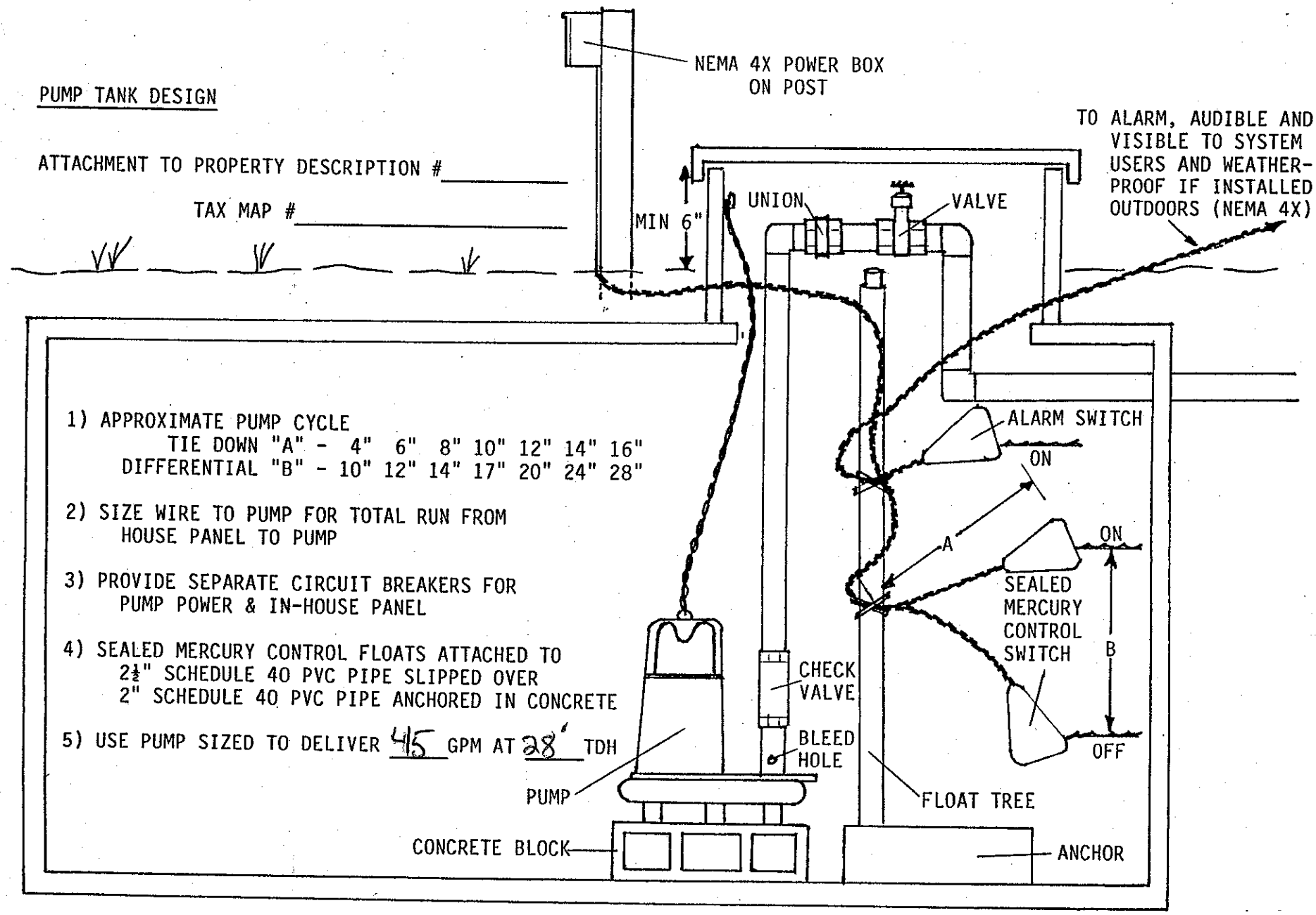
PUMP TANK DESIGN

ATTACHMENT TO PROPERTY DESCRIPTION #_____

TAX MAP #_____



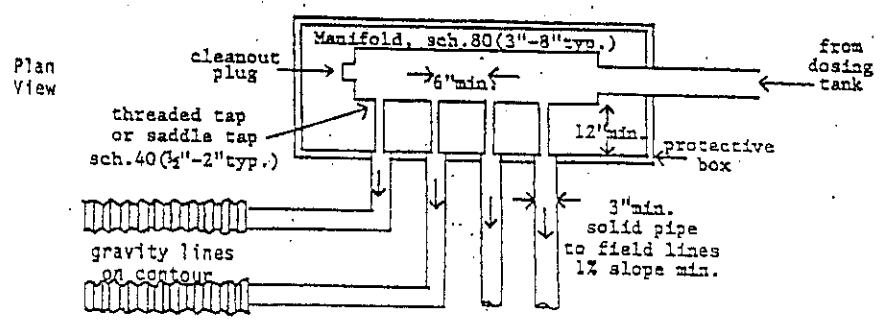
1) APPROXIMATE PUMP CYCLE
   TIE DOWN "A" - 4" 6" 8" 10" 12" 14" 16"
   DIFFERENTIAL "B" - 10" 12" 14" 17" 20" 24" 28"

2) SIZE WIRE TO PUMP FOR TOTAL RUN FROM HOUSE PANEL TO PUMP

3) PROVIDE SEPARATE CIRCUIT BREAKERS FOR PUMP POWER & IN-HOUSE PANEL

4) SEALED MERCURY CONTROL FLOATS ATTACHED TO 2½" SCHEDULE 40 PVC PIPE SLIPPED OVER 2" SCHEDULE 40 PVC PIPE ANCHORED IN CONCRETE

5) USE PUMP SIZED TO DELIVER 45 GPM AT 28' TDH



Pressure Manifold Design

1. 6 Number of Taps = Number of trenches
2. 4" Manifold Diameter (in) (obtain from table 1)
3. 1/2" Tap Size (in) (obtain from table 1)
4. 12" Tap Length (in)
5. _____ Manifold Length (in) = # of Taps ____ X Tap Spacing _____ (in)
   + Tap Spacing _____ (in)
6. 7.11 Flow per Tap (gpm) (obtain from table 2)
7. 45 g/min Total Flow of Taps (gpm) = Flow per Tap X # of Taps
8. 2" Supply Line Size (in)
9. 115' Supply Line Length (ft)
10. _____ Friction Loss per 100 ft of Supply Line (ft / 100 ft) (from table 3)
11. _____ Friction Head (ft) = Friction Loss (ft/ 100 ft) X Supply Length (ft)
12. _____ Elevation Head (ft)
13. _____ Pressure Head (ft)
14. 28' Total Head (ft) = Friction head + Elevation Head + Pressure Head
15. _____ Pump required to supply total flow of 45 gpm
    against a total head of 28 ft

    (obtain from pump curve)