

**SUBSURFACE SEWAGE PROGRAM**  
**CLASSROOM EXERCISE #2 (PHASE 1)**

The plan attached includes a septic system design for a 4-bedroom 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 slope (gradient) of the property? 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.

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