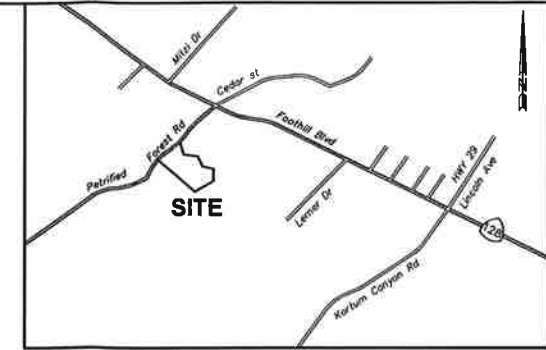


# TENTATIVE PARCEL MAP LANDS OF BRANSTAD 957 PETRIFIED FOREST ROAD Calistoga, California APN 011-370-026



**LOCATION MAP**  
NOT TO SCALE

**SHEET INDEX**

- 1 TITLE SHEET
- 2 PARCEL MAP
- 3 TABULATION OF SITE TREES
- 4 PARTIAL GRADING PLANS & GRADING & UTILITY PLAN
- 5 DETAILS

**SITE INFORMATION**

TOTAL ACREAGE: 8.14 ACRES  
 PARCEL 1 5.05 AC (219,978 SQ FT)  
 PARCEL 2 3.10 AC (135,036 SQ FT)

**OWNER / SUBDIVIDER**

BOB BRANSTAD  
 PO BOX 1009  
 WINNEMUCCA, NEVADA  
 89446

**ENGINEER / SURVEYOR**

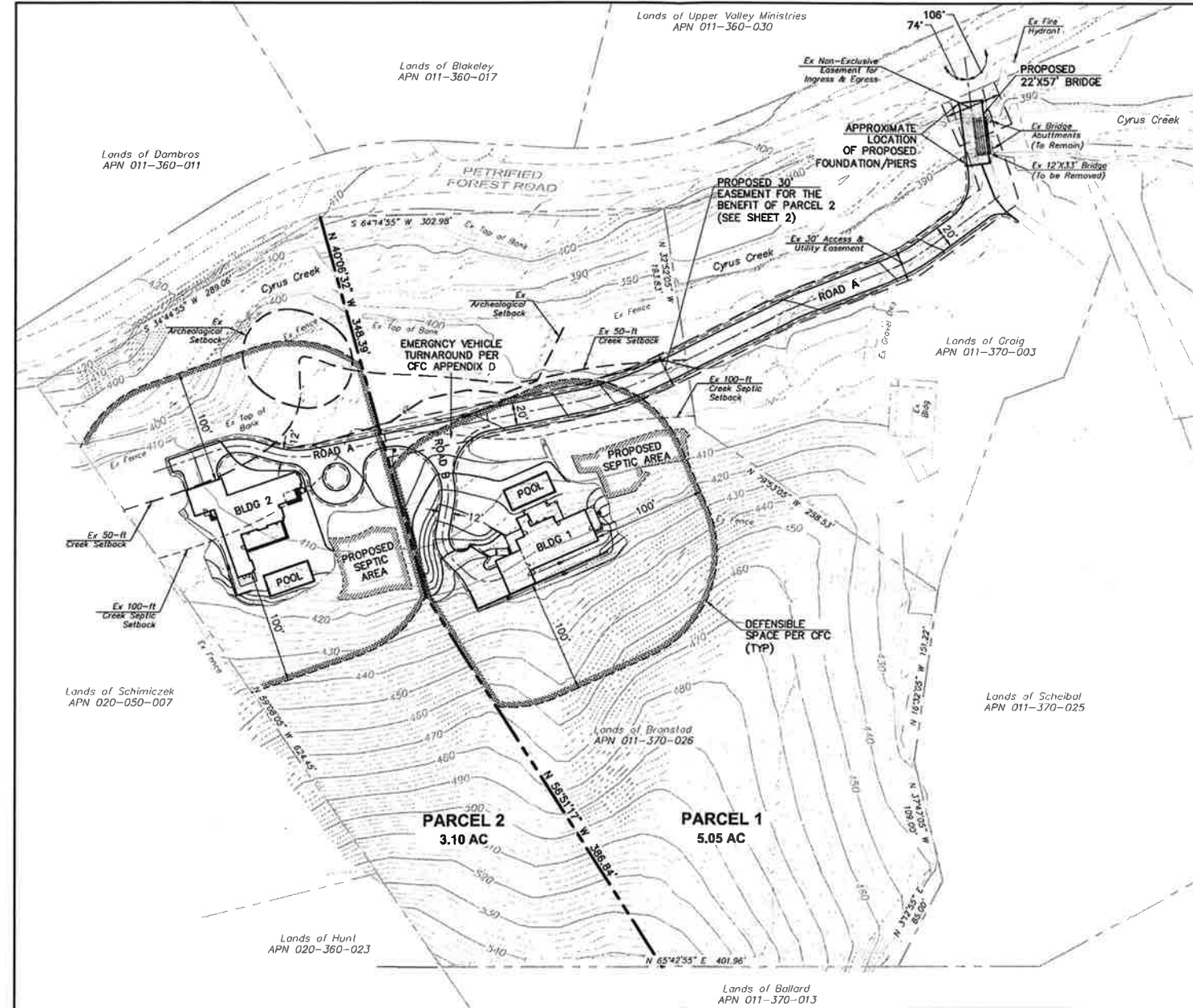
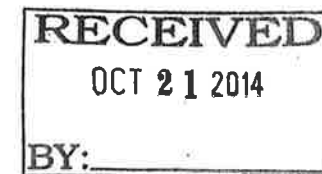
ADOBE ASSOCIATES, INC.  
 1220 N DUTTON AVENUE  
 SANTA ROSA, CALIFORNIA 95401  
 PHONE: (707) 541-2300  
 FAX: (707) 541-2301

**BENCHMARK**

FOUND 3" BRONZE DISC STAMPED "85-M-1933-364"  
 LOCATED AT THE NORTHERLY CORNER OF THE  
 INTERSECTION OF GRANT AVENUE AND LAKE STREET,  
 AT THE NORTHERLY CORNER OF THE CALISTOGA JOINT  
 UNIFIED HIGH SCHOOL; ARMY CORPS OF ENGINEERS  
 MONUMENT DESIGNED "RM2" ON THE FIRM  
 (FEDERAL INSURANCE RATE MAP) FOR CALISTOGA.  
 TOP OF DISC ELEVATION IS 365.29' (NGVD 1929 DATUM)

**UTILITIES:**

SEWER SERVICE: PRIVATE SEPTIC SYSTEM  
 WATER SERVICE: CITY OF CALISTOGA  
 TELEPHONE: SBC  
 GAS / ELECTRIC: PG&E  
 CALBE SERVICE: COMCAST  
 FIRE PROTECTION: CITY OF CALISTOGA  
 GENERAL PLAN DESIGNATION: RURAL RESIDENTIAL HILLSIDE  
 EXISTING ZONING: RURAL RESIDENTIAL HILLSIDE



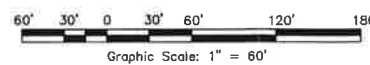
**ABBREVIATIONS**

AAI	ADOBE ASSOCIATES, INC.	IG	INVERT GRATE
AB	AGGREGATE BASE	LF	LINEAR FEET
AC	ASPHALT CONCRETE, ACRE	MAX	MAXIMUM
AD	AREA DRAIN	MH	MANHOLE
BLDG	BUILDING	MIN	MINIMUM
BM	BENCH MARK	NTS	NOT TO SCALE
BOV	BLOWOFF VALVE	NO	NUMBER
C	COMPACT PARKING	PIV	POST INDICATOR VALVE
CB	CATCH BASIN	PL	PROPERTY LINE
CFC	CALIFORNIA FIRE CODE	PP	POWER POLE
CFD	CALISTOGA FIRE DEPARTMENT	PUE	PUBLIC UTILITY EASEMENT
CL	CLASS	RCE	REGISTERED CIVIL ENGINEER
C	CENTERLINE	RCP	REINFORCED CONCRETE PIPE
CPC	CENTRAL PRECAST CONCRETE	R/W	RIGHT OF WAY
CMP	CORRUGATED METAL PIPE	S	SLOPE
CO	CLEANOUT	SAD	SEE ARCHITECTURAL DRAWINGS
CONC	CONCRETE	SD	STORM DRAIN
DI	DROP INLET	SS	SANITARY SEWER
DWY	DRIVEWAY	STA	STATION
EG	EXISTING GROUND	STD	STANDARD
EP	EDGE OF PAVEMENT	TC	TOP OF CURB
EL	ELEVATION	TYP	TYPICAL
EK	EXISTING	W	WATER
FL	FLOWLINE	WM	WATER METER
FG	FINISH GRADE	WV	WATER VALVE
FH	FIRE HYDRANT	WWF	WELDED WIRE FABRIC
FSS	FINISHED SURFACE		
GB	GRADE BREAK		
GR	GRATE		
HC	HANDICAPPED		

**LEGEND**

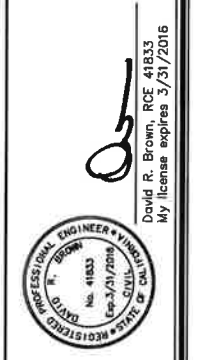
PROPOSED	EXISTING	DESCRIPTION
		APPROXIMATE PROPERTY BOUNDARY (BASED ON CURRENT DEED)
		CURB & GUTTER
		SANITARY SEWER & MANHOLE
		SANITARY SEWER & CLEANOUT
		SANITARY SEWER LATERAL
		STORM DRAIN & MANHOLE
		STORM DRAIN & DRAINAGE INLET (DI)
		STORM DRAIN & AREA DRAIN (AD)
		ROOF DRAIN & DOWN SPOUT (DS)
		WATER SERVICE / WM
		WATER SERVICE / RPS
		FIRE LINE / DDCV
		BLOW-OFF
		WATER MAIN & GATE VALVE
		FIRE HYDRANT
		STREET SIGN
		UTILITY POLE W/MO CUY WIRE
		DRAINAGE SWALE

**SITE LAYOUT**



No.	Date	Description	Approved

**adobe associates, inc.**  
 civil engineering | land surveying | wastewater  
 1220 N. Dutton Ave., Santa Rosa, CA 95401  
 P: (707) 541-2300 F: (707) 541-2301  
 Website: www.adobeinc.com  
 "A Service You Can Count On!"

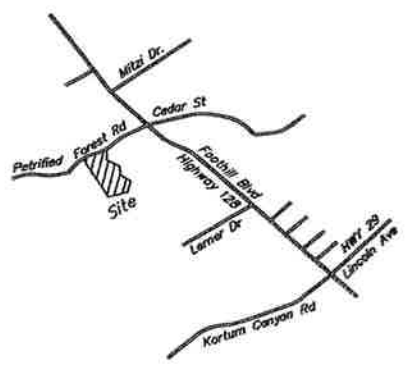
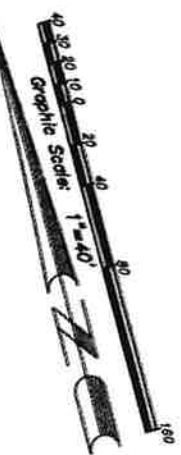
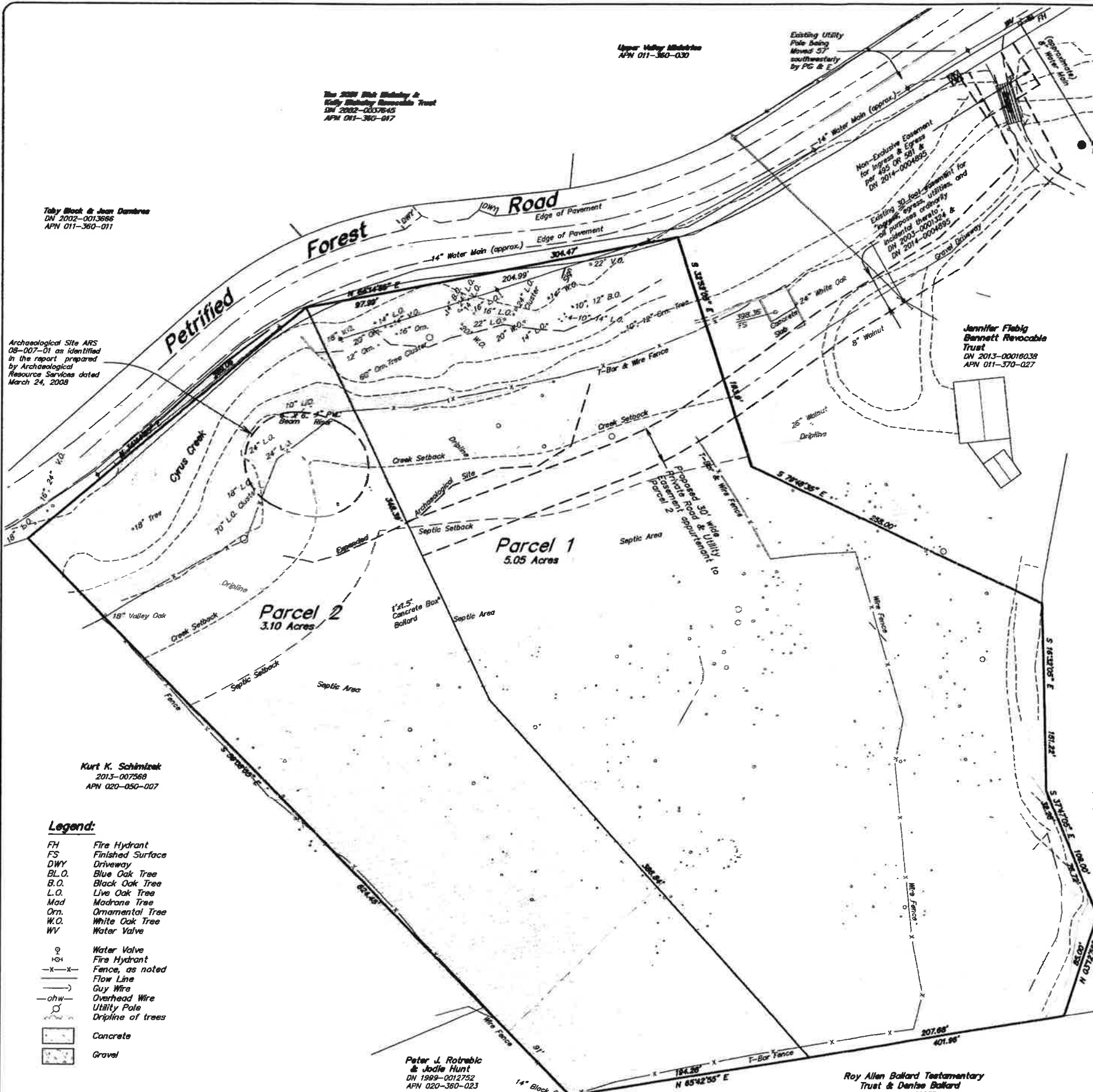


**TENTATIVE PARCEL MAP  
 LANDS OF BRANSTAD  
 TITLE SHEET  
 957 Petrified Road  
 Calistoga, California  
 APN 011-370-026**

SCALE: AS NOTED  
 Date: SEPTEMBER 16, 2014  
 Design by: W&P  
 Drawn by: AAI  
 Checked by: PRP

Sheet  
**1**  
 of 5 Sheets  
 Job 14059

T:\2014 PROJECTS\14059\Draw\Adobe-Design\Tentative Map\14059-C\_1111e Sheet.dwg, Bill Bardele, 12/10/2014, 11:28:59 AM



Location Map  
not to scale

**Slope Analysis**

"Density and Development Standard" City of Calistoga

<b>Average Slope of property</b>	<b>Minimum area per dwelling Unit</b>
$S = \frac{0.0023 \text{ IL}}{A}$	$a = \frac{1}{1.089 - 0.017798 S}$
<small>S is average slope I is contour interval A is gross area in acres of parcel L is combined length of contour IL is in feet</small>	<small>S is average slope a is minimum area per dwelling</small>

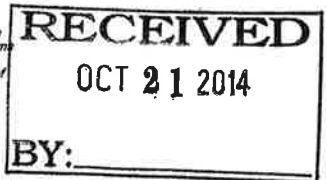
<b>Total Parcel</b>	$S = \frac{0.0023 \times 2 \times 51,159}{8.15} = 28.9\%$
<b>Average Slope = 28.9 percent</b>	
<b>Parcel One</b>	$S = \frac{0.0023 \times 2 \times 32,451}{5.05} = 29.6\%$
<b>Average Slope = 29.6 percent</b>	
<b>Minimum area = 1.8 acres</b>	$a = \frac{1}{1.089 - 0.017798 \times 29.6} = 1.8 \text{ acres}$
<b>Parcel Two</b>	$S = \frac{0.0023 \times 2 \times 18,708}{3.10} = 27.8\%$
<b>Average Slope = 27.8 percent</b>	
<b>Minimum area = 1.7 acres</b>	$a = \frac{1}{1.089 - 0.017798 \times 27.8} = 1.7 \text{ acres}$

**OWNER/SUBDIVIDER:**  
ROBERT BRANSTAD  
P.O. Box 1009  
Winnemucca, NV. 89446(415)  
510-334-2232

**SURVEYOR/ENGINEER:**  
ADobe ASSOCIATES, INC.  
1220 N. Dutton Avenue  
Santa Rosa, CA. 95401  
(707)541-2300 phone  
(707)541-2000 fax

APN 011-370-026  
**GENERAL PLAN & ZONING DESIGNATION:**  
Rural Residential Hillside

Sanitary Sewer: Private Sewage Disposal System  
Water: Public Water, City of Calistoga



**General Notes**

Provide 20' (twenty foot) wide asphalt driveway across parcel 1 and APN 011-370-027

Boundary lines shown hereon are APPROXIMATE ONLY and based on the current deed. Features shown hereon are existing as of the date of the field survey performed by Adobe Associates, Inc.

Contours shown hereon are a 2' (two foot) vertical interval and are shown based upon a field survey performed by Adobe Associates, Inc., on June 18, 2007.

**Bench Mark:** Found 3" Bronze Disc stamped "85-M-1933-364" located at the northerly corner of the intersection of Grant Avenue and Lake Street, at the northerly corner of the Calistoga Joint Unified High School; Army Corps of Engineers monument designed "RM2" on the FIRN (Federal Insurance Rate Map) for Calistoga. Top of Disc Elevation is 365.29' (NGVD 1929 Datum)

Toby Black & Jean Damstra  
DN 2002-0013666  
APN 011-360-011

The 2004 Hillside & Valley Highway Branchlands Trust  
DN 2002-0037645  
APN 011-360-017

Upper Valley Hillside  
APN 011-360-030

Existing Utility Pole Being Moved 57' southwesterly by PG & E

Non-Exclusive Easement for ingress & egress per 495 OR 501 & DN 2014-0004895

Existing 30-foot easement for ingress & egress for purpose of utility incidental thereto per 495 OR 501 & DN 2014-0004895

Jennifer Flabig Bennett Revocable Trust  
DN 2013-00018038  
APN 011-370-027

Archaeological Site ARS 08-007-01 as identified in the report prepared by Archaeological Resource Services dated March 24, 2008

Kurt K. Schimzik  
2013-007568  
APN 020-050-007

Peter J. Rotrabic & Jodie Hunt  
DN 1909-0012752  
APN 020-360-023

Roy Allen Ballard Testamentary Trust & Denise Ballard  
DN 1994-002537  
APN 011-370-013

**Legend:**

- FH Fire Hydrant
- FS Finished Surface
- DWY Driveway
- BL.O. Blue Oak Tree
- B.O. Black Oak Tree
- L.O. Live Oak Tree
- Mad Madrone Tree
- Orn. Ornamental Tree
- W.O. White Oak Tree
- WV Water Valve
- Water Valve
- Fire Hydrant
- Fence, as noted
- Flow Line
- Guy Wire
- Overhead Wire
- Utility Pole
- Dripline of trees
- Concrete
- Gravel

Revisions

No.	Date	Description	Approved

1881 N. Dutton Ave  
Santa Rosa, CA 95401  
707 541 2300  
Fax 707 541 2000

Adobe Associates, Inc.  
Civil Engineering  
Land Surveying &  
Land Investigation  
Services

**Tentative Parcel Map**  
Lands of Robert Branstad  
957 Petrified Forest Road, Calistoga, Ca  
Assessor's Parcel Number 011-370-026  
my license expires 6/30/15

Scale: 1" = 40'  
Date: 9/16/2014  
Design by: [Signature]  
Drawn by: JS  
Checked by: PMB

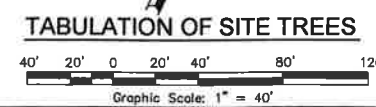
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**2**  
of 5 sheet  
Job No. 14059



Tabulation of Site Trees  
 "Tree inventory" (underlined to be removed)

T-1 54" Maple	T-51 9" Maple	T-151 9" Fir	T-551 12" Black Oak
T-2 20" Valley Oak	T-52 22" Fir	T-152 11" Fir	T-552 15" Fir
T-3 26" Valley Oak	T-53 13" Maple	T-153 23" Black Oak	T-553 10" Valley Oak
T-4 33" Oregon Ash	T-54 6" Fir	T-154 6" Fir	T-554 12" Fir
T-5 39" Black Cottonwood	T-55 6" Fir	T-155 4" Fir	T-555 18" Coast Live Oak
T-6 5" Coast Live Oak	T-56 20" Fir	T-156 9" Fir	T-556 8" Coast Live Oak
T-7 7" Coast Live Oak	T-57 19" Fir	T-157 4" Black Oak	T-557 6" Fir
T-8 11" Coast Live Oak	T-58 14" Fir	T-158 11" Coast Live Oak	T-558 17" Fir
T-9 8" Coast Live Oak	T-59 11" Fir	T-159 18" Fir	T-559 6" Fir
T-10 7" Coast Live Oak	T-60 5" Maple	T-160 8" Coast Live Oak	T-560 9" Fir
T-11 72" Coast Live Oak	T-61 10" Black Oak	T-161 4" Coast Live Oak	T-561 15" Fir
T-12 16" Pine	T-62 11" Fir	T-162 12" Coast Live Oak	T-562 15" Coast Live Oak
T-13 16" Pine	T-63 16" Coast Live Oak	T-163 9" Black oak	T-563 10" Fir
T-14 14" Pine	T-64 8" Fir	T-164 16" Blue oak	T-564 6" Fir
T-15 13" Valley Oak	T-65 18" Coast Live Oak	T-165 24" Valley Oak	T-565 15" Black Oak
T-16 21" Oregon Ash	T-66 22" Black Oak	T-166 4" Coast Live Oak	T-566 15" Black Oak
T-17 10" Madrone	T-67 15" Coast Live Oak	T-167 3" Coast Live Oak	T-567 13" Black Oak
T-18 22" Black Oak	T-68 23" Coast Live Oak	T-168 18" Fir	T-568 17" Black Oak
T-19 11" Fir	T-69 10" Fir	T-169 13" Coast Live Oak	T-569 6" Coast Live Oak
T-20 27" Fir	T-70 7" Coast Live Oak	T-170 14" Fir	T-570 13" Black Oak
T-21 6" Coast Live Oak	T-71 8" Fir	T-171 8" Coast Live Oak	T-571 7" Black Oak
T-22 8" Fir	T-72 15" Fir	T-172 4" Coast Live Oak	T-572 15" Maple
T-23 34" Maple	T-73 57" Maple	T-173 4" Coast Live Oak	T-573 38" Maple
T-24 12" Coast Live Oak	T-74 9" Maple	T-174 4" Coast Live Oak	T-574 27" Maple
T-25 22" Fir	T-75 18" Fir	T-175 5" Fir	T-575 14" Black Oak
T-26 19" Coast Live Oak	T-76 26" Black Oak	T-176 7" Coast Live Oak	T-576 10" Black Oak
T-27 13" Coast Live Oak	T-77 7" Fir	T-177 17" Maple	T-577 11" Black Oak
T-28 6" Coast Live Oak	T-78 6" Black Oak	T-178 4" Fir	T-578 10" Black Oak
T-29 5" Coast Live Oak	T-79 6" Fir	T-179 5" Fir	T-579 48" Maple
T-30 7" Coast Live Oak	T-80 3" Coast Live Oak	T-180 11" Fir	T-580 7" Black Oak
T-31 12" Coast Live Oak	T-81 15" Valley Oak	T-181 8" Blue Oak	T-581 13" Black Oak
T-32 6" Coast Live Oak	T-82 14" Coast Live Oak	T-182 4" Live oak	T-582 10" Black Oak
T-33 6" Coast Live Oak	T-83 5" Coast Live Oak	T-183 11" Fir	T-583 12" Black Oak
T-34 6" Madrone	T-84 5" Coast Live Oak	T-184 18" Fir	T-584 10" Black Oak
T-35 6" Coast Live Oak	T-85 8" Madrone	T-185 23" Fir	T-585 22" Madrone
T-36 4" Coast Live Oak	T-86 3" Coast Live Oak	T-186 16" Fir	T-586 16" Fir
T-37 29" Valley Oak	T-87 4" Coast Live Oak	T-187 15" Fir	T-587 10" Coast Live Oak
T-38 21" Coast Live Oak	T-88 3" Coast Live Oak	T-188 7" Fir	T-588 22" Fir
T-39 16" Fir	T-89 8" Fir	T-189 14" Madrone	T-589 9" Black Oak
T-40 14" Fir	T-90 8" Fir	T-190 6" Madrone	T-590 6" Black Oak
T-41 9" Fir	T-91 10" Fir	T-191 4" Coast Live Oak	T-591 8" Black Oak
T-42 6" Coast Live Oak	T-92 33" Coast Live Oak	T-192 13" Valley Oak	T-592 7" Black Oak
T-43 8" Coast Live Oak	T-93 9" Fir	T-193 10" Valley Oak	T-593 9" Coast Live Oak
T-44 19" Black Oak	T-94 6" Fir	T-194 11" Fir	T-594 6" Maple
T-45 18" Black Oak	T-95 28" Coast Live Oak	T-195 13" Valley Oak	T-595 12" Fir
T-46 14" Black Oak	T-96 18" Coast Live Oak	T-196 4" Coast Live Oak	T-596 12" Fir
T-47 15" Maple	T-97 14" Fir	T-197 8" Coast Live Oak	T-597 12" Fir
T-48 6" Black Oak	T-98 14" Fir	T-198 12" Coast Live Oak	T-598 7" Black Oak
T-49 14" Fir	T-99 4" Coast Live Oak	T-199 9" Coast Live Oak	T-599 19" Black Oak
T-50 10" Maple	T-100 11" Coast Live Oak	T-200 12" Fir	T-600 6" Oregon Oak
	T-101 4" Fir	T-201 5" Fir	T-601 12" Black Oak
	T-102 6" Fir	T-202 7" Fir	T-602 6" Fir
	T-103 7" Fir	T-203 9" Fir	T-603 6" Fir
	T-104 14" Black Oak	T-204 14" Fir	T-604 10" Oregon Oak
	T-105 14" Valley Oak	T-205 8" Fir	T-605 7" Black Oak
	T-106 3" Coast Live Oak	T-206 8" Fir	T-606 5" Oregon Oak
	T-107 3" Coast Live Oak	T-207 11" Madrone	T-607 15" Black Oak
	T-108 "NO TREE-TAG, 108 MISSING"	T-208 23" Valley Oak	T-608 7" Black Oak
	T-109 3" Fir	T-209 18" Madrone	T-609 10" Madrone
	T-110 5" Coast Live Oak	T-210 4" Madrone	T-610 25" Oregon Oak
	T-111 10" Fir	T-211 7" Valley Oak	T-611 15" Madrone
	T-112 5" Blue Oak	T-212 7" Fir	T-612 8" Oregon Oak
	T-113 4" Coast Live Oak	T-213 5" Madrone	T-613 9" Black Oak
	T-114 4" Coast Live Oak	T-214 14" Fir	T-614 4" Fir
	T-115 6" Fir	T-215 6" Fir	T-615 8" Fir
	T-116 9" Fir	T-216 14" Coast Live Oak	T-616 13" Fir
	T-117 7" Coast Live Oak	T-217 8" Fir	T-617 8" Coast Live Oak
	T-118 8" Coast Live Oak	T-218 5" Fir	T-618 8" Coast Live Oak
	T-119 3" Coast Live Oak	T-219 10" Madrone	T-619 6" Black Oak
	T-120 15" Fir	T-220 11" Coast Live Oak	T-620 11" Black Oak
	T-121 26" Fir	T-221 22" Black Oak	T-621 9" Black Oak
	T-122 38" Madrone	T-222 7" Fir	T-622 10" Black Oak
	T-123 32" Maple	T-223 7" Coast Live Oak	T-623 4" Madrone
	T-124 8" Fir	T-224 15" Valley Oak	T-624 24" Oregon Oak
	T-125 48" Maple	T-225 8" Fir	T-625 8" Buckeye
	T-126 37" Maple	T-226 5" Fir	T-626 12" Black Oak
	T-127 20" Fir	T-227 18" Coast Live Oak	T-627 9" Black Oak
	T-128 15" Madrone	T-228 20" Coast Live Oak	T-628 17" Black Oak
	T-129 8" Black Oak	T-229 10" Fir	T-629 7" Black Oak
	T-130 6" Madrone	T-230 4" Coast Live Oak	T-630 5" Buckeye
	T-131 7" Fir	T-231 8" Coast Live Oak	T-631 10" Oregon Oak
	T-132 8" Fir	T-232 5" Coast Live Oak	T-632 7" Oregon Oak
	T-133 7" Black Oak	T-233 10" Fir	T-633 4" Madrone
	T-134 10" Maple	T-234 9" Fir	T-634 6" Coast Live Oak
	T-135 16" Fir	T-235 6" Fir	T-635 18" Fir
	T-136 6" Madrone	T-236 5" Fir	T-636 8" Oregon Oak
	T-137 5" Maple	T-237 6" Fir	T-637 5" Madrone
	T-138 18" Fir	T-238 6" Fir	T-638 7" Oregon Oak
	T-139 6" Maple	T-239 6" Fir	T-639 18" Fir
	T-140 18" Fir	T-240 5" Fir	T-640 9" Coast Live Oak
	T-141 18" Fir	T-241 4" Fir	T-641 7" Coast Live Oak
	T-142 3" Black Oak	T-242 6" Fir	T-642 31" Madrone
	T-143 18" Black Oak	T-243 8" Fir	T-643 13" Fir
	T-144 15" Fir	T-244 11" Coast Live Oak	T-644 11" Fir
	T-145 10" Fir	T-245 12" Fir	T-645 10" Oregon Oak
	T-146 55" Maple	T-246 6" Fir	T-646 9" Madrone
	T-147 5" Fir	T-247 6" Fir	T-647 8" Coast Live Oak
	T-148 19" Fir	T-248 9" Fir	T-648 13" Fir
	T-149 9" Black Oak	T-249 15" Coast Live Oak	T-649 10" Oregon Oak
	T-150 8" Valley oak	T-250 25" Coast Live Oak	T-650

- Legend:**
- FH Fire Hydrant
  - FS Finished Surface
  - DWY Driveway
  - BL.O. Blue Oak Tree
  - B.O. Black Oak Tree
  - L.O. Live Oak Tree
  - Mad Madrone Tree
  - Orn. Ornamental Tree
  - W.O. White Oak Tree
  - WV Water Valve
  - x—x— Fence, as noted
  - Flow Line
  - Guy Wire
  - ohw— Overhead Wire
  - Utility Pole
  - Dripline of trees
  - Concrete
  - Gravel
  - x Existing Tree to be Removed (21)



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 BY:

**reid adobe associates, inc.**  
 civil engineering / land surveying / wastewater  
 1220 N. Dutton Ave., Santa Rosa, CA 95401  
 P. (707) 541-2300 F. (707) 541-2301  
 Website: www.adobeinc.com

David R. Brown, RCE 41833  
 My license expires 3/31/2016

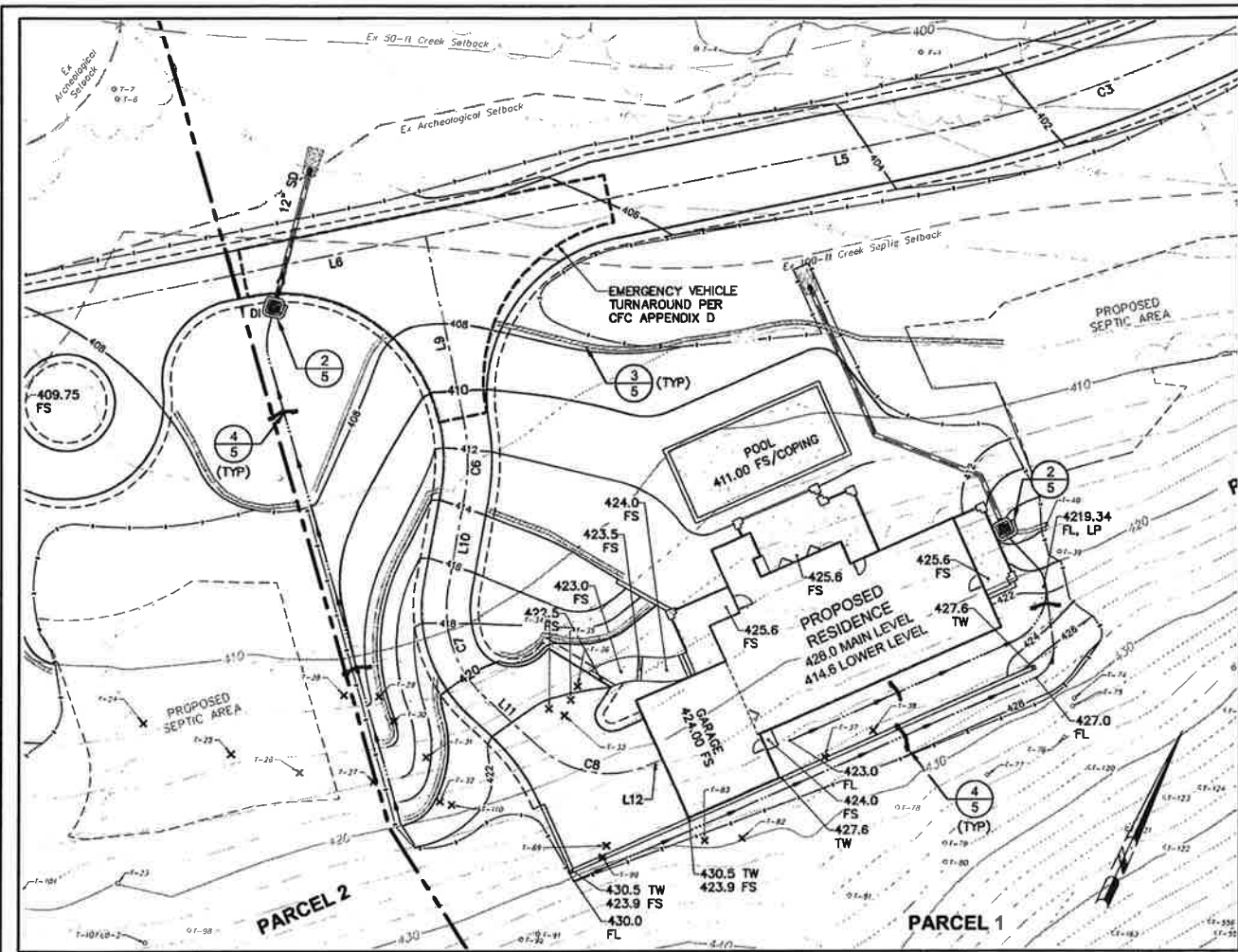
**PROFESSIONAL ENGINEER**  
 No. 41833  
 Exp. 3/31/2016

**TENTATIVE PARCEL MAP**  
**LANDS OF BRANSTAD**  
**TABULATION OF SITE TREE**  
 957 Petrified Road  
 Calistoga, California  
 APN 011-370-026

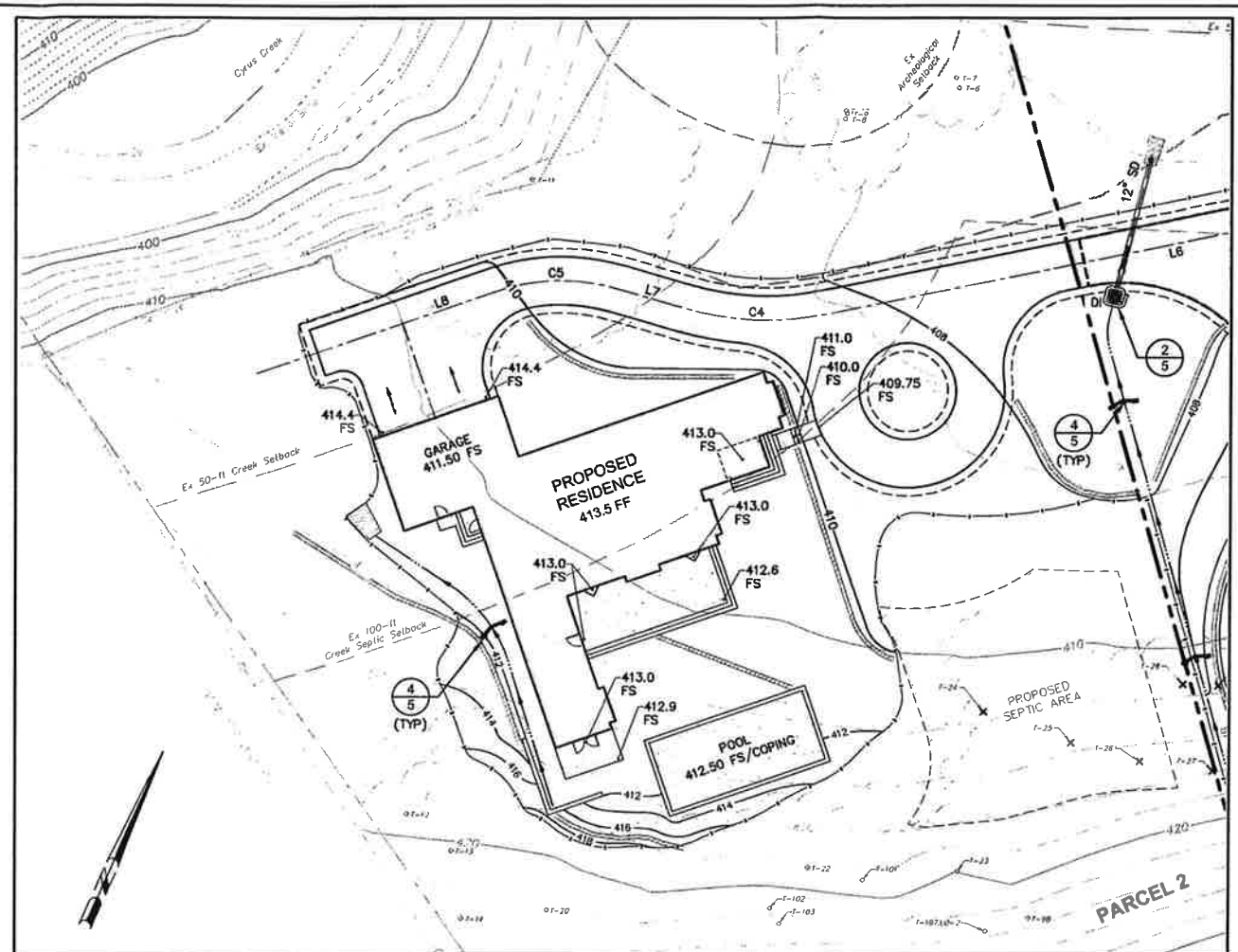
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 Drawn by: All  
 Checked by: PRP

Revisions  
 No. Date Description Approved

Sheet  
**3**  
 of 5 Sheets  
 Job 14059

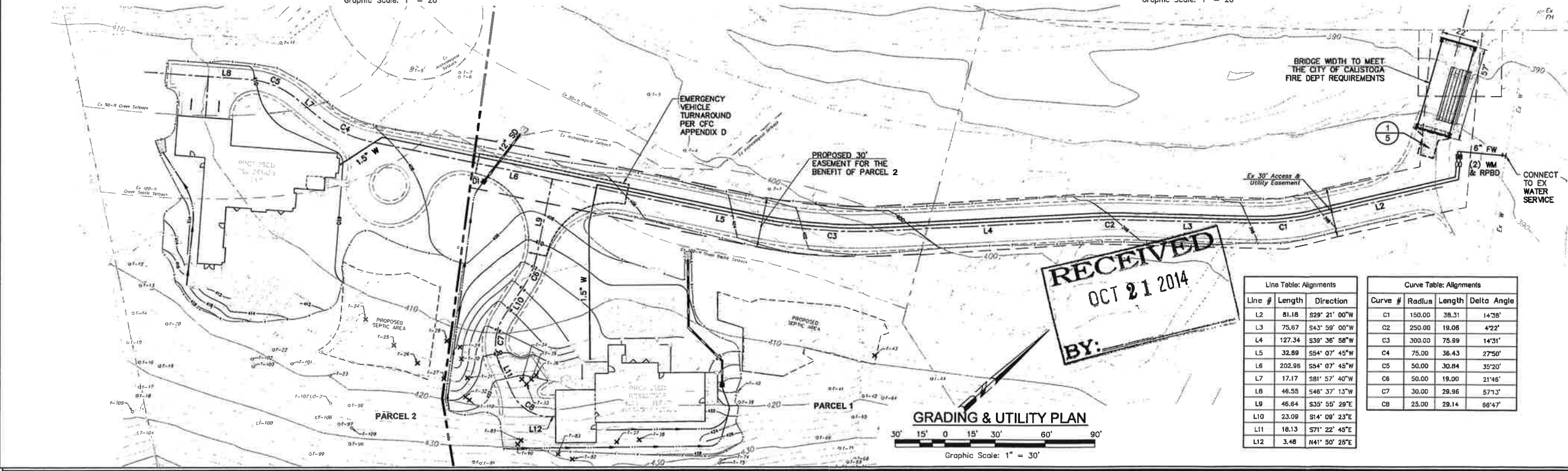


**PARTIAL GRADING PLAN - PARCEL 1**  
 20' 10' 0 10' 20' 40' 60'  
 Graphic Scale: 1" = 20'



**PARTIAL GRADING PLAN - PARCEL 2**  
 20' 10' 0 10' 20' 40' 60'  
 Graphic Scale: 1" = 20'

**DEMOLITION LEGEND**  
 X EXISTING TREE TO BE REMOVED (21)



**GRADING & UTILITY PLAN**  
 30' 15' 0 15' 30' 60' 90'  
 Graphic Scale: 1" = 30'

Line Table: Alignments			Curve Table: Alignments			
Line #	Length	Direction	Curve #	Radius	Length	Delta Angle
L2	81.18	S29° 21' 00"W	C1	150.00	38.31	142°8'
L3	75.67	S43° 59' 00"W	C2	250.00	19.06	4°22'
L4	127.34	S39° 36' 58"W	C3	300.00	75.89	14°31'
L5	32.89	S54° 07' 45"W	C4	75.00	36.43	27°50'
L6	202.96	S54° 07' 45"W	C5	50.00	30.84	35°20'
L7	17.17	S81° 57' 40"W	C6	50.00	19.00	21°46'
L8	46.55	S46° 37' 13"W	C7	30.00	29.96	57°13'
L9	46.84	S35° 55' 29"E	C8	25.00	29.14	66°47'
L10	23.09	S14° 08' 23"E				
L11	18.13	S71° 22' 45"E				
L12	3.48	N41° 50' 25"E				

T: 2014 PROJECTS\14059\img\Acad-Design\Tentative Map\14059-C4\_Partial Grading & Utility Plan.dwg, Bill Barabab, 12/10/2014 11:28:19 AM

**revisions**

No.	Date	Description	Approved

**rl adobe associates, inc.**  
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 "A Service You Can Count On!"

David R. Brown, RCE #1883  
 My license expires 5/31/2016

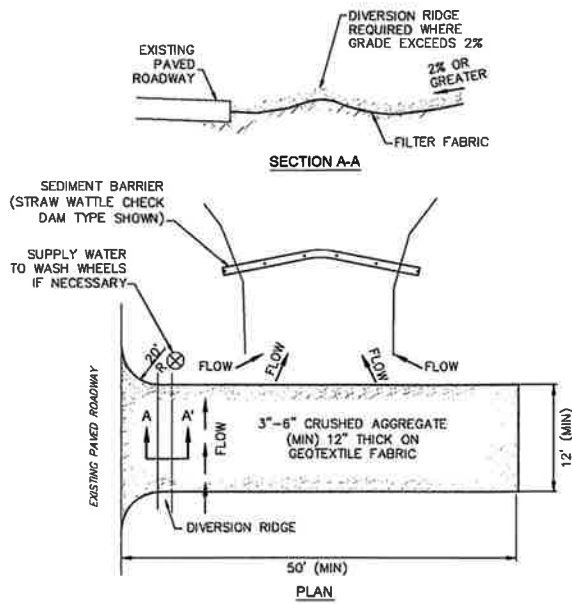
**PROFESSIONAL ENGINEER - CIVIL**  
 No. 41833  
 Exp. 3/31/2016

**TENTATIVE PARCEL MAP**  
**LANDS OF BRANSTAD**  
**PARTIAL GRADING PLANS & GRADING & UTILITY PLAN**  
 957 Petrified Road  
 Calistoga, California  
 AEN 011-370-026

SCALE: AS NOTED  
 Date: SEPTEMBER 16, 2014  
 Design by: WJP  
 Drawn by: AJI  
 Checked by: DRB

Sheet  
**4**  
 of 5 Sheets  
 Job 14059

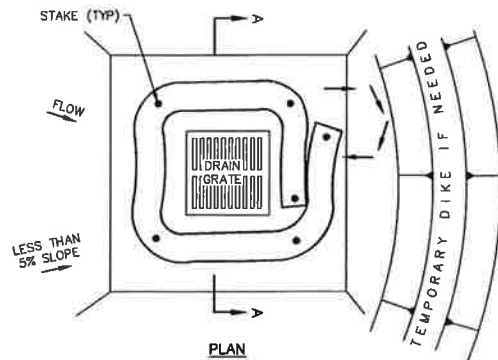
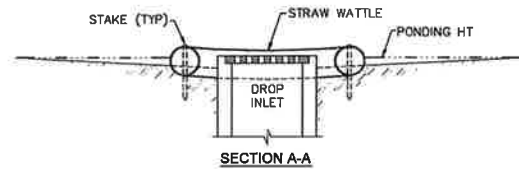
T:\2014 PROJECTS\14059\Temp\Adobe-Design\14059-C5\_Details.dwg, Bill Boroko, 12/10/2014 11:25:24 AM



**NOTES:**

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS- OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

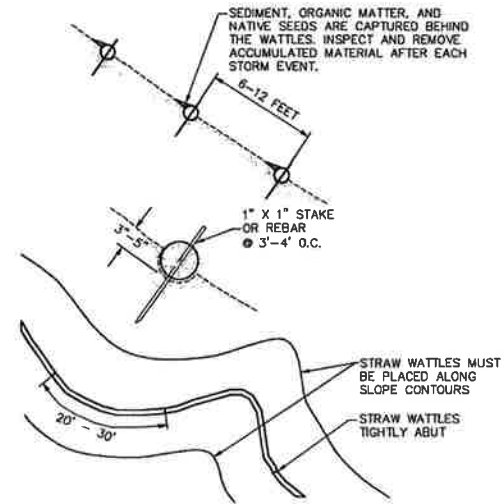
**1 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT**  
NTS



**NOTES:**

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. USE 1X4 WOOD OR EQUIVALENT METAL STAKES, (3 FT MIN LENGTH).
3. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

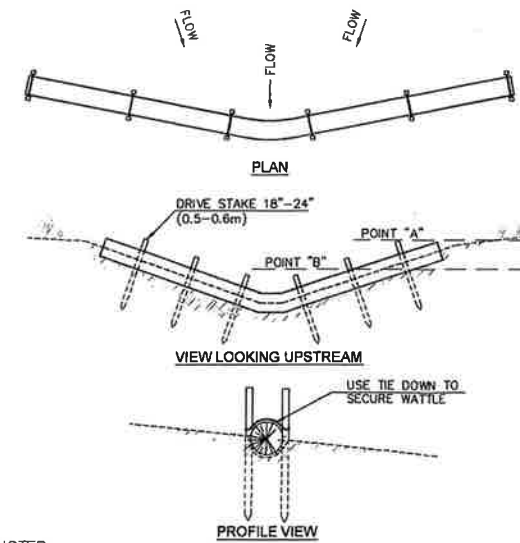
**2 DROP INLET SEDIMENT BARRIER**  
NTS



**NOTES:**

1. STRAW WATTLES ARE TUBES MADE FROM STRAW AND BOUND W/ BIO-DEGRADABLE WRAPPED NETTING. THEY ARE APPROXIMATELY 8" DIA AND 20 - 30 FT LONG.
2. STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET & RILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.
3. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH, 3" - 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

**3 STRAW WATTLE**  
NTS



**NOTES:**

1. EMBED WATTLES 4" (100mm) INTO THE SOIL AND 'KEY' WATTLES INTO THE SWALE BANKS.
2. POINT "A" MUST BE HIGHER THAN POINT "B". (SPILLWAY HEIGHT)
3. PLACE WATTLES PERPENDICULAR TO THE FLOW WITH ENDS TIGHTLY ABUTTING.
4. INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

**4 STRAW WATTLE CHECK DAM**  
NTS

**STRAW WATTLES (CONSTRUCTION SPECIFICATIONS)**  
PREPARE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.

DIG SMALL TRENCHES ACROSS SLOPE ON CONTOUR, TO PLACE WATTLES IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE WATTLE. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE WATTLE 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE. IT IS CRITICAL THAT WATTLES ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.

START BUILDING TRENCHES AND INSTALL WATTLES FROM THE BOTTOM OF THE SLOPE AND WORK UP.

CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF THREE TO EIGHT FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES. LAY THE WATTLE ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.

USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WOODEN STAKES.

DRIVE THE STAKE THROUGH THE PREPARED HOLE INTO THE SOIL. LEAVE ONLY ONE OR TWO INCHES OF STAKE EXPOSED ABOVE WATTLE.

INSTALL STAKES AT LEAST EVERY FOUR FEET APART THROUGH WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSION OR VERY STEEP SLOPES.

**RECEIVED**  
OCT 21 2014  
BY:

TENTATIVE PARCEL MAP  
LANDS OF BRANSTAD  
DETAILS  
957 Petrified Road  
Calistoga, California  
APN 011-370-025

Revisions	No.	Date	Description	Approved

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SCALE: AS NOTED  
Date: SEPTEMBER 16, 2014  
Design by: WLB  
Drawn by: AJL  
Checked by: PRB

Sheet  
**5**  
of 5 Sheets  
Job 14059

**DESIGN CRITERIA**

**SITE REVIEW:**  
 A SITE REVIEW WAS CONDUCTED BY ADOBE ASSOCIATES INC. WITH A REPRESENTATIVE FROM THE NAPA COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (DEM) ON AUGUST 14, 2007.

ESTIMATED HYDRAULIC LOADING RATE (HLR): (BASED UPON SOIL MORPHOLOGY) = 0.400 GAL/SF/DAY

WASTEWATER FLOWS: = 120 GAL/DAY/BEDROOM

GROUND SLOPE: = RANGES FROM 2%-30%

**PARCEL 1 SYSTEM DESIGN**

**3 BEDROOM RESIDENCE**

SYSTEM DESIGN CALCULATIONS/FLOWS:  
 (120 GAL/DAY/BDRM)(3 BEDROOMS) = 360 TOTAL GAL/DAY  
 (360 TOTAL GAL/DAY)/(0.400 GAL/SF/DAY) = 900 TOTAL SQUARE FEET

DRIP IRRIGATION PRIMARY SEPTIC SYSTEM DESIGN:  
 900 SQUARE FEET (100%) PRIMARY DRIP IRRIGATION DISPOSAL FIELD REQUIRED;  
 900 SQUARE FEET PRIMARY DRIP IRRIGATION DISPOSAL FIELD SHOWN.  
 (TO BE CONSTRUCTED)

DRIP IRRIGATION RESERVE SEPTIC SYSTEM DESIGN:  
 1,800 SQUARE FEET (200%) RESERVE DRIP IRRIGATION DISPOSAL FIELD REQUIRED;  
 2,179 SQUARE FEET RESERVE DRIP IRRIGATION DISPOSAL FIELD SHOWN.  
 (NOT TO BE CONSTRUCTED)

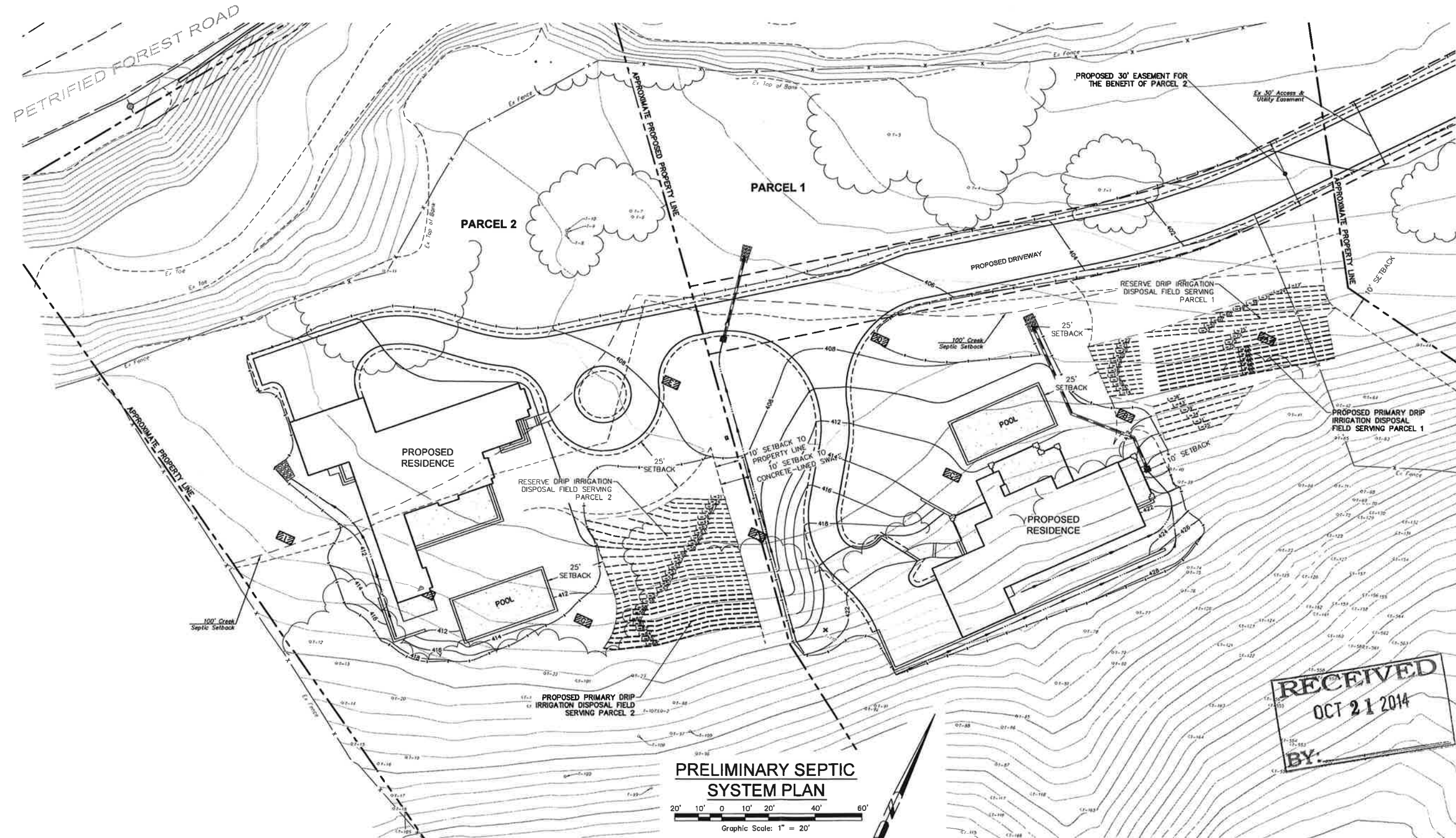
**PARCEL 2 SYSTEM DESIGN**

**3 BEDROOM RESIDENCE**

SYSTEM DESIGN CALCULATIONS/FLOWS:  
 (120 GAL/DAY/BDRM)(3 BEDROOMS) = 360 TOTAL GAL/DAY  
 (360 TOTAL GAL/DAY)/(0.400 GAL/SF/DAY) = 900 TOTAL SQUARE FEET

DRIP IRRIGATION PRIMARY SEPTIC SYSTEM DESIGN:  
 900 SQUARE FEET (100%) PRIMARY DRIP IRRIGATION DISPOSAL FIELD REQUIRED;  
 999 SQUARE FEET PRIMARY DRIP IRRIGATION DISPOSAL FIELD SHOWN.  
 (TO BE CONSTRUCTED)

DRIP IRRIGATION RESERVE SEPTIC SYSTEM DESIGN:  
 1,800 SQUARE FEET (200%) RESERVE DRIP IRRIGATION DISPOSAL FIELD REQUIRED;  
 2,000 SQUARE FEET RESERVE DRIP IRRIGATION DISPOSAL FIELD SHOWN.  
 (NOT TO BE CONSTRUCTED)



**PRELIMINARY SEPTIC SYSTEM PLAN**

Graphic Scale: 1" = 20'

**RECEIVED**  
 OCT 21 2014  
 BY: \_\_\_\_\_

<p><b>adobe associates, inc.</b>                  civil engineering   land surveying   wastewater                  1228 N. Dutton Ave., Suite 200, CA 95401                  P. (707) 541-2300 F. (707) 541-2301                  Website: www.adobeinc.com</p>	
<p>Steven R. Brown, RCE #3525                  My License Expires 6/30/2015</p>	<p>APN 011-370-026</p>
<p><b>DRIP IRRIGATION TYPE PRIVATE SEWAGE DISPOSAL SYSTEM SEPTIC SYSTEM PLAN</b>                  957 Petrified Forest Road                  California</p>	
<p>Scale: AS SHOWN                  Date: DECEMBER 10, 2014                  Design by: GMS                  Drawn by: SMG                  Checked by: SRB</p>	<p>Sheet  <b>W1</b>                  of 1 Sheets                  Job No. 14059</p>