

SUBSURFACE SEWAGE PROGRAM
CLASSROOM EXERCISE #2 (PHASE 1)

The plan attached includes a septic system design for a 5-bedroom single-family residential building. Answer the following questions below based on your review of the plan.

1. Determine the minimum drop required for the 4-inch diameter building sewer pipe from the building foundation to the septic tank inlet.

_____ (inches) _____ (feet)

2. How much effective leaching area (ELA) is required? _____ (sq ft)

3. How much effective leaching area (ELA) is provided? _____ (sq ft)

4. What is the minimum size septic tank required? _____ (gal)

5. Determine the average slope (gradient) of the ground in the leaching system area (use two arrows shown on plan for horizontal distances). _____ (%)

6. What is the general direction of the downhill slope (gradient)? north south east west

7. Based on the deep-hole test pit data, what is the maximum depth the bottom of the leaching system can be located below original grade? _____ (inches)

8. Determine the minimum leaching system spread (MLSS) for the system:

MLSS = HF _____ X FF _____ X PF _____ = _____ (feet)

9. As proposed on the plan, what would be the minimum finished grade elevations for each row?

ROW#1 = _____ (feet)

ROW#2 = _____ (feet)

10. List at least two problems noted on the proposed plan regarding the leaching system design, separation distances, well location, etc.
