

3369 Kimberly Road
Cameron Park, CA 95682
(530) 677-3055

Professional Geologist #4717

PERCOLATION TEST REPORT

Date: November 29, 2017

Owner/Builder & Address:

APN: 110-565-17

AKA Consulting
500 Falcon Crest Lane
El Dorado Hills, CA 98767

Day Phone: (916) 801-2071

Water Source: Public

Purpose of Test: New 3-bedroom house

Directions to Property: 1591 Bonito Court

Date of Test: 7/5/2003

Weather at time of Test: Clear, very warm

Soil Profile: 0-3' Brown silty, clayey slightly loamy soil; 3-7.25' reddish brown moderately fractured weathered metavolcanic rock and silty soil

TEST DATA

Hole Number:	1	2	3	4
Depth of Test Holes (inches):	36	31	27	23
Stabilized Perc. Rate (min/inch):	160	160	96	48
Number of Holes:	4			
Average Percolation Rate:	116 minutes per inch			

APN: 167-225-17

Effective Soil Depth 725

DATE: 7/5/03

[Signature]
Consultant Signature

Groundwater > 7.5

SOIL PROFILE

Test Pit # _____, 1st horizon : Depth 0 to 2, Texture: s ls sl l c cl sic sicl sil si, DRX IWRX MWRX DG, Rocks 45%, Color DARK BROWN, Redoxlmorphic features? NONE, Structure: gran platy block prism, Consistence: loose friable, firm, plastic, sticky, hard, soft, Sticky: ns ss ms vs, Plastic: np sp mp vp, Roots: SOME GRASS, Moisture: dry moist wet saturated, Boundary distinctness: a c @ d, Topography: s=smooth, w=wavy, i=irregular, b=broken
Comments: SILTY CLAYEY LOAM SOIL

2nd horizon : Depth 2 to 725, Texture: s ls sl l c cl sic sicl sil si, DRX IWRX MWRX DG, Rocks —, Color TAN BROWN, Redoxlmorphic features? —, Structure: granular platy blocky prismatic, Consistence: loose, friable firm, plastic, sticky, hard, soft, Sticky: ns ss ms vs, Plastic: np sp mp vp, Roots: VERY FEW 3', Moisture: dry moist wet saturated, Boundary distinctness: a c g d, Topography: s=smooth, w=wavy, i=irregular, b=broken
Comments: V-MOD WEATHERED FRACTURED METAVOLCANIC ROCK AND SILTY CLAYEY SOIL

3rd horizon : Depth _____ to _____, Texture: s ls sl l c cl sic sicl sil si, DRX IWRX MWRX DG, Rocks _____, Color _____, Redoxlmorphic features? _____, Structure: granular platy blocky prismatic, Consistence: loose, friable, firm, plastic, sticky, hard, soft, Sticky: ns ss ms vs, Plastic: np sp mp vp, Roots: _____, Moisture: dry moist wet saturated, Boundary distinctness: a c g d, Topography: s=smooth, w=wavy, i=irregular, b=broken
Comments: _____

4th horizon : Depth _____ to _____, Texture: s ls sl l c cl sic sicl sil si, DRX IWRX MWRX DG, Rocks _____, Color _____, Redoxlmorphic features? _____, Structure: granular platy blocky prismatic, Consistence: loose, friable, firm, plastic, sticky, hard, soft, Sticky: ns ss ms vs, Plastic: np sp mp vp, Roots: _____, Moisture: dry moist wet saturated, Boundary distinctness: a c g d, Topography: s=smooth, w=wavy, i=irregular, b=broken
Comments: _____

KEY

TEXTURE: s=sand, sc=sandy clay, c=clay, sicl=silty clay loam, ls=loamy sand, scl=sandy clay loam, cl=clay loam, sil=silt loam, sl=sandy loam, l=loam, sic=silty clay, sl=silt, DRX=bedrock, IWRX=intensely weathered rock, MWRX=moderately weathered rock, DG=decomposed granite, granodiorite
PLASTICITY: np=non-plastic, sp=slightly plastic, mp=moderately plastic, vp=very plastic
STICKINESS: ns=non-sticky, ss=slightly sticky, ms=moderately sticky, vs=very sticky
BOUNDARY: distinctness: a=abrupt < 1 inch, c=clear 1-2 inches, g=gradual 2-6 inches, d=diffuse >6 inches
CONSISTENCE: loose=non-coherent when dry or moist; does not hold together in a mass, friable=when moist, crushes under moderate pressure between thumb and forefinger and can be pressed together into a lump, firm=when moist, crushes under moderate pressure between thumb and forefinger, but resistance is noticeable, plastic=when wet, readily deformed by moderate pressure, but can be pressed into a lump; will form a wire, sticky=when wet, adheres to other material, and tends to stretch somewhat and pull apart, rather than pull away from other material, hard=when dry, moderately resistant to pressure; can be broken with difficulty between thumb and forefinger, soft=when dry, breaks into powder or individual grains under very slight pressure, cemented=hard and brittle; little affected by moistening. (-USDA Soil Survey)

PERCOLATION TEST REPORT

APN: 167-225-17

RECORDED BY: CLYDE HEBERON Signature: [Signature] Date: 7/5/23

Weather: SUNNY; V. WARM BG #4717

Time	Test Hole Number					
	1	2	3	4	5	6
9:00	2 1/8	2 1/8	3 1/4	3 1/4		
:30	2 9/8	2 3/4	3 7/8	3 7/8		
	FILL TO					
12:00	3 1/8	3 1/8	4 1/4	4 1/8		
:30	3 3/8	3 5/16	4 5/8	4 7/8		
1:00	3 9/16	3 1/2	4 13/16	5 1/2		
:30	3 3/4	3 11/16	5 1/4	5 1/8		
2:00	3 15/16	3 7/8	5 9/16	6 3/4		
Depth	42"	35"	27"	24"		AVE
Rate	160	160	96	48		

Soil Profile	
0	DARK BROWN SILTY CLAYEY LOAMS
2	
4	VERY TO MOD. WEATHERED
6	FRACTURED METAVOLCANIC
8	ROCKY BROWN SILTY CLAYEY SOIL
10	
12	

Depth of Groundwater 27.5

U. S. D. A. Soil Survey: AXE; AUBURN V. ROCKY SILT LOAM
 Vegetation: OAKS 10% GRASS
 Terrain: MOD SLOPE IN SEPTIC AREA

Sonde
Geological Services

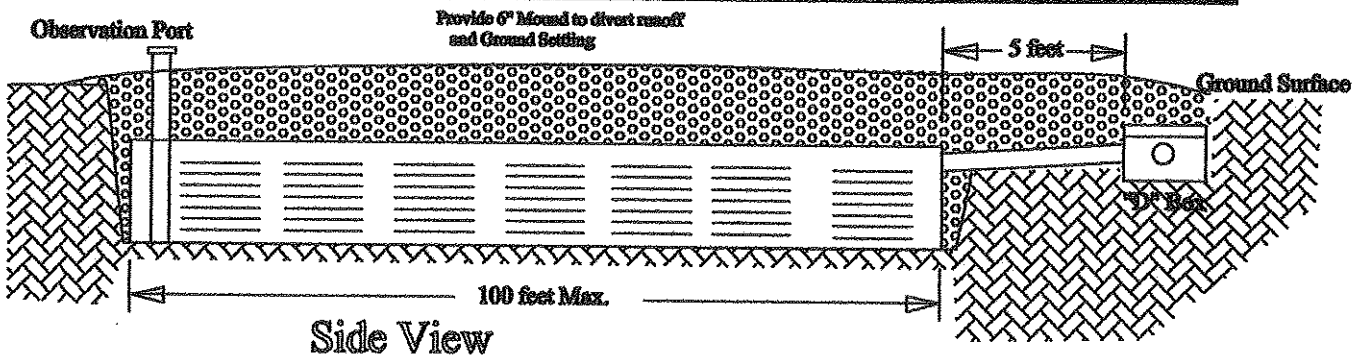
3369 Kimberly Road, Cameron Park, CA 95682
(530) 677-3053

APN: 110-565-17

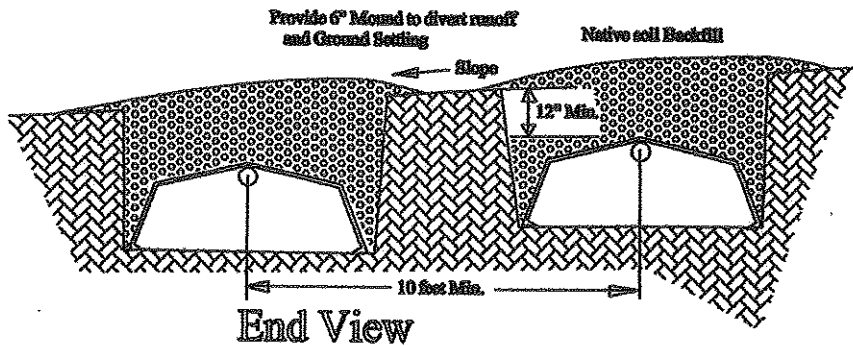
Date: 11/28/17

SEPTIC DESIGN - Infiltrator Design

<u>3</u> Bedroom House =	<u>650</u>	Gal/Day
Average Percolation Rate =	<u>116</u>	Min/inch
Allowable Application Rate =	<u>0.4642</u>	Gal/Sq ft/Day
Required Surface Area =	<u>1,400</u>	Square feet
Depth of System (D) =	<u>2.5</u>	Feet
Width of System (W) =	<u>3</u>	Feet
Length of System (L) =	<u>280</u>	Feet Infiltrator Design - See Below



Trench Design



Other Design Considerations

- 1) All tight lines shall be schedule 40 PVC, ABS or SDR 35.
- 2) Lines must be constructed level or with a maximum of 3 inch fall in 100 feet
- 3) An Effluent filter required on tank outlet.
- 4) Septic tank lids (manholes) shall be brought to grade, with water tight gaskets

Number of ^{Quick 4} Standard/High Capacity Infiltrator Units: 1400 Sq. ft. div. by ²⁰ ~~15.25~~ = 70 Use 70

Total Length of System = 70 Units X 4.0 feet = 280

SONDE GEOLOGICAL SERVICES

3369 Kimberly Road
CAMERON PARK, CA 95682
(530) 677-3055

JOB AKA CONSULTING 110-565-17

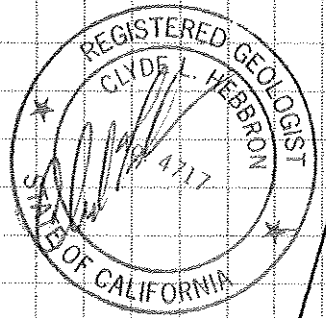
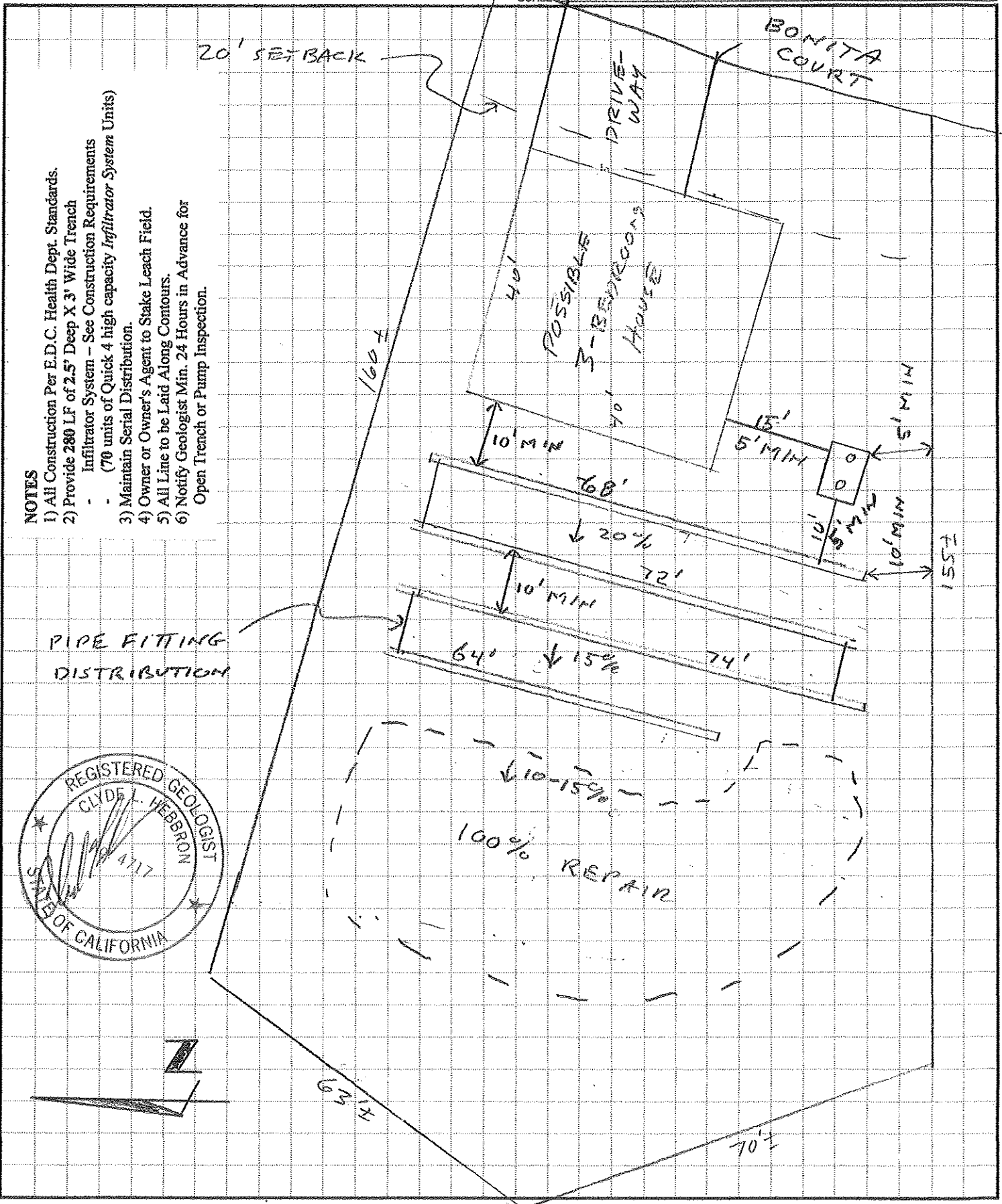
SHEET NO. PLOT PLAN OF _____

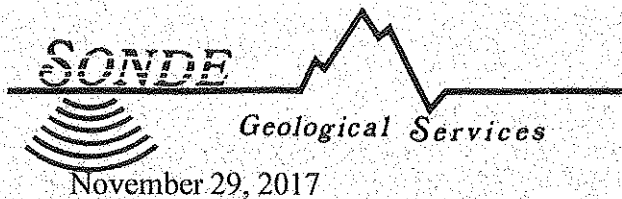
CALCULATED BY CLH DATE 11/28/17

CHECKED BY _____ DATE _____

SCALE 1" = 20'

- NOTES**
- 1) All Construction Per E.D.C. Health Dept. Standards.
 - 2) Provide 280 LF of 2.5' Deep X 3' Wide Trench Infiltrator System - See Construction Requirements (70 units of Quick 4 high capacity Infiltrator System Units)
 - 3) Maintain Serial Distribution.
 - 4) Owner or Owner's Agent to Stake Leach Field.
 - 5) All Line to be Laid Along Contours.
 - 6) Notify Geologist Min. 24 Hours in Advance for Open Trench or Pump Inspection.





November 29, 2017

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Professional Geologist #4717

Re: APN 110-565-17

Ladies and Gentlemen:

As request, Sonde Geological Services has prepared a submittal of information for the disposal of effluent based on guidelines issued by El Dorado County, Environmental Health. Enclosed you will find the following

- Percolation Test Report
- Soil Profile Report
- Percolation Test Data
- Septic Design – *Infiltrator Leach Chambers*
- Plot Plan

The enclosed packet includes the information El Dorado County, Environmental Health requires when obtaining a permit. When applying for a permit to construct, please submit all of the above information. Please make additional copies for your records and to perspective installers.

Please be aware that the footprint of the structure is conceptual only. If the actual footprint of the structure is different, it may require a redesign and if the footprint is significantly different, it may make the parcel unbuildable.

If you have any questions or need clarification, please let me know. Thank you for allowing me to serve you.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Hebbro", written over a light blue horizontal line.

Clyde L. Hebbro
Principal Geologist

Enclosures

SONDE Geological Services

3450 Palmer Ave., Suite #4-304
 Cameron Park, CA 95682
 (530) 677-3055

Invoice

DATE	INVOICE N...
11/28/2017	1658

BILL TO
AKA Consulting

TERMS	PROJECT
Due on receipt	

DESCRIPTION	QTY	RATE	AMOUNT
Septic design: Includes site inspection when leach lines are constructed; APN - 110-565-17		450.00	450.00
Credit from previous consulting		-50.00	-50.00
Please remit to above address.		Total	\$400.00

All past due invoices are subject to finance charges equal to 1.5% per month. Overdue accounts are responsible for all legal and collection fees. If you have any questions, please call 530-677-3055

1138

12/18/17