

# LOW PRESSURE PIPE (LPP) SYSTEM

## WHY?

- Better effluent distribution throughout drainfield.
- May be required under certain siting criteria to reclassify provisionally suitable site (need at least 24 inches).
- Typically uses about 1/3 of the area as a conventional system (LTAR is figured on aerial basis) and can be fit into irregularly shaped drainfield areas.

## WHAT?

- Network of small diameter (1 to 2 inch) PVC pipes with holes drilled at specified sizes and spacings.
- Installed in narrow (8 to 24 inches), shallow (8 inches, minimum) gravel trenches spaced on five-foot centers.

## HOW DOES IT WORK?

- Pump fills LPP network with effluent and pressurizes the network to 2 to 5 feet of pressure head.
- The flow of effluent out of the drilled holes is dependent upon the size of the hole and the pressure head.

## WHERE?

- Level sites
- Sloping sites

## PROBLEMS

- Hole clogging with solids and "rock shadowing".
- Effluent drainback to lower laterals.

**Problem: Design LPP system using 5/32" holes.  
Start with a hole spacing of 6' (8 holes) for the lowest line, line #4.**

<u>Line #</u>	<u>PH</u>	<u>Flow/hole</u>	<u># of holes</u>	<u>Flow/line</u>	<u>Hole spacing</u>
<u>1</u>	<u>2</u>	<u>0.41</u>	<u>14</u>	<u>5.68</u>	<u>5.14</u>
<u>2</u>	<u>3</u>	<u>0.50</u>	<u>11</u>	<u>5.47</u>	<u>6.55</u>
<u>3</u>	<u>4</u>	<u>0.58</u>	<u>10</u>	<u>5.74</u>	<u>7.20</u>
<u>4</u>	<u>5</u>	<u>0.64</u>	<u>9</u>	<u>5.77</u>	<u>8.00</u>