The plan attached includes a septic system design for 125 seat restaurant (with public bathrooms). The building is new construction. Answer the following questions below based on your review of the plan.

1. What is the daily design flow? ______________________________ (gpd)

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

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

4. Determine the average slope (gradient) of the ground in the leaching system area. ________ (%)  

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

6. 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)

7. Is the proposed bottom of system depth acceptable? __________________________ (yes/no)

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

   
   MLSS = HF _______ X FF _______ X PF _______ = ______________ (feet)

9. Does the design meet the MLSS requirement for the proposed restaurant? ______________ (yes/no)

10. List the type of tank and minimum size required for each of the four (4) tanks shown on the plan.

   Tank A ___________________________      Tank B ___________________________

   Tank C ___________________________      Tank D ___________________________

11. Are the tanks located at an acceptable distance from the restaurant building? __________ (yes/no)

12. Determine the minimum drop required for the 6-inch diameter building sewer pipe from the building foundation to the Tank C inlet.

   ___________________________ (inches)      ___________________________ (feet)

13. What is the minimum separation distance required between the private well and the following:

   Leaching system _______ (ft)       Septic Tanks _______ (ft)       Building Sewer _______ (ft)

14. Is a reserve septic system area required to be shown for this plan? ______________ (yes/no)

15. Based on the layout and bottom elevations of the proposed leaching system, what type of distribution is being provided? __________________________________________
CLASSROOM EXERCISE #3 (PLAN)

TEST PIT A
0-22” FINE SANDY LOAM
22-76” MEDIUM SAND
NO LEDGE
MOTTLING @ 38”

TEST PIT B
0-21” FINE SANDY LOAM
21-70” MEDIUM SAND
NO LEDGE
MOTTLING @ 36”

PERC RATES
P1 = 9 MIN/INCH @ 16” DEEP
P2 = 3 MIN/INCH @ 32” DEEP

DATE 5/1/2018

PROPOSED LEACHING SYSTEM:
TWO (2) ROWS OF ELJEN MANTIS 536-8.
EACH ROW HAS A TOTAL OF 300 LINEAR FEET OR THREE (3) 100 FT ROW SEGMENTS.

UPPER ROW: BOTTOM OF SYSTEM ELEVATION @ 98.5’
LOWER ROW: BOTTOM OF SYSTEM ELEVATION @ 96.5’