

NO.	BY	DATE	SYMBOL	REVISIONS
8.				
7.				
6.				
5.				
4.				
3.				
2.	SJCUJ	2025		REVISION 2
1.	SJCUJ	2020		REVISION 1

ENGINEER SHALL SUBMIT A DIMENSIONED DRAWING OF PUMP STATION TOP SHOWING ALL PRECAST PENETRATIONS BASED ON PUMP CONFIGURATION AS PART OF PLAN ACCEPTANCE PACKAGE AND PRIOR TO REQUESTING SHOP DRAWINGS

AIR RELIEF PIPE SHALL REST ON AND BE SECURED TO A 5" LONG PIECE OF 316SS UNI-STRUT FASTENED TO THE WETWELL TOP USING 316SS HARDWARE.

1" SCH 80 PVC FROM PANEL TO PRESSURE TRANSMITTER FOR TELEMETRY USE. EXTEND 2' ABOVE SLAB.

PLUG VALVE (TYPICAL OF 3) LEVER & SPRING VALVE (TYPICAL OF 2) PRESSURE GAUGE (TYPICAL OF 2)

PRECAST HOLES FOR DISCHARGE SHALL BE NO MORE THAN 1" LARGER IN DIAMETER THAN OUTSIDE DIAMETER OF PIPE FLANGE. SEAL ANNULAR SPACE WITH SIKAFLEX OR APPROVED EQUAL.

CONTRACTOR TO INSTALL: 316SS TAP, NIPPLE W/ (2)-1" 316SS BALL VALVES (2)-1"x1" 316SS TEE (2)-1" 316SS PLUG (SEE NOTE 17)

VELOCITY THROUGH VALVES OR FORCEMAIN CANNOT BE MORE THAN 8' OR 6' PER SECOND, RESPECTIVELY. INSTALL REDUCER HERE IF NEEDED

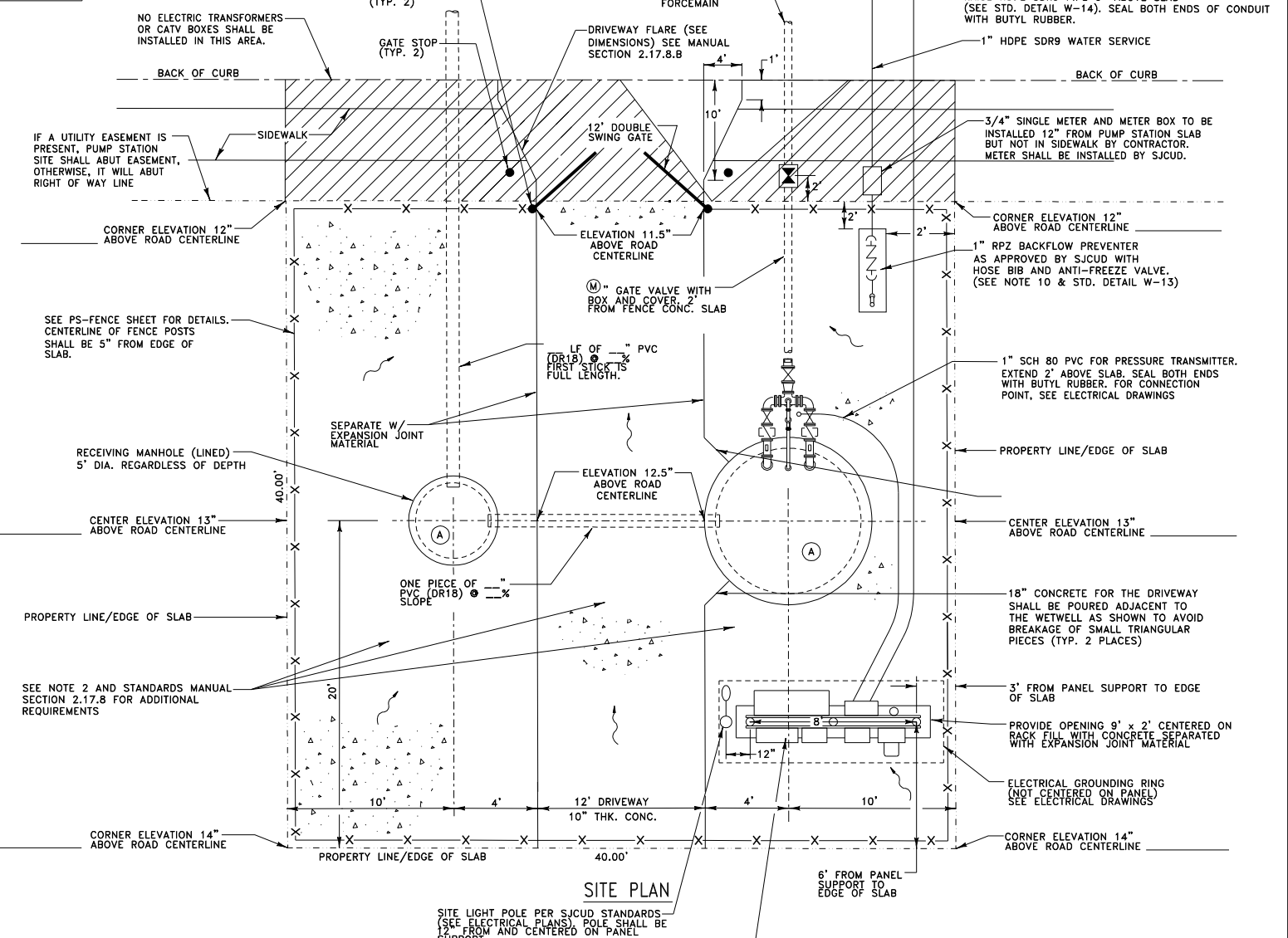
JOINTS TO BE RESTRAINED PER DETAIL G-4 OR EOR PROVIDED TABLE FOR TRANSITION FROM SS PIPE TO DI FITTING. SEE DETAIL S-16

316SS GUIDE RAILS, ALL RAILS REGARDLESS OF LENGTH SHALL BE ONE PIECE. IF LONGER THAN 20' PROVIDE INTERMEDIATE BRACKETS AS REQ'D. BY MANUFACTURER.

2" PUMP STATION SHALL HAVE 316SS THREADED CONNECTION TO PUMP BASE & MIN. 3" FLANGED PUMP DISCHARGE PIPE & VALVES WITH 4" PUMPOUT

LIFT STATION	
STATION ELEVATIONS	
ROAD CENTERLINE	
(A) TOP = ROAD CENTERLINE + 13"	
(B) GRADE	
(C) INFLUENT INVERT	
(D) HIGH WATER ALARM (C - 0.5')	
(E) LAG PUMP ON	
(F) LEAD PUMP ON	
(G) ALL PUMPS OFF	
(H) LOW WATER ALARM (G - 0.5')	
(I) SUCTION PIPE BOTTOM (K + 1.50')	
(J) TOP OF GROUT (K + 1.00')	
(K) WETWELL BOTTOM	
STATION INFORMATION	
(L) PUMP DISCHARGE PIPING (3" MIN)	
(M) FORCEMAIN PIPING (3" MIN)	
(N) TOP SLAB THICKNESS (8" MIN)	
(P) SIDE WALL THICKNESS (8" MIN)	
(Q) BOTTOM SLAB THICKNESS (12" MIN)	
(R) BOTTOM SLAB DIAMETER (8'-4" MIN)	
(S) WET WELL DIAMETER (8' MIN)	
(T) EMERGENCY SUCTION PIPING (4" MIN)	4"
PUMP INFORMATION	
NUMBER OF PUMPS	2
PUMP MANUFACTURER	
PUMP MODEL	
DISCHARGE	
IMPPELLER ID	
MOTOR RPM	
HP	3
VOLTS	60
PHASE	3
MANIFOLD COND.	
GPM AT	
FT. TDH	
RUN-OUT COND.	
GPM AT	
FT. TDH	
PUMP ACCESS HATCH SIZE	x
(MUST ACCOMMODATE MIX-FLUSH VALVE IF PRESENT)	
ELECTRICAL SERVICE AMPS (100 or 200)	

- NOTES:
- ACCESS COVER FOR THE WETWELL SHALL BE 1/4" ALUM. TREAD PLATE WITH STAINLESS STEEL HARDWARE. COVER SHALL BE PROVIDED WITH LIFTING HANDLE. LOCKING HASP AND SAFETY LATCH TO HOLD COVERS OPEN. OPENING IN WETWELL SLAB AS PER MANUFACTURERS SPECIFICATIONS.
 - CONCRETE SHALL BE TYPE I OR TYPE II, 3,000 PSI, USE WITH PLASTICIZER, HAVE A 4"-6" SLUMP, HAVE 2-4% AIR ENTRAINMENT, WATER TO CEMENT RATIO OF 0.43-0.45, AND BE REINFORCED USING 4 LB/CY OF A MACRO SYNTHETIC FIBER SUCH AS SIKAFIBER 650, EUCLID TU1-STRAND S1, FORTA FERRO, OR PRE-APPROVED EQUAL. CONCRETE DELIVERY TICKETS SHALL BE PROVIDED TO THE SJCUJ INSPECTOR.
 - "J" BOLT MOUNTING HOLE AND CONDUIT HOLES SHALL BE CORE DRILLED IN THE FIELD AS PER SHOP DRAWINGS OR ACTUAL FIELD REQUIREMENTS.
 - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRECAST WETWELL. SHOP DRAWINGS SHALL INCLUDE ALL NECESSARY STRUCTURAL AND FLOTATION CALCULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ELECTRICAL POWER TO THE PUMPING STATION. THREE PHASE POWER IS REQUIRED. THIS WORK IS TO BE COORDINATED WITH ELECTRIC PROVIDER.
 - THE INTERIOR OF THE WET WELL AND RECEIVING MANHOLE SHALL BE COATED WITH LINER BY APPROVED MANUFACTURER.
 - A LIGHTNING ARRESTER, SURGE SUPPRESSOR, AND AUDIBLE ALARM SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
 - THE SURFACE OF THE WET WELL SHALL FIRST BE PREPARED BY GROUTING THE WET WELL AS REQUIRED TO OBTAIN A SMOOTH SURFACE. THE COATING SHALL BE WARRANTED ACCORDING TO SECTION 3.15.
 - PLUG VALVE OPERATOR SHALL BE MOUNTED PARALLEL TO GROUND AND FACE OUTWARD. WHEN OPEN, PLUG SHALL BE IN THE TOP OF THE VALVE BODY.
 - RPZ BACKFLOW PREVENTER PIPING ABOVE GRADE SHALL BE THREADED BRASS WITH BRASS OR STAINLESS STEEL FITTINGS AND VALVES.
 - SITE GRADING SHALL PROVIDE FOR DRAINAGE OF WATER TO THE DRIVEWAY AND TO THE STREET.
 - SIZES SHOWN IN "STATION INFORMATION" ABOVE ARE MINIMUMS AND MAY NEED TO BE LARGER BASED ON SPECIFIC SITE DESIGN.
 - ALL NON-STAINLESS STEEL PIPING AND FITTINGS SHOULD BE PAINTED FOREST GREEN (OIL BASED).
 - ONE 2" 316SS SUPPORT SHALL BE INSTALLED UNDER EACH PLUG VALVE. (3 TOTAL)
 - ALL PIPE FLANGES SHALL BE ANSI CLASS 16.5. FLANGES TO BE 316SS 150# RAISED FACED SLIP FLANGES WITH FULL FACE CIRCLE GASKETS.
 - ALL 316SS PIPING SHALL BE SCHEDULE 40.
 - ROTATE THE PRESSURE TRANSMITTER MOUNTING TEE (BOTTOM TEE) SUCH THAT THE FUTURE PRESSURE TRANSMITTER DISPLAY INSTALLED BY SJCUJ FACES NORTH.
 - ALL MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL INCLUDING, BUT NOT LIMITED TO, NUTS, BOLTS, BRACKETS. ALL HARDWARE SHALL BE HAND-TIGHTENED AND HAVE ANTI-SIEZE COMPOUND APPLIED. DO NOT USE IMPACT WRENCHES.
 - IF PUMP DISCHARGE PIPING IS 3", A 3"x 4" REDUCER IS REQUIRED, OTHERWISE, TEE SHALL BE (L) x 4".



DESIGNER:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

SJC
ST. JOHNS COUNTY
UTILITY DEPARTMENT
1205 STATE ROAD 16
ST. AUGUSTINE, FLORIDA 32084-8646
Phone (904) 209-2700 • Fax (904) 209-2702

NO. SHEETS
SHEET NO.
PS-1
DRAWING NO.
PS-01.dwg