# NO Ü **8** PERMIT

FOR

#### EROSION CONTROL PLAN NOTES

- 1. GRADING ON THE SITE WILL BE LIMITED TO THE AREA OF EXCAVATION SHOWN
- 2. SILT FENCE OR STRAW BALE SEDIMENT BARRIERS WILL BE INSTALLED PRIOR TO ANY GRADING ON THE SITE AND WILL BE OPERABLE DURING RAINY WEATHER. DURING THE RAINY SEASON, OCTOBER 15 TO APRIL 15, PERIODIC INSPECTIONS AND MAINTENANCE OF EROSION CONTROL MEASURES WILL BE REQUIRED UNTIL VEGETATION IS FULLY RESTORED.
- 3. ALL MOVEMENT OF EARTH SHALL COMPLY WITH NAPA COUNTY SPECIFICATIONS, AND THE GRADING AND DRAINAGE PLAN SHALL BE STRICTLY
- 4. CHANGES TO THIS GRADING AND DRAINAGE PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF THE COUNTY INSPECTOR AND THE CIVIL ENGINEER.
- 5. ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF LEAVES THE SITE.
- 6. THE CONTRACTOR WILL INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THIS PLAN PERTAINING TO EROSION AND SFDIMENT CONTROL, AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF ALL EROSION CONTROL MEASURES.
- 7. THE SOIL IS COMPOSED OF SOIL TYPE 136(FELTON GRAVELY LOAM 5-50% SLOPE) AND SOIL TYPE 157 (LODO-MAYMEN-FELTON ASSOCIATION 5-50% SLOPE) AS SHOWN ON SOIL SURVEY OF NAPA COUNTY, CALIFORNIA, DATED AUGUST 1978
- 8. CONTOUR INTERVAL FOR THE SITE PLAN IS 5 FOOT.

#### MAINTENANCE NOTES

ALL SEDIMENT BARRIERS WILL BE INSPECTED AND REPAIRED AFTER EACH STORM, IN ADDITION AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON (OCTOBER 15 TO APRIL 15).

SEEDED AREAS WILL BE REPAIRED, RESEEDED AND MULCHED AS SOON AS POSSIBLE AFTER BEING DAMAGED.

#### SEEDING SPECIFICATIONS AND SCHEDULES

ALL GRADED OR DISTURBED AREAS SHALL BE SEEDED AS FOLLOWS:

INTERIM MEASURES: SPREAD STRAW MULCH OVER ALL EXPOSED EARTH SURFACES WHEN CHANCE OF RAIN IS OVER 70% AS DETERMINED BY THE NATIONAL WEATHER BUREAU, PER APPLICATION SCHEDULE.

WINTERIZING MEASURES: PLACE STRAW BALE DIKES AS SHOWN ON SITE PLAN PRIOR TO WINTER RAINS & NO LATER THAN NOV. 30. COVER NEWLY SEEDED AREAS WITH STRAW MULCH. CALL FOR INSPECTION TO CONFIRM WINTERIZING OF SITE. INSTALL VELOCITY CHECK DAMS AND WATER BARS PRIOR TO OCT. 7 th. FINISH WORK AT COMPLETION OF PROJECT.

. THE SEED, FERTILIZER AND MULCH MIXTURE WILL BE APPLIED HYDRAULICALLY OR BY HAND AT THE RATES SPECIFIED BELOW:

NAPA EROSION CONTROL MIX (NAPA VALLEY AGG. SUPPLY) 40 FERTILIZER (16-20-0) STRAW MULCH 3000-4000

SEED SHALL NOT REMAIN IN THE SLURRY LONGER THAN 30 MINUTES. FERTILIZERS SHALL NOT REMAIN IN THE SLURRY LONGER THAN 2 HOURS. AREAS TO BE HYDROSEEDED SHALL BE SCARIFIED TO A DEPTH OF 4" TO 8" AND DRESSED TO PROVIDE A REASONABLY SMOOTH FIRM SURFACE. THE SLURRY SHALL BE APPLIED IN A UNIFORM MANNER AT A RATE THAT IS NON-EROSIVE AND MINIMIZES RUNOFF.

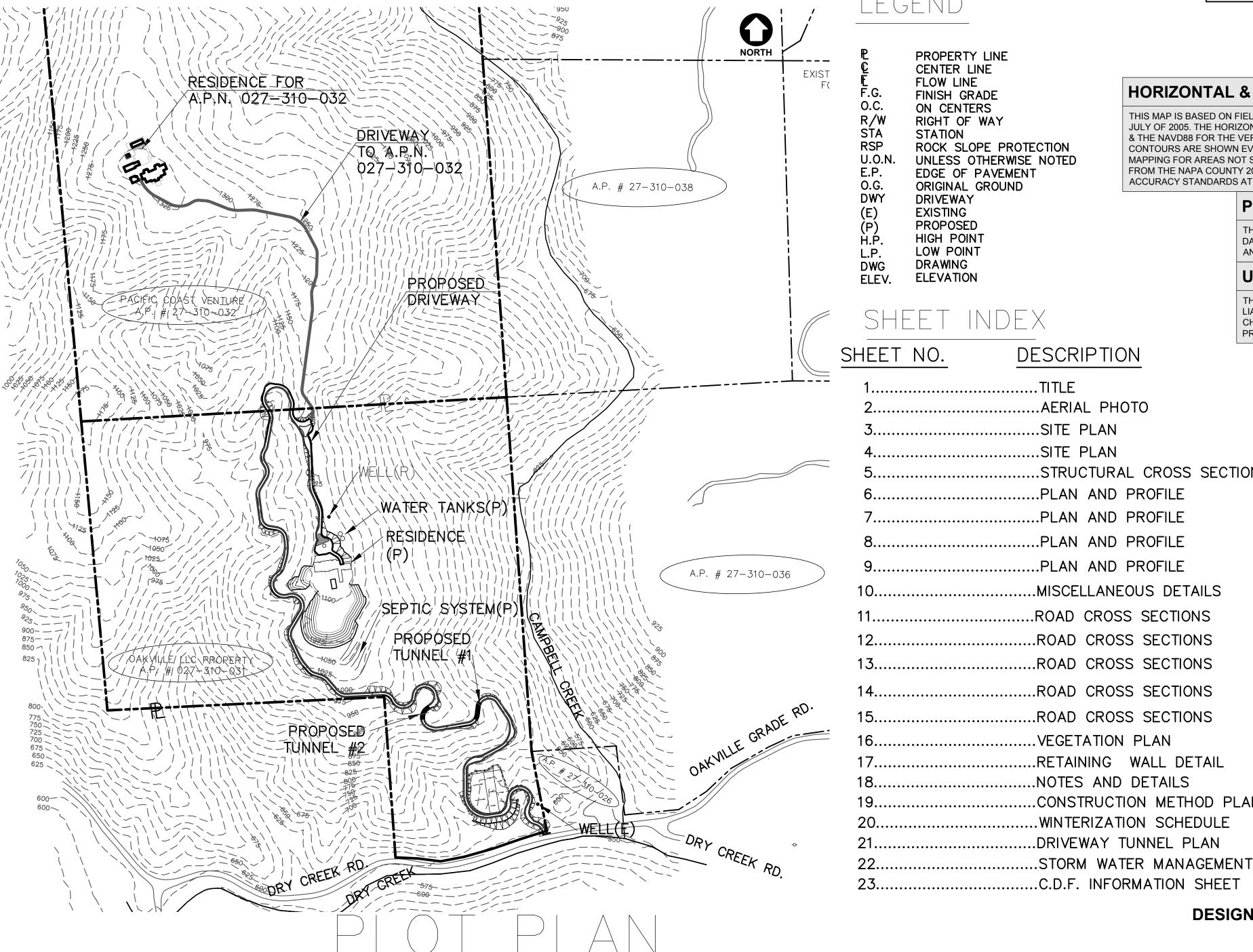
### GRADING NOTES

SITE SHALL BE VISUALLY INSPECTED BY THE CONTRACTOR TO DETERMINE THE EXTENT OF CLEARING. GRUBBING AND GRADING WORK TO BE DONE PRIOR TO BEGINNING CONSTRUCTION.

- THE ELEVATIONS GIVEN ON THIS PLAN ARE APPROXIMATE ONLY, AND ARE FOR THE ROUGH LAYOUT OF DRIVEWAY AND DRAINAGE IMPROVEMENTS. SOIL REQUIREMENTS PERTAINING TO COMPACTION, CONSOLIDATION, CONSTRUCTION, AND STABILITY ARE PER SOILS ENGINEERS RECOMMENDATIONS. DISCREPANCIES BETWEEN THE SOILS ENGINEERS RECOMMENDATIONS AND THESE PLANS SHOULD BE BROUGHT TO THE ATTENTIONS OF THE PROJECT ENGINEER FOR CLARIFICATION IMMEDIATELY. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL TOPS AND TOES OF SLOPES AND RETAINING WALLS IN THE FIELD. IT MAY BE NECESSARY TO INSTALL ADDITIONAL RETAINING WALLS TO CATCH EXISTING SLOPES AND AVOID EXCESS GRADING BASED ON SITE CONDITIONS FOUND. RETAINING WALLS ARE TO BE DESIGNED BY OTHERS AND APPROVED BY THE NAPA COUNTY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSISTENT GEOTECHNICAL REVIEW AND ENGINEERING INSPECTIONS DURING THE CONSTRUCTION AND PLACEMENT OF THE ROAD & FILL AREAS TO ENSURE STABILITY OF CONSTRUCTION. IT IS THE OWNER & CONTRACTORS RESPONSIBILITY TO HAVE WRITTEN VERIFICATION OF ALL INSPECTIONS BY THE SOILS ENGINEER TO CONFIRM THAT CUTS, FILLS, AND RETAINING WALLS MEET ENGINEERS REQUIREMENTS.
- WRITTEN DIMENSIONS ALWAYS TAKE PRECEDENCE OVER SCALED DIMENSIONS. IF THERE IS A CONFLICT, NOTIFY THE ENGINEER AND OBTAIN A CLARIFICATION. NO DEVIATIONS OR SUBSTITUTIONS SHALL BE ALLOWED WITHOUT OBTAINING WRITTEN APPROVAL FROM THE ENGINEER.
- SHOULD ANY CONTRACTOR OR SUBCONTRACTOR FIND ANY DEFICIENCIES, ERRORS, CONFLICTS OR OMISSIONS IN THESE PLANS AND SPECIFICATIONS OR SHOULD HE BE IN DOUBT AS TO THEIR MEANING OR INTENT, HE SHALL NOTIFY THE ENGINEER FOR A WRITTEN CLARIFICATION, ADDENDUM, ETC. SHOULD HE FAIL TO DO SO BEFORE SUBMITTING A PROPOSAL, HE CANNOT CLAIM ADDITIONAL COMPENSATION FROM OWNER FOR WORK REQUIRED TO COMPLETE THE WORK.
- CONTRACTOR WILL LEAVE THE CONSTRUCTION AREA IN AN ORDERLY CONDITION AT THE END OF EACH DAY.
- ALL WORK WILL BE CONDUCTED IN CONFORMANCE WITH CAL-OSHA REQUIREMENTS.
- 8. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AT 800-642-2444 PRIOR TO START OF ANY CONSTRUCTION.
- ALL MATERIAL WILL BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS OTHERWISE NOTED.
- O. CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN SUCH A MANNER AS TO PRECLUDE WIND BLOWN DIRT AND DUST AND RELATED DAMAGE TO NEIGHBORING PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST IS REQUIRED AT ALL TIMES. CONTRACTOR SHALL ASSUME LIABILITY FOR CLAIMS RELATED TO WIND BLOWN MATERIAL. IF THE DUST CONTROL IS INADEQUATE AS DETERMINED BY THE COUNTY INSPECTOR, THE CONSTRUCTION WORK SHALL BE TERMINATED UNTIL CORRECTIVE MEASURES ARE TAKEN.
- 1. THE EARTH WORK DESIGNATED ON THESE PLANS IS FOR THE EXCAVATION OF A BUILDING SITE, INSTALLING A DRIVEWAY, DRAINAGE SYSTEMS, AND APPURTENANT REQUIREMENTS. ALL EXCAVATED SOILS ARE TO BE PROTECTED FROM EROSION AS SHOWN ON PLANS. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL SPOILS IN A MANNER APPROVED BY THE COUNTY OF NAPA.
- 12. OWNER TO ACQUIRE A ROADWAY EASEMENT OVER PROPERTIES NOT OWNED BY OWNER PRIOR TO BEGINNING CONSTRUCTION. ON ANY ADJOINING PROPERTY.

# GRADING & DRAINAGH PLAN THE PROPOSED RESIDENCE

CAMPBELL CREEK RANCH - PARCEL #7 A.P.N. 027-310-031



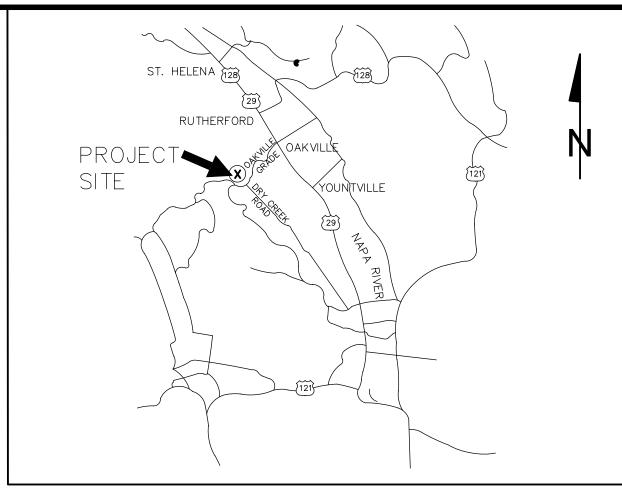
PROPERTY LINE CENTER LINE FLOW LINE FINISH GRADE ON CENTERS RIGHT OF WAY STATION ROCK SLOPE PROTECTION UNLESS OTHERWISE NOTED EDGE OF PAVEMENT ORIGINAL GROUND DRIVEWAY **EXISTING** PROPOSED HIGH POINT LOW POINT DRAWING **ELEVATION** 

SHEET NO. DESCRIPTION 1.....TITLE 2.....AERIAL PHOTO ...SITE PLAN 4...... ..STRUCTURAL CROSS SECTIONS ..PLAN AND PROFILE ...PLAN AND PROFILE ....PLAN AND PROFILE ...PLAN AND PROFILE .. MISCELLANEOUS DETAILS 11.....ROAD CROSS SECTIONS ..ROAD CROSS SECTIONS ..ROAD CROSS SECTIONS ..ROAD CROSS SECTIONS ..ROAD CROSS SECTIONS .... VEGETATION PLAN ...RETAINING WALL DETAIL ...NOTES AND DETAILS

...CONSTRUCTION METHOD PLAN

....DRIVEWAY TUNNEL PLAN

...C.D.F. INFORMATION SHEET



## VICINITY MAP

### **HORIZONTAL & VERTICAL DATUM:**

THIS MAP IS BASED ON FIELD SURVEY INFORMATION PERFORMED BY R.E.B. ENGINEERING, INC. IN JUNE & JULY OF 2005. THE HORIZONTAL COORDINATES FOR THIS MAP ARE BASED ON NAD83-STATE PLANE ZONE II & THE NAVD88 FOR THE VERTICAL DATUM (SURVEY DATA POST-PROCESSED USING N.G.S. O.P.U.S.). CONTOURS ARE SHOWN EVERY 2 FEET IN AREAS SURVEYED BY R.E.B. ENGINEERING, INC. TOPOGRAPHIC MAPPING FOR AREAS NOT SURVEYED BY R.E.B. ENGINEERING, INC. WAS CREATED USING L.I.D.A.R. DATA FROM THE NAPA COUNTY 2002/2003 ORTHOPHOTOGRAPHY PROJECT, AND CONFORMS TO NATIONAL MAP ACCURACY STANDARDS AT A SCALE OF 1" = 200'.

#### **PROPERTY LINES:**

THE PROPERTY LINES SHOWN HEREON ARE BASED ON PRELIMINARY SURVEY DATA, AND ARE FOR REFERENCE ONLY. THIS IS NOT A BOUNDARY SURVEY MAP AND SHOULD NOT BE USED AS SUCH.

### **UNAUTHORIZED CHANGES & USES:**

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

#### PROJECT INFORMATION: OWNER(S): ROB YEAKEY PACIFIC COAST VENTURE, CORP 3082 WHITE SULPHUR SPRING ROAD ST. HELENA, CA 94574 PLANNING ALLAN E. MOORE, ESQ. **CONSULTANT: GAGEN McCOY CORPORATION** 279 FRONT STREET DANVILLE, CA 94526 (925) 837-0585 CIVIL ENGINEER RANDAL E. BRYANT, P.E., P.L.S. R.E.B. ENGINEERING, INC. P.O. BOX 113 ST. HELENA, CA 94574 (707) 963-8638 SOILS ENGINEER: **PJC & ASSOCIATES, INC** SONOMA BRANCH 141 EAST NAPA STREET SONOMA, CA 95476 (707) 935-3747 JOB #549.01 DATE: MARCH 29, 2007 JONATHAN PLANT & ASSOCIATES, INC LANDSCAPE ARCHITECT: 1230 PINE STREET ST. HELENA, CA 94574 (707) 963-8313 BIOLOGICAL & STEVEN RAE BOTANICAL MUSCI.

1130 CAYETANO COURT

NAPA, CA 94559

(707) 257-2487

**DESIGNED BY:** RANDAL E. BRYANT R.C.E. 45115 (EXP. 9/30/2008)

CONSALTANT:

**APPROVED BY:** DATE:

DATE:

JOB NO: **2007-111G** 07/21/1999 SHEET NO:

#### ESIGNED BY: R.E.B. RAFTED BY: B.E.C. R.E.B 2007-111G REB 3 | 2-25-08 ENTIRE SHEET. 07/21/1999 REB 6-12-03 REALIGN DWY & SHT INDEX ENGINEERING, INC 4-25-00 PLOT PLAN FOR DWY REALIGNMENT REB OMMENTS: V. NO. REV. DATE **REVISIONS** APPD. APPD. DATE

R.E.B. ENGINEERING, INC. **CIVIL & STRUCTURAL ENGINEERING, PLANNING, & SURVEYING** 345 La Fata St., Suite B • P.O. Box 113

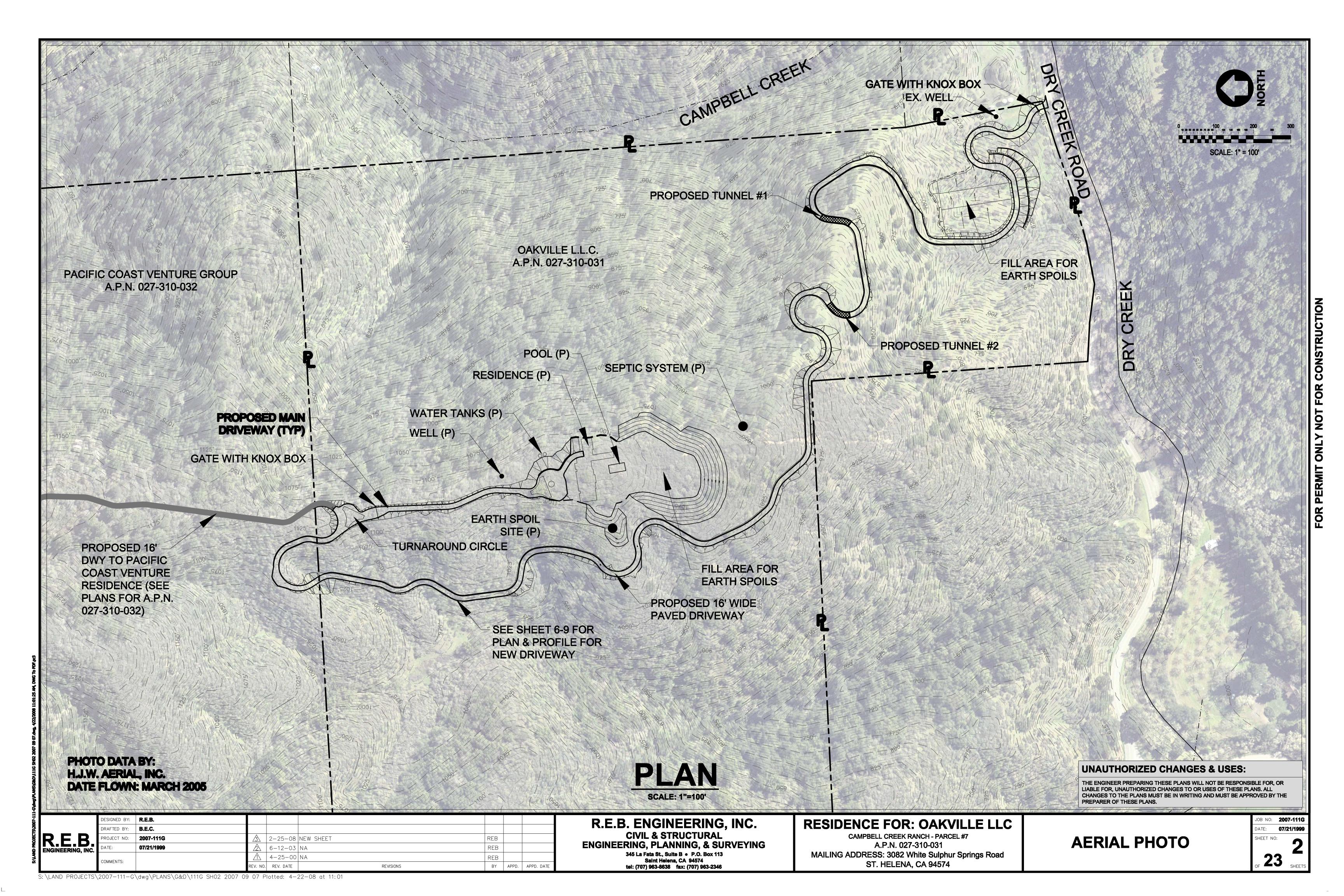
Saint Helena, CA 94574

tel: (707) 963-8638 fax: (707) 963-2346

SCALE: 1" = 300

**RESIDENCE FOR: OAKVILLE LLC** CAMPBELL CREEK RANCH - PARCEL #7

A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road ST. HELENA. CA 94574



BY APPD. APPD. DATE

EV. NO. REV. DATE

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BY APPD. APPD. DATE

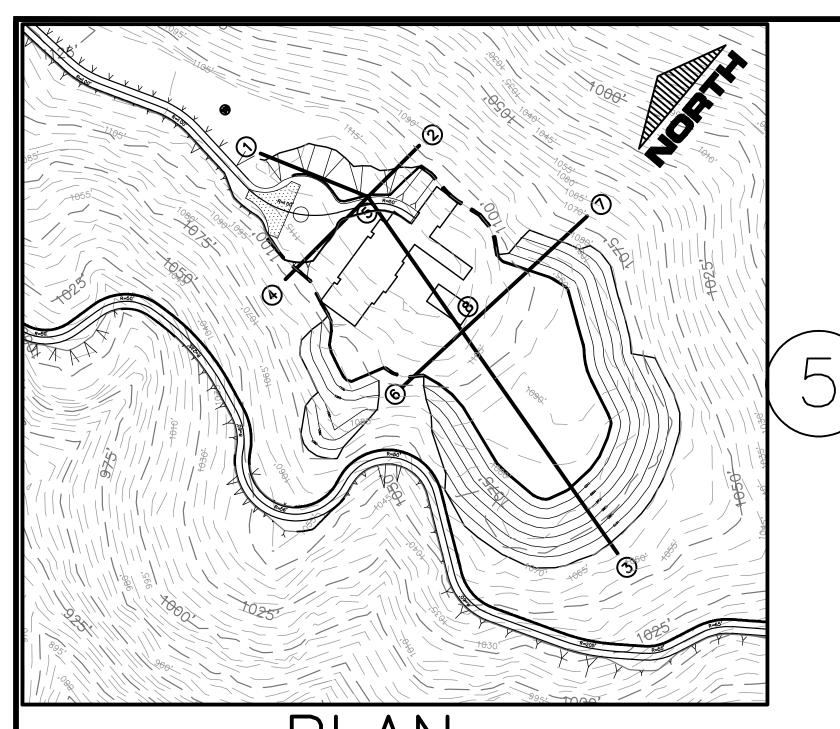
**ST. HELENA, CA 94574** 

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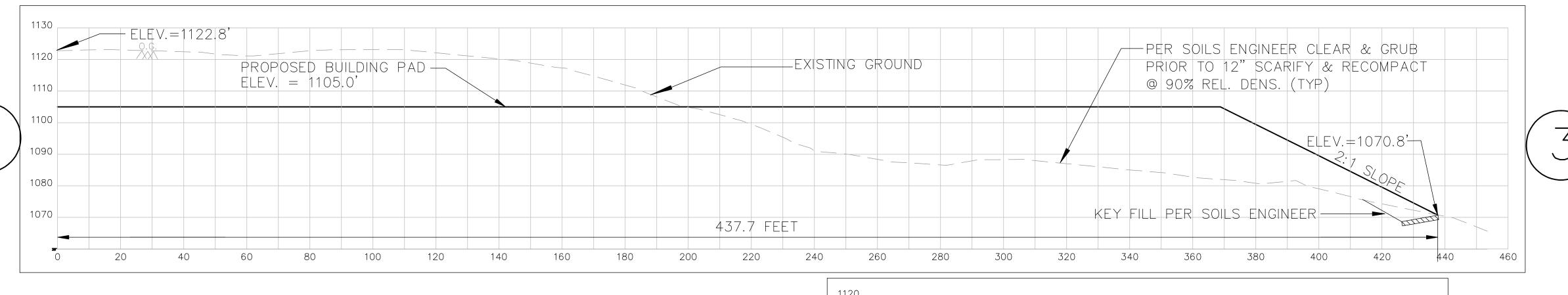
REVISIONS

COMMENTS:



## STRUCTURE CROSS-SECTIONS

SCALE: 1"=20' HORZ & VERT.



### PLAN

SCALE: 1"=100'

### ELEV.=1114.4'— PROPOSED BUILDING PAD-ELEV. = 1105.0' EXISTING GROUND ELEV.=1105.0 68.4 FEET

### **PROPERTY LINES:**

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### **UNAUTHORIZED CHANGES & USES:**

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<u>SECTION (1) - (5)</u> :	<u>SECTION (5) - (3):</u>	<u>SECTION (4) - (5):</u>		
$SLOPE = \frac{1122.8'-1119.4'}{}$	SLOPE = $\frac{1122.8' - 1070.8'}{}$	SLOPE = $\frac{1122.8'-1105.0'}{}$		
108.3'	437.7'	106.1		
% SLOPE = <u>3.2%</u>	% SLOPE = <u>11.9%</u>	% SLOPE = <u>16.8%</u>		
SECTION (5) - (2):	SECTION 6 - 8:	<u>SECTION (8) - (7):</u>		
1122.8'-1107.9'	1114.4'-1102.5'	1114.4'-1084.2'		
SLOPE = $\frac{1122.8' - 1107.9'}{52.9'}$	SLOPE = $\frac{1114.4'-1102.5'}{68.4'}$			
SLOPE =	SLOPE = ———	SLOPE = 1114.4'-1084.2'		

SECTION DESC.	LENGTH=L	SLOPE=S	SxL				
SECTION (1) - (5):	108.3'	3.2%	346.6'				
SECTION 5 - 3:	437.7'	11.9%	5,208.6'				
SECTION 4 - 5 :	106.1	16.8%	1,782.5				
SECTION (5) - (2):	52.9'	28.2%	1,491.8'				
SECTION 6 - 8:	68.4'	17.4%	1,190.2				
SECTION (8) - (7):	141.5'	21.4%	3,028.1				
$\sum$	$\sum L = 914.9'$		\(\sum_\text{LxS=13,047.8'}\)				
AVERAGE PAD SLOPE = $\frac{\sum LxS}{} = \frac{13,047.8'}{}$							
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ΣL	914.9'				
TOTAL AVERA	GE SLOPE =	<u>1</u>	4.3%				

1130 1120 ELEV = 1122.8 PROPOSED BUILDING PAD ELEV. = 1105.0' ELEV. = 1107.9
EXISTING GROUND— ELEV.=1122.8'-  The state of the state o
ESIDENCE FOR: OAKVILLE LLC  CAMPBELL CREEK RANCH - PARCEL #7  STRUCTURAL

	DESIGNED BY:	R.E.B.						
	DRAFTED BY:	B.E.C.						
IR F R	PROJECT NO: 200	2007-111G	3	2-25-08	NO CHANGE ON THIS SHEET	T.T.		
ENGINEERING, INC.	DATE:	07/21/1999	2	6-12-03	CADD FILE	REB		
	COMMENTS:	NTC.	$\triangle$	4-25-00	NO CHANGES THIS SHEET	REB	REB	4-25-00
	COMMENTS.		REV. NO.	REV. DATE	REVISIONS	BY	APPD.	APPD. DATE

R.E.B. ENGINEERING, INC.

**CIVIL & STRUCTURAL ENGINEERING, PLANNING, & SURVEYING** 345 La Fata St., Suite B • P.O. Box 113 Saint Helena, CA 94574

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### CAMPBELL CREEK RANCH - PARCEL #7

A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road **ST. HELENA, CA 94574** 

SIRUCIURAL **CROSS SECTIONS** 

- PROPOSED BUILDING PAD

120

ELEV.=1122.8'-

PROPOSED BUILDING PAD

|ELEV.| = |1105.0

96.1 FEET

-EXISTING GROUND

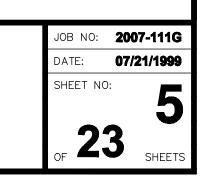
ELEV. = 1105.0'

KEY FILL PER SOILS ENGINEER

141.5 FEET

1130 EXISTING GROUND -

ELEV.=1105.0'

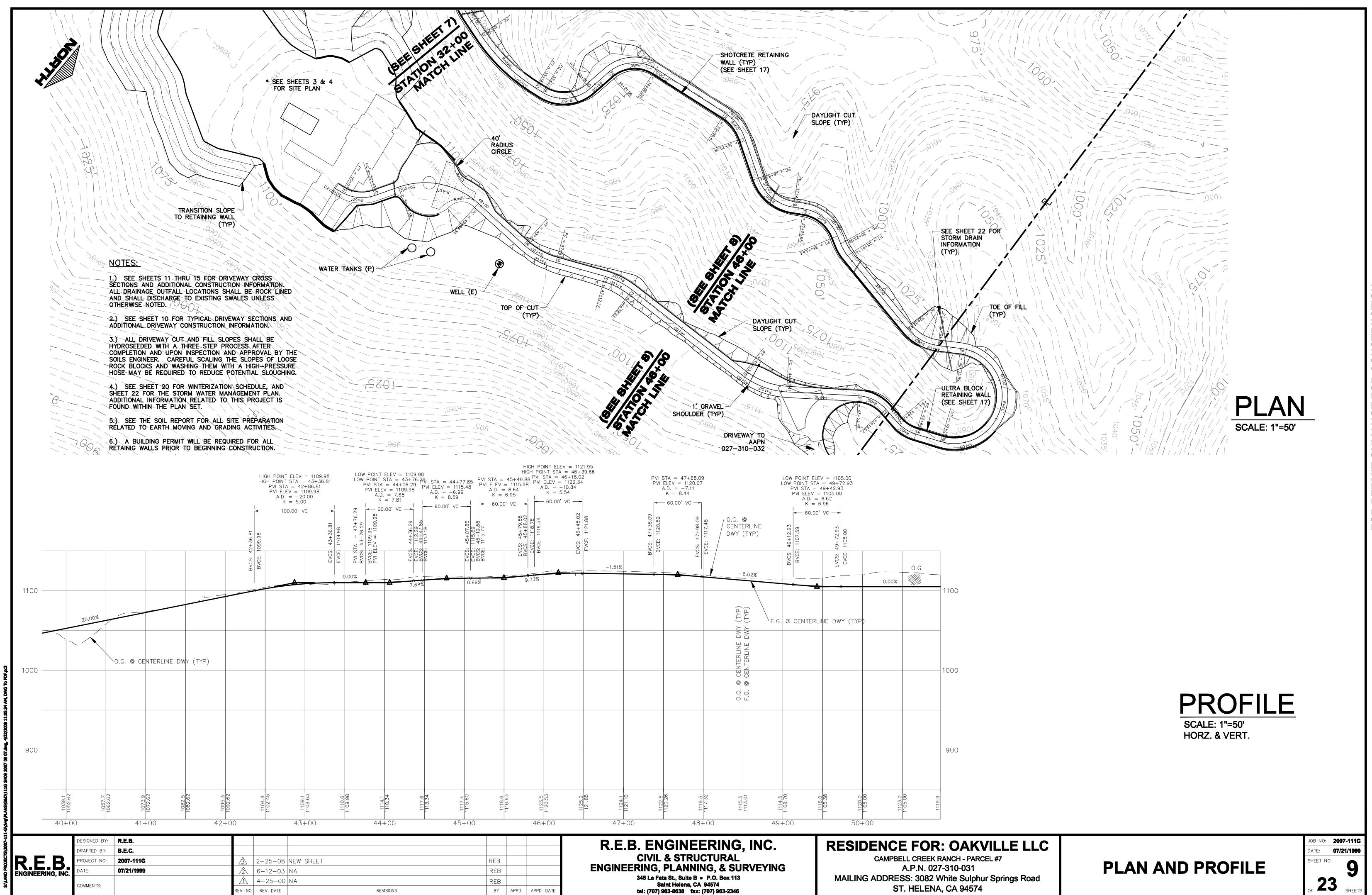


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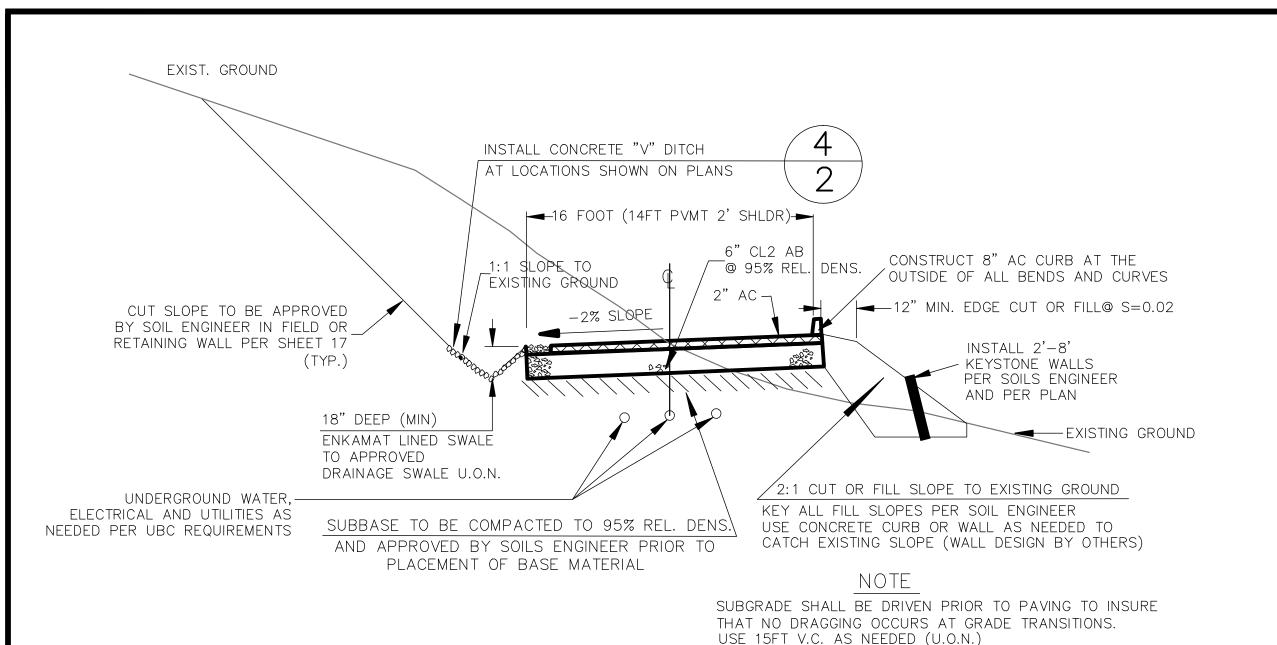
REVISIONS

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TYPICAL SLOPE-LEFT

### PLACEMENT OF BASE MATERIAL **TYPICAL 14' CROWN**

6 CL2 AB 95% REL. DENS.

-2:1 SLOPE (U.O.N.)

REQUIREMENTS

-- DRAIN SWALE PER PLANS

SUBGRADE SHALL BE DRIVEN

PRIOR TO PAVING TO INSURE THAT NO DRAGGING OCCURS

AT GRADE TRANSITIONS.

USE 15FT V.C. (U.O.N.)

TYPICAL DRIVEWAY SECTIONS

NOTES

CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER OR AS DIRECTED

PROJECT ENGINEER IF EXISTING GRADES PROHIBIT DESIGN SLOPES.

USE 2% MIN CROSS SLOPE SUPER ELEVATION AT ALL TURNS AND

-2% SLOPE

KEY ALL FILLS PER

SOILS ENGINEER (TYP)

WHEN RADIUS IS 100 FEET OR LESS.

2:1 SLOPE (U.O.N.)

STAKED AND

ENTRENCHED STRAW BALE

SEDIMENT

LADEN

COMPACTED SOIL

TO PREVENT

PIPING

RUNOFF

2 FT. SHOULDER ◎ -5% SLOPE

EACH SIDE OF PAVEMENT. USE

SUBBASE TO BE COMPACTED TO 95% REL. DENS.

AND APPROVED BY SOILS ENGINEER PRIOR TO

CL 2 AB @ 95 % REL. DENS. (TYP)

BY THE SOILS ENGINEER. SOFT OR SLIDING AREAS SHALL BE REPAIRED

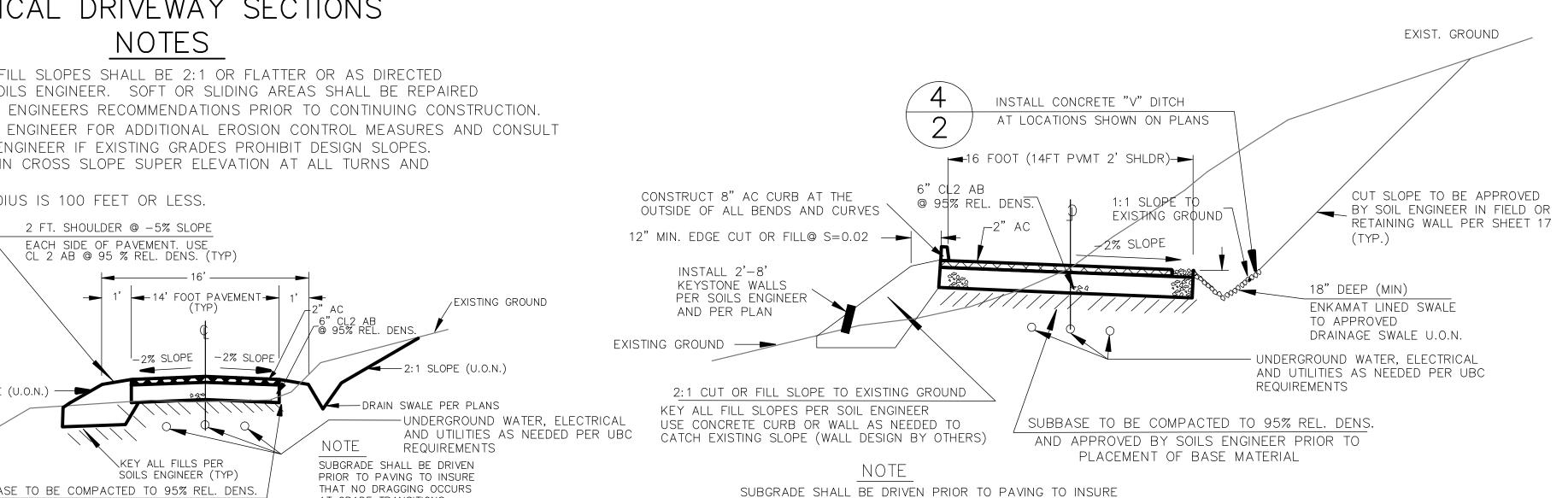
→ 14' FOOT PAVEMENT→

----

-2% SLOPE

PER SOILS ENGINEERS RECOMMENDATIONS PRIOR TO CONTINUING CONSTRUCTION.

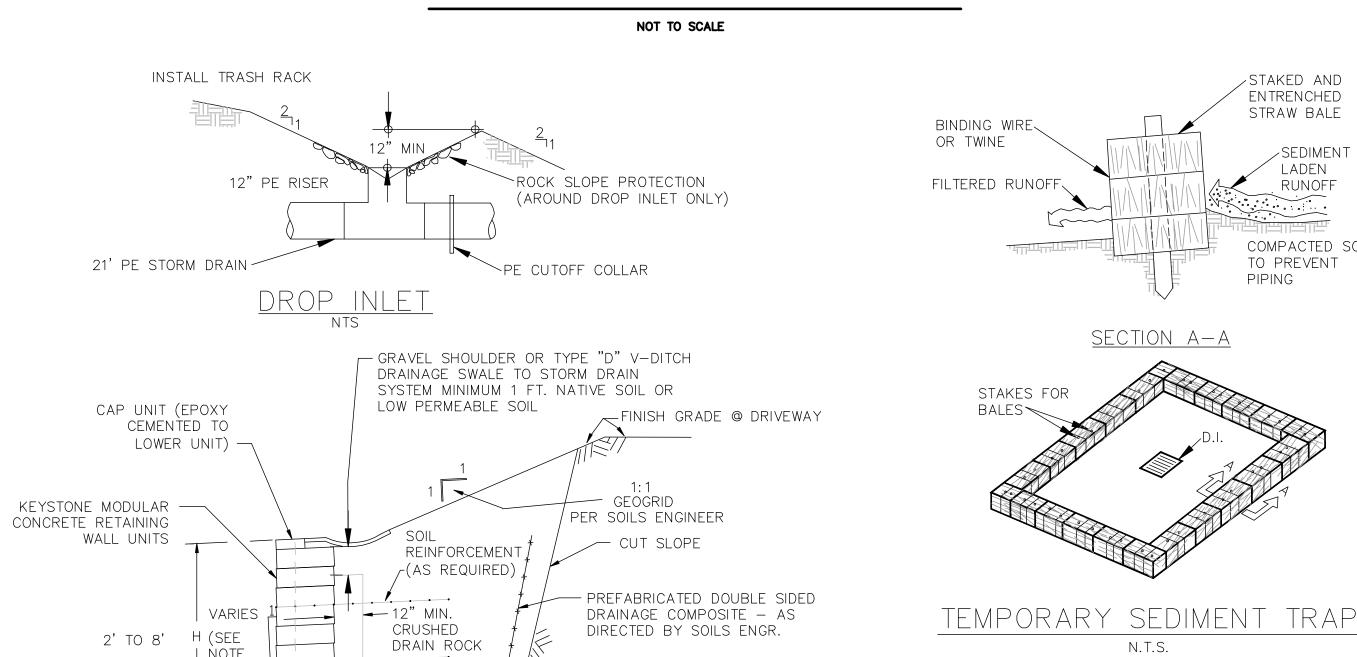
NOT TO SCALE



THAT NO DRAGGING OCCURS AT GRADE TRANSITIONS. USE 15FT V.C. AS NEEDED (U.O.N.)

### TYPICAL SLOPE-RIGHT

NOT TO SCALE



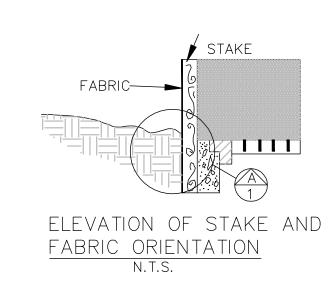
IN FILTER FABRIC.

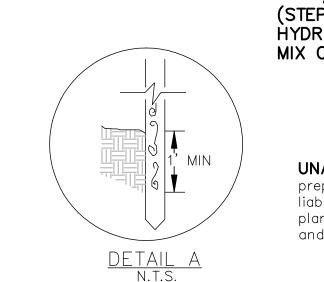
SOLS ENGINEER.

4" PERF. PIPE SLOPED TO

DRAIN - AS DIRECTED BY

---- 1 CF/LF DRAIN ROCK WRAPPED /WITH GRATE 2×4" WOOD FRAME FRAME `GATHER EXCESS AT CORNERS PERSPECTIVE VIEWS





### NOTE

### **ENGINEERED FILLS:**

### THREE STEP HYDROSEED PROCESS

### A TYPICAL DRIVEWAY SECTION LOCATIONS

ENGINEERED FILLS:	STATION NUMBER	DRIVEWAY SECTION	STATION NUMBER	DRIVEWAY SECTIO
ALL FILL SHOULD BE PLACED ON LEVEL	00+00-00+25	CROWN	TRANSITION	
BENCHES CUT INTO UNDISTURBED ROCK AS	TRANSITION		31+60-32+00	LEFT-SLOPED
ACCEPTED BY THE ENGINEER IN THE FIELD.	00+40-00+65	LEFT-SLOPED	TRANSITION	
BACK DRAINAGE MAY BE REQUIRED AT THE	TRANSITION		32+30-33+00	CROWN
DISCRETION OF THE ENGINEER. THE FACE OF ANY UNREINFORCED FILL SLOPE SHOULD NOT	00+80-01+65	RIGHT-SLOPED	TRANSITION	
EXCEED AN ANGLE OF 2:1 (VERTICAL TO	TRANSITION		33+25-34+00	LEFT-SLOPED
HORIZONTAL). UNCLASSIFIED FILLS SHOULD BE	01+85-03+65	LEFT-SLOPED	TRANSITION	
COMPACTED TO 90 PERCENT OF THE MAXIMUM	TRANSITION		34+25-35+00	RIGHT-SLOPED
DRY DENSITY OF THE MATERIALS AS	03+85-09+50	RIGHT-SLOPED	TRANSITION	
DETERMINED BY ASTM D-1557 TEST	TRANSITION	71107117 2227 22	35+25-35+70	CROWN
PROCEDURES. SOIL AND FILL SERVING AS PAVEMENT SUB-BASES SHOULD HAVE THE TOP	09+75-11+00	LEFT-SLOPED	TRANSITION	
WELVE INCHES COMPACTED TO 95 PERCENT	TRANSITION		35+95-36+35	RIGHT-SLOPED
MAXIMUM DENSITY. ALL FILL DENSITIES SHOULD	11+15-12+20	CROWN	TRANSITION	TATOTTI GEGI EB
BE VERIFIED BY TESTING PROCEDURES ASTM	TRANSITION	0110 1111	36+50-36+75	CROWN
0-1556 AND D-1557, OR ASTM D-2292 AND	12+35-13+60	LEFT-SLOPED	TRANSITION	OT CO VITA
D-3017 (NUCLEAR METHOD). FILL SPECIFICATIONS WILL BE PROVIDED IF REQUIRED.	TRANSITION	LLI I SLOI LD	36+90-37+50	LEFT-SLOPED
SI ECH TOATIONS WILL BE I NOVIDED II NEGOINED.	14+00-14+65	RIGHT-SLOPED	TRANSITION	LLI I SLOI LD
	TRANSITION	MOITI SLOI LD	37+65-38+20	RIGHT-SLOPED
THREE STEP HYDROSEED PROCESS	15+00-15+50	LEFT-SLOPED	TRANSITION	- MGHT-3LOFLD
ALL EXPOSED SLOPES ALONG THE PROPOSED	TRANSITION	LLI I—SLOI LD	38+50-39+45	CROWN
ORIVEWAY WHICH ARE STEEPER THAN A 3:1	16+00-17+45	RIGHT-SLOPED	TRANSITION	CNOWN
SLOPE SHALL BE HYDROSEEDED WITH A THREE	TRANSITION	NIGHT-SLOPED	39+60-40+10	LEFT-SLOPED
STEP PROCESS PER CALTRANS SPECIFICATIONS.	17+75-19+70	LEFT-SLOPED	TRANSITION	LEFT-SLUPED
SOILS ENGINEER TO INSPECT GRADED SURFACES FOR STABILITY PRIOR TO APPLICATION OF		LEFT-SLOPED	40+30-43+00	DICHT CLARED
HREE STEP HYDROSEEDING PROCESS.	TRANSITION			RIGHT-SLOPED
STEP 1)	19+85-21+05	RIGHT-SLOPED	TRANSITION	LEET CLODED
IYDRAUĹICALLY APPLY SEED, FIBER, FERTILIZER,	TRANSITION		43+20-43+60	LEFT-SLOPED
MULSION, COMPOST AND MYCHORHIZOL	21+20-21+75	LEFT-SLOPED	TRANSITION	
NOCULANT.	TRANSITION		43+80-44+30	CROWN
STEP 2) JSING STRAW BLOWER APPLY STRAW AT 3	22+00-23+00	CROWN	TRANSITION	
TONS/ACRE.	TRANSITION		44+50-45+10	RIGHT-SLOPED
STEP 3)	23+40-24+00	RIGHT-SLOPED	TRANSITION	
HYDRAULICALLY APPLY FIBER AND TACKAFIER	TRANSITION		45+30-46+50	CROWN
MIX OVER STRAW AND NEWLY SEEDED AREA.	24+25-25+25	LEFT-SLOPED	TRANSITION	
	TRANSITION		47+70-47+20	LEFT-SLOPED
	25+80-26+90	CROWN	TRANSITION	
	TRANSITION		47+35-47+70	CROWN
	27+20-27+80	RIGHT-SLOPED	TRANSITION	
UNAUTHORIZED CHANGES AND USES: The engineer	TRANSITION		47+85-48+35	RIGHT-SLOPED
preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these	28+10-28+40	CROWN	TRANSITION	
plans. All changes to the plans must be in writing	TRANSITION		48+50-50+20	CROWN
and must be approved by the preparer of these plans.	28+70-29+85	LEFT-SLOPED	TRANSITION	
	TRANSITION		50+40-50+80	RIGHT-SLOPED
	30+10-31+35	RIGHT-SLOPED		

#### **EROSION CONTROL NOTES**

TEMPORARY EROSION CONTROL DEVICES, SHOWN ON THESE PLANS SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES, ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE NAPA CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT.

2. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER ON A DAILY BASIS AND AS DIRECTED BY THE COUNTY INSPECTOR AND/OR THE ENGINEER.

CONTRACTOR SHALL PROVIDE WATER BARS IN THE UNPAVED PATHWAY AS SHOWN ON THE PLANS.

4. CONTRACTOR SHALL PROVIDE VELOCITY CHECK DAMS OF SANDBAGS OR STAKED HAY BALES IN ALL UNLINED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF CHANNEL INTERVAL LESS THAN 3% 100 FT. 3% TO 6% 50 FT. OVER 6% 25 FT.

5. EXCEPT AS OTHERWISE DIRECTED BY THE COUNTY INSPECTOR, ALL TEMPORARY EROSION CONTROL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FORECAST OF RAIN PROBABILITY EXCEEDS 40% AS DETERMINED BY THE NATIONAL WEATHER BUREAU OR THE COUNTY INSPECTOR. THESE DEVICES SHALL BE MAINTAINED CONTINUOUSLY AS REQUIRED DURING THE RAINY SEASON (OCTOBER 15 TO APRIL 1).

6. ALL BASINS AND CHECK DAMS SHALL HAVE BEEN PUMPED DRY, AND ALL DEBRIS AND SILT REMOVED WITHIN 48HRS AFTER EACH STORM.

7. ALL PERMANENT STORM DRAINAGE DEVICES (eg. ROCK LINED SWELLS, ENERGY DISSIPATERS, ETC.) SHALL BE INSTALLED BEFORE OCTOBER 15 OF EACH YEAR.

8. HAND BROADCAST OR HYDRATED ALL FILL AND CUT SLOPES AND EXPOSED EARTH SURFACES ACCORDING TO THE APPLICATION SCHEDULE ATTACHED AND THE COUNTY.

SANDBAGS AND/OR HAY BALES SHALL BE STOCKPILED ADJACENT TO EACH POINT OF USE AS SHOWN ON THESE PLANS, READY TO BE PLACED IN POSITION WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE COUNTY INSPECTOR.

10. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON (OCTOBER 15 TO APRIL ).

12. ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC., THAT ARE A DIRECT RESULT OF THE CONSTRUCTION ASSOCIATED WITH THIS PROJECT.

13. ALL WORK WILL BE CONSTRUCTED IN CONFORMANCE WITH CAL-OSHA REQUIREMENTS AND CURRENT COUNTY REGULATIONS.

	DESIGNED BY:	R.E.B.					
	DRAFTED BY:	B.E.C.					
R.E.B.	PROJECT NO:	2007-111G	3 2-25-0	8 SHEET NUMBER & SECTION LOCATIONS	CBS		
ENGINEERING, INC.	DATE:	07/21/1999	6-12-0	3 CADD FILE & DRIVEWAY SECTION LOCATIONS	REB		
	COMMENTS:		4-25-0	00 ADD KEYSTONE WALL DETAIL & SECTION LOCATIONS	DAS		
'	COMMENTS.		REV. NO. REV. DAT	REVISIONS	BY	APPD.	APPD. DATE

### R.E.B. ENGINEERING, INC. **CIVIL & STRUCTURAL**

**ENGINEERING, PLANNING, & SURVEYING** 345 La Fata St., Suite B • P.O. Box 113 Saint Helena, CA 94574

tel: (707) 963-8638 fax: (707) 963-2346

### **RESIDENCE FOR: OAKVILLE LLC**

**CAMPBELL CREEK RANCH - PARCEL #7** A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road ST. HELENA, CA 94574

MISCELLANEOUS DETAILS

OB NO: 2007-111G 07/21/1999

S:\LAND PROJECTS\2007-111-G\dwg\PLANS\G&D\111G SH10 2007 09 07 Plotted: 4-22-08 at 11:06

REINFORCED SOIL

- PROVIDE EMBEDMENT (He) AS REQUIRED AND PLACE

BASE COURSE ON 4" (MIN.) GRADED OR 4" (MIN.) LEAN

CONCRETE LEVELING BVED OVER COMPETENT SANDSTONE

VOLUME....

SOIL REINF. LENGTH

(VARIES)

─ 3'-0" BENCH ON ROCK

BEDROCK MATERIAL

1. DESIGN TO BE PROVIDED BY VENDOR BASED ON DESIGN CRITERIA

DEPARTMENT OF BUILDING INSPECTION. CONSTRUCTION OF THE

PROVIDED BY PROJECT GEOTECHNICAL ENGINEER UPON REQUEST.

2. A FINAL DESIGN SHALL BE SUBMITTED TO THE ENGINEER AND TO THE

KEYSTONE WALL SHALL NOT COMMENCE UNTIL THE FINAL DESIGN IS

3. FOR ESTIMATING PURPOSES THE BEDROCK SHALL BE ASSUMED TO BE

**KEYSTONE WALL DETAIL** 

NOT TO SCALE

BELOW)

KEYSTONE RETAINING WALL NOTES

APPROVED BY BOTH PARTIES.

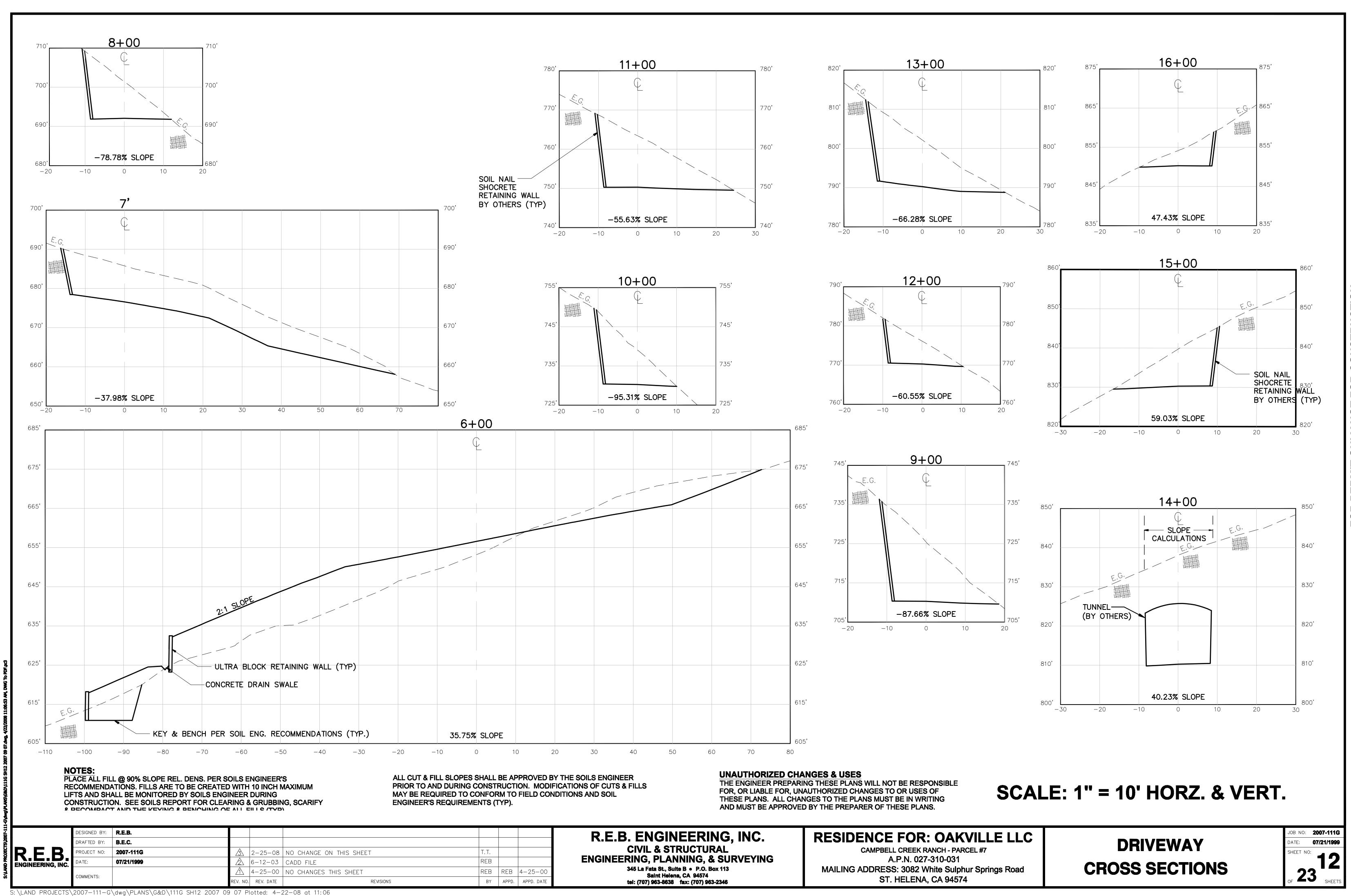
2'-3' BELOW THE SURFACE.

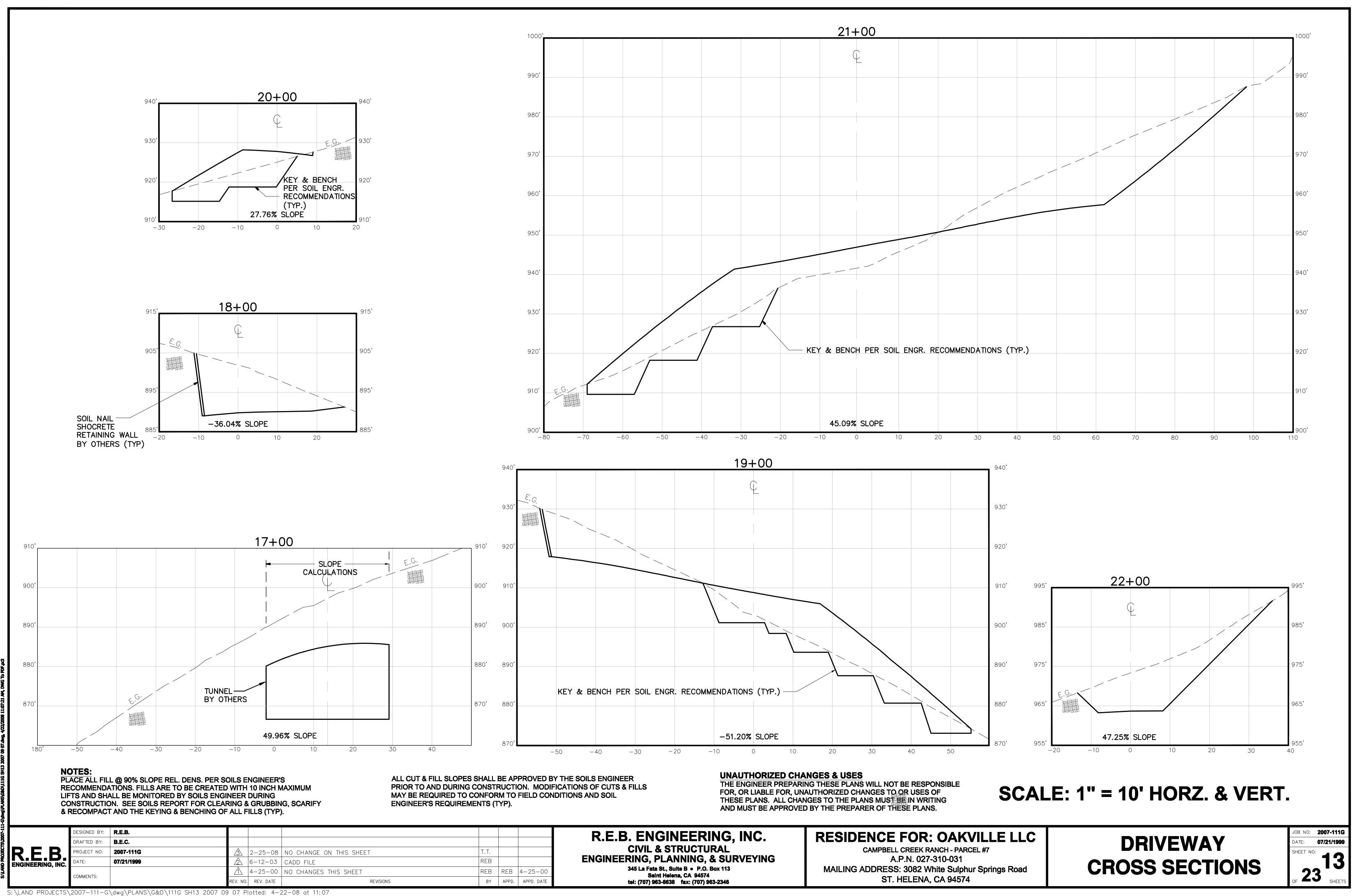
EXISTING GROUND

OR FINISH GRADE —

ROCK-

**23** 

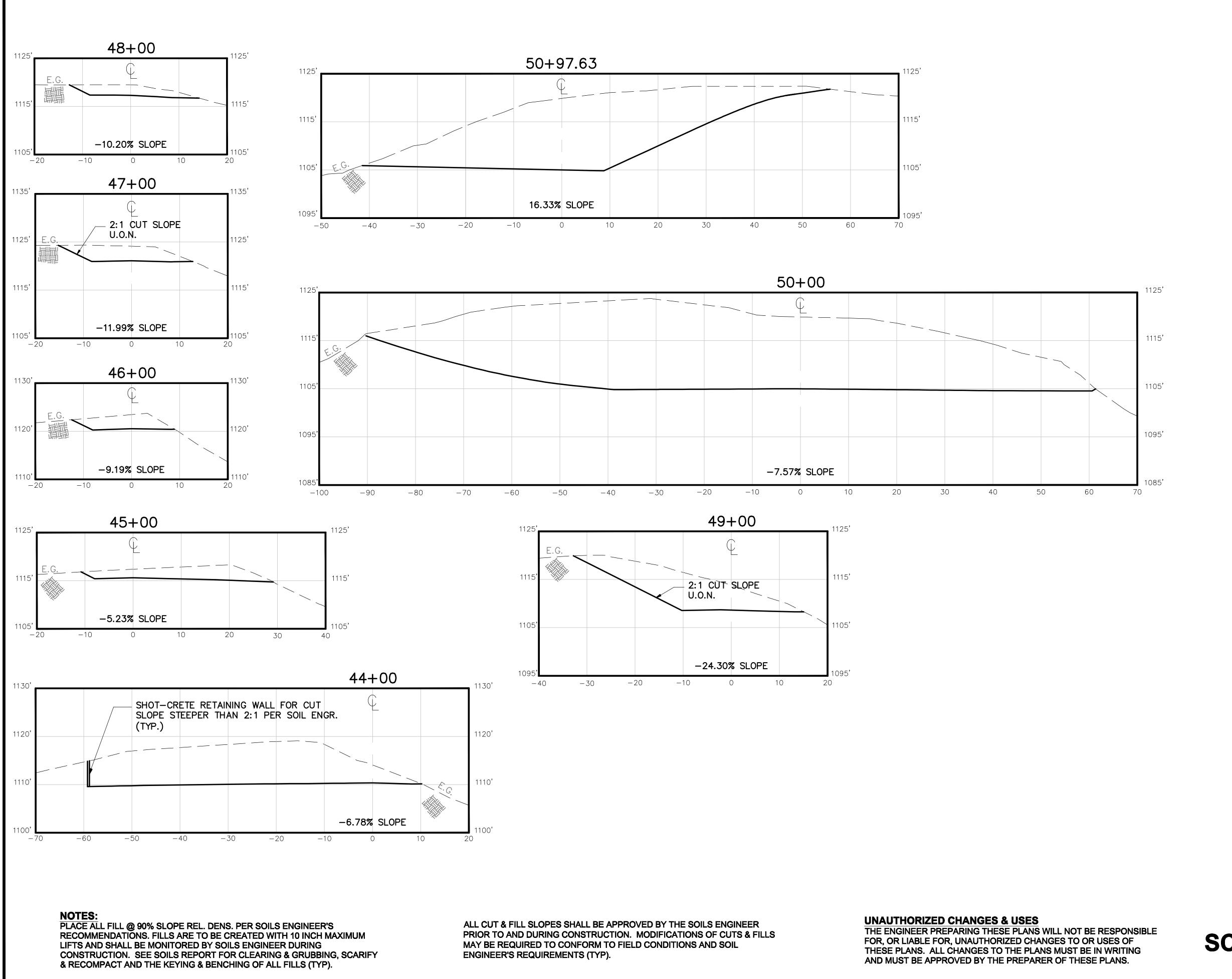




BY APPD. APPD. DATE

REV. NO. REV. DATE

S:\LAND PROJECTS\2007-111-G\dwg\PLANS\G&D\111G SH14 2007 09 07 Plotted: 4-22-08 at 11:07



SLOPE TABLE

SLOPE
24.29
12.59
5.53
64.8
19.07
23.75
35.75
37.98
78.78
37.66
95.31
55.63
30.55
66.28
10.23
59.03
17.43
19.96
36.04
51.20
27.76
15.09
17.25
52.15
52.68
66.56
51.23
58.09
19.06
52.52
11.68
22.66
56.16
33.77
38.09
60.96
54.95
53.46
10.76
55.03
5.89
16.33
71.21
55.65
6.78
5.23
9.19
11.99
10.20
24.3
7.57
16.33
LE
202.44
52
<u>42%</u>

**SCALE: 1" = 10' HORZ. & VERT.** 

	DESIGNED BY:	R.E.B.						
	DRAFTED BY:	B.E.C.						
IR F R I	PROJECT NO:	2007-111G	3	2-25-08	NO CHANGE ON THIS SHEET	T.T.		
R.E.B. ENGINEERING, INC.	DATE:	07/21/1999	2	6-12-03	CADD FILE	REB		
	COMMENTS:		$\triangle$	4-25-00	NO CHANGES THIS SHEET	REB	REB	4-25-00
	COMMENTS.		REV. NO.	REV. DATE	REVISIONS	BY	APPD.	APPD. DATE

R.E.B. ENGINEERING, INC.

CIVIL & STRUCTURAL

ENGINEERING, PLANNING, & SURVEYING

345 La Fata St., Suite B • P.O. Box 113

Saint Helena, CA 94574 tel: (707) 963-8638 fax: (707) 963-2346 RESIDENCE FOR: OAKVILLE LLC
CAMPBELL CREEK RANCH - PARCEL #7

A.P.N. 027-310-031

MAILING ADDRESS: 3082 White Sulphur Springs Road

ST. HELENA, CA 94574

DRIVEWAY
CROSS SECTIONS

JOB NO: 2007-111G

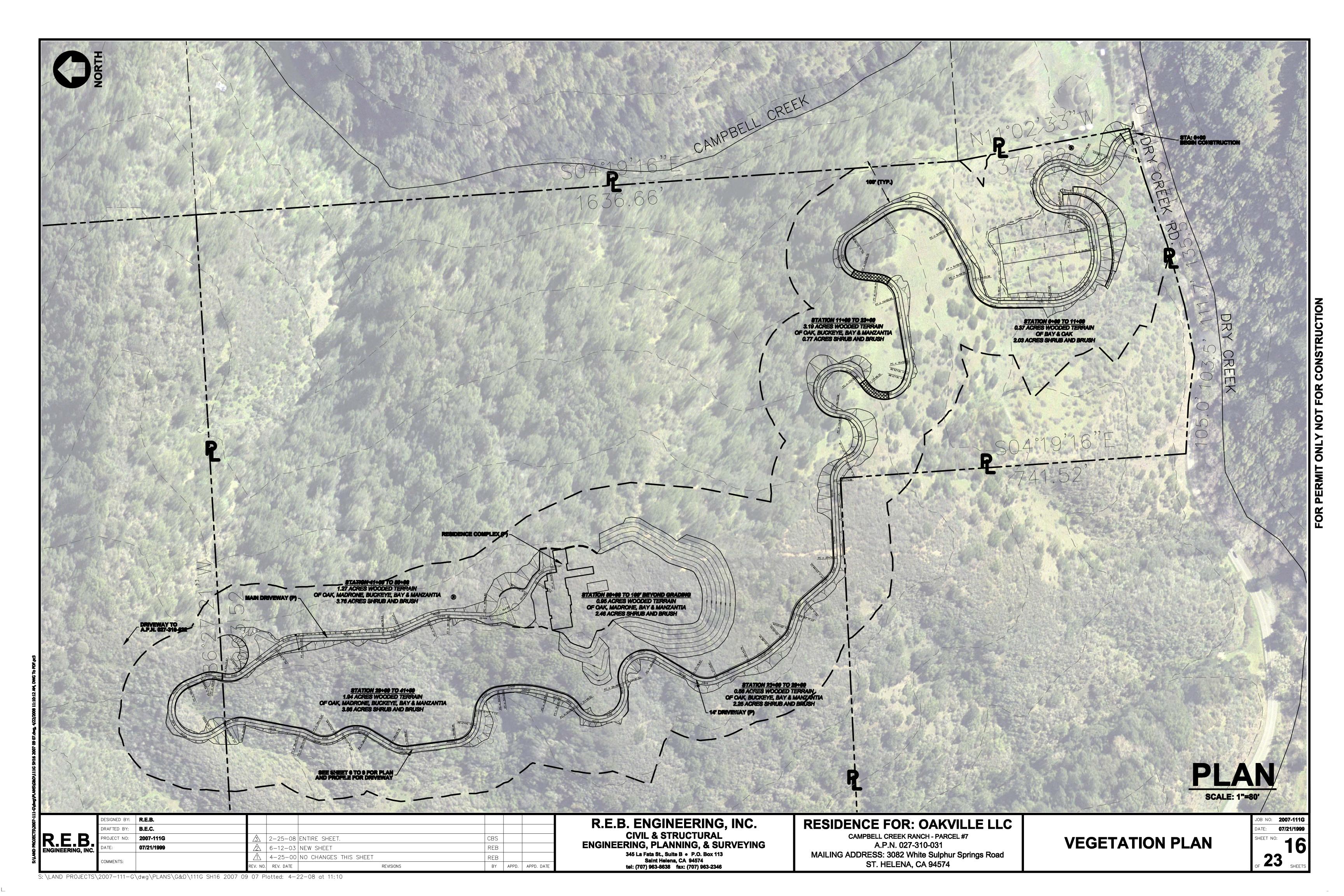
DATE: 07/21/1999

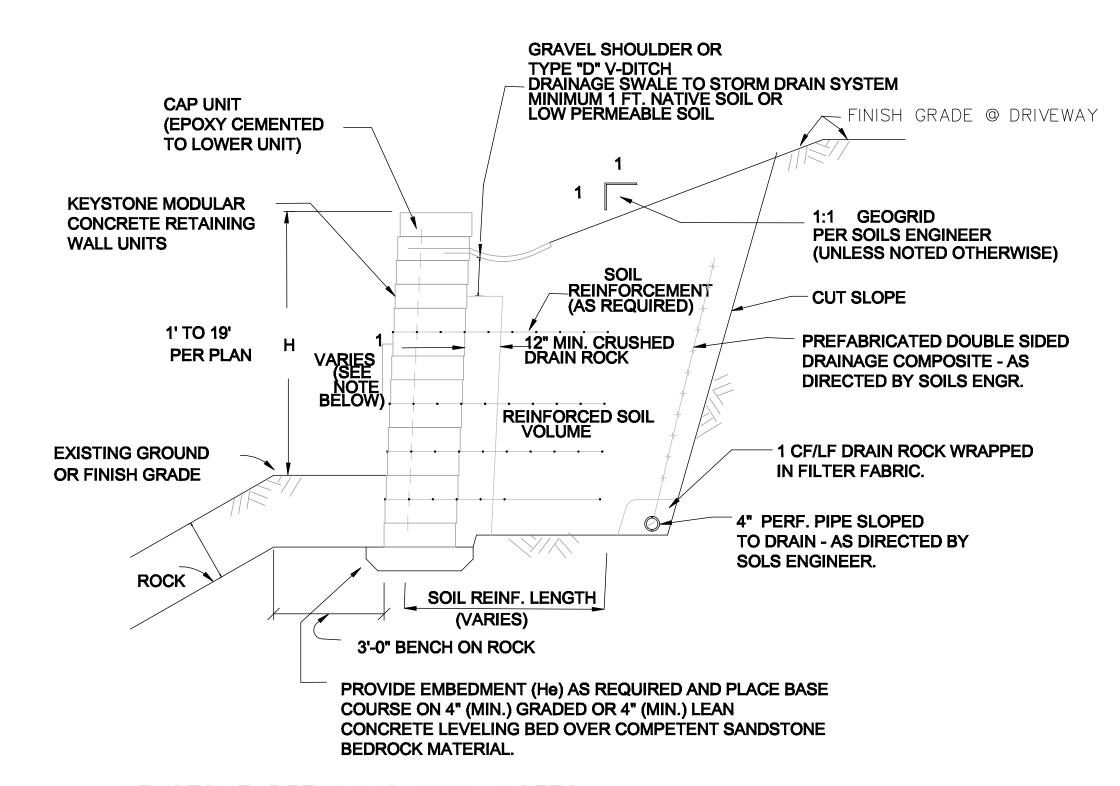
SHEET NO: 15

OF 23

SHEETS

S:\LAND PROJECTS\2007—111—G\dwg\PLANS\G&D\111G SH15 2007 09 07 Plotted: 4-22-08 at 11:08

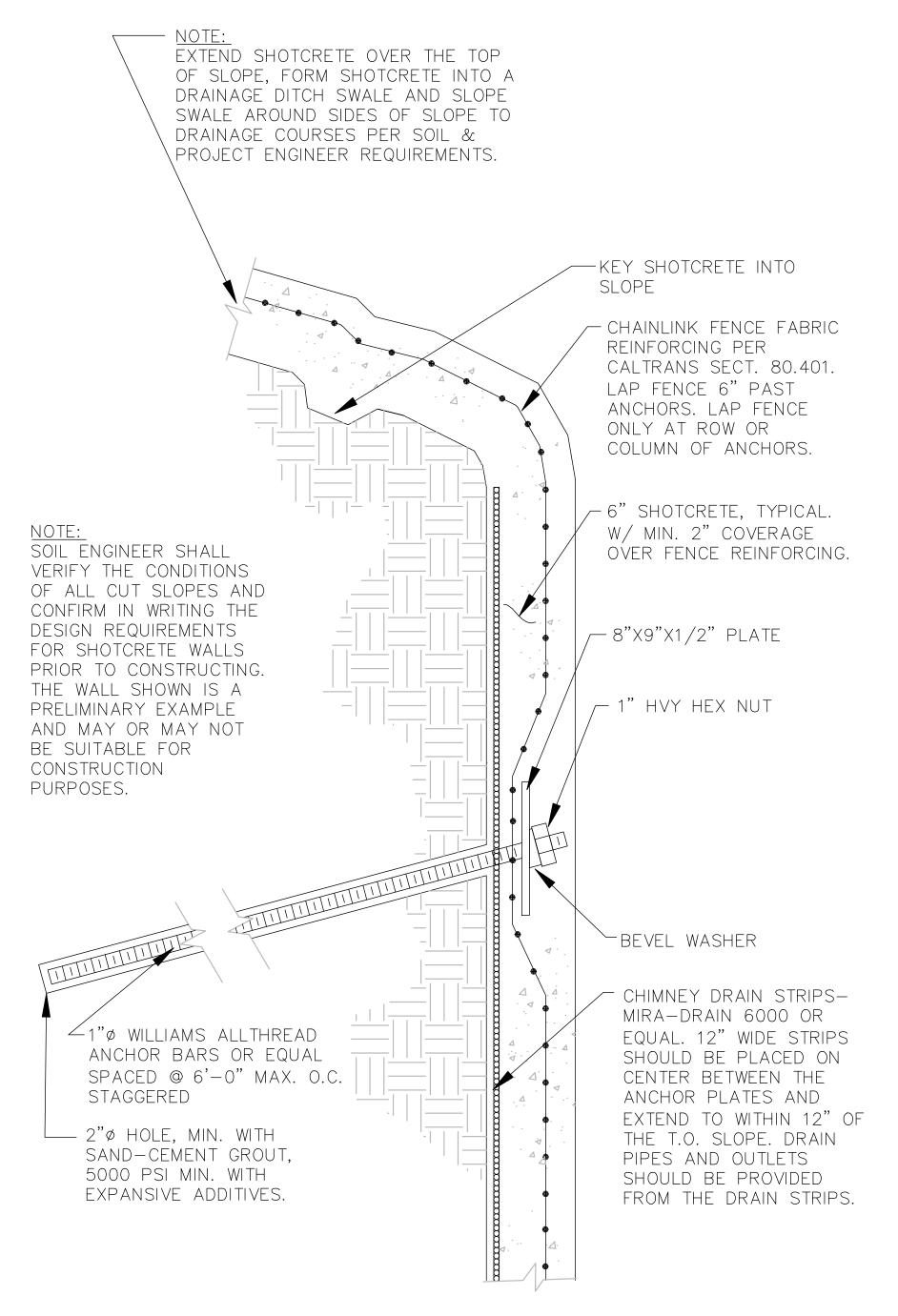




### KEYSTONE RETAINING WALL NOTES

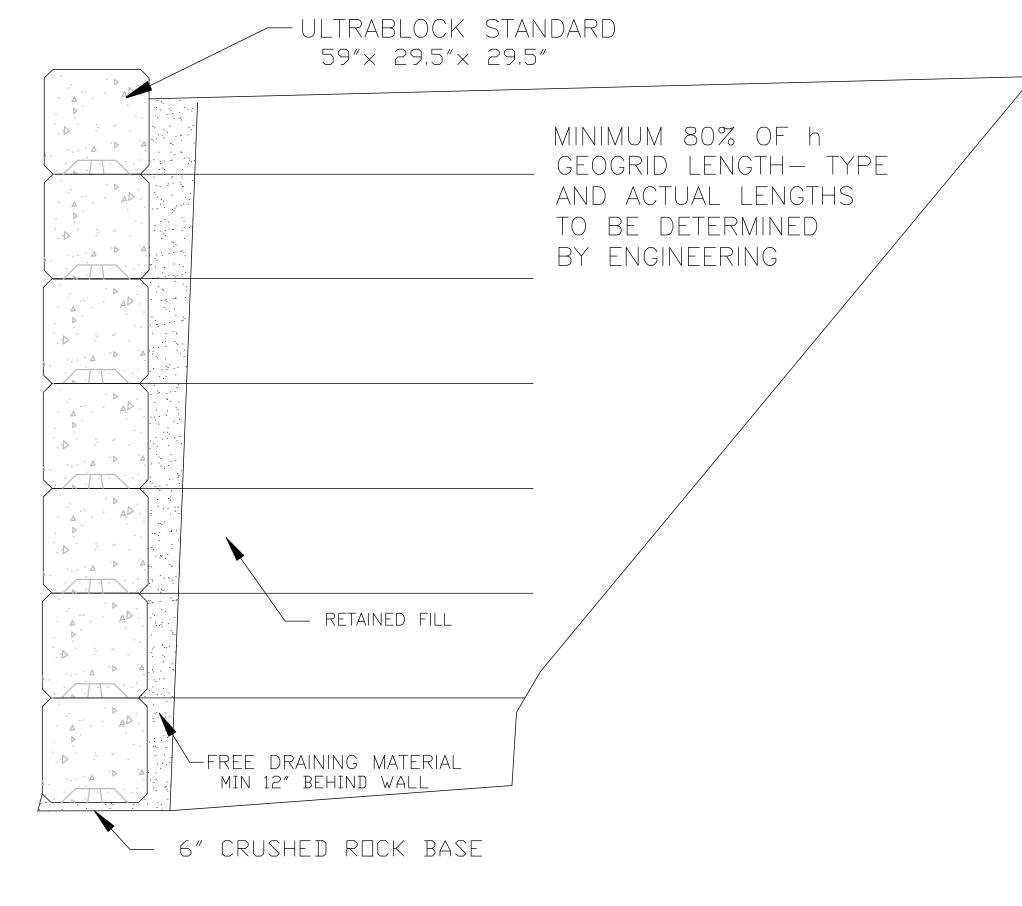
- 1. DESIGN TO BE PROVIDED BY VENDOR BASED ON DESIGN CRITERIA PROVIDED BY PROJECT GEOTECHNICAL ENGINEER UPON REQUEST.
- 2. A FINAL DESIGN SHALL BE SUBMITTED TO THE ENGINEER AND TO THE DEPARTMENT OF BUILDING INSPECTION. CONSTRUCTION OF THE KEYSTONE WALL SHALL NOT COMMENCE UNTIL THE FINAL DESIGN IS APPROVED BY BOTH PARTIES.
- 3. FOR ESTIMATING PURPOSES THE BEDROCK SHALL BE ASSUMED TO BE 2'-3' BELOW THE SURFACE.

KEYSTONE WALL DETAIL N.T.S.



REINFORCED SHOTCRETE @ HILLSIDE N.T.S.

TYPICAL ULTRABLOCK MSE WALL PRELIM ONLY-NOT FOR CONSTRUCTION



TYPICAL ULTRABLOCK DETAIL N.T.S.

ALL RETAINING WALLS FOR THIS PROJECT SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER. PLANS AND CALCULATIONS FOR ALL RETAINING WALLS SHALL BE REVIEWED BY THE SOILS ENGINEER FOR CONFORMANCE TO SOILS RECOMMENDATIONS AND SUBMITTED TO THE NAPA COUNTY BUILDING DEPARTMENT FOR PERMITTING PRIOR TO BEGINNING CONSTRUCTION.

R.E.B.		DESIGNED BY:	R.E.B.						
		DRAFTED BY:	B.E.C.						
	RFR	PROJECT NO: <b>2007-111G</b>	T.T.						
	ENGINEERING. INC.	DATE:	07/21/1999	2	6/12/03	ENTIRE SHEET	REB		
		COMMENTS:		$\triangle$	4/25/00	ENTIRE SHEET	DAS	REB	4/25/00
'				REV. NO.	REV. DATE	REVISIONS	BY	APPD.	APPD. DATE
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R.E.B. ENGINEERING, INC. **CIVIL & STRUCTURAL** 

**ENGINEERING, PLANNING, & SURVEYING** 345 La Fata St., Suite B • P.O. Box 113 Saint Helena, CA 94574 tel: (707) 963-8638 fax: (707) 963-2346

### **RESIDENCE FOR: OAKVILLE LLC**

CAMPBELL CREEK RANCH - PARCEL #7 A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road **ST. HELENA, CA 94574** 

**RETAINING WALL DETAILS** 

JOB NO: **2007-111G** DATE: **07/21/199**9

S:\LAND PROJECTS\2007—111—G\dwg\PLANS\G&D\111G SH17 2007 09 07 Plotted: 4—22—08 at 11:11

1. SHAPE AND DRESS SURFACE IN ACCORDANCE WITH THE PLANS. ALL VEGETATION MUST BE REMOVED. SURFACES MUST BE

2. THE SURFACE MUST BE SMOOTH AND FREE OF RUTS AND

3. PIN OVERLAPS AND EDGES OF ENKAMAT AT 3' INTERVALS ALONG LENGTH OF DITCH. PIN EVERY 3' AT EDGES IN REMAINDER OF THE MAT.

4. STAKE WITH 1"x3"x12" WOOD STAKE ALONG CENTERLINE OF

WATER RUN OFF FROM UNDERCUTTING.

6. DISTRIBUTE SEED

3' INTERVALS DIRECTION OF FLOW 18" **TERMINAL** OVERLAP PLAN VIEW TRENCH NO SCALE BACKFILL WITH NATIVE MATERIAL

SECTION A-A

←→ 6"± (TYP)

# 6-12" INTO FIRM ROAD

DITCH CUT AT 30-40' ANGLE OUTLET WITH ENERGY DISSIPATER -- 6-12" BEAM ON DOWNHILL SIDE OF PITCH

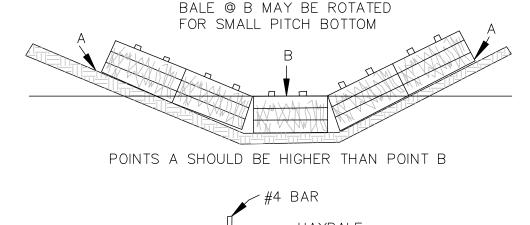
WATER BAR DETAIL

NO SCALE

### SPACING BETWEEN CHECK DAMS

L = THE DISTANCE SUCH THAT POINTSA AND B ARE OF EQUAL ELEVATION

PROPER PLACEMENT OF STRAW BALE CHECK DAM IN DRAINAGE WAY



-HAYBALE **EMBEDMENT DETAIL** 

NO SCALE

SANDBAGS OR ROCKS MAY BE USED IN PLACE OF HAY BALES.

**RESIDENCE FOR: OAKVILLE LLC** 

UNAUTHORIZED CHANGES AND USES: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these

plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

**CAMPBELL CREEK RANCH - PARCEL #7** 

OB NO: 2007-111G

GENERAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES, PRIOR TO STARTING CONSTRUCTION. THESE PLANS ARE BASED UPON THE BEST INFORMATION AVAILABLE, BUT CAN ONLY BE TAKEN AS APPROXIMATE.

2. ANY UTILITIES THAT MAY HAVE TO BE RELOCATED SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

3. PRIOR TO EXCAVATING NEAR ANY P.G. & E., PAC BELL, CITY, COUNTY, OR PRIVATE FACILITIES IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT U.S.A. AT LEAST 2 WORKING DAYS IN ADVANCE AT (800) 642-2444.

4. DAMAGE TO ANY AND ALL UTILITIES BY CONTRACTOR WILL BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE, AS WELL AS ANY EXISTING PRIVATE OR PUBLIC IMPROVEMENTS OR NATURAL LANDSCAPES SPECIFICALLY DESIGNATED BY OWNER.

5. CONTRACTOR WILL MAINTAIN SAFE CONDITIONS IN THE CONSTRUCTION AREA FOR WORKMEN AND TRAVELING PUBLIC.

6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE CONSTRUCTION PERMITS FORM THE NAPA COUNTY PUBLIC WORKS DEPARTMENT, THE NAPA COUNTY CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT, AND ANY OTHER JURISDICTIONAL AGENCY AS REQUIRED. CONTRACTOR SHALL PAY FOR ALL FEES INCLUDING INSPECTION FEES THEREFORE.

7. ALL STATIONS (ON PLAN) ARE TAKEN ALONG CENTERLINE UNLESS OTHERWISE NOTED ON PLAN AND SHOW MEASUREMENTS IN A HORIZONTAL PLANE.

8. ALL GRADING, SITE PREPARATION, PLACING AND COMPACTING OF FILL SHALL BE DONE ACCORDING TO THESE PLANS, AND NAPA COUNTY REQUIREMENTS.

9. SLOPE PLANTING SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT AND IS NOT A PART OF THIS PROJECT.

UNLESS OTHERWISE NOTED. 11. ALL ABANDONED UNDERGROUND PIPELINES EXPOSED DURING

10. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR MORE GENTLE,

12. ROUND CUT AND FILL SLOPES TO BLEND IN WITH THE

GRADING SHALL BE REMOVED OR ADEQUATELY PLUGGED.

NATURAL GROUND CONTOURS.

13. EROSION CONTROL MEASURES SHALL BE EMPLOYED DURING THE RAINY SEASON AS REQUIRED AND AS SHOWN ON THE APPROVED EROSION CONTROL PLANS. A PRE-GRADE MEETING MAY BE SCHEDULED AT THE CONTRACTORS REQUEST AT THE SITE 48 (FORTY-EIGHT) HOURS PRIOR TO THE START OF GRADING. THE FOLLOWING PEOPLE SHOULD BE PRESENT: OWNER, GRADING CONTRACTORS, ENGINEER, AND THE COUNTY REPRESENTATIVE.

14. CHANGES TO THIS PLAN DUE TO FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER AND THE NAPA COUNTY CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT

15. ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC.

16. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF THE ENGINEER AND THE GOVERNING COUNTY

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ALL FILLS ACCORDING TO THE PLAN, AND THE PREPARATION OF GROUND TO RECEIVE FILLS, TESTING FOR REQUIRED COMPACTION, STABILITY OF ALL FINISH SLOPES, SOIL EROSION, AND REQUIRED CUT SLOPE SURFACES.

BY 1.5' WIDE

BY 4' WIDE FOR DRAIN SWALE

FOR DRAIN PIPES

**ENERGY DISSIPATER** 

REQUIREMENTS. CHANGES IN TRADITIONAL WEATHER PATTERNS AND RAINFALL INTENSITIES HAVE NOT BEEN PLANNED FOR AND COULD IMPACT THE INTEGRITY OF THE DRIVEWAY AND APPURTENANCES. IT IS SUGGESTED THAT EMERGENCY MEASURES BE PLANNED FOR, AS WELL AS THE COSTS FOR GENERAL MAINTENANCE OF ALL OF THE IMPROVEMENTS SHOWN ON THESE PLANS.

MAINTENANCE AND LIMITATIONS

PROPERLY.

I. THIS PLAN IS PREPARED FOR THE PURPOSE OF REVEGETATING

THOSE SOILS EXPOSED DURING THE CONSTRUCTION PROCESS AND

TO REDUCE THE IMPACT OF THE IMPROVEMENTS TO THE PROJECT

THESE PLANS THAT THE PLANNED IMPROVEMENTS CAN FUNCTION

2. THE EFFECTS OF NORMAL EROSION SUCH AS THOSE DUE TO

CONTINUE EXIST THROUGHOUT THE PROJECT SITE AND ON THIS HILL

SIDE PROPERTY. THE STABILITY OF EARTH SLOPES AND METHODS

OF CONTROLLING THE EFFECTS OF NORMAL EROSION ARE NOT A

ENVIRONMENTAL, WEATHER, AND GEOLOGIC CONDITIONS, WILL

PART OF THIS PLAN. CONSULT A SOILS ENGINEER FOR THE

STABILITY OF EARTH SLOPES AND THE EFFECTS OF NORMAL

3. UPON COMPLETION OF THE DRIVEWAY, STORM DRAINAGE

FACILITIES, AND EROSION CONTROL IMPROVEMENTS THE OWNER

SHOULD PROVIDE FOR A DETAILED INSPECTION BY THE ENGINEER.

THE INSPECTION SHOULD BE PERFORMED BOTH PRIOR TO AND

DURING THE FIRST RAIN, TO CHECK THE FUNCTIONALITY OF THE

STORM DRAINAGE AND DRIVEWAY IMPROVEMENTS.

ON THESE PROJECT PLANS.

IMPROVEMENTS MAY RESULT.

DRIVEWAY AND ALL STORM DRAINAGE IMPROVEMENTS. IT MAY BE

NECESSARY TO MAKE SOME MODIFICATIONS AND/OR REPAIRS TO

4. THE PROPERTY OWNER, AND ANY SUBSEQUENT HOMEOWNER

A RESIDENCE ON HILLSIDE PROPERTY WITH A REMOTE AND

LENGTHY DRIVEWAY FOR ACCESS. THE OWNER NEEDS TO

5. SIGNIFICANT MAINTENANCE AND UPKEEP COSTS MAY BE

THESE IMPROVEMENTS IN ORDER TO HAVE A WORKING SYSTEM OF

MUST CLEARLY UNDERSTAND THAT THEY HAVE CHOSEN TO LIVE IN

VIGILANTLY REPAIR THE EROSIVE AND ADVERSE EFFECTS OF HEAVY

ASSOCIATED WITH THIS PROJECT AND SHOULD PLANED FOR BY THE

6. THE DESIGN OF FACILITIES ON THESE PLANS ARE BASED UPON

OWNER. SEVERE STORMS CAN MOBILIZE SEDIMENTS WHICH CAN

IMPAIR THE FUNCTIONALITY OF STORM DRAINAGE DEVICES. IF

DRAINAGE DITCHES AND CULVERTS ARE NOT KEPT CLEAR OF

SEDIMENTS, EROSIVE DAMAGE TO RESIDENTIAL AND DRIVEWAY

STANDARD ENGINEERING PRACTICES, AND NAPA COUNTY

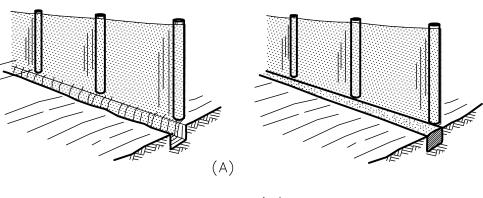
RAINFALL TO THE PROJECT SITE AND THE IMPROVEMENTS SHOWN

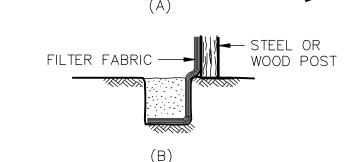
SITE. IT IS ONLY BY MAINTAINING THE FACILITIES SHOWN ON

1. SET STEEL OR WOOD POSTS (SEE NOTE 1.) AND EXCAVATE A 4 BY 4 IN (10 BY 10 CM) TRENCH UPSLOPE FROM AND ALONG THE LINE OF POSTS.

2. INSTALL MIRAFI FILTER FABRIC SILT FENCE WITH POCKETS (OR APPROVED EQUAL) ON THE STEEL POSTS AND EXTEND IT INTO THE

3. BACKFILL AND COMPACT THE EXCAVATED SOIL.





CONSTRUCTION OF A SILT FENCE. (A) INSTALLATION SEQUENCE. (B) EXTENSION OF FABRIC INTO THE TRENCH.

FENCE SEDIMENT BARRIER

ÓR Drain Swale

ACE ROCK RIPRAP @

ALL DRAIN OUTFALLS

6" TO 12" TO ROCK

SILT FENCE SEDIMENT BARRIER MAY BE USED AS AN ALTERNATE TO THE STRAW BALE SEDIMENT BARRIER.

NO SCALE

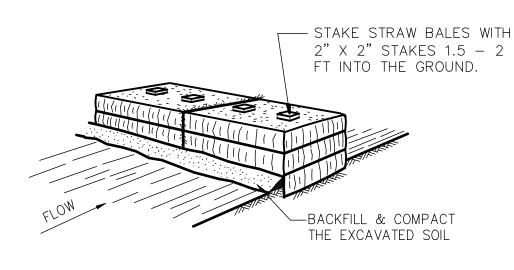
INSTALLATION OF SILT FENCE SEDIMENT BARRIER

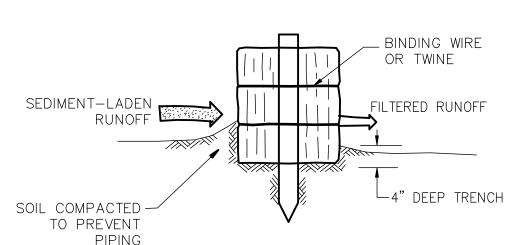
1. LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES. ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SWALES, CURVE THE FENCE LINE UPSTREAM AT THE SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED IN THE FIGURE AT RIGHT. SPACE POSTS ON 6' CENTERS AND DRIVE THEM A MINIMUM OF 12 IN (30 CM) INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1 1/2" (3.8 CM) MIN. DIA. HARD WOOD OR 1.33 LB/FT (1.97 KG/M) STEEL WITH A MINIMUM LENGTH OF 5 FT (1.5 M). STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.

2. FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO 6 TO 8 IN (15 TO 20 CM) INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 IN (0.9 M). DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 IN (15 CM) OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST

3. BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.

4. PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.





### STRAW BALE SEDIMENT BARRIER

TYPE "A" TYPE "B"

NOTE: OWNER MAY USE GROUTED COBBLES IN "V" DITCH ALONG WITH THE FOLLOWING.

1. ALL SECTIONS SHALL BE AT LEAST 4" THICK.

2. CONCRETE SHALL BE CLASS "B" (5 SACK).

3. BOTH SIDES OF THE DITCH SHALL BE FORMED WITH 2"x4" LUMBER, AS SHOWN UNLESS OMITTED BY THE AGENCY ENGINEER.

4. CONCRETE FINISH SHALL CONFORM TO SECTION 51-1.18A OF THE LATEST STATE SPECIFICATIONS.

5. DITCH SIDES SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER THE REMOVAL

6. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.

7. NO DITCH IS TO BE CONSTRUCTED ON FILLED GROUND PRIOR TO CERTIFICATION OF THE FILL TO THE ANGENCY BY THE SOIL ENGINEER.

8. NO EXPANSION JOINTS SHALL BE REQUIRED.

"V"-DITCH DETAIL NO SCALE

ESIGNED BY: R.E.B. PRAFTED BY: B.E.C. R.E.B. ROJECT NO: 2007-111G  $\sqrt{3}$  | 2-25-08|no change on this sheet REB 07/21/1999 **ENGINEERING, INC** | REB | REB | 4-25-00 1 4-25-00 NO CHANGES THIS SHEET COMMENTS: EV. NO. REV. DATE BY APPD. APPD. DATE REVISIONS

R.E.B. ENGINEERING, INC. **CIVIL & STRUCTURAL ENGINEERING, PLANNING, & SURVEYING** 

A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road 345 La Fata St., Suite B • P.O. Box 113 Saint Helena, CA 94574 **ST. HELENA, CA 94574** tel: (707) 963-8638 fax: (707) 963-2346

S: \LAND PROJECTS\2007-111-G\dwg\PLANS\G&D\111G SH18 2007 09 07 Plotted: 4-22-08 at 11:11

ENKAMAT TYPE 70101 NO SCALE

COMPACTED TO 90%.

DITCH. BROAD SIDE OF STAKE TO BE PERPENDICULAR TO THE FLOW

5. BACK FILL OVER ENKAMAT EDGES TO PREVENT UPPER SLOPE

MAXIMUM DISTANCE BETWEEN WATERBARS ROAD OR TRAIL GRADIENT PERCENT HAZARD RATING 10 OR 11-25 26-50 50 OR MORE MORE FEET FEET FEET EXTREME 100 50 150 50 HIGH 100 75 MODERATE 200 150 100 200 150 100 LOW 300

ALL RUNOFF SHALL BE DIRECTED AWAY FROM LOOSE FILL MATERIAL

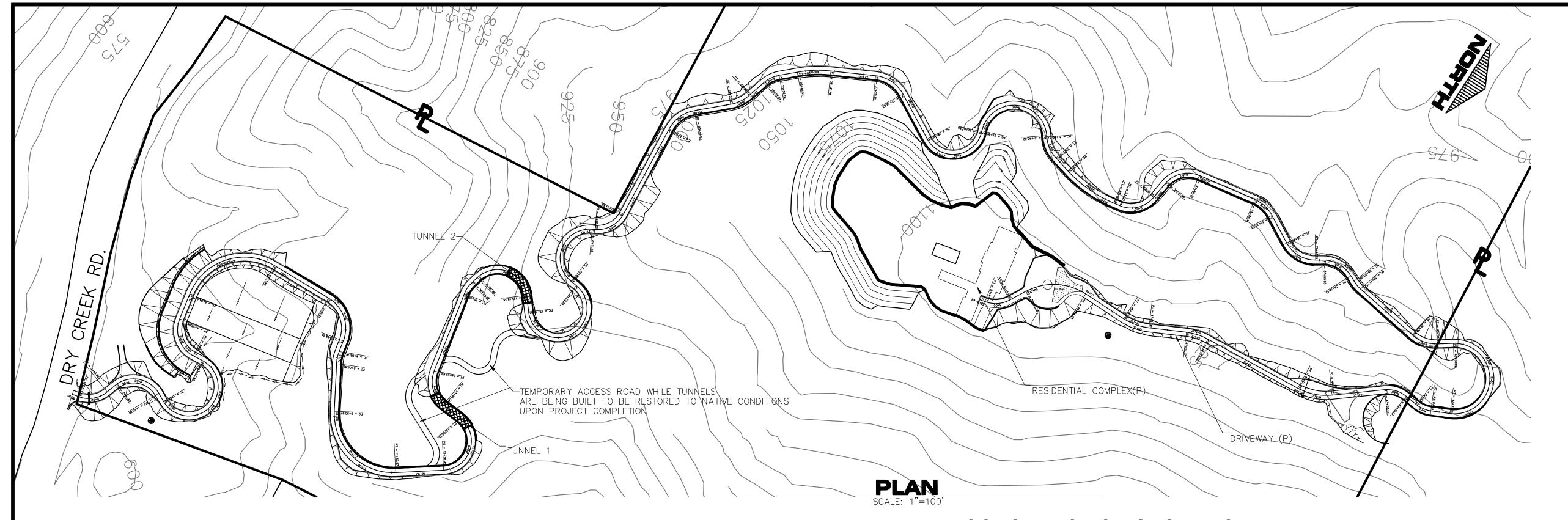
MATCH BANK

2-#4 BAR 1 1/2' - 2 INTO GROUND (TYP)

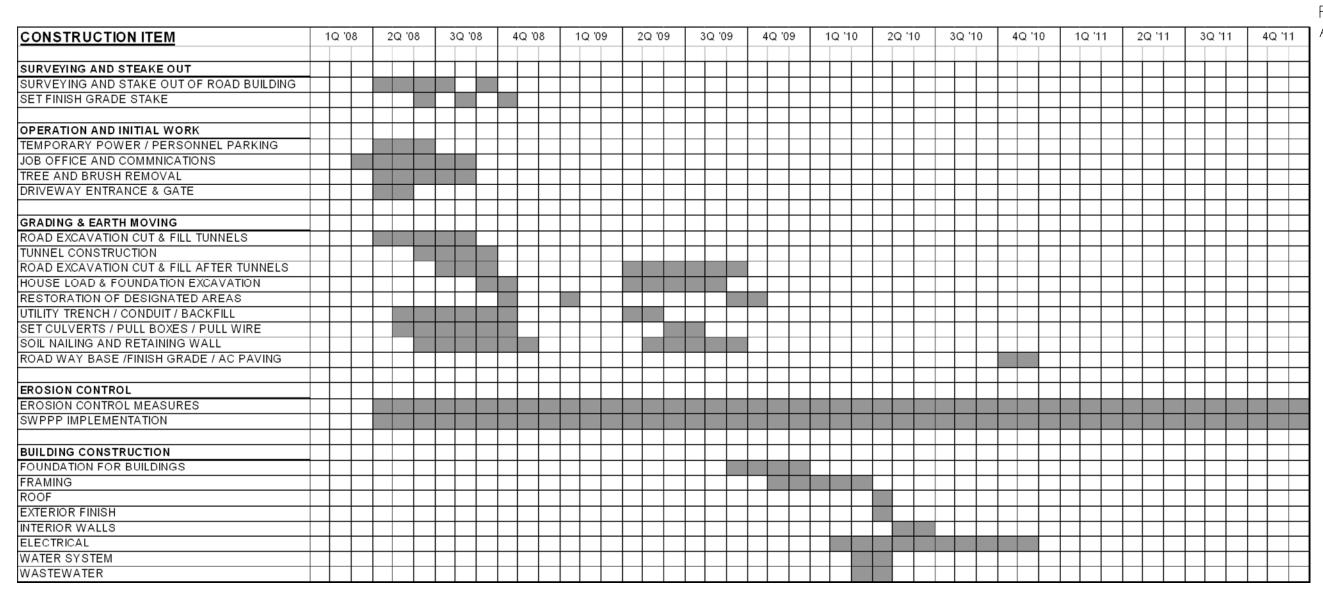
VELOCITY CHECK DAM

NO SCALE

NOTES AND DETAILS



## CONSTRUCTION SEQUENCE (INCLUDES SEQUENCE FOR BOTH APN 027-310-032 &031)



### CONSTRUCTION METHODS NOTES

1. UPON OBTAINING THE BUILDING PERMIT, AND THE GRADING ENCROACHMENT PERMIT FOR THE DRIVEWAY, THE CONTRACTOR SHALL BEGIN CLEARING WORK ACCORDING TO THE PROJECT PLANS. A 3 ACRE EXEMPTION PERMIT IS REQUIRED FROM C.D.F. PRIOR TO REMOVING COMMERCIAL TIMBER.

2. VEGETATION REMOVAL, CLEARING, AND GRUBBING SHALL BE RESTRICTED TO THE IMPROVEMENTS SHOWN ON THE PLANS. ALL TREES AND VEGETATION SHALL BE REMOVED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. TOPSOIL SHALL BE STOCKPILED FOR USE AT THE RESIDENCE OR IN CONJUNCTION WITH THE INSTALLATION OF THE WASTEWATER DISPOSAL SYSTEM.

3. GRADING WORK SHALL PROCEED TO CREATE CUT AND FILLS FOR THE DRIVEWAY. THE FILLS FOR THE DRIVEWAY IN THE AREA OF STATION 28+00 WILL COME FROM THE EXCAVATION OF THE RESIDENCE COMPLEX FOUNDATION WITH THE APPROVAL OF THE SOILS ENGINEER.

4. RETAINING WALLS SHALL BE CONSTRUCTED AS NEEDED TO COMPLETE DRIVEWAY AND RESIDENCE ROUGH GRADING.

5. STORM DRAINAGE IMPROVEMENTS SHALL BE INSTALLED PRIOR TO OCT. OF THE CONSTRUCTION YEAR.

6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PER THE PLAN AND SHEET 20 "WINTERIZATION SCHEDULE". EROSION CONTROL MEASURES SHOULD BE IN PLACE BY OCT. 1ST OF EACH YEAR.

7. SEE STORM WATER POLLUTION PREVENTION PLAN SWPPP FOR ADDITIONAL INFORMATION PERTAINING TO THIS PROJECT.

8. ALL GRADING AND EARTH MOVING SHALL BE FROM APRIL TO OCT. 15TH UNLESS APPROVED IN WRITING BY THE PLANNING DIRECTOR.

9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO REDUCE THE IMPACT OF CONSTRUCTION WORK TO THE NATURAL SURROUNDINGS ON THE PROPERTY. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS AND REJUVENATE AREAS AS NEEDED TO ENHANCE THE SITE AESTHETICS.

STATION	CUMULATIVE	VOLUME
	CUT	FILL
0.1.00		1.65
0+00	0.05	
1+00	1124.51	4.90
2+00	1548.94	219.16
3+00	1898.90	482.20
4+00	2473.37	1463.66
5+00	2473.37	9945.07
6+00	2473.51	13296.86
7+00	2998.68	13312.73
8+00	3500.00	28900.00
9+00	4541.40	28900.00
10+00	5381.82	28900.00
11+00	6389.69	28900.00
12+00	6969.53	28900.00
13+00	7443.44	28900.00
		20900.00
14+00	9208.50	28900.00
15+00	10580.67	28900.00
16+00	11020.68	28900.00
17+00	11591.47	28905.17
18+00	13466.14	28905.17
19+00	13605.14	29763.59
20+00	13906.62	29802.63
21+00	13906.62	30925.09
22+00	14803.56	30984.38
23+00	15935.04	30984.51
24+00	16671.16	30984.51
25+00	17602.79	30984.76
26+00	18542.11	30984.76
27+00	19519.66	30984.76
28+00	20271.43	30984.76
29+00	20793.50	30984.76
30+00	20735.30	31085.62
31+00	20935.42 20975.67	31178.98
	20975.67	311/0.90
32+00	21386.42	31222.02
33+00	21946.76	31222.49
34+00	22430.77	31246.66
35+00	23662.91	31247.32
36+00	23973.27	31247.87
37+00	24378.75	31248.12
38+00	25199.58	31248.49
39+00	25699.90	31248.49
40+00	26031.76	31568.68
41+00	26114.84	32762.24
42+00	26207.60	32768.95
43+00	26363.14	32801.76
44+00	26823.49	32874.71
45+00	27532.98	32875.34
46+00	27732.44	32875.59
47+00	27950.24	32884.52
48+00	28122.62	32884.77
49+00	28399.93	32888.76
50+00	31386.35	32888.76
50+98	34281.42	32888.88
51+00	37721.42	37368.88
52+00	41161.42	41848.88
53+00	44601.42	46328.88
54+00	48041.42	50808.88
JT 1 (M) 1		

	DESIGNED BY: R.E.B.	R.E.B.							
<u> </u>	R.E.B. ENGINEERING, INC.	DRAFTED BY:	B.E.C.						
3	RFR	PROJECT NO:	2007-111G	3	2-25-08	ENTIRE SHEET			
2	ENGINEERING, INC.	DATE:	07/21/1999	2	6-12-03	CADD FILE			
				$\triangle$	4-25-00	NO CHANGES THIS SHEET			
<b>"</b>		COMMENTS:		REV. NO.	REV. DATE	REVISIONS	BY	APPD.	APPD. DATE

MASS HAUL DIAGRAM

MASS HAUL DIAGRAM

30+00

STATION

40+00

R.E.B. ENGINEERING, INC.

CIVIL & STRUCTURAL
ENGINEERING, PLANNING, & SURVEYING

345 La Fata St., Suite B • P.O. Box 113

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RESIDENCE FOR: OAKVILLE LLC

CAMPBELL CREEK RANCH - PARCEL #7

A.P.N. 027-310-031

MAILING ADDRESS: 3082 White Sulphur Springs Road

ST. HELENA, CA 94574

CONSTRUCTION METHOD PLAN

JOB NO: 2007-111G

DATE: 07/21/1999

SHEET NO: 19

23

SHEETS

10000.00

5000.00

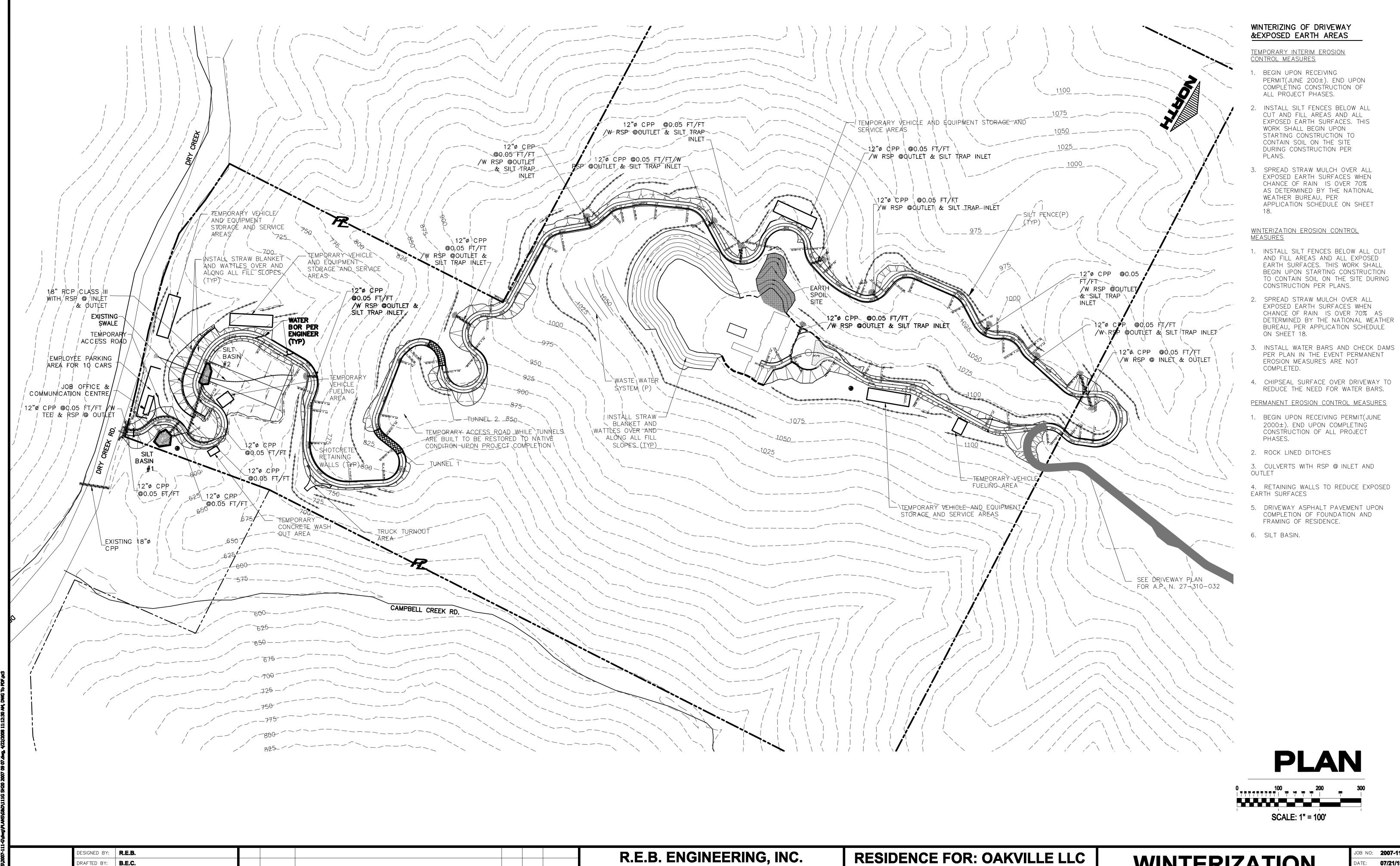
-10000.00

-15000.00

-20000.00

-25000.00

10+00



CIVIL & STRUCTURAL ENGINEERING, PLANNING, & SURVEYING 345 La Fata St., Suite B • P.O. Box 113 Saint Helena, CA 94574 tel: (707) 963-8638 fax: (707) 963-2346

CAMPBELL CREEK RANCH - PARCEL #7 A.P.N. 027-310-031 MAILING ADDRESS: 3082 White Sulphur Springs Road **ST. HELENA, CA 94574** 

WINTERIZATION **SCHEDULE** 

JOB NO: **2007-111G** 07/21/1999

 $\boxed{3}$  | 2-25-08 | NEW SHEET

REVISIONS

△ 6-12-03 NA

⚠ | 4-25-00 NA

EV. NO. REV. DATE

REB

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BY APPD. APPD. DATE

2007-111G

07/21/1999

COMMENTS:

R.E.B.
ENGINEERING, INC.

ST. HELENA, CA 94574

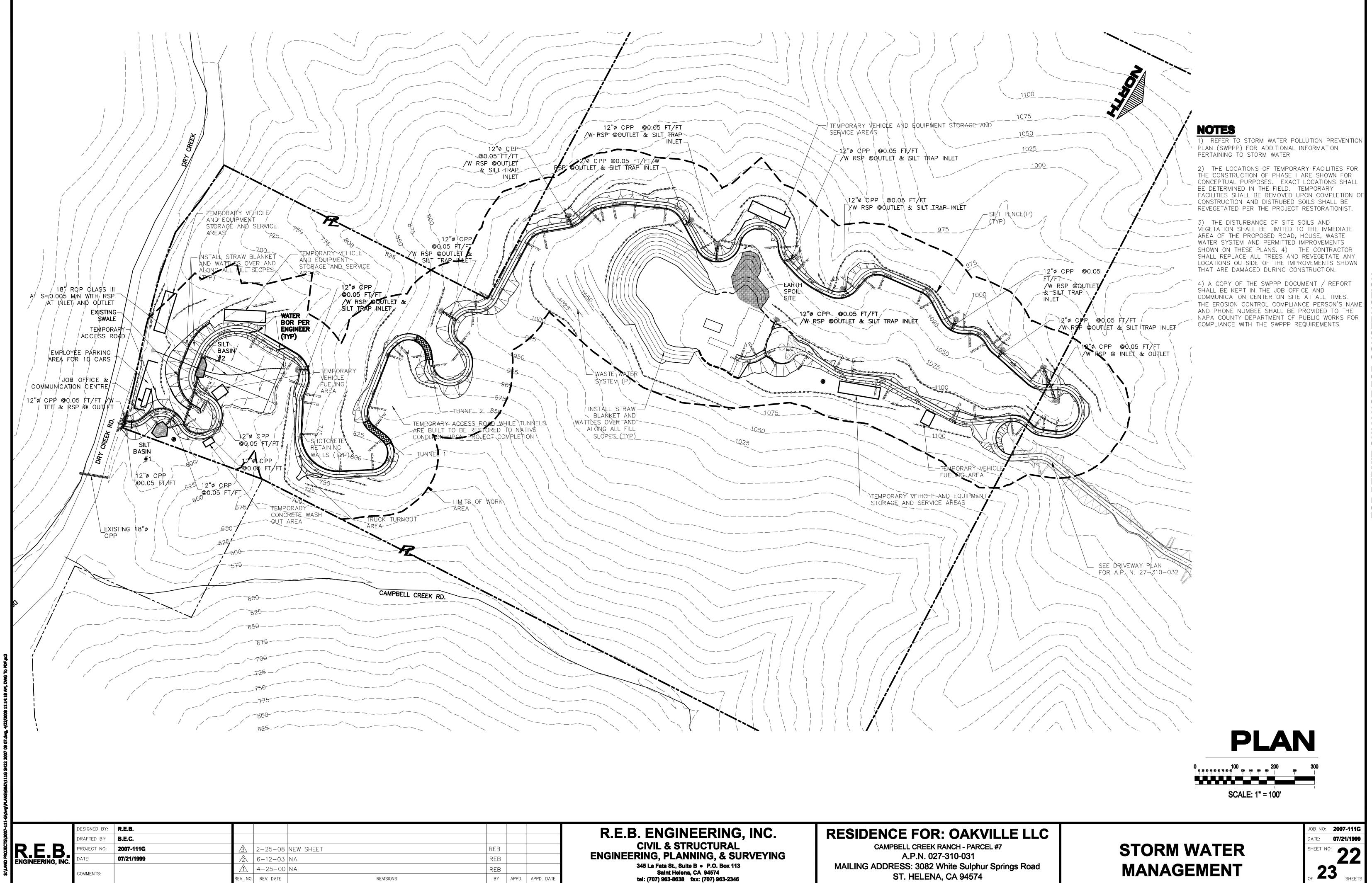
1 4-25-00 NA

EV. NO. REV. DATE

COMMENTS:

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REB



S:\LAND PROJECTS\2007-111-G\dwg\PLANS\G&D\111G SH22 2007 09 07 Plotted: 4-22-08 at 11:14

EV. NO. REV. DATE

