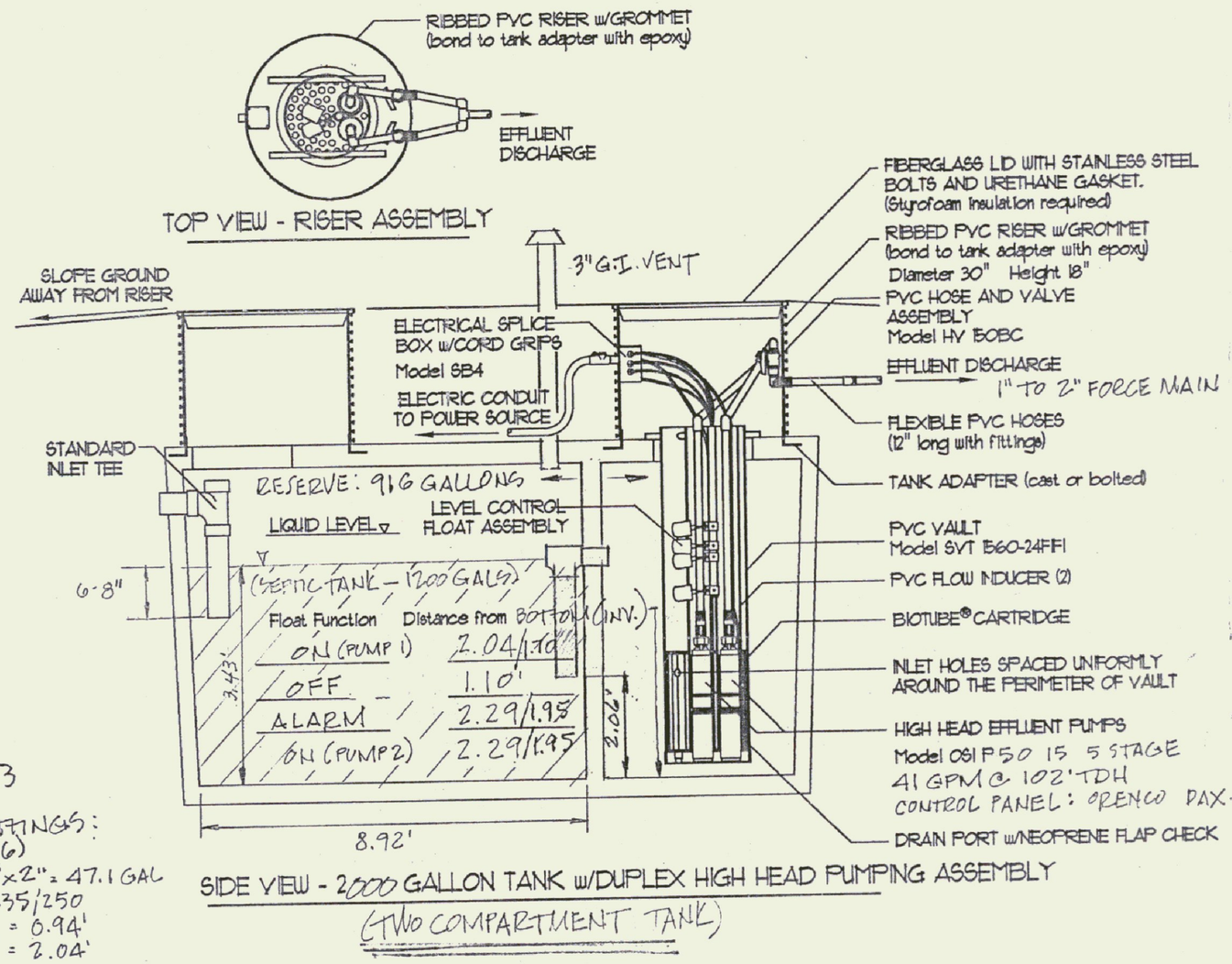
Septic/Dosing Tank w/ Duplex High Head Pumping Assembly

Information and materials available for this system from Wastewater Technologies, Inc. (802)869-3219



SIDE VIEW - 2000 GALLON TANK w/DUPLEX HIGH HEAD PUMPING ASSEMBLY
(TWO COMPARTMENT TANK)

LOT N° 3

FLOAT SETTINGS:
(WW-9-0346)
DOSE: 240'x2" = 47.1 GAL
5x VOL = 235/250
= 0.94'
PUMP 'ON' = 2.04'

LOT N° 4

FLOAT SETTINGS
(WW-9-0321-1)
DOSE: 2. ½ = 5.1
5x VOL(30.1) = 150.5
≈60'
PUMP 'ON' = 1.71'

PUMP STATION INSTALLATION NOTES

1. The tank shall be installed on twelve (12) inches of compacted g . . or crushed stone (3/8" or less) with the tank bottom level in all directions.

2. Prior to backfilling, the tank shall be filled with water to the bottom of the roof slab. After allowing for absorption, the tank shall remain full for twenty-four (24) hours with no more than one (1) inch drop in the water level. Any leaks shall be repaired with hydraulic cement around the exterior of the tank. The tank must pass the leakage test before being placed in service.

3. All wiring must be completed by a licensed electrician. All lines between the tank and the building must be contained in conduit.

4. The pressure distribution test of the disposal field will be performed by using clean water that is delivered to the disposal field by means of the pump station.

Prepared for you by John H. Stuart, P.E. 10/5/98

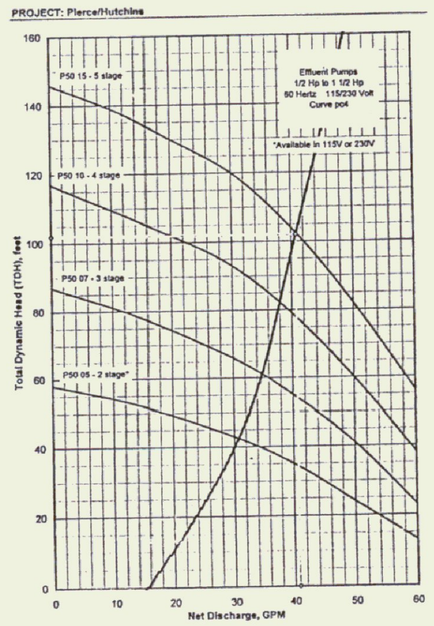
Pump Selection for Pressurized System

Orifice Size	0.218	inches
Residual Head at Last Orifice	3.00	feet
Lateral Length	30	feet
Total Number of Laterals per Cell	8	
Orifice Spacing	6.00	feet
Distributing Valve Model (# of Zones)	1	
Lift to Manifold	-36	feet
Discharge Assembly Size	1.00	
Transport Line Size	2.00	inches
Pipe Class/Schedule	40	
Transport Length	3500	feet
Manifold Size	2.00	inches
Pipe Class/Schedule	40	
Manifold Length	8.00	feet
Lateral Size	2.00	inches
Pipe Class/Schedule	40	
Flow Meter	none	

Calculation

Minimum Flow Rate per Orifice	1.02 gpm
Number of Orifices per Zone	40
Total Actual Flow Rate	40.8 gpm
Number of Laterals per Cell	8
Total Dynamic Head:	
Lift to Manifold	-36.0 feet
Residual Head at Last Orifice	3.0 feet
Frictional Head Losses:	
Head Loss in Transport Pipe	96.7 feet
Head Loss through Discharge Assembly	38.2 feet
Head Loss in Distribution Header	0.1 feet
Head Loss in Laterals	0.0 feet
'Add-on' Friction Losses	0.0 feet
Head Loss through Distributing Valve	0.0 feet
Head Loss through Flow Meter	0.0 feet

Size Pump for:
TOTAL FLOW RATE 40.8 gpm @
TOTAL DYNAMIC HEAD 102.0 feet



STATE OF VERMONT
JOHN H. STUART
No. 8018
REGISTERED
PROFESSIONAL ENGINEER

Department of Environmental Conservation
Approved: Paul Allen
Date: WW-9-0321-1
12/11/2000

12/00 FLOATS
2/99 ANR COMMENTS
REV 1/99 ANR COMMENTS

DEC - 8 2000

JOHN PIERCE
NORTH FERRISBURGH
WASTEWATER DETAILS (PUMP STATION)
APRIL 1998
DRAWING 1A

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