



STAFF REPORT

Date: January 11, 2024

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Taylor Land Capability Challenge
545 Alpine View Drive, Washoe County, NV
APN: 131-212-03; TRPA File #: LCAP2023-0309

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. The challenge changes Class 3- 27,848 sq. ft. (100 percent of parcel) to Class 4- 27,848 sq. ft. (100 percent of parcel).

Background:

The subject parcel is shown as Class 1a on TRPA Land Capability Overlay Maps (aka Bailey Land Capability maps). The Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974) places the subject parcel in the UmF, Umpa very stony sandy loam, 30 to 50 percent slope mapunit. A land capability verification completed in 2023 (LCAP2023-0309) verified the entire parcel as Class 3-UmE, Umpa very stony sandy loam, 15 to 30 percent slope mapunit. The updated *Soil Survey of Tahoe Basin Area, California and Nevada* (NRCS, 2007) maps this parcel as mapunit 7152- Jorge very cobbly fine sandy loam, 15 to 30 percent slopes. This parcel has a geomorphic mapping of D2 for Streamcut Volcanic Flowlands; Headlands (Moderate hazard lands). The Umpa soils formed in colluvium and residuum over andesitic bedrock. Umpa soils have a very stony sandy loam A-horizon, with gravelly sandy loam subsurface textures in the upper 40 inches. Hard, fractured andesite is encountered between 20 and 40 inches below ground surface. The Jorge soils formed in colluvium and residuum over andesitic bedrock. Jorge soils have a stony sandy loam A-horizon, with gravelly sandy loam or very gravelly sandy loam subsurface textures in the upper 50 inches. An argillic horizon is present at 33 inches to a depth of 50 inches, where a C horizon is present. Depth to weathered andesitic bedrock is below 60 inches.

A land capability challenge (LCAP2023-0309) was filed by David Herzog on behalf of the land owners Alexander and Julia Taylor on October 13, 2023. A private soil consultant was not retained for this land capability challenge. TRPA consultant, Marchel Munnecke, visited the site on October 19, 2023 with David Herzog. One soil pit was hand excavated and described.

Findings:

One soil pit was excavated by hand to 56 inches. The soil pit was located approximately 35 feet south of the southeast corner of the residence. This soil formed in colluvium and residuum from volcanic parent material over old lake influenced deposits. This parcel ranges in elevation from 6,730 to 6,790 feet. In the report, *Pleistocene volcanism and shifting shorelines at Lake Tahoe, California*, the shoreline of Lake Tahoe was determined to reach elevations of 6,700 to 6,840 feet at specific times in the past due to volcanic flows plugging of the Truckee River outlet. This parcel is in the elevation band affected by the high lake levels. In many areas of the lake a “stone line” can be found around this elevation where submersion by the lake has caused erosion and deposition. The somewhat jumbled arrangement of the soil and rock fragments in this pit is likely a result of this process. The soil at this pit is characterized by a sandy loam surface texture, with sandy loam, very stony sandy clay loam, and extremely gravelly clay loam subsurface textures. This soil is deep, well drained, and is a member of Soil Hydrologic Group B. The soil taxonomy is Loamy-skeletal, isotic, frigid, Andic Dystroxerepts. The vegetation is an open Jeffrey pine forest with a few incense cedar and landscaped plants. Greenleaf manzanita, huckleberry oak, prostrate ceanothus, antelope bitterbrush, and creeping snowberry are present in the openings.

In the *Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974), the Umpa soils are moderately deep (20-40 inches over hard bedrock). The soil at this site is somewhat similar to the Umpa soil and has the same taxonomy, but it is deeper than 40 inches to hard bedrock, has finer textures, and is influenced by lacustrine processes. This soil is dissimilar to the Jorge and Tahoma soils because it lacks argillic soil development and is influenced by lacustrine processes. This soil does not meet the range and characteristics of other soils in the 1974 Tahoe Basin Soil Survey, so is an unmapped soil (XXX).

Using Table 4 in the *Land Capability Classification of Lake Tahoe Basin, California-Nevada*, and based on the slopes, this parcel is land capability Class 4 -XXX, 16 to 30 percent slopes.

The table below summarizes the changes in land capability as concluded by this land capability challenge.

Land Capability District	Area (sq. ft.) 2023 LCV	Area (sq. ft.) 2023 LCC
Class 3 (UmE, 15 to 30% slopes)	27,848	0
Class 4 (XXX, 16 to 30 % slopes)	0	27,848
Total Parcel Area	27,848	27,848

BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information	
Assessor's Parcel Numbers: (APN)	131-212-03
TRPA File No. / Submittal Date:	LCAP2023-0309 / 10/19/2023
Owner or Applicant:	Alexander and Julie Taylor
Address:	545 Alpine View Drive, Incline Village, NV 89451

Environmental Setting	
Bailey Soil Mapping Unit¹ / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit	UmE (Umpa very stony sandy loam, 15 to 30 percent slopes/ HSG C/ D2 (Streamcut Volcanic Flowlands; Headlands (Moderate hazard lands)
Soil Parent Material	Colluvium over residuum from volcanic rock over lacustrine deposits
Slopes and Aspect	21 to 29 percent; sloping southwest.
Elevation and Datum	6,730 to 6,6790 feet, Arnett and Associates, 6/16/2023 site plan.
Rock Outcrops and Surface Configuration	Uniform slope. No rock out crops exposed.
SEZ and Hydrology Source	NA
Vegetation	The vegetation is an open Jeffrey pine forest with a few incense cedar and landscaped plants. Greenleaf manzanita, huckleberry oak, prostrate ceanothus, antelope bitterbrush, and creeping snowberry are present in the openings.
Ground Cover Condition	Good (vegetation 55 %, duff/mulch 65 % cover)
Site Features	Residence, garage, retaining walls, stone walkways decks, railroad tie steps, decks, A/C driveway.

Field Investigation and Procedures	
Consultant and Address	Marchel Munnecke (TRPA consultant) PO Box 1015 Twin Bridges, CA 95735
TRPA Staff Field Dates	October 19, 2023
SEZ Mapping / NRCS Hydric Soil	None present
Number of Soil Pits or Auger Holes and Description Depth	1 pit excavated by hand to 56 inches.
Additional or Repetitive TRPA Sample Locations	NA
Representative Soil Profile Descriptions	Mrs. Munnecke's soil profile description, see attached.

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.

Areas Not Examined	Residence, garage, retaining walls, stone walkways decks, railroad tie steps, decks, A/C driveway.
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TRPA Findings	
2006 Soil Survey Map Unit	7152- Jorge very cobbly fine sandy loam, 15 to 30 percent slopes (Class 4).
Consultant Soil Mapping Determination and Rationale	<p>Based on slopes and soil characteristics this parcel is mapped as capability Class 4- XXX, 16 to 30 percent slopes.</p> <p>In the <i>Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada</i> (Rogers, 1974), the Umpa soils are moderately deep (20-40 inches over hard bedrock). The soil at this site is somewhat similar to the Umpa soil and has the same taxonomy, but it is deeper than 40 inches to hard bedrock, has finer textures, and is influenced by lacustrine processes. This soil is dissimilar to the Jorge and Tahoma soils because it lacks argillic soil development and is influenced by lacustrine processes. This soil does not meet the range and characteristics of other soils in the 1974 Tahoe Basin Soil Survey, so is an unmapped soil (XXX).</p>
Slope Determination	21 to 29 percent slopes.
TRPA Conclusion(s)	TRPA concurs with consultants' determination and rationale above.
Applicable Area	See parcel map for soil delineations.

Contact Information:

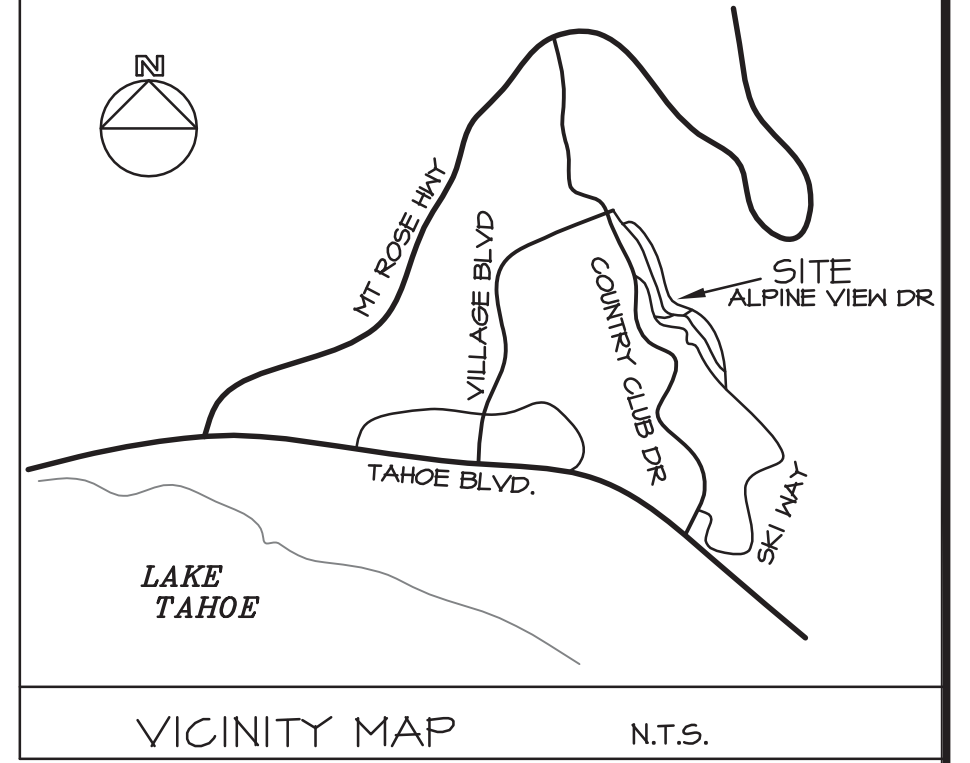
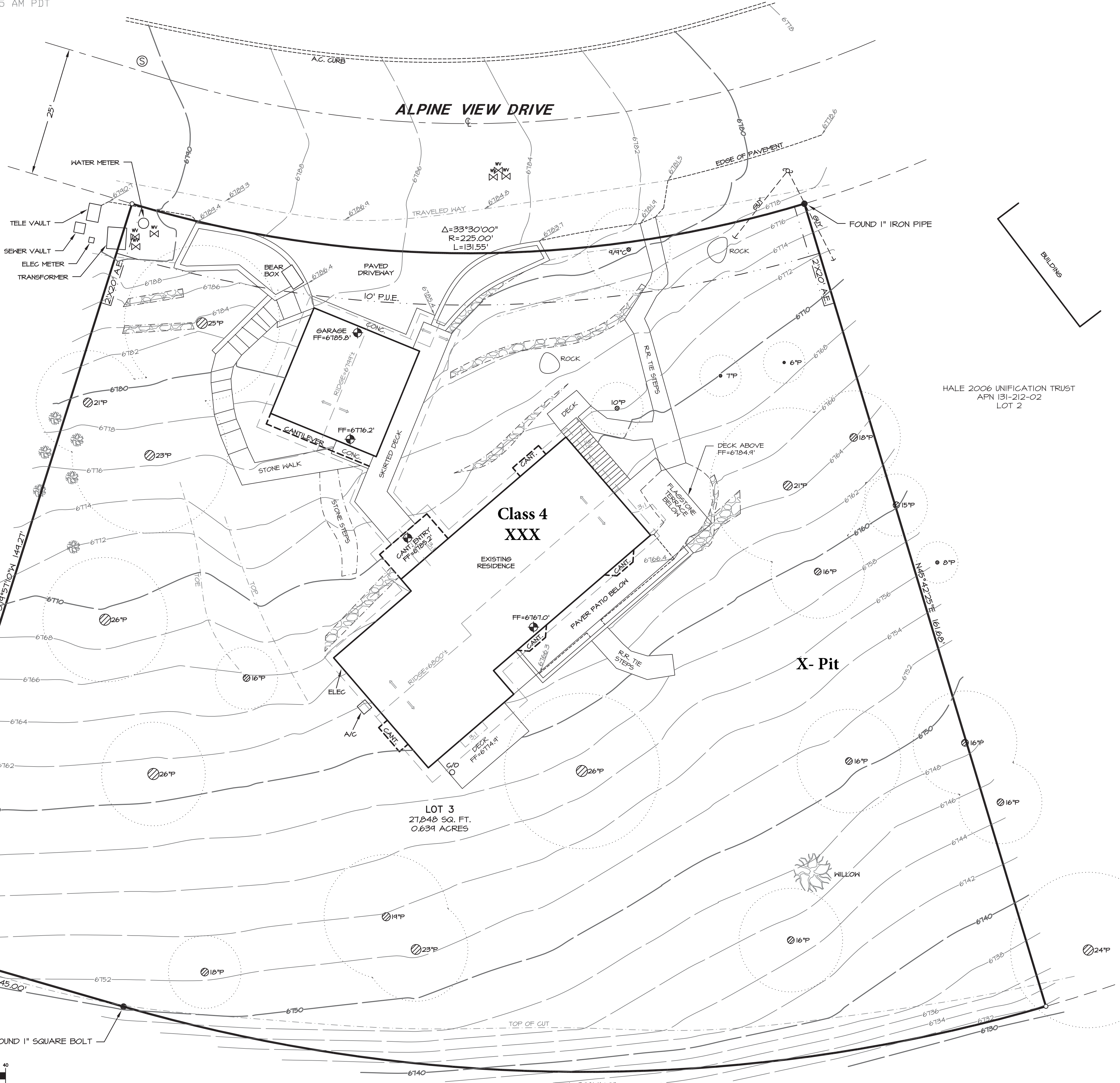
This memorandum was jointly prepared by Senior Planner, Julie Roll. If you have questions on this Hearings Officer item, please contact Julie Roll, 775-589-5247, or email at jroll@trpa.gov. To submit a written public comment, email publiccomment@trpa.gov with the appropriate agenda item in the subject 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. Parcel Map
- B. Soil Profile Description
- C. Site Photographs

Attachment A
Parcel Map

- NOTES:**
- BEFORE DRAWING PLANS, PROPERTY OWNERS AND THEIR REPRESENTATIVES SHOULD REVIEW THIS MAP FOR CONSISTENCY WITH ASSESSOR AND AGENCY RECORDS. DESIGNER TO CHECK FOR ZONING, SETBACKS, ASSOCIATION DESIGN AND CARE REQUIREMENTS, OPEN SPACE REQUIREMENTS, HEIGHT RESTRICTIONS, ETC. AN INVESTIGATIVE VISIT TO THE SITE BY THE DESIGNER AND/OR A SITE ASSESSMENT TO DETERMINE LEGALLY EXISTING COVERAGE AND LAND CAPABILITY THRESHOLDS, AND TO VERIFY TOPOGRAPHY SHOULD BE CONDUCTED PRIOR TO RELIANCE ON THIS PLAN. LAND COVERAGES SHOWN DO NOT REFLECT ANY LAND COVERAGE CREDITS OR EXEMPTIONS THAT MAY BE APPLICABLE BY TRPA FOR PERVIOUS DECKING, PERVIOUS CONCRETE, ETC. ANY OBSERVED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE SURVEYOR PRIOR TO PROCEEDING WITH DESIGN/APPLICATION OR PERMITTING OF A PROJECT.
 - TREES SMALLER THAN 6" IN DIAMETER HAVE NOT BEEN SHOWN.
 - THE VERTICAL DATUM OF THIS SURVEY IS BASED ON THE WASHOE COUNTY GIS. THE CONTOUR INTERVAL IS 2 FEET. THE ACCURACY OF THIS SURVEY IS ONE-HALF CONTOUR INTERVAL.
 - FIELD WORK FOR THIS SURVEY WAS ACCOMPLISHED ON 6/15/23.
 - ALL EASEMENTS OF RECORD PER THE SUBDIVISION TRACT MAP HAVE BEEN SHOWN. NO INVESTIGATION HAS BEEN MADE FOR EASEMENTS OF RECORD, ENCUMBRANCES, COVENANTS AND CONDITIONS OF OWNERSHIP, TITLE EVIDENCE, OR ANY OTHER FACTS WHICH A CURRENT TITLE SEARCH MAY DISCLOSE, OTHER THAN THOSE SHOWN HEREON.
 - THIS MAP INDICATES THE LOCATION OF SURFACE UTILITIES DISCOVERED DURING THE COURSE OF THIS SURVEY. UTILITY COMPANIES SHOULD BE CONSULTED FOR LOCATION OF UNDERGROUND FACILITIES OR OTHER UTILITIES NOT SHOWN HEREON.
 - THE BOUNDARY LINES AND PROPERTY CORNERS SHOWN ON THIS TOPOGRAPHIC SURVEY ARE TAKEN FROM RECORD DATA. A BOUNDARY SURVEY TO RE-MONUMENT MISSING PROPERTY CORNERS SHOULD BE DONE PRIOR TO RELIANCE ON THIS PLAN FOR CONSTRUCTION.
 - THE EXISTING BUILDING FOOTPRINT SHOWN IS INTENDED TO BE USED FOR LAND COVERAGE PURPOSES ONLY. SAID FOOTPRINT IS REPRESENTATIVE OF THE EXTERIOR STRUCTURE. DESIGNER AND CONTRACTOR TO VERIFY AS-BUILT INFORMATION AND ACCOUNT FOR VARIANCES DUE TO SIDING, TRIM, AND OTHER BUILDING ELEMENTS.



- LEGEND**
- FOUND MONUMENT AS NOTED
 - NOTHING FOUND OR SET
 - SPOT ELEVATION
 - ⊙ SEWER MANHOLE
 - ⊕ POWER POLE
 - ⊗ WATER VALVE
 - CLEAN OUT
 - UTILITY AS NOTED
 - A.E. ANCHOR EASEMENT
 - P.U.E. PUBLIC UTILITY EASEMENT
 - ⊙ 12" P TREE W/DRIPLINE, DIAMETER & TYPE
P=PINE, F=FIR, C=CEDAR
 - ⊙ LANDSCAPE TREE

COVERAGE CALCULATIONS

LOT AREA = 21,848 S.F. (0.639 AC.)

EXISTING LAND COVERAGE

RESIDENCE	1624 S.F.*
GARAGE	454 S.F.
PAVED DRIVEWAY	385 S.F.
SKIRTED ENTRY DECK	226 S.F.
DECKS & STAIRS	76 S.F.*
CONCRETE	74 S.F.
STONE WALK	274 S.F.
R.R. TIE STEPS	283 S.F.
STONE STEPS	76 S.F.
PAVER PATIO	218 S.F.
FLA. COVERAGE NOT A PART	155 S.F.
TOTAL	3,880 S.F. (14%)

* CALCULATED WITH 3:1 HEIGHT REDUCTION

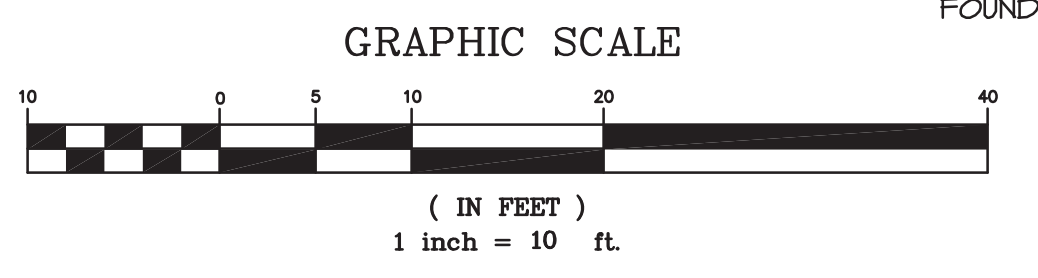
OFFSITE COVERAGE

PAVED DRIVEWAY/APRON 636 S.F.

LAND CAPABILITY CHALLENGE
FILE LCAP2023-0309

THIS DRAWING WAS PREPARED EXCLUSIVELY FOR ALEXANDER & JULIA TAYLOR AND THEIR ARCHITECT/ENGINEER AND ACCURATELY REPRESENTS, TO THE BEST OF OUR KNOWLEDGE, THE MATTERS CONTAINED HEREIN AS OF THE DATE STATED HEREON. THIS DRAWING MAY NOT BE RELIED UPON BY ANY OTHER PERSON OR ENTITY FOR ANY PURPOSE WHATSOEVER. THIS MAP IS VALID FOR A PERIOD OF EIGHTEEN (18) MONTHS FROM THE DATE OF ISSUE. SUBSEQUENT USE OF THE MAP WILL REQUIRE A FIELD SITE VISIT AND MAPPING UPDATES.

KENNETH R. ARNETT
PROFESSIONAL LAND SURVEYOR
PLS 7624



EAGLE DRIVE
60' RIGHT OF WAY

REVISIONS	BY

T.R.P.A. IMPERVIOUS COVERAGE SURVEY
LOT 3 BLOCK "B" COUNTRY CLUB OF INCLINE
APN 131-212-03 WASHOE COUNTY NEVADA
ADDRESS: 545 ALPINE VIEW DR., INCLINE VILLAGE, NV

LAND SURVEYORS & PLANNERS
ARNETT & ASSOCIATES, INC.
NORTH TANGIE (775) 831-8658 TRUCKEE (530) 587-0822
150 COUNTRY CLUB DR. NO. 15, INCLINE VILLAGE, NEVADA 89441
SOUTH TANGIE (530) 843-3068

DATE 6/16/23
SCALE 1" = 10'
DRAWN JDT
JOB 22-12-04
FILE TOPO.DWG
SHEET 1 OF 1 SHEETS

Attachment B
Soil Profile Description

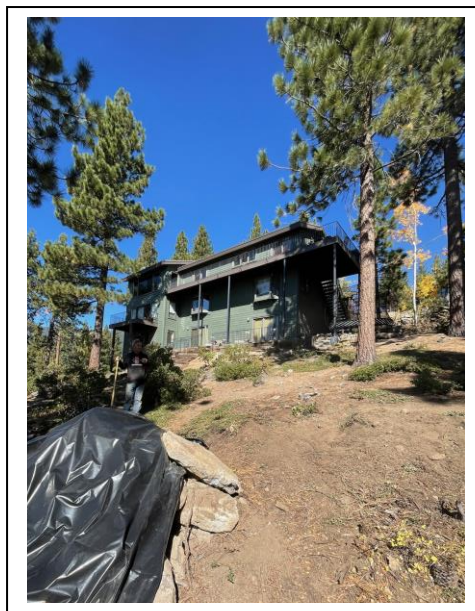
Alexander and Julie Taylor Land Capability Challenge

545 Alpine View Drive,
Incline Village, Washoe County, NV 89451
APN 131-212-03, LCAP2023-0309

Soil Profile Description

Marchel Munnecke

Field Date: 10-19-23



Pit 131-212-03:

Soil Classification: Loamy-skeletal, isotic, frigid Andic Dystrocherepts

Soil Series: XXX, Land Capability Class 4.

Drainage Class: Well Drained

Hydrologic Group: B

Parent Material: Colluvium and residuum from volcanic parent material over old lake deposits.

Slope: 25 % **Aspect:** Southwest

Vegetation: Open Jeffrey pine forest with a few incense cedar and landscape plants including planted aspen. Greenleaf manzanita, huckleberry oak, prostrate ceanothus, antelope bitterbrush, and creeping snowberry are in the open areas.

Description:

- Oe 0 to 0.5 inch; shrub leaves and pine needle duff
- A1 0.5 to 8 inches; sandy loam, dark grayish brown (10YR 4/2), very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine and fine roots; many very fine and fine irregular pores; 5 percent gravels; gradual smooth boundary.
- A2 8 to 20 inches; sandy loam, grayish brown (10YR 5/2), brown (10YR 4/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine to very coarse roots; many very fine and fine irregular pores, 10 percent gravel; gradual smooth boundary.
- Bw 20 to 38 inches; very stony sandy clay loam, light gray (10YR 7/1), grayish brown (10YR 5/2) moist; moderate medium subangular blocky structure; hard, very firm, slightly sticky and slightly plastic; common very fine to medium roots; many very fine and fine irregular pores, 15 percent gravel, 20 percent cobbles, and 15 percent stones, gradual wavy boundary.
- C 38 to 56+ inches; extremely gravelly clay loam, light brownish gray (10YR 6/2), grayish brown (10YR 5/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; many fine to coarse roots; many very fine and fine irregular pore, 55 percent gravel and 5 percent stones.

Attachment C
Site Photographs

PHOTOGRAPHS (Addendum to APN 131-112-03, January 18, 2024 Staff Summary)



Photo 1 – a. Pit. Photo 1- b. View looking north across parcel toward the residence.



Photo 2 – a. View from road at east corner of parcel looking to the west. Photo 2 – b. View from west to east.

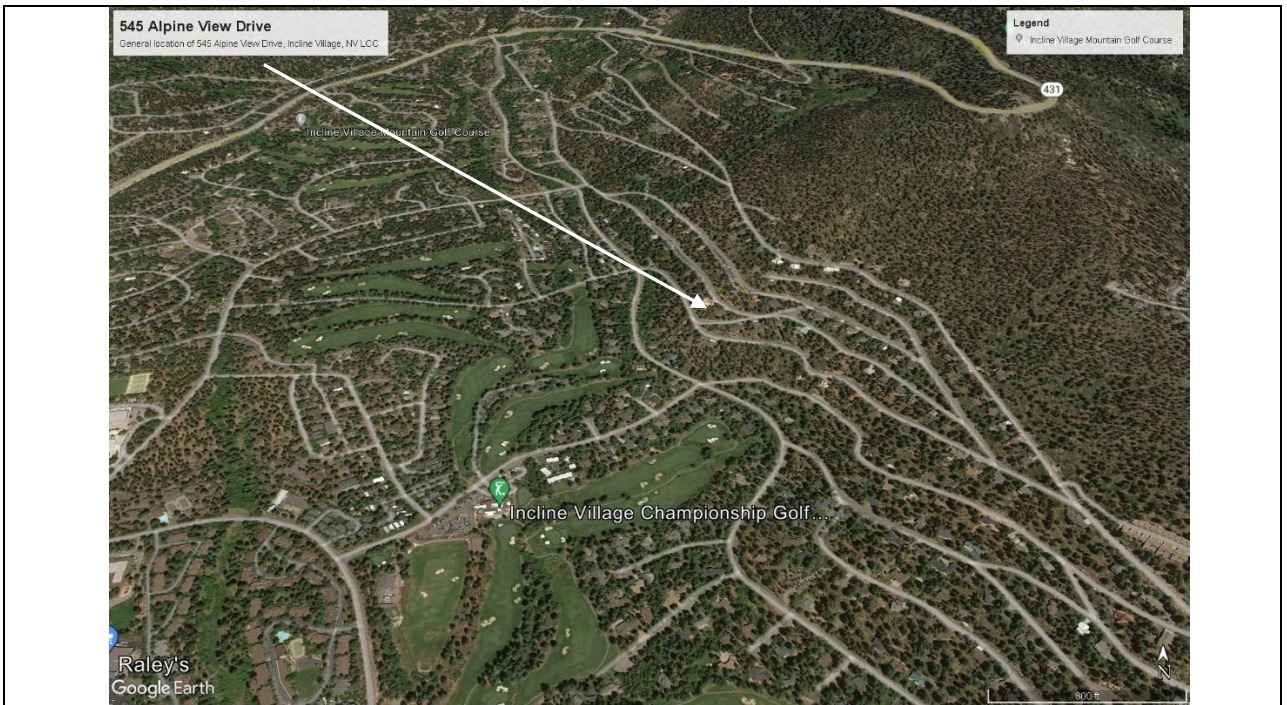


Image 3 – Google Earth image of general area.



Image 4– ESRI Map, 1974 Soil Survey delineations in white, mapunit in yellow/black, and parcel in bold yellow.