TAHOE REGIONAL PLANNING AGENCY

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.gov

STAFF REPORT

Date: February 8, 2024

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Wolpe Land Capability Challenge
4127 Verbier Road, Placer County, California
APN: 083-450-008, TRPA File no: LCAP2023-0301

Proposed Action:
Hearings Officer review and approve the proposed Land Capability Challenge.

Staff Recommendation:
Staff recommends the TRPA Hearings Officer approve the land capability challenge on the subject parcel. This challenge changes the land capability from Class 1C (Ra) to Class 2 (XXX-1, Slopes 16 to 30%) and Class 4 (XXX-2, Slopes 16 to 30%). This change is itemized on the table on Page 3 and depicted on a map included in Attachment C.

Background:
The parcel being challenged is currently mapped having Class 1C soil. The Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada (Rogers, 1974) identifies the site having Rock land (Ra, any slope). The Rock land designation is miscellaneous map unit that contains variable soil conditions derived from moraine materials (granitic and volcanic mineralogy). Due to high elevation and excessive rockiness, Ra soils are somewhat sparsely vegetated. The vicinity of the parcel has a geomorphic mapping of C-5 for Streamcut granitic mountain slopes – Subalpine rim lands (severe hazard lands). The subject parcel has a surveyed size of 13,472 sf. (from Webb Land Surveying, Feb. 14, 2001).

An October 10 Land Capability Verification (LCV) completed by Placer County planning staff determined the entire parcel qualified as Class 1C (Attachment C). A TRPA land capability challenge (LCAP2023-0301) was filed by the property owners and their planning consultant on October 19, 2023. On October 22, 2023, the TRPA contractor (Phil Scoles, Terra Science, Inc.) conducted a site visit with the applicant and their planning consultant. The TRPA contractor then completed a detailed soil description using two backhoe-dug pits located near the northeast and south-center portions of the parcel. The TRPA contractor described the soil profile matrix colors and ped structures; measured soil horizon depths; determined soil textures; estimated gravel volume and root distribution; depth to bedrock, and conducted a walking tour of the remaining portion of the property. The TRPA contractor compiled a soil description (Attachment D) and integrated the technical findings into this Staff Report. The observed gravelly to very gravelly-

cobbly sandy loam soil appears representative of the entire parcel, which ranges from 26 to 33% slopes (dips to southeast).

Findings:
The subject parcel consists of an southeast sloping hillside formed from moraines and volcanic material that originated in the upper part of the Ward Creek watershed. The soil parent material has mixed mineralogy. The soil onsite has gravelly and cobbly sandy loam colluvium in the upper part, and very gravelly to very cobbly sandy loam residuum in the lower part. A two-story house sits in the northwest part of the property. There are artificially steepened slopes just below Verbier Road and just above Courchevel Road. Since TRPA relies upon historic slope conditions for land capability mapping, the TRPA contractor utilized adjacent, natural slopes to interpolate the historic slope in the vicinity of the driveway (Attachment C). Additionally, the slopes immediately northeast of SP-2 were utilized for slope determination, which was less disturbed than land surface surrounding the residence. The forest floor in the south part of the property has about 5% scattered boulders (not bedrock), while the north part has more boulders that were sidecast when the residence was built.

This land capability challenge utilized two backhoe soil pits – one located about 20 feet northeast of the existing residence, and another about 20 feet northwest of the southeast property line. The vicinity of the pits is mostly undisturbed (except past timber clearing or home construction). The TRPA contractor found the soil is moderately deep (46 to 52 inches), well drained and considered soil hydrologic group B (HSG-B). The onsite soil does not have a silica-cemented layer that is associated with the Tallac series (usually below 40 inches). The TRPA contractor found the soil having less rock than the mapped Rock land map unit and more in-situ soil formation (cambic horizon). The onsite soil has root penetration into underlying rock material (presumably bedrock). No indication of seasonal ground water perching atop the bedrock.

The onsite soil also differs from the Jorge and Tahoma soils by having less in-situ soil formation (cambic horizon instead of argillic horizon). While Jorge and Tahoma soils are derived from volcanic parent material, they have more in-situ soil development (argillic horizon) than this unnamed soil. Another soil mapped in this vicinity is the Meiss soil series; however, those soils are composed of very rocky soil on slopes greater than 30% and have a very shallow depth to bedrock (typically 20 inches or less). As such, the onsite soils do not match known soil series described in the 1974 Soil Survey of the Lake Tahoe Basin (hence they are considered unnamed, XXX soils). The land capability classes for the XXX soils were determined from Page 20, Table 4 of Land-Capability Classification of the Lake Tahoe Basin, California-Nevada (Bailey, 1974). Specifically, Class 2 for slopes 30 to 50% and Class 4 for slopes 16 to 30%. The table on the following page summarizes the soil types, slope classes, as well as changes in land capability concluded by this land capability challenge.

Land Capability District	Slope Class (Range)	2023 Placer Co. Land Cap. Verif. Area (sq. ft.)	2023 TRPA Contractor LCC Area (sq. ft.)	Net Change Total Area (sq. ft.)
Class 1C (Ra)	Any slope	13,472	0	-13,472

Class 2 (XXX-1)	30 to 50%	0	4,078	+4,078
Class 4 (XXX-2)	16 to 30%	0	9,394	+9,394
Total Parcel Area		**13,472**	**13,472**	**N/A**

This memorandum was jointly prepared by TRPA contractor Phil Scoles (Terra Science, Inc.) and TRPA Senior Planner, Julie Roll. If you have questions on this Hearings Officer item, please contact Julie Roll at 775-589-5247 or jroll@trpa.gov
To submit a written public comment, email publiccomment@trpa.gov with the appropriate agenda item in the subject line. Written comments received by 4 p.m. the day before a scheduled public meeting will be distributed and posted to the TRPA website before the meeting begins. TRPA does not guarantee written comments received after 4 p.m. the day before a meeting will be distributed and posted in time for the meeting.

Attachments:

A. Vicinity Map and TRPA Land Capability Map
B. Site Photographs (October 22, 2023)
C. Oct. 10, 2023 Placer Co. Land Capability Verification and Feb. 2024 land capability challenge recommendation map
D. TRPA land capability contractor soil profile descriptions (2 soil pits)

BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information	
Assessor's Parcel No. (APN):	083-450-008
TRPA File No. / Submittal Date:	LCAP2023-0301 / Oct. 19, 2023
Owner or Applicant:	Alexander and Nilgun Wolpe; 300 Pine Creek Road, Walnut Creek, Calif. 96145; Tahoe Land Planning (Abby Edwards), Post Office Box 1253, Carnelian Bay, CA.
Site Address:	4127 Verbier Road, Tahoe City, Placer County, CA 95145; T. 15N, R. 16E, SE1/ 4 of SE1/4 of Sec. 17.

Environmental Setting	
Bailey Soil Mapping Unit / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit	Rock land, any slope (Ra, HSG-B) / C-5 Streamcut granitic mountain slopes – Subalpine rim lands (severe hazard lands as per 1974 Bailey Land Capability Report)
Landform and Soil Parent Material	Moraine-influenced hillside with lahar or other volcanic bedrock and colluvial surface materials.
Slopes and Aspect	26 to 33% slopes / slopes to southeast.
Elevation and Datum	46 to 102 feet, no datum; Webb Land Surveying (WLS, Feb. 14, 2001)
Rock Outcrops and Surface Configuration	No rock outcrops, but 5% surface stones and boulders (not bedrock).
SEZ and Hydrology Source	None.
Vegetation	White fir and saplings, red fir, willow (near snow storage zone). Understory includes snowberry, whitethorn, Sierra currant, prostrate ceanothus, wild rose, peavine, thistle, and forbs/grass.
Ground Cover Condition	Good (vegetation 25 to 35%, duff 65 to 75%)
Site Features	Residence, asphalt driveway, and decks.

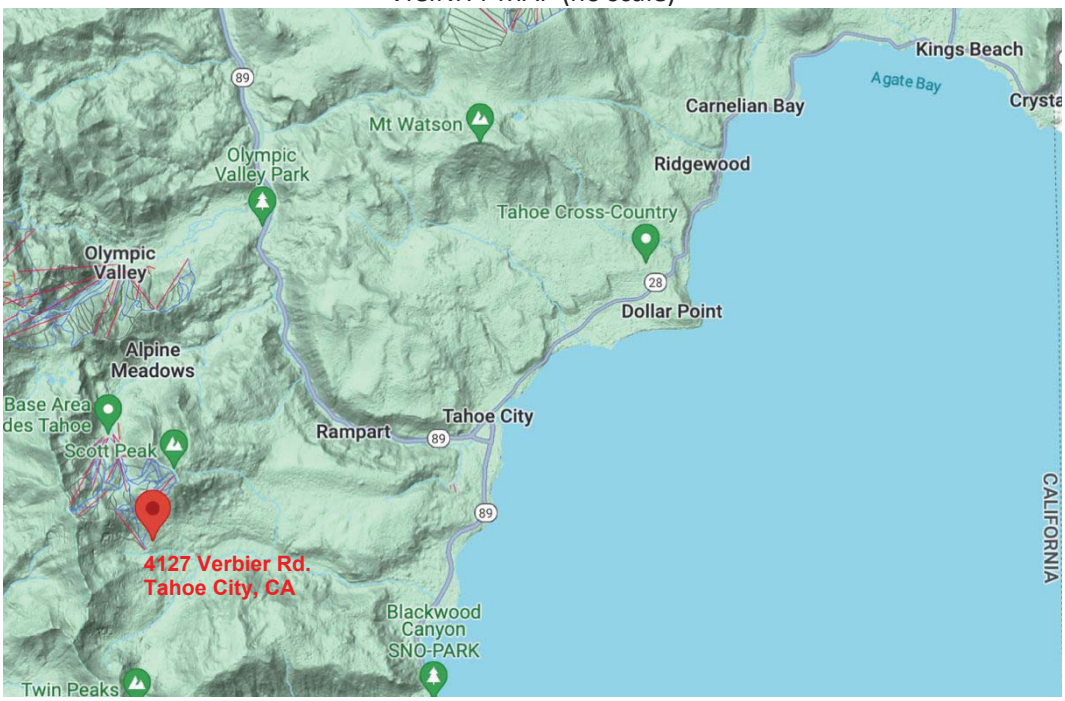
Field Investigation and Procedures	
TRPA Contractor and Address	Phil Scoles (TRPA subcontractor) Post Office Box 2100; Portland, OR 97208-2100
TRPA Contractor Field Dates	October 22, 2023.
SEZ Mapping / NRCS Hydric Soil	None.
Number of Soil Pits or Auger Holes and Description Depth	Two backhoe pits excavated to 46 to 52 inches (large rock encountered at bottom of soil pits).
Additional or Repetitive TRPA Sample Locations	Not Applicable.
Areas Not Examined	Residence, driveway and decks.

TRPA Findings	
2006 Soil Survey Map Unit[1]	Paige medial sandy loam (Humic Vitrixerands), 15 to 30% slopes (map unit 7182, Class 4, HSG-B).
Contractor Soil Mapping Determination and Rationale	Onsite soils do not match the Rock land (Ra) miscellaneous map unit described in the 1974 soil survey. It's also unlike the Jorge-Tahoma and Meiss series, which are mapped nearby. The soil has volcanic parent material but lacks the silica-cemented subsurface layer that occurs in the glacial debris of the Tallac series. Instead, the soil is moderately deep (46 to 52 inches), well drained, gravelly to very gravelly-cobbly sandy loam textures and limited in-situ soil development (cambic horizon). As an unnamed soil (XXX), the slopes of 30 to 50% qualify as Class 2, while slopes of 16 to 30% qualify as Class 4. See staff report and TRPA contractor profile description for additional discussion.
Slope Determination	Slopes range from 26% (south, lower part) to 33% (west, upper part). There are slope classes of 30 to 50% and 16 to 30% slopes. See land capability map based upon WLS topographic survey. Artificially steepened slopes immediately below Verbier Road and above Courchevel Road Historical slope interpolated for artificially steepened areas.
TRPA Conclusion(s)	Class 2 for unnamed soil (XXX-1), HSG-B for 30 to 50% slopes, and Class 4 unnamed soil (XXX-2), HSG-B for 16 to 30% slopes.
Applicable Area	Entire site (see map, Attachment C, Feb., 2024).

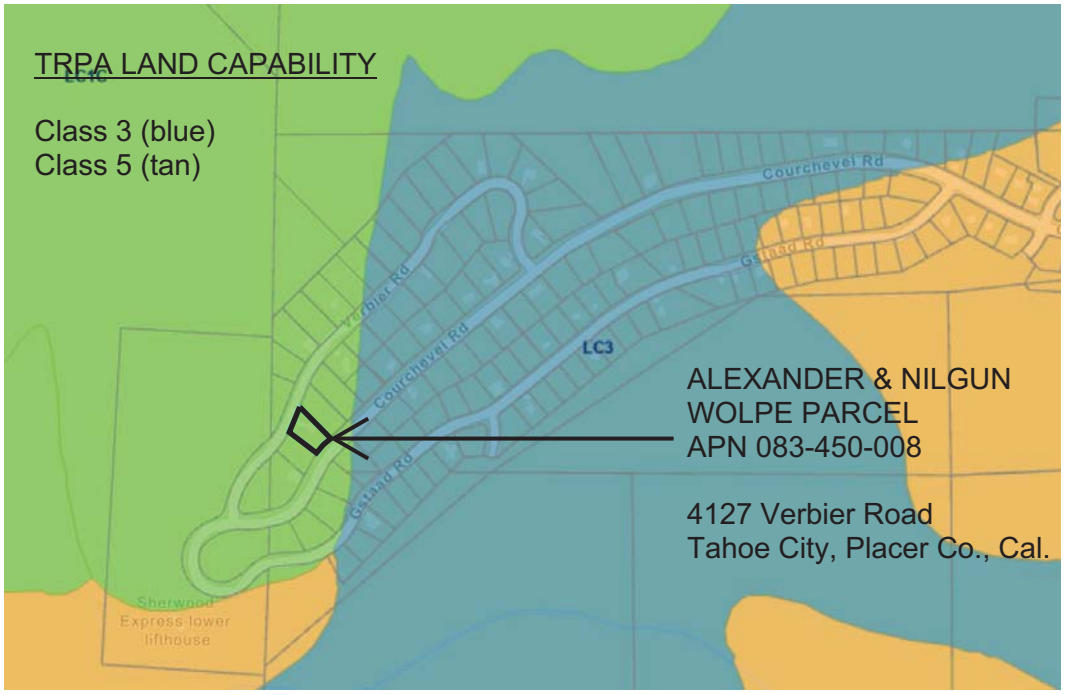
[1] TRPA currently relies upon the Soil Survey of Tahoe Basin, California-Nevada (Rogers and Soil Conservation Service, 1974), which the Bailey Land Capability system is predicated upon. The 2006 soil survey update has not yet been formally adopted by TRPA for use with land capability matters.

Attachment A
Vicinity Map and TRPA Land Capability Map

VICINITY MAP (no scale)



TRPA LAND CAPABILITY MAP



Attachment B
Site Photographs (October 22, 2023)

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Mail
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Location
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Stateline, NV 89449

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www.trpa.gov

4127 Verbier Drive, Tahoe City, Cal. (Alexander & Nilgun Wolpe Parcel; APN: 083-450-008)

Photo 1 – View east toward residence from west corner of property. Slope immediate downgradient of Verbier Road is artificially steepened. Natural slope on this side of residence is 33%. Tree cover includes white fir, red fir and willow.

Photo 2 – View northwest toward residence from south-center of parcel. The slope to the left of residence is 33% and 29% to the right. Native understory contains snowberry, Sierra currant, whitethorn, prostrate ceanothus, plus grasses/forbs.

Photo 3 – View to southeast along east side of residence. Ground cover is good with 25 to 35% vegetation and 65 to 75% fir needles, twigs, and leaves. No indication of active erosion.

Photo 4 – View to east along west side of residence. This vicinity exhibited more historic ground disturbance, as evident by concrete debris, increased surface stones (side cast during house construction), and less vegetative cover (still no active erosion).

Photo 5 – View to west toward Test Pit no. 1, located in the lower part of parcel. This vicinity of the property has the least disturbance, such as timber harvest. The lower edge of the parcel abuts Courcheval Road, so that slope is artificially steep; whereas, the natural slope is about 26%.

Photo 6 – View to northeast toward Test Pit no. 2, located about 20 feet northeast of the residence. The slope in this vicinity is 29%, which was measured on the adjacent (vacant) parcel at right edge of photo. The land surface immediately surrounding the residence is irregular, presumably a remnant condition after house construction.

Attachment C
Oct. 10, 2023 Placer Co. Land Capability Verification and Feb. 2024 Land Capability Challenge Recommendation Map

PLACER COUNTY PLANNING DEPARTMENT

565 W. Lake Blvd, P. O. Box 1909, Tahoe City CA 96145
Telephone 530-581-6280/FAX 530-581-6282
Web Page: www.placer.ca.gov/planning E-Mail: planning@placer.ca.gov

October 10, 2023

Mr. Dale R. Richards
56 Tamalpais Avenue
San Anselmo, CA 94960

Re: Site Assessment, 4127 Verbier Road , APN 083-450-008, Placer # 2004-107

Dear Mr. Richards;

At your request, a Site Assessment was recently conducted at the above referenced parcel, and address. The results of the Site Assessment are outlined below.

LAND CAPABILITY VERIFICATION

The Placer County Planning Department has verified the land capability of this property as:

Capability	District/Class	% Allowable	Area (sq. ft.)	Base Allowed
Class 1C	Ra	1	13,472	134

Assuming a parcel size of 13,472 square feet, the total allowed land coverage for this parcel is 134 square feet.

LAND COVERAGE VERIFICATION

The Placer County Planning Department has verified the following existing land coverage:

Existing Onsite coverage (Class 1c)	Land Coverage	
Residence / Shed	829	sq. ft.
Asphalt Driveway	22	sq. ft.
Decks, Stairs and Walkway (with 3:1 ht. reduction)	84	sq. ft
Total Existing On-site coverage	**935**	**sq. ft.**

***Onsite coverage Not Verified** (Class 1c)	Land Coverage	
Dirt Paths	425	sq. ft.
Total Class 1c coverage not verified	**425**	**sq. ft.**

Continued on Page 2

submitted in the near future, please expect to complete the recommended Best Management practices by the date set by ordinance. (Priority I area due date was October 2000). Please contact TRPA for technical information and assistance in completing these requirements by the statutory date.

1. Install infiltration device(s) to accommodate runoff infiltration experienced in a 20 year one hour storm, (approximately one inch of rainfall in one hour) per TRPA runoff infiltration engineering specifications. Please contact TRPA for specification information, and assistance in making those calculations.
2. Install a swale or slit trench across driveway entrance directed to a dry well, properly sized per expected runoff infiltration capacity.
3. Install a three- inch layer of gravel (pea or ¾" drain rock) beneath all raised decks and stairways.

It will be necessary to post a security deposit to ensure compliance with certain conditions of approval of proposed projects. Project security deposits are typically equal to 110 per cent of the estimated cost of the required BMPs.

Because the Land Capability of this parcel is contained in one classification the extra site plan is being returned to you for your use.

Sincerely,

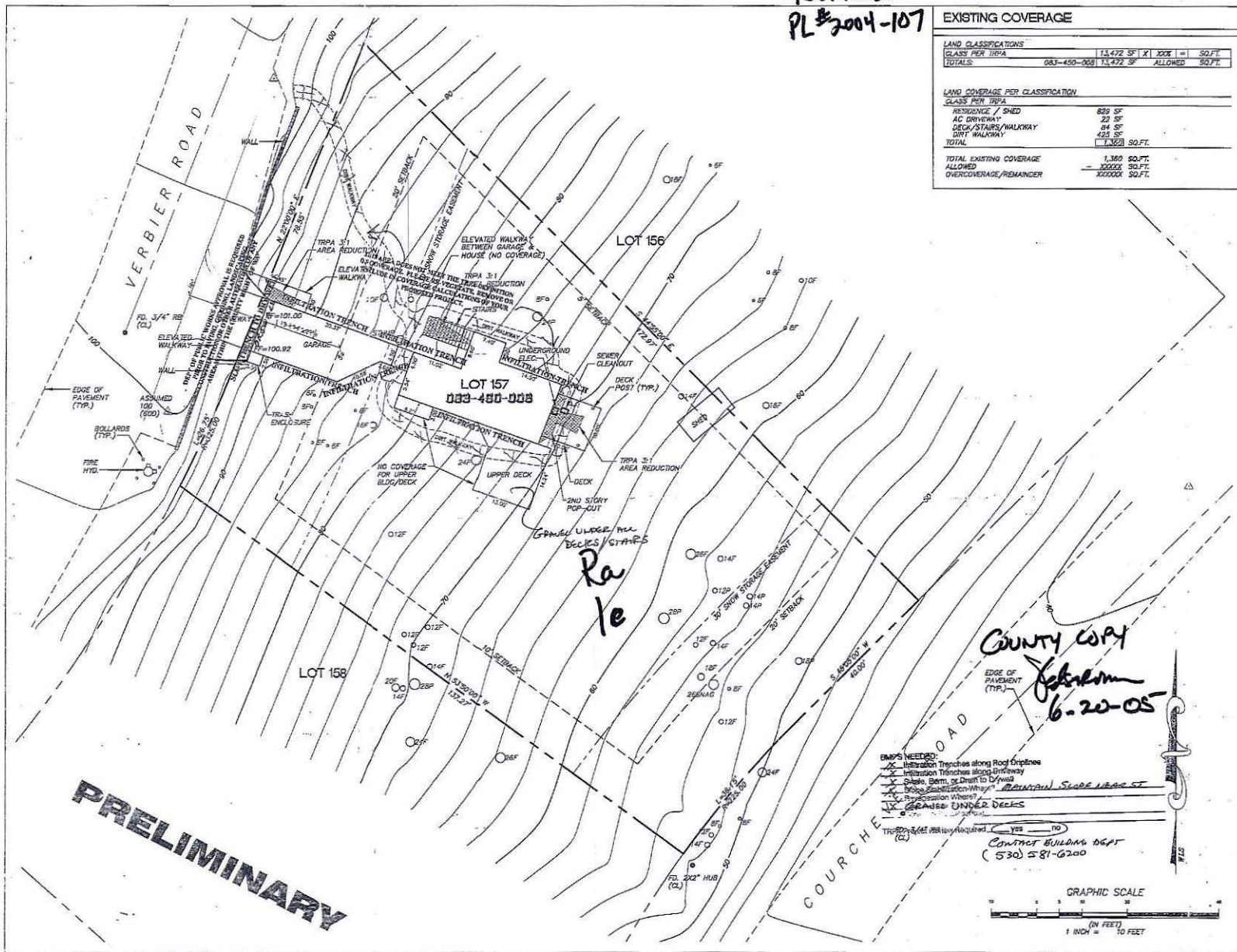
PLACER COUNTY PLANNING DEPARTMENT
FRED YEAGER, DIRECTOR

_____

Jack Edstrom
Senior Planner/Tahoe Office

cc: Tahoe Resource Conservation District
Enclosure: Site Assessment Field Notes

RICHARDS
PL # 2004-107



EXISTING COVERAGE

LAND CLASSIFICATIONS

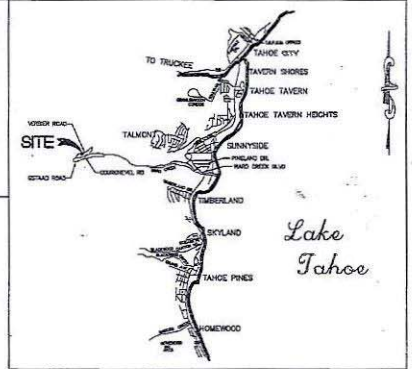
CLASS PER TRPA					
		13,472 SF	X	XX%	= SQ.FT.
TOTALS:	033-450-008	13,472 SF		ALLOWED	SQ.FT.

LAND COVERAGE PER CLASSIFICATION

CLASS PER TRPA	
RESIDENCE / SHED	829 SF
AC DRIVEWAY	23 SF
DECK/STAIRS/WALKWAY	84 SF
DIRT WALKWAY	425 SF
TOTAL	1,360 SQ.FT.

TOTAL EXISTING COVERAGE	1,360 SQ.FT.
ALLOWED	- XXXXX SQ.FT.
OVERCOVERAGE/REMAINDER	XXXXX SQ.FT.

VICINITY MAP



NOTES

1. THE BOUNDARY SHOWN HEREON IS FROM A FIELD SURVEY COMPILED FROM ALPINE PEAKS UNIT NO. 1 SUBDIVISION. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP, TITLE EVIDENCE, OR ANY OTHER FACTS WHICH AN ACCURATE & CURRENT TITLE SEARCH MAY DISCLOSE.
2. NO INVESTIGATION CONCERNING ENVIRONMENTAL & SUBSURFACE CONDITIONS, OR THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
3. NO INVESTIGATION CONCERNING THE LOCATION OF OR EXISTENCE OF UTILITY SERVICE LINES TO THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
4. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO ANY DESIGN OR CONSTRUCTION.
5. DATE OF FIELD WORK NOV. 29, 2000
6. THE TOPOGRAPHY SHOWN HEREON MEETS THE STANDARDS OF THE AMERICAN CONGRESS OF SURVEYING & MAPPING WITH 90% OF THE CONTOURS TO BE WITHIN PLUS OR MINUS ONE HALF OF A CONTOUR INTERVAL.
7. VERTICAL DATUM IS ASSUMED.
8. T.B.M.=TP-1- 60D NAIL, ELEV=100.00'
9. LAND CAPABILITY CLASSIFICATION IS FROM THE TAHOE LAND GUIDE, DATED SEPTEMBER 1981 & MUST BE VERIFIED BY THE T.R.P.A.
10. BUILDING SETBACKS SHOULD BE VERIFIED PRIOR TO ANY PROJECT DESIGN.

LEGEND

500 — 10' CONTOUR	TREE TRUNK, DIAM., PINE
2' CONTOUR	TREE TRUNK, DIAM., FIR
PROPERTY LINE	TREE TRUNK, DIAM., CEDAR
RETAINING WALL	TREE TRUNK, DIAM., SNAG
FLOWLINE	TREE TRUNK, DIAM., STUMP
OHU — OVERHEAD UTILITIES	
SANITARY SEWER MANHOLE	
WATER VALVE	
SANITARY SEWER CLEANOUT	
MONUMENT	
100.00 ASSUMED — CONTROL/TRAVERSE POINT	
TEMPORARY BENCH MARK	

COUNTY COPY
Returned 6-20-05

RECEIVED
MAY - 4 2005
PLACER COUNTY TRPA/MOU

NOTES 6-16-05

PROJECT INFORMATION

OWNER:	DALE & DEBRA RICHARDS 56 TAMALPIAS SAN ANSELMO, CA. 94960
PROJECT ADDRESS:	4127 VERBIER ROAD TAHOE CITY, CA
APN:	033-450-008
RECORD INFORMATION:	LOT 157, ALPINE PEAKS UNIT NO. 1 BOOK, 1 OF MAPS AT PAGE 61, D.R.P.C.

	CHECKED BY	REVISION	DATE	DESCRIPTION	BY
DATABASE BY:	MW				
"D3 CHECKED BY:	MW				
DESIGN BY:	MW				
DRAFTED BY:	MW				
DRAWING NAME:	2100STD1.DWG				
DIRECTORY:	JOBS				
KREF'S: N/A					

RICHARDS PROPERTY
4127 VERBIER ROAD
TOPOGRAPHIC SURVEY
PLACER COUNTY CALIFORNIA

DATA DATE 12/19/00
PLOT DATE 02/14/01
SCALE
HORIZONTAL 1"=10'
VERTICAL 2' CONTOURS

WLS
WEBB LAND SURVEYING

LAND SURVEYING SERVICES
AGENCY PROCESSING
PLANNING
2931 Lake Forest Blvd. Ste. 205
P.O. Box 1222
Cornelian Bay, CA 96140
(530) 581-2229
FAX (530) 581-3231

BMP'S NEEDED: Infiltration Trenches along Roof Driplines; Infiltration Trenches along Driveway; Slope Stabilization Where?; Revegetation Where?; Gravel Under Decks (Described); Trees Removed? (Yes/No); TRPA Project Review Required (Yes/No)

FILE NUMBER 2100.00

AGENDA ITEM NO. V. A.

TRPA Land Capability Challenge for
LCAP2023-0301; APN 083-450-008
4127 Verbier Road; Tahoe City, Placer County, Cal.

Field Investigation: October 22, 2023
Data Analysis: February 01, 2024
Conducted By: P.Scoles (Soil Scientist)

CLASS 2, 4,078 sq. ft. Gravelly sandy loam to very gravelly-cobbly sandy loam, unnamed soil (XXX-1), 30 to 50% slopes.

CLASS 4, 9,394 sq. ft. Very gravelly sandy loam to gravelly-cobbly sandy loam, unnamed soil (XXX-2), 16 to 30% slopes.

Soil Pit no. 2 -- This location is representative of the upper portion of the parcel, which has a 30 to 50% slope class. The soil is a gravelly sandy loam in the upper part and very gravelly-cobbly sand in the lower part. It is a well drained soil and HSG-B. Pit excavation stopped by large rocks at 52 inches, which may be the upper limit of bedrock. This soil is unlike the mapped Rock land (Ra) miscellaneous map unit, which highly variable due to excessive rockiness, shallow depth to bedrock, and high elevation. Instead, the observed soil has minimal in-situ formation (Bw cambic horizon) and supports a mature forest. As such, the observed soil is an unnamed soil types (XXX-1). For slopes slopes 30 to 50%, the unnamed soil qualifies as Class 4 as per Table 4 of Land-Capability Classification of the Lake Tahoe Basin, California-Nevada (R.G. Bailey, 1974).

Soil Pit no. 1 -- This location is representative of the lower portion of the parcel, which has a 16 to 30% slope class. The soil is a gravelly sandy loam in the upper part and very gravelly-cobbly sand in the lower part. It is a well drained soil and HSG-B. Pit excavation stopped by large rocks at 46 inches, which may be the upper limit of bedrock. This soil is unlike the mapped Rock land (Ra) miscellaneous map unit, which highly variable due to excessive rockiness, shallow depth to bedrock, and high elevation. Instead, the observed soil has minimal in-situ formation (Bw cambic horizon) and supports a mature forest. This soil is also unlike the Jorge-Tahoma, Meiss and Tallac soils that occur at similar elevation. As such, the observed soil is an unnamed soil types (XXX-2). For slopes slopes 16 to 30%, the unnamed soil qualifies as Class 4 as per Table 4 of Land-Capability Classification of the Lake Tahoe Basin, California-Nevada (R.G. Bailey, 1974).

EXISTING COVERAGE

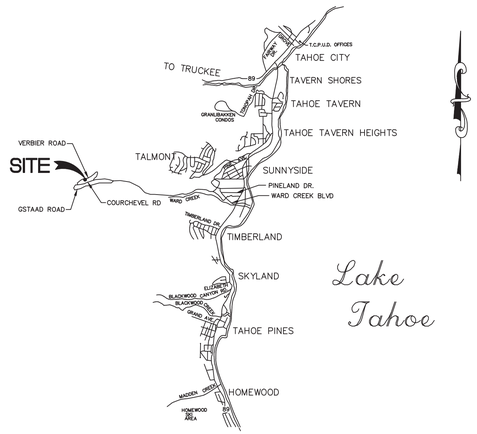
LAND CLASSIFICATIONS

CLASS PER TRPA		13,472 SF	X	XX%	=	SQ.FT.
TOTALS:	083-450-008	13,472 SF		ALLOWED		SQ.FT.

LAND COVERAGE PER CLASSIFICATION

CLASS PER TRPA	
RESIDENCE / SHED	829 SF
AC DRIVEWAY	22 SF
DECK/STAIRS/WALKWAY	84 SF
DIRT WALKWAY	425 SF
TOTAL	1,360 SQ.FT.
TOTAL EXISTING COVERAGE	1,360 SQ.FT.
ALLOWED	– XXXXX SQ.FT.
OVERCOVERAGE/REMAINDER	XXXXXX SQ.FT.

VICINITY MAP



NOTES

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LEGEND

500	10' CONTOUR	⌀#P	TREE TRUNK, DIAM., PINE
	2' CONTOUR	⌀#F	TREE TRUNK, DIAM., FIR
	PROPERTY LINE	⌀#C	TREE TRUNK, DIAM., CEDAR
	RETAINING WALL	⌀#SN	TREE TRUNK, DIAM., SNAG
	FLOWLINE	⌀#ST	TREE TRUNK, DIAM., STUMP
DHU	OVERHEAD UTILITIES		
SS	SANITARY SEWER MANHOLE		
W	WATER VALVE		
	SANITARY SEWER CLEANOUT		
	MONUMENT		
100.00 ASSUMED	CONTROL/TRAVERSE POINT		
	TEMPORARY BENCH MARK		

PROJECT INFORMATION

OWNER:	DALE & DEBRA RICHARDS 56 TAMALPIAS SAN ANSELMO, CA. 94960
PROJECT ADDRESS:	4127 VERBIER ROAD TAHOE CITY, CA
APN:	083-450-008
RECORD INFORMATION:	LOT 157, ALPINE PEAKS UNIT NO. 1 BOOK, 1 OF MAPS AT PAGE 61, O.R.P.C.

PRELIMINARY

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 INCH = 10 FEET

		CHECKED BY	REVISION	DATE	DESCRIPTION	BY
DATABASE BY:	MW					
DB CHECKED BY:	MW					
DESIGN BY:	MW					
DRAFTED BY:	MW					
DRAWING NAME:	21000T01.DWG					
DIRECTORY:	JOBS					
XREFS: N/A						

RICHARDS PROPERTY
4127 VERBIER ROAD
TOPOGRAPHIC SURVEY
PLACER COUNTY CALIFORNIA

DATA DATE 12/19/00
PLOT DATE 02/14/01
SCALE
HORIZONTAL 1"=10'
VERTICAL 2' CONTOURS

WLS
WEBB LAND SURVEYING
LAND SURVEYING SERVICES
AGENCY PROCESSING
PLANNING
2931 Lake Forest Blvd, Ste. 205
P.O. Box 1222
Carnelian Bay, CA 96140
(530) 581-2599
FAX (530) 581-3231

SHEET NUMBER: 1 of 1
FILE NUMBER: 210.00

AGENDA ITEM NO. V. A.

Attachment D
TRPA Land Capability Contractor Soil Profile Descriptions (2 soil pits)

TAHOE REGIONAL PLANNING AGENCY

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.gov

4127 Verbier (Alexander and Nilgun Wolpe Parcel; APN: 083-450-008);
Tahoe City, Placer County, Calif. – Soil Pit 1 (SP-1)

Photo A – View of soil profile showing bottom depth of 46 inches. Fine root penetration to bedrock. No indication of seasonal water table. HSG-B.

Photo B – View south at Soil Pit 1, located 20 feet northwest of southeast property line and 25 feet southwest of northeast property line. This vicinity has a 26% slope, except parallel to Courchevel Road (artificially steepened). The surface layers are composed of mixed colluvium. Few surface boulders (not attached to bedrock).

Layer	Depth (In.)	Color (moist)	Soil Properties / Features
Oi	0 to 3	Dark brown	Partially decomposed fir needles, twigs, abrupt boundary.
A	3 to 12	Very dark brown (10YR 2/2)	Very gravelly SANDY LOAM, moderate medium granular structure, 40% gravels and 10% cobbles, very friable, slightly plastic, slightly sticky, no redox features, many fine roots, common medium and coarse roots; many fine interstitial pores, abrupt boundary.
Bw1	12 to 22	Very dark brown (7.5YR 2.5/2)	Very gravelly SANDY LOAM, moderate medium granular structure, 35% gravels, 10% cobbles, 2% stones/boulders, friable, slightly plastic, slightly sticky, no redox features, many fine, medium and coarse roots; many fine interstitial pores, clear boundary.
Bw2	22 to 35	Very dark brown (7.5YR 2.5/3)	Very gravelly SANDY LOAM, weak fine subangular blocky structure, 30% gravels, 15% cobbles, 5% stones/boulders, friable, slightly plastic, slightly sticky, no redox features, common fine and coarse roots, many medium roots; many fine interstitial pores, clear boundary.
C	35 to 46	Dark brown (7.5YR 3/4)	Gravelly-Cobbly SANDY LOAM, massive structure, 10% gravels, 20% cobbles, 5% stones/boulders, slightly hard, slightly plastic, slightly sticky, no redox features, few fine and coarse roots, common medium roots; many fine interstitial pores.
Cr	>46	N/A	Boulders too large to remove; possible upper extent of bedrock.

Soil does not match 1974 soil survey (Rock land, Ra). Onsite soil conditions are less rocky in both upper and lower parts. Additionally, soils onsite have a cambic horizon (Bw), which formed by parent material remaining stable for vegetation growth (such as mature conifer forest). The observed soil also lacks the subsurface silica-cemented layer (that restricts drainage) that is present in the Tallac series. Soil characteristics also do not resembles Jorge-Tahoma very stony, sandy loam, 15 to 30% slopes (JwE) or Meiss cobbly loam (MxE). This unnamed soil is well drained (HSG-B). In accordance with the Land-Capability Classification of the Lake Tahoe Basin (Bailey, 1974), unnamed soils (designated XXX) with slopes 30 to 50% qualify as Class 2, while slopes 16 to 30% qualify as Class 4.

TAHOE REGIONAL PLANNING AGENCY

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.gov

4127 Verbier (Alexander and Nilgun Wolpe Parcel; APN: 083-450-008);
Tahoe City, Placer County, Calif. – Soil Pit 2 (SP-2)

Photo C – View of soil profile showing bottom depth of 52 inches. Fine root penetration to bedrock. No indication of seasonal water table. HSG-B.

Photo D – View south at Soil Pit 1, located 70 feet southeast of northwest property line and 5 feet southwest of northeast property line. This vicinity has a 29% slope, except parallel to Verbier Road (artificially steepened). The surface layers are composed of mixed colluvium. Few surface boulders (not attached to bedrock).

Layer	Depth (In.)	Color (moist)	Soil Properties / Features
Oi	0 to 1	Dark brown	Partially decomposed fir needles, twigs, abrupt boundary.
A1	1 to 11	Very dark brown (10YR 2/2)	Gravelly SANDY LOAM, moderate fine granular structure, 25% gravels, 1% cobbles,1% stones; very friable, slightly plastic, slightly sticky, no redox features, many fine roots, common medium roots, and few coarse roots; many fine interstitial pores, clear boundary.
A2	11 to 20	Very dark brown (10YR 2/2)	Gravelly SANDY LOAM, weak fine granular structure, 20% gravels, 10% cobbles, 1% stones, friable, slightly plastic, slightly sticky, no redox features, many fine and medium roots, few coarse roots; many fine interstitial pores, clear boundary.
Bw	20 to 33	Very dark brown (7.5YR 3/3)	Very gravelly-cobbly SANDY LOAM, weak fine subangular blocky structure, 25% gravels, 20% cobbles, 10% stones, friable, slightly plastic, slightly sticky, no redox features, common fine and medium roots, few coarse roots; many fine interstitial pores, clear boundary.
C	33 to 52	Dark brown (7.5YR 3/4)	Ver gravelly-cobbly SANDY LOAM, massive structure, 30% gravels, 20% cobbles, 20% stones/boulders, slightly hard, slightly plastic, slightly sticky, no redox features, few fine and medium roots; many fine interstitial pores.
Cr	>52 in.	N/A	Boulders too large to remove; possible upper extent of bedrock.

Soil does not match 1974 soil survey (Rock land, Ra). Onsite soil conditions are less rocky in both upper and lower parts. Additionally, soils onsite have a cambic horizon (Bw), which formed by parent material remaining stable for vegetation growth (such as mature conifer forest). The observed soil also lacks the subsurface silica-cemented layer (that restricts drainage) that is present in the Tallac series. Soil characteristics also do not resembles Jorge-Tahoma very stony, sandy loam, 15 to 30% slopes (JwE) or Meiss cobbly loam (MxE). This unnamed soil is well drained (HSG-B). In accordance with the Land-Capability Classification of the Lake Tahoe Basin (Bailey, 1974), unnamed soils (designated XXX) with slopes 30 to 50% qualify as Class 2, while slopes 16 to 30% qualify as Class 4.