TAHOE REGIONAL PLANNING AGENCY

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STAFF REPORT

Date: September 19, 2024

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Curwest Holdings, LLC Land Capability Challenge; 826 Jennifer Street, Washoe County, NV; APN: 125-223-04; TRPA File #: LCAP2024-0016

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 results in a change from Capability Class 3 (8,251 sq. ft., 100 % of parcel) to Capability Class 4 (8,251 sq. ft., 100 % of parcel).

Background:
The subject parcel is shown as Class 3 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 UmE, Umpa very stony sandy loam, 15 to 30 percent slope mapunit. A land capability verification completed in 2007 verified the entire parcel as Class 3-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 andesitc 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 typically 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 (LCAP2024-0016) was filed with TRPA on January 17, 2024, by Gary Taylor, who is representing the owner, Curwest Holdings, LLC. Davis2 Consulting Earth Scientists described one soil pit that was excavated by backhoe to 52 inches and provided a land capability report. TRPA consultant, Marchel Munnecke visited the site on June 28, 2024, with Gary Taylor to review the soil pit, site conditions, and associated land capability report.

Findings:
One pit was excavated near the southwest corner of the parcel, approximately 20 feet from both the west and south parcel boundary. This parcel is relatively uniform and slopes to the east. This soil has a gravelly loamy sand surface texture, with coarse sandy loam, gravelly coarse sandy loam, very gravelly sandy clay loam, and extremely gravely sandy loam subsurface textures. Parent material appears to be till and outwash from primarily volcanic parent material. This soil is well drained, Hydrologic Soil Group B, and classified as a Loamy-skeletal, mixed, frigid Ultic Haploxeralfs. The vegetation is an open Jeffrey pine forest with greenleaf manzanita, snowbrush ceanothus, and huckleberry oak in the understory.

This soil differs from the Umpa soil that was mapped on this parcel in 1974, because it is deeper than 40 inches to weathered bedrock. This soil is similar to the Jorge soil but formed in till material rather than volcanic mud flow material. This soil is similar to the Inville soil but has finer textures at depth. Both the Jorge and Inville soils are high capability soils. This soil does not meet the range, and characteristics of any soils mapped in the 1974 Soil Survey; thus this soil is an unmapped, XXX soil. This soil is very deep, in HSG B with slopes between 16 to 30 percent. Using Table 4 in the *Land Capability Classification of Lake Tahoe Basin, California-Nevada*, this soil is Land Capability Class 4- XXX.

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

Land Capability District	**Area (sq. ft.) 2007 LCV**	**Area (sq. ft.) 2024 LCC**
Class 3 (UmE, 15 to 30 % slopes)	8,251	0
Class 4 (XXX, 16 to 30 % slopes)	0	8,251
Total Parcel Area	8,251	8,251

This memorandum was jointly prepared by TRPA Senior Planner Julie Roll and Marchel Munnecke of Pyramid Botanicals. 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.

BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information	
Assessor's Parcel Numbers: (APN)	125-223-04
TRPA File No. / Submittal Date:	LCAP2024-0016/ 1/17/2024
Owner or Applicant:	Gary Taylor
Address:	18124 Wedge Parkway #420 Reno, NV 89511

Environmental Setting	
Bailey Soil Mapping Unit[1] / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit	UmE, Umpa very stony sandy loam, 15 to 30 percent slopes / HSG B/ D2- Stream cut volcanic flowlands, headlands (moderate hazard lands)
Soil Parent Material	Volcanic colluvium over outwash and till.
Slopes and Aspect	15 to 30 percent; sloping to the east.
Elevation and Datum	HWL 7,022 to 7,046, Site topo Brunner-Hagen, Inc., 2023
Rock Outcrops and Surface Configuration	There are no rock outcrops.
SEZ and Hydrology Source	There is no SEZ on the parcel or in the immediate vicinity.
Vegetation	The vegetation is an open Jeffrey pine forest with a high cover of huckleberry oak, greenleaf manzanita and snowbrush ceanothus in open areas.
Ground Cover Condition	Good (vegetation 60%, duff/mulch 40% cover)
Site Features	Residence, driveway, deck, rock paths, retaining walls, fence, and decks.

Field Investigation and Procedures	
Consultant and Address	Davis2 Earth Scientists PO Box 734 Georgetown, CA 95634
TRPA Staff Field Dates	June 28, 2024
SEZ Mapping / NRCS Hydric Soil	NA
Number of Soil Pits or Auger Holes and Description Depth	1 pit described to 52 inches.
Additional or Repetitive TRPA Sample Locations	NA
Representative Soil Profile Descriptions	See Attachment B

[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, driveway, deck, rock paths, retaining walls, fence, and decks.

TRPA Findings	
2006 Soil Survey Map Unit	7152, Jorge very cobbly fine sandy loam, 15 to 30 percent mapunit (Class 4)
Consultant Soil Mapping Determination and Rationale	Class 4, XXX- 15 to 30 percent slopes. This soil differs from the Umpa soil that was mapped on this parcel in 1974, because it is deeper than 40 inches to weathered bedrock. This soil is similar to the Jorge soil but formed in till material rather than volcanic mud flow material. This soil is similar to the Inville soil but has finer textures at depth. Both the Jorge and Inville soils are high capability soils. This soil does not meet the range and characteristics of any soils mapped in the 1974 Soil Survey; thus this soil is an unmapped, XXX soil. This soil is very deep, in HSG B with slopes between 16 to 30 percent. Using Table 4 in the *Land Capability Classification of Lake Tahoe Basin, California-Nevada*, this soil is Land Capability Class 4- XXX.
Slope Determination	16 to 30 percent slopes.
TRPA Conclusion(s)	TRPA concurs with consultants' determination and rationale above.
Applicable Area	See parcel map.

Attachments:

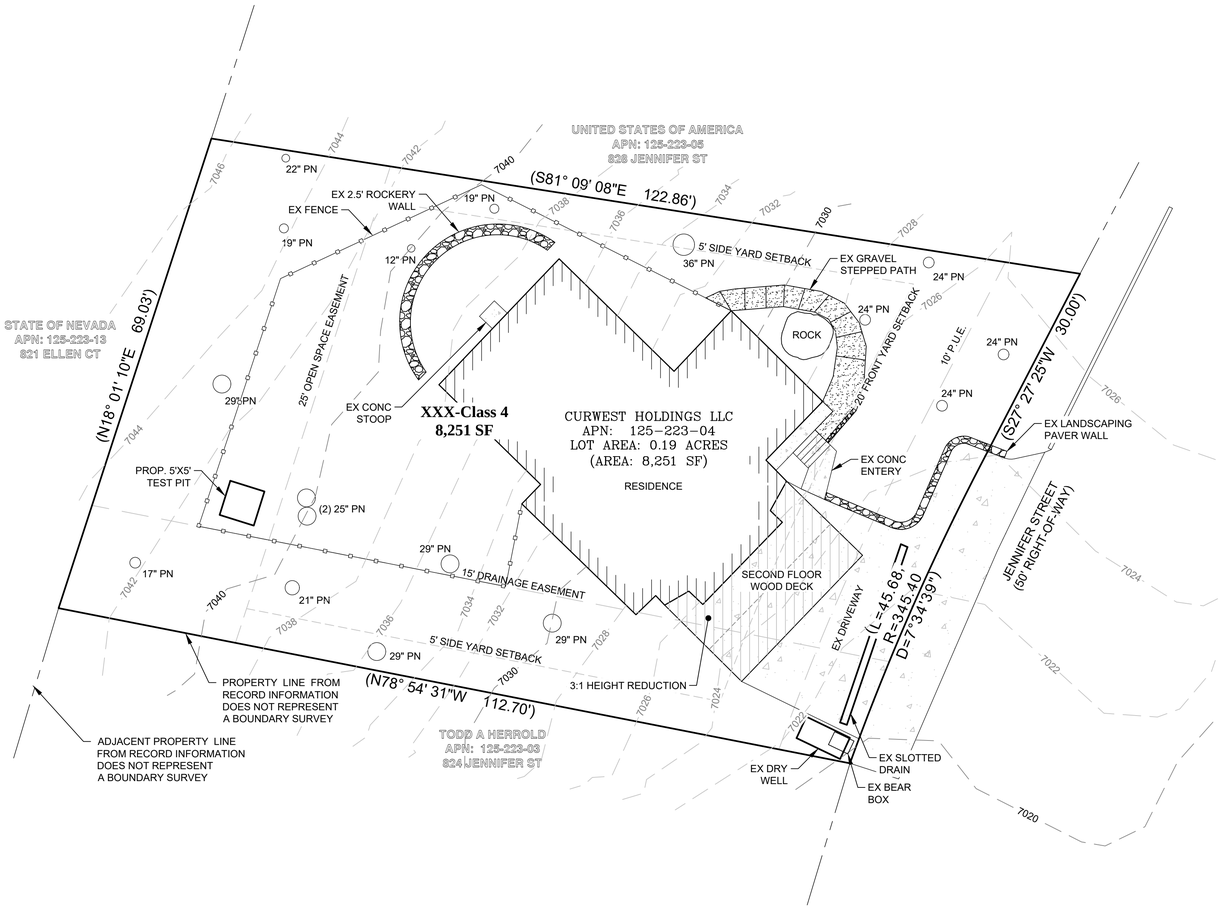
A. Site Plan
B. Land Capability Challenge Report
C. Photographs

Attachment A
Site Plan

Land Capability Assement
For
Washoe APN 125-223-04
826 Jennifer Street, Incline Village, NV

December 26, 2023

DAVIS2
CONSULTING EARTH SCIENTISTS, INC.
P.O. Box 734, Georgetown, CA 95634
Tel. (530) 559-1405; email:
sid@davis2consult.com



GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

LEGEND:

- EXISTING BUILDING
- EXISTING DECKS & STAIRS
- EXISTING ASPHALT & CONCRETE
- 3:1 HEIGHT REDUCTION

SURVEY NOTES:

1. PROPERTY IS ZONED AS TA_IV1 (TAHOE - INCLINE VILLAGE 1) WITH A 5.0' SIDE YARD SETBACK, 20.0' FRONT AND REAR YARD SETBACK, FOR LOT SIZE 5,000 SF TO 11,999.99 SF.
2. BASIS OF BEARINGS ARE ASSUMED, TAKEN FROM INCLINE VILLAGE UNIT NO. 1, PORTIONS OF SECTIONS 8 & 9, T16N-R18E,. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.
3. VERTICAL DATUM IS ASSUMED, TAKEN FROM USGS INFORMATION (NAVD 88).
4. TOPOGRAPHY IS SHOWN AT A 2 FOOT CONTOUR INTERVAL.

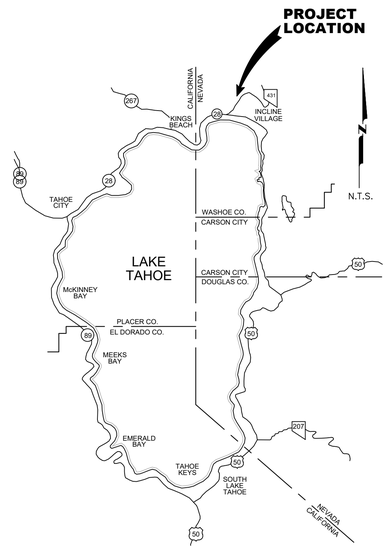
LAND CAPABILITY NOTE:
CAPABILITY DETERMINATION WAS ENTERED ON 04/24/2007.

BMP:
BMP CERTIFICATE ISSUED ON 10/17/2008. BMP CERTIFICATE #10743

COVERAGE CALCULATIONS:
LOT AREA = 0.19 ACRES (8,251 SF)

LAND COVERAGE:	AREA:
RESIDENCE	1,349 SF
A.C. PAVED DRIVEWAY	770 SF
CONCRETE	60 SF
TOTAL	2,179 SF

OFFSITE COVERAGE (DRIVEWAY APRON): 364 SF



LAKE TAHOE AREA MAP
NOT TO SCALE

Know what's below. Call before you dig.

CURWEST HOLDINGS LLC
APN: 125-223-04
826 JENNIFER ST
INCLINE VILLAGE, NV 89451

C/O BRIAN & TAYLOR CURLER
PO BOX 5554
INCLINE VILLAGE, NV 89450

Brunner-Hagen, Inc.
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Reno, NV 89511
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PROFESSIONAL ENGINEER-STATE OF NEVADA
DAVID L HAGEN
Exp: 6/30/25
CIVIL
No. 16460

DATE: 11/18/2023

Revisions:

TRPA SUBMITTAL NOT FOR CONSTRUCTION

Sheet Title:
AS-BUILT TOPOGRAPHIC SURVEY

Project:	826 JENNIFER
Drawn By:	MLS
Checked By:	DLH
Scale:	AS NOTED
Date:	NOV 2023
Sheet Number:	1 OF 1

AGENDA ITEM NO. V. B.

Attachment B
Land Capability Challenge Report

DAVIS²
CONSULTING EARTH SCIENTISTS
P.0. Box 734 · Georgetown, CA 95634 · Tel. (530) 559-1405; davis2consulting@sbcglobal.net

Land Capability Challenge
826 Jennifer Street
Incline Village, Washoe County, Nevada
(APN 125-223-04)

December 22, 2023

INTRODUCTION

A soil investigation was conducted on the parcel on November 28, 2023. The objective of the study was to identify soils and other features and relate them to Land Capability, which is administered by the Tahoe Regional Planning Agency (TRPA) for the purpose impervious coverage regulation, by Chapter 30 of the Code of Ordinances.

The parcel supports an existing single-family residential dwelling on 0.19 acres of land, located at 826 Jennifer Street, Incline Village, Nevada. This work is advanced at the request of Mr. Gary Taylor, agent for the owners.

Soil information contained in this report is for the strict use of land capability and it should not be used for building foundation design, slope stability, hazard waste assessment or seismic analyses. In this report the term "soil" refers to the surface weathering of rocks and sediments as typically used in agriculture, forestry, and erosion control. In contrast, the typical engineering use of the "soil" refers to the strength of deeper materials, often a few to tens or more feet deep.

ENVIRONMENTAL SETTING

The site is located at 826 Jennifer Street, Incline Village, Nevada. Vegetation consists of Jeffrey pine, manzanita, tobacco bush and huckleberry oak. Slopes range between 15 and 30 percent on an eastern aspect. There are no stream environment zones (SEZ) influencing this parcel.

Soils are shown on TRPA map sheet G-2 as UmE (Umpa very stony sandy loam, 15 to 30 percent slopes). Geology (Mathews /1968) is characterized as Tv^a (andesite). Bailey's (1974) geomorphic analysis shows the parcel within D_2 (Headlands).

METHODOLOGY

For this investigation, we surveyed the parcel and immediately adjacent areas (map attached). We then measured and technically described one discrete soil profile, representative of the site-specific landform. By use of hand augers and backhoe excavators, we exposed the near- surface sediments to depths ranging from 0 to 5 ft deep. We then formally described and measured the physical properties of the soils following procedures of the National Cooperative Soil Survey. We similarly documented groundwater levels using visual methodologies. Information gathered at the site was compared to the *Soil Survey of the Lake Tahoe Basin, California-Nevada* (Rogers et al,

1974) and to criteria of the *Land-Capability Classification of the Lake Tahoe Basin, California-Nevada* (Bailey, 1974) for proper placement in the appropriate land capability class. A detailed topographic base map supplied by Brunner- Hagan Inc. was available in the field for ground control and slope analysis. Information pertaining to land capability districts is shown on the base map.

FINDINGS

Soils are found to be deep and well drained, members of Soil Hydrologic Group B. They can be characterized having very dark brown gravelly coarse sandy loam topsoil approximately 12 inches thick, over dark yellowish brown very gravelly sandy clay loam subsoil to 52 plus inches depth. Parent materials are interpreted as reworked andesitic volcanic clasts, glacial till. The upper 24 inches of the profile appears to be of younger age and developed separately from the lower part of the profile, which expresses an argillic horizon with a higher quantity of 3-inch to 10-inch gravel and stone beneath a clear smooth boundary. There is no sign of groundwater or redoximorphic features and roots extend to greater than 52 inches depth.

These soils are different than those shown as Umpa series on the TRPA map sheet because they are deeper, have developed in till as opposed to lahar, and express no restrictive layers at depth. They are different than Jorge series soils, which is also developed from volcanic flow material and has very gravelly sandy loam subsoil.

Soils found are unnamed and are treated as XXX and rated by Table 4 (Bailey, 1974) criteria. Soils in Soil Hydrologic Group B in the 16 to 30 percent range place in Land Capability Level 4.

CONCLUSIONS AND RECOMMENDATIONS

Soils found are unmade (XXX) and place in Land Capability Class 4.
Please refer to the following soil profile description that supports the findings and the attached map showing the spatial distribution of the appropriate land capability class on the parcel.

Respectfully submitted,

Sidney W. Davis,
CPSS /SC No. 1031

Soil Profile Description:

Oi 0 to 2 inches, conifer needles, dry leaves and wood chips.

A1 2 to 4 inches, very dark brown (10YR 2/2), moist, gravelly sandy loam; strong coarse granular structure; soft, loose, nonsticky and non plastic; many very fine and fine roots; many very fine and fine interstitial pores; 15 percent gravel; clear smooth boudary.

A2 4 to 12 inches, dark brown (10YR 3/3), moist, coarse sandy loam; weak fine subangular structure; soft, loose, nonsticky and nonplastic; common fine, medium and coarse roots; many very fine, fine, medium interstitial and few coarse tubular pores; 10 percent gravel; gradual wavy boundary.

Bw 12 to 24 inches, dark yellowish brown (10YR 3/4), moist, gravelly coarse sandy loam; moserate medium subangular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine, medium and coarse roots; common fine, medium and coarse tubular pores; few thin clay films bridging sand grains; 15 percent gravel; clear, smooth boundary.

2Bt1 24 to 40 inches; dark yellowish brown (10YR 4/4), moist, very gravelly sandy clay loam; moderate medium angular blocky structure; hard, firm, sticky and plastic; common fine and medium roots; common fine and medium tubular pores; moderately thick clay films on ped faces and lining pores; 40 percent gravel and 10 percent stone; gradual wavy boundary.

2Bt2 40 to 52 inches, dark yellowish brown (10YR 4/4), moist, extremely gravelly heavy sandy loam; moderate medium angular blocky structure; hard, firm, slightly sticky and slightly plastic; common moderately thick clay films on ped faces and lining pores; 60 percent gravel.

Notes: No groundwater or redoximorphic features.

Soil Series: Unnamed (XXX).
Soil Drainage Class: Well drained.
Soil Classification: Loamy-skeletal, mixed, frigid, Ultic Haploxeralfs
Hydrologic Soil Group: B

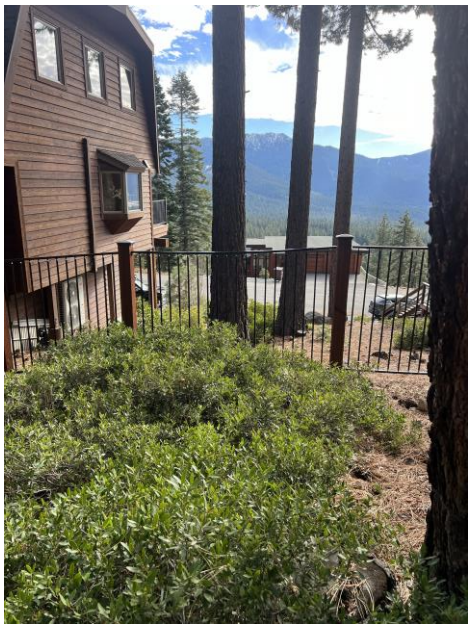

Figure 1. Landscape.

Figure 2. Soil profile.

Attachment C
Photographs

TAHOE REGIONAL PLANNING AGENCY

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PHOTOGRAPHS (Addendum to APN 125-223-04, September 12, 2024, Staff Summary)

Photo 1 – a. Soil pit. Photo 1- b. View of front of residence.

Photo 2 – a. View east from pit. Photo 2- b. View across pit to northwest corner.

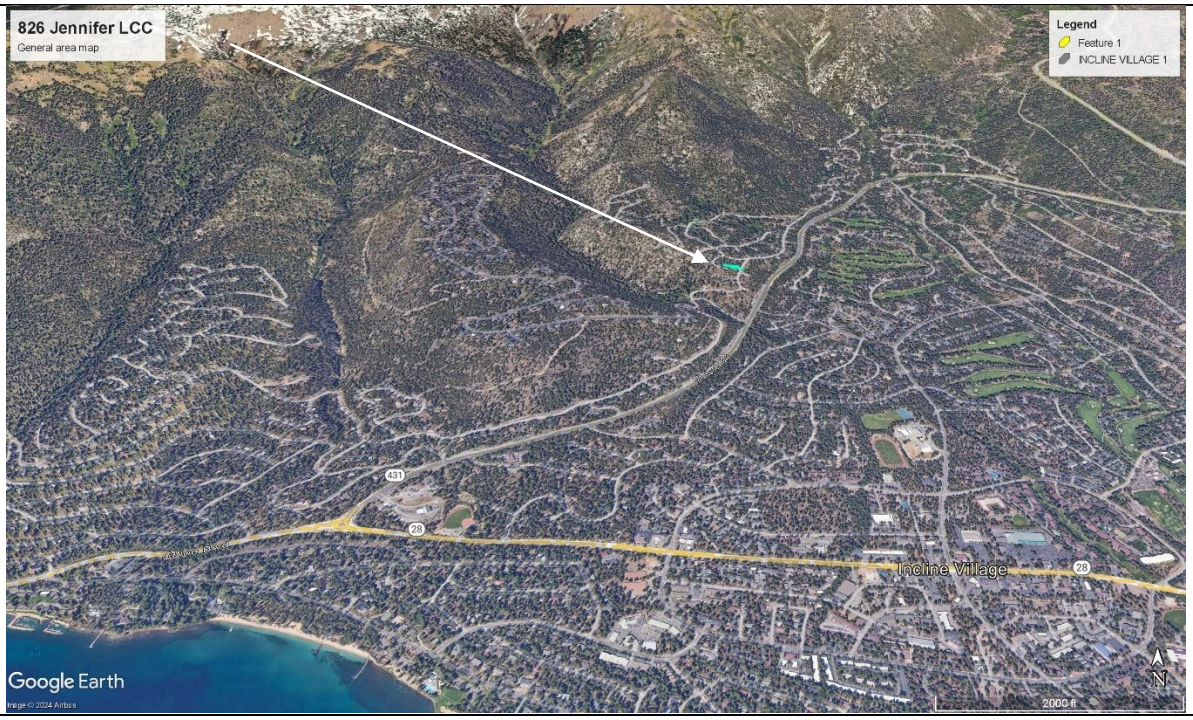

Image 1 – General location of parcel on Google Earth imagery. Parcel is in blue.

Image 2 – 1974 Soil mapunit delineations are white, soil mapunit identifier is yellow, and the parcel boundary is blue.