P-D System Calc's

P-D is a must when percs are > 60 and <120 MPI. Otherwise it is a good idea but not required.

1. Layout trench as for any other system.

2. Determine lateral length to fit the available area.

3. Determine lateral diameter (Fig. A-1a thro' A-3b).

4. Determine Min. Dose Volume (5 x Total lateral vol. - Table A-4).

5. Determine hole size and on-center spacing (6 SF area per hole max.).

6. Total number of holes: (Total LF ÷ o.c. holes spacing = # of holes).

7. Total Network Discharge: (# of holes x hole discharge rate [Table A-1] = gpm).

Hole discharge rate calculation = $D^2 \times \sqrt{H} \times 11.8$

(orifice hole Diameter in inches and squirt height H in feet)

8. Size Manifold = Force Main (Table A-2).

9. TDH: Residual Head……5

Elevation……_____

Depth of pump……...____

Force Main Friction loss-(Table A-2)…____

Fittings Friction Loss (Table A-3)…….._____

TDH = Sum of above……_____FEET