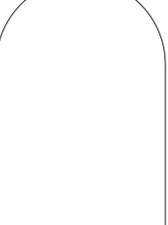


Revisions	
1.1	DATED 5/29/2013
	Modified PS Sign
1.2	DATED 10/15/2013
	Modified Note 11
1.3	DATED 10/30/2015
	Mod. Note 1, 15, Item H
	Add Matrix for OC & MV

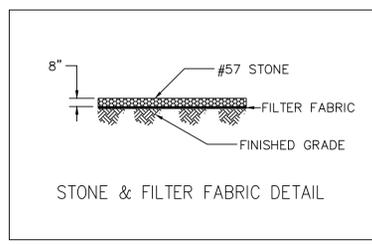
COUNTY OF BRUNSWICK

PUMP STATION DETAILS  
50HP OR SMALLER PUMP STATION  
FOR  
**BRUNSWICK COUNTY**  
NORTH CAROLINA

Date: 04-23-12  
Scale: NTS  
Drawn By: JDM  
Checked By: WLP

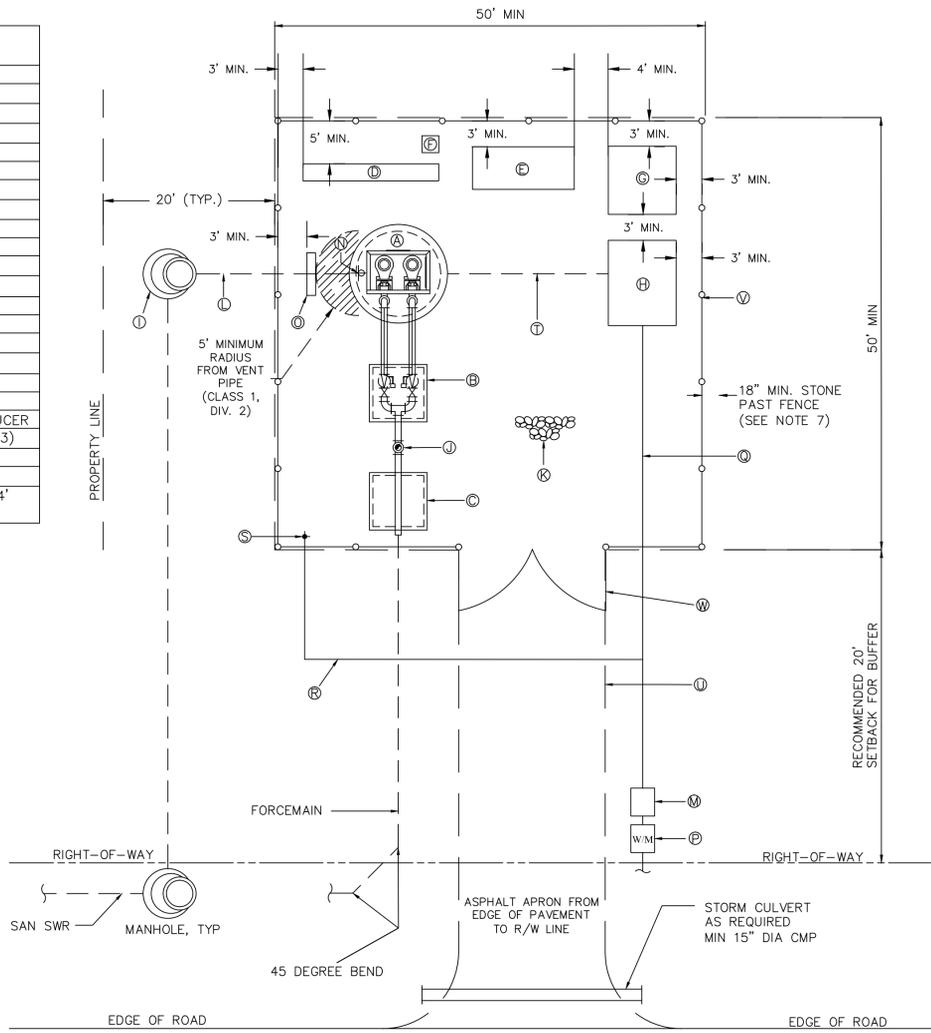


PUMP STATION COMPONENTS	
A	WET WELL
B	VALVE VAULT - 6'x6' MIN. (SEE NOTE 10)
C	METERING VAULT - 6'x6' MIN. (SEE NOTE 11)
D	CONTROL PANEL (SEE DETAIL SHEET 3)
E	GENERATOR PAD AND STANDBY GENERATOR
F	AREA LIGHT ON POLE
G	ANTENNA PAD (SEE NOTE 9)
H	ODOR CONTROL PAD AND UNIT (SEE NOTE 13)
I	5' RECEIVING MANHOLE
J	EMERGENCY PUMP OUT
K	#57 STONE BASE (SEE DETAIL THIS SHEET)
L	INFLUENT SANITARY SEWER LINE
M	APPROVED BACKFLOW PREVENTION DEVICE
N	6" VENT
O	JUNCTION BOX RACK ASSEMBLY (SEE DETAIL)
P	2" IRRIGATION METER
Q	1" WATER SERVICE TO ODOR CONTROL UNIT
R	1" WATER SERVICE TO YARD HYDRANT
S	4" FREEZE-PROOF YARD HYDRANT WITH 2" REDUCER
T	VENT PIPE TO ODOR CONTROL UNIT (SEE NOTE 13)
U	16" ALL-WEATHER GRAVEL DRIVE
V	CHAIN LINK FENCE (SEE DETAIL)
W	DOUBLE SWING GATES 2 @ 7', TOTAL OPENING 14' (SEE INSET)



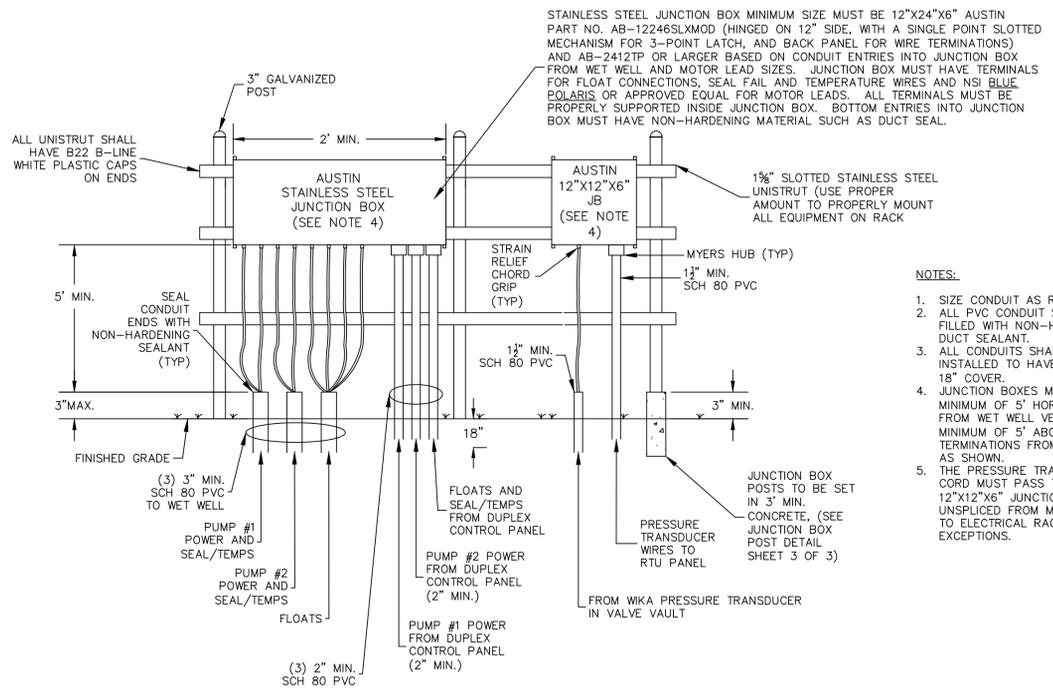
	REQUIRED	NOT REQUIRED
ODOR CONTROL UNIT		
METERING VAULT		

NOTE FOR ALL PUMP STATIONS:  
THE ODOR CONTROL SLAB, VENT PIPING FROM WETWELL, WATER SERVICE, AND ELECTRICAL CONDUIT FROM BUILDING IS REQUIRED EVEN IF THE ODOR CONTROL UNIT IS NOT.



NOTES:

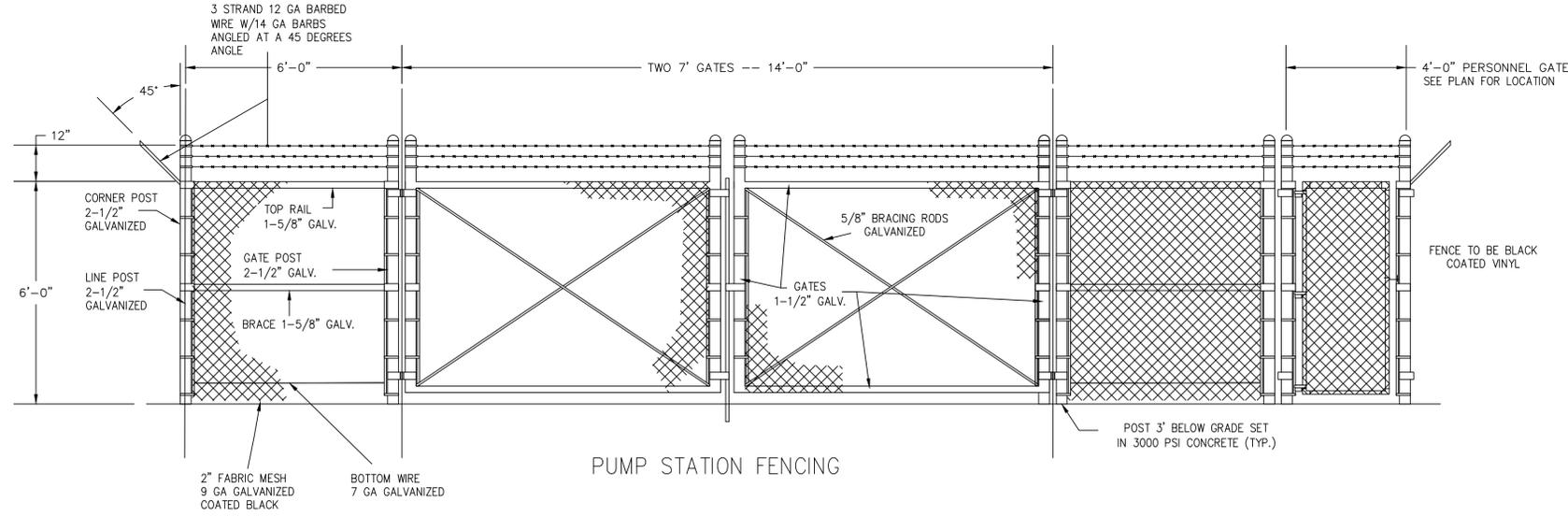
1. WET WELL INTERIOR TO RECEIVE MIN 120 MILS RAVEN 405 HIGH SOLIDS EPOXY OR APPROVED EQUAL.
2. WET WELL VENT OUTLET TO HAVE ODORHOG CHARCOAL FILTER OR APPROVED EQUAL.
3. THE PUMP STATION SITE SHALL BE A MINIMUM OF 50 FEET BY 50 FEET. THE PLAN HEREIN SHOWS A RECOMMENDED 20 FOOT BUFFER FROM THE PROPERTY LINE TO THE FENCED AREA. SEE APPLICABLE JURISDICTION'S ZONING ORDINANCE FOR REQUIRED BUFFERS.
4. THE PUMP STATION SITE SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE AWAY FROM THE WET WELL. NO STORM DRAINAGE SHALL ENTER PUMP STATION SITE.
5. THE ACCESS ROAD SHALL BE #57 STONE AT A MINIMUM 8" THICK. THE ROAD SHALL BE A MINIMUM OF 16' WIDE.
6. THE ACCESS ROAD AND ENTIRE AREA WITHIN PUMP STATION FENCE SHALL BE A MINIMUM OF 2 FEET ABOVE THE 100 YEAR WATER SURFACE ELEVATION.
7. THE PUMP STATION SHALL HAVE STONE EXTENDING 18" PAST THE FENCE LINE IN ALL DIRECTIONS.
8. THE PUMP CONTROL PANEL MUST BE INSTALLED SUCH THAT IT FACES THE WET WELL.
9. SEE ROHN ANTENNA DETAIL SHEET FOR ANTENNA DETAILS.
10. VALVE VAULT MINIMUM SIZE IS 6' x 6'. ACTUAL REQUIRED MINIMUM SIZE DEPENDS ON ACTUAL DISCHARGE PIPING SIZES. ALL PIPING CONNECTIONS INSIDE VALVE VAULT SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE AND REPAIR.
11. IF REQUIRED, METERING VAULT MINIMUM SIZE IS 6'x6'. ACTUAL REQUIRED MINIMUM SIZE DEPENDS ON ACTUAL DISCHARGE PIPING SIZES. ALL PIPING CONNECTIONS INSIDE METERING VAULT SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE AND REPAIR. IF A METERING VAULT IS REQUIRED, A SEPARATE METERING ENCLOSURE WILL BE REQUIRED ON THE ELECTRICAL RACK. A DRAIN LINE WITH BACK FLOW TO THE WET WELL WILL BE REQUIRED.
12. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ELECTRIC POWER COMPANY FOR PLACEMENT OF POWER COMPANY EQUIPMENT AND ANY REQUIRED CONCRETE SLABS, CONDUIT, ETC., NEEDED TO SERVE PUMP STATION. ELECTRIC COMPANY EQUIPMENT PLACEMENT SHALL NOT OBSTRUCT ACCESS DRIVE, GATES, GRAVITY SEWER MAIN, MANHOLES, DISCHARGE FORCE MAIN, OR ANY OTHER PUMP STATION EQUIPMENT.
13. IF APPLICABLE, ODOR CONTROL UNIT REQUIREMENTS:
  - A) CONCRETE SLAB - 10'x8'x2". TO BE INSTALLED SO THAT 12" OF SLAB ARE ABOVE FINISHED GRADE.
  - B) INLET PIPE FROM WET WELL - 8" PVC MINIMUM
  - C) CORE AND BOOT WET WELL FOR 8" PVC VENT PIPE TO ODOR CONTROL UNIT.
  - D) SIEMENS WATER TECHNOLOGIES, ZABOCS MODEL 5000/6000 - CONTACT BRUNSWICK COUNTY PUBLIC UTILITIES FOR DETAILS
  - E) ELECTRICAL POWER TO UNIT IS REQUIRED FROM ELECTRICAL BUILDING
14. F) WET WELL VENT IS CAPPED IF ODOR CONTROL UNIT IS UTILIZED
15. ALL PUMP STATION WORK BY CONTRACTOR SHALL BE OF ADEQUATE QUALITY AND WORKMANSHIP FOR ACCEPTANCE BY BRUNSWICK COUNTY.
16. GENERATOR TO HAVE ENGINE EXHAUST SILENCER, WEATHER PROTECTIVE ENCLOSURE, AND SOUND ATTENUATION. REFER TO STANDBY EMERGENCY GENERATOR TECHNICAL SPECIFICATIONS FOR FURTHER DETAILS.
17. IF BRUNSWICK COUNTY REQUIRES AN ODOR CONTROL UNIT - SLAB PLACEMENT IS SHOWN - A 2" MIN. SCH. 80 PVC CONDUIT WILL BE REQUIRED FROM THE ELECTRICAL RACK TO THE UNIT.
18. IF BRUNSWICK COUNTY REQUIRES A FLOW METER - METER VAULT IS SHOWN - A METERING ENCLOSURE WILL BE REQUIRED ON THE ELECTRICAL RACK. A 1" MIN. SCH. 80 PVC CONDUIT FROM THE METER VAULT TO THE METERING ENCLOSURE WILL ALSO BE REQUIRED.



NOTES:

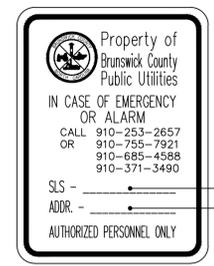
1. SIZE CONDUIT AS REQUIRED.
2. ALL PVC CONDUIT STUBS TO BE FILLED WITH NON-HARDENING DUCT SEALANT.
3. ALL CONDUITS SHALL BE INSTALLED TO HAVE A MINIMUM 18" COVER.
4. JUNCTION BOXES MUST BE A MINIMUM OF 5' HORIZONTAL FROM WET WELL VENT AND A MINIMUM OF 5' ABOVE CONDUIT TERMINATIONS FROM WET WELL AS SHOWN.
5. THE PRESSURE TRANSDUCER CORD MUST PASS THROUGH THE 12"x12"x6" JUNCTION BOX UNSPLICED FROM METER VAULT TO ELECTRICAL RACK - NO EXCEPTIONS.

ELECTRICAL JUNCTION BOX DETAIL



PUMP STATION FENCING

BCPU PUMP STATION SIGN SPECIFICATIONS  
MATERIAL: ANODIZED ALUMINUM, #5052, .080 THICK  
SIZE: 18" WIDE X 24" HIGH WITH 1.5" RADIUS ON ALL CORNERS  
BACKGROUND: 3-M ENGINEER GRADE SCOTCHLITE REFLECTIVE FILM  
ALL COPY AND BORDER IS 3-M SCOTCHCAL VINYL FILM, SAPPHIRE BLUE WITH THE EXCEPTION OF THE PHONE NUMBER AND "AUTHORIZED PERSONNEL ONLY" WHICH ARE 3-M SCOTCHCAL CARDINAL RED. THE ENTIRE SIGN IS OVERLAIN WITH FLEXCON EVL 400 VINYL #V-29, LAMINATED AT 40 PSI. ALL LETTERING IS STANDARD BOLD CONDENSED.



PUMP STATION SIGN