5-28-96

PENNINGTON FROZEN FOOD WH.
LORAY, TREDELL CO

SEPTIC SYSTEM L-TAR = 0.3 GPD/SF
DOMESTIC WASTE ONLY
30 EMPLOYEES - MAX @ 25 G/E = 750 GPD

$\frac{750\ GPD}{0.3\ L\text{-}TAR} = \frac{2500\ SF}{3\ TRENCH} = 833\ LF$ ~~ABSORPTION~~ LINE

SEPTIC TANK: $V = 1.17Q + 500 = 1377.5$ GAL
USE: 2000 GAL SEPTIC TANK & PUMP TK.

PRESSURE MANIFOLD:
4" ϕ SCH 80 PVC W/ 8-½" ϕ SCH 80 TAPS.
OPERATING @ 2.0 FT HEAD PRESSURE
FLOW = 8 x 5.48 GPM = 43.84 GPM
USE CHECK VALVE

HEAD: ELEV HEAD: 1006 - 996 = 10.0
OPERATING HD 2.0
FRICTION HD: 220 FT x 3.75/100 x 1.2 9.9
TOTAL OPERATING HEAD = 21.9 FT
PUMP: 43.84 GPM @ 21.9 FT HEAD.
USE: MYERS ME 33 - ⅓ HP PUMP

DOSING: 833 LF LINE @ 65.3 G/100 x ⅔ = 364 GAL DOSE
DRAWDOWN: $\frac{364}{2000} \times 48 = 8.74"$
PUMP RUN TIME: $\frac{364\ GAL}{43.84\ GPM} = 8.3$ MIN

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