



ANALYSIS  
 PLANNING  
 SURVEYING  
 ENGINEERING

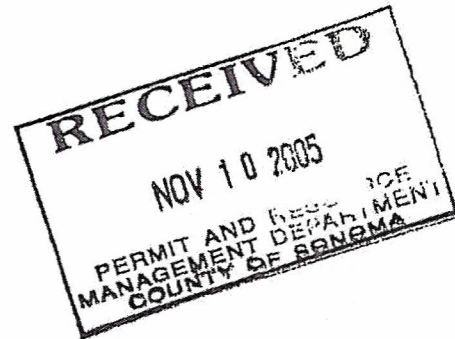
2952 Mendocino Avenue, Suite C  
 Santa Rosa, California 95403

(Office) 707-578-3433  
 (Fax) 707-526-3433

November 8, 2005

County of Sonoma  
 Department of Permit and Resource Management  
 2550 Ventura Ave.  
 Santa Rosa, CA 95403

Attn: Mr. James Johnson, R.E.H.S.  
 Subject: Percolation Test Review  
 Worksite: 3550 Porter Creek Rd., Santa Rosa  
 APN 028-070-029



Dear James,

Transmitted herewith are:

- Perc test data
- Site sketch
- Soil profiles

Adequate presoak was performed; the test was set up to comply with County Standards; the test was performed with my review in accordance with the intent of the established requirements of Sonoma County Department of Permit and Resource Management. This report is a true and accurate indication of the suitability of the site for on-site sewage disposal as measured by the Standards of Sonoma County and the Permit and Resource Management Officer.

Based on current Permit and Resource Management requirements, the attached test data establishes the percolation rates shown below:

Existing Soil Depth (inches)	Average Percolation Rate (minutes per inch)
24 (except Hole 4)	29
36	63

**Percolation Test Review**

Site: 3550 Porter Creek Rd., Santa Rosa

Date: November 8, 2005

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I recommend that sewage disposal needs be met with:

SYSTEM TYPE						
SYSTEM	Filled Land		Mound		LOCATION	
	Primary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Or	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1 <sup>st</sup> Expan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Holes 6, 9 & 10
2 <sup>nd</sup> Expan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Holes 6-8

Based upon currently applied standards, the area tested appears more than adequate for a 3-bedroom house with a 200% expansion area.

**SEPTIC SYSTEM SIZE:**

- The Filled-Land septic system should have 123 linear feet of leachline per bedroom. The trenches should be 24 inches deep from existing ground surface with 12 inches of rock below the effluent lines and 12 inches of fill added above natural grade.
- The Mound septic system requires design calculations based on a system layout using a detailed topographic map. The estimated size of the system is 27' x 80'.

**I recommend the following design features:**

- An effluent sump and pump are required;
- The system construction plans should be prepared by a Civil Engineer;
- A detailed topographic map of the septic area is required.

**Some factors which may affect future usability of the area tested are:**

- Future building location and/or driveway location;
- Future changes in drainage patterns or groundwater;
- Groundslope and other features as determined by a detailed topographic map;
- Future well location on site;
- Septic site is less than 100 feet from the property line and any future well on the adjacent property may be less than 100 feet from proposed leachlines making the area tested or a portion of it unusable;

**Percolation Test Review**

Site: 3550 Porter Creek Rd., Santa Rosa

Date: November 8, 2005

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A linear loading rate of 6 gallons per day per lineal foot is recommended for mound design. It appears that a mound leachfield would accommodate more bedrooms than a filled-land septic system.

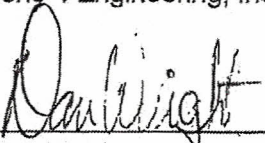
Please review this report and issue written comments regarding Sonoma County Department of Health Services requirements for approval of a permit to construct an on-site sewage disposal system in the test area described.

**Any persons seeking to utilize this report are advised to obtain and consult the Sonoma County Department of Health Services response requested above.**

Sincerely,

Dimensions 4 Engineering, Inc.

By

  
\_\_\_\_\_  
Dan Wright, R.C.E. 22296



By

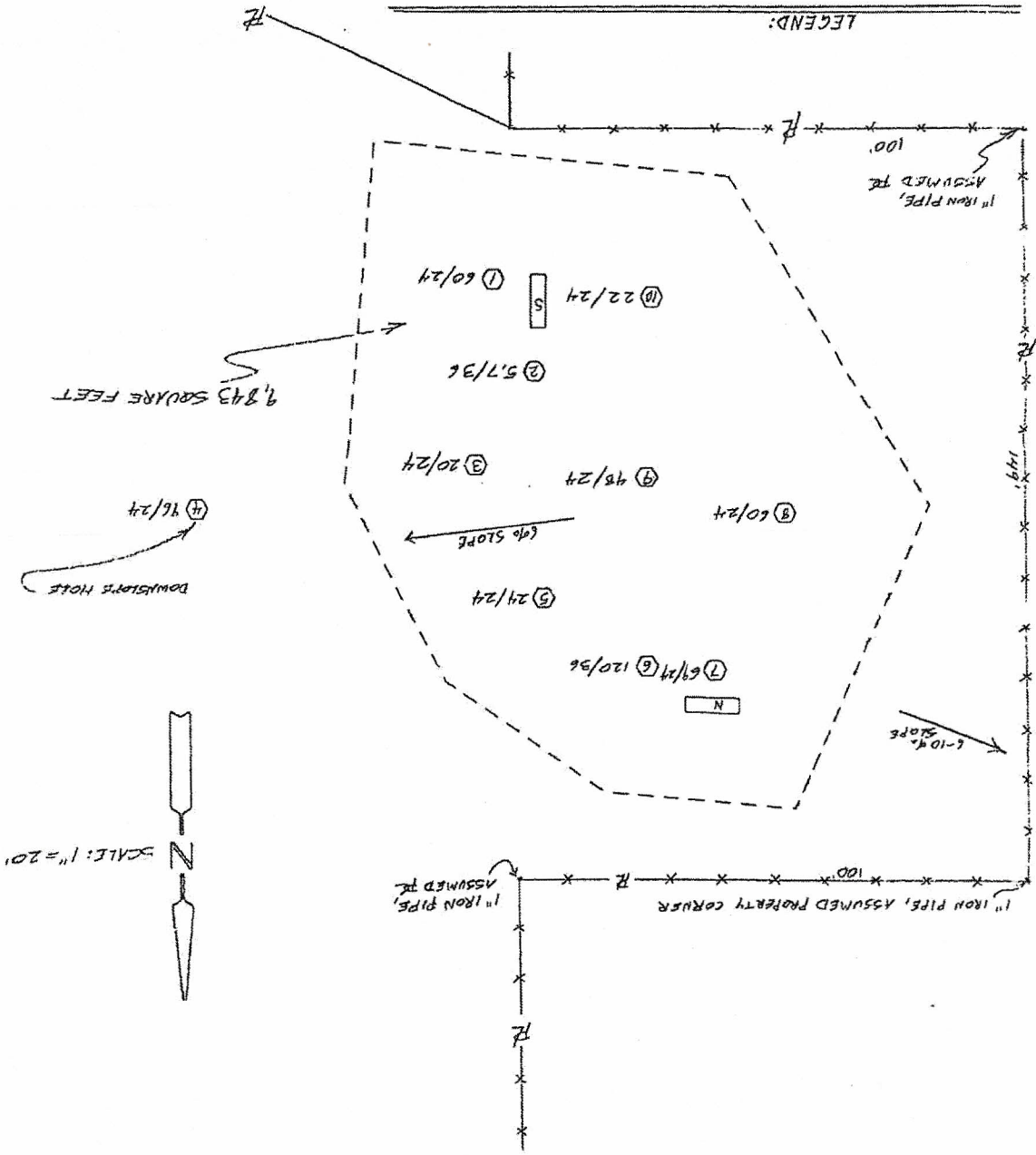
  
\_\_\_\_\_  
Heath Pope, E.I.T. 120546

Heath Pope, E.I.T. 120546

Enc.: map  
Perc data

cc: Linda Harris, Owner  
Virgil Elliott, Perc Tester  
File

SOIL PERCOLATION TEST SITE MAP OF  
 3550 PORTER CREEK ROAD, SANTA ROSA, CALIFORNIA  
 APN 028-070-029 TEST DATE: OCTOBER 14, 2005



**Virgil Elliott**  
Soil Percolation Testing  
111 Goodwin Avenue  
Penngrove, CA 94951

Phone: (707) 664-8198

Fax: (707) 794-0910

Subject: Soil Profile Report

Site: 3550 Porter Creek Road, Santa Rosa, California

APN 028-070-029

Project: Percolation Testing

Hole S:

0-36" 7.5YR 3/4 Loam/Clay Loam, <10% Rock; Moderately Blocky, Friable; Dry,  
Many Coarse Pores, Many Fine Roots

36"-46" 7.5YR 3/4 Clay Loam, 5-10% Rock; Weak Blocky, Friable/Firm; Dry,  
Some Fine Pores, Few Fine Roots

46"-60" 7.5YR 3/4 Silty Clay, 5-10% Rock; Massive, Very Firm; Dry, Very Few Fine Pores,  
Few Fine Roots

No Mottling or Groundwater

Hole N:

0-22/27" 7.5YR 3/4 Loam/Clay Loam, 30% Rock; Moderately Blocky, Friable/Firm; Dry,  
Many Coarse Pores, Many Fine Roots

22/27"-63" 7.5YR 4/6 Clay Loam, 50% +/-Rock; Weak Blocky, Friable; Dry,  
Few Fine Pores, No Roots

No Mottling or Groundwater



Hole Number	Depth of Hole	Pipe Length	Presoak Remaining	Start		First Measurement		Second Measurement		Third Measurement		Fourth Measurement		Fifth Measurement		Sixth Measurement		RATE
				Time	Inches	Time	Inches	Time	Inches	Time	Inches	Time	Inches	Time	Inches	Time	Inches	
2	36"	40"	0	2:45	25	2:55	39	3:05	DRY <sub>F</sub>	3:15	36 <sup>7</sup> / <sub>8</sub>	3:25	39 <sub>F</sub>	3:35	36	3:45	38 <sup>1</sup> / <sub>8</sub> <sub>F</sub>	
						3:55	36 <sup>1</sup> / <sub>8</sub>	4:05	38 <sup>1</sup> / <sub>4</sub> <sub>RF</sub>	4:15	35 <sup>5</sup> / <sub>8</sub>	4:25	37 <sup>5</sup> / <sub>8</sub>	4:35	39 <sup>3</sup> / <sub>8</sub>	4:45	DRY	5.7 <sub>v</sub>
3	24"	30"	0	2:46	15 <sup>1</sup> / <sub>2</sub>	2:56	21	3:06	24	3:16	26	3:26	27 <sup>1</sup> / <sub>4</sub>	3:36	28 <sup>1</sup> / <sub>2</sub> <sub>RF</sub>	3:46	20 <sup>1</sup> / <sub>2</sub>	
						3:56	23 <sup>1</sup> / <sub>4</sub>	4:06	25 <sup>1</sup> / <sub>8</sub>	4:16	26 <sup>1</sup> / <sub>2</sub>	4:26	27 <sup>7</sup> / <sub>8</sub>	4:36	29	4:46	29 <sup>1</sup> / <sub>2</sub>	20 <sub>v</sub>

# REQUEST FOR SERVICE

County of Sonoma  
Permit And Resource Management Department  
Well & Septic Section

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900

mailed 6/14/15

Location Address <b>3550 PORTER CREEK RD.</b>		City, Zip <b>SANTA ROSA, CA 95403</b>	
Owner/Facility Name <b>LINDA HARRIS</b>		Assessor's Parcel # <b>028-070-029</b>	
Address of Owner <b>681 PILGRIM DRIVE</b>		City, State, Zip <b>FOSTER CITY, CA 94404</b>	
Person Requesting Service <b>VIRGIL ELLIOTT</b>		Phone <b>664-8198</b>	
Address of Person Requesting Service <b>111 GOODWIN AVENUE</b>		City, State, Zip <b>PENNGROVE, CA 94951</b>	
Description <b>PRE-PERC</b>			
			By

Date **10-6-05**  
Permit # **BE205-142**

EHS \_\_\_\_\_ Dist # \_\_\_\_\_  
Category \_\_\_\_\_ Priority \_\_\_\_\_

- Classification:
- A. Complaint
  - B. Site Review
  - C. Plan Check
  - D. Recheck/Reinspection
  - E. Vesting
  - F. \_\_\_\_\_

- Disposition:
- 1. Service Completed
  - 2. Follow Up
  - 3. Referral
  - 4. Referral Completed
  - 5. Enforcement
  - 6. No Violation
  - 7. No Action

### Report of Investigation

10-12-05. A pre perc site review was conducted with Heath Pope, EIT D4 and Virgil Elliott. 2 profile holes were evaluated and logged on a vacant lot (see field notes). Soils appear to be Goulding clay loam.

Profile N - loam is wavy to 22-27" over fractured shale with clay loam in interstices. Potential mound or filled land system. Perc @ 24" & 36"

Profile S - similar to "N" but deeper soil and no fractured shale. Potential filled-land or 30" standard if hydro/PI is taken between 60-66" and percs faster than 120 mpi at 66".

Maintain all appropriate setbacks.

For office use

373.00 m-AC  
OCT 10 2005

James A. Johnson  
EWC

10/13/05  
Date Completed



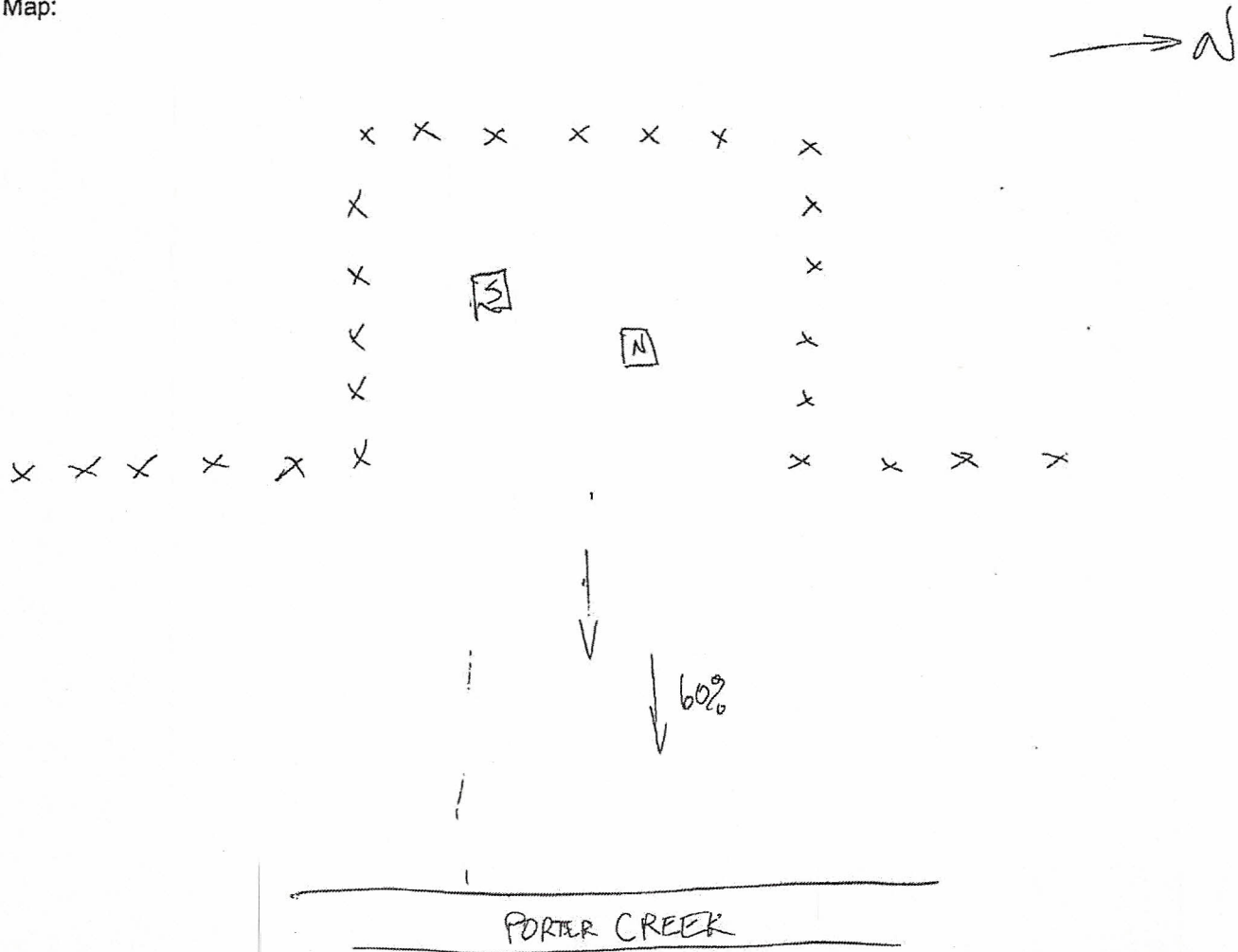
# PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 - (707) 527-1900

## Pre-Perc Field Notes

Address: 3550 Porter Creek	Pre-Perc date: 10/12/05	Time: 1:00
AP# 028-070-029	Site Review by: JAMES JOHNSON	
Test conducted by: Virgil Elliott	Subdivision: Yes <input type="checkbox"/> No <input type="checkbox"/>	Initial <input type="checkbox"/> Supp. <input type="checkbox"/>
Test verified by: Heath Pope, EIT	Water availability zone:	
Special standards area:	SCS soil type:	
Topography: Ridge <input type="checkbox"/> Slope <input type="checkbox"/> Saddle <input type="checkbox"/> Basin <input type="checkbox"/>	Convex <input type="checkbox"/> Planar <input type="checkbox"/> Concave <input type="checkbox"/>	
Setbacks: Cutbank/grade break <input type="checkbox"/> Wells <input type="checkbox"/> Springs <input type="checkbox"/> Streams <input type="checkbox"/> Ponds <input type="checkbox"/> Drainage <input type="checkbox"/>		
Areas of concern: Trees <input type="checkbox"/> Drainage <input type="checkbox"/> Geology report <input type="checkbox"/> Rock outcrops <input type="checkbox"/> % Rock: _____ GW <input type="checkbox"/>		
Hydrometer test: Yes <input type="checkbox"/> No <input type="checkbox"/> Depth(s): _____		Bulk density: Yes <input type="checkbox"/> No <input type="checkbox"/> Depth: _____
Wet-weather perc required: Yes <input type="checkbox"/> No <input type="checkbox"/>		Wet-weather groundwater required: Yes <input type="checkbox"/> No <input type="checkbox"/>
Subsoil perc depth(s): _____		Pump System: Yes <input type="checkbox"/> No <input type="checkbox"/> Perc depth(s): _____
Type of system: _____		Eng. Design <input type="checkbox"/> Topographic map req. <input type="checkbox"/> Geology report req. <input type="checkbox"/>
Comments:		

Site Map:



Profile: N		Average Ground Slope: 6%						
Depth	Munsell Color	% Rock	Texture	Structure	Consistency	Moist	Pores	Roots
0-22 1/2"	7.5YR 3/4	30	L-CL	mod B	Fr-F	Dr	many coarse	many fine
-63	7.5YR 4/6	50%+	CL	weak B	Fr	Dr	few fine	—
Mottling:		Reduction <input type="checkbox"/> Oxidation <input type="checkbox"/>			Depth to groundwater:		Perc depth: 24 & 36"	
Other: filled land or mound if perc's fail at 36"								

Profile: S		Average Ground Slope: 6%						
Depth	Munsell Color	% Rock	Texture	Structure	Consistency	Moist	Pores	Roots
0-36	similar to "N"							
-46	7.5YR 3/4	5-10	CL	weak B	Fr-F	Dr	some fine	few fine
-60	7.5YR 3/4	5-10	SiC	M	VF	Dr	v few v fine	few fine
Mottling:		Reduction <input type="checkbox"/> Oxidation <input type="checkbox"/>			Depth to groundwater:		Perc depth: 24 & 36"	
Other: filled land or 30" standard if hydro/PI below 46" & perc's at 66"								

Profile:		Average Ground Slope:						
Depth	Munsell Color	% Rock	Texture	Structure	Consistency	Moist	Pores	Roots
Mottling:		Reduction <input type="checkbox"/> Oxidation <input type="checkbox"/>			Depth to groundwater:		Perc depth:	
Other:								

**Abbreviations:**

USDA Texture: Gravel=G, Sand=S, Loamy Sand=LS, Sandy Loam=SL, Sandy Clay Loam=SCL, Sandy Clay=SC, Silt Loam=SiL, Loam=L, Clay Loam=CL, Silty Clay Loam=SiCL, Clay=C

Structure: Granular=G, Platy=p, Blocky=B, Prismatic=Pr, Massive=M, Columnar=C

Consistency: Loose=L, Very Friable=VFr, Friable=Fr, Firm=F, Very Firm=VF, Extremely Firm=EF, Solid (BH refusal)=S

Moisture: Dry=Dr, Damp=D, Very Damp=VD, Saturated=S, Seepage=Se