

**DEPARTMENT POLICY FOR DRAINFIELD SIZING IN AREAS WITH DISCONTINUOUS LIMESTONE
AUGUST 1999**

- A. WHERE DISCONTINUOUS LIMESTONE EXISTS WITHIN THE PROPOSED DRAINFIELD AREA, AND IS 42 INCHES OR LESS BELOW THE BOTTOM SURFACE OF THE DRAINFIELD, THE FOLLOWING REQUIREMENTS SHALL APPLY.
- B. ADDITIONAL DRAINFIELD SHALL BE ADDED TO EQUAL THE AMOUNT OF AREA WHICH HAS DISCONTINUOUS LIMESTONE WITHIN 42 INCHES OF THE BOTTOM OF THE DRAINFIELD. THIS ADDITIONAL AREA SHALL NOT CONTAIN DISCONTINUOUS LIMESTONE WITHIN 42 INCHES OF THE BOTTOM OF THE DRAINFIELD.
- C. THE SOIL LOADING RATE SHALL NOT BE BASED ON THE LIMESTONE BUT SHALL BE BASED ON THE MOST RESTRICTIVE SLIGHTLY OR MODERATELY LIMITED SOIL TYPE IN THE REMAINDER OF THE DRAINFIELD AREA, PER TABLE III, FOOTNOTE 5., AND 64E-6.009(3)(e), F.A.C. HOWEVER, LIMESTONE SHALL NOT TOUCH THE BOTTOM SURFACE OF THE DRAINFIELD. WHERE THE APPLICANT CHOOSES TO REMOVE DISCONTINUOUS LIMESTONE, REMOVAL MUST BE TO A DEPTH OF 24 INCHES BELOW THE BOTTOM OF THE DRAINFIELD, AND REPLACED WITH SUITABLE SLIGHTLY LIMITED SOIL MATERIAL. THIS WILL NOT COUNT AS A "SOIL REPLACEMENT" AND WILL NOT REQUIRE THE USE OF A LOWER SOIL LOADING RATE. THE APPLICANT MAY ALSO CHOOSE TO "DETOUR" THE DRAINFIELD. THIS MAY BE ACCOMPLISHED BY REMOVAL OF ANY GRAVEL WITHIN A 1 FOOT PERIMETER AROUND THE DISCONTINUOUS LIMESTONE AND USING A SOLID WALL PIPE (NON-PERFORATED) TO PASS THROUGH THE DETOURED AREA. THE CONNECTION BETWEEN PERFORATED AND NON PERFORATED PIPE SHALL BE WITHIN THE REMAINING DRAINFIELD AND NO CLOSER THAN 6 INCHES FROM THE SIDEWALL.
- D. WHERE ADDITIONAL DRAINFIELD MUST BE ADDED DUE TO THE PRESENCE OF DISCONTINUOUS LIMESTONE, ADDITIONAL UNOBSTRUCTED AREA (2X AREA) SHALL BE REQUIRED IN EQUAL PROPORTION.

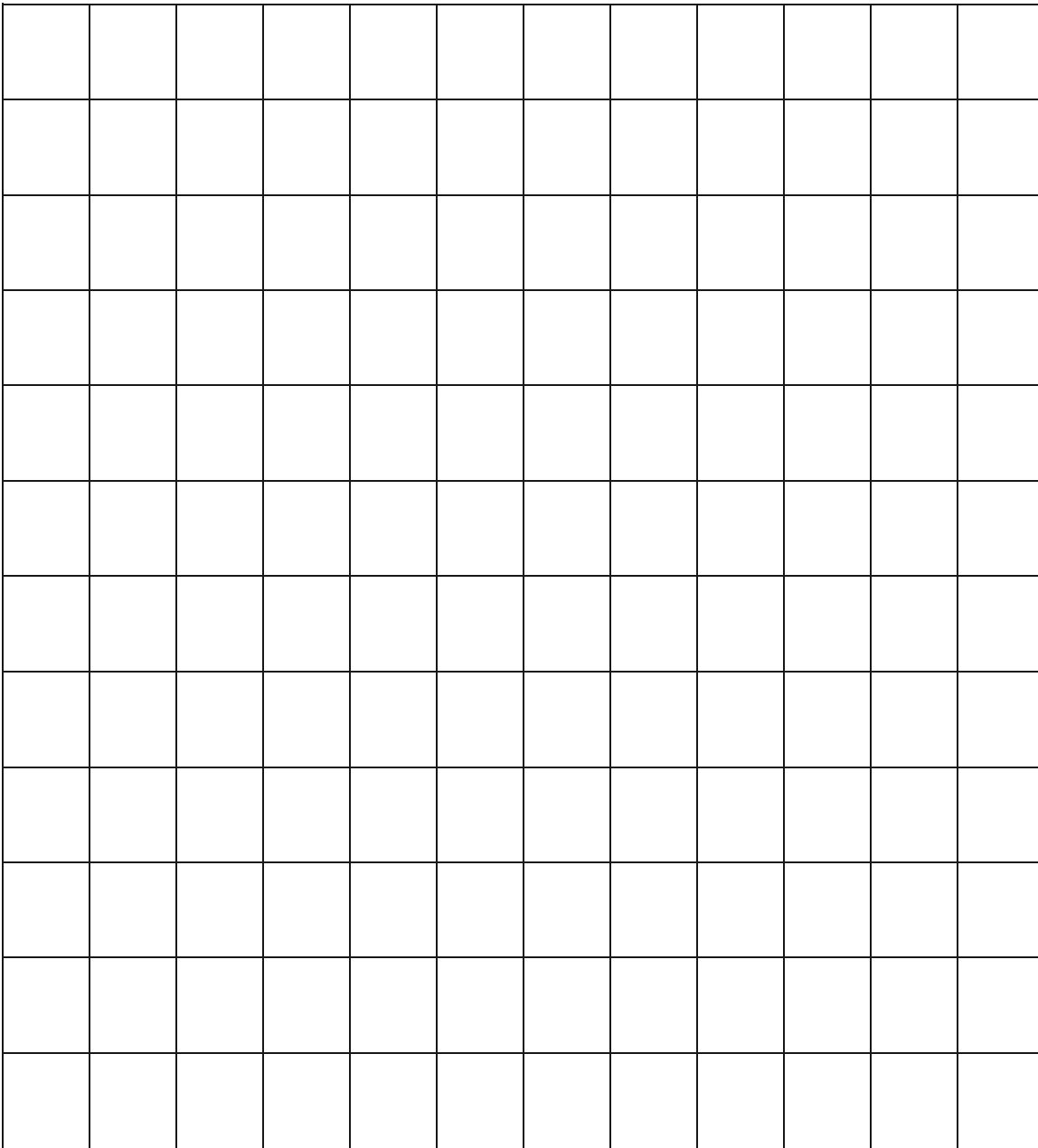
METHOD FOR DETERMINING DRAINFIELD LOCATION AND SIZE IN AREAS WITH SHALLOW DISCONTINUOUS LIMESTONE FORMATIONS AT VARYING DEPTHS

1. Have the applicant identify a drainfield installation area on the property that is at least two times the minimum required drainfield size. Recommend an area of at least 900 square feet.
2. Two soil profiles shall be performed in the proposed area in compliance with the requirements of Chapter 64E-6.
3. Determine the soil type for drainfield sizing and the estimated SHWT. Determine the drainfield area required by Chapter 64E-6.
4. Divide the installation area (or a portion thereof which is approximately two times the required drainfield area) into a grid of 5' by 5' squares.
5. Make one probe into the center of each of the 5' by 5' squares to determine the depth to limestone at that point. Record the depth for each square.
6. Each 5'x5' square is considered as "counted" or "discounted" as part of the drainfield based on the depth to rock as determined by probing the middle of the square. Where the probe depth to limestone meets or exceeds 42 inches below the proposed drainfield bottom, the entire square can be "counted" as drainfield. Where the probe depth to limestone is less than 42 inches below the proposed drainfield bottom, the entire square is "discounted" from the drainfield.
7. The drainfield needs to incorporate a sufficient number of "counted" squares to occupy the area required by 64E-6.

For example, if 64E-6 requires 300 square feet of drainfield, the installed drainfield must fully overlie at least 12 "counted" squares. (12 squares X 25 square feet per square = 300 square feet.). If an area exists on this site where a rectangular group of 16 squares includes 12 counted squares and 4 discounted squares, a total drainfield area of 400 square feet (16 X 25) would be required to be installed over the area. This would encompass 300 square feet of counted drainfield required to meet the code.

If a different rectangular area encompasses 12 counted squares and only 2 discounted squares, that 14 square (350 square foot) area would probably be a better choice since it "discounted" less drainfield.

8. Once a rectangular total drainfield area is identified, squares in the area must be covered with drainfield. This trades off the incidental areas of "counted" squares which may not meet the drainfield-limestone separation requirement with incidental areas of "discounted" squares which do meet the separation requirement.
9. Since elevating the drainfield will increase the separation to limestone and thus increase the number of "counted" squares, an applicant may wish to elevate the drainfield to reduce the total drainfield area necessary to be installed.
10. The total drainfield area should be checked to make sure that no very shallow limestone exists at the elevation of the bottom of the drainfield. Cobble-sized limestone can be ignored. Small boulders can be removed and replaced with slightly limited soil. Drainfield should not be installed over large contiguous limestone where the bottom of the drainfield will be in contact with the limestone.



1 BLOCK IS 5' X 5' (25 SQUARE FEET). SCALE IS 1 INCH = 10 FEET.

DATE:

SIGNATURE:

41	48	16	18	0	17	22	17	48	18	12	22
48	20	48	14	48	48	15	25	10	9	33	48
TREE	29	TREE	16	48	48	13	22	10	45	26	18
42	48	32	15	26	48	48	TREE	48	48	48	48
32	24	21	27	48	48	48	TREE	48	48	18	21
48	48	35	12	36	22	30	48	29	48	12	48
48	48	48	48	48	36	48	16	36	13	12	14
48	48	48	48	34	48	48	25	17	48	15	27
48	20	48	48	25	48	45	28	18	12	48	23
48	24	48	29	48	27	29	48	26	15	10	NP
46	17	12	48	21	38	48	NP	NP	NP	NP	NP

EACH SQUARE 5' HIGH BY 5' WIDE.

EACH SQUARE IS 25 SQUARE FEET.

**THE NUMBER INDICATES THE PROBE DEPTH TO ROCK (IN INCHES) IN THE MIDDLE OF EACH SQUARE
BOTTOM OF DRAINFIELD IS AT GRADE.**

ESTIMATED SEASONAL HIGH WATER TABLE IS 24 INCHES BELOW GRADE.

**PROPOSED DRAINFIELD AREA IS BLACK BOX, WHICH EQUALS 525 SQUARE FEET. THIS WILL EQUATE TO 425
SQUARE FEET OF DRAINFIELD THAT WILL MEET RULE REQUIREMENTS.**

**ABSORPTION SURFACE CANNOT BE WITHIN 12 INCHES (VERTICALLY OR HORIZONTALLY) OF LIMESTONE
FORMATION.**

**PROPOSED DRAINFIELD SITE MUST BE PROBED TO A DEPTH OF 12 INCHES TO VERIFY THE ABSENCE OF
SHALLOW LIMESTONE FORMATIONS. ANY SUCH FORMATIONS DETECTED SHOULD BE FLAGGED TO
PREVENT DRAINFIELD INSTALLATION WITHIN 12 INCHES. SPLIT DRAINFIELDS MAY BE USED.**