

# ZIERKE SOIL TESTING

Martin Davis  
9637 Stonebridge Trl N  
Stillwater, MN 55082

May 7th, 2024

Dear Martin Davis,

At your request, I have conducted a septic inspection to determine the compliance status of your septic system pursuant to Minnesota Rules Chapter 7080.1500.

The compliance test set out in 7080.1500 has three main inquiries: 1). Is the system functioning hydraulically (disposing of effluent in a manner that prevents it from coming in contact with people)? 2). Are the septic tanks water tight? 3). Does the system have sufficient vertical separation between the bottom of the septic system and restrictive layers (bedrock, standing water, seasonally wet layers, etc) to provide full treatment of effluent?

Based off of these criteria, your system is non-compliant due to root infiltration in your tanks that is preventing the tank from being fully inspected. This system is considered "failing to protect groundwater" and is not considered an imminent threat to public health. I am required to provide copies of this report to you and to Washington County. You should contact them as to the next steps that will be required to bring the system into compliance.

Sincerely,



Benjamin Zierke  
MPCA Lic 119, Cert 9594

ADDRESS:  
28587 Jeffrey Ave  
Chisago City, MN 55013

PHONE 651-249-1346  
EMAIL benzierke@gmail.com

# Compliance inspection report form

## Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

**Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance.** Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at <https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf>.

### Property information

Local tracking number: \_\_\_\_\_

Parcel ID# or Sec/Twp/Range: 1703020140003 Reason for Inspection Sale

Local regulatory authority info: Washington County

Property address: 9637 Stonebridge Trail N Stillwater, MN 55082

Owner/representative: Martin Davis Owner's phone: 651-968-7726

Brief system description: 1500 gallon precast septic tank, 1000 gallon precast lift tank, rock trench drainfield

### System status

System status on date (mm/dd/yyyy): 5/7/2024

**Compliant – Certificate of compliance\***

*(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.)*

**\*Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.**

**Noncompliant – Notice of noncompliance**

*Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.*

*An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance or under section 145A.04 subdivision 8.*

#### Reason(s) for noncompliance (check all applicable)

- Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- Other Compliance Conditions (Compliance component #3) – *Failing to protect groundwater*
- System not abandoned according to Minn. R. 7080.2500 (Compliance component #3) – *Failing to protect groundwater*
- Soil separation (Compliance component #5) – *Failing to protect groundwater*
- Operating permit/monitoring plan requirements (Compliance component #4) – *Noncompliant - local ordinance applies*

#### Comments or recommendations

Could not verify the tank bottoms due to extensive root infiltration around the bottom riser sections on both tanks. The roots have grown all the way around the float above the pump as well - the pump could malfunction due to the float being tangled in roots. The roots will have to be removed and tank bottom checked. Go-pro footage of the tank showed that the sidewalls and top of the tanks are in good condition. The root issues are likely to continue due to the two large maple trees near the tank - I would recommend re-sealing and replacing the risers. The tanks are deep (~100").

### Certification

*I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.*

**By typing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing this form.**

Business name: Zierke Soil Testing Certification number: 9594

Inspector signature: *Benjamin Zierke* License number: 119

*(This document has been electronically signed)* Phone: 651-249-1346

### Necessary or locally required supporting documentation (must be attached)

- Soil observation logs
- System/As-Built
- Locally required forms
- Tank Integrity Assessment
- Operating Permit
- Other information (list): \_\_\_\_\_

## 1. Impact on public health – Compliance component #1 of 5

**Compliance criteria:**

System discharges sewage to the ground surface	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
System discharges sewage to drain tile or surface waters.	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
System causes sewage backup into dwelling or establishment.	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No

**Any "yes" answer above indicates the system is an imminent threat to public health and safety.**

**Describe verification methods and results:**

None of the above observed.

**Attached supporting documentation:**

- Other: \_\_\_\_\_
- Not applicable

## 2. Tank integrity – Compliance component #2 of 5

**Compliance criteria:**

System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
Sewage tank(s) leak below their designed operating depth?	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
If yes, which sewage tank(s) leaks:	

**Any "yes" answer above indicates the system is failing to protect groundwater.**

**Describe verification methods and results:**

Could not see the tank bottoms due to extensive root infiltration - see notes on page one. Used a camera to view the sidewalls and top of the tank - those areas looked good. Outlet baffle on the septic tank has fallen off and needs to be replaced.

**Attached supporting documentation:**

- Empty tank(s) viewed by inspector
  - Name of maintenance business: Olson's
  - License number of maintenance business: 216
  - Date of maintenance: 5/6/2024
- Existing tank integrity assessment (Attach)
  - Date of maintenance (mm/dd/yyyy): \_\_\_\_\_ (must be within three years)
  - (See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))
- Tank is Noncompliant (pumping not necessary – explain below)
- Other: \_\_\_\_\_

### 3. Other compliance conditions – Compliance component #3 of 5

3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecured?

Yes\*  No  Unknown

3b. Other issues (*electrical hazards, etc.*) to immediately and adversely impact public health or safety?  Yes\*  No  Unknown

**\*Yes to 3a or 3b - System is an imminent threat to public health and safety.**

3c. System is non-protective of ground water for other conditions as determined by inspector?

Yes\*  No

3d. System not abandoned in accordance with Minn. R. 7080.2500?

Yes\*  No

**\*Yes to 3c or 3d - System is failing to protect groundwater.**

**Describe verification methods and results:**

Attached supporting documentation:  Not applicable

### 4. Operating permit and nitrogen BMP\* – Compliance component #4 of 5 Not applicable

Is the system operated under an Operating Permit?

Yes  No

**If “yes”, A below is required**

Is the system required to employ a Nitrogen BMP specified in the system design?  Yes  No

**If “yes”, B below is required**

*BMP = Best Management Practice(s) specified in the system design*

**If the answer to both questions is “no”, this section does not need to be completed.**

**Compliance criteria:**

a. Have the operating permit requirements been met?

Yes  No

b. Is the required nitrogen BMP in place and properly functioning?

Yes  No

**Any “no” answer indicates noncompliance.**

**Describe verification methods and results:**

Attached supporting documentation:  Operating permit (Attach)

## 5. Soil separation – Compliance component #5 of 5

Date of installation 8/10/1987  Unknown  
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging?  Yes  No

**Compliance criteria (select one):**

5a. For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:  Yes  No\*  
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.

5b. Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:  Yes  No\*  
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.\*

5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080.2350 or 7080.2400 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day)  Yes  No\*  
Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

**Attached supporting documentation:**

- Soil observation logs completed for the report
- Two previous verifications of required vertical separation
- Not applicable (No soil treatment area)
- \_\_\_\_\_

**Indicate depths or elevations**

A. Bottom of distribution media	96.9'
B. Periodically saturated soil/bedrock	93.0'+
C. System separation	3.9'+
D. Required compliance separation*	2.0'

\*May be reduced up to 15 percent if allowed by Local Ordinance.

**\*Any "no" answer above indicates the system is failing to protect groundwater.**

**Describe verification methods and results:**

See attached boring log and elevations.

**Upgrade requirements:** (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.



Relative Elevations  
in Decimal Feet:

B1: 100.0  
B1 Redox: 93.0+  
Bottom of rock at probe: 96.9  
B1 Separation: 3.9+  
Benchmark: 101.1  
(bottom of siding east side  
of house)

Tanks

9637

Drainfield

Probe

B1



## Log Of Soil Borings

Location of Project:		9637 Stonebridge Trl N, Stillwater Twp, MN 55082	
Borings Made By:		Inspect Minnesota	Date: 11/28/16
Auger Used:		Hand/Bucket	Classification System: USDA
Boring Number:		1	Boring Number:
Surface Elevation of Boring	Same ground surface as last drainfield trench		Surface Elevation of Boring
Depth In Inches	<u>Soils Encountered</u>		Depth In Inches
0-7 7-44 44-60 60-68 68-80	7.5YR 2.5/2 Loam 7.5YR 4/4 Medium Sand 10YR 5/4 Medium Sand 10YR 5/3 Medium Sand 10YR 5/3 Fine Sand With 10YR 4/4 Lamellae		
80"	Depth To End Of Boring Or Redox		Depth To End Of Boring Or Redox
Same	Elevation Of Boring Relative To System		Elevation Of Boring Relative To System
-33"	Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media
≥47"	Of Separation		Of Separation
End Of Boring At:	80"	End Of Boring At:	
Redox Present At:	None	Redox Present At:	
Standing Water Present At:	None	Standing Water Present At:	

Bottom Of Distribution Medium At: 33 Inches

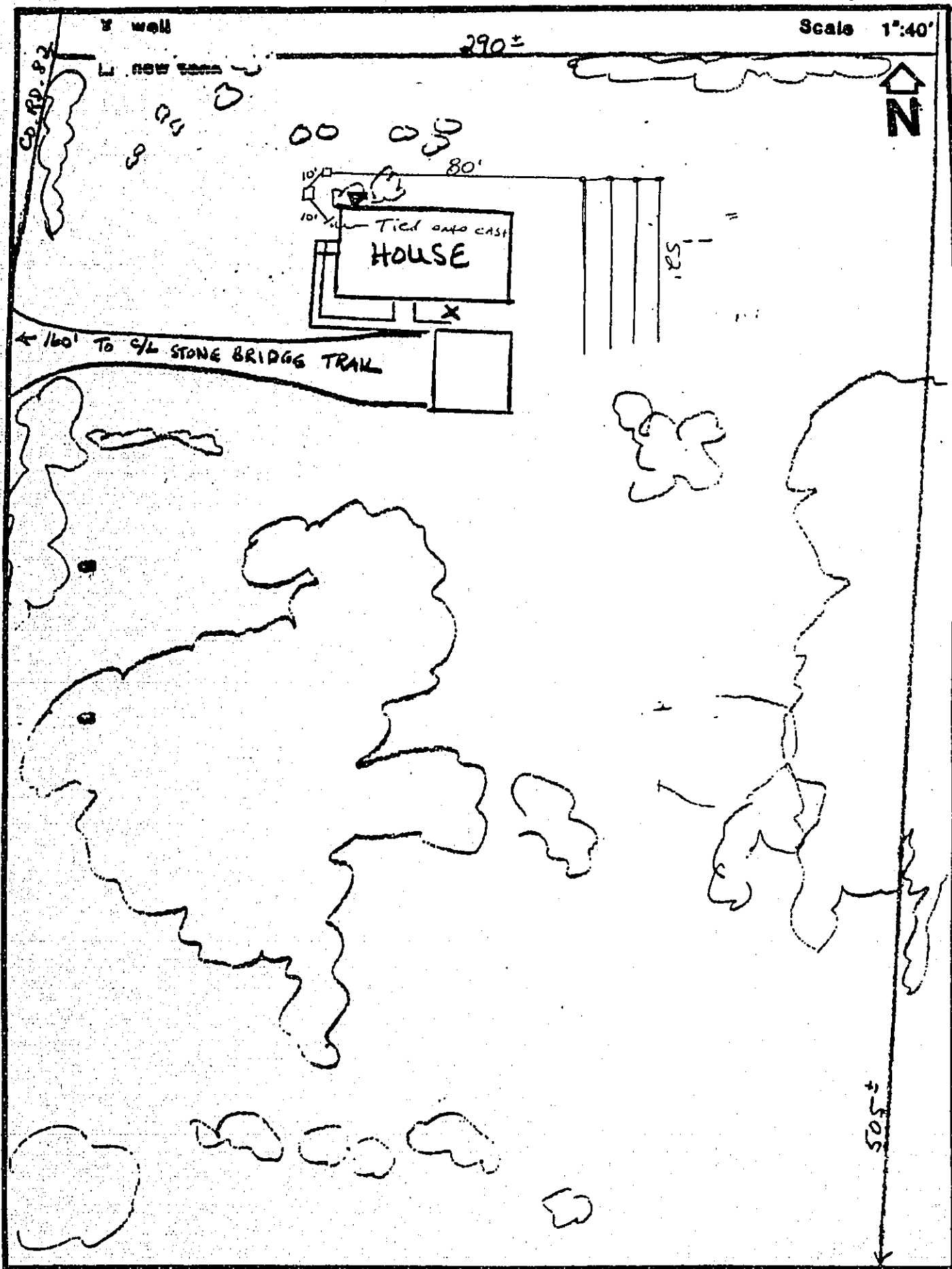
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201-78 62



FEE: \$ 50.00

**WASHINGTON COUNTY, MINNESOTA**

Sewage Treatment Permit No. 300(7B6Z)

Inspection of Installation Must Be Made By the Building Official Before Any Portion of System Is Covered  
Contact Planning Department, 439-3220 x-176, 24 HOUR NOTICE REQUIRED

Owner JAMES V. BLAHA 95017-2350

Property Description P4 SE 1/4 NE 1/4 Sec 17 Stillwater Twp

Property Address 9637 Stonebridge Trail N., Stillwater

Use of Building: 1 FAMILY RES Flow Rate: 5 BEDROOMS Percolation Rate: 5 mpi

Septic Tank 1500 Gal. Liquid Capacity Lift Station (if needed) 1000 Gal.

Type of System: TANK AND DRAINFIELD WITH LIFT STATION

Absorption Trench — Square Feet 623 Lineal Feet 208 Width 36"

Depth of Rock Below Lines 12 Inches, Above Lines 2 Inches

Depth of Trench From Existing Grade — Minimum 26 Inches, Maximum 42 Inches

Recommended Number of Lines 4@52' (Note: Maximum Length of Individual Line Is 100 Feet.)

Minimum Spacing of Lines 7 1/2 Ft. Center to Center

Special Conditions System is to be installed in area tested and shown on the attached site plan. Use of drop boxes and a minimum number of 4 lines connected serially is required.

PERMIT: Permission is hereby granted to the above named applicant to perform the work described in the application to the minimum specifications shown above and per attached site plan. This permit is granted upon express condition that the person to whom it is granted, and his agents, employees and workmen shall conform in all respects to ordinances of Washington County, Minnesota. This permit may be revoked at any time upon violation of any said ordinance, and permit shall be void if work is not commenced within six (6) months.

**INSTALLER MUST HOLD CURRENT SEPTIC INSTALLER LICENSE WITH WASHINGTON COUNTY.**

Approved: [Signature] Date 4/23/87  
Zoning Administrator/Authorized Agent

Comments SYSTEM SUBSTANTIALLY COMPLETE 5/5/87

Installation Approved [Signature] Date 8/10/87  
Inspector

White—Copy-Applicant

Canary—Copy-File

Pink—Copy-Inspector

Goldenrod—Municipality

Application Fee: \$50.00

"201" # S-62

APPLICATION FOR PERMIT TO INSTALL SEWAGE TREATMENT SYSTEM

Washington County Planning Department  
14900 - 61st Street North  
Stillwater, MN 55082

MAR 18 1984

Name (Owner)	Phone
James V. Blaha	439-5017
Address	
9637 Stonebridge Trail Stillwater, MN 55082	
Legal Description	
4A PT SE 1/4 of NE 1/4 and Pr SW 1/4 of NW 1/4 Sec 17 Twp 30 Rg 20 Being N 505 Ft of S Cor SE 1/4 of NE 1/4 Sec 17	
Use of Building	Number of Bedrooms
Dwelling	5
What is the depth of the well? <u>60-80 ft. ?</u>	
Is there a basement? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If yes, please answer the following:	
What fixtures are in the basement? Floor Drain <input checked="" type="checkbox"/> Laundry Tub <input checked="" type="checkbox"/>	
Toilet <sup>To be</sup> <del>Disconnected</del> Shower _____ None _____	
Does the main sewer line exit under the basement floor? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
How deep is basement floor (sewer line) in relation to outside ground level?	
> 6' deep <input checked="" type="checkbox"/> 4' deep _____ 2' deep _____ Level _____ Unknown _____	

Conditions of Permit

Agreement: The undersigned hereby makes application for a permit to install or extend a sewage treatment system and agrees that all such work shall be done in strict accordance with the ordinances and regulations of the County of Washington, State of Minnesota. Applicant further agrees to provide access, at reasonable times, to the Zoning Administrator or his agent for the purpose of performing inspections required along with the installation of the system. The applicant further agrees, for himself and subsequent owners of the subject property, to allow the Zoning Administrator and his agents to enter upon the above-described property, after the installation of the sewage treatment system has been completed, at all reasonable times to conduct soil tests and surveys and to construct, reconstruct, inspect, repair or maintain the sewer system.

March 8, 1984  
Date

James V. Blaha  
Signature of Applicant

✓

7/15/52  
 J. M. R. G. A.  
 9637 Street, ... TRAIL 10.

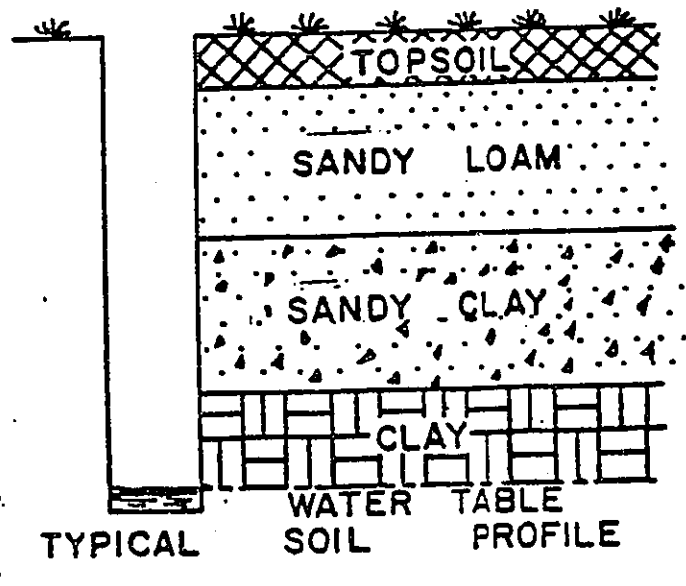
-SOIL BORINGS-

Soil borings are made in order to determine the type and structure of soils at various depths as well as the location of the water table, impervious strata or bedrock.

Borings are most easily made with a hand auger, however other expedients may be utilized - back hoe, post hole auger, etc.

Soils encountered at various depths should be listed as to appearance, texture and composition.

Depth at which water, bedrock or heavy clay layer is encountered should be recorded.



LOG OF SOIL BORINGS

BORING NO. 1		BORING NO. 2		BORING NO. 3		BORING NO. 4	
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0	VERY DARK GRAYISH BROWN LOAMY SAND	0	→	0		0	
1/2	DARK GRAYISH BROWN SAND	1/2	REDDISH BROWN	1/2		1/2	
1		1	SAND GRAVEL	1		1	
1 1/2	DARK BROWN SAND	1 1/2		1 1/2		1 1/2	
2		2	DARK BROWN SAND	2		2	
2 1/2		2 1/2		2 1/2		2 1/2	
3		3		3		3	
3 1/2	BROWN	3 1/2		3 1/2		3 1/2	
4		4	BROWN	4		4	
4 1/2		4 1/2	SAND	4 1/2		4 1/2	
5		5		5		5	
5 1/2	SAND (Med & Coarse)	5 1/2	(Med & Coarse)	5 1/2		5 1/2	
6		6		6		6	
6 1/2		6 1/2		6 1/2		6 1/2	
7		7		7		7	
7 1/2		7 1/2		7 1/2		7 1/2	
8		8		8		8	
8 1/2		8 1/2		8 1/2		8 1/2	
9		9		9		9	

LOT # 8-62  
J. BLAHA

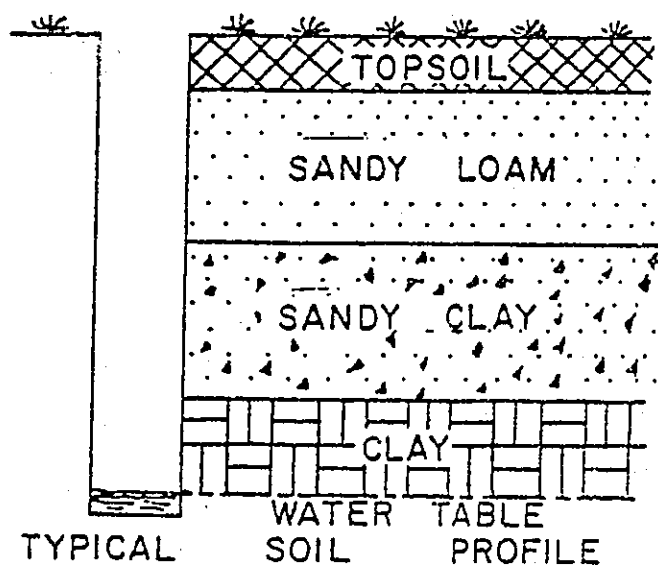
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Soils encountered at various depths should be listed as to appearance, texture and composition.

Depth at which water, bedrock or heavy clay layer is encountered should be recorded.



LOG OF SOIL BORINGS

BORING NO. 1		BORING NO. 2		BORING NO. 3		BORING NO. 4	
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0	SANDY LOAM	0		0		0	
1/2		1/2		1/2		1/2	
1		1		1		1	
1 1/2	DARK	1 1/2	DARK	1 1/2		1 1/2	
2	BROWN	2	BROWN	2		2	
2 1/2		2 1/2		2 1/2		2 1/2	
3		3	SAND	3		3	
3 1/2		3 1/2		3 1/2		3 1/2	
4	SAND	4		4		4	
4 1/2		4 1/2		4 1/2		4 1/2	
5		5		5		5	
5 1/2		5 1/2	BROWN	5 1/2		5 1/2	
6		6		6		6	
6 1/2	DARK BROWN	6 1/2	SAND	6 1/2		6 1/2	
7	SILT LOAM	7		7		7	
7 1/2	REDDISH BROWN SAND	7 1/2		7 1/2		7 1/2	
8		8		8		8	
8 1/2		8 1/2		8 1/2		8 1/2	