Bryan Canyon Road Pond

Special Use Permit

August
2021

LUMOS & ASSOCIATES

9222 Prototype Drive
Reno, Nevada 89521
775.827.6111
www.LumosInc.com

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information	**Staff Assigned Case No.:**
Project Name: Bryan Canyon Road Pond Special Use Permit	
Project Description: This application requests an SUP for grading of a pond.	
Project Address: 0 Bryan Canyon Roaad	
Project Area (acres or square feet): 346.480 +/-acres (Development Area is only 9.6+/- acres)	
Project Location (with point of reference to major cross streets **AND** area locator): Bryan Canyon Road and Ponderosa	

Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
055-301-38	346.480 +/- acres		

Indicate any previous Washoe County approvals associated with this application:
Case No.(s).

Applicant Information (attach additional sheets if necessary)

Property Owner:		**Professional Consultant:**	
Name: SC Advisors, LLC		Name: Lumos & Associates	
Address: PO Box 3390		Address: 9222 Prototype Drive	
Stateline, CA	Zip: 89449	Reno, NV	Zip: 89521
Phone:	Fax:	Phone: 775-827-6111	Fax:
Email:		Email: ethomas@lumosinc.com	
Cell:	Other:	Cell:	Other:
Contact Person:		Contact Person: Ed Thomas, PE	
Applicant/Developer:		**Other Persons to be Contacted:**	
Name: SC Advisors, LLC		Name: CFA, Inc.	
Address: PO Box 3390		Address: 1150 Corporate Blvd	
Stateline, CA	Zip: 89449	Reno, NV	Zip: 89506
Phone:	Fax:	Phone: 775-850-7073	Fax:
Email:		Email: dsnelgrove@cfareno.com	
Cell:	Other:	Cell: 775-737-8910	Other:
Contact Person:		Contact Person: Dave Snelgrove, AICP	

For Office Use Only

Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Property Owner Affidavit

Applicant Name: SCAP 7, LLC

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
COUNTY OF WASHOE)

I, John J Hussey,
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 055-301-38

Printed Name John J Hussey

Signed

Address 466 Pithan Terrace, Incline Village NV

Subscribed and sworn to before me this 26 day of July, 2021.

Notary Public in and for said county and state

My commission expires: 05/26/2023

(Notary Stamp)

Notary Certificate attached/affixed pursuant
☐ CA Civil Code § 1189
☒ CA Government Code § 8202

*Owner refers to the following: (Please mark appropriate box.)

- ☒ Owner
- ☐ Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- ☐ Power of Attorney (Provide copy of Power of Attorney.)
- ☐ Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- ☐ Property Agent (Provide copy of record document indicating authority to sign.)
- ☐ Letter from Government Agency with Stewardship

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange

Subscribed and sworn to (or affirmed) before me on this 26th day of July, 2021, by John J Hurry,
proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

EVAN BISSETT
Notary Public - California
Orange County
Commission # 2290130
My Comm. Expires May 26, 2023

(Seal)

Signature

Special Use Permit Application
Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

   An SUP is being requested to facilitate grading to create a pond structure and end a code violation case regarding existing grading that had occurred on site.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

   See Tab B in the submittal package for a site plan addressing this requested information.

3. What is the intended phasing schedule for the construction and completion of the project?

   It is anticipated that construction/grading will commence near to the end of 2021 and completion of the proposed grading will conclude prior to the end of 2022.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

   The location chosen for the pond is entirely for aesthetic reasons of the natural beauty. It also provides a "beneficial" use to maintain senior water rights.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

   An increase in wildlife attracted to the pond, potential use as a water source for firefighting equipment

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

   No negative impacts are anticipated with this request

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

   As this is proposed to be private pond in a rural area, no formal parking, signs or lighting is planned. Revegetation will incorporated around the pond.

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

❑ Yes	■ No

9. Utilities:

a. Sewer Service	Not Applicable to this project
b. Electrical Service	Not Applicable to this project
c. Telephone Service	Not Applicable to this project
d. LPG or Natural Gas Service	Not Applicable to this project
e. Solid Waste Disposal Service	Not Applicable to this project
f. Cable Television Service	Not Applicable to this project
g. Water Service	Not Applicable to this project

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #	See Permits in Tab D	acre-feet per year	
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

10. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Station 30, 3905 State Route 429
b. Health Care Facility	Renown Urgent Care - North Carson, 2814 N. Carson Street, Carson City
c. Elementary School	Not Applicable to this project
d. Middle School	Not Applicable to this project
e. High School	Not Applicable to this projec
f. Parks	Not Applicable to this project
g. Library	Not Applicable to this project
h. Citifare Bus Stop	Not Applicable to this project

Special Use Permit Application
for Grading
Supplemental Information

(All required information may be separately attached)

1. What is the purpose of the grading?

   To create a natural looking pond

2. How many cubic yards of material are you proposing to excavate on site?

   A total cut area associated with the grading plan is 29,062+/- CY, but the amount of fill will bring the grading work to a virtual balance with a 58+/- CY identified as excess when considered with the fill area.

3. How many square feet of surface of the property are you disturbing?

   9.6 +/- acres (418,176 +/- sf)

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

   The grading plan for the site is intended to balance. 58+/- CY is shown as excess material on Sheet C2 with this application. This excess material will be spread across the site in a thin layer across additional fill areas to bring the site into balance.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

   No, in order to accommodate the intended water amount, the affected areas must either be wider or deeper. In this instance, the applicant has chosen to affect more land horizontally rather than digging deeper.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

   Yes, the requested SUP is in response to a code enforcement action, WVIO-ENG 20-0015. The requested SUP is intended to provide approval for the private pond that was originally envisioned.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

   Yes, please see site photos in the project narrative that show the existing disturbance.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

No. Currently, no structures are constructed on adjoining properties.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

No, the proposed area of grading is entirely contained within the parcel.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

Maximum 3:1 slope.

11. Are you planning any berms?

Yes XXX	No	If yes, how tall is the berm at its highest? 16-18 feet

12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

Not applicable

13. What are you proposing for visual mitigation of the work?

The site cannot be seen from anywhere in the valley or from any public right of way due to the topography surrounding this bowl area. As such, no visual mitigation is seen to be necessary.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

No trees are intended to be removed with the approval of this SUP.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

An appropriate seed mix for the area and terrain will be provided with the final plans for the project.

16. How are you providing temporary irrigation to the disturbed area?

No temporary irrigation is proposed. Hydro-seeding or native vegetation that naturally occurs will be incorporated.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

No.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No X	If yes, please attach a copy.

TAB A

Table of Contents

Project Description

Project Request

This application is a request for a special use permit for grading on a portion of the subject parcel. The proposed grading is for a pond that will provide a beneficial use of permitted water that the property owner holds. The pond is proposed to be private but would provide a watering hole for wildlife in the area and an environment for birds. The pond is proposed to be stocked for private use by the owner for fishing.

The proposed pond area is located towards the southern portion of APN 055-301-38, a 346.5+/- acre parcel. The proposed pond area grading totals 9.6+/- acres, which is +\-2.8% of the total site.

This application is presented to address previous grading activities were commenced (in error) by the applicant and their contractor. With this requested special use permit, certain thresholds associated with grading (Article 438) are specifically requested for review and approval as well as review and approval of Hillside Development (Article 424) considerations.

Article 438 (Grading) Requests

The following code sections from Section 110.438.35 (Major Grading Permit Thresholds) are specifically included with this application:

Grading on slopes of less than (flatter than) fifteen (15) percent:

- 110.438.35(a)(1)(i)(C) – Area – Grading of an area of more than four (4) acres on a parcel of any size.
- 110.438.35(a)(1)(ii)(A) – Volume – Excavation of five thousand (5,000) CY or more…

Grading on slopes of fifteen (15) percent or greater (steeper):

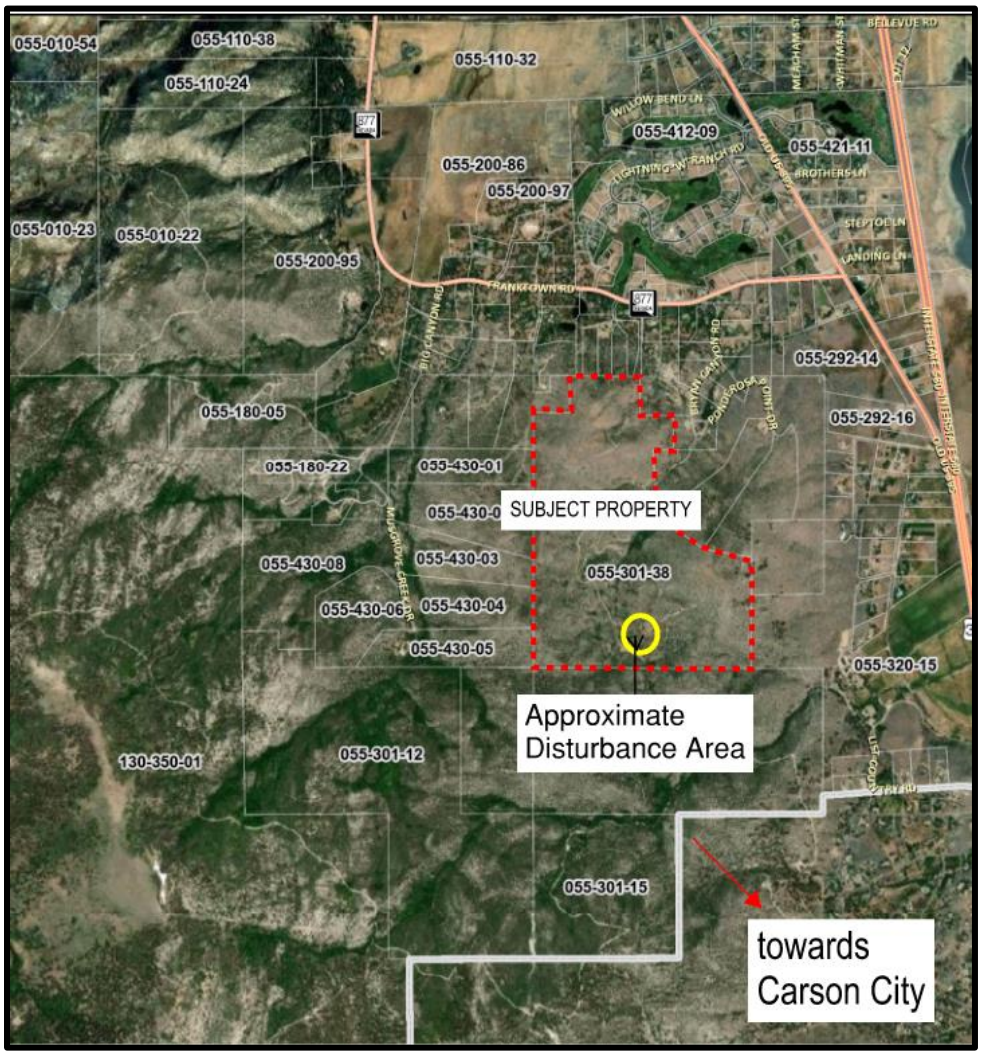
- 110.438.35(a)(2)(i)(B) – Area - Grading of ten (10) percent or more of the area of the parcel on parcels six (6) acres or greater in size ----- Although the overall parcel is significantly large, this threshold is believed to be crossed as the development site is only 9.6+/- acres and the portion of the development site that has grading in association with the pond is greater than 20% of the development site area.
- 110.438.35(a)(2)(ii)(A) – Volume – Excavation of one thousand (1,000) CY or more…

General thresholds regardless of slope:

- 110.438.35(a)(4) – Grading to construct a permanent earthen structure greater than six (6) feet in height on the remainder of the property.
- 110.438.35(a)(6) – Creation of a dam structure that holds (retains) more than twenty-five thousand cubic feet of water.

Property Location

The subject parcel contains 346.5+/- acres of land but only 9.6+/- acres or +/-2.8% of subject parcel is proposed to be disturbed with this grading. The development site is located in the southern portion of the subject parcel. A Vicinity Map is provided below showing the subject parcel and development site that is associated with this request.



Master Plan and Zoning

The subject parcel is master planned general rural (GR) and zoned General Rural (GR). The proposed grading for the pond is allowed under the existing zoning designation.

Project Summary

Overview – The proposed grading project consists of earthwork on a small portion of the 346.5+/- acre parcel (APN 055-301-38). Allowance of this grading activity will provide a necessary water structure to create a "beneficial" use for the maintenance of existing water rights.

The proposed grading will create a pond (mostly manmade) located near the southern boundary of the parcel and be supplied with water by an existing well located west of the pond.

Revegetation

Native revegetation will be incorporated into the final treatment around this pond area using strippings from the site and an appropriate seed mix for the area (to be defined with the final grading permit). There is no formal landscaping proposed as this is simply the creation of a pond in a high desert foothills type setting. Formal landscaping, as is required by code would be out of character for the area in which the development site is located.

Site Hydrology

The preliminary hydrology report is provided in Tab C with this application.

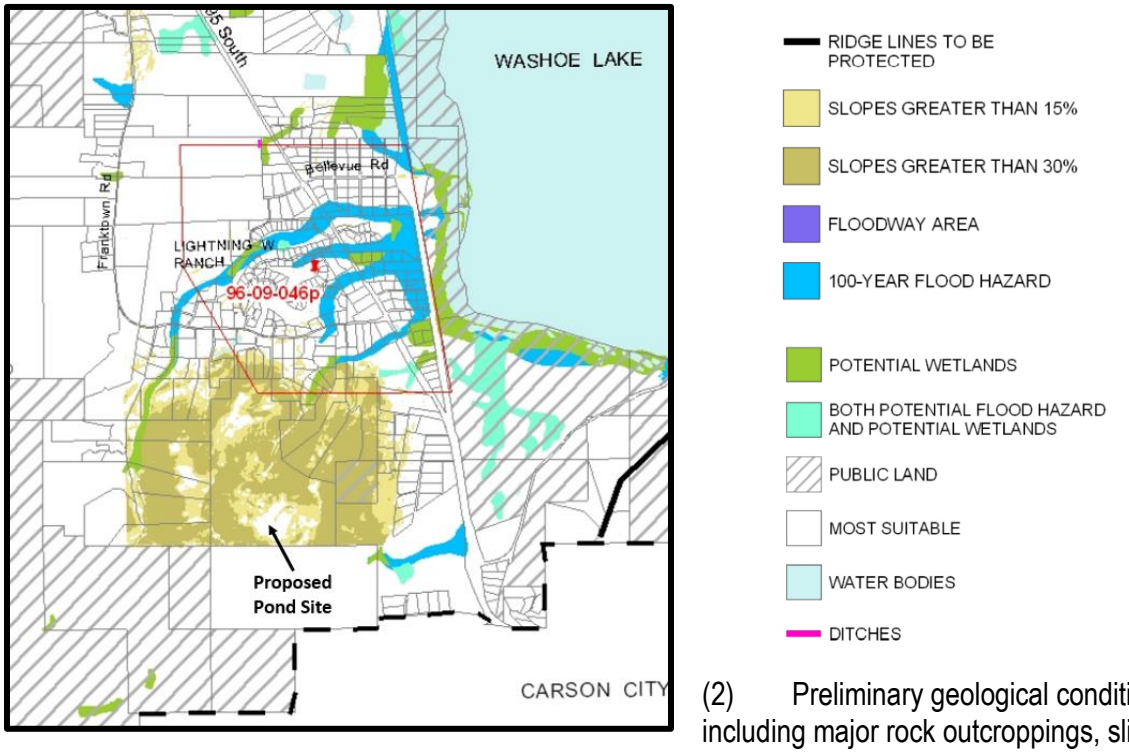
Hillside Development Site Analysis

Following is a review of the supplemental review items required under Article 424 (Hillside Development) in the Washoe County Development Code. Each review item listed in section 110.424.15 is provided

a. Site Analysis

(1) Major topographic conditions including ridgelines, ravines, canyons and knolls;

Below is an excerpt from the South Valleys Area Plan – Development Suitability Map showing the location of the proposed pond being in an area suitable for development and surrounded by topography. The development site sits in a bowl that helps to conceal views of the pond and associated grading from lands in the valley and along public rights-of-way.



(2) Preliminary geological conditions including major rock outcroppings, slide areas and areas underlain with faults that have been active during the Halocene epoch of geological time;

Seismic Considerations are included in the Geotechnical Investigation Report, provided in Tab C of this application package.

(3) Preliminary soil conditions including soil type, expansiveness, slumping, erodibility and permeability;

Soils Conditions have been reviewed in the Geotechnical Investigation Report, provided in Tab C of this application package.

(4) Significant surface hydrological conditions including natural drainage courses, perennial streams, floodplains, wetlands and ponding areas;

No significant hydrologic resources are identified to be within the development area.

(5) The location and types of significant vegetation including known rare and endangered plant species and general plant communities;

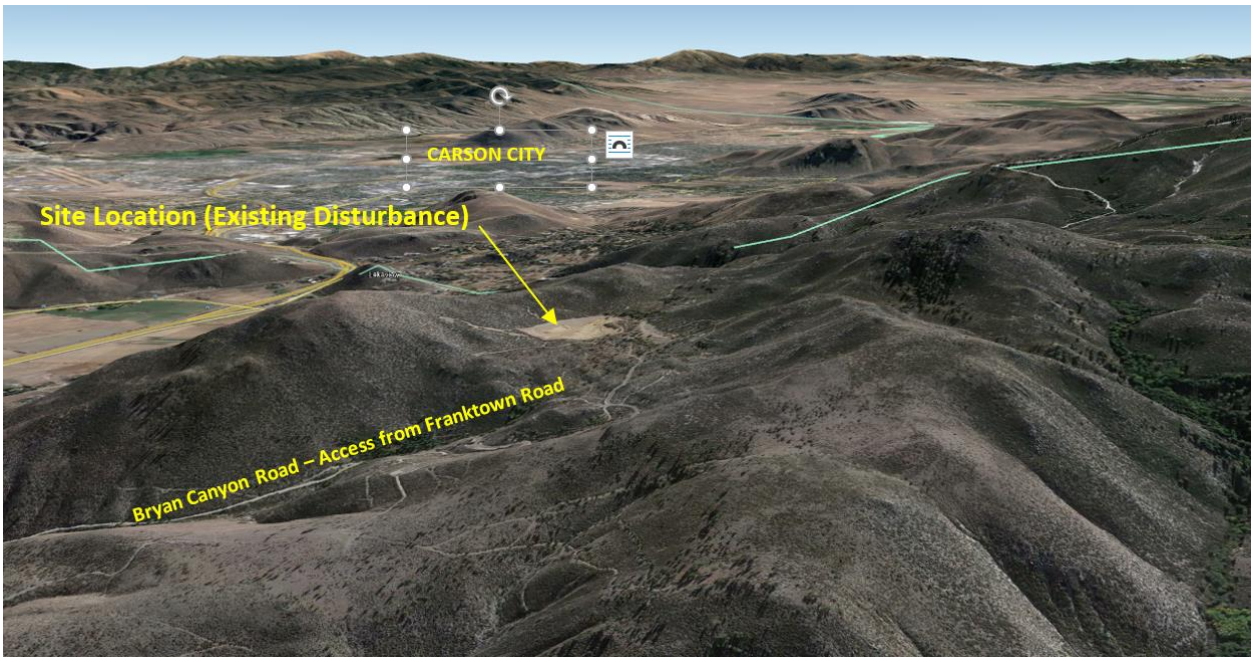
No rare or endangered plant species are known to be located in the area of the proposed pond by the applicant or consultants on this project.

(6) Habitat areas for rare or endangered animal species;

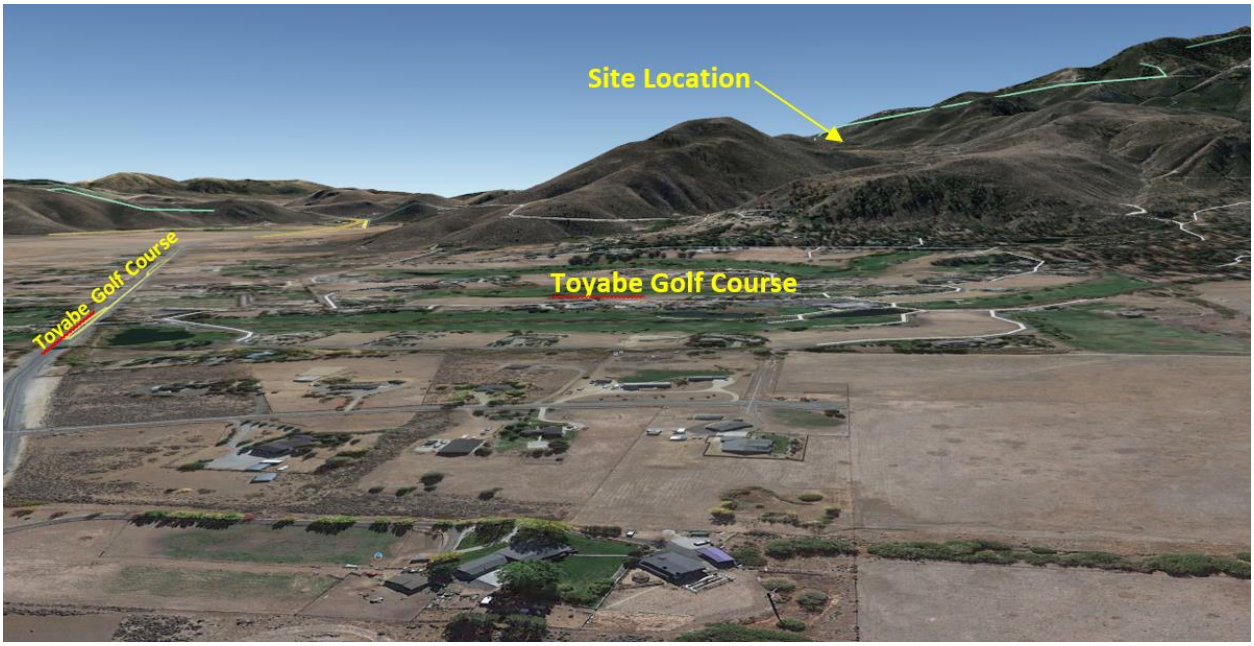
The location of a pond will have no negative impact on any habitat within the area. From review of the Washoe County habitat area maps from the Conservation Element of the Washoe County Master Plan, only Mule Deer appear to have Key winter habitat in the area of the development site. The pond will provide a water supply for the Mule Deer and can be seen as a benefit.

(7) Preliminary viewshed analysis including cross sections of views to and from the development site from all major roadways within one (1) mile of the project site, and from major focal points on the project site;

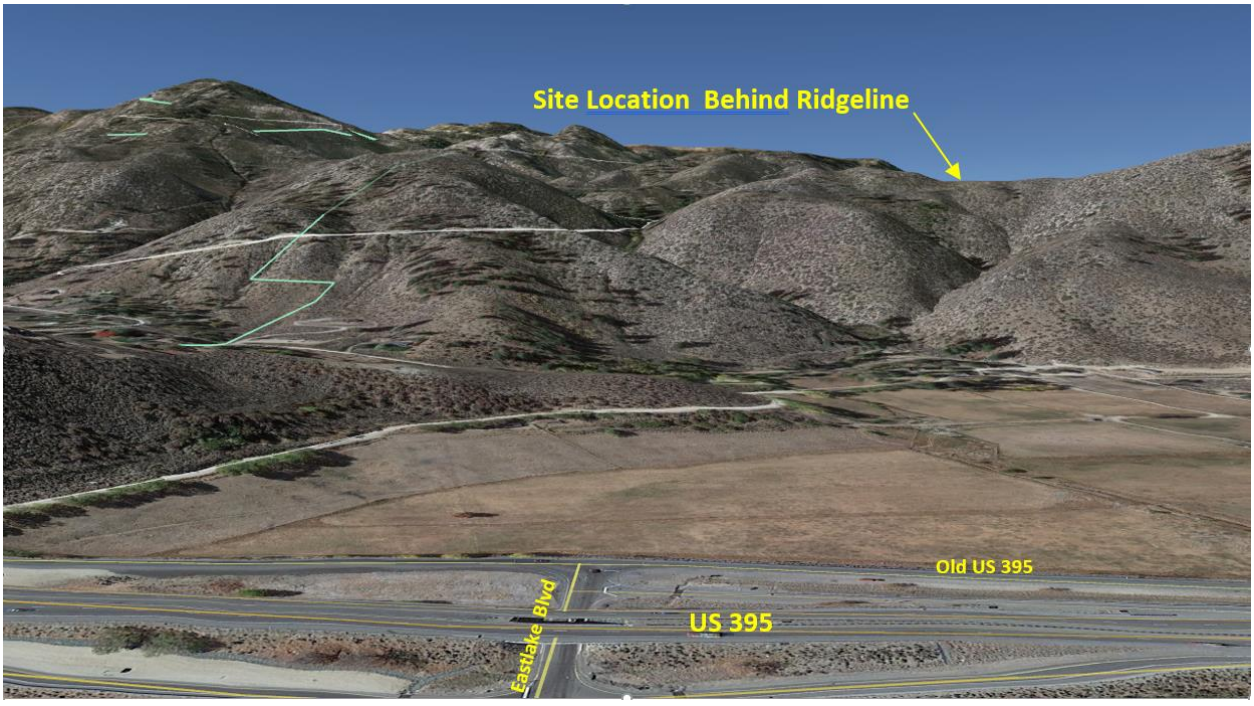
Below are aerial images viewed at varying perspectives toward the site that show the proposed location of the pond is not visible from major roadways and vantage points that are in the habited portions of the Washoe Valley area.



Perspective view of the development site from above, viewing toward the southeast. The access canyon (Bryan Canyon and Bryan Canyon Road can be seen in the foreground and the existing disturbance area associated with the proposed pond can be seen in this aerial image.



Perspective view toward the site from a couple hundred feet above the ground surface. View exposes that the area of the pond cannot be viewed from this vantage point. View is looking south from north of the Toyabe Golf Course toward the site.



Perspective view toward the site from a couple hundred feet above the ground surface. View exposes that the area of the pond cannot be viewed from this vantage point due to natural topographic view blockage. View is looking West from the intersection of Eastlake Blvd and U.S. 395 toward the site.

(8) How the development responds to the unique conditions of the hillside; and

For the most part, the development exists in the lesser slope areas (as is evidenced on the Slope Analysis Map provided as Sheet C4 in Tab B of this application. The proposed pond could have been naturally occurring with a slightly higher ground being formed, naturally at the northern portion of the bowl. The site is well suited to have a pond (man-made or natural.

(9) A slope analysis, submitted on a topographic map with contour intervals of at least five (5) feet for planning purposes.
(i) 0 - 15 percent;
(ii) 15 - 20 percent;
(iii) 20 - 25 percent;
(iv) 25 - 30 percent; and
(v) Greater than 30 percent.

A Slope Analysis Map is provided as Sheet C4 in Tab B using the slope categories noted above.

b. **Developable Area Map.**
A developable area map, prepared pursuant to Section 110.424.20(b).

The Existing Site and Preliminary Grading Plans, coupled with the Slope Analysis Map (Sheets C1, C2 and C3), provided with this application adequately address site developable area as the total area of disturbance is only +/-2.8% of the entire subject parcel. The proposed location of the pond, as has been noted previously within this project narrative The total amount of 30% or steeper slopes is only 804+ SF of the 9.6+/- acre development site area or less than 2/10 of 1% of the total development site area.

c. **Constraint and Mitigation Analysis**.
A detailed analysis of how the identified constraints will be mitigated and incorporated into the project's design.

There are no constraints that to the development of this site for a pond. As such, there is no mitigation analysis that is foreseen to be necessary.

d. **Washoe County Master Plan Amendment.**

Not applicable. No Master Plan Amendment is proposed with this application.

Existing Site Photos

The development site slopes from south to northwest. The site lies at the intersection of a number of informal dirt trails that can be seen on the Washoe County GIS map. Site photos showing the access road to the development site and the existing site disturbance are provided, below.

View of paved section of Bryan Canyon Road (access to the development site/pond location) – view near the northern entry to the subject parcel

View of gravel section of Bryan Canyon Road (access to the development site/pond location) – view nearing the development site.

View to the north of the existing disturbance at the development site

View to the southwest of the existing disturbance/development area. Area vegetation can be seen in the foreground.

Special Use Permit Legal Findings Review

Section 110.810.30 -- Findings. Prior to approving an application for a special use permit, the Planning Commission, Board of Adjustment or a hearing examiner shall find that all of the following are true:

a) Consistency. The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan;

The proposed SUP for grading improvements has been prepared to meet the design requirements set forth under the Washoe County Master Plan and Development Code. The subject property is contained within the South Valleys Area Plan Suburban Character Management Area.

These measures will be met with the proposed grading and drainage improvements.

SV.1.6 The following Regulatory Zones are permitted within the West Washoe Valley Suburban Character Management Area:

a. General Rural (GR – One unit per 40 acres).
b. Low Density Rural (LDR – One unit per 10 acres).
c. Medium Density Rural (MDR – One unit per 5 acres).
d. Public/Semi-public Facilities (PSP).
e. Parks and Recreation (PR).
f. Open Space (OS).
g. High Density Rural (HDR – One unit per 2.5 acres).

The development site is zoned GR and appropriate to the Master Plan and the WWVRCMA.

SV.2.3 Site development plans in the South Valleys planning area must submit a plan for the control of noxious weeds. The plan should be developed through consultation with the Washoe County District Health Department, the University of Nevada Cooperative Extension, and/or the Washoe-Storey Conservation District. The control plan will be implemented on a voluntary compliance basis.

An appropriate control plan will be submitted with final plans, as is typically required through condition of approval.

SV.2.14 Development activities should be designed to support the efficient use of infrastructure and the conservation of recharge areas, habitat, and open vistas.

The proposed drainage will provide an additional recharge area for the West Washoe Valley area.

SV.2.16 The approval of special use permits and administrative permits must include a finding that the community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.

The proposed grading SUP will not negatively impact the surrounding parcels owners nor community character. The pond structure is intended to directly affect the parcel owner by providing a use for existing water rights in the area. Indirectly, the pond structure should provide a water source for wildlife in the area, particularly mule deer and may be available as a water source for fire fighting efforts, if necessary and agreed by all stakeholders in such use..

b) Site Suitability. The site is physically suitable for the type of development and for the intensity of development;

Response: The pond is suitable within the area in which is it located and with slightly different topography at the northwest corner of the pond, could be naturally occurring.

c) Issuance Not Detrimental. Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area; and

Response: This request will not be detrimental to the character of the surrounding area and is appropriate to the setting of a forest/natural area in the foothills of the Sierra Nevada mountain range.

d) Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Response: Not applicable as there are no military installations in proximity to the project site.

TAB B

LOCATION MAP

EXP. 6/30/2022

22x34 SHEETS = HORIZONTAL:1"=300'
11x17 SHEETS = HORIZONTAL:1"=600'

LUMOS & ASSOCIATES

308 N. CURRY ST., STE. 200
CARSON CITY, NV 89703
TEL: 775.883.7077

WWW.LUMOSINC.COM
INFO@LUMOSINC.COM

SCAP 7, LLC

BRYAN CANYON ROAD POND
SPECIAL USE PERMIT
EXISTING SITE PLAN

WASHOE VALLEY — WASHOE COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY

PRELIMINARY
FOR SUP REVIEW
AUGUST 2021

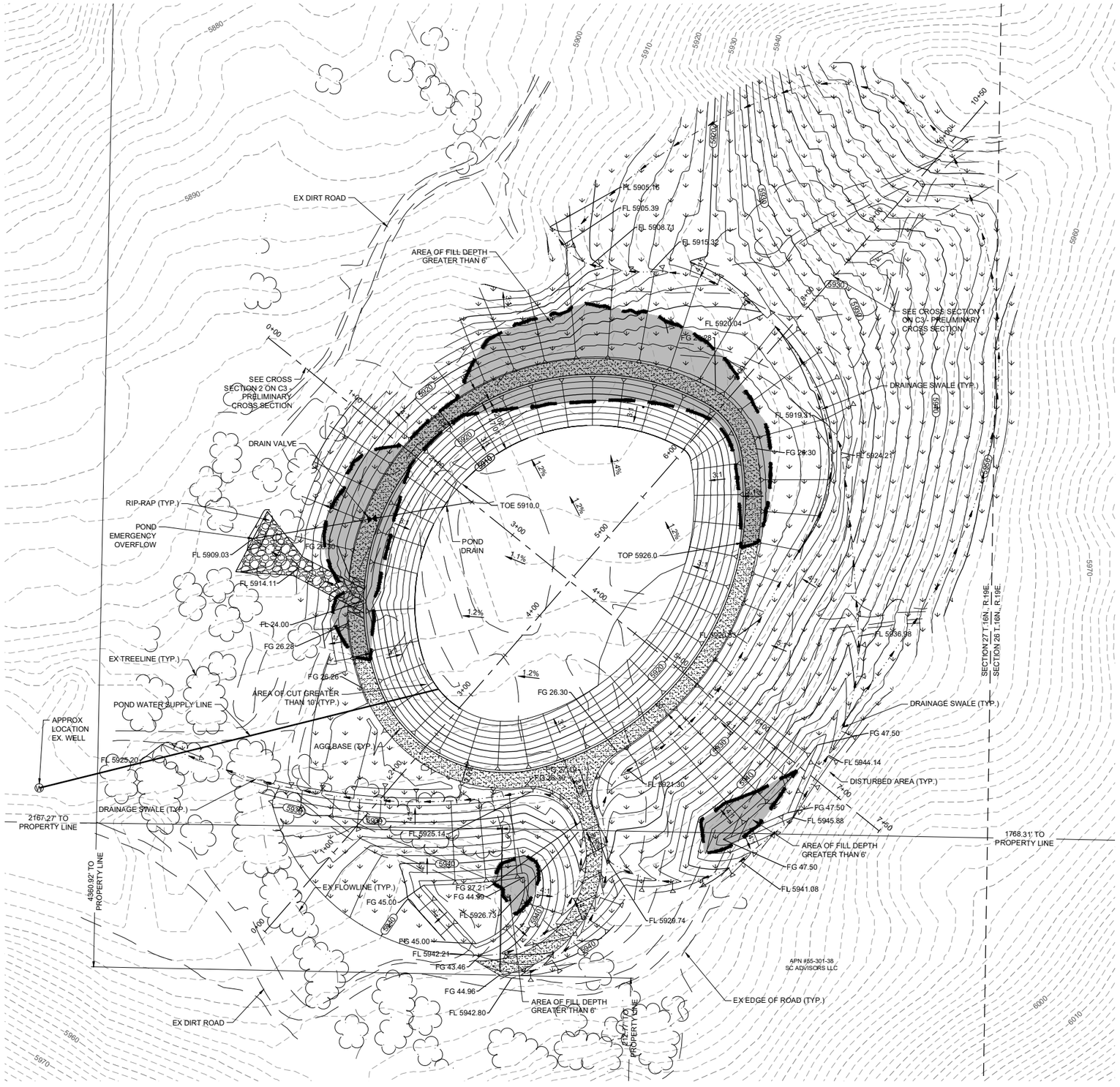
BAR IS 1 INCH ON ORIGINAL DRAWING
0 50'

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C1

DRAWN BY:	MCR
DESIGNED BY:	ET
CHECKED BY:	BM
JOB NO.:	10334.000

L:\AD\10334.000 - Bryan Canyon Road Pond SUP\DWG\Sheets\10334000-SITE PLAN.dwg,C1 EXISTING SITE PLAN,
07/28/2021 12:58 pm Brad



SUP LEGEND

- AREAS OF FILL GREATER THAN 6'
- AGGREGATE ROAD BASE SURFACE
- REVEGETATION AREA

GRADING LEGEND

- EX ACCESS ROAD
- EX FLOWLINE
- PROP FLOWLINE

GENERAL NOTES

1. TO THE BEST OF MY KNOWLEDGE, BELIEF, AND ABILITY THESE PLANS ARE IN COMPLIANCE WITH WASHOE COUNTY DEVELOPMENT CODE.

EARTHWORK TABLE

DISTURBED AREA - TOTAL	9.6 AC.
CUT	29,062 CU. YD
FILL	29,003 CU. YD.
TOTAL EARTHWORK VOLUME	58 CU. YD. (CUT)
MAXIMUM DEPTH OF CUT	15 FT
MAXIMUM DEPTH OF FILL	16 FT
AREA OF CUT GREATER THAN 10'	15,536 SF
AREA OF FILL GREATER THAN 10'	12,869 SF
POND VOLUME @ EL. 5924	2.9 AC. FT.
NORMAL WSEL	5924
AREA OF FILL GREATER THAN 6' DEEP	39,471 SF = 0.91 AC

LUMOS & ASSOCIATES
308 N. CURRY ST., STE. 200
CARSON CITY, NV 89703
TEL: 775.883.7077
WWW.LUMOSINC.COM
INFO@LUMOSINC.COM

PROFESSIONAL ENGINEER - STATE OF NEVADA
EDWARD C. THOMAS
8/6/21
CIVIL
No. 9740
EXP. 6/30/2022

SCAP 7, LLC

BRYAN CANYON ROAD POND
SPECIAL USE PERMIT
PRELIMINARY GRADING PLAN

WASHOE COUNTY — NEVADA

WASHOE VALLEY

REV	DATE	DESCRIPTION	BY

PRELIMINARY
FOR SUP REVIEW
AUGUST 2021

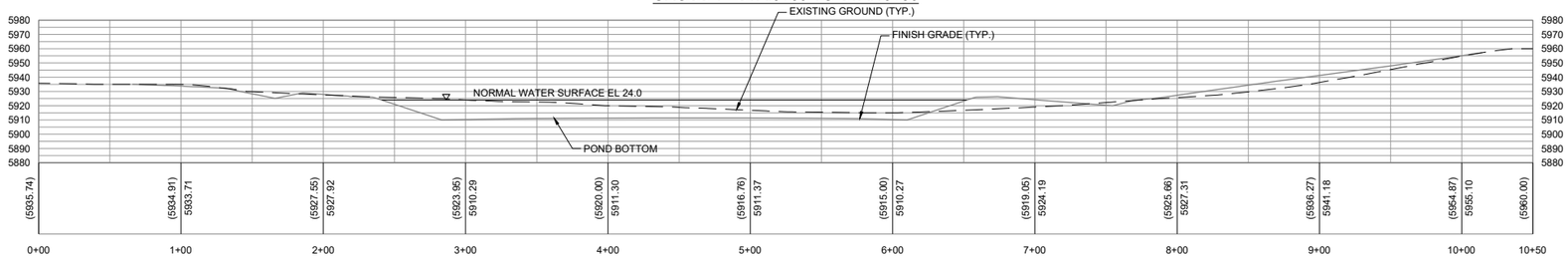
BAR IS 1 INCH ON ORIGINAL DRAWING
0 50'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C2

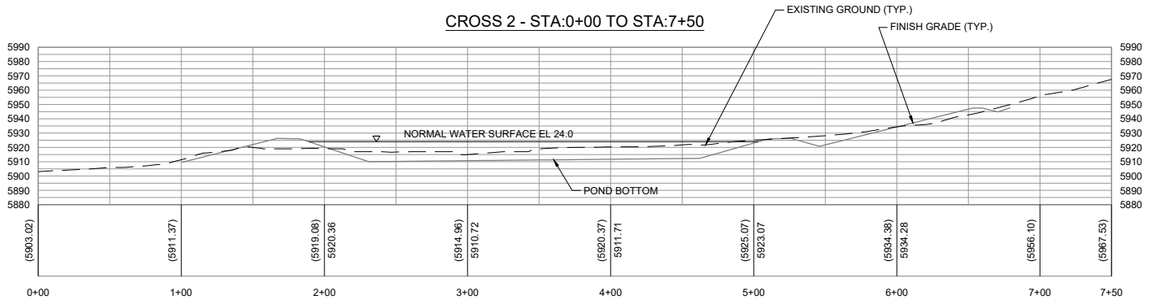
DRAWN BY: MCR
DESIGNED BY: ET
CHECKED BY: BM
JOB NO.: 10334.000

L:\APro\10334.000 - Bryan Canyon Road Pond SUP\DWG\Sheets\10334000-SHEETS.dwg,C2 PRELIMINARY GRADING PLAN, 08/06/2021 08:54 pm ethomas

CROSS 1 - STA:0+00 TO STA:10+50



CROSS 2 - STA:0+00 TO STA:7+50



LUMOS & ASSOCIATES

308 N. CURRY ST., STE. 200
CARSON CITY, NV 89703
TEL: 775.883.7077

WWW.LUMOSINC.COM
INFO@LUMOSINC.COM

PROFESSIONAL ENGINEER STATE OF NEVADA
EDWARD C. THOMAS
8/6/21
CIVIL
No. 9740
EXP. 6/30/2022

SCAP 7, LLC

BRYAN CANYON ROAD POND
SPECIAL USE PERMIT
PRELIMINARY CROSS SECTION

WASHOE VALLEY — WASHOE COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY
		PRELIMINARY FOR SUP REVIEW AUGUST 2021	

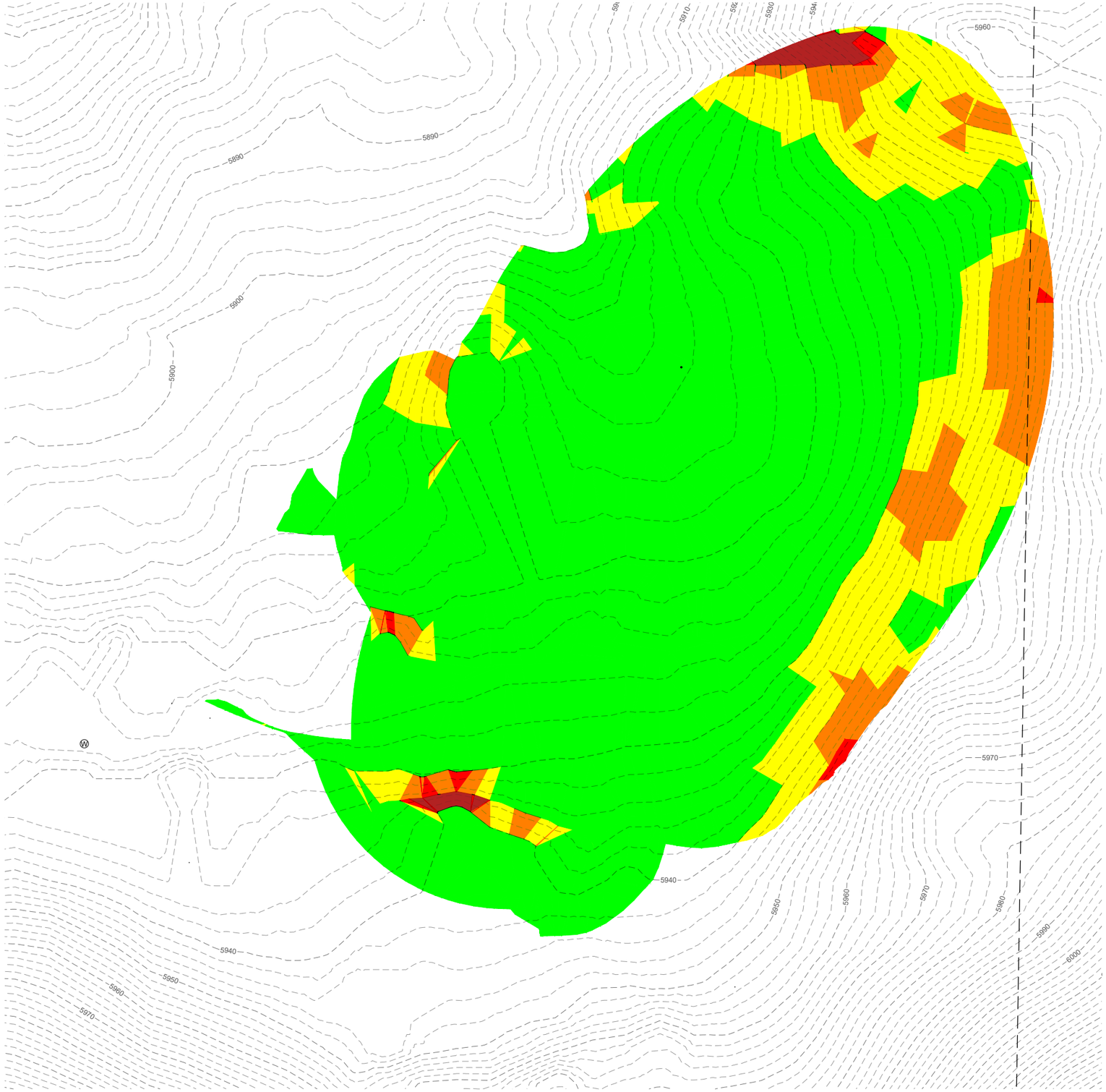
BAR IS 1 INCH ON ORIGINAL DRAWING
0 50'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

0 50' 100'
22x34 SHEETS = HORIZONTAL:1"=50'
11x17 SHEETS = HORIZONTAL:1"=100'

C3

DRAWN BY:	MCR
DESIGNED BY:	ET
CHECKED BY:	BM
JOB NO.:	10334.000

L:\LAProj\10334.000 - Bryan Canyon Road Pond SUP\DWG\Sheets\10334000-SHEETS.dwg,C3 PRELIMINARY CROSS SECTION, 07/28/2021 01:02 pm mrae



SLOPES TABLE				
Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	15.00%	317959.69	
2	15.00%	20.00%	67993.73	
3	20.00%	25.00%	28389.36	
4	25.00%	30.00%	1761.64	
5	30.00%	100.00%	3191.63	

PROFESSIONAL ENGINEER – STATE OF NEVADA
EDWARD C. THOMAS
8/6/21
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No. 9740
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0 50' 100'
22x34 SHEETS = HORIZONTAL:1"=50'
11x17 SHEETS = HORIZONTAL:1"=100'

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SCAP 7, LLC

BRYAN CANYON ROAD POND
SPECIAL USE PERMIT
SLOPE ANALYSIS MAP

WASHOE VALLEY WASHOE COUNTY NEVADA

REV	DATE	DESCRIPTION	BY

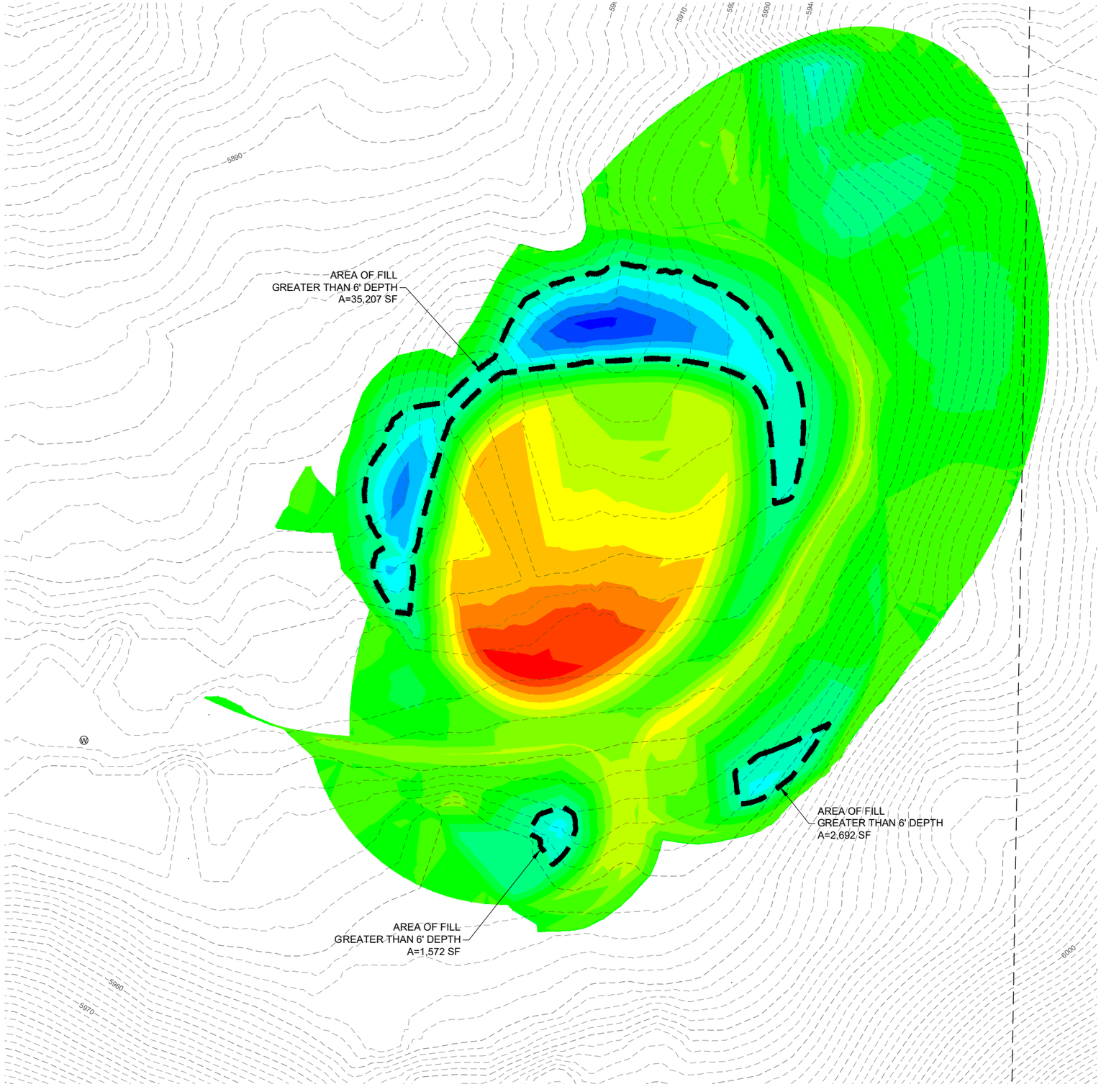
PRELIMINARY
FOR SUP REVIEW
AUGUST 2021

BAR IS 1 INCH ON ORIGINAL DRAWING
0 50'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C4

DRAWN BY:	MCR
DESIGNED BY:	ET
CHECKED BY:	BM
JOB NO.:	10334.000

L:\LAPro\10334.000 - Bryan Canyon Road SUP\DWG\Sheets\10334000-SHEETS.dwg,C4 SLOPE ANALYSIS MAP, 08/06/2021 04:08 pm ethomas



ELEVATIONS TABLE

NUMBER	MIN ELEVATION	MAX ELEVATION	AREA	COLOR
1	-16.00	-14.00	1549.59	
2	-14.00	-12.00	6849.41	
3	-12.00	-10.00	7137.43	
4	-10.00	-8.00	18154.59	
5	-8.00	-6.00	17965.41	
6	-6.00	-4.00	28714.76	
7	-4.00	-2.00	34452.31	
8	-2.00	0.00	78899.29	
9	0.00	2.00	96466.73	
10	2.00	4.00	55138.29	
11	4.00	6.00	33976.78	
12	6.00	8.00	18432.33	
13	8.00	10.00	9407.71	
14	10.00	12.00	6368.16	
15	12.00	14.00	3475.68	
16	14.00	16.00	2030.60	
17	16.00	18.00	276.99	

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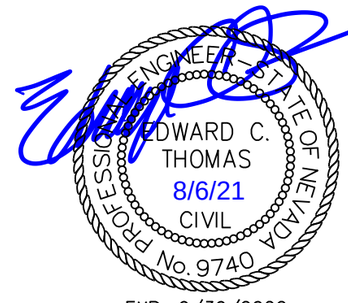
SCAP 7, LLC

BRYAN CANYON ROAD POND
SPECIAL USE PERMIT
CUT/FILL ANALYSIS MAP

WASHOE VALLEY — WASHOE COUNTY — NEVADA



EXP. 6/30/2022

REV	DATE	DESCRIPTION	BY

PRELIMINARY
FOR SUP REVIEW
AUGUST 2021

0 50' 100'
22x34 SHEETS = HORIZONTAL:1"=50'
11x17 SHEETS = HORIZONTAL:1"=100'

BAR IS 1 INCH ON ORIGINAL DRAWING
0 50'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C5

DRAWN BY:	MCR
DESIGNED BY:	ET
CHECKED BY:	BM
JOB NO.:	10334.000

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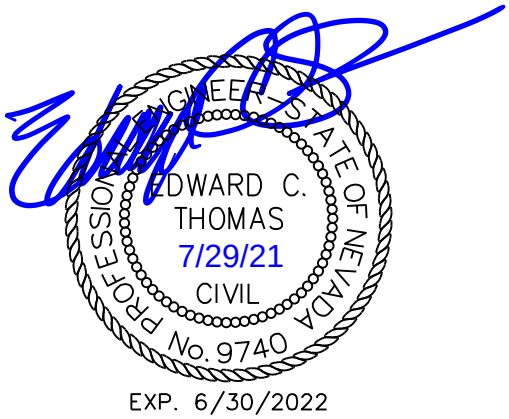
TAB C

CONCEPTUAL DRAINAGE REPORT
For
BRYAN CANYON ROAD POND
SPECIAL USE PERMIT



Prepared For:

SCAP 7, LLC

Prepared By:
Taylor Adams, E.I.
Ed Thomas, P.E.

Lumos & Associates, Inc.
9222 Prototype Drive
Reno, NV 89521
(775) 827-6111

JN 10334.000

July 2021

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LIST OF FIGURES

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TABLE OF APPENDENICES

1. INTRODUCTION

This document is presented as a Conceptual Drainage Report in support of the proposed two acre private fishing pond in Washoe Valley. This report is to provide support for the Special Use Permit (SUP) for the developed area as required by Washoe County.

SCAP 7, LLC intends to develop upon assessor parcel number (APN) 055-301-38. The subject area is approximately 1.6 miles southwest of Washoe Lake and 1 mile south of the current terminus of Bryan Canyon Road. The site currently has dirt roadways but is otherwise undeveloped. Refer to Figure 1 for a vicinity map of the area. The total proposed pond area is 2 acres, with a total disturbed area of approximately 6.1 acres. The entire project site is within Section 34, Township 27 North, and Range 19 East in unincorporated Washoe C.

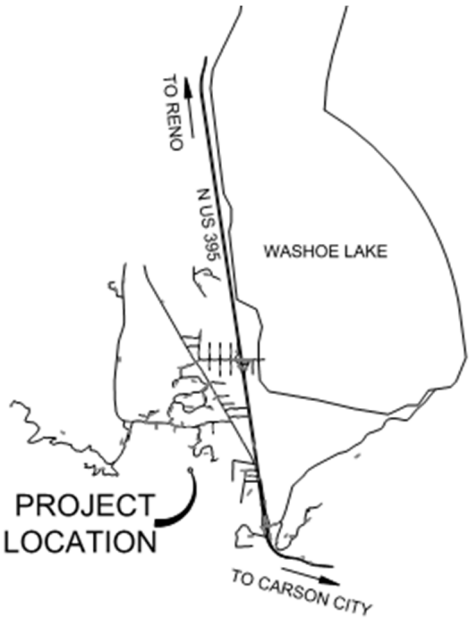


Figure 1: Vicinity Map

1.1. Existing Site Description

The site is located in the eastern foothills of the Sierra Nevada mountain range (the Carson Range) in the southern portion of Washoe Valley. No existing structures are located on site. Dirt/gravel access roads provide connectivity to the proposed project area. The site is currently undeveloped with some clearing and grubbing taking place on site. The site generally slopes to the northwest into Bryan Canyon, with the surrounding area sloping severely onto the site ranging from 20-40 percent. The site eventually flows into an existing onsite creek.

1.2. Proposed Project Description

The proposed 2 acre fishing pond will be developed upon a portion of the property near the southern property line. The design will feature the pond, an access road that leads up to the top of the pond and around the perimeter, a berm surrounding the base of the pond, grading to dispose of earth that is excavated from the pond, and drainage improvements. Drainage improvements include the collector swales along the access roads, swales on either side of the pond grading limits, and various side channels that eventually lead into the existing creek.

1.3. FEMA FIRM Panels

Based on a review of the Flood Insurance Rate Map Index (panel 32031C3430G dated 2009), the site is in an un-mapped area of the Federal Emergency Management Agency (FEMA). The project site is, therefore identified as Flood Hazard Zone X (unshaded), which is defined as areas determined to be outside the 500-year floodplain. A FIRMette of the project site is included in Appendix A.

2. METHODOLOGY

According to the drainage guidelines for Washoe County Development Code and Truckee Meadows Regional Drainage Manual (TMRDM), the Rational Formula Method was used to generate peak discharges for all drainage hydrologic basins [1]. The peak discharges for the project were calculated using:

$$\text{Design Discharge, } Q = C\ I\ A$$

Where:

Q = maximum rate of runoff (cfs),
A = contributing basin area (acres),
C = runoff coefficient,
I = average rainfall intensity for a duration equal to the T_c (in/hr),
T_c = time of concentration, T_c (minutes).

Rational runoff coefficients (C-values) for the local design were applied from the TMRDM. The selected values are presented in Table 1. C-values for local sub-basins were defined for the 5- and 100-year events based on the percentage of water surface and natural coverage. Time of Concentration was determined from equations provided in the TMRDM. The minimum time of concentration for undeveloped areas is 10 minutes, as defined by TMRDM. Precipitation values were computed using National Oceanic and Atmospheric Administration's (NOAA's) Point Precipitation Frequency Estimates function available on the NOAA website [2].

Table 1: Selected Rational C Values

Land Use	Average % Impervious Area	Runoff Coefficient 5-year (C_5)	Runoff Coefficient 100-year (C_{100})
Open Water Body	100	1	1
Range	0	0.20	0.50

3. HISTORIC DRAINAGE SYSTEM

A single hydrologic drainage basin was delineated based on existing topography. A summary of the calculations is provided in Table 2. Refer to Appendix C for the existing conditions drainage exhibit.

Table 2: Existing Peak Flow Summary

Sub-basin ID	Description	Area [ac]	Tc [min]	C_5	C_{100}	I_5 [in/hr]	I_{100} [in/hr]	Q_5 [cfs]	Q_{100} [cfs]
E1	Overall	32.45	15.37	0.20	0.50	1.52	3.57	9.90	57.99

As a result of the analysis, it was determined 57.99 cfs is generated from the existing site for the 100-year storm event. All calculations can be found in Appendix B.

4. PROPOSED DRAINAGE SYSTEM

Development of the project will involve the construction of the pond, access road, grading to dispose of excavated earth, and drainage swales. The uphill runoff will either enter a drainage swale on the southern edge of the pond or a drainage swale on the eastern edge of the pond. Both swales will be located along the bottom of the berm surrounding the pond. Swales will eventually discharge into the existing creek. All swale sizing calculations will be included in the final design.

To appropriately compare pre-developed and post-developed conditions, the site was treated as one sub-basin. Reference the proposed drainage exhibit in Appendix C for the drainage schematic. Rational C-values were determined based on post-developed condition and land cover. The site is located entirely in hydrologic soil group D determined from the USDA Web Soil Survey [3]. Refer to Appendix A for the soil map and corresponding soil data for the project site. The peak runoff rate calculated for the developed area of the site is summarized in Table 3.

Table 3: Proposed Peak Flow Summary

Sub-basin ID	Description	Area [ac]	Tc [min]	C_5	C_{100}	I_5 [in/hr]	I_{100} [in/hr]	Q_5 [cfs]	Q_{100} [cfs]
P1	Overall	32.45	16.10	0.25	0.54	1.49	3.48	12.05	60.96

The 100-year peak rate of runoff for the entire site was determined to be 60.96 cfs. This is a 2.97 cfs increase from the existing condition, which is primarily due to the surface of the pond being treated as impervious. Volume in the pond will be controlled by an overflow weir, and during a storm event it is assumed rainfall will be stored in the pond with 0.5' of freeboard below the spillway elevation remaining at all times. The total precipitation from the 100-year storm is 0.93 inches, so the pond itself will act as stormwater storage. In the case of rainfall resulting in excess volume in the pond, it will spill out via the overflow weir and travel over an energy dissipater before reaching the existing creek. The proposed condition results in similar land cover, so onsite detention is unnecessary. Riprap sizing of the overflow weir will be included in the final design. All runoff calculations can be found in Appendix B.

5. WATER QUALITY

As required by the TMRDM, Low Impact Development (LID) methods of treating runoff will be required to address water quality. Flow-based controls will be designed to treat runoff from the 2-year storm event (WQ_F). All improvements to the site drain to a proposed swale. Riprap calculations for the swales have been performed to determine median stone diameter of 6 inches (Class 150). In all swales, the WQ_F produces a depth of flow that is less or approximately equal to the diameter. The swales will effectively remove collected sediments to meet the Truckee Meadows Structural Controls Design and Low Impact Development Manual [4]. The swale and riprap calculations will be included in the final design.

6. CONCLUSIONS

The project, as proposed, will allow for the construction of a private fishing pond for Bryan Canyon SUP. Drainage improvements to the site shall convey anticipated flows via a network of swales and ditches. Development of the project will result in a slight increase in impervious ground cover in the form of an open pond, but increased runoff will occur in the pond limits. As a result, stormwater detention facilities have been determined unnecessary. Water quality of the runoff will all be controlled by swales along the toe of the berm surrounding the pond and into the existing ditch. The design and hydrologic studies of the proposed pond have been conducted in compliance with the drainage guidelines for Washoe County and TMRDM.

7. REFERENCES

[1] Washoe County, "Truckee Meadows Regional Drainage Manual," Reno, 2009.

[2] National Oceanic and Atmospheric Administration (NOAA), "Atlas 14 Precipitation-Frequency Atlas," 2018. [Online]. Available: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk.

[3] United States Department of Agriculture (USDA), "Web Soil Survey," 2020. [Online]. Available: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[4] NCE, "Truckee Meadows Structural Controls Design and Low Impact Development Manual," Reno, NV, April 2015.

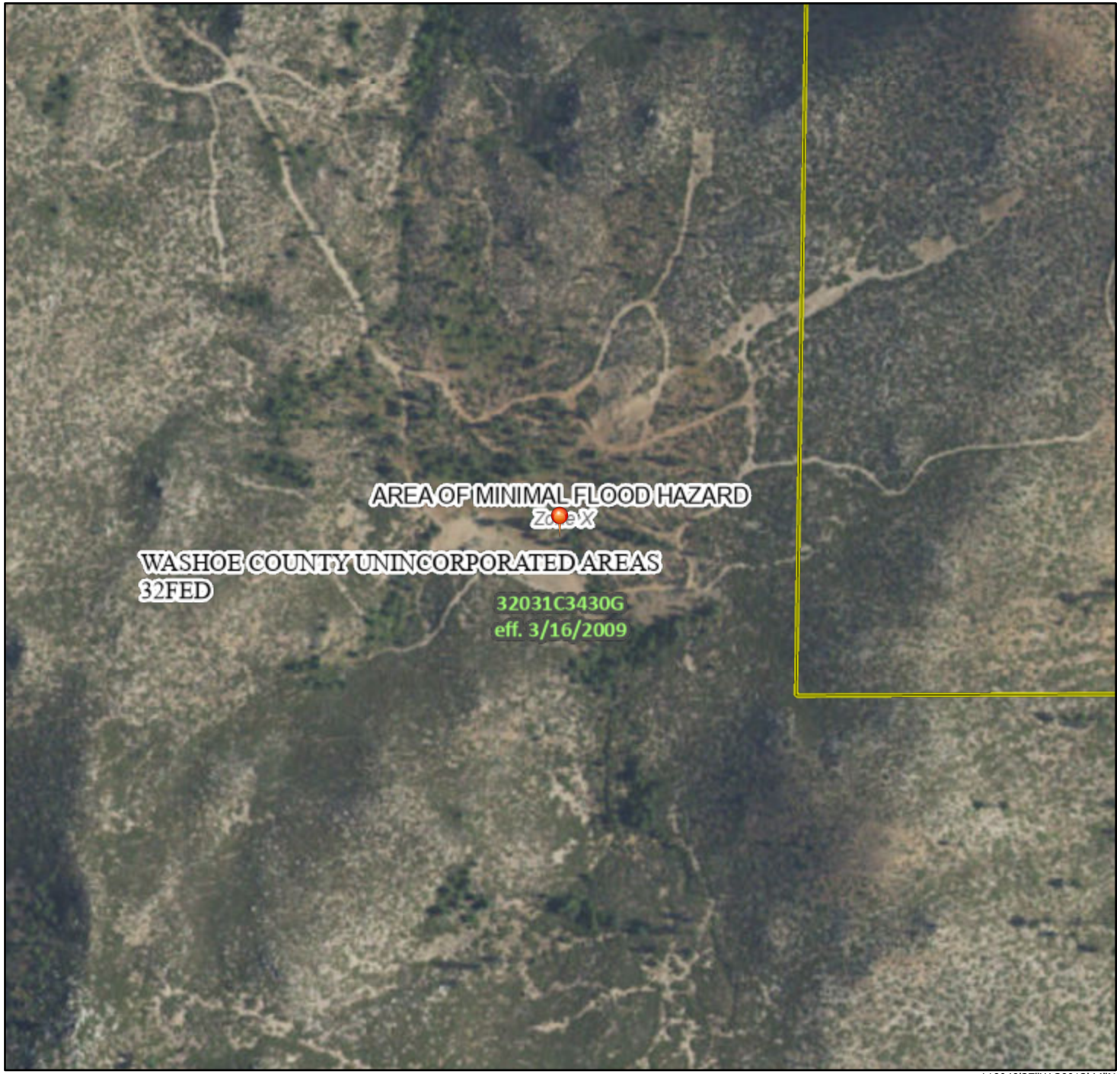
Appendix A

Background Data

National Flood Hazard Layer FIRMette

FEMA

119°50'4"W 39°13'12"N



119°49'27"W 39°12'44"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/15/2021 at 7:25 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NOAA Atlas 14, Volume 1, Version 5
Location name: Washoe Valley, Nevada, USA*
Latitude: 39.2174°, Longitude: -119.8306°
Elevation: 5883.62 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**1.40** (1.21-1.63)	**1.74** (1.51-2.05)	**2.29** (1.98-2.70)	**2.82** (2.41-3.31)	**3.68** (3.06-4.33)	**4.46** (3.60-5.30)	**5.41** (4.21-6.49)	**6.54** (4.88-8.00)	**8.39** (5.88-10.5)	**10.1** (6.73-12.9)
10-min	**1.06** (0.930-1.24)	**1.33** (1.16-1.56)	**1.75** (1.51-2.05)	**2.15** (1.84-2.52)	**2.80** (2.33-3.29)	**3.40** (2.74-4.04)	**4.12** (3.20-4.94)	**4.98** (3.72-6.10)	**6.38** (4.48-7.99)	**7.69** (5.12-9.83)
15-min	**0.880** (0.768-1.03)	**1.10** (0.956-1.29)	**1.44** (1.24-1.70)	**1.78** (1.52-2.08)	**2.32** (1.92-2.72)	**2.81** (2.26-3.34)	**3.40** (2.65-4.08)	**4.12** (3.08-5.04)	**5.27** (3.70-6.60)	**6.35** (4.24-8.12)
30-min	**0.592** (0.516-0.692)	**0.738** (0.644-0.866)	**0.972** (0.838-1.14)	**1.20** (1.02-1.40)	**1.56** (1.30-1.83)	**1.89** (1.53-2.25)	**2.29** (1.78-2.75)	**2.77** (2.07-3.39)	**3.55** (2.49-4.44)	**4.28** (2.85-5.47)
60-min	**0.366** (0.319-0.428)	**0.457** (0.399-0.537)	**0.602** (0.519-0.707)	**0.740** (0.633-0.869)	**0.965** (0.801-1.14)	**1.17** (0.944-1.39)	**1.42** (1.10-1.70)	**1.72** (1.28-2.10)	**2.20** (1.54-2.75)	**2.65** (1.77-3.38)
2-hr	**0.244** (0.218-0.276)	**0.302** (0.270-0.340)	**0.380** (0.338-0.429)	**0.448** (0.396-0.508)	**0.552** (0.474-0.628)	**0.646** (0.542-0.742)	**0.752** (0.616-0.876)	**0.886** (0.703-1.06)	**1.12** (0.850-1.39)	**1.34** (0.982-1.71)
3-hr	**0.198** (0.179-0.220)	**0.246** (0.224-0.274)	**0.303** (0.274-0.337)	**0.350** (0.314-0.389)	**0.417** (0.368-0.466)	**0.475** (0.412-0.535)	**0.538** (0.458-0.613)	**0.626** (0.522-0.724)	**0.771** (0.625-0.934)	**0.911** (0.720-1.15)
6-hr	**0.145** (0.132-0.161)	**0.180** (0.163-0.200)	**0.220** (0.199-0.244)	**0.252** (0.226-0.279)	**0.293** (0.259-0.326)	**0.324** (0.284-0.364)	**0.356** (0.306-0.403)	**0.393** (0.332-0.451)	**0.448** (0.372-0.522)	**0.498** (0.406-0.590)
12-hr	**0.099** (0.089-0.111)	**0.124** (0.112-0.139)	**0.155** (0.138-0.173)	**0.178** (0.159-0.199)	**0.210** (0.185-0.237)	**0.235** (0.204-0.266)	**0.260** (0.222-0.297)	**0.285** (0.239-0.330)	**0.318** (0.260-0.375)	**0.343** (0.276-0.411)
24-hr	**0.069** (0.062-0.077)	**0.086** (0.077-0.097)	**0.109** (0.098-0.122)	**0.127** (0.114-0.142)	**0.153** (0.136-0.171)	**0.173** (0.153-0.194)	**0.195** (0.170-0.219)	**0.217** (0.188-0.246)	**0.248** (0.211-0.283)	**0.272** (0.228-0.314)
2-day	**0.043** (0.038-0.049)	**0.054** (0.048-0.062)	**0.069** (0.061-0.079)	**0.082** (0.072-0.094)	**0.100** (0.087-0.115)	**0.115** (0.099-0.132)	**0.130** (0.111-0.150)	**0.147** (0.124-0.171)	**0.170** (0.141-0.200)	**0.189** (0.154-0.225)
3-day	**0.032** (0.028-0.036)	**0.040** (0.036-0.046)	**0.053** (0.046-0.060)	**0.063** (0.055-0.072)	**0.077** (0.067-0.088)	**0.089** (0.076-0.102)	**0.101** (0.086-0.117)	**0.115** (0.097-0.133)	**0.134** (0.111-0.157)	**0.150** (0.122-0.178)
4-day	**0.026** (0.023-0.030)	**0.034** (0.030-0.039)	**0.044** (0.039-0.051)	**0.053** (0.046-0.061)	**0.065** (0.057-0.075)	**0.076** (0.065-0.087)	**0.087** (0.074-0.100)	**0.099** (0.083-0.115)	**0.116** (0.095-0.136)	**0.130** (0.105-0.154)
7-day	**0.018** (0.016-0.021)	**0.023** (0.020-0.027)	**0.031** (0.027-0.035)	**0.037** (0.032-0.042)	**0.046** (0.040-0.052)	**0.053** (0.045-0.061)	**0.060** (0.051-0.070)	**0.068** (0.058-0.080)	**0.080** (0.066-0.094)	**0.089** (0.073-0.106)
10-day	**0.015** (0.013-0.017)	**0.019** (0.016-0.021)	**0.025** (0.022-0.029)	**0.030** (0.026-0.034)	**0.037** (0.032-0.042)	**0.042** (0.036-0.048)	**0.048** (0.041-0.055)	**0.054** (0.045-0.062)	**0.062** (0.052-0.073)	**0.069** (0.056-0.081)
20-day	**0.010** (0.008-0.011)	**0.012** (0.011-0.014)	**0.016** (0.014-0.018)	**0.019** (0.017-0.022)	**0.023** (0.020-0.026)	**0.027** (0.023-0.030)	**0.030** (0.026-0.034)	**0.033** (0.028-0.038)	**0.038** (0.032-0.044)	**0.042** (0.035-0.049)
30-day	**0.008** (0.007-0.009)	**0.010** (0.009-0.011)	**0.013** (0.011-0.015)	**0.015** (0.013-0.017)	**0.018** (0.016-0.021)	**0.021** (0.018-0.024)	**0.024** (0.020-0.027)	**0.026** (0.022-0.030)	**0.030** (0.025-0.035)	**0.033** (0.027-0.038)
45-day	**0.006** (0.005-0.007)	**0.008** (0.007-0.009)	**0.010** (0.009-0.012)	**0.012** (0.011-0.014)	**0.015** (0.013-0.017)	**0.017** (0.014-0.019)	**0.019** (0.016-0.021)	**0.021** (0.018-0.023)	**0.023** (0.020-0.027)	**0.025** (0.021-0.029)
60-day	**0.005** (0.005-0.006)	**0.007** (0.006-0.008)	**0.009** (0.008-0.010)	**0.011** (0.009-0.012)	**0.013** (0.011-0.014)	**0.014** (0.012-0.016)	**0.016** (0.013-0.018)	**0.017** (0.015-0.019)	**0.019** (0.016-0.022)	**0.020** (0.017-0.023)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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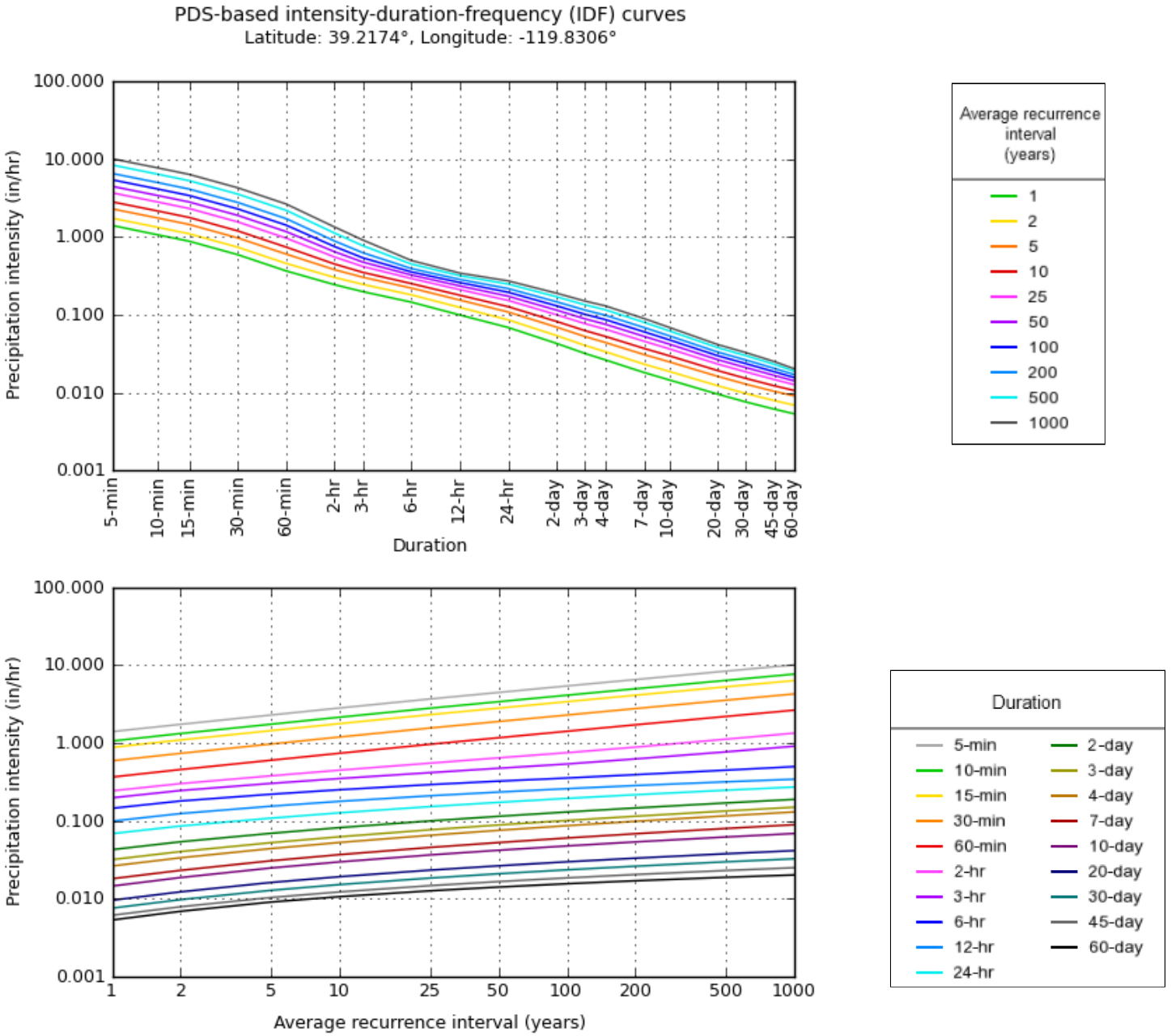
PF graphical



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Wed Jul 14 22:33:51 2021

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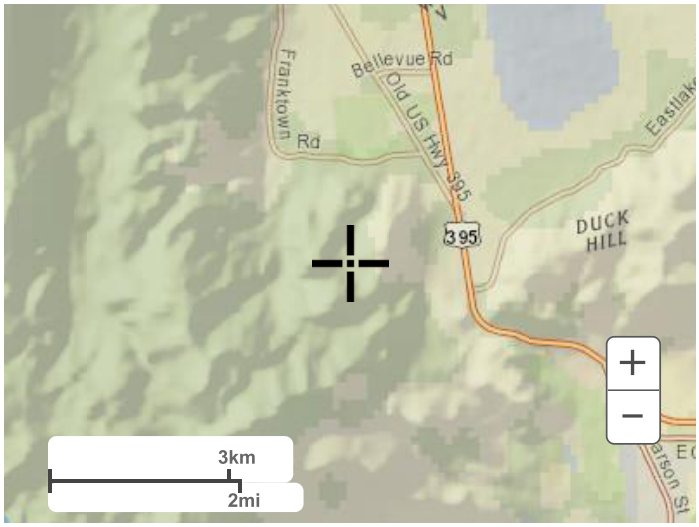
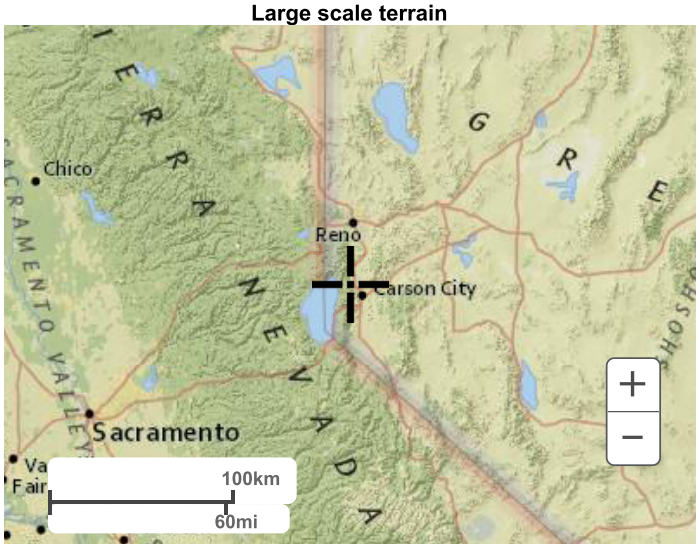
Maps & aerials

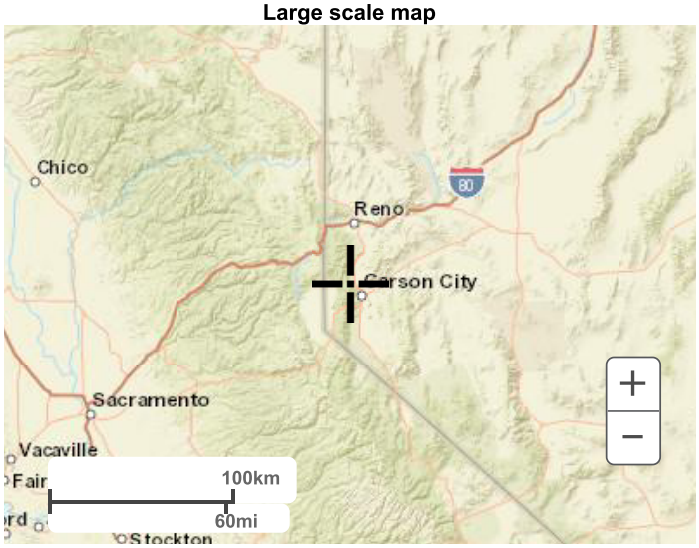
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

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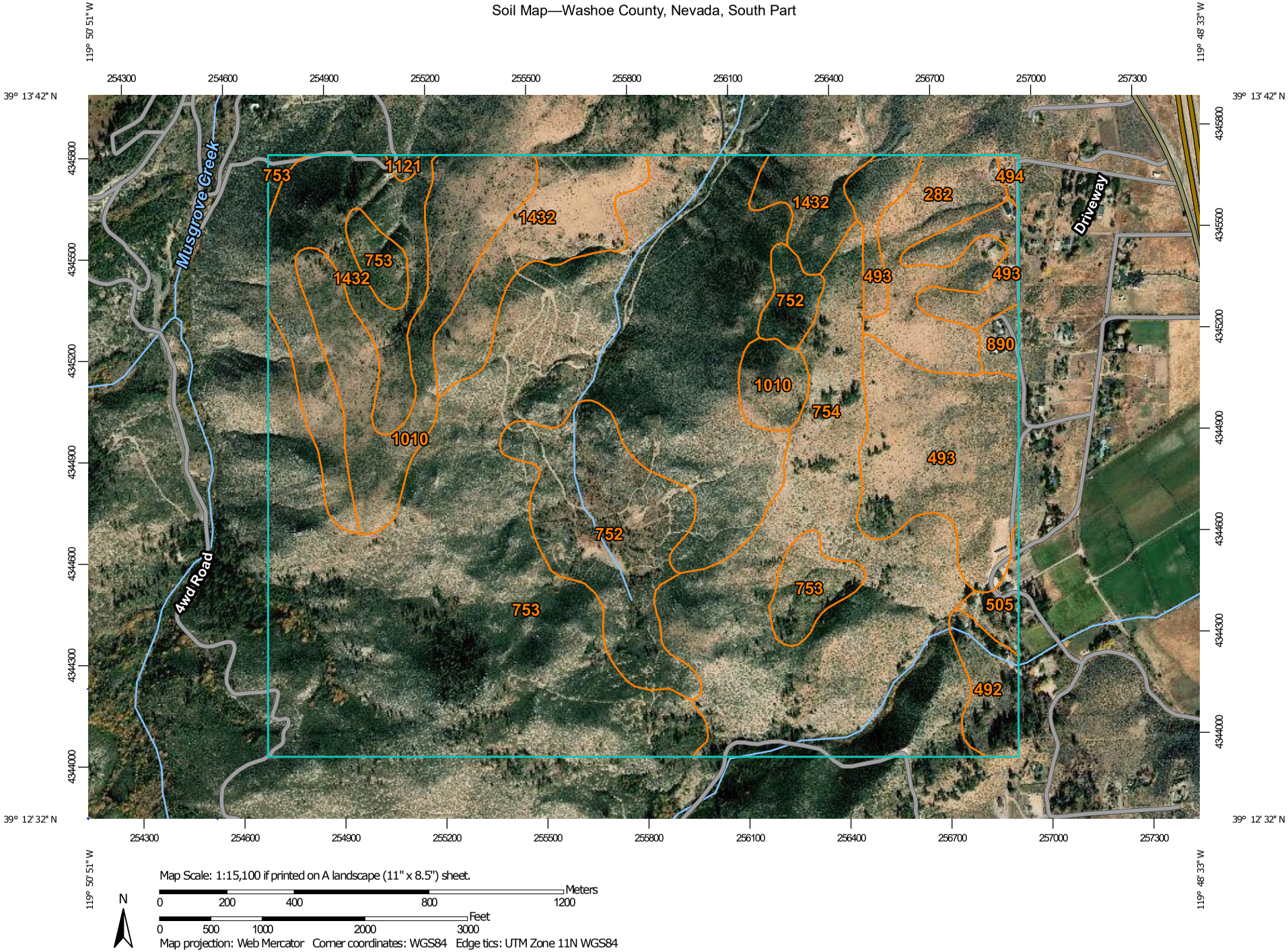
US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Soil Map—Washoe County, Nevada, South Part



Map Scale: 1:15,100 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 200 400 800 1200

Feet
0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washoe County, Nevada, South Part
Survey Area Data: Version 17, Aug 26, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2015—Jun 30, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
282	Wedekind gravelly sandy loam, 30 to 50 percent slopes	38.3	3.9%
492	Graufels bouldery sand, 15 to 30 percent slopes	15.0	1.5%
493	Graufels-Glenbrook complex, 8 to 50 percent slopes	88.9	9.0%
494	Graufels gravelly loamy coarse sand, 4 to 8 percent slopes	1.7	0.2%
505	Mottsville gravelly coarse sand, 4 to 8 percent slopes	6.7	0.7%
752	Toiyabe-Corbett-Rock outcrop association, moderately steep	72.7	7.4%
753	Toiyabe-Corbett-Rock outcrop association, steep	402.0	40.8%
754	Toiyabe-Rock outcrop complex, 50 to 70 percent slopes	161.2	16.4%
890	Indiano gravelly loam, warm, 15 to 30 percent slopes	5.1	0.5%
1010	Gabica very gravelly sandy loam, 8 to 30 percent slopes	71.3	7.2%
1121	Apmat gravelly sandy loam, 2 to 8 percent slopes	1.4	0.1%
1432	Fraval-Hirschdale-Jumbo association	120.2	12.2%
Totals for Area of Interest		**984.4**	**100.0%**

Washoe County, Nevada, South Part

752—Toiyabe-Corbett-Rock outcrop association, moderately steep

Map Unit Setting

National map unit symbol: hxm7
Elevation: 5,500 to 7,000 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 60 to 80 days
Farmland classification: Not prime farmland

Map Unit Composition

Toiyabe and similar soils: 40 percent
Corbett and similar soils: 35 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Toiyabe

Setting

Landform: Mountains
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Residuum and colluvium derived from granitic rocks

Typical profile

H1 - 0 to 8 inches: bouldery coarse sand
H2 - 8 to 13 inches: gravelly coarse sand
Cr - 13 to 60 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D

Ecological site: F022AY116NV - PIJE/ARTRV/ACOCO
Hydric soil rating: No

Description of Corbett

Setting

Landform: Mountains
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Residuum and colluvium derived from granitic rocks

Typical profile

H1 - 0 to 8 inches: gravelly sand
H2 - 8 to 32 inches: gravelly loamy coarse sand
Cr - 32 to 60 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: F022AY130NV - Pinus Jeffreyi/ Artemisia Tridentata Ssp. Vaseyana-Purshia
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Peaks
Down-slope shape: Convex
Across-slope shape: Convex

Minor Components

Graufels

Percent of map unit: 3 percent
Landform: Mountains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY026NV - GRANITIC SLOPE 10-12 P.Z.
Hydric soil rating: No

Temo

Percent of map unit: 3 percent
Landform: Mountains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F022AY121NV - Pinus contorta-Abies magnifica/ Artemisia tridentata ssp. tridentata/Achnatherum occidentale ssp. oca
Hydric soil rating: No

Witefels

Percent of map unit: 3 percent
Landform: Mountains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F022AY118NV - ABMA-PICO/ARTRV/BRMA4
Hydric soil rating: No

Aquolls

Percent of map unit: 1 percent
Landform: Swales
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R022AY016NV - WET MEADOW
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Washoe County, Nevada, South Part
Survey Area Data: Version 17, Aug 26, 2020

Appendix B

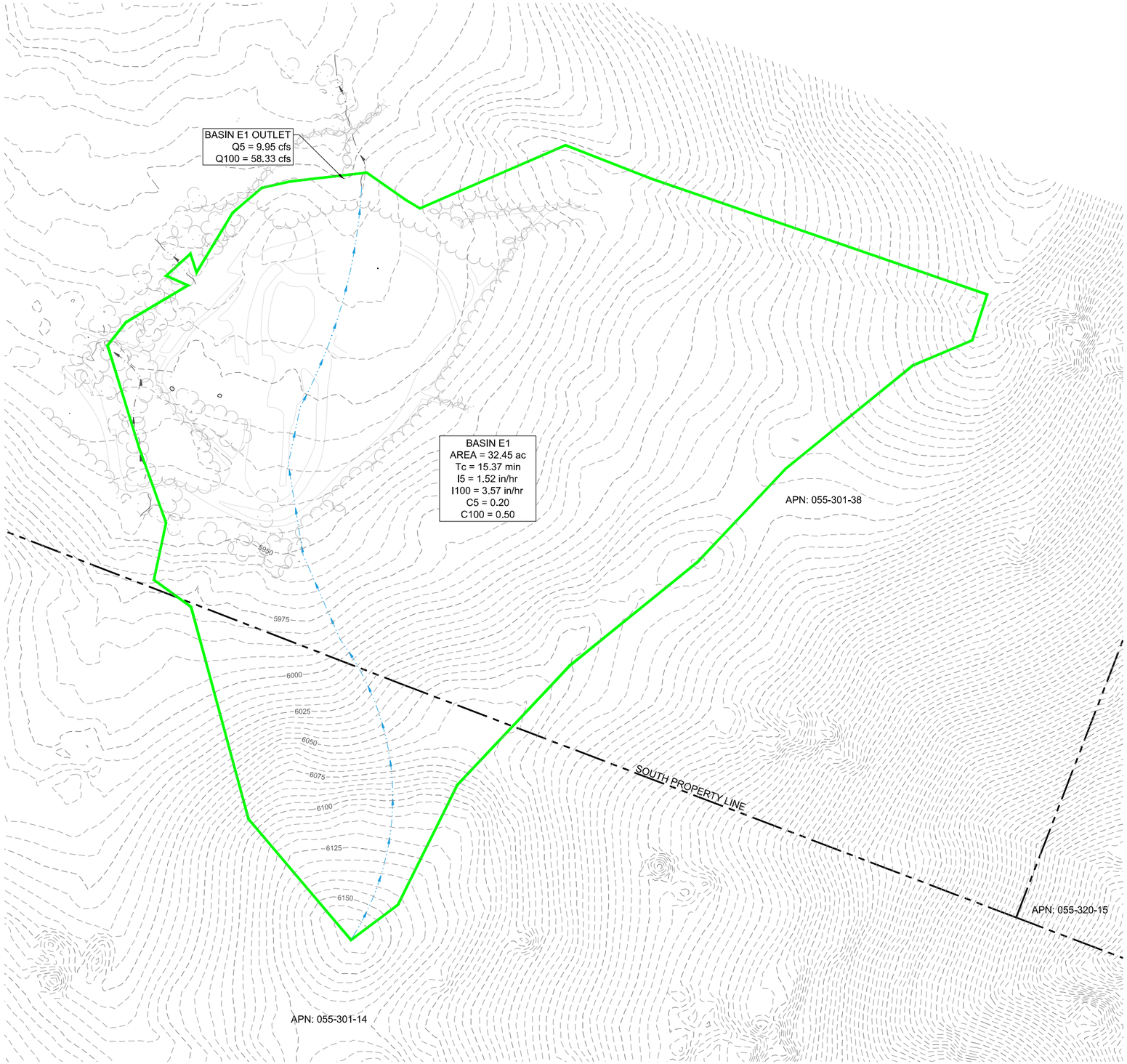
Hydrologic Calculations

BRYAN CANYON POND RUNOFF CALCULATIONS

Basin		Subbasin ID	E1	P1
		Drainage Direction	N/NW	N/NW
		Area, A [sf]	1413437.73	1413437.73
		Area, A [ac]	32.45	32.45
Coef.	C	Composite C_5	0.20	0.25
		Composite C_{100}	0.50	0.54
Initial Overland	T_i	Flow Runoff Coefficient, C_5 '	0.20	0.25
		Flow Length, L [ft] [1]	500	500
		Land Slope, s [%]	31.00	31.00
		Initial Overland Time: T_i	11.53	10.89
Travel Time	T_t	Flow Length, L [ft]	1085	1330
		Channel Slope, s [%]	9.86	8.0
		Travel Time Coefficient [3]	1.50	1.50
		Average Velocity, V_5 [ft/s]	4.71	4.25
		Travel Time: T_t [min]	3.84	5.21
ToC & Intensity	T_c	Time of Concentration, T_c [min]	15.37	16.10
	Urban. Check	Required? - Y/N	Y	Y
		Total Length: L_{total} [ft]	1585	1830
		Time of Concentration - Check, $T_{c,check}$ [min]	18.8	20.2
	$T_{c,final}$	**Final ToC, $T_{c,final}$ [min]**	**15.37**	**16.10**
	I [2]	5-yr Intensity I_5 [in/hr]	1.52	1.49
		100-yr Intensity I_{100} [in/hr]	3.57	3.48
Flow	Q	5-yr Flow, Q_5 [cfs]	9.90	12.05
		Design 100-yr Flow, Q_{100}	**57.99**	**60.96**

Appendix C

Drainage Exhibits



LEGEND:

- ACCESS ROAD
- TIME OF CONCENTRATION PATH
- EXISTING HYDRO SUB-BASIN
- PARCEL LINE
- EXISTING FLOWLINE

0 100' 200'

22x34 SHEETS = HORIZONTAL:1"=100'
11x17 SHEETS = HORIZONTAL:1"=200'

LUMOS & ASSOCIATES
9222 PROTOTYPE DRIVE
RENO, NV 89521
TEL: 775.827.6111
WWW.LUMOSINC.COM

SCAP 7, LLC

BRYAN CANYON POND
SPECIAL USE PERMIT
EXISTING DRAINAGE PLAN

WASHOE COUNTY NEVADA

REV	DATE	DESCRIPTION	BY

PRELIMINARY
NOT FOR CONSTRUCTION

BAR IS 1 INCH ON ORIGINAL DRAWING
0 1
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C2.0

DRAWN BY:	TA
DESIGNED BY:	TA/ET
CHECKED BY:	ET
JOB NO.:	10334.000

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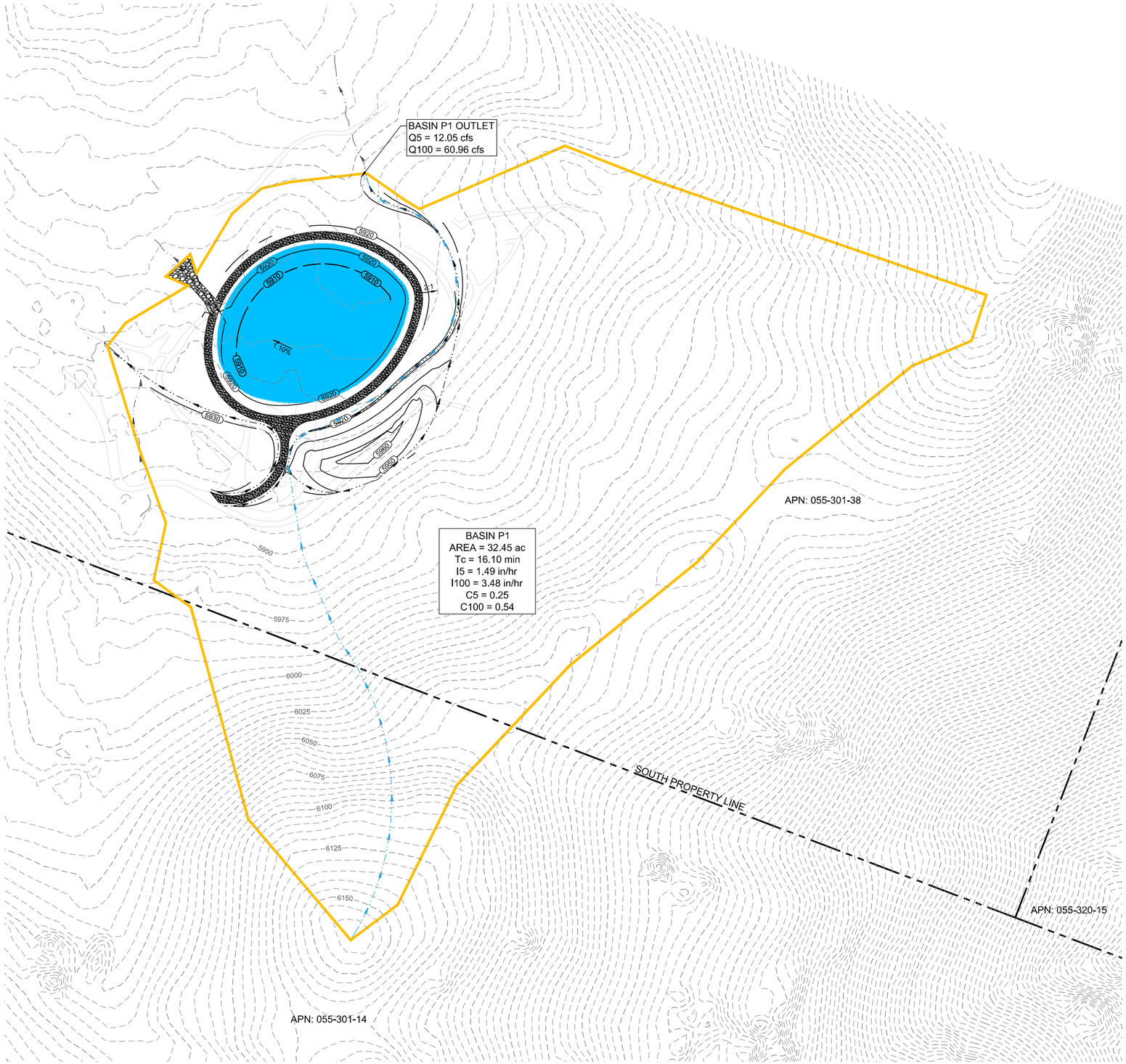

LEGEND:

- WATER SURFACE
- ACCESS ROAD
- TIME OF CONCENTRATION PATH
- PROPOSED DRAINAGE SUB-BASIN
- PARCEL LINE
- PROPOSED FLOWLINE

- WATER SURFACE AREA = 2.0 AC
- WATER STORAGE VOLUME = 23.36 AC FT
- AVERAGE POND DEPTH = 15 FT
- NET EARTHWORK = 340 CU YD (CUT)

0 100' 200'

22x34 SHEETS = HORIZONTAL:1"=100'
11x17 SHEETS = HORIZONTAL:1"=200'

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SCAP 7, LLC

BRYAN CANYON POND
SPECIAL USE PERMIT
PROPOSED DRAINAGE PLAN

WASHOE COUNTY NEVADA

REV | DATE | DESCRIPTION | BY

PRELIMINARY
NOT FOR CONSTRUCTION

BAR IS 1 INCH ON ORIGINAL DRAWING
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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CHECKED BY:	ET
JOB NO.:	10334.000

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GEOTECHNICAL INVESTIGATION REPORT

Bryan Canyon Road Pond SUP
Washoe County, NV

10334.000

April 2021

PREPARED FOR:
SCAP 7, LLC
7170 E. MCDONALD DRIVE, SUITE 4
SCOTTSDALE, ARIZONA 85253

PREPARED BY:
LUMOS & ASSOCIATES, INC.
808 E. COLLEGE PARKWAY, SUITE 101
CARSON CITY, NV 89706
775.883.7077

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List of Appendices

1.0 INTRODUCTION

Submitted herewith are the results of Lumos & Associates, Inc. (Lumos) Geotechnical Investigation Report for the pond located within Washoe County, Nevada on parcel APN 055-301-38. This parcel is in the southern portion of Washoe Valley at the end of Bryan Canyon Road (Plate 1).

It is our understanding that the proposed pond will have a surface area of two (2) acres. We understand the pond will have a water depth of up to twenty (20) feet. The maximum fill height will be ten (10) feet which includes five (5) feet of freeboard. The pond water will be contained partially by native undisturbed material and fill soil.

The purpose of our investigation was to characterize the site geology and soil conditions, describe the native soils, and determine their engineering properties as they relate to the proposed construction. The investigation was also intended to identify possible adverse geologic, soil, and or water table conditions. However, this study did not include an environmental assessment, a fault study, a liquefaction analysis or an evaluation for soil and/or groundwater contamination at the site.

This report concludes with recommendations for site grading. In addition, information such as logs of all exploratory test pits, laboratory test data, and slope stability are provided in this report.

The recommendations contained herein have been prepared based on our understanding of the proposed construction, as outlined above. Re-evaluation of the recommendations presented in this report should be conducted after the final site grading and construction plans are completed, if there are any variations from the assumptions described herein.

It is possible that subsurface discontinuities may exist between and beyond exploration points. Such discontinuities are beyond the evaluation of the Engineer at this time. No guarantee of the consistency of site geology and sub-surface conditions is implied or intended.

2.0 GEOLOGIC SETTING

The eastern foothills of the Sierra Nevada mountain range (the Carson Range) in the southern portion of Washoe Valley, Nevada is located within the Great Basin geomorphic province. The geologic evolution of this Basin and Range province is extremely complex and involved a long sequence of events. Extension caused thinning and faulting of the North American Continental crust due to the subduction of the Pacific Oceanic Plate, and abduction of the North American Continental plate. The north-south trending dip-slip faults created low valleys and mountains with steep slopes. The western margin of the Basin and Range province can also be characterized by the interplay of the strike-slip faults of the Walker Lane and the normal faulting related to the Basin and Range extension. Approximately 10,000 years ago, large expanses of the Great Basin were covered by water. One of these expanses was The Ancient Lake Lahontan, which connected Walker Lake, the Carson Sink, Pyramid Lake, and Lake Bonneville.

The surface geology of the project area has been mapped by Dennis T. Trexler (1977) refer to Plate 3. The mapping indicates that Hornblende-Biotite Granodiorite (Kgd) deposits underlie the site. Hornblende-Biotite Granodiorite is defined as grayish white to gray and greenish, gray, medium- to coarse-grained. Equigranular to porphyritic, and locally foliated and lineated. Locally grades into quartz monzonite or quartz diorite.

3.0 Seismic Considerations

The Carson Range, similar to many areas in Nevada, is located near active faults that are capable of producing significant earthquakes. We reviewed the Quaternary Fault Map of Nevada's interactive map (https://gisweb.unr.edu/Quaternary/Faults) and the Carson City Quadrangle Earthquake Hazards Map which show the nearest active fault of Holocene age (<15,000 years), a fault of the Mount Rose Fault Zone, to be three-quarters (0.75) of a mile east of the site. Refer to Plates 4.1 and 4.2. No Holocene faults are shown to extend into the site and no evidence of faulting was noted during our site investigation. The maximum credible earthquake (MCE) for the vicinity of the project is estimated at 7.5 in moment magnitude and many large earthquakes have occurred near the site as presented on Plate 5. This correlates to a Modified Mercalli Intensity of lX-X. Refer to Plate 6.

Liquefaction is the phenomenon where loose saturated granular soils lose their shear strength when subjected to strong vibration or cyclical loading and become unstable. Large earthquakes, as described above, may provide that type of cyclical loading. Loose saturated sands are the most susceptible to this phenomena. These conditions were not encountered during our field investigation. The soils encountered on-site were primarily dry, medium dense to very dense sands with varying amounts of silts. Therefore, the liquefaction of subsurface soils at the site is not considered likely to occur. The majority of any damage to a structure at this site is most likely to be the result of strong seismic shaking rather than subsurface soil liquefaction.

2018 IBC Design: The mapped maximum considered earthquake spectral response acceleration at short periods (S_S) is 2.167g corresponding to a 0.2 second spectral response acceleration at five percent (5%) of critical damping and for a Site Class B (IBC Figure 1613.2.1(1)). The mapped maximum considered earthquake spectral response

acceleration at a 1.0 second period (S_1) is 0.783g corresponding to a 1.0 second spectral response acceleration at five percent (5%) of critical damping and for a Site Class B (IBC Figure 1613.2.1(2)). At this time, the soil conditions are not known in sufficient detail to a depth of one hundred (100) feet, thus, a Site Class D-default may be assumed per the IBC. These spectral response accelerations are adjusted for site class effects because Site Class D-default is assumed instead of Site Class B. The site coefficient for spectral response accelerations adjustment at short periods (F_a) is 1.2 (IBC Table 1613.2.3(1)). The maximum considered earthquake spectral response acceleration parameter for short period (S_{MS}) is 2.600g. This corresponds to design spectral response acceleration parameters of 1.733g for short period (S_{DS}). Refer to Appendix C.

It is emphasized that the above values are the minimum requirements intended to maintain public safety during strong ground shaking. These minimum requirements are meant to safeguard against loss of life and major structural failures, but are not intended to prevent damage or insure the functionality of the structure during and/or after a large seismic event.

The seismic risks at this site are similar to other sites within western Nevada. The risks associated with this site can be mitigated utilizing widely accepted design and construction standards.

4.0 SITE CONDITIONS AND FIELD EXPLORATION

At the time of our investigation, construction (grading and filling) of the site had already began. The pond site slopes generally to the northwest into Bryan Canyon.

Field exploration included a site reconnaissance and subsurface soil-exploration. During the site reconnaissance, surface conditions were noted and the locations of the exploratory test pits were determined. Test pit locations were located using a hand held GPS, existing staking, and existing features. Locations and elevations should be considered accurate only to the degree implied by these methods.

Five (5) exploratory test pits were excavated across the area to a maximum depth of thirteen (13) feet below-ground-surface (bgs). All explorations were terminated due to the difficulty encountered while digging as the material transitioned to bedrock. The

approximate locations of the explorations within the site are shown on Plate 2. The subsurface soils were continuously logged and visually classified in the field by our Geotechnician in accordance with the Unified Soil Classification System. Representative soil samples were collected at regular intervals and at material changes within the exploratory test pits and subsequently transported to our Carson City geotechnical laboratory for testing and analysis.

The subsurface soils (native and fill) consisted of well-graded sands with silt and was encountered the entire depth in every excavation. The fill soils encountered during exploration and during previous testing were medium dense. The native material was medium dense to very dense as it transitioned to bedrock. Groundwater was not encountered at the time of our investigation. However, fluctuations in the groundwater table should be anticipated.

5.0 FIELD AND LABORATORY TEST DATA

Field and laboratory data was developed from samples taken and tests conducted during the field exploration and laboratory phases of this project. A Link Belt 145x4 track hoe was employed to excavate the test pits. Field nuclear density tests were performed on the existing fill soils (Refer to Appendix D). Representative bulk samples were collected at regular intervals which encompassed each lithological change. All samples were subsequently transported to our Carson City geotechnical laboratory for testing and analysis.

Laboratory tests performed on representative samples included sieve analysis (including fines content), Atterberg limits, moisture content, direct shear, and modified proctor. Much of this data is displayed on the "logs" of the exploratory test pits to facilitate correlation. Field descriptions presented on the logs have been modified, where appropriate, to reflect laboratory test results. The logs of the exploratory test pits are included in Appendix A of this report as Plates A-1 through A-5. Plate A-6 the "Legend" describes the various symbols and nomenclature shown on the logs.

Individual laboratory test results are presented in Appendix B as Plates B-1 through B-4. Laboratory testing was performed per ASTM standards, except when test procedures are briefly described and no ASTM standard is specifically referenced in the report. Atterberg limits were determined using the dry method of preparation (Plate B-2). Field density testing with the associated laboratory testing was conducted prior to this investigation and are presented in Appendix E and F.

6.0 DISCUSSION AND RECOMMENDATIONS

6.1 General

From a geotechnical viewpoint, the site is considered suitable for the proposed improvements when prepared as recommended herein.

The following recommendations are based upon the construction and our understanding of this project, as outlined in the introduction of this report. If changes in the construction are proposed, they should be presented to the Lumos Geotechnical Department, so that these recommendations can be reviewed and modified in writing, as necessary. As a minimum, final construction drawings should be submitted to the Lumos Geotechnical Department for review prior to actual construction and verification that our geotechnical design recommendations have been implemented.

6.2 General Site Grading

We understand an embankment will be required for the proposed pond. At the time of the investigation the majority of the pond area had been cleared and grubbed, however, if the construction is to extend beyond the current footprint, all soils with organics and any loose or otherwise disturbed native soils within the proposed pond areas should be removed.

Organic material encountered during excavations, should be stockpiled in a designated area on site for later use in landscaping, or removed off site as directed by the owner.

If fill is to be placed on a slope greater than five-to-one (5:1), the slope shall be benched and keyed. The width of the bench shall be the width of the equipment being used, and the

key shall be a minimum of two (2) feet deep and ten (10) feet wide located at the toe of the slope to prevent the migration of fill soils down slope.

Exposed soil to receive fill should be scarified in place to a minimum depth of twelve (12) inches, the oversize particles (greater than four (4) inches) removed, moisture conditioned to within two percent (2%) of optimum, and re-compacted to at least ninety percent (90%) of the ASTM D1557 standard. Additionally, prior to placing any fill, the surface shall be proof-rolled to identify any possible yielding surfaces. Proof rolling should be conducted with a heavy rubber-tire loader with a fully loaded bucket, and observed and approved by a Lumos representative. Also, the surface shall be "roughened" to insure a good bond with fill and to prevent seepage between the cut/fill interface. A "sheep's foot" can provide such a surface. The site sands, provided oversized particles (+4") are removed, are suitable for reuse as embankment fill. Embankment fill shall be placed in twelve (12) inch maximum loose lifts, moisture conditioned to within two percent (2%) of optimum and compacted to a minimum of ninety percent (90%) of the ASTM D1557 standard. Each lift shall be "roughened" to prevent seepage between layers.

A representative of Lumos should be present during site grading operations to ensure that any unforeseen or concealed conditions within the site are identified and properly mitigated, and to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction and is dependent upon compaction and stability of the subgrade soils. The soils engineer may reject any material that does not meet engineering characteristics, compaction, and stability requirements. Further, recommendations of this report are based upon the assumption that earthwork construction will conform to recommendations set forth in this section of the report.

7.0 SLOPE STABILITY AND EROSION CONTROL

The results of our exploration, testing and analysis indicate that 2:1 (H:V) maximum slopes will be stable for on-site materials used as embankment fill, provided the embankment fill is placed as recommended earlier in this report. "Cut" slopes in native on-site materials will also be stable up to a maximum of 2:1 (H:V). Measures shall be taken to direct surface drainage away from the slope faces.

In order to analyze the stability of the slopes, a maximum embankment height of twenty (20) feet, with maximum fill of ten (10) feet, and a minimum top width of ten (10) feet for the embankment was assumed. We then assumed there would be five (5) foot of freeboard from the water surface to embankment top.

We then reviewed the laboratory test results and utilized them in order to predict the engineering characteristics of the embankment fill, provided native soils will be utilized. The following characteristics/properties were utilized in our analysis:

Cohesion of Fill = 160 psf

Lowest Value of Cohesion from Direct Shear Test Results

Friction Angle of Fill = 36°

Shallowest Friction Angle from Direct Shear Test Results

We then performed slope stability analyses utilizing Janbu (1968) methods as presented in EM 1110-2-1902 (Army Corps of Engineers) for 2:1 (H:V), slopes utilizing our predicted embankment fill characteristics, the assumed dimensions, and a surcharge load at top of embankment equal to 240 psf to simulate maintenance vehicular traffic. Results of our analysis are included in Appendix G.

The potential for dust generation is high at this project. Dust control will be mandatory on this project in order to comply with air quality standards. The contractor shall be responsible for submitting a dust control plan and securing any required permits.

Stabilization of all slopes and areas disturbed by construction will be required to prevent erosion and to control dust. Stabilization may consist of rip-rap, revegetation, or dust pallative, depending on the inclination of the slope. The steeper the slope, the more aggressive the stabilization technique will be required. We also recommend that rip rap underlain by filter fabric be utilized from the toe of downstream slope to five (5) feet from the top of the slope to prevent erosion of the toe due to possible seepage.

8.0 CONSTRUCTION SPECIFICATIONS

All work on-site shall be governed by the latest editions of the International Building Code (IBC) and The Standard Specifications for Public Works Construction (Orange Book) as accepted by Washoe County, except where modified herein.

9.0 LIMITATIONS

This report has been prepared in accordance with the currently accepted engineering practices in Northern Nevada and Northern California. The analysis and recommendations in this report are based upon exploration performed at the locations shown on the site plan, the proposed improvements as described in the Introduction section of this report and upon the property in its condition as of the date of this report. Lumos makes no guarantee as to the continuity of conditions as subsurface variations may occur between or beyond exploration points and over time. Any subsurface variations encountered during construction should be immediately reported to Lumos so that, if necessary, Lumos' recommendations may be modified.

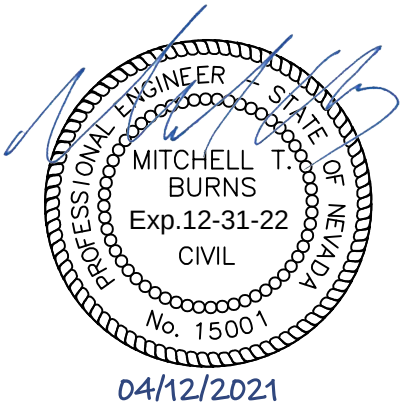
This report has been prepared for and provided directly to SCAP 7 ("The Client"), and any and all use of this report is expressly limited to the exclusive use of the Client. The Client is responsible for determining who, if anyone, shall be provided this report, including any designers and subcontractors whose work is related to this project. Should the Client decide to provide this report to any other individual or entity, Lumos shall not be held liable for any use by those individuals or entities to whom this report is provided. The Client agrees to indemnify, defend and hold harmless Lumos, its agents and employees from any claims resulting from unauthorized users.

If this report is utilized in the preparation of an Engineer's Estimate of Probable Construction Costs, then the preparer of the estimate acknowledges that the report recommendations are based on the subsurface conditions found at the specific locations investigated on site; that subsurface conditions may vary outside these locations; and that no guaranty or warranty, express or implied, is made that the conditions encountered are representative of the entire site. The preparer of the estimate agrees to indemnify,

defend and hold harmless Lumos & Associates, its agents and employees from any and all claims, causes of action or liability arising from any claims resulting from the use of the report in the preparation of an Engineer's Cost Estimate.

This report is not intended for, nor should be utilized for, bidding purposes. If it is utilized for bidding purposes, Client acknowledges that the report recommendations are based on the subsurface conditions found at the specific locations investigated on site; that subsurface conditions may vary outside these locations; and that no guaranty or warranty, express or implied, is made that the conditions encountered are representative of the entire site. The Client agrees to indemnify, defend and hold harmless Lumos & Associates, Inc., its agents and employees from any and all claims, causes or action or liability arising from any claims resulting from the use of the report for bidding purposes.

As explained above, subsurface variations may exist and as such, beyond the express findings located in this report, no warranties express, or implied, are made by this report. No affirmation of fact, including but not limited to statements regarding suitability for use of performance shall be deemed to be a warranty or guaranty for any purpose.



Christopher "Pete" McCreary, E.I.
Geotechnician
Lumos & Associates, Inc.

Mitch Burns, P.E., C.E.M.
Materials Engineering Manager
Lumos & Associates, Inc.

10.0 References

American Society for Testing and Materials (ASTM), 2016, Annual Book of ASTM Standards, West Conshohoken

International Code Council, Inc. (ICC), 2018 International Building Code

Naval Facilities Engineering Command, 1986, Design Manual 7.01

Naval Facilities Engineering Command, 1986, Design Manual 7.02

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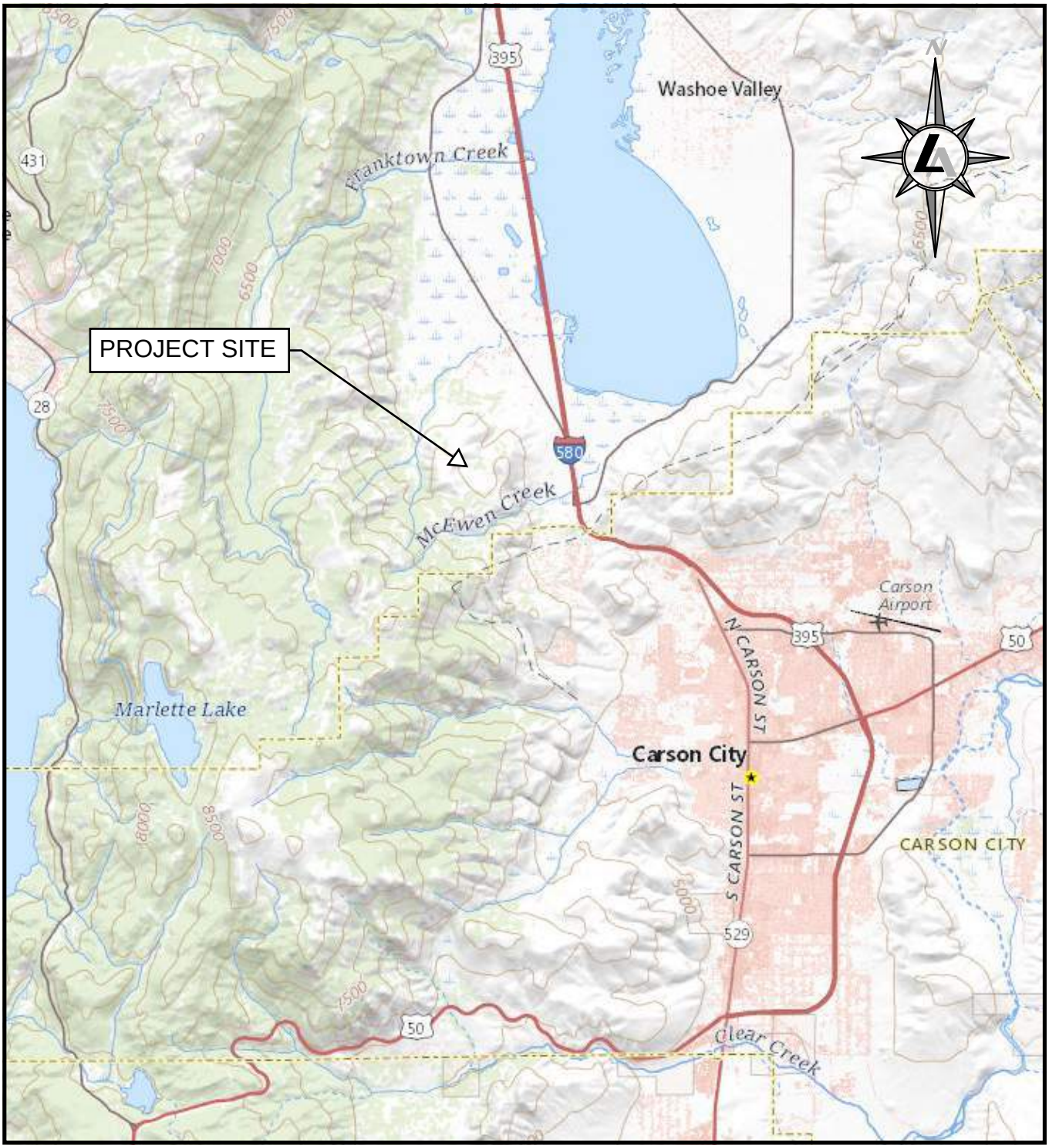
Trexler, Dennis T., (1977) Carson City Folio Geologic Map, Nevada Bureau of Mine and Geology, Reno, Nevada

Trexler, Dennis T., (1979) Carson City Quadrangle Earthquake Map, Nevada Bureau of Mine and Geology, Reno, Nevada

US Army Corps of Engineers Engineering and Design, 2000, Design and Construction of Levees, EM1110-2-1913



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Bryan Canyon Road Pond SUP

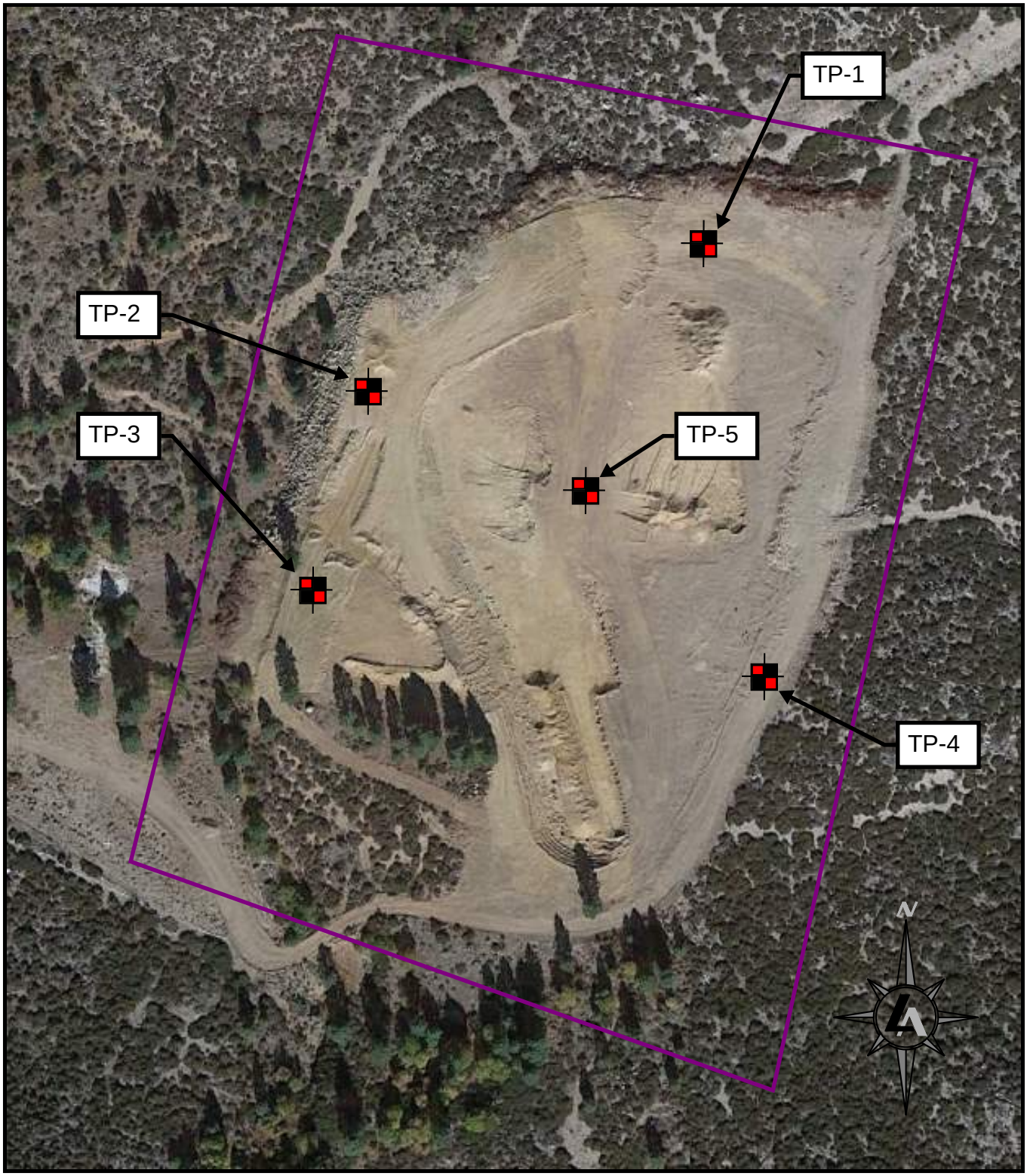
VICINITY MAP

Job Number: 10334.000

Date: April 2021

PLATE

1



Approximate Test Pit Location

Approximate Project Area

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Bryan Canyon Road Pond SUP

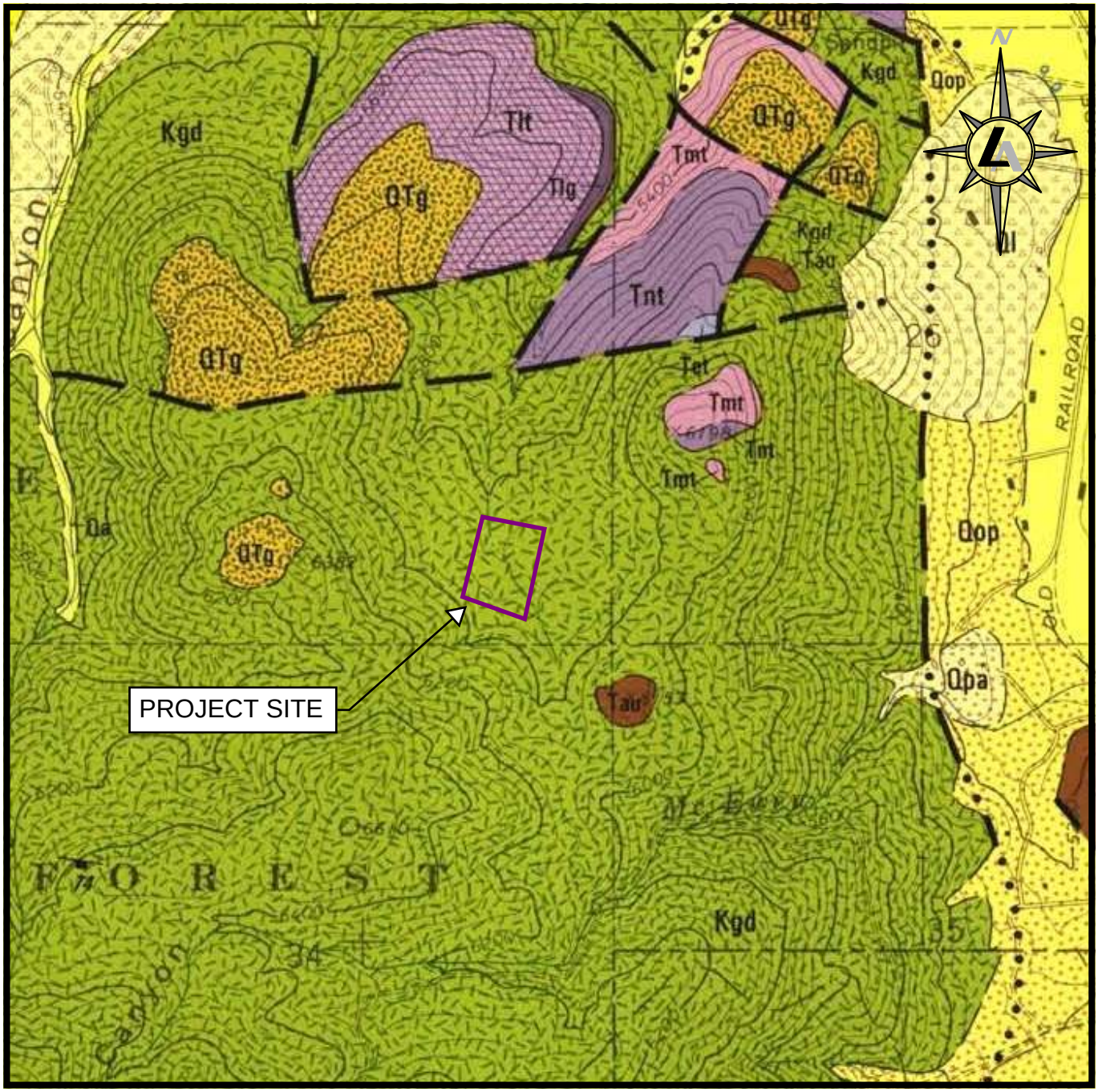
VICINITY MAP

Job Number: 10334.000

Date: April 2021

PLATE

2



Kgd **Hornblende-biotite granodiorite.** Grayish white to gray and greenish gray, medium- to coarse-grained, equigranular to porphyritic, and locally foliated and lineated. Locally grades into quartz monzonite or quartz diorite.

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Bryan Canyon Road Pond SUP

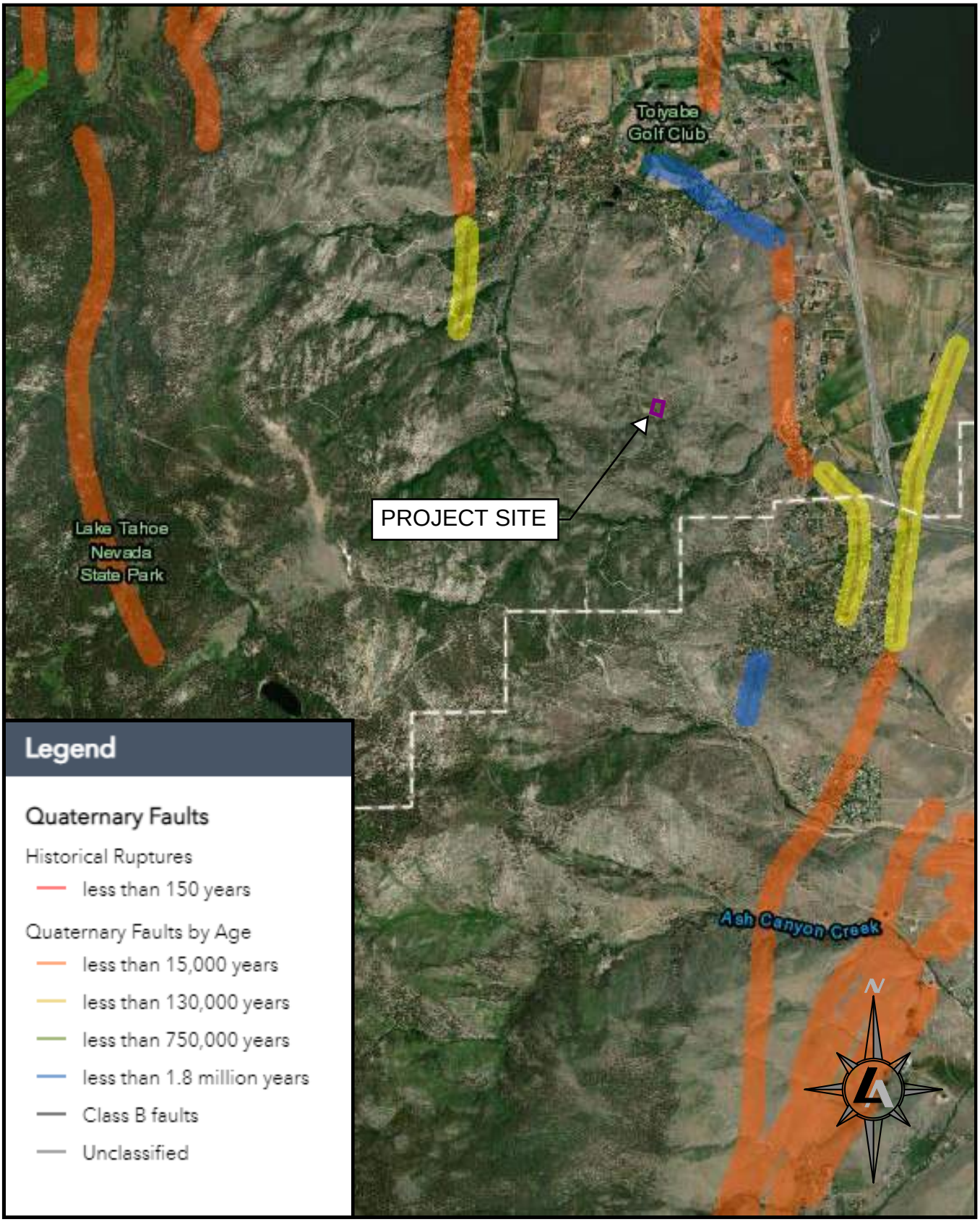
GEOLOGIC MAP

Job Number: 10334.000

Date: April 2021

PLATE

3



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Bryan Canyon Road Pond SUP

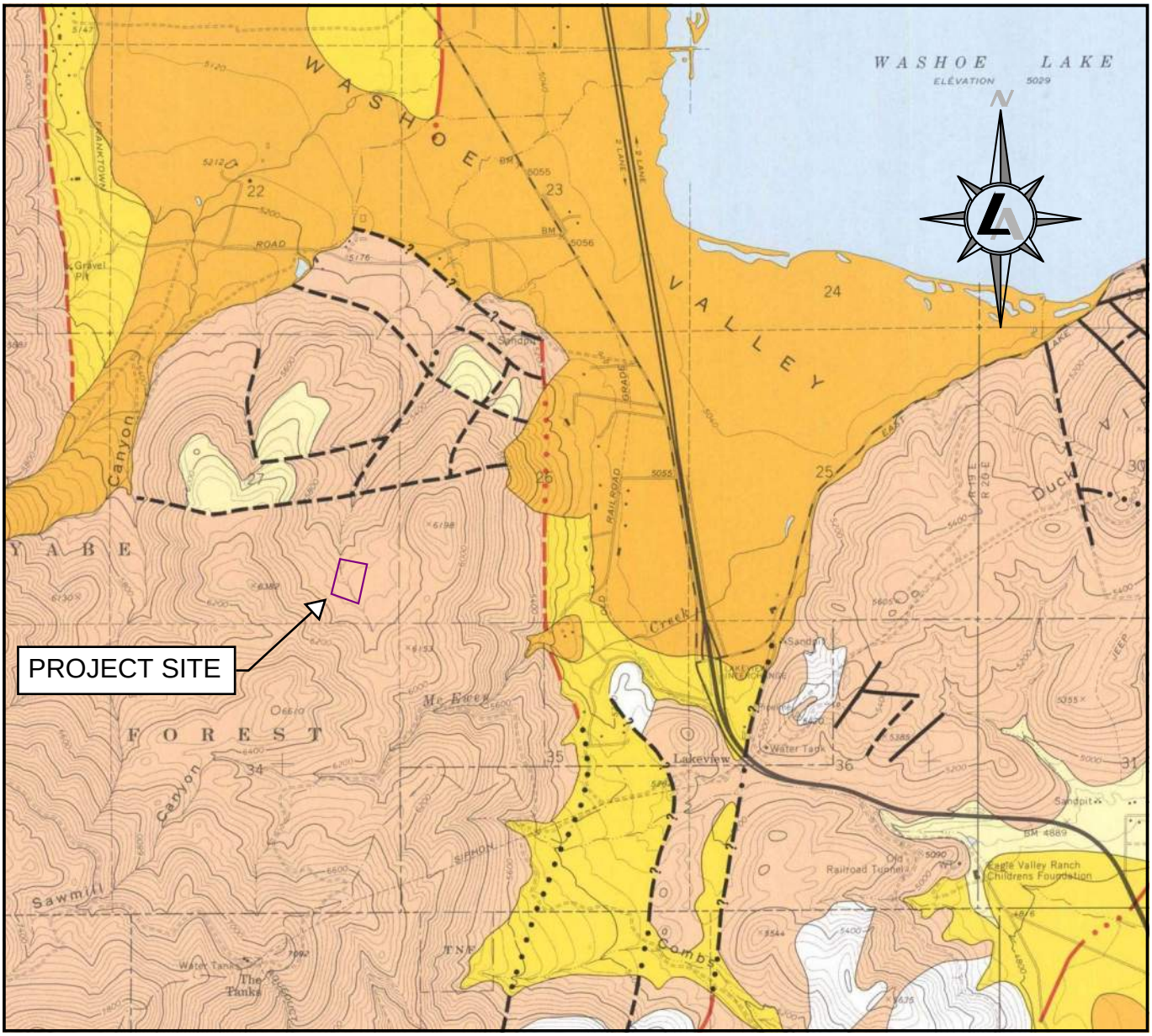
EARTHQUAKE MAP 1

Job Number: 10334.000

Date: April 2021

PLATE

4.1



POTENTIAL FOR GROUND SHAKING DURING EARTHQUAKES

INCREASING INTENSITY OF SHAKING AND POTENTIAL HAZARD
Possibly about 3 units Mercalli intensity scale difference from I to IV

- **I** — Greatest severity of shaking. Depth to ground water less than 3 meters (10 ft). Unconsolidated deposits with low rigidity. Possible severe liquefaction locally.
- **II** — Moderate severity of shaking. Includes units from I above where depth to ground water is greater than 3 meters (10 ft); also includes unconsolidated deposits, with moderate rigidity where depth to ground water is less than 10 meters (33 ft).
- **III** — Moderate severity of shaking. Includes unconsolidated deposits with moderate rigidity where depth to ground water is greater than 10 meters (33 ft).
- **IV** — Least severity of shaking. Underlain by bedrock.
- **V** — Variable severity of shaking. Includes older fan deposits, granodiorite, which ranges in degree and depth of weathering, and Tertiary ash-flow tuffs, which exhibit various degrees of alteration, welding and fracture spacing.

POTENTIAL FOR SURFACE RUPTURE

Age of youngest fault displacement

INCREASING POTENTIAL HAZARD

- Holocene (<12,000 years); locally less than a few hundred years.
- Late Pleistocene (approximately 12,000–35,000 years).
- Early to mid-Pleistocene (approximately 100,000 years–1.8 m.y.).
- Indeterminate; predominantly bedrock faults with last probable movement of pre-Pleistocene age.
- Questionable fault.
- Fault. Dotted where concealed; dashed where approximately located. Ball on downthrown side.

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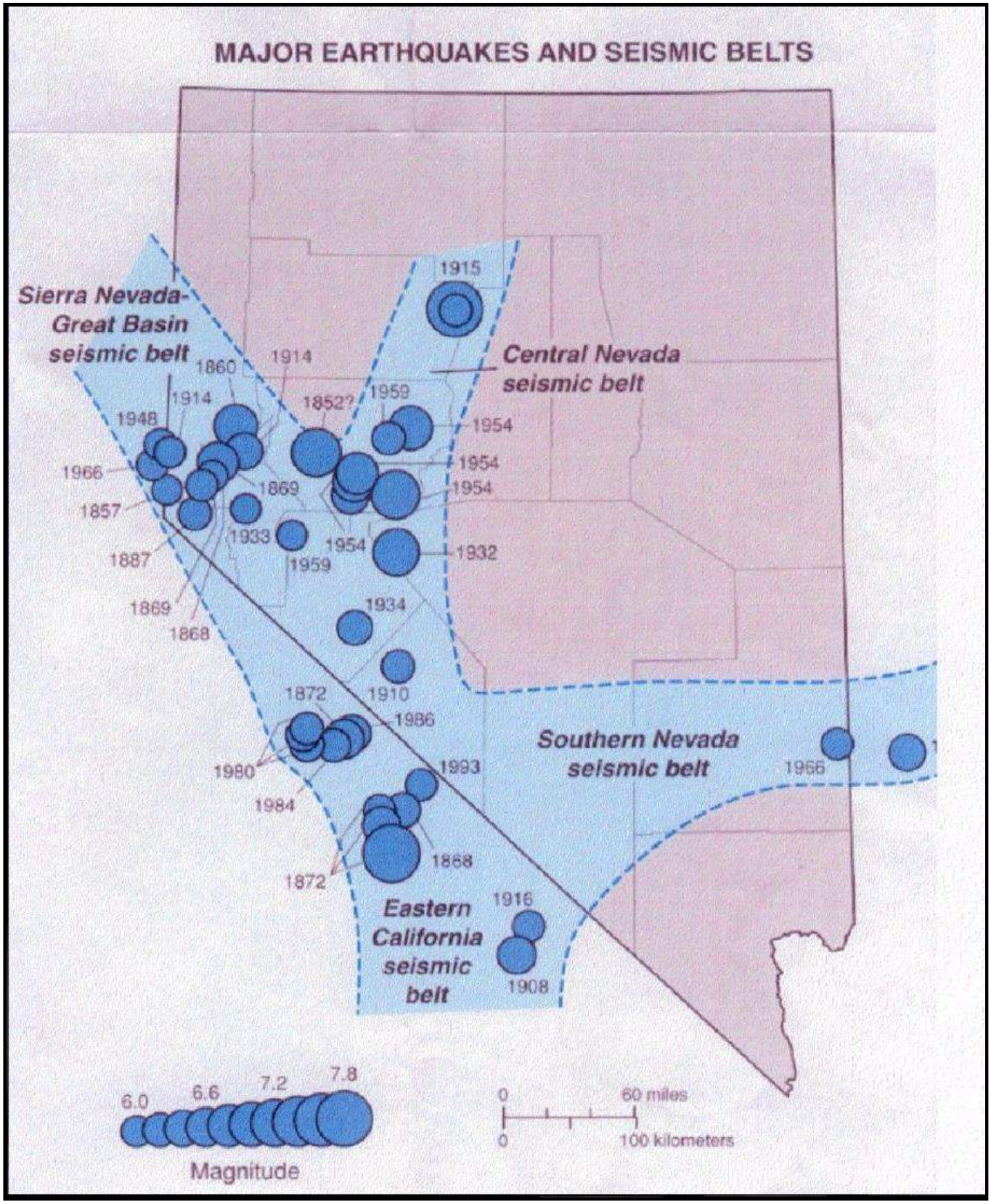
EARTHQUAKE MAP 2

Job Number: 10334.000

Date: April 2021

PLATE

4.2



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MAJOR EARTHQUAKES/SIESMIC BELTS

Job Number: 10334.000

Date: April 2021

PLATE

5

MODIFIED MERCALLI INTENSITY SCALE

INTENSITY	EFFECTS
I	Not felt except by a very few under especially favorable circumstances.
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Felt quite noticeable indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
IV	During the day felt indoors by many, outdoors by few. At night some awaken. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building; standing motor cars rock noticeably.
V	Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
VI	Felt by all; many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well- built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Disturbs persons driving motor cars.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
X	Some well-built wooden structures destroyed; most masonry and frame structures with foundations destroyed; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (sloped) over banks.
XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

From Wood and Newman, 1931, by U.S. Geological Survey, 1974, Earthquake Information Bulletin, v. 6, no. 5, p. 28i

Richter Magnitude	Intensity (maximum expected Modified Mercalli)
3.0 - 3.9	II - III
4.0 - 4.9	IV - V
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - VIII
7.0 - 7.9	IX - X
8.0 - 8.9	XI - XII

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MODIFIED MERCALLI SCALE

Job Number: 10334.000 Date: April 2021

PLATE

6

APPENDIX A

Field Exploration

LUMOS & ASSOCIATES

TEST PIT No. 1

Logged By:	**P. McCreary**	Total Depth:	**7 feet**
Date Logged:	**3-31-2021**	Water Depth:	**No groundwater encountered**
Equipment Type:	**Link Belt 145X4**	Ground Elev.:	**Existing**

Percolation Test | Split Spoon | Ziplock Sample | California Sampler | Bulk Sample | Static Water Table

Depth in Feet	Graphic Log	Sample Type	SOIL DESCRIPTION	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Liquid Limit, %	Plasticity Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1		B	***Fill* - Well-Graded SAND with Silt** Reddish Brown to Medium Brown, Moist, and Medium Dense. Some Small Distrubed Roots Observed. Estimated Trace Fine Gravel, 90% Coarse to Fine Sand, and 10% Non-Plastic Silt.											
2														
3														
4														
5			5.0											
6			**Well-Graded SAND with Silt** Brown, Moist, and Medium Dense to Very Dense. Estimated Trace Fine Gravel, 90% Coarse to Fine Sand, and 10% Non-Plastic Silt.											
7		B	7.0 Very Hard Digging (Transitioning to Bedrock)											

Latitude, Longitude: 39.217442°, -119.827783°

Test pit terminated at 7 feet.
Test pit backfilled without compaction verification.

LUMOS_TP_FULL_PAGE WITH R-V AND SHEAR_BRYAN POND GINT.GPJ US_LAB.GDT 4/12/21

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Bryan Canyon Road Pond SUP

LOG OF EXPORATORY TEST PIT

Job Number: 10334.000 Date: April 2021

PLATE

A-1

TEST PIT No. 2

Logged By:	**P. McCreary**	Total Depth:	**13 feet**
Date Logged:	**3-31-2021**	Water Depth:	**No groundwater encountered**
Equipment Type:	**Link Belt 145X4**	Ground Elev.:	**Existing**

Percolation Test | Split Spoon | Ziplock Sample | California Sampler | Bulk Sample | Static Water Table

Depth in Feet	Graphic Log	Sample Type	SOIL DESCRIPTION	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Liquid Limit, %	Plasticity Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1		B	***Fill* - Well-Graded SAND with Silt** Brown, Moist, and Medium Dense. Some Small Distrubed Roots Observed. Estimated Trace Fine Gravel, 90% Coarse to Fine Sand, and 10% Non-Plastic Silt.											
2														
3														
4														
5		B												
6														
7			7.0											
8			**Well-Graded SAND with Silt** Reddish Brown, Moist, and Medium Dense to Very Dense. Estimated Trace Fine Gravel, 90% Coarse to Fine Sand, and 10% Non-Plastic Silt.											
9														
10														
11														
12		B												
13			13.0											
			Very Hard Digging (Transitioning to Bedrock)											
			Latitude, Longitude: 39.217054°, -119.828877°											
			Test pit terminated at 13 feet. Test pit backfilled without compaction verification.											

LUMOS_TP_FULL_PAGE WITH R-V AND SHEAR_BRYAN POND GINT.GPJ US_LAB.GDT 4/12/21

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Bryan Canyon Road Pond SUP

LOG OF EXPORATORY TEST PIT

Job Number: 10334.000 Date: April 2021

PLATE

A-2

TEST PIT No. 3

Logged By:	**P. McCreary**	Total Depth:	**10 feet**
Date Logged:	**3-31-2021**	Water Depth:	**No groundwater encountered**
Equipment Type:	**Link Belt 145X4**	Ground Elev.:	**Existing**

Percolation Test | Split Spoon | Ziplock Sample | California Sampler | Bulk Sample | Static Water Table

Depth in Feet	Graphic Log	Sample Type	SOIL DESCRIPTION	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Liquid Limit, %	Plasticity Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1		B	***Fill* - Well-Graded SAND with Silt** Brown, Moist, and Medium Dense. Some Small Distrubed Roots Observed.											
2														
3														
4		B		9.6			NP	NP	3.5	84.7	11.7			36
5														
6														
7			7.0											
			Well-Graded SAND with Silt Reddish Brown, Moist, and Medium Dense to Very Dense. Estimated Trace Fine Gravel, 90% Coarse to Fine Sand, and 10% Non-Plastic Silt.											
9		B	10.0											
10			Very Hard Digging (Transitioning to Bedrock)											

Latitude, Longitude: 39.216581°, -119.829019°

Test pit terminated at 10 feet.
Test pit backfilled without compaction verification.

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Bryan Canyon Road Pond SUP

LOG OF EXPORATORY TEST PIT

Job Number: 10334.000 Date: April 2021

PLATE A-3

LUMOS_TP_FULL_PAGE WITH R-V AND SHEAR_BRYAN POND GINT.GPJ US_LAB.GDT 4/12/21

TEST PIT No. 4

Logged By:	**P. McCreary**	Total Depth:	**8 feet**
Date Logged:	**3-31-2021**	Water Depth:	**No groundwater encountered**
Equipment Type:	**Link Belt 145X4**	Ground Elev.:	**Existing**

Percolation Test | Split Spoon | Ziplock Sample | California Sampler | Bulk Sample | Static Water Table

Depth in Feet	Graphic Log	Sample Type	SOIL DESCRIPTION	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Liquid Limit, %	Plasticity Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1		B	**Well-Graded SAND with Silt** Brown, Moist, and Medium Dense to Very Dense.	6.1			NP	NP	1.5	88.6	10.0			
2														
3		B	At 3' Color Change to Brown.											
4														
5														
6														
7														
8		B	8.0 Very Hard Digging (Transitioning to Bedrock)											

Latitude, Longitude: 39.216362°, -119.827500°

Test pit terminated at 8 feet.
Test pit backfilled without compaction verification.

LUMOS_TP_FULL_PAGE WITH R-V AND SHEAR_BRYAN POND GINT.GPJ US_LAB.GDT 4/12/21

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Bryan Canyon Road Pond SUP

LOG OF EXPORATORY TEST PIT

Job Number: 10334.000 Date: April 2021

PLATE

A-4

TEST PIT No. 5

Logged By:	**P. McCreary**	Total Depth:	**10 feet**
Date Logged:	**3-31-2021**	Water Depth:	**No groundwater encountered**
Equipment Type:	**Link Belt 145X4**	Ground Elev.:	**Existing**

Percolation Test | Split Spoon | Ziplock Sample | California Sampler | Bulk Sample | Static Water Table

Depth in Feet	Graphic Log	Sample Type	SOIL DESCRIPTION	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Liquid Limit, %	Plasticity Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1			**Well-Graded SAND with Silt** Light Brown, Moist, and Medium Dense to Very Dense.											
2														
3														
4		B		4.9	10.0	126.0	NP	NP	11.1	82.0	6.9			38
5														
6														
7														
8														
9		B												
10			10.0											
			Very Hard Digging (Transitioning to Bedrock)											

Latitude, Longitude: 39.216763°, -119.827490°

Test pit terminated at 10 feet.
Test pit backfilled without compaction verification.

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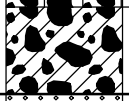
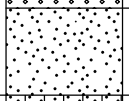
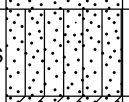
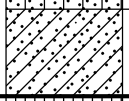
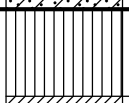
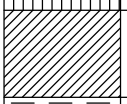
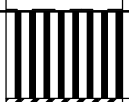
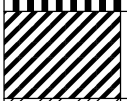
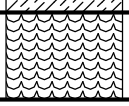
Bryan Canyon Road Pond SUP

LOG OF EXPORATORY TEST PIT

Job Number: 10334.000 Date: April 2021

PLATE A-5

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE)	GRAVEL AND GRAVELLY SOILS (MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE)	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS (MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE)	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE)	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Other Tests

AN	ANALYTICAL TEST (pH, Soluble Sulfate, and Resistivity)
C	CONSOLIDATION TEST
DS	DIRECT SHEAR TEST
MD	MOISTURE DENSITY CURVE

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Bryan Canyon Road Pond SUP

LEGEND

Job Number: 10334.000

Date: April 2021

PLATE

A-6

LUMOS LEGEND BRYAN POND GINT.GPJ 10-23-06.GDT 4/5/21

APPENDIX B

Soils Laboratory Test Results

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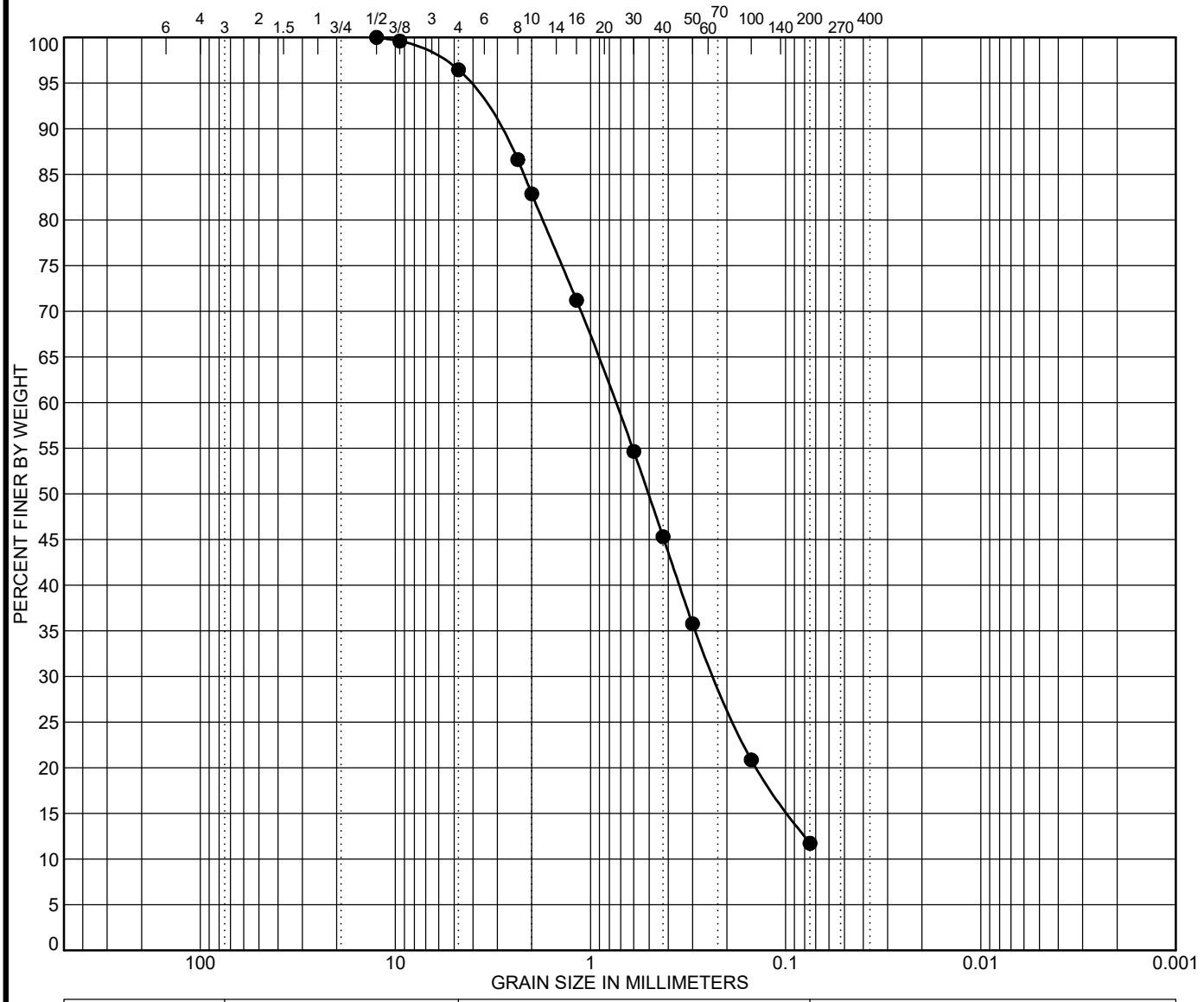

COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Date: 4-1-2020					
●	3	Classification	LL	PL	PI	Cc	Cu
	Depth: 4	Fill - Well-Graded SAND with Silt (SW-SM)	NP	NP	NP	1.1	11.3
	Sample Location	TP-3 at 4-4.5'					
	USCS	SW-SM					
	AASHTO						

	Specimen Identification								
●	3	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	Depth: 4	12.5	0.747	0.229		3.5	84.7	11.7	

	Natural Moisture	9.6 %		**S.E.**		**Absorption %**	
	R-Value			**Durability Index**		**Soundness**	
	Perctage of Wear (500 rev)	%		**Specific Gravity**		**Direct Shear**	

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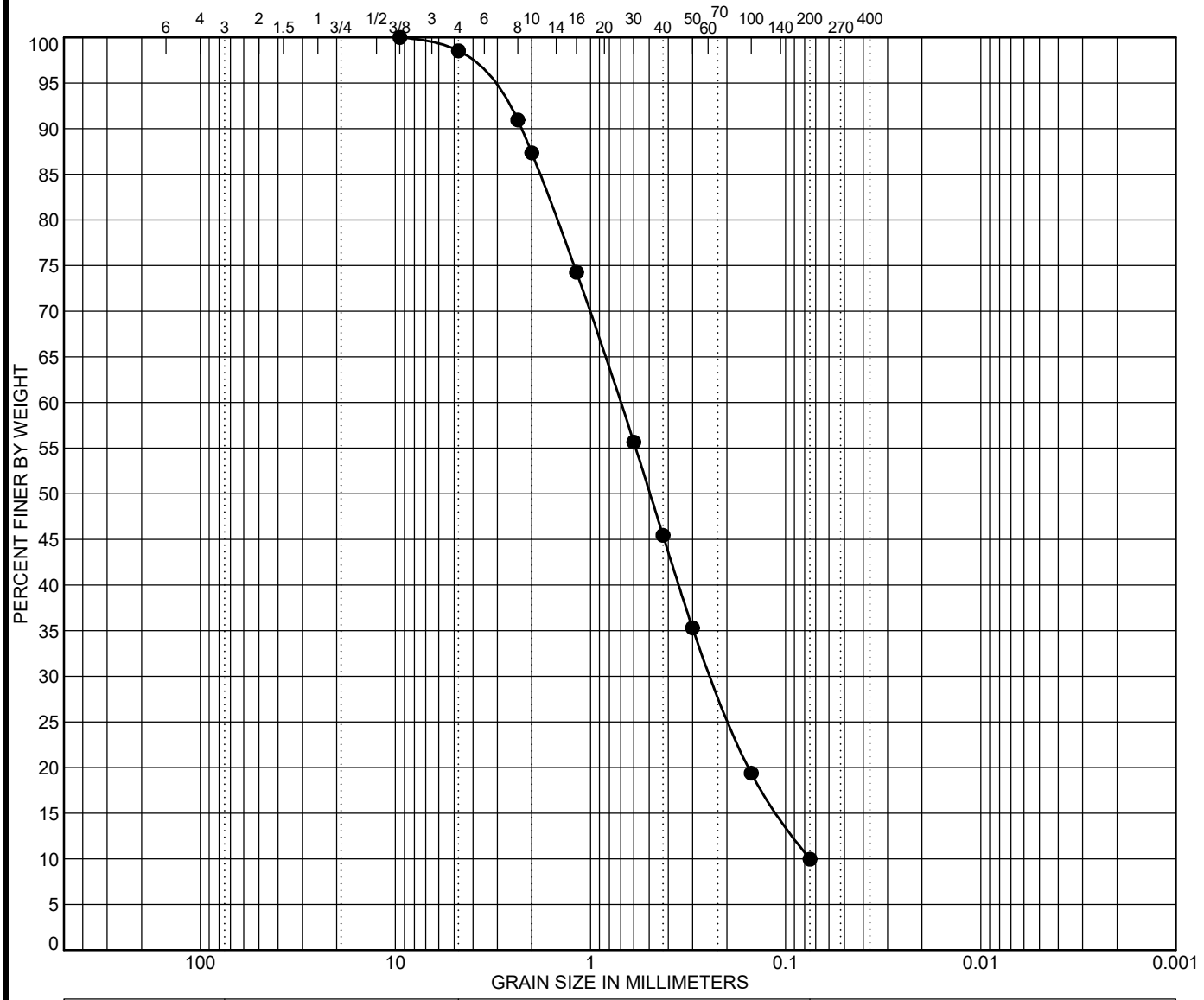
GRAIN SIZE DISTRIBUTION

Job Number: 10334.000 Date: April 2021

PLATE

B-1.1

LUMOS GRAIN SIZE BRYAN POND GINT.GPJ US LAB.GDT 4/5/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Date: 4-1-2021						
●	**4**	Classification	LL	PL	PI	Cc	Cu
	Depth: 1	Well-Graded SAND with Silt (SW-SM)	NP	NP	NP	1.1	9.3
	Sample Location	TP-4 at 1-1.5'					
	USCS	SW-SM					
	AASHTO						

	Specimen Identification								
●	**4**	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	Depth: 1	9.5	0.703	0.238	0.075	1.5	88.6	10.0	
	Natural Moisture	6.1 %		**S.E.**		**Absorption %**			
	R-Value			**Durability Index**		**Soundness**			
	Perctage of Wear (500 rev)	%		**Specific Gravity**		**Direct Shear**			

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Bryan Canyon Road Pond SUP

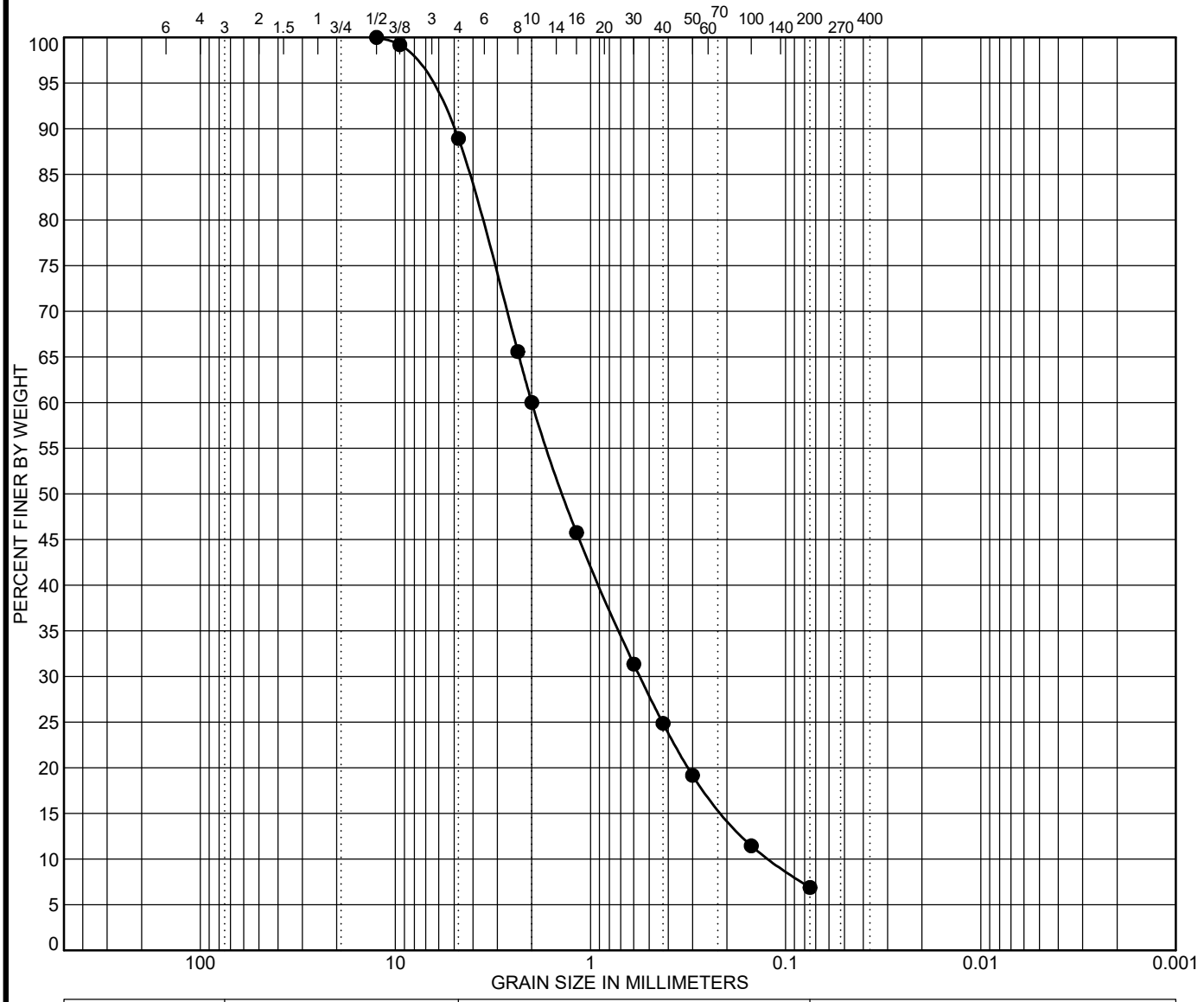
GRAIN SIZE DISTRIBUTION

Job Number: 10334.000 Date: April 2021

PLATE

B-1.2

LUMOS GRAIN SIZE BRYAN POND GINT.GPJ US LAB.GDT 4/5/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Date: 4-1-2021					
●	**5**	Classification	LL	PL	PI	Cc	Cu
	Depth: 4	Well-Graded SAND with Silt (SW-SM)	NP	NP	NP	1.3	16.6
	Sample Location	TP-5 at 4-4.5'					
	USCS	SW-SM					
	AASHTO						

	Specimen Identification								
●	**5**	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	Depth: 4	12.5	1.999	0.558	0.12	11.1	82.0	6.9	
	Natural Moisture	4.9 %		**S.E.**		**Absorption %**			
	R-Value			**Durability Index**		**Soundness**			
	Perctage of Wear (500 rev)	%		**Specific Gravity**		**Direct Shear**			

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Bryan Canyon Road Pond SUP

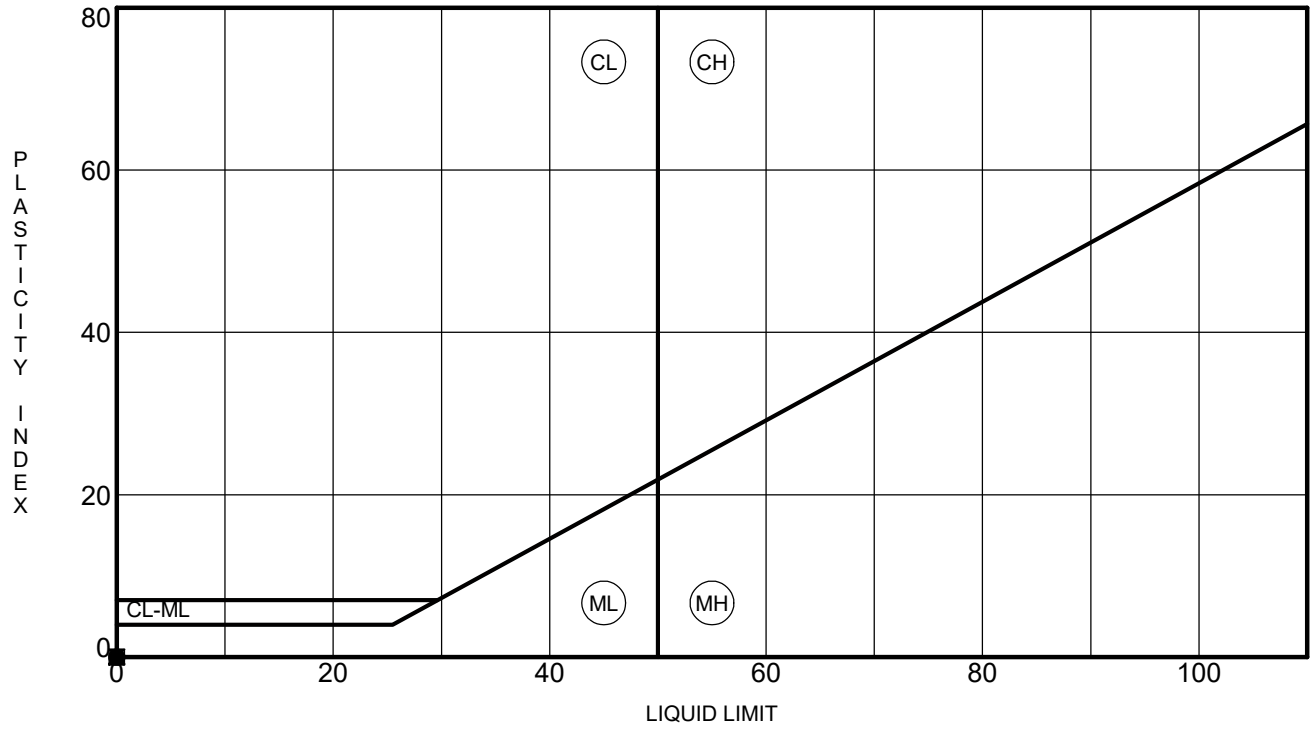
GRAIN SIZE DISTRIBUTION

Job Number: 10334.000 Date: April 2021

PLATE

B-1.3

LUMOS_GRAIN_SIZE_BRYAN POND GINT.GPJ US_LAB.GDT 4/5/21



	Specimen Identification		LL	PL	PI	Fines	Classification
●	**3**	**4.0**	**NP**	**NP**	**NP**	**12**	Fill - Well-Graded SAND with Silt (SW-SM)
⊠	**4**	**1.0**	**NP**	**NP**	**NP**	**10**	Well-Graded SAND with Silt (SW-SM)
▲	**5**	**4.0**	**NP**	**NP**	**NP**	**7**	Well-Graded SAND with Silt (SW-SM)

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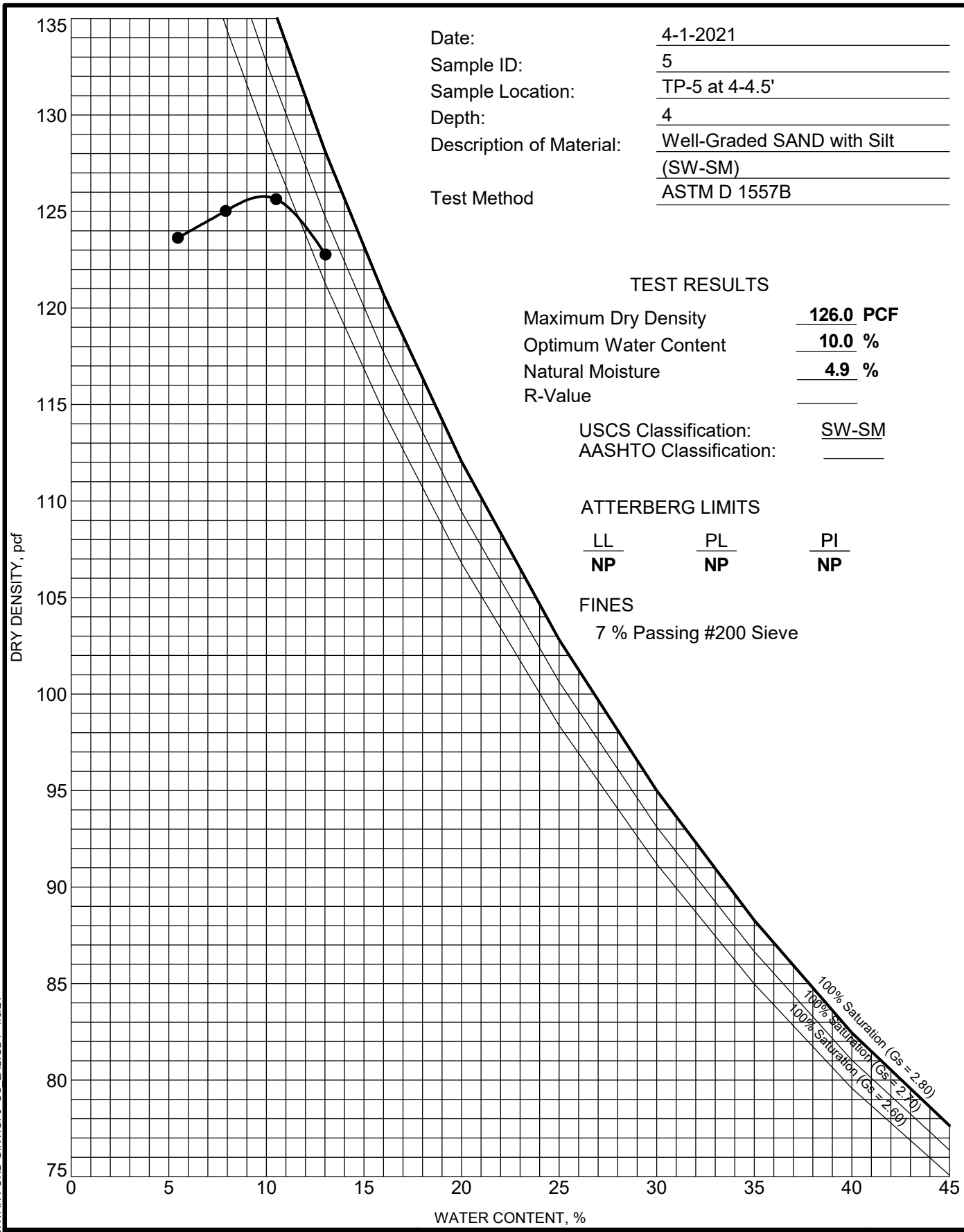
Bryan Canyon Road Pond SUP

ATTERBERG LIMITS' RESULTS

Job Number: 10334.000 Date: April 2021

PLATE

B-2



Date: 4-1-2021
Sample ID: 5
Sample Location: TP-5 at 4-4.5'
Depth: 4
Description of Material: Well-Graded SAND with Silt (SW-SM)
Test Method: ASTM D 1557B

TEST RESULTS

Maximum Dry Density	**126.0 PCF**
Optimum Water Content	**10.0 %**
Natural Moisture	**4.9 %**
R-Value	

USCS Classification: SW-SM
AASHTO Classification:

ATTERBERG LIMITS

LL	PL	PI
NP	**NP**	**NP**

FINES
7 % Passing #200 Sieve

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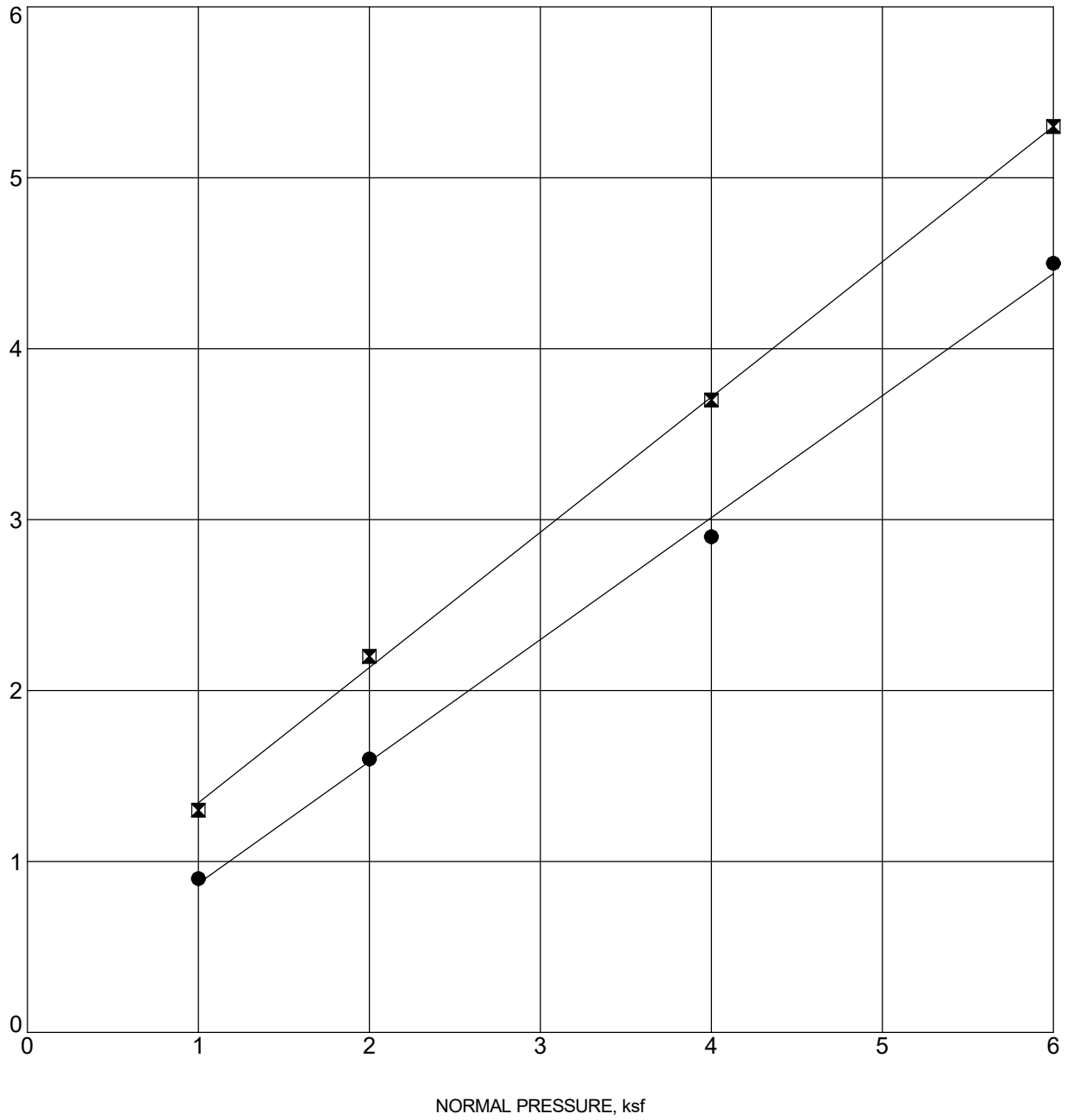
Bryan Canyon Road Pond SUP

MOISTURE-DENSITY CURVE

Job Number: 10334.000 Date: April 2021

PLATE

B-3



Specimen Identification			Classification	γ_d	MC%	c	ϕ
●	3	4.0	**Fill - Well-Graded SAND with Silt (SW-SM)**	**104**	**10**	**0.16**	**36.0**
⊠	5	4.0	**Well-Graded SAND with Silt (SW-SM)**	**125**	**10**	**0.55**	**38.0**

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Bryan Canyon Road Pond SUP

DIRECT SHEAR TEST

Job Number: 10334.000 Date: April 2021

PLATE

B-4

APPENDIX C

Design Response Spectrum

LUMOS & ASSOCIATES

Hazards by Location

Search Information

Coordinates: 39.21684214007821, -119.8280507116462

Elevation: 5915 ft

Timestamp: 2021-04-05T21:21:16.806Z

Hazard Type: Seismic

Reference Document: ASCE7-16

Risk Category: II

Site Class: D-default

Map data ©2021 Imagery ©2021 , Landsat / Copernicus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency

Basic Parameters

Name	Value	Description
S_S	2.167	MCE_R ground motion (period=0.2s)
S_1	0.783	MCE_R ground motion (period=1.0s)
S_{MS}	2.6	Site-modified spectral acceleration value
~~S_{M1}~~	~~* null~~	Site-modified spectral acceleration value
S_{DS}	1.733	Numeric seismic design value at 0.2s SA
~~S_{D1}~~	~~* null~~	Numeric seismic design value at 1.0s SA

* See Section 11.4.8

Additional Information

Name	Value	Description
~~SDC~~	~~* null~~	Seismic design category
F_a	1.2	Site amplification factor at 0.2s
~~F_v~~	~~* null~~	Site amplification factor at 1.0s
CR_S	0.892	Coefficient of risk (0.2s)
CR_1	0.881	Coefficient of risk (1.0s)
PGA	0.923	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	1.108	Site modified peak ground acceleration
T_L	6	Long-period transition period (s)
SsRT	2.167	Probabilistic risk-targeted ground motion (0.2s)
SsUH	2.429	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
SsD	2.466	Factored deterministic acceleration value (0.2s)

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Bryan Canyon Road Pond SUP

DESIGN RESPONSE SPECTRUM

Job Number: 10334.000

Date: April 2021

PLATE C-1

APPENDIX D

Investigation Field Density Testing

LUMOS & ASSOCIATES

Location: Test Pit #1					
Depth Below Existing Grade (Ft)	Inplace		Maximum Dry Density (pcf)	Optimum Moisture	Relative Density
	Density (pcf)	Moisture			
0	117.4	6.2%	126.0	10.0%	93%
1	113.3	7.8%	126.0	10.0%	90%
2	117.9	11.2%	126.0	10.0%	94%
3	115.7	9.4%	126.0	10.0%	92%

Location: Test Pit #2					
Depth Below Existing Grade (Ft)	Inplace		Maximum Dry Density (pcf)	Optimum Moisture	Relative Density
	Density (pcf)	Moisture			
0	119.6	7.3%	126.0	10.0%	95%
1	124.2	10.0%	126.0	10.0%	99%
2	120.5	8.6%	126.0	10.0%	96%
4	120.9	9.4%	126.0	10.0%	96%
5	121.6	10.7%	126.0	10.0%	97%

Location: Test Pit #3					
Depth Below Existing Grade (Ft)	Inplace		Maximum Dry Density (pcf)	Optimum Moisture	Relative Density
	Density (pcf)	Moisture			
0	113.6	8.2%	126.0	10.0%	90%
1	113.9	10.8%	126.0	10.0%	90%
2.5	110.3	10.1%	115.0	10.0%	96%
4	107.4	15.5%	115.0	10.0%	93%

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Bryan Canyon Road Pond SUP

FILL DENSITY TESTING

Job Number: 10334.000 Date: April 2021

PLATE

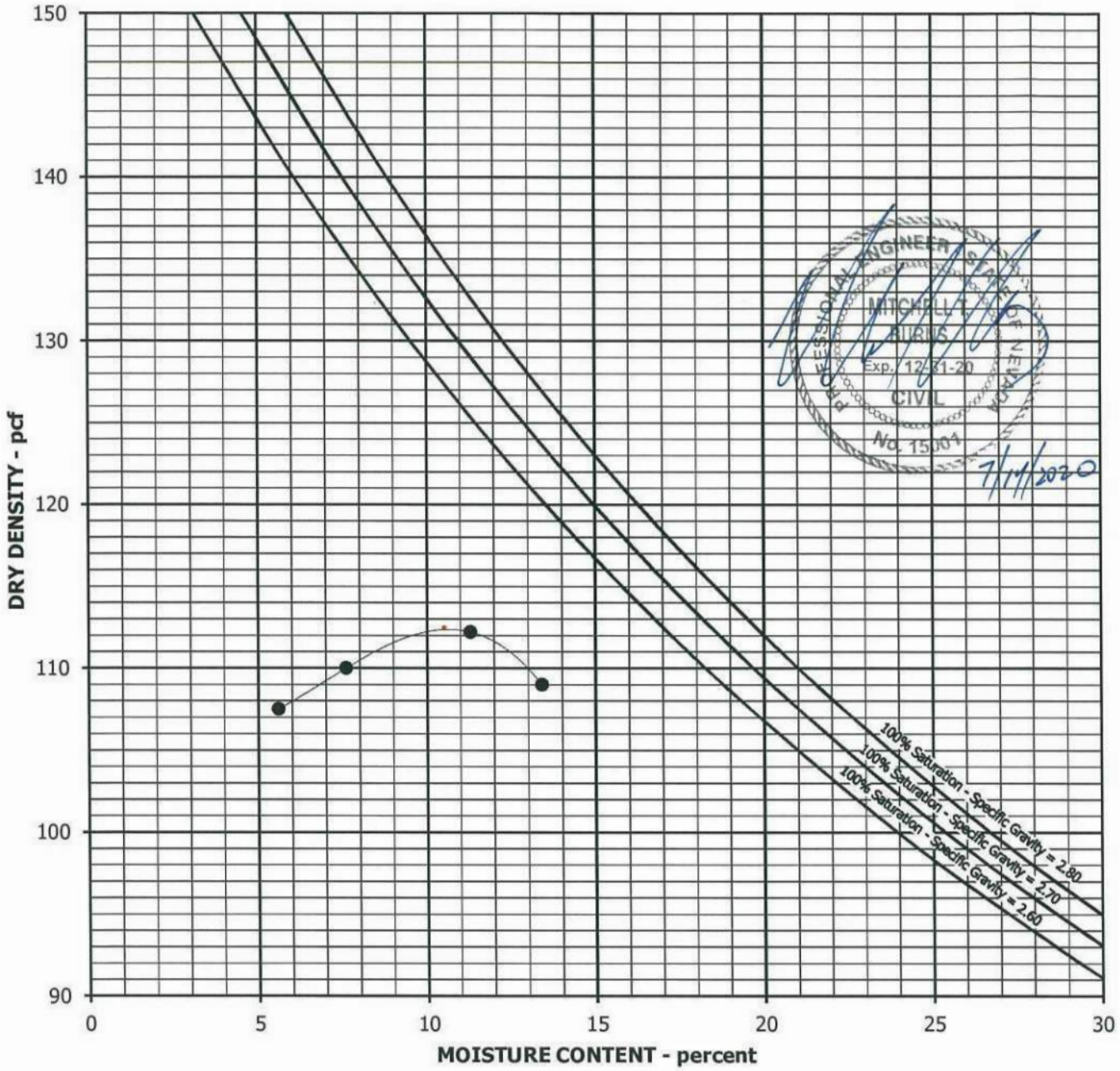
D-1

APPENDIX E

Previous Laboratory Testing

LUMOS & ASSOCIATES

MOISTURE DENSITY CURVE



Client:	Armac	Project Name:	Armac 2020 Misc Testing - Bryan Rd. Pond
Job Number:	10000.015	Project Location:	Washoe Valley, NV
Lab Number:	CC-1180-20	Date Sampled:	7/8/2020
Color:	Redish Brown	Test Method:	ASTM D-1557 B
% Passing #200:	- USCS: -	Liquid Limit:	- Plasticity Index: -
Sample Location:	4' Below Original Ground, Edge of Proposed Dam Southwest Cut Section		
Material Description:	Silty Sand		

Optimum Moisture Content 10.5 % **Maximum Dry Density** 112.5 pcf

Remarks:

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Bryan Canyon Road Pond SUP

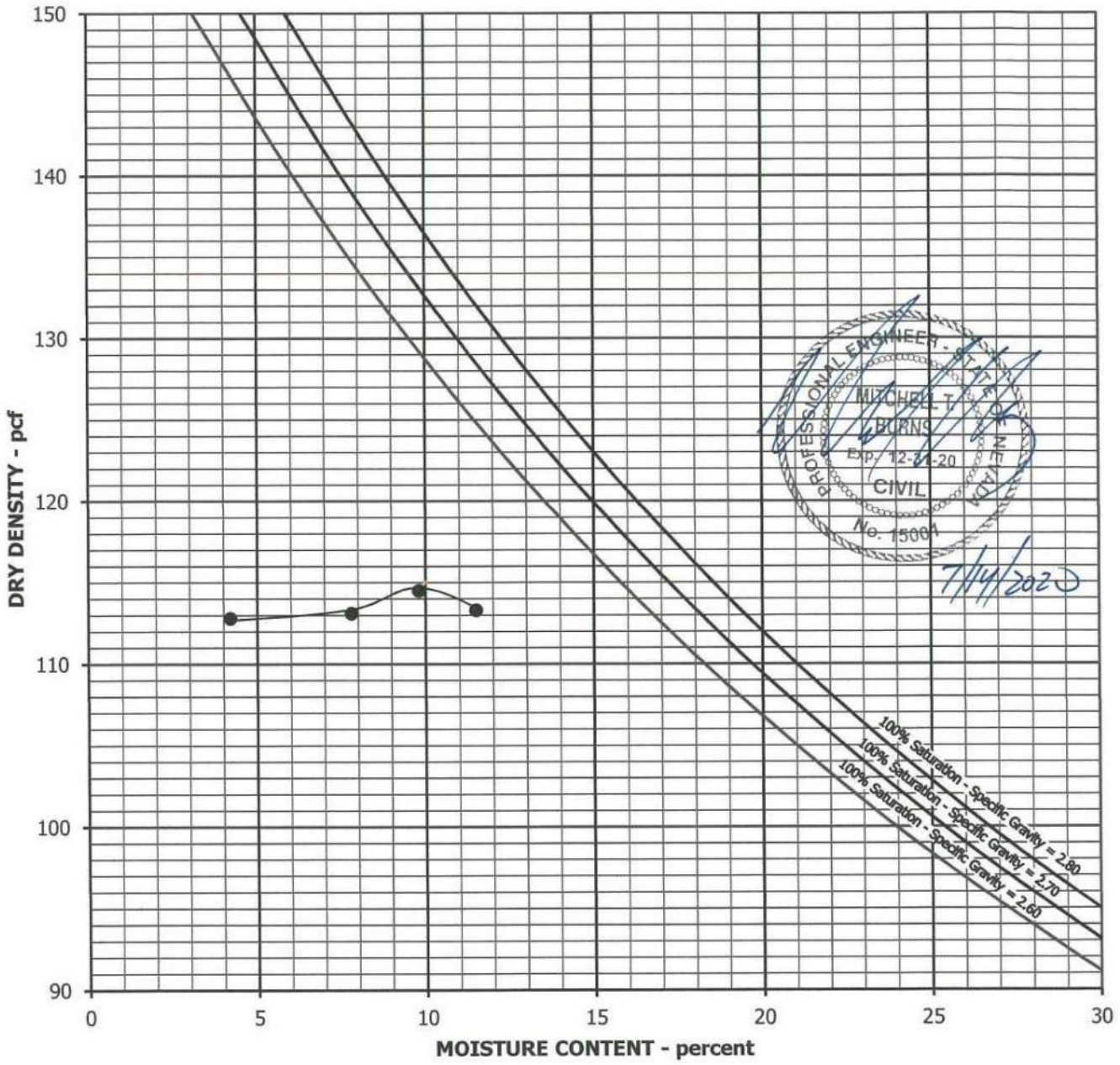
PREVIOUS LABORATORY TESTING DATA

Job Number: 10334.000 Date: April 2021

PLATE

E-1

MOISTURE DENSITY CURVE



Client:	ARMAC	Project Name:	ARMAC 2020 Misc Testing - Bryan Rd. Pond
Job Number:	10000.015	Project Location:	Washoe Valley, NV
Lab Number:	CC-1181-20	Date Sampled:	7/8/2020
Color:	Reddish Brown	Test Method:	ASTM D-1557 B
% Passing #200:	- USCS: -	Liquid Limit:	- Plasticity Index: -
Sample Location:	North West Cut Section 0' - 12' Below Original Grade		
Material Description:	Moderately Cemented Decomposed Granite		

Optimum Moisture Content 10.0 % **Maximum Dry Density** 115.0 pcf

Remarks:

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Bryan Canyon Road Pond SUP

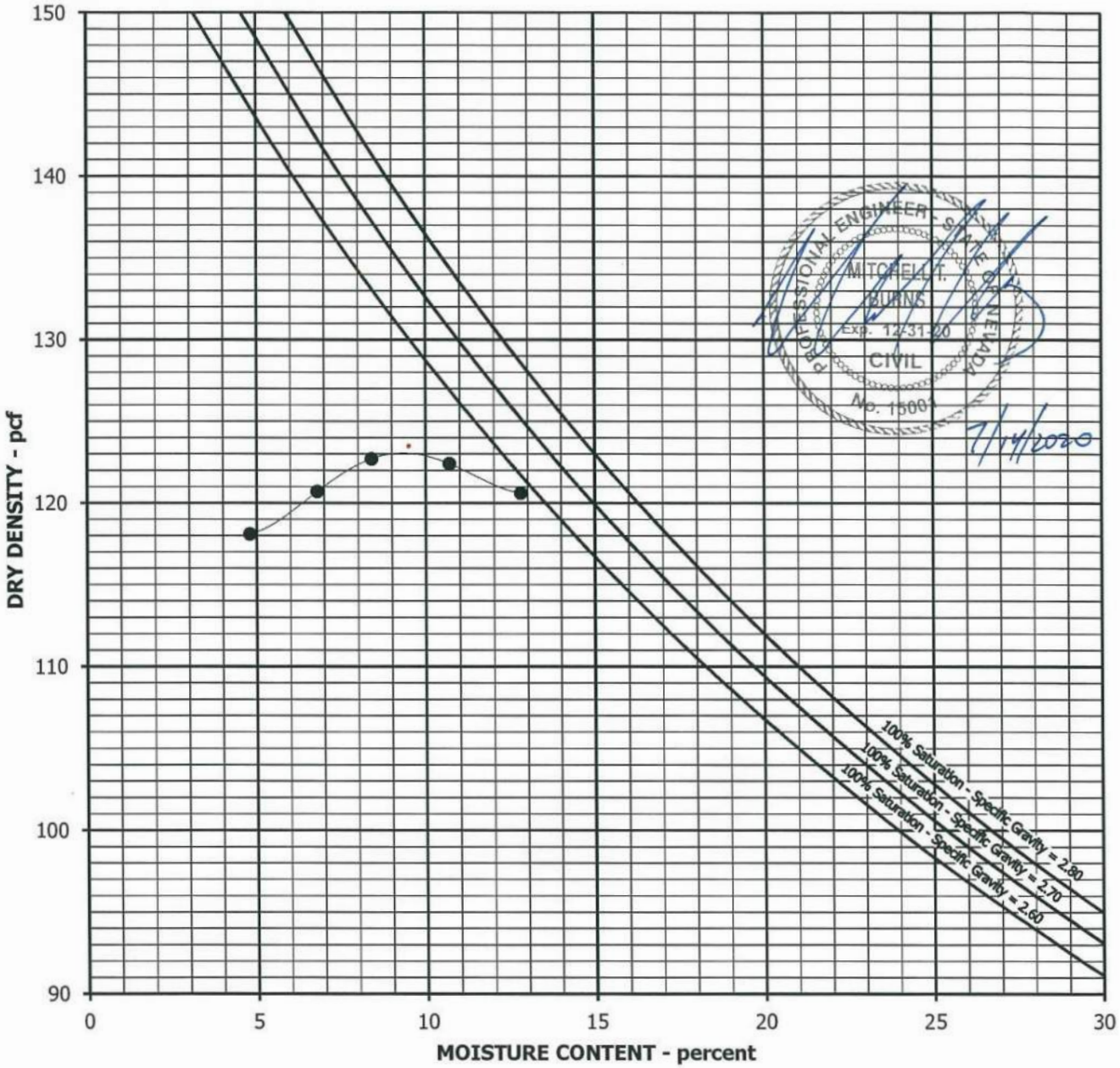
PREVIOUS LABORATORY TESTING DATA

Job Number: 10334.000 Date: April 2021

PLATE

E-2

MOISTURE DENSITY CURVE



PROFESSIONAL ENGINEER - STATE OF NEVADA
MITCHELL T. BURNS
Exp: 12-31-20
CIVIL
No. 15007
7/14/2020

Client:	Armac	Project Name:	Armac 2020 Misc Testing - Bryan Rd. Pond
Job Number:	10000.015	Project Location:	Washoe Valley, NV
Lab Number:	CC-1182-20	Date Sampled:	7/9/2020
Color:	Redish Brown	Test Method:	ASTM D-1557 B
% Passing #200:	- USCS: -	Liquid Limit:	- Plasticity Index: -
Sample Location:	Middle of Cut Section		
Material Description:	Clean Sand		

Optimum Moisture Content 9.5 % **Maximum Dry Density** 123.5 pcf

Remarks:

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Bryan Canyon Road Pond SUP

PREVIOUS LABORATORY TESTING DATA

Job Number: 10334.000 Date: April 2021

PLATE

E-3

APPENDIX F

Previous Field Density Testing

LUMOS & ASSOCIATES

SOIL FIELD DENSITY REPORT

LUMOS & ASSOCIATES

CLIENT: ARMAC Construction
P.O. Box 4616
Carson City, NV 89702

ATTN: **Rob McQueary**

PROJECT NAME: **2020 Misc. Testing**
PROJECT NO.: **10000.015**

TEST NO.	DATE TESTED	LOCATION	ELEVATION	IN PLACE DRY DENSITY lbs/cu.ft.	IN PLACE MOISTURE CONTENT (%)	OPTIMUM MOISTURE CONTENT (%)	MAXIMUM DRY DENSITY lbs/cu.ft.	RELATIVE COM-PACTION (%)	SPECIFIED RELATIVE COM-PACTION (MIN %)
		Bryan Road Pond							
1	07/23/20	Pond Embankment, S.W. corner	5.5' BFG	112.2	8.1	9.5	123.5	91	90
2	07/23/20	Pond Embankment, W. side center	5.5' BFG	114.2	7.9	9.5	123.5	93	90
3	07/23/20	Pond Embankment, N.W. corner	12' BFG	114.7	11.5	9.5	123.5	93	90
4	07/23/20	Pond Embankment, N. side of pond	12' BFG	119.7	4.4	9.5	123.5	97	90
5	07/23/20	Pond Embankment, N.E. corner	6' BFG	117.7	4.9	9.5	123.5	95	90
6	07/28/20	Pond Embankment, N.W. corner	10.5' BFG	118.8	4.2	9.5	123.5	96	90
7	07/28/20	Pond Embankment, center W. side	8' BFG	111.1	8.8	9.5	123.5	90	90

Testing shown hereon was performed at random intervals and continuous observation was not conducted. Test results are valid for locations expressly set forth in this report. No opinion of the material consistency is guaranteed or implied.

NOTE:
RG = ROUGH GRADE
BC = BASE COURSE
SG = SUBGRADE
FG = FINISH GRADE
OG = ORIGINAL GRADE
FTG = FOOTING GRADE
PG = PAD GRADE
FF = FINISH FLOOR
PREFIX "B" = DEPTH BELOW REFERENCE LEVEL
PREFIX "A" = DEPTH ABOVE REFERENCE LEVEL
± = **FAILED TEST**

LUMOS & ASSOCIATES, INC.

REMARKS:

LUMOS & ASSOCIATES

Lumos & Associates

808 E. College Pkwy, Suite 101
Carson City, NV 89706
(775) 883-7077
Fax: (775) 883-7114
mburns@lumosinc.com

Bryan Canyon Road Pond SUP

PREVIOUS FIELD TESTING DATA

Job Number: 10334.000

Date: April 2021

PLATE

F-1

APPENDIX G

Slope Stability

LUMOS & ASSOCIATES

Laboratory Test Values:

1. Internal Friction Angle (Φ) = 36°
2. Cohesion (C) = 160 psf

Assumptions:

1. Slope Height (H) = 20 ft
2. Water Depth (H_w) = 15 ft
3. Surcharge (q) = 240 psf
4. Slope (b) , (2:1) = 2
5. Wet Soil Density (γ) = 125 pcf
6. Water Density (γ_w) = 62.4 pcf
7. No Tension Cracks
8. No Seepage ($H_{w'}$)
9. Toe Circle
10. Homogeneous Soils Strength Parameters

Pond Side of Embankment

H_w/H = 15 ft/20 ft therefore, $\mu_w = 0.97$
$H_{w'}/H$ = 0 ft/20 ft therefore, $\mu_{w'} = 1.0$

$q/(\gamma * H)$ = 240 psf /(125 pfs * 20 ft) therefore, $\mu_q = 0.98$

No tension crack and therefore, $\mu_t = 1.0$

Driving Force

$P_d = (\gamma * H + q - \gamma_w * H_w) / (\mu_q * \mu_w * \mu_t)$
$= (125*20 + 240 - 62.4*0) / (0.98*0.97*1)$
$= 1898$ psf

Effective Force

$P_e = (\gamma * H + q - \gamma_w * H_{w'}) / (\mu_q * \mu_{w'})$
$= (125*20 + 240 - 62.4*0) / (0.98*1.0)$
$= 2796$ psf

Dimensionless Parameter

$\lambda_{C\Phi} = P_e * \tan(\Phi)/C$
$= 2796 * \tan(36°)/160$
$= 13$

Factor of Safety

$N_{cf} = 45$

$F = C*N_{cf}/P_d$
$= 160*45/1898$
$= 3.7$ and therefore, OK

LUMOS & ASSOCIATES
Lumos & Associates
808 E. College Pkwy, Suite 101
Carson City, NV 89706
(775) 883-7077
Fax: (775) 883-7114
mburns@lumosinc.com

Bryan Canyon Road Pond SUP

SLOPE STABILITY 1

Job Number: 10334.000 Date: April 2021

PLATE G-1

Laboratory Test Values:

1. Internal Friction Angle (Φ) = 36°
2. Cohesion (C) = 160 psf

Assumptions:

1. Slope Height (H) = 10 ft
2. Water Depth (H_w) = 5 ft
3. Surcharge (q) = 240 psf
4. Slope (b) , (2:1) = 2
5. Wet Soil Density (ɣ) = 125 psf
6. Water Density ($ɣ_w$) = 62.4 psf
7. No Tension Cracks
8. Seepage ($H_{w'}$) = 5 ft
9. Toe Circle
10. Homogeneous Soils Strength Parameters

Back Side of Pond Embankment

$H_w/H = H_{w'}/H =$ 5 ft/10 ft therefore, $\mu_w = \mu_{w'} = 0.95$

$q/(ɣ * H) =$ 240 psf /(125 pfs * 10 ft) therefore, $\mu_q = 0.95$

No tension crack and therefore, $\mu_t = 1.0$

Driving Force

$P_d = (ɣ * H + q - ɣ_w * H_w) / (\mu_q * \mu_w * \mu_t)$
$= (125*10 + 240 - 62.4*5) / (0.95*0.95*1)$
$= 1305$ psf

Effective Force

$P_e = (ɣ * H + q - ɣ_w * H_{w'}) / (\mu_q * \mu_{w'})$
$= (125*10 + 240 - 62.4*5) / (0.95*0.95)$
$= 1305$ psf

Dimensionless Parameter

$\lambda_{C\Phi} = P_e * \tan(\Phi)/C$
$= 1305 * \tan(36°)/160$
$= 5.9$

Factor of Safety

$N_{cf} = 25$

$F = C*N_{cf}/P_d$
$= 160*25/1305$
$= 3.1$ and therefore, OK

LUMOS & ASSOCIATES
Lumos & Associates
808 E. College Pkwy, Suite 101
Carson City, NV 89706
(775) 883-7077
Fax: (775) 883-7114
mburns@lumosinc.com

Bryan Canyon Road Pond SUP

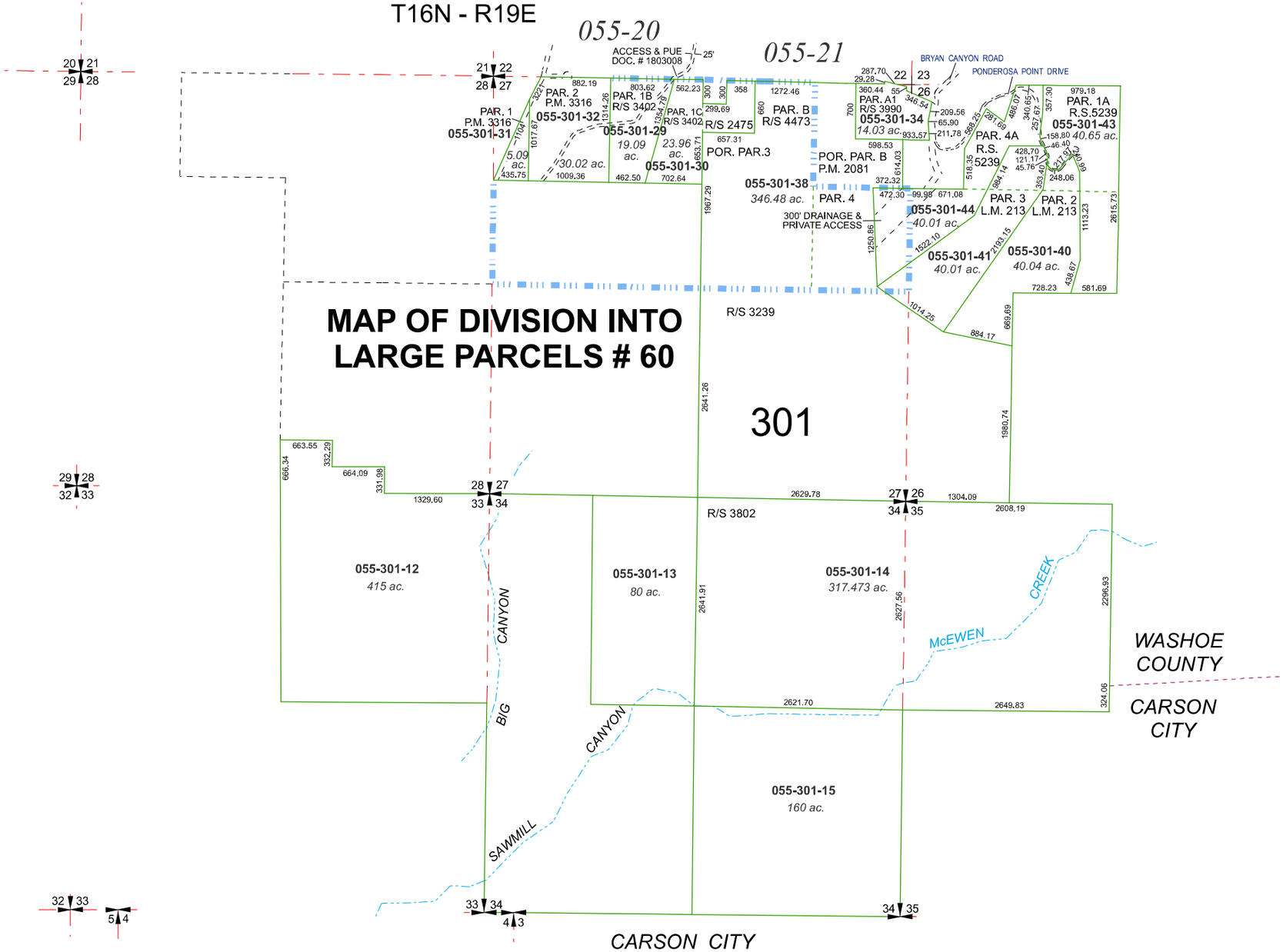
SLOPE STABILITY 2

Job Number: 10334.000 Date: April 2021

PLATE G-2

TAB D

SECTION 34 &
PORTIONS OF SECTIONS 26, 27, 33 & 35
T16N - R19E



Assessor's Map Number

055-30

STATE OF NEVADA

WASHOE COUNTY

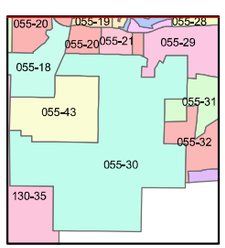
ASSESSOR'S OFFICE

Joshua G. Wilson, Assessor

1001 East Ninth Street
Building D
Reno, Nevada 89512
(775) 328-2231

Feet
0 170340 680 1,020 1,360

1 inch = 1,320 feet



created by: TWT 12/2/2009

last updated: CFB 06/17/2010

area previously shown on map(s)

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

Permit No. 74350

THE STATE OF NEVADA

PERMIT TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Name of applicant:	**GRANT J. WEISE JR.**
Source:	**BRYAN CREEK AND TRIBUTARIES**
Basin:	**WASHOE VALLEY**
Manner of Use:	**AS DECREED**
Period of Use:	**As Decreed**
Priority Date:	**01/01/1870**

****

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of the waters of a portion of the Bryan Creek Tributaries, as heretofore appropriated under Proof V02779, as appears in the Judgment and Decree, in the District Court of the Second Judicial District of the State of Nevada, in and for the County of Washoe, is issued subject to the terms, conditions and irrigation period imposed in said decree and with the understanding that no other rights on the source will be affected by the change proposed herein.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is limited to the irrigation of 8.0 acres within the proposed place of use.

The point of diversion and place of use is as described under items 5 and 7 respectively on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, **and not to exceed 0.20 cubic feet per second or 32.0 acre-feet annually, and not to exceed a yearly duty of 4.0 acre-feet per acre of land irrigated from any and/or all sources.**

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before: **August 21, 2009**

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before: **August 21, 2010**

Map in support of proof of beneficial use shall be filed on or before: **August 21, 2010**

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 21st day of **August**, A.D. **2007**

Tracy Taylor, P.E.
State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

lt

No. 74350

AMENDED

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Date of filing in State Engineer's Office JUN 06 2006

Returned to applicant for correction

Corrected application filed JUN 12 2006

Map filed JUN 12 2006 under 74302

****

The applicant **Grant J. Weise, Jr.** hereby make application for permission to change the **Point of Diversion and Place of Use** of water heretofore appropriated under **Claim V02779, In the Matter of the Determination of the Relative Rights in and to the Waters of Bryan Creek and Its Tributaries in Washoe County, Nevada**

****

1. The source of water is **Bryan Creek and Tributaries**

2. The amount of water to be changed **0.2 cfs, not to exceed 32.00 afa**

3. The water to be used for **As Decreed**

4. The water heretofore permitted for **As Decreed**

5. The water is to be diverted at the following point **SE¼ SE¼ Sec. 27, T.16N., R.19E., M.D.M., or at a point from which the SE corner of said Sec. 27 bears S.71°56'17"E., a distance of 635'.**

6. The existing permitted point of diversion is located within **SW¼ SW¼ Section 23, T.16N., R.19E., M.D.B.&M., or at a point from which the SW¼ corner of said Section 23 bears S. 67°19' W., a distance of 1,192 feet**

7. Proposed place of use **W½ SW¼ Sec. 26, E½ Sec. 27, T.16N., R.19E., M.D.M. (8.0 ac.)**

8. Existing place of use **SW¼ SW¼ Sec. 23, T.16N., R.19E., M.D.B.&M. (8.0 ac. in SW¼ SW¼ Sec. 23 to be removed from existing place**

9. Use will be from **As Decreed**

10. Use was permitted from **As Decreed**

11. Description of proposed works **Creek diversion, storage pond, and gravity pipeline distribution system**

12. Estimated cost of works **$10,000**

13. Estimated time required to construct works **2 Years**

14. Estimated time required to complete the application of water to beneficial use **5 Years**

15. Remarks: **Use the Proof of Beneficial Use map filed under Claim 02779 to support the existing Point of Diversion and Place of Use. Use the map filed under Application 74302 to support the Proposed Point of Diversion and Place of Use.**

74350

Water placed to beneficial use under this application will not be supplemental to water rights being sought under ground water Application 74302.

Brian A. Randall, Resource Concepts, Inc.
By s/ Brian A. Randall
340 North Minnesota Street
Carson City, Nevada 89703

Compared sc/ gkj

Protested

****

Permit No. 77786

THE STATE OF NEVADA

PERMIT TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Name of applicant:	**GRANT J. WEISE, JR.**
Source:	**UNDERGROUND**
Basin:	**WASHOE VALLEY**
Manner of Use:	**IRRIGATION**
Period of Use:	**January 1st to December 31st**
Priority Date:	**07/31/1963**

****

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of a portion of the waters of an underground source as heretofore granted under Permit 21413, Certificate 6087, is issued subject to the terms and conditions imposed in said Permit 21413, Certificate 6087 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The total combined duty of water under Permits 77786 and 77787 shall not exceed 13.94 acre-feet annually for the irrigation of 3.5 acres within the described place of use.

The total combined duty of water from this well under Permits 74302, 77786 and 77787 shall not exceed 32.5 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

(Continued on Page 2)

Application No. 77786

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

THIS SPACE FOR OFFICE USE ONLY

Date of filing in State Engineer's Office JAN 1 2 2009

Returned to applicant for correction _____

Corrected application filed _____ Map filed JUN 1 2 2006 under 7 4 3 0 2

The applicant Grant J. Weise, Jr.

1 Mill Station Ranch Road (Street Address or P.O. Box) of Washoe Valley (City or Town)

Nevada 89704 (State and Zip Code), hereby make(s) application for permission to change the

☒ Point of diversion ☒ Place of use ☐ Manner of use ☒ of a portion

of water heretofore appropriated under (Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)
Permit 21413, Certificate 6087

1. The source of water is Underground (Name of stream, lake, underground, spring or other sources.)
2. The amount of water to be changed 0.0256 c.f.s., 12.95 A.F.A. (Second feet, acre-feet. One second foot equals 448.83 gallons per minute.)
3. The water to be used for Irrigation and Domestic (Irrigation, power, mining, commercial, etc. If for stock, state number and kind of animals. Must limit to one major use.)
4. The water heretofore used for Irrigation and Domestic (If for stock, state number and kind of animals.)
5. The water is to be diverted at the following point (Describe as being within a 40-acre subdivision of public survey and by course and distance to a found section corner. If on unsurveyed land, it should be stated.)
   SE¼ SE¼ Section 27, T. 16 N., R. 19 E., M.D.M., or at a point from which the SE corner of said Section 27 bears South 60° 23' 40" East, a distance of 1,028 feet.
   See supporting map filed under Permit 74302.
6. The existing point of diversion is located within (If point of diversion is not changed, do not answer.)
   SW¼ SE¼ Section 22, T. 16 N., R. 19 E., M.D.B.&M., or at a point from which the SE corner of said Section 22 bears South 68° 10' East, a distance of 2,255.0 feet
   See supporting PBU map filed under Permit 18011.

89-WD

7. Proposed place of use (Describe by legal subdivisions. If for irrigation, state number of acres to be irrigated.)

Portions of the W½ SW¼ Section 26 and E½ Section 27, T. 16 N., R. 19 E., M.D.M.
See supporting map filed under Permit 74302.

8. Existing place of use (Describe by legal subdivisions. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.)

SE¼ SE¼ Section 22, T. 16 N., R. 19 E., M.D.M. (northern 3.5 acres appurtenant to Washoe County APN 55-200-94 being stripped from existing place of use).
See supporting map being filed with this Application.

9. Proposed use will be from January 1 (Month and Day) to December 31 (Month and Day) of each year.

10. Existing use permitted from January 1 (Month and Day) to December 31 (Month and Day) of each year.

11. Description of proposed works. (Under the provision of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.)(State manner in which water is to be diverted, i.e. diversion structure, ditches, pipes and flumes or drilled well, pump and motor, etc.)
Drilled well, pump and motor, irrigation lines, and sprinklers.

12. Estimated cost of works $25,000 for well, pipeline, and road

13. Estimated time required to construct works 2 years (If well completed, describe well.)

14. Estimated time required to complete the application of water to beneficial use 4 years

15. Provide a detailed description of the proposed project and its water usage (use attachments if necessary):
(Failure to provide a detailed description may cause a delay in processing.)
Water will be developed from a drilled well and used for irrigation and domestic purposes on a total of 3.5 acres, to be supplemental to a pending application filed to change Permit 21413.

16. Miscellaneous remarks:

2009 JAN 12 PM 3:37
STATE ENGINEER'S OFFICE

(775) 883-1600
Phone No.

E-mail

By Brian A. Randall
Print or type name clearly

Signature, applicant or agent

Resource Concepts, Inc.
Company Name

340 N. Minnesota St.
Street Address or P.O. Box

Carson City, NV 89703
City, State, Zip Code

APPLICATION MUST BE SIGNED BY THE APPLICANT OR AGENT

$150 FILING FEE AND SUPPORTING MAP MUST ACCOMPANY APPLICATION

7. Proposed place of use (Describe by legal subdivisions. If for irrigation, state number of acres to be irrigated.)

Portions of the W½ SW¼ Section 26 and E½ Section 27, T. 16 N., R. 19 E., M.D.M.
See supporting map filed under Permit 74302.

8. Existing place of use (Describe by legal subdivisions. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.)

SE¼ SE¼ Section 22, T. 16 N., R. 19 E., M.D.M. (northern 3.5 acres appurtenant to Washoe County APN 55-200-94 being stripped from existing place of use).
See supporting map being filed with this Application.

9. Proposed use will be from January 1 (Month and Day) to December 31 (Month and Day) of each year.

10. Existing use permitted from January 1 (Month and Day) to December 31 (Month and Day) of each year.

11. Description of proposed works. (Under the provision of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.)(State manner in which water is to be diverted, i.e. diversion structure, ditches, pipes and flumes or drilled well, pump and motor, etc.)
Drilled well, pump and motor, irrigation lines, and sprinklers.

12. Estimated cost of works $25,000 for well, pipeline, and road

13. Estimated time required to construct works 2 years (If well completed, describe well.)

14. Estimated time required to complete the application of water to beneficial use 4 years

15. Provide a detailed description of the proposed project and its water usage (use attachments if necessary):
(Failure to provide a detailed description may cause a delay in processing.)
Water will be developed from a drilled well and used for irrigation and domestic purposes on a total of 3.5 acres, to be supplemental to a pending application filed to change Permit 20648.

16. Miscellaneous remarks:

2009 JAN 12 PM 3:37
STATE ENGINEER'S OFFICE

(775) 883-1600
Phone No.

E-mail

By Brian A. Randall
Print or type name clearly

Brian A. Randall
Signature, applicant or agent

Resource Concepts, Inc.
Company Name

340 N. Minnesota St.
Street Address or P.O. Box

Carson City, NV 89703
City, State, Zip Code

APPLICATION MUST BE SIGNED BY THE APPLICANT OR AGENT

$150 FILING FEE AND SUPPORTING MAP MUST ACCOMPANY APPLICATION

The point of diversion and place of use are as described on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, **and not to exceed 0.0256 cubic feet per second or 12.95 acre-feet annually.**

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before: **August 21, 2010**

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before: **August 21, 2010**

Map in support of proof of beneficial use shall be filed on or before: **August 21, 2010**

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 11th day of **September**, A.D. **2009**

State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

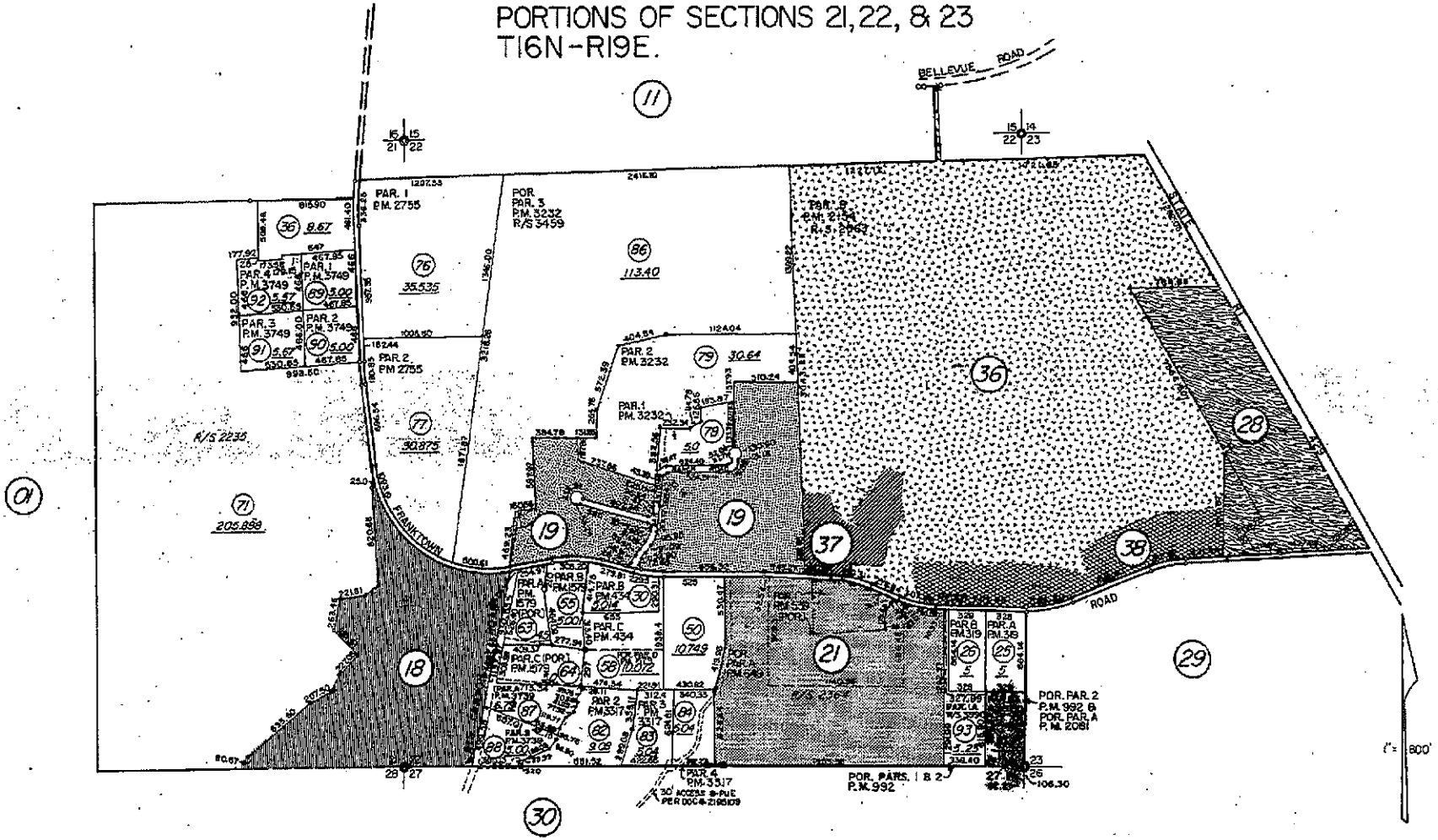
Certificate No. _____ Issued _____

llb

77786

55-20

PORTIONS OF SECTIONS 21, 22, & 23 T16N-R19E.



NOTE: This Map is prepared for the use of the Washoe County Assessor for Assessment and illustrative purposes only, it does not represent survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

Assessor's Map County of Washoe, Nevada

NOTE – *ASSESSOR'S BLOCK NUMBERS SHOWN IN ELLIPSES*
ASSESSOR'S PARCEL NUMBERS SHOWN IN CIRCLES

drawn by LS/P 1/66
revised TWT 3/3/01, 4/4/01, 10/24/01
superseded

Permit No. 77787

THE STATE OF NEVADA

PERMIT TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Name of applicant:	**GRANT J. WEISE, JR.**
Source:	**UNDERGROUND**
Basin:	**WASHOE VALLEY**
Manner of Use:	**IRRIGATION**
Period of Use:	**January 1st to December 31st**
Priority Date:	**08/20/1962**

****

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of a portion of the waters of an underground source as heretofore granted under Permit 20648, Certificate 6086, is issued subject to the terms and conditions imposed in said Permit 20648, Certificate 6086 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The total combined duty of water under Permits 77786 and 77787 shall not exceed 13.94 acre-feet annually for the irrigation of 3.5 acres within the described place of use.

The total combined duty of water from this well under Permits 74302, 77786 and 77787 shall not exceed 32.5 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

(Continued on Page 2)

The point of diversion and place of use are as described on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, **and not to exceed 0.0181 cubic feet per second or 12.74 acre-feet annually.**

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before: **August 21, 2010**

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before: **August 21, 2010**

Map in support of proof of beneficial use shall be filed on or before: **August 21, 2010**

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 11th day of **September**, A.D. **2009**

State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

llb

Application No. 77787

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

THIS SPACE FOR OFFICE USE ONLY

Date of filing in State Engineer's Office JAN 1 2 2009

Returned to applicant for correction _____

Corrected application filed _____ Map filed JUN 1 2 2006 under 7 4 3 0 2

The applicant Grant J. Weise, Jr.

1 Mill Station Ranch Road (Street Address or P.O. Box) of Washoe Valley (City or Town)

Nevada 89704 (State and Zip Code), hereby make(s) application for permission to change the

☒ Point of diversion ☒ Place of use ☐ Manner of use ☒ of a portion

of water heretofore appropriated under (Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)
Permit 20648, Certificate 6086

1. The source of water is Underground (Name of stream, lake, underground, spring or other sources.)
2. The amount of water to be changed 0.0181 c.f.s., 12.74 A.F.A. (Second feet, acre-feet. One second foot equals 448.83 gallons per minute.)
3. The water to be used for Irrigation and Domestic (Irrigation, power, mining, commercial, etc. If for stock, state number and kind of animals. Must limit to one major use.)
4. The water heretofore used for Irrigation and Domestic (If for stock, state number and kind of animals.)
5. The water is to be diverted at the following point (Describe as being within a 40-acre subdivision of public survey and by course and distance to a found section corner. If on unsurveyed land, it should be stated.)
   SE¼ SE¼ Section 27, T. 16 N., R. 19 E., M.D.M., or at a point from which the SE corner of said Section 27 bears S. 60° 23' 40" E., a distance of 1,028 feet.
   See supporting map filed under Permit 74302.
6. The existing point of diversion is located within (If point of diversion is not changed, do not answer.)
   NW¼ SE¼ Section 22, T. 16 N., R. 19 E., M.D.B.&M., or at a point from which the SE corner of said Section 22 bears S. 46° 43' E., a distance of 2,650.0 feet.
   See supporting PBU map filed under Permit 18011

89-WA

- Permit 74350 grants you .02 cubic feet per second and 32 acre-feet annually. This translates into roughly 10,427, 2447 gallons per year, 868,937.25 gallons per month, and 2,606,811.7 gallons quarterly.

- Permit 77786 grants you .0256 cubic feet per second and 12.95 acre-feet annually. This translates into roughly 4,219,769.7 gallons per year, 351,647.47 gallons per month, and 1,054,942.4 gallons quarterly.

- Permit 77787 grants you .0181 cubic feet per second and 12.74 acre-feet annually. This translates into roughly 4,154, 599.3 gallons per year, 346,216.6 gallons per month, and 1,038,649.8 gallons quarterly.

Adam Torrero

From: Chris Sarman <sarman@reno-realty.com>
Sent: Thursday, January 18, 2018 8:13 AM
To: adam@jhurry.com
Cc: mbanta@confluencewaterresources.com
Subject: Re: FW: Parcel Information - Taxpayer Inquiry

Adam. Ive added Matt Banta to this correspondence. He will likely reach out to you sometime today. Tomorrow may not work but we certainly want to take some neccessay steps with ya.

Thanks

Parcel(s) 055-301-38 and 055-301-44.

All data on this for

Owner Information & Legal Description			
APN	**055-301-38**	Card 1 of 1	
Previous Parcel	Next Parcel		Neighborhood Map
Parcel Map | Map Index | iLookAbout | Pictometry | GIS WRMS (new quickmap) | Old QuickMap | 2018 VN			
Situs	0 BRYAN CANYON RD		
Owner 1	SCAP 7 LLC		
Owner 2 or Trustee			
Owner 3 or Trustee			
Mail Address Copy to Clipboard	7170 E MCDONALD DR #4		
	PARADISE VALLEY AZ 85253		
Keyline Desc	RS 4473 LT B		
Subdivision	_UNSPECIFIED		
Lot B **Block**		**Section** **Township** 16 **Range** 19	
Record of Survey Map 4473 **: Parcel Map#** **: Sub Map#**			
		Special Property Code	060
2018 Tax Dist	4000	Prior APN	Multiple
2017 Tax Dist	4000	Additional Tax Info	
Tax Cap Status	Use does not qualify for Low Cap, High Cap Applied		
	Last Activity/ Last Permit		

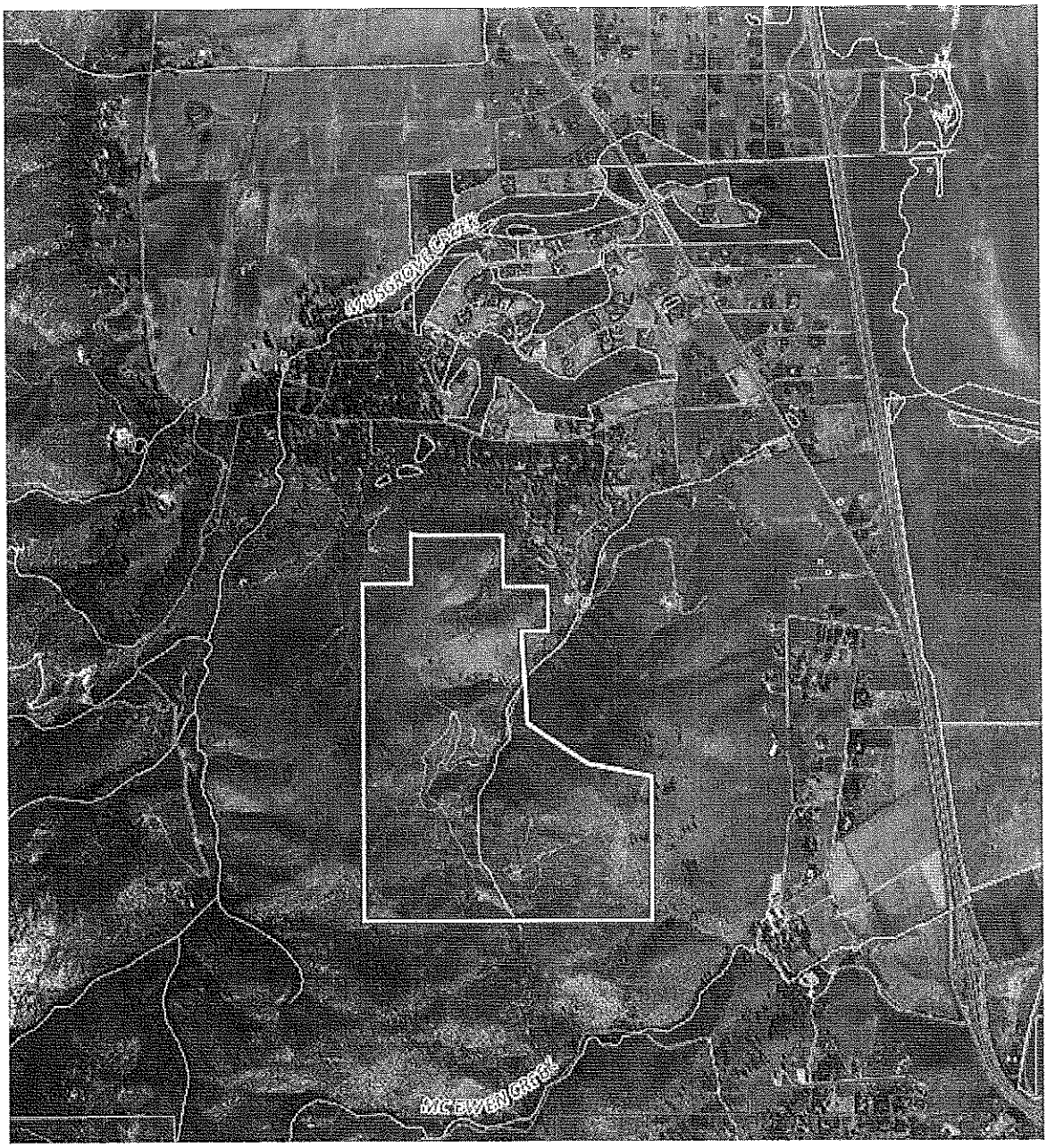
Up to 7 Sales/Transfer Records/Recorded Document (additional information/records)

Grantor	Grantee
WEISE 1981 TRUST	SCAP 7 LLC
WEISE, GRANT J JR & OLIVIA S	WEISE 1981 TRUST
WEISE, GRANT J JR & OLIVIA S	WEISE, GRANT J JR & OLIVIA S
WEISE, GRANT J JR & OLIVIA S	WEISE, GRANT J JR & OLIVIA S
WEISE, GRANT J JR & OLIVIA S	WEISE,GRANT J JR & OLIVIA S

To view sale/

Land Information (additional land information)			
Land Use	100	**Sewer**	None
Size	346.48 Acre	**Water**	None

Valuation Information (additional valuation information)


MUDDY CREEK
MCELMO CREEK

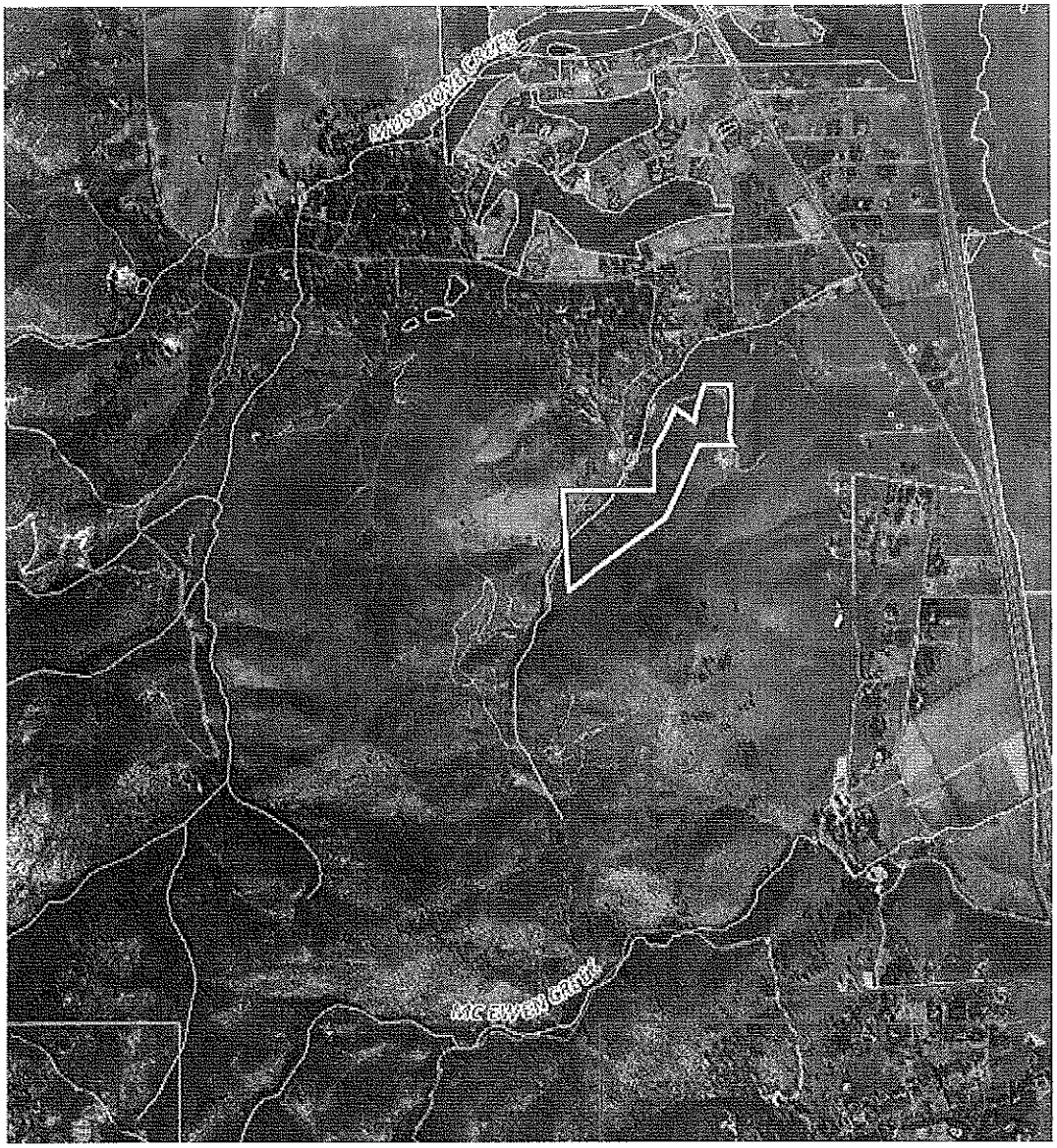
All data on this form

Owner Information & Legal Description			
APN	**055-301-44**	Card 1 of 1	
Previous Parcel	Next Parcel		Neighborhood Maps
Parcel Map | Map Index | iLookAbout | Pictometry | GIS WRMS (new quickmap) | Old QuickMap | 2018 VN			
Situs	300 PONDEROSA POINT DR		
Owner 1	SCAP 7 LLC		
Owner 2 or Trustee			
Owner 3 or Trustee			
Mail Address Copy to Clipboard	7170 E MCDONALD DR #4		
	PARADISE VALLEY AZ 85253		
Keyline Desc	DLM 213 LT 4 ADJ RS 5239 LT 4A		
Subdivision	_UNSPECIFIED		
Lot 4A **Block**		**Section** **Township** 16 **Range** 19	
Record of Survey Map 5239 : **Parcel Map#** : **Sub Map#** 213			
		Special Property Code	
2018 Tax Dist	4000	Prior APN	055-301-42
2017 Tax Dist	4000	Additional Tax Info	
Tax Cap Status	Use does not qualify for Low Cap, High Cap Applied		
	Last Activity/ Last Permit		

Up to 7 Sales/Transfer Records/Recorded Document (additional information/records)	
Grantor	**Grantee**
PONDEROSA LAND/LVSTOCK CO INC	SCAP 7 LLC
PONDEROSA LAND/LVSTOCK CO INC,	PONDEROSA LAND/LVSTOCK CO INC

To view sale/tr

Land Information (additional land information)				
Land Use	120	**Sewer**	None	
Size	40.01 Acre	**Water**	None	



Water Rights

74350	PER		SCAP 7, LLC
77786	PER		SCAP 7, LLC
77787	PER		SCAP 7, LLC

App/Permit: 74350
Status: PERMIT
Certificate: None

General | Maps & Due Dates | Place of Use | Abrogations/Protests/Rulings | Ownership and Title

General

Owner(s): SCAP 7, LLC
Basin: WASHOE VALLEY
Sub Basin:
Basin Status: DESIGNATED
Region: TRUCKEE RIVER BASIN
County: WASHOE
Resource Specialist: Melissa Marr

Previous Applications(Base Rights)

Change of App No	POD	POU	MOU
V02779	Y	Y	

Source: STREAM
Source Description: BRYAN CREEK &
Project Name:
Decree Name:
Use: AS DECREED
Period Start: DECR
Period End: DECR

Point of Diversion Information

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SE	SE	27	16N	19E

Duty-Balance 32 AFA
Div Balance 0.2
Acre-Feet Storage 0
Well Logs:
Remarks:

App/Permit: 77786
Status: PERMIT
Certificate: None

General | Maps & Due Dates | Place of Use | Abrogations/Protests/Rulings | Ownership and Title

General

Owner(s): SCAP 7, LLC
Basin: WASHOE VALLEY
Sub Basin:
Basin Status: DESIGNATED
Region: TRUCKEE RIVER BASIN
County: WASHOE
Resource Specialist: Melissa Marr

Previous Applications(Base Rights)

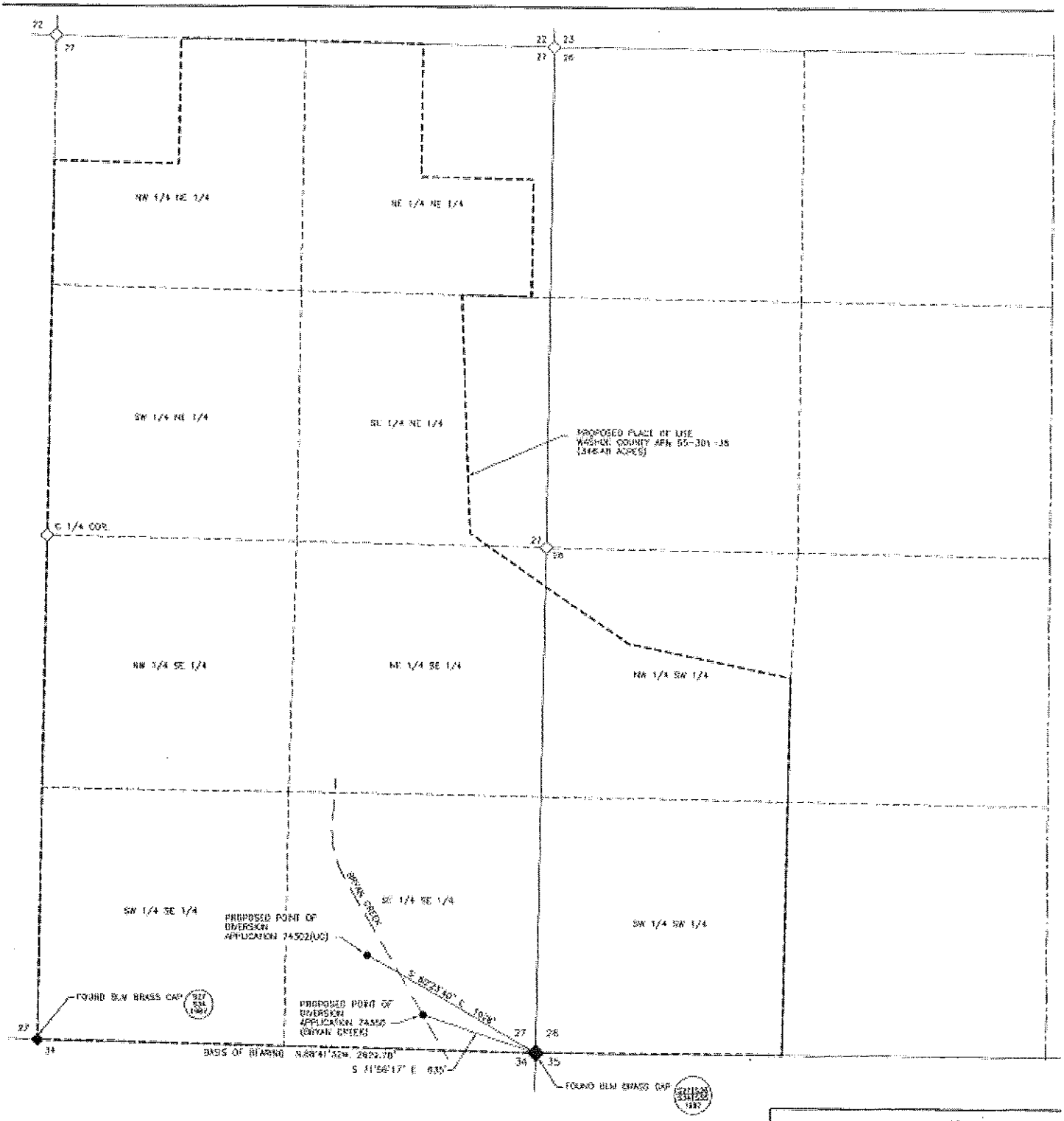
Change of App No	POD	POU	MOU
21413	Y	Y	

Source: UNDERGROUND
Source Description:
Project Name:
Decree Name:
Use: IRRIGATION
Period Start: 0101
Period End: 1231

Point of Diversion Information

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SE	SE	27	16N	19E

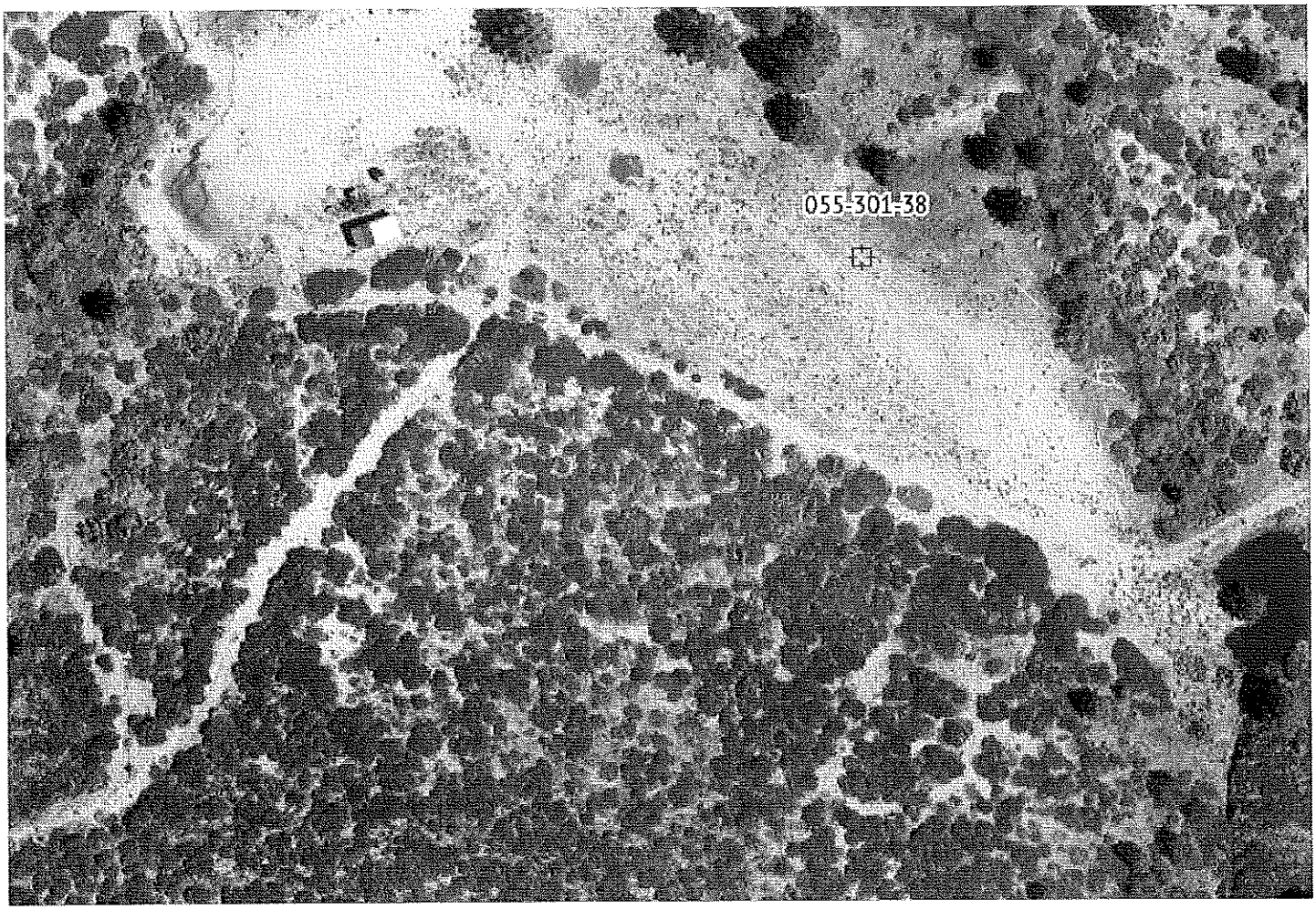
Duty-Balance 12.95 AFA
Div Balance 0.0256
Acre-Feet Storage 0
Well Logs:
Remarks:



PROPOSED PLACE OF USE
SECTIONS 26 AND 27, T.16 N., R.19 E., M.D.M.

STATE ENGINEER'S

8289


055-301-38

Nevada Division of Water Resources

Well Log Details

Download Well Log:

General Information

Well Log No:	111607	**Basin:**	089
Waiver No:	N/A	**Owner:**	WEISE, GRANT
Permit No:	74302	**Well Name:**	N/A
Date Received:	08/26/2010	**Address:**	0 BRYAN CANYON RD
Notice of Intent:	58562		

Location Information

Reference:	Mount Diablo	**Parcel No:**	55-301-38	Latitu
Township:	16N	**Lot No:**	N/A	Longi
Range:	19E	**Subdivision:**	N/A	Count
Section:	27	**Block No:**	N/A	Work
Quarters:	SE SE			Propo

Well Construction

Date Started:	4/28/2009	**Perforations:**	60 ft	Static
Date Completed:	05/01/2009	**From:**	140 ft	Pump
Aquifer Desc:	N/A	**To:**	200 ft	Methc
Hole Depth:	200 ft	**Perforation Interval:**	2	Speci
Surface Casing Diameter:	6.625 in	**Depth of Seal:**	101	Yield:
Cased To:	200 ft	**Draw Down:**	0	Water
Casing Reductions:	0	**Gravel Packed:**	Yes	After
		From:	101 ft	
		To:	200 ft	

Drilling Contractor Information

Contractor's Lic No:	46498	**Name:**	BLAIN DRILLING & PUMP CO
Contractor's Drilling No:	0	**Address:**	P O BOX 1255 CARSON CITY NV 89702
Driller's Lic. No:	2167		

Remarks

Work Type:	N/A	**General:**	N/A	Ad

CHRIS SARMAN - APPRAISER

email: csarman@washoecounty.us | direct phone: (775) 328-2262 | fax (775) 328-3641

Washoe County Assessor's Office

1001 E. Ninth St., Bldg. D, Reno, NV 89512

Connect with us: cMail | Twitter | Facebook | www.washoecounty.us

Nevada Division of Water Resources

Well Log Details

Download Well Log:

General Information

Well Log No:	134554	**Basin:**	089
Waiver No:	N/A	**Owner:**	SCRAP 7 LLC
Permit No:	N/A	**Well Name:**	N/A
Date Received:	07/07/2020	**Address:**	7545 BRYAN CANYON RD WASHOE VALLEY
Notice of Intent:	N2020-316		

Location Information

Reference:	Mount Diablo	**Parcel No:**	055-301-38	**Latitude:**	39.22
Township:	16N	**Lot No:**	N/A	**Longitude:**	119.83
Range:	19E	**Subdivision:**	N/A	**County:**	WASHOE
Section:	27	**Block No:**	N/A	**Work Type:**	Replacement Well
Quarters:	SE SE			**Proposed Use:**	Irrigation

Well Construction

Date Started:	6/1/2020	**Perforations:**	80 ft	**Static Water Level:**	25 ft
Date Completed:	06/08/2020	**From:**	420 ft	**Pumping Water Level:**	25 ft
Aquifer Desc:	N/A	**To:**	500 ft	**Method:**	Air Lift
Hole Depth:	500 ft	**Perforation Interval:**	1	**Specific Capacity:**	0.00
Surface Casing Diameter:	6 in	**Depth of Seal:**	100	**Yield:**	200 gpm
Cased To:	500 ft	**Draw Down:**	0	**Water Temperature:**	45 degrees F
Casing Reductions:	0	**Gravel Packed:**	Yes	**After Hours Pump:**	6
		From:	500 ft		
		To:	100 ft		

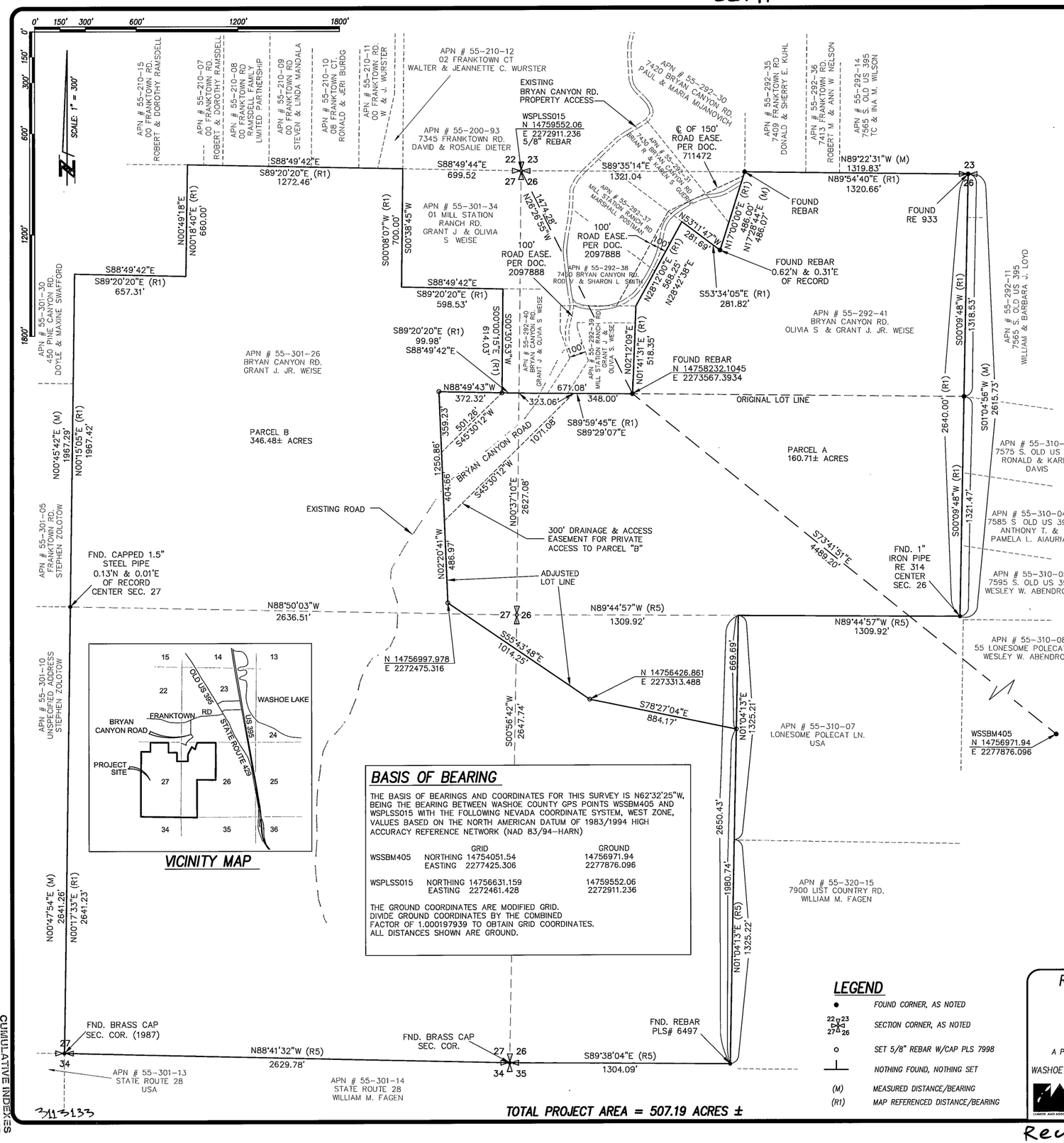
Drilling Contractor Information

Contractor's Lic No:	55548	**Name:**	CAPITAL CITY WELL DRILLING AND PUMP SERVICE INC
Contractor's Drilling No:	0	**Address:**	20 KIT KAT DRIVE CARSON CITY NV 89706
Driller's Lic. No:	2010		

Remarks

Work Type:	REPLACES WELL LOG 111607	**General:**	N/A	**Additional:**	N/A

ELth



OWNER'S CERTIFICATE

WE THE UNDERSIGNED OWNERS OF THE AFFECTED PARCELS AS SHOWN ON THIS MAP DO HEREBY STATE:
1) WE HAVE EXAMINED THIS PLAT AND APPROVE AND AUTHORIZE ITS RECORDING;
2) WE AGREE TO EXECUTE THE REQUIRED DOCUMENTS CREATING ANY EASEMENT WHICH IS SHOWN HEREON;
3) WE AGREE TO EXECUTE THE REQUIRED DOCUMENTS ABANDONING ANY EXISTING EASEMENT(S) PURSUANT TO THE PROVISIONS OF N.R.S. 278.010 TO 278.630, INCLUSIVE.
4) ALL PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID;
5) ANY LENDER WITH AN IMPOUND ACCOUNT FOR THE PAYMENT OF TAXES HAS BEEN NOTIFIED OF THE ADJUSTMENT OF THE BOUNDARY LINE OR THE TRANSFER OF THE LAND.
6) WE AGREE TO ACCEPT ANY DRAINAGE ONTO OUR PROPERTY RESULTING FROM THIS BOUNDARY LINE ADJUSTMENT.

GRANT J. WEISE, JR.
BY: Grant J. Weise, JR. DATE: 9-27-04
OLIVIA S. WEISE
BY: Olivia S. Weise DATE: 9.27.04

STATE OF NEVADA
COUNTY OF WASHOE } SS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 27th DAY OF SEPTEMBER, 2004, BY GRANT J. + OLIVIA S. WEISE

NOTARY PUBLIC IN AND FOR SAID STATE MY COMMISSION EXPIRES: NOV 22, 2006

DEBORAH A HUNTER
Notary Public - State of Nevada
Appointment Number 02-79244-2
My Appt. Expires Nov. 22, 2006

AMENDED

SURVEYOR'S CERTIFICATE

I, RANDAL L. BRIGGS, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, DO HEREBY CERTIFY THAT:

1) THIS IS A TRUE AND ACCURATE REPRESENTATION OF THE LANDS SURVEYED UNDER MY SUPERVISION AT THE INSTANCE OF GRANT & OLIVIA WEISE.
2) THE LANDS SURVEYED LIE WITHIN SECTIONS 26 & 27 T. 16 N., R. 19 E., M.D.M., AND THE SURVEY WAS COMPLETED ON JUNE 8, 2004.
3) THIS PLAT COMPLIES WITH THE APPLICABLE STATUTES OF THIS STATE AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE SURVEY WAS COMPLETED, AND THE SURVEY WAS CONDUCTED IN ACCORDANCE WITH CHAPTER 625 OF THE NEVADA ADMINISTRATIVE CODE.
4) THIS MAP IS NOT IN CONFLICT WITH THE PROVISIONS OF N.R.S. 278.010 TO 278.630 INCLUSIVE.
5) ALL CORNERS AND ANGLE POINTS OF THE ADJUSTED BOUNDARY HAVE BEEN DEFINED BY MONUMENTS OR WILL BE OTHERWISE DEFINED ON A DOCUMENT OF RECORD AS REQUIRED BY N.R.S. 625.340
6) THE MONUMENTS DEPICTED ON THE PLAT ARE OF THE CHARACTER SHOWN, OCCUPY THE POSITIONS INDICATED, AND ARE OF SUFFICIENT DURABILITY.

PROFESSIONAL LAND SURVEYOR STATE OF NEVADA RANDAL L. BRIGGS No. 7998
RANDAL L. BRIGGS 9/27/04 DATE
exp 12-3109

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER
DEPUTY Frances J. Lince DATE 9-28-2004

GOVERNING AGENCY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS MAP HAS BEEN REVIEWED AND APPROVED BY THE COUNTY OF WASHOE.

JACK HOLMES, WASHOE COUNTY SURVEYOR Jack Holmes 10/06/04 DATE

REFERENCE DOCUMENTS

R1 RECORD OF SURVEY MAP #3239 FILED FOR RECORD MAY 19, 1997, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA, DOCUMENT NO. 2099106.

R2 PARCEL MAP #2081 FILED FOR RECORD JANUARY 23, 1987, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA, DOCUMENT NO. 1134609.

R3 LAND MAP #60 FILED FOR RECORD FEBRUARY 16, 1984, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA, DOCUMENT NO. 907535.

R4 PARCEL MAP #1185 FILED FOR RECORD DECEMBER 10, 1980, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA, DOCUMENT NO. 711472.

R5 RECORD OF SURVEY #3802 FILED FOR RECORD JUNE 21, 2000, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA, DOCUMENT NO. 2457646.

RECORD OF SURVEY TO SUPPORT A BOUNDARY LINE ADJUSTMENT FOR GRANT & OLIVIA WEISE

PARCELS 5 & 6 OF RECORD OF SURVEY #3239
A PORTION OF THE E 1/2 OF SECTION 27 & THE W 1/2 OF SECTION 26
T. 16 N., R. 19 E., M.D.M.

WASHOE COUNTY NEVADA

LUMOS AND ASSOCIATES, INC.
CIVIL ENGINEERING • GEOTECHNICAL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • SURVEYING GIS • CONSTRUCTION SERVICES • MATERIALS TESTING
5441 LONGLEY LANE, SUITE 5 RENO, NEVADA 89511
PH: (775) 827-6111 FAX (775) 827-6122
E MAIL: reno@lumosengineering.com WEBSITE: www.lumosengineering.com

DATE: AUGUST, 2004
JOB NO: 5737.004
SHEET 1 OF 1

FILE NO.: 3113133
FILED FOR RECORD AT THE REQUEST OF Grant & Olivia Weise
THIS 14 DAY OF October 2004, AT 51 MINUTES PAST 4 O'CLOCK P.M., IN THE OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.
Kathryn L. Burke COUNTY RECORDER
BY: C. Bartley DEPUTY
FEE: 21.00

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

4473

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

Record of Survey Map 4473