
STAFF REPORT

Date: July 28, 2022

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Oak Angle LLC Land Capability Challenge, 1054 Tahoe Boulevard, Washoe County, NV, APN 130-152-08, TRPA File Number LCAP2022-0440

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 1C -97,138 sq. ft. (100 percent of parcel) to Class 6- 92,938 sq. ft. (96 percent of parcel) and Class 4- 4,200 sq. ft. (4 percent of parcel).

Background:

The subject parcel is shown as Class 1C 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 Px, Pits mapunit. A land capability verification completed in 2022 verified the entire parcel as Px, pits and dumps mapunit. The updated *Soil Survey of Tahoe Basin Area, California and Nevada* (NRCS, 2007) maps this parcel as 7031 pits and dumps mapunit. This parcel has a geomorphic mapping of E2 Outwash, till, and lake deposits (Low hazard lands). The Px- pits and dumps mapunit consists of sand and gravel pits, refuse dumps, and rock quarries. Soils were not described for the Px mapunit.

A land capability challenge (LCAP2022-0440) was filed by GilanFarr and Associates on behalf of the land owner, Oak Angle LLC, on June 2, 2022. A private soil consultant was not hired for this land capability challenge, but Mr. Herzog organized the soil pit investigation. TRPA consultant, Mrs. Munnecke, visited the site on June 7, 2022, and described two soil pits.

Findings:

Two soil pits were excavated by backhoe to 60 and 52 inches. Pit A was near the center of the parcel towards the east side. Pit B was located on the cutback on the southeast portion of the parcel. Previously a pit was excavated to 25 feet (near the center along the northern side of the parcel) for a soil hydrologic investigation. This parcel is situated on the toe slope of the mountains, on the boundary where bedrock influenced soils meet the alluvial soils. This parcel was excavated for a quarry prior to 1969 based on Google Earth historic images. The site has been most recently used as a lumber mill and yard, and most of the parcel is paved.

Due to the highly altered condition of the landscape and soils on this site, historic conditions have been interpreted based on the site topo, surrounding slopes and soil conditions, historical imagery, and review of GIS data. There is no indication of an existing or historic SEZ on this parcel. The nearest swale is to the south of this parcel. A 25.5-foot-deep excavation for a soil hydrologic approval was composed of multiple layers of alluvial deposits for the entire depth, with evidence of a seasonal water table (gleyed soil colors) at 25 feet below the existing ground surface.

Soil Pit A has 4 inches of asphalt over 4 inches of roadbed gravel, over 33 inches of fill material. The natural soil surface was removed, and fill was subsequently placed on top. Natural soil is present below 42 inches. The texture of the fill material is very gravelly sandy clay loam. The texture of the natural soil is sandy loam with few rock fragments. There are no roots in this soil due to the broad coverage of asphalt, but a root or water restricting barrier was not encountered. This soil is very deep, well drained, and is a member of Soil Hydrologic Group B. There is no vegetation in the vicinity of Pit A. Pit B was excavated on the cut back to find a more natural soil condition. However, the surface soil has been excavated or eroded away. The existing surface soil texture is sandy clay loam, with loamy sand, and sandy loam subsurface textures. The vegetation on the edges of this parcel is dominated by and open Jeffrey pine forest with greenleaf manzanita and antelope bitterbrush in the understory.

In the Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974), the Px mapunit is described as pits and dumps and consists of sand and gravel pits, refuse dumps, and rock quarries. Soils were not described for the Px mapunit. The soils above this site and to the north are mapped as UmE, Umpa 15 to 30 percent slopes, and below are mapped as IsC, Inville, 2 to 9 percent slopes. These soils are not like the Umpa or Jorge soils because they are formed in alluvium and not volcanic colluvium over bedrock. These soils are similar to the Inville soil but Pit A has been too altered to determine, and Pit B lacks the rock fragments. The soils on this site are unlike any soils mapped the 1974 soil survey. They are very deep alluvial soils, without any drainage restrictions or signs of a seasonal highwater

Table 4 in the Land-Capability Classification of the Lake Tahoe Basin, California and Nevada is utilized to classify unnamed soils. Based on Table 4, this parcel is Class 6- XXX, 0-16 percent slopes and Class 4- XXX, 16-30 percent slopes.

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

Land Capability District	Area (sq. ft.) 2022 LCV	Area (sq. ft.) 2022 LCC
Class 1c (Px)	97,138	0
Class 6 (XXX, 0 to 16 % slopes)	0	92,938
Class 4 (XXX, 16 to 30 % slopes)	0	4,200
Total Parcel Area	97,138	97,138

This memorandum was prepared by TRPA 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.

BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information	
Assessor's Parcel Numbers: (APN)	130-152-08
TRPA File No. / Submittal Date:	LCAP2022-0440 / 6/2/2022
Owner or Applicant:	
Address:	1054 Highway 50 , Incline Village, NV, 89451

Environmental Setting	
Bailey Soil Mapping Unit¹ / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit	Px, pits and dumps/ HSG D/ E2 (Outwash, till, and lake deposits, (Low hazard lands).
Soil Parent Material	Alluvial deposits form mixed parent material
Slopes and Aspect	5 percent slope across paved area and up to 60 percent slope on cutbanks above. Interpretation of natural slopes adjacent to this parcel indicate the historic slopes ranged from 7 to 18 percent.
Elevation and Datum	6,379 to 6,435 feet, Google Earth
Rock Outcrops and Surface Configuration	NA.
SEZ and Hydrology Source	There is no SEZ on this parcel, or any indication of a historic swale or stream channel across this parcel.
Vegetation	There is very little vegetation on this parcel, pavement covers approximately 67 percent of the parcel, and total coverage was determined to be approximately 77 percent. The native vegetation that remains is found on the perimeter of the parcel, and is an open Jeffery pine forest with shrubs such as greenleaf manzanita and antelope bitterbrush
Ground Cover Condition	Poor (vegetation 5 %, litter/duff 15% cover)
Site Features	Paved area for old lumber yard, retail office, mill office, log shed, retaining walls and BMP infiltration structures.

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.

Field Investigation and Procedures	
Consultant and Address	Marchel Munnecke PO Box 1015 Twin Bridges, CA 95735
TRPA Staff Field Dates	June 7, 2022
SEZ Mapping / NRCS Hydric Soil	No SEZ on the parcel
Number of Soil Pits or Auger Holes and Description Depth	2 pits excavated by backhoe to 60 and 52 inches.
Additional or Repetitive TRPA Sample Locations	NA
Representative Soil Profile Descriptions	Attachment B
Areas Not Examined	Paved area for old lumber yard, retail office, mill office, log shed, retaining walls and BMP infiltration structures.

TRPA Findings	
2006 Soil Survey Map Unit	7130- Pits and dumps, Class 1C
Consultant Soil Mapping Determination and Rationale	In the Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada (Rogers, 1974), the Px mapunit is described as pits and dumps and consists of sand and gravel pits, refuse dumps, and rock quarries. Soils were not described for the Px mapunit. The soils above this site and to the north are mapped as UmE, Umpa 15 to 30 percent slopes, and below are mapped as IsC, Inville, 2 to 9 percent slopes. These soils are not like the Umpa or Jorge soils because they are formed in alluvium and not volcanic colluvium over bedrock. These soils are similar to the Inville soil but Pit A has been too altered to determine, and Pit B lacks the rock fragments. The soils on this site are unlike any soils mapped the 1974 soil survey. They are very deep alluvial soils, without any drainage restrictions or signs of a seasonal highwater. Table 4 in the Land-Capability Classification of the Lake Tahoe Basin, California and Nevada is utilized to classify unnamed soils. Based on Table 4, this parcel is Class 6- XXX, 0-16 percent slopes and Class 4- XXX, 16-30 percent slopes.
Slope Determination	5 to 60 percent existing slopes and 7 to 17 percent historic slopes
TRPA Conclusion(s)	TRPA concurs with consultants' determination and rationale above.
Applicable Area	See parcel map for soil delineations.

Attachments:

- A. Parcel map with soil map units delineated
- B. Soil Description
- C. Site Photographs
- D. Historic Slope Assessment

Attachment A

Parcel map with soil map units delineated

Attachment B

Soil Description

Oak Angle LCC Capability Challenge
August 4, 2022, Hearing Officer Meeting

1054 Tahoe Blvd.,
Incline Village, Washoe County, NV 89451
APN 130-152-08, LCAP2022-0440

Soil Profile Descriptions

Marchel Munnecke

Field Date: 6-7-2022



Photographs; Clockwise from top left, Pit A Upper section; Pit A, lower section; Pit A looking into pit.

130-152-08 -A:

Human-altered soil: Surface is covered with asphalt, with road gravels to 9 inches. Up to 14 feet of soil has been removed in this area for an old pit and fill material is evident over the older natural soil which is present at 42 inches below the existing surface.

Soil Classification: Asphaltic, mixed, frigid Dystric Xerorthents

Soil Series: XXX

Capability Class: Class 6.

Drainage Class: Well Drained

Hydrologic Group: B

Parent Material: Alluvium from primarily volcanic parent material.

Slope: 4 % **Aspect:** west to west southwest

Description:

^1Cu 0 to 4 inches; manufactured asphalt layer, extremely firm.

2^Cu 4 to 9 inches; gravel, dark grayish brown (10YR 4/2) moist; single grain; loose, loose, nonsticky and nonplastic; many very fine to fine irregular pores; 90 percent gravels; clear smooth boundary.

^Bwu 9 to 42 inches; gravelly sandy clay loam, dark yellowish brown (10YR 4/4) moist; strong medium subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; common very fine to fine irregular pores; 30 percent gravel; clear smooth boundary.

Cb 42 to 60+ inches; sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; many very fine and fine irregular pores; 10 percent gravel.



Photographs: Pit B, and view of Pit B in cut area

130-152-08 -B:

Human-altered soil: This pit was excavated near the top of the cutback in an attempt to find the natural soil on this parcel. This pit does have natural soil, but the upper several feet was removed when the pit was excavated.

Soil Classification: Coarse-loamy, isotic, frigid Ultic Haploxeralfs

Soil Series: XXX

Capability Class: Class 2 based on existing cut slope, but Class 6 based on historic slopes

Drainage Class: Well Drained

Hydrologic Group: B

Parent Material: Alluvium from primarily volcanic parent material.

Slope: 50 % **Aspect:** west southwest

Description:

- AB 0 to 10 inches; very gravelly sandy clay loam, brown (10YR 4/3) moist; strong medium granular parting to moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine to coarse roots; many very fine to fine irregular pores; 45 percent gravels; clear smooth boundary.

- Bt1 10 to 38 inches; loamy sand, yellowish brown (10YR 5/6) moist; moderate medium angular blocky structure; slightly hard, friable, nonsticky and nonplastic; common fine to medium roots; many very fine to fine irregular pores; few thin clay films bridging sand grains ; 10 percent gravels; gradual smooth boundary.

- Ct1 38 to 49 inches; sandy loam, dark yellowish brown (10YR 4/6) moist; massive; moderately hard, firm, slightly sticky and slightly plastic; common fine roots; common very fine to fine irregular pores; few thin clay films bridging sand grains 5 percent gravel; gradual smooth boundary.
- Ct2 49 to 52+ inches; sandy loam, yellowish brown (10YR 5/6) moist; massive; moderately hard, firm, nonsticky and slightly plastic; few fine roots; many very fine and fine irregular pores; few thin clay films bridging sand grains; 10 percent gravel.

Attachment C
Site Photographs

PHOTOGRAPHS (Addendum to APN 130-152-08, August 4, 2022 Staff Summary)



Photo 1 – a. Pit A. Photo 1- b. View from east to west over Pit A.



Photo 2 – a. Pit B. Photo 2 – b View from below Pit B to north.



Photo 3 – a. View from Pit A to the north. Photo 3- b. View from east to west over Pit A.



Photo 4 – a. Natural slopes to the north with existing/natural slopes of 8 to 9 percent. 4 b Natural slopes to the east with existing natural slopes of 10 to 11 percent.

imagine. plan. achieve.

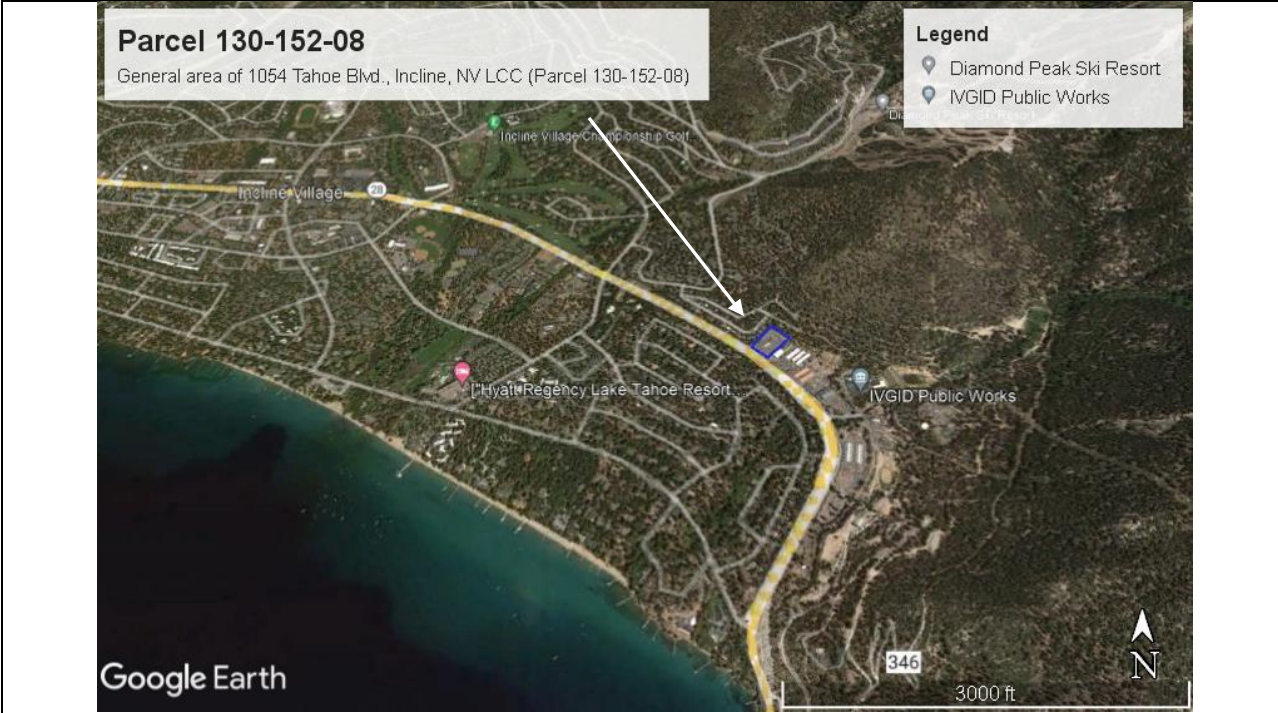


Image 1 – Google Earth image of area.

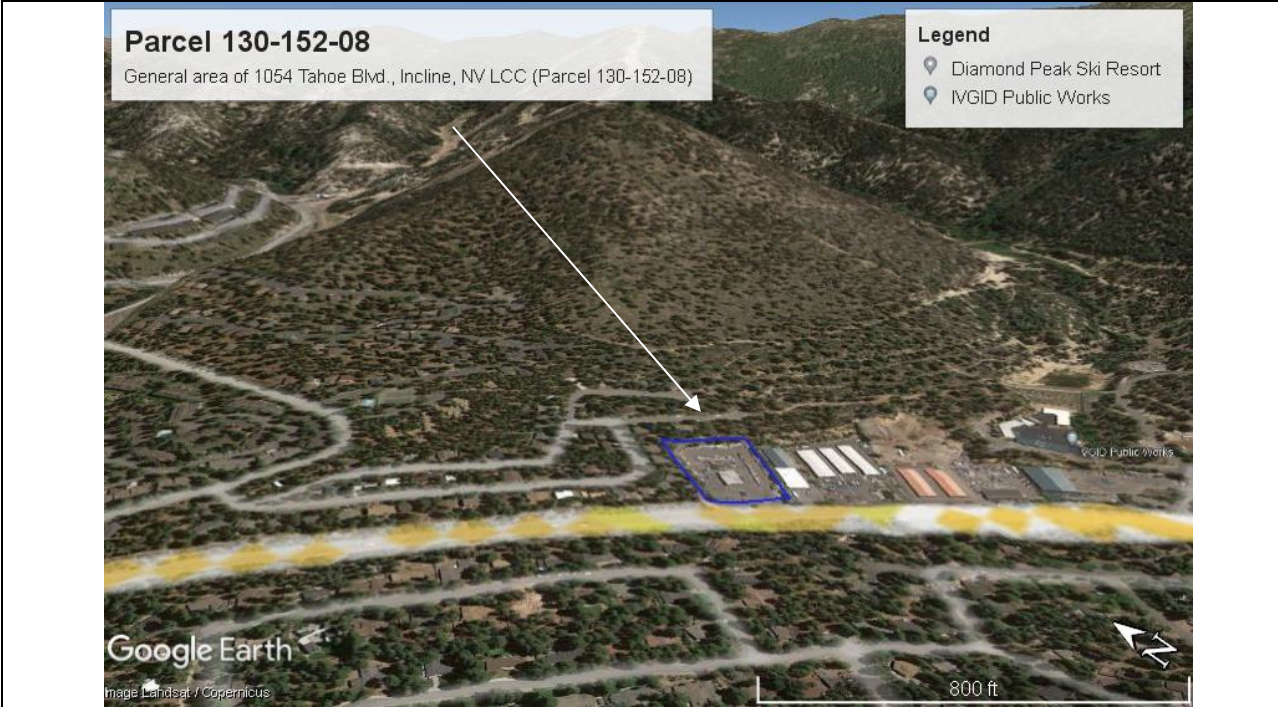


Image 2– Google Earth image of parcel area.



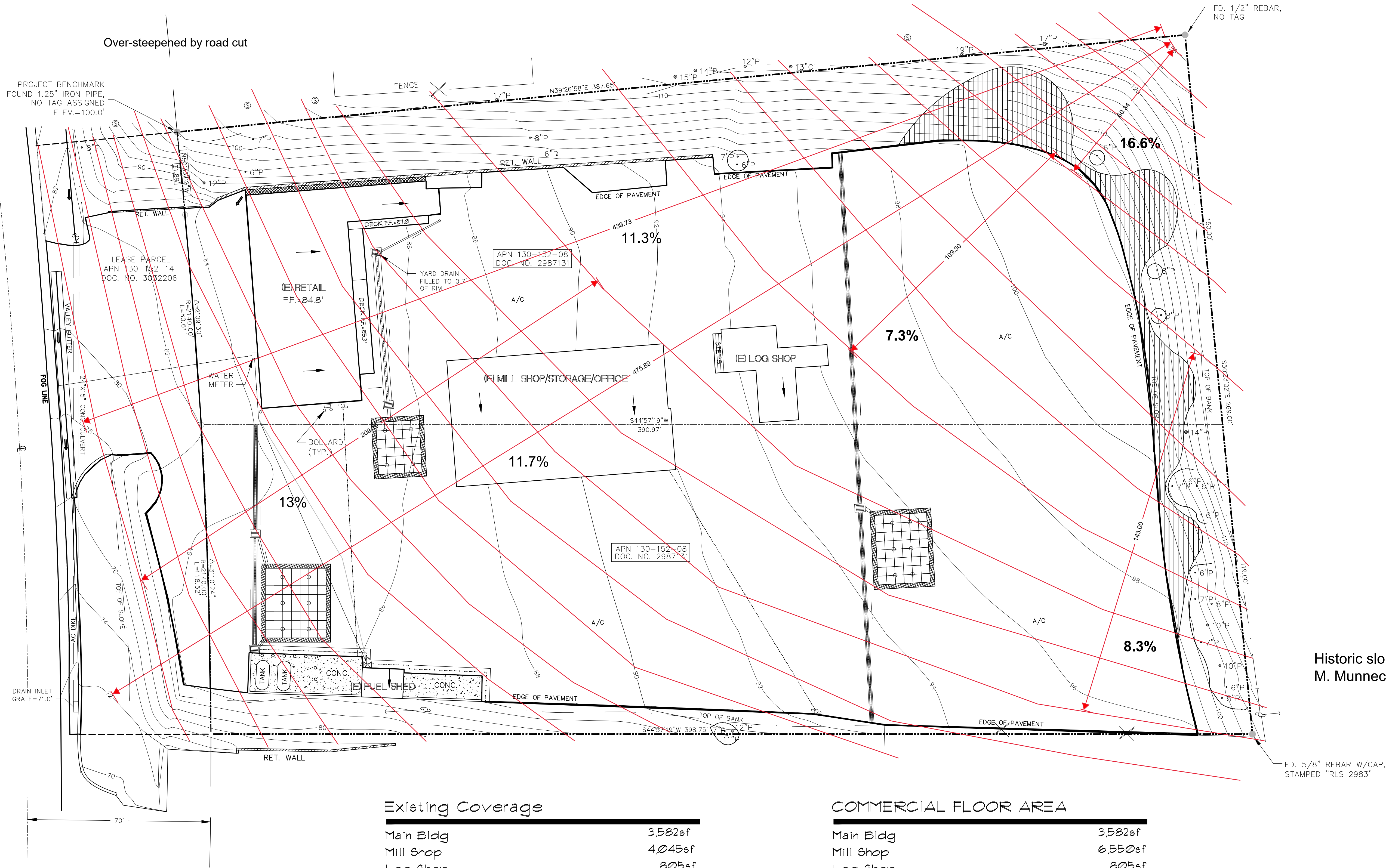
Image 3 – 2007 Soil Survey mapunits in yellow. The parcel remains mapped as 7031- pits and dumps mapunit. The area where UmE, Umpa 15 to 30 percent slopes (Class 3) was mapped is now mapped as 7151- Jorge 5 to 15 percent slopes (Class 6) and 7152- Jorge 15 to 30 percent slopes (Class 4). Mapunits 7142 – Inville 9 to 15 percent slopes (Class 6) and 7141-Inville 2 to 9 percent slopes (Class 6) are mapped below the parcel. Mapunit 7422- Cassenai- 15 to 30 percent slopes (Class 4) is mapped to the southeast of the pits mapunit.

Attachment D

Historic Slope Assessment

Attachment D Analysis of historic slopes from site topo

TAHOE BOULEVARD
(STATE HIGHWAY NO. 28)

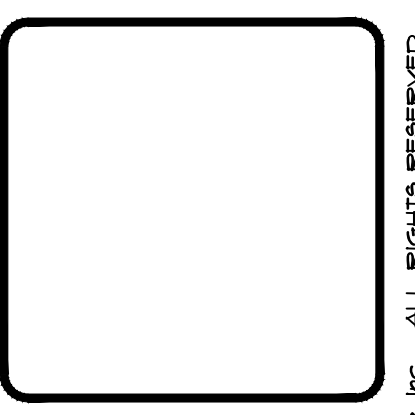


Historic slope interpretation
M. Munnecke 7/21/2022

EXISTING SITE PLAN
SCALE: 1:20

Existing Coverage	
Main Bldg	3,582sf
Mill Shop	4,045sf
Log Shop	805sf
Fuel Facility	182sf
Paving	65,230sf
Concrete (Gas)	1,154sf
Decks and wood steps	324sf
Total Existing Coverage	75,030sf
Offsite	6,833sf

COMMERCIAL FLOOR AREA	
Main Bldg	3,582sf
Mill Shop	6,550sf
Log Shop	805sf
Fuel Facility	182sf
Total CFA	11,199sf



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architecture

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TITLE: SITE PLAN EXHIBIT

CUSTOM RESIDENCE FOR:
BOATS & TAHOE STORAGE LLC
1054 TAHOE BLVD, INCLINE VILLAGE, NEVADA
LOT, BLOCK, SUB COUNTY, STATE
APN: 150-152-08

REVISIONS	

FILE: 1054 TAHOE BLVD

DATE: 06/02/2021

SCALE: 1:20

DRAWN: CF

SHEET:
C1.e
CF 11 SHEETS