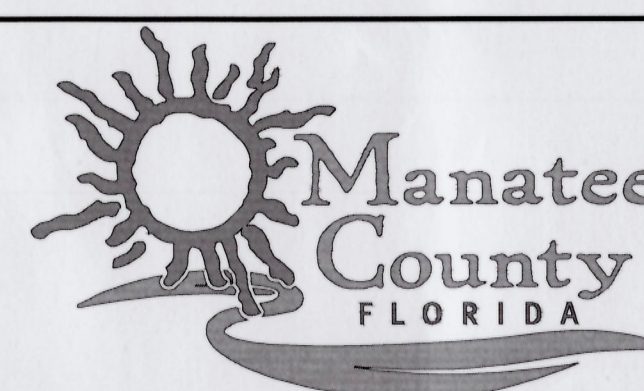
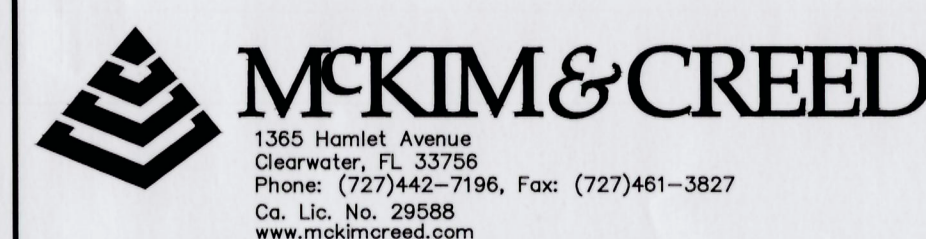
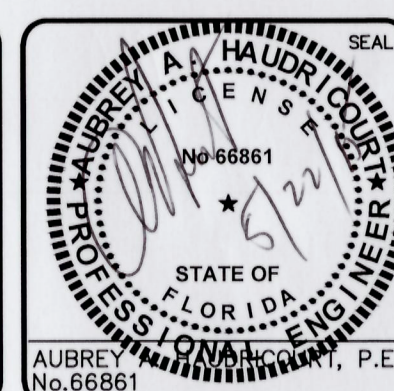


PHOTO D
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REVNO.	DESCRIPTIONS	REVISIONS
ADDENDUM #4		MAY 2015



**MANATEE AGRICULTURAL REUSE
SYSTEM-MANAGEMENT IMPROVEMENTS**

**SWWRF ELECTRICAL SITE PLAN
AND ELECTRICAL ROOM PLAN**

DATE: MARCH 2015	SCALE: HORIZONTAL: AS SHOWN	MSO FILE NUMBER: E5
MCE PROJ. # 1024-0164	DESIGNED: MSL	DRAWING NUMBER: E5
CHECKED: DCW	PROJ. MGR: MSL	
STATUS: ISSUED FOR BID		