

TM: 50-PI-2
SD-88-254

Sewage Disposal System Construction Permit

Commonwealth of Virginia
Department of Health



Health Department

Identification Number

SD-88-254

CULPEPER COUNTY Health Department

Map Reference

50-58B-2 (D-10)

General Information

50-58B-2 (D-10)

New Repair Expanded Conditional FHA VA Case No. _____
 Based on the application for a sewage disposal system construction permit filed in accordance with Section 3.13.01, a construction permit is hereby issued to:
 Owner GERALD + GAIL BERTHOE Telephone 825-3825
 Address 20128 BUCK RUN CT. #11 CULPEPER, VA 22701
 For a Type T Sewage disposal system which is to be constructed on/at EAST SIDE OF RTE 720 0.25 MILES NORTH OF INT. 601/720
 Subdivision BUCK RUN ESTATES Section/Block _____ Lot 2
 Actual or estimated water use 1100 GPD (3 BEDROOMS)

DESIGN	NOTE: INSPECTION RESULTS
Water supply, existing: (describe) _____ To be installed: class <u>TII</u> cased <u>ROCK</u> grouted <u>20 FT (MIN.)</u>	Water supply location: Satisfactory yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments _____ G. W. 2 Received: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> not applicable <input type="checkbox"/>
Building sewer: <u>4"</u> I.D. PVC 40, or equivalent. Slope 1.25" per 10' (minimum). <input type="checkbox"/> Other _____	Building sewer: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments Satisfactory
Septic tank: Capacity <u>1000</u> gals. (minimum). <input type="checkbox"/> Other _____	Pretreatment unit: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments Satisfactory
Inlet-outlet structure: PVC 40, 4" tees or equivalent. <input type="checkbox"/> Other _____	Inlet-outlet structure: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments Satisfactory
Pump and pump station: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> describe and show design. if yes: _____	Pump & pump station: yes <input type="checkbox"/> no <input checked="" type="checkbox"/> comments Satisfactory
Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. crush strength or equivalent. <input checked="" type="checkbox"/> Other <u>4" I.D.</u>	Conveyance method: yes <input type="checkbox"/> no <input checked="" type="checkbox"/> comments Satisfactory
Distribution box: Precast concrete with <u>> 7</u> ports. <input type="checkbox"/> Other _____	Distribution box: yes <input type="checkbox"/> no <input checked="" type="checkbox"/> comments Satisfactory
Header lines: Material: 4" I.D. 1500 lb. crush strength plastic or equivalent from distribution box to 2' into absorption trench. Slope 2" minimum. <input type="checkbox"/> Other _____	Header lines: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments Satisfactory
Percolation lines: Gravity 4" plastic 1000 lb. per foot bearing load or equivalent, slope 2" 4" (min. max.) per 100'. <input type="checkbox"/> Other _____	Percolation lines: yes <input type="checkbox"/> no <input checked="" type="checkbox"/> comments Satisfactory
Absorption trenches: Square ft. required <u>1128</u> ; depth from ground surface to bottom of trench <u>36"</u> ; aggregate size <u>1/2-1 1/2"</u> ; Trench bottom slope <u>2 TO 4 INCHES PER FOOT</u> ; center to center spacing <u>7 FT.</u> ; trench width <u>24"</u> Depth of aggregate <u>12 INCHES (MINIMUM)</u> ; Trench length <u>100 FT.</u> ; Number of trenches <u>6</u>	Absorption trenches: yes <input checked="" type="checkbox"/> no <input type="checkbox"/> comments Satisfactory
	Date <u>7-21-88</u> Inspected and approved by: _____ Sanitarian

BUCK RUN EST. LOT 2

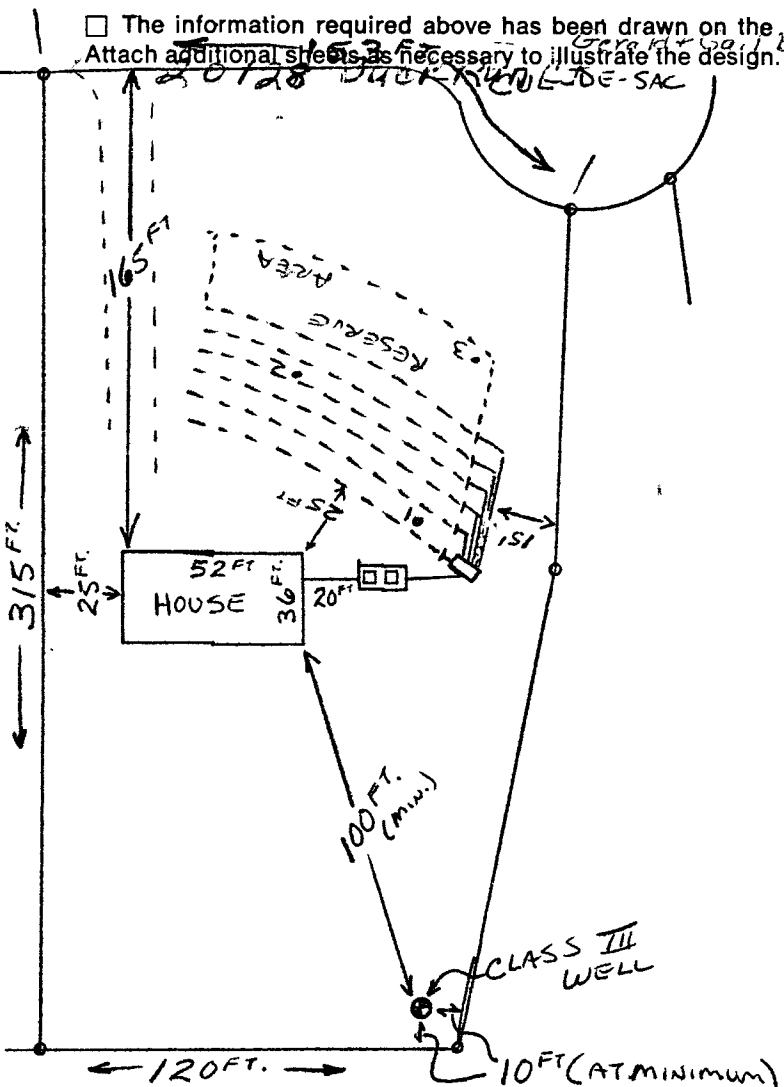
G-P1-2
 BUCK RUN
 LOT #2
NOT DRAWN TO SCALE

Health Department
 Identification Number SD-88-254

Schematic drawing of sewage disposal system and topographic features.

Show the lot lines of the building lot and building site, sketch of property showing any topographic features which may impact on the design of the system, all existing and/or proposed structures including sewage disposal systems and wells within 100 feet of sewage disposal system and reserve area. The schematic drawing of the sewage disposal system shall show sewer lines, pretreatment unit, pump station, conveyance system, and subsurface soil absorption system, reserve area, etc. When a nonpublic drinking water supply is to be located on the same lot show all sources of pollution within 100 feet.

The information required above has been drawn on the attached copy of the sketch submitted with the application. Attach additional sheets as necessary to illustrate the design.



825-3825
 DRAINFIELD LINES MUST BE
 INSTALLED ON CONTOUR.
 6 LINES, 100 FT. LONG.
 24" WIDE, 36" DEEP
 7 FT. CENTERS.

DRAINFIELD AREA:
 100 FT. X 37 FT.
 RESERVE AREA:
 100 FT. X 19 FT.

Buck Run 100 ft. Lot 2

The sewage disposal system is to be constructed as specified by the permit or attached plans and specifications .

This sewage disposal system construction permit is null and void if (a) conditions are changed from those shown on the application (b) conditions are changed from those shown on the construction permit.

No part of any installation shall be covered or used until inspected, corrections made if necessary, and approved, by the local health department or unless expressly authorized by the local health dept. Any part of any installation which has been covered prior to approval shall be uncovered, if necessary, upon the direction of the Department.

Date: 25 MAY 1988 Issued by: Douglas L Jenkins Sanitarian

Date: 6-1-88 Reviewed by: Charles E. Shepherd Supervisory Sanitarian

This Construction Permit Valid until 25 OCT. 92

If FHA or VA financing

Reviewed by Date _____ Date _____
 Supervisory Sanitarian Regional Sanitarian

Record Of Inspection—Nonpublic Drinking Water Supply System

**Commonwealth of Virginia
Department of Health**

Use of form required only when water supply constructed in conjunction with an on-site sewage disposal system, or when FHA, VA financing is involved.

Health Department I.D. Number SD-88-254

F.H.A. or V.A. Case Number
If Applicable

Map Reference

50		58B-2
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Date _____ Local Health Department Culpeper County

Owner C. Jack Frazier Address 2377 Kirtley Trail
Culpeper, Va. 22701 Phone 547-2724

Exact Location of Premises _____

Subdivision BUCK RUN ESTATES Section/Block _____ Lot 2

Class of nonpublic drinking water well.

1) Class III	A. (drilled well)	<input checked="" type="checkbox"/>
2) Class III	B. (bored well)	<input type="checkbox"/>
3) Class III	C. (jetted well)	<input type="checkbox"/>
4) Class III	D. (dug well)	<input type="checkbox"/>
5) Other	E. _____	<input type="checkbox"/>

Date of installation 7-1-88

CONSTRUCTION INFORMATION

If information in any item below is secured from other sources (i.e.) well log, etc., so note.

- Water well completion report filed as required by 18.02.07. Yes No
- Well Location: Distances from sources of pollution (see Table 12.1, Minimum Separation Distances) and Section 10.04.01 and 18.02.02.
Building Sewer _____ Pretreatment Unit 2-02 Conveyance System _____ Subsurface Soil Absorption System _____ (nearest point) Property Line _____ Other _____
Site graded where necessary to divert water away from well? Yes No n.a.
- Construction, General: (see Section 18.02.05, and 18.02.02)
Total depth of well _____ feet. Type of casing 5/8" pipe. Depth of casing _____ feet. Diameter of casing _____ inches. Casing extends inches above ground _____. Exterior space around casing sealed with neat cement grout to a depth of _____ feet. Screens constructed of _____ free of rough edges and irregularities, with positive watertight seal between screen and casing? yes no n.a.
Well head and opening to the interior protected? yes no Type of well seal vented
Pitless adapter used? yes no n.a. Properly installed? yes no n.a. Proper venting? yes no n.a.
- Quantity: Yield and drawdown determined by continuous pumping of 1 hours. Drawdown 0 feet. Yield 100 GPM. Type of storage pressure
- Quality: Sample tap provided at entry into system? yes no Sample(s) collected? yes no BY OTHERS
Results of samples. Satisfactory Unsatisfactory (attach copy of results to this form)

Based on the inspection of this water supply system and the information contained on the water well completion report attached, this water supply is approved.

Remarks: _____

Date 3-7-89 Signed [Signature] Sanitarian
Date _____ Signed _____ Supervisory Sanitarian
Date _____ Signed _____ Regional Sanitarian (If V.A. or F.H.A.)

COMMONWEALTH OF VIRGINIA
WATER WELL COMPLETION REPORT

• BWCM No. _____

(Certification of Completion/County Permit)

State Water Control Board
P. O. Box 11143
2111 North Hamilton St.
Richmond, Va. 23230

County/City Culpeper

County/City Stamp

SWCB Permit <u>SD-88-254</u>
County Permit _____
Certification of inspecting official: This well does _____ does not _____ meet code/low requirements. S. _____ Date _____
For Office Use

• Virginia Plane Coordinates
_____ N
_____ E
Latitude & Longitude
_____ N
_____ W
• Topo. Map No. _____
• Elevation _____ ft.
• Formation _____
• Lithology _____
• River Basin _____
• Province _____
• Type Logs _____
• Cuttings _____
• Water Analysis _____
• Aquifer Test _____

• Owner C. Jack Frazier

• Well Designation or Number _____

Address 2377 Kirtley Trail

Culpeper, Va. 22701

Phone 547-2724

• Drilling Contractor DOMINION WELL COMPANY

Address 361-3443 Manassas 361-9126

1-800-523-2977

Phone _____

Tax Map I.D. No.
Subdivision <u>BUCK RUN ESTE</u>
Section _____
Block <u>Rt. 720</u>
Lot <u>2</u>
Class Well: I _____, IIA _____
IIIB _____, IIIA _____, IIIB <u>X</u>
IIIC _____, IIID _____, IIIE _____

WELL LOCATION: _____ (feet/miles _____ direction) of _____
and _____ (feet/miles _____) (direction) of _____
(If possible please include map showing location marked) Directions: See reverse

Date started 6-30-88 • Date completed 7-1-88 Type rig air rotary

1. WELL DATA: New Reworked _____ Deepened _____

• Total depth 125 ft.

• Depth to bedrock 30 ft.

• Hole size (Also include reamed zones)

- 10 inches from 0 to 63 ft.
- 6-1/8 inches from 63 to 125 ft.
- _____ inches from _____ to _____ ft.

• Casing size (I.D.) and material

- 6-1/4 inches from + 1 to 63 ft.
Material steel
Wt. per foot 13 or wall thickness .188 in.
- _____ inches from _____ to _____ ft.
Material _____
Wt. per foot _____ or wall thickness _____ in.
- _____ inches from _____ to _____ ft.
Material _____
Wt. per foot _____ or wall thickness _____ in.

• Screen size and mesh for each zone (where applicable)

- _____ inches from _____ to _____ ft.
- Mesh size _____ Type _____
- _____ inches from _____ to _____ ft.
- Mesh size _____ Type _____
- _____ inches from _____ to _____ ft.
- Mesh size _____ Type _____
- _____ inches from _____ to _____ ft.
- Mesh size _____ Type _____

• Gravel pack

- From _____ to _____ ft.
- From _____ to _____ ft.

• Grout

- From 0 to 20 ft., Type pressure
- From _____ to _____ ft., Type 19 bags

2. WATER DATA • Water temperature _____ OF

- Static water level (unpumped level-measured) 20 ft.
- Stabilized measured pumping water level _____ ft.
- Stabilized yield 100 gpm after 1 hours
- Natural Flow: Yes _____ No flow rate: _____ gpm
- Comment on quality _____ muddy

3. WATER ZONES: From 67 To 68

From 110 To 112 From 123 To 125

From _____ To _____ From _____ To _____

4. USE DATA:

Type of use: Drinking Livestock Watering _____

- Irrigation _____ Food processing _____ Household
- Manufacturing _____ Fire safety _____ Cleaning _____
- Recreation _____ Aesthetic _____ Cooling or heating _____
- Injection _____ Other _____

• Type of facility: Domestic Public water supply _____

- Public institution _____ Farm _____ Industry _____
- Commercial _____ Other _____

5. PUMP DATA: Type _____ Rated H.P. _____

- Intake depth _____ Capacity _____ at _____ head

6. WELLHEAD: Type well seal _____

- Pressure tank _____ gal., Loc. _____
- Sample tap _____ Measurement port _____
- Well vent _____ Pressure relief valve _____
- Gate valve _____ Check valve (when required) _____
- Electrical disconnect switch on power supply _____

7. DISINFECTION: Well disinfected _____ yes _____ no _____

- Date _____ Disinfectant used _____
- Amount _____ Hours used _____

8. ABANDONMENT (where applicable) • yes _____ no _____

- Casing pulled yes _____ no _____ not applicable _____
- Plugging grout From _____ to _____ material _____

9. State law requires submitting to the Virginia State Water Control Board information about groundwater and wells for every well made in the State intended for water, or any other non-exempt well. This information must be submitted whether the well is completed, on standby, or abandoned. Information required includes: an accurately and completely prepared water well completion report, full data from any aquifer pumping tests, drill cuttings taken at ten foot intervals (unless exemption is secured), the results of any chemical analyses, and copies of any geophysical logs. Quarterly pumpage and use reports are required from owners of public supply and industrial wells. County or State permits to drill may be required in some parts of the state. Some counties require submission of a water well completion report. The Virginia State Health Department requires a water well completion report for public supply wells.

10. DRILLERS LOG (use additional Sheets if necessary)			11. Drilling Time (Min.)	12. DIAGRAM OF WELL CONSTRUCTION (with dimensions)
DEPTH (feet)		TYPE OF ROCK OR SOIL		
From	To	(color, material, fossils, hardness, etc.)	(water, caving, cavities, broken, core, shot, (etc.))	
0	30	OVERBURDEN		
30	125	BLUE & RED SHALE		
RT. 66 W TO RT. 29 S (NEW BYPASS) TO 3RD CULPEPER EXIT (RT. 15S) (L) FOR 2 MILES TO RT. 601 (L) FOR 1/4 MILE TO RT. 720 (L) (NO SIGN) 1ST (L) FOR APPROX. 1/4 MILE TO CONSTRUCTION ON (R). (LOOK FOR BLDKS. SIGN).				

13. Well lot dedicated? _____; Size _____ ft. X _____ ft.; Well house? _____
 Distance to nearest pollutant source _____ ft., Type _____
 Distance to nearest property line _____ ft., Building _____ ft.

14. WATER SERVICE PIPE: Checked under _____ p.s.i. for _____ minutes. Pipe size _____ inches, Material _____
 Installer _____
 Date _____

15. I certify that the information contained herein is true and correct and that this well and/or system has been installed and constructed in accordance with the requirements for well construction as specified in compliance with appropriate county or independent city ordinances and the laws and rules of the Commonwealth of Virginia.

Signature Robert M. Kray (Seal), Date 7/21/88
 (Well driller or authorized person) License No. _____

State Water Control Board Regional Offices

Valley Reg. Off.
 116 North Main Street
 P. O. Box 268
 Bridgewater, Va. 22813
 703-828-2595

Southwest Reg. Off.
 408 East Main Street
 P. O. Box 476
 Abingdon, Va. 24210
 703-628-5183

West Central Reg. Off.
 Executive Park
 5312 Peters Creek Road
 Roanoke, Va. 24019
 703-982-7432

Richmond Reg. Off.
 4000 West Broad Street
 P. O. Box 6618
 Richmond, Va. 23230
 804-254-1006

Tidewater Reg. Off.
 287 Pembroke Office Park
 Suite 310 Pembroke No. 2
 Va. Beach, Va. 23462
 804-499-8742

Northern Virginia Reg. Off.
 5515 Cherokee Avenue
 Suite 404
 Alexandria, Va. 22312
 703-750-9111





ENVIRONMENTAL SYSTEMS SERVICE, LTD.

CERTIFICATE OF ANALYSIS

FOR: C. Jack Frazier
2377 Kirtley Trail
Culpeper, VA 22701

SAMPLE NUMBER: ESS-47153
SAMPLE SOURCE: Buck Run Estates
DATE SAMPLED: February 27, 1989

PARAMETER	CONCENTRATION (# OF TUBES WITH AIR)
Total Coliform (MPN)	0

This water sample has passed the minimum potable water test requirements as established by the Health Department.

REVIEWED BY:

Pamela M. Pruett
Pamela M. Pruett/Lab Manager

REPORTED BY:

ENVIRONMENTAL SYSTEMS SERVICE, LTD.
P.O. Box 512
Culpeper, Virginia 22701

DATE:

March 1, 1989

VA Lab ID # - 00115

Sewage Disposal System Operation Permit

Commonwealth of Virginia
Department of Health

Health Department -
Identification No. SD-88-254
Culpeper County Health Department



Tax Map No. 50 - 58B-2

C. Jack Frazier is Hereby Granted Permission
to Operate a (Type) I Sewage Disposal System Having a Design Capacity of 450 gpd, at

SUBDIVISION	SECTION/BLOCK	LOT
BUCK RUN ESTATES		2

This permit is Issued in Accordance with the Provisions of 32.1, Chapter 6 of the Code of Virginia as Amended and Section(s) 3.22 of the Sewage Handling and Disposal Regulations of the Virginia Department of Health and

with Previously Issued permits NA Dated NA

with the understanding that the Owner and/or any Subsequent Owner will operate the Sewage Disposal System in Accordance with the Sewage Handling and Disposal Regulations of the Virginia Department of Health and any Variance(s) or Conditions Granted. Issuance of an Operating Permit does not imply or Guarantee that the Sewage Disposal System will Function for any Specified Period of Time.

VARIANCES GRANTED
 NONE SEE ATTACHED

SPECIAL CONDITIONS
 NONE SEE ATTACHED

3-7-89
Effective Date

[Signature]
Recommended (Sanitarian)

[Signature]
Approved (State Health Commissioner)

Completion Statement

Commonwealth of Virginia
State Department of Health

Health Department
Identification Number SD-88-254

Culpeper County Health Department

Name of Company/Corporation/Individual: B. L. Cabbage

Address: _____ Telephone: _____

Owner's Name C. Jack Frazier

Owner's Address 2377 Kirtley Trail Culpeper, Va. 22701

Location of Installation: Lot 2 Block _____

Section: _____ Subdivision: Buckrun

Other: _____

I hereby certify that the onsite sewage disposal system has been installed and completed in accordance with the construction permit issued (date) _____ and is in compliance with Part D of the Sewage Handling and Disposal Regulations and when appropriate the plans and specifications for the project.

7-21-88

Date

B. L. Cabbage

Signature and Title

Soil Evaluation Form

PAGE 1 OF 2

Commonwealth of Virginia
Department of Health

Health Department
Identification Number SD-88-254
Tax Map Number 50-888-2 (B-10)

General Information

Date 23 MAY 1988 CULPEPER COUNTY Health Department
Applicant C. JACK FRAZIER Telephone No. (703) 547-2724
Address 2377 KIRTLEY TRAIL, CULPEPER, VA 22701
Owner _____ Address _____
Location EAST SIDE OF RTE 720; 0.25 MI. NORTH INT. 601/720
Subdivision BUCK RUN ESTATES Block/Section _____ Lot 2

Soil Information Summary

1. Position in landscape satisfactory Yes No Describe SIDE SLOPE
2. Slope 6-7 %
3. Depth to rock/impervious strata Max. _____ Min. _____ None
4. Depth to seasonal water table (gray mottling or gray color) No Yes _____ inches
5. Free water present No Yes _____ range in inches
6. Soil percolation rate estimated Yes Texture group I II IV
No Estimated rate 50 min/inch
7. Percolation test performed Yes Number of percolation test holes _____
No Depth of percolation test holes _____
Average percolation rate _____
- Name and title of evaluator: DOUGLAS L. JENKINS, SANITARIAN
- Signature: Douglas L. Jenkins

Department Use

Site Approved: Drainfield to be placed at 36" depth at site designated on permit.

Site Disapproved:

Reasons for rejection:

1. Position in landscape subject to flooding or periodic saturation.
2. Insufficient depth of suitable soil over hard rock.
3. Insufficient depth of suitable soil to seasonal water table.
4. Rates of absorption too slow.
5. Insufficient area of acceptable soil for required drainfield, and/or Reserve Area.
6. Proposed system too close to well.
7. Other Specify _____

Application for a Sewage Disposal System Construction Permit

Commonwealth of Virginia
Department of Health

For Department Use Only

Health Department

Identification Number SD-88-254

Map Reference 50-588-2 (60)
(D-10)

Culpeper Co Health Department

Date Received 5-18-88

To Be Completed By The Applicant

Type sewage system: New Repair Expanded Conditional
FHA/VA yes no

Owner C. Jack Frazier Address 2377 Kirtley Trail Phone 547-2724
Culpeper, Va. 22701

Agent _____ Address _____ Phone _____

Directions to Property RT. 15 South left on RT. 601 - 1/4 mi. left on RT. 720
1/4 mi. on Right

Subdivision Buck Run Section 50 Block _____ Lot 2

Other Property Identification _____

Dimensions/size of Lot/Property _____

Other Application Information

I. Building/facility New Existing
Intermittent Use Yes No If yes, describe: _____

II. Residential Use Yes No
Termite Treatment Yes No
 Single Family Multifamily Number of Units _____ Number of Bedrooms 3
Basement Yes No
Fixtures in Basement Yes No

III. Commercial Use Yes No Describe: _____
Commercial/Wastewater Yes No Number of Patrons _____ Number of Employees _____
If yes, give volumes and describe _____

IV. Water Supply: Public New Describe: well
 Private Existing

V. Proposed Installation: Septic tank and drainfield Other
If other, describe _____

SITE PLAN Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption systems, bodies of water, drainage ways, and wells and springs within 200 feet radius of the center of the proposed building or drainfield. Distances may be paced or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

C. Jack Frazier
Signature of owner/agent

5/18/88
Date