

PCTS 0000/CONTRACT X-000 or RPQ/ERX0000
SUBMERSIBLE PUMPING STATION WITHOUT GENERATOR
PUMPING STATION No. 0000 (UPDATE 2015)
 PROJECT OFFICIAL ADDRESS

DRAWING HISTORY

RELEASED FOR	DATE	BY
X REVIEW 90%	04/21/15	LMS
REVIEW 00%		
PERMIT		
BID		
AS-BUILT		

REVISIONS

No.	DESCRIPTION	DATE	BY
Δ XXXXX		06/19/15	LMS
XXXXXX			

APPROVALS

PROJECT MGR: X.X.X	CHECKED: X.X.X
DESIGNED: X.X.X	DRAWN: X.X.X
CHIEF ENGINEER: J.B.F.	
DESIGN MGR.: R.J.A.	
SECTION HEAD: X.X.X	

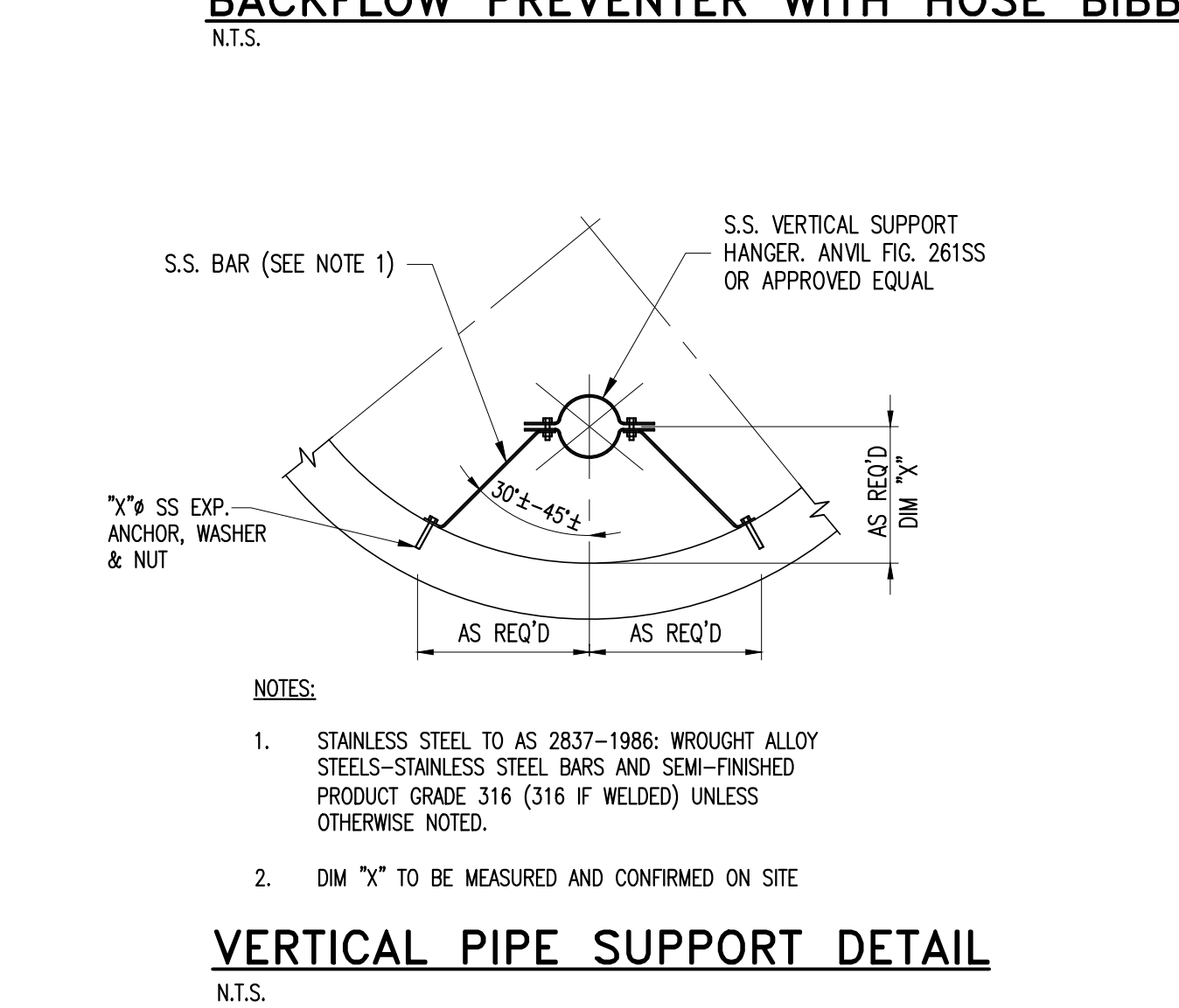
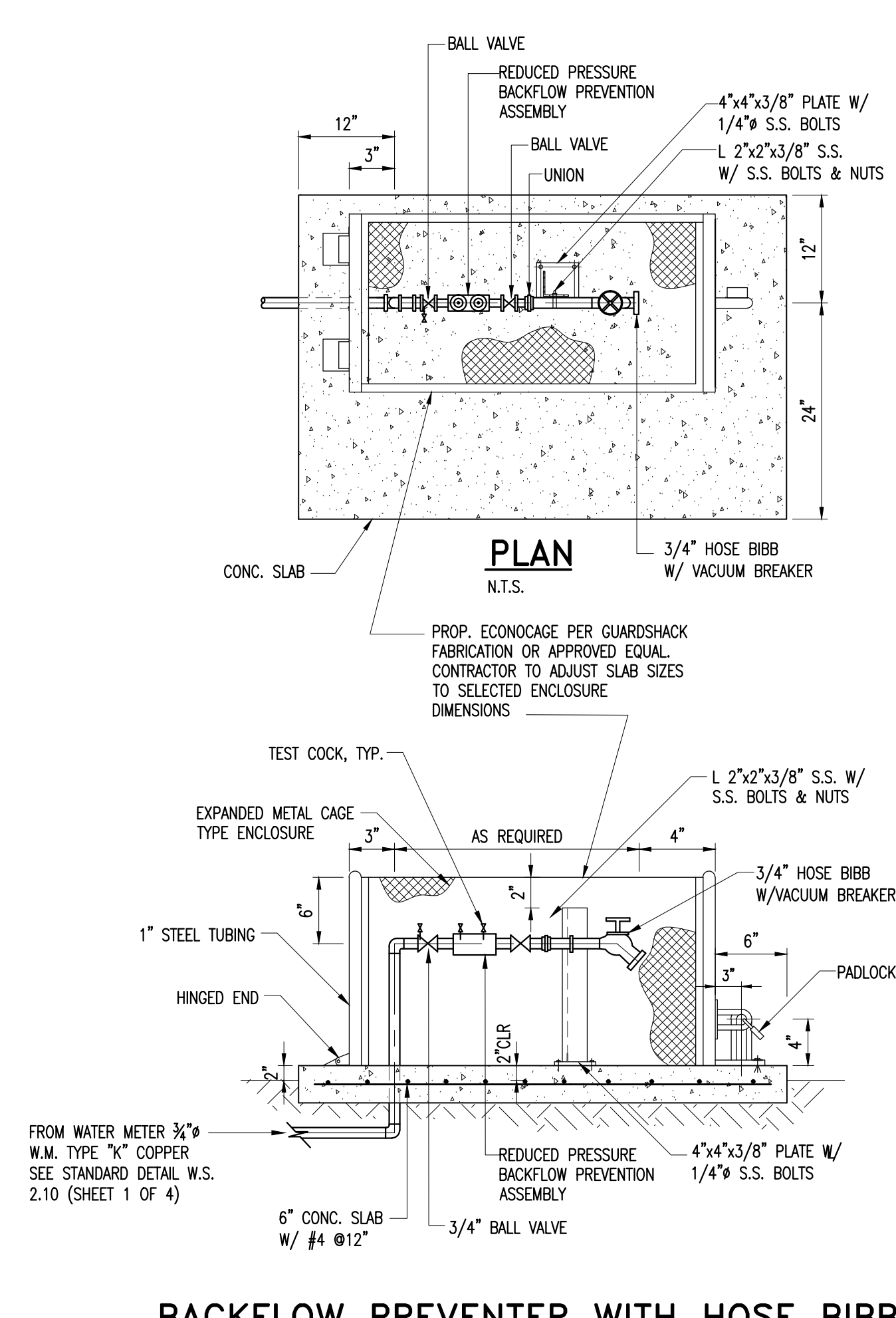
Xxxx Xxxxx, P.E.
 Xxxxx Engineer
 State of Florida—License No.00000
 Date:

MECHANICAL PLAN, SECTIONS, DETAILS AND PUMP DATA

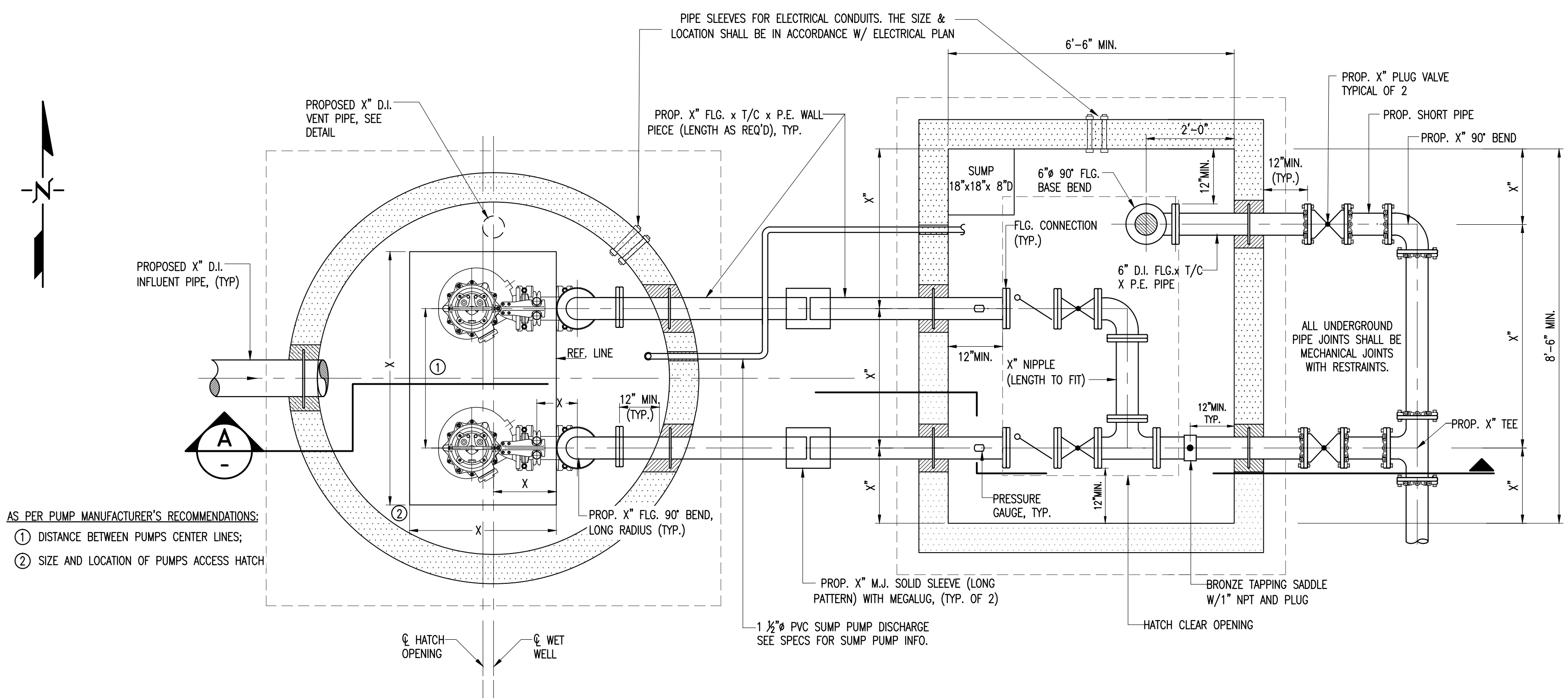
PUMP DATA:

FLUID	RAW SEWAGE		
INSTALLATION LOCATION	ADDRESS:		
PUMP TYPE	SUBMERSIBLE PUMP		
RATED POINT	CAPACITY, GPM TDH, FEET	???	
SHUT OFF HEAD, FT	???		
CONTINUOUS OPERATING RANGE	MAXIMUM TDH, FT	???	
	CAPACITY, GPM	???	
	MINIMUM TDH, FT	???	
	CAPACITY, GPM	???	
PUMP EFFICIENCY	NPSHR, FT	???	
	AT B.E.P., % MIN. RUNOUT, %	???	
PUMP CONSTRUCTION	CASING	CAST IRON CLASS 35B	
	IMPELLER	CAST IRON CLASS 35B	
	SHAFT	ANSI 420 S.S.	
	BEARINGS	L-10 LIFE, HRS.	???
	MAX. SHAFT DEFLECTION IN OPERATING RANGE	MILS	2
	MAX. VEL. OF VIBRATIONS IN OP. RANGE	INCH/SEC	0.15
	SUCTION, INCHES	DISCHARGE, INCHES	???
	RATED HP	RPM	???
	VOLTS/PHASE/Hz/S.F.	AMBIENT TEMP. FOR MOTOR RATING, °C	40
	MAXIMUM TEMP. RISE, °C	BEARINGS L-10 LIFE, HRS.	40
MAX. VIBRATION AMP., MILS	NOISE LEVEL, d@1 METER	0.1	
NEMA DESIGN CODE LETTER	START. CURR. LETTER CODE	B	
INSULATION CLASS		G	
MOTOR RATED HP NOT OVERLOADED AT ANY POINT IN THE PUMPS PERFORMANCE CURVE			
MANUFACTURERS & MODELS	PUMP	???	
	MOTOR	???	

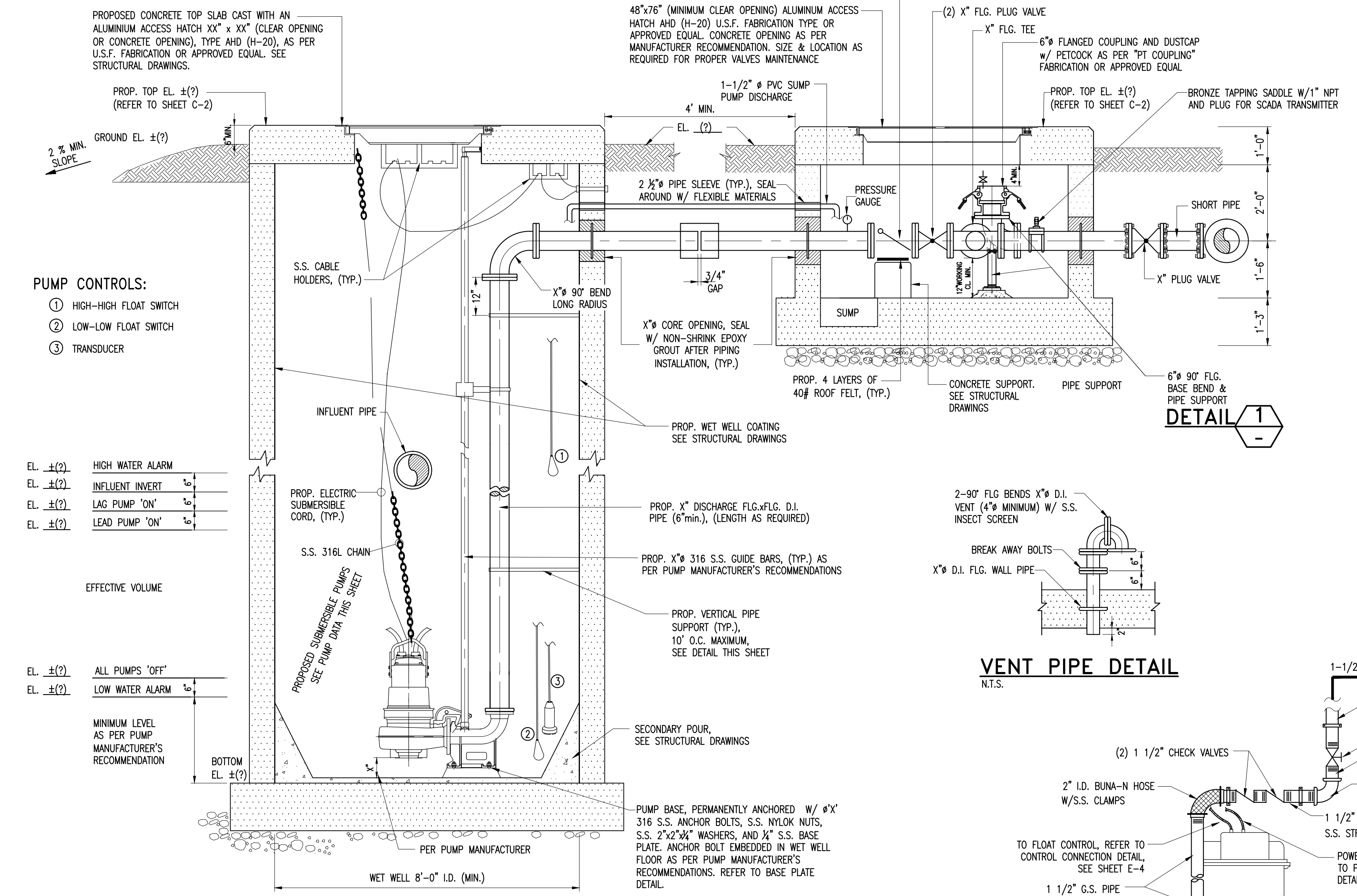
ALL PUMP STATION PLANS SHALL BE DRAWN TO SCALE



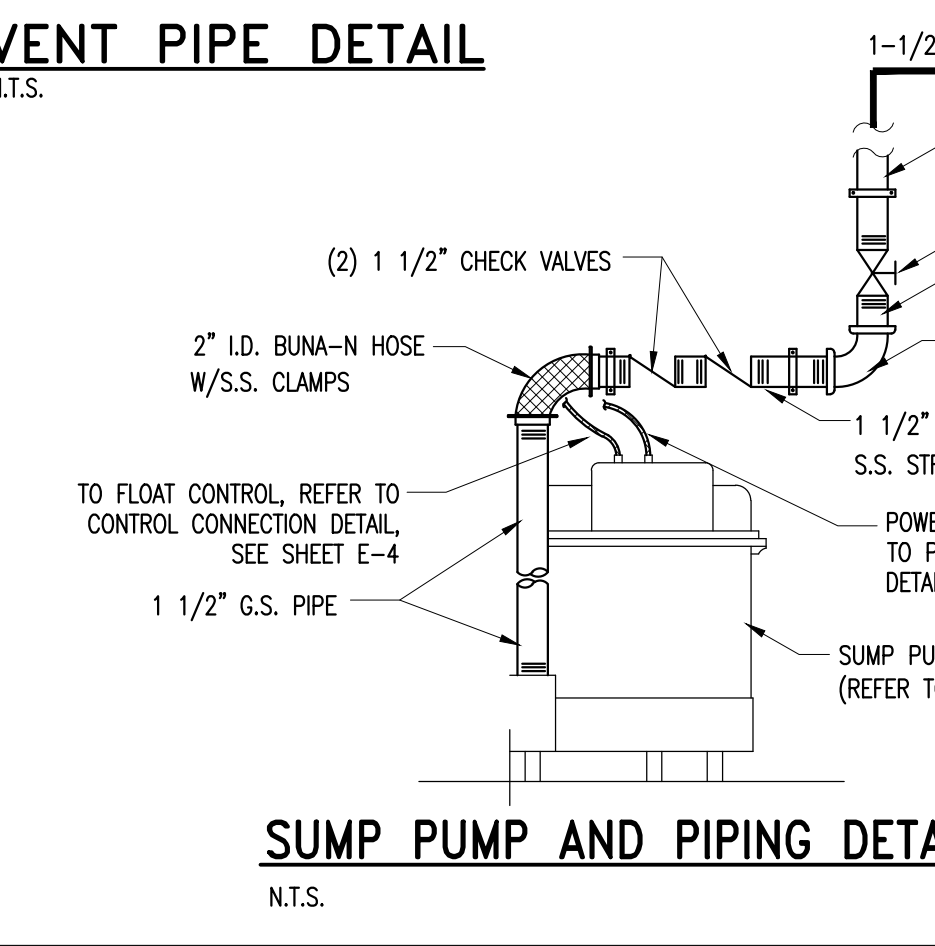
- MECHANICAL NOTES:**
- THE STANDARD DRAWINGS PRESENTED ARE BASED ON MINIMUM OF 6" DISCHARGE FORCE MAIN.
 - CONTRACTOR SHALL VERIFY EXISTING UNDERGROUND UTILITIES IN APPLICATIONS, ELEVATIONS, AND QUALITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING NEW PIPE AND FITTINGS FOR CONNECTIONS. THE CONTRACTOR SHALL INSPECT AND VERIFY ALL SITE CONDITIONS, DIMENSIONS, ELEVATIONS ETC. AND COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION. WORK SHALL BE SCHEDULED ACCORDING TO SPECIFIED CONSTRUCTION SEQUENCE.
 - PAY ATTENTION TO AVOID DISTURBING EXISTING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION (FOR EXISTING FACILITIES ONLY).
 - ALL ELEVATIONS FOR UNDERGROUND UTILITIES SHOWN ARE T.O.P. ELEVATIONS UNLESS OTHERWISE SPECIFIED.
 - ALL PIPING, UNLESS SPECIFIED, TO USE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS; FITTINGS ABOVE GROUND OR IN VAULT TO USE FLANGE JOINT.
 - PROTECT ALL UNDERGROUND FITTING WITH BOLT CONNECTIONS IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC MATERIAL OR APPROVED EQUAL. PROVIDE DIELECTRIC FITTINGS BETWEEN TWO DIFFERENT PIPING MATERIALS.
 - PIPE SUPPORTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
 - PROPOSED WET WELL SHALL BE CYLINDRICAL TYPE MADE OF REINFORCED CONCRETE WITH DEPTH NO GREATER THAN 24 FEET.
 - PROVIDE SPARK-PROOF CONTACT BETWEEN PUMPS AND GUIDE RAIL SYSTEM.
 - ALL PUMP CONTROLS SHALL BE SET AS PER DESIGN REQUIREMENTS.



WET WELL AND VALVE VAULT PLAN
 SCALE: 1/2"=1'-0"



SECTION A
 SCALE: 1/2"=1'-0"



SUMP PUMP AND PIPING DETAIL
 N.T.S.



VENT PIPE DETAIL
 N.T.S.

- AS PER PUMP MANUFACTURER'S RECOMMENDATIONS:
 ① DISTANCE BETWEEN PUMPS CENTER LINES;
 ② SIZE AND LOCATION OF PUMPS ACCESS HATCH

- PUMP CONTROLS:**
 ① HIGH-HIGH FLOAT SWITCH
 ② LOW-LOW FLOAT SWITCH
 ③ TRANSDUCER

- EL. ±(2) HIGH WATER ALARM
 EL. ±(2) INFLUENT INVERT
 EL. ±(2) LAG PUMP 'ON'
 EL. ±(2) LEAD PUMP 'ON'
- EFFECTIVE VOLUME
- EL. ±(2) ALL PUMPS 'OFF'
 EL. ±(2) LOW WATER ALARM
- MINIMUM LEVEL AS PER PUMP MANUFACTURER'S RECOMMENDATION