

Lakeside Custom Lot Subdivision  
Amendment of Conditions Request

Community Services Department

Planning and Building

AMENDMENT OF CONDITIONS  
APPLICATION



Community Services Department  
Planning and Building  
1001 E. Ninth St., Bldg. A  
Reno, NV 89512-2845

Telephone: 775.328.6100

# LAKESIDE CUSTOM LOT SUBDIVISION

AMENDMENT OF CONDITIONS  
PROJECT NARRATIVE

## Table of Contents

<b>Development Application, Amendment of Conditions Supplemental Information &amp; Proof of Property Tax Payment .....</b>	<b>Tab A</b>
<b>Project Narrative .....</b>	<b>Tab B</b>
Property Location .....	1
Project Background .....	1
Project Request .....	2
Project Pedestrian Paths .....	3
Surface Water Rights Irrigation Pond .....	5
Enlarging Detention Pond Area at Project Entry .....	6
<b>Tentative Map Findings &amp; Considerations .....</b>	<b>7</b>
<b>Reduced Preliminary Civil Engineering Sheets &amp; Exhibits .....</b>	<b>Tab C</b>
<b>Supplemental Information .....</b>	<b>Tab D</b>
Previous Maps and Exhibits from 11/1/2022 Planning Commission Approval	
Updated Hydrology Report	
Neighborhood Agreement Letter, 10/31/2022	
Action Order from 11/1/2022 Planning Commission Approval	



# Amendment of Conditions Development Application Submittal Requirements

Applications are accepted on the 8<sup>th</sup> of each month. If the 8<sup>th</sup> falls on a non-business day, applications will be accepted on the next business day.

If you are submitting your application online, you may do so at [OneNV.us](https://www.onenv.us)

- x 1. **Fees:** See Master Fee Schedule. **Most payments can be made directly through the OneNV.us portal.** If you would like to pay by check, please make the check payable to Washoe County and bring your application and payment to the Community Services Department (CSD).
- x 2. **Development Application:** A completed Washoe County Development Application form.
- x 3. **Owner Affidavit:** The Owner Affidavit must be signed and notarized by all owners of the property subject to the application request.
- x 4. **Proof of Property Tax Payment:** The applicant must provide a written statement from the Washoe County Treasurer's Office indicating all property taxes for the current quarter of the fiscal year on the land have been paid.
- x 5. **Application Materials:** The completed Amendment of Conditions Application materials.
- x 6. **Site Plan Specifications:**
  - x a. Lot size with dimensions drawn using standard engineering scales (e.g. scale 1" = 100', 1" = 200', or 1" = 500') showing all streets and ingress/egress to the property.
  - NA b. Show the location and configuration of all proposed buildings (with distances from the property lines and from each other), all existing buildings that will remain (with distances from the property lines and from each other), all existing buildings that will be removed, and site improvements on a base map with existing and proposed topography expressed in intervals of no more than five (5) feet.
  - Shown on Original Application Plans c. Show the location and configuration of wells, septic systems and leach fields, overhead utilities, water and sewer lines, and all easements.
  - NA d. Show locations of parking, landscaping, signage and lighting.
- x 7. **Application Map Specifications:** Map to be drawn using standard engineering scales (e.g. scale 1" = 100', 1" = 200', or 1" = 500') clearly depicting the area subject to the request, in relationship to the exterior property lines. All dimensions and area values shall be clearly labeled and appropriate symbols and/or line types shall be included in the map legend to depict the map intent.
- NA 8. **Building Elevations:** All buildings and structures, including fences, walls, poles, and monument signs proposed for construction within the project shall be clearly depicted in vertical architectural drawings provided in accurate architectural scale. Architectural elevations of all building faces shall be presented.
- x 9. **Submission Packets:** One (1) packet and a flash drive. Any digital documents need to have a resolution of 300 dpi. If materials are unreadable, you will be asked to provide a higher quality copy. The packet shall include one (1) 8.5" x 11" reduction of any applicable site plan, development plan, and/or application map. Labeling on these reproductions should be no smaller than 8 point on the 8.5" x 11" display. Large format sheets should be included in a slide pocket(s). Any specialized reports identified above shall be included as attachments or appendices and be annotated as such.

## Notes:

- (i) Application and map submittals must comply with all specific criteria as established in the Washoe County Development Code and/or the Nevada Revised Statutes.

- (ii) Appropriate map engineering and building architectural scales are subject to the approval of the Planning and Building and/or Engineering and Capital Projects.
- (iii) All oversized maps and plans must be folded to a 9" x 12" size.
- (iv) Based on the specific nature of the development request, Washoe County reserves the right to specify additional submittal packets, additional information and/or specialized studies that clarify the potential impacts and potential conditions of development in order to minimize or mitigate impacts resulting from the project. No application shall be processed until the information necessary to review and evaluate the proposed project is deemed complete by the Director of Planning and Building.
- (v) **Labels:** If the assigned planner determines the abandonment will affect the access to a mobile home park, the applicant will be required to submit a list of mailing addresses for every tenant residing in the mobile home park.

**TAB A**

## 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.

<b>Project Information</b>		Staff Assigned Case No.: _____	
Project Name:			
Project Description:			
Project Address:			
Project Area (acres or square feet):			
Project Location (with point of reference to major cross streets <b>AND</b> area locator):			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
<b>Applicant Information</b> (attach additional sheets if necessary)			
<b>Property Owner:</b>		<b>Professional Consultant:</b>	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone:                      Fax:		Phone:                      Fax:	
Email:		Email:	
Cell:                              Other:		Cell:                              Other:	
Contact Person:		Contact Person:	
<b>Applicant/Developer:</b>		<b>Other Persons to be Contacted:</b>	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone:                      Fax:		Phone:                      Fax:	
Email:		Email:	
Cell:                              Other:		Cell:                              Other:	
Contact Person:		Contact Person:	
<b>For Office Use Only</b>			
Date Received:                      Initial:		Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

---

**ENTITY INFORMATION****ENTITY INFORMATION****Entity Name:**

8900 LAKESIDE, LLC

**Entity Number:**

E17532222021-8

**Entity Type:**

Domestic Limited-Liability Company (86)

**Entity Status:**

Active

**Formation Date:**

09/15/2021

**NV Business ID:**

NV20212229257

**Termination Date:**

Perpetual

**Annual Report Due Date:**

9/30/2023

**Series LLC:****Restricted LLC:****REGISTERED AGENT INFORMATION**

**Name of Individual or Legal Entity:**

Roger R Davidson

**Status:**

Active

**CRA Agent Entity Type:**

**Registered Agent Type:**

Non-Commercial Registered Agent

**NV Business ID:**

**Office or Position:**

**Jurisdiction:**

**Street Address:**

2100 MANZANITA LN, RENO, NV, 89509, USA

**Mailing Address:**

**Individual with Authority to Act:**

**Fictitious Website or Domain Name:**

**OFFICER INFORMATION**

**VIEW HISTORICAL DATA**

Title	Name	Address	Last Updated	Status
Manager	Roger R. Davidson	2100 Manzanita Lane, Reno, NV, 89509, USA	09/15/2021	Active

Page 1 of 1, records 1 to 1 of 1

[Filing History](#)

[Name History](#)

[Mergers/Conversions](#)

[Return to Search](#)

[Return to Results](#)

# Amendment of Conditions Application Supplemental Information

(All required Information may be separately attached)

## Required Information

1. The following information is required for an Amendment of Conditions:
  - a. Provide a written explanation of the proposed amendment, why you are asking for the amendment, and how the amendment will modify the approval.
  - b. Identify the specific Condition or Conditions that you are requesting to amend.
  - c. Provide the requested amendment language to each Condition or Conditions, and provide both the **existing** and **proposed condition(s)**.

2. Describe any potential impacts to public health, safety, or welfare that could result from granting the amendment. Describe how the amendment affects the required findings as approved.

**TAB B**



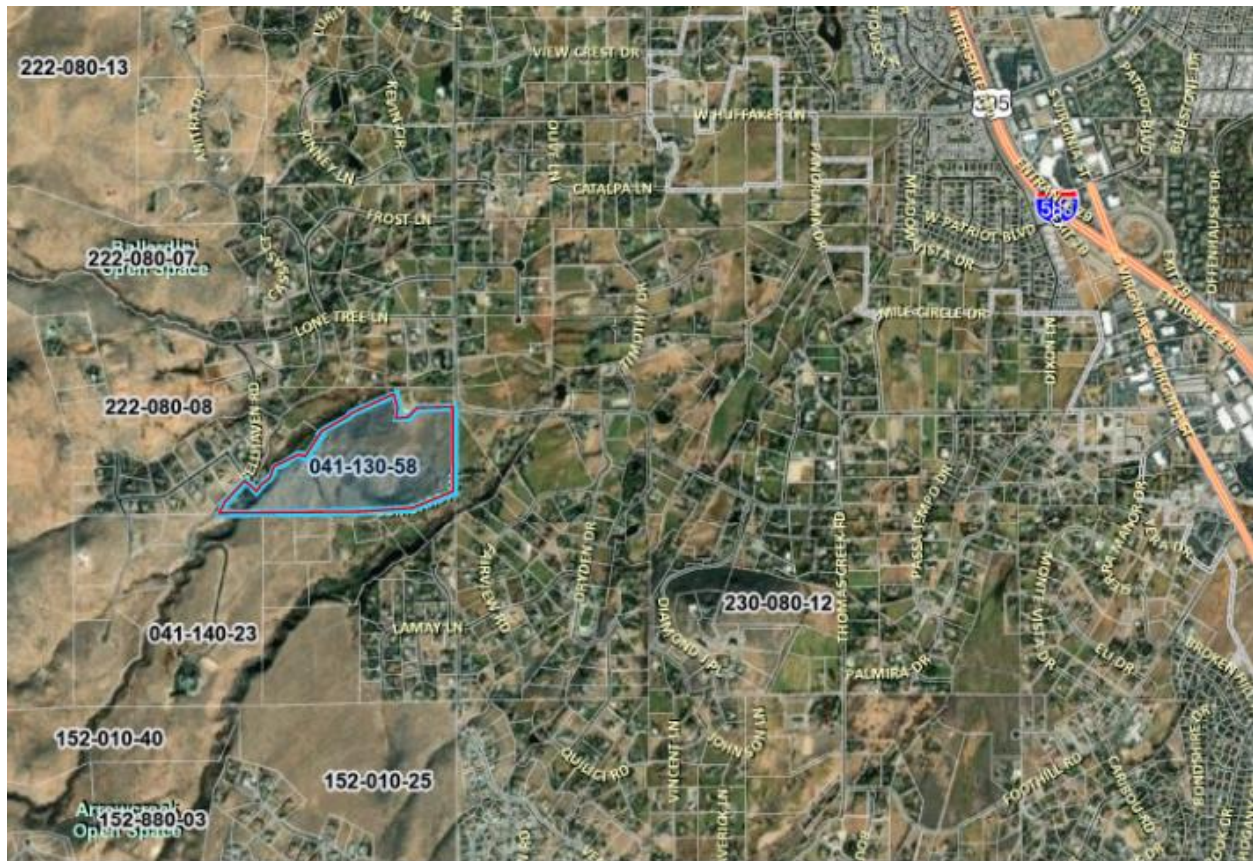
# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS PROJECT NARRATIVE

### Property Location

The subject property is located southwest of Lakeside Drive and Brady Ranch Road in southwest Reno. The subject property totals 72.8+/- acres of land in one parcel. The Washoe County Assessor's office recognizes the parcel as APN 041-130-58. An aerial based vicinity map is provided below showing the location of the subject property and the general lot patterning of the surrounding properties.

### Vicinity Map



### Project Background

The project (Lakeside Custom Lot Subdivision) was approved on November 1, 2022 under Washoe County case numbers WTM21-013 and WSUP 22-0010. The Action Order for this project was written for the approval of the following:

1. A tentative subdivision map to divide one parcel of 72.8 acres into 24 lots, with lot sizes ranging from 2.01 to 10.29 acres.

# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS

### PROJECT NARRATIVE

2. A special use permit for major grading: the proposal exceeds the major grading threshold and will result in  $\pm 8.31$  acres of disturbance including  $\pm 20,004$  CY of cut material and  $\pm 16,583$  CY of fill material; a roadway that traverses a slope of 30% or greater; construction of earthen structures greater than 4- $\frac{1}{2}$  feet high; and grading in the Critical Stream Zone, which is subject to all requirements of Article 418, Significant Hydrologic Resources. The applicant is also requesting a variance of the development code standards found in WCC 110.438.45(c), that finish grading shall not vary from the natural slope by more than ten (10) feet in elevation, in order to construct earthen structures and a driveway.

During work on the final plans for the subdivision, a few design items have become necessary and/or deemed beneficial to future residents and neighbors. These items increase the cut and fill amounts that were approved in November exceeding the 10% range allowed for variation by the administrator. The details of the additional items are provided in the following section (Project Request).

### Project Request

Requested is an amendment of conditions that allows for additional grading for the following improvements within the subdivision.

- Addition of pedestrian walking paths along the interior streets of the project
- Creation of an irrigation pond required for the surface water irrigation system within the subdivision. Use of surface water for irrigation was agreed upon with residents to limit the dependency on well water in the approved subdivision.
- Enlarging the detention pond at the northeastern corner of the site near the project entry to provide additional storage of stormwater. This improvement will be coupled with stormwater cut off ditches, where appropriate, to help direct stormwater to the detention pond.

It is believed by the applicant that all of these items are beneficial to the project and surrounding properties and residents. Each of these improvements will be described in the following pages.

The project was approved with the following language and limitations relative to the tentative map (WTM21-013) and special use permit for grading (WSUP11-0010):

1. *A tentative subdivision map to divide one parcel of 72.8 acres into 24 lots, with lot sizes ranging from 2.01 to 10.29 acres.*
2. *A special use permit for major grading: the proposal exceeds the major grading threshold and will result in  $\pm 8.31$  acres of disturbance including  $\pm 20,004$  CY of cut material and  $\pm 16,583$  CY of fill material; a roadway that traverses a slope of 30% or greater; construction of earthen structures greater than 4- $\frac{1}{2}$  feet high; and grading in the Critical Stream Zone, which is subject to all*

# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS

### PROJECT NARRATIVE

*requirements of Article 418, Significant Hydrologic Resources. The applicant is also requesting a variance of the development code standards found in WCC 110.438.45(c), that finish grading shall not vary from the natural slope by more than ten (10) feet in elevation, in order to construct earthen structures and a driveway.*

No amendment to the tentative subdivision map is requested as part of the amendment of conditions request. However, the special use permit approval is sought for a different allowance of cut and fill due to the noted addition of improvements (trail, irrigation pond and additional detention and cut-off drains). As noted previously, it is believed by the applicant that all of the additional grading associated items benefit the neighborhood and residents.

The applicant proposes the language of the special use permit be modified as follows (underlined text/numbers represent the request for change to the approval).

2. *A special use permit for major grading: the proposal exceeds the major grading threshold and will result in  $\pm 8.31$  acres of disturbance including  $\pm 41,057$  CY of cut material and  $\pm 25,981$  CY of fill material; a roadway that traverses a slope of 30% or greater; construction of earthen structures greater than 4-½ feet high; and grading in the Critical Stream Zone, which is subject to all requirements of Article 418, Significant Hydrologic Resources. The applicant is also requesting a variance of the development code standards found in WCC 110.438.45(c), that finish grading shall not vary from the natural slope by more than ten (10) feet in elevation, in order to construct earthen structures and a driveway.*

While the cut and fill amounts would increase with the proposed amendments to grading, the overall graded area of the site remains very low at only +/-18.4%.

## Project Pedestrian Paths

The addition of pedestrian paths provides a separated and safe walking environment throughout the subdivision. The proposal includes 5,700 feet of convenient and safe walkway.

The grading associated with the proposed pedestrian path location is shown in this application. A schematic of the paths is shown below. Cross-section details show both the cut and fill conditions. Note

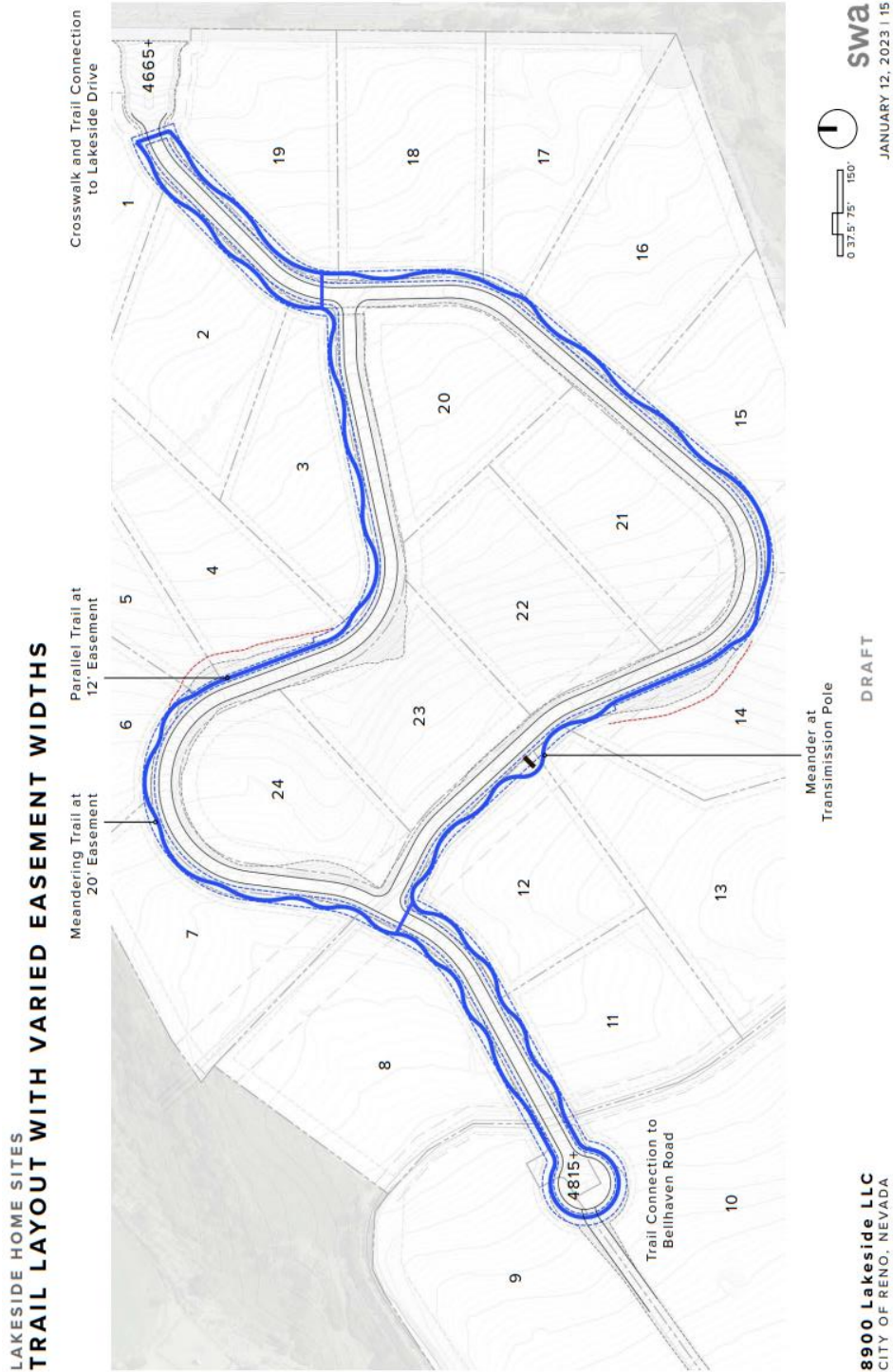


# LAKESIDE CUSTOM LOT SUBDIVISION

AMENDMENT OF CONDITIONS

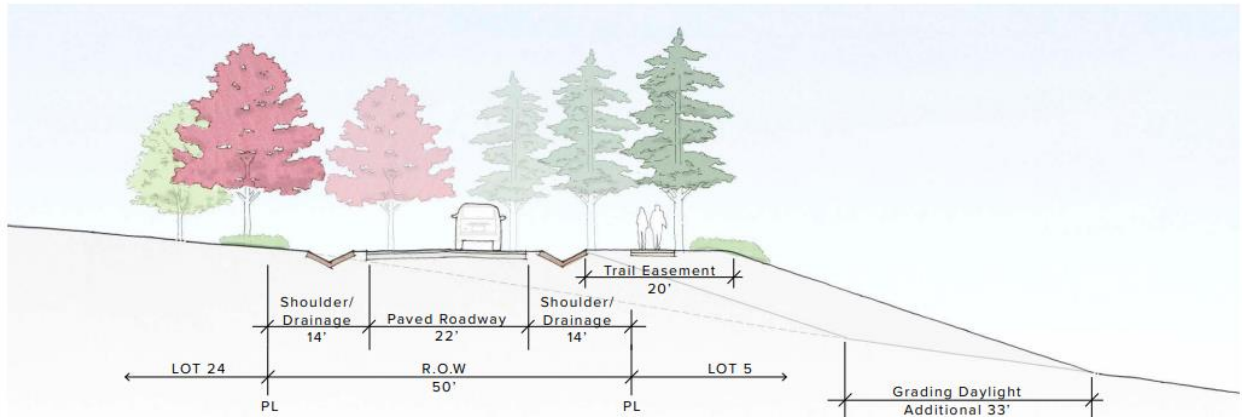
PROJECT NARRATIVE

that that the cross sections show steeper areas of the site that require more cut and fill. The majority of the site requires minimal additional grading and disturbance to implement the 20' walking path easement.

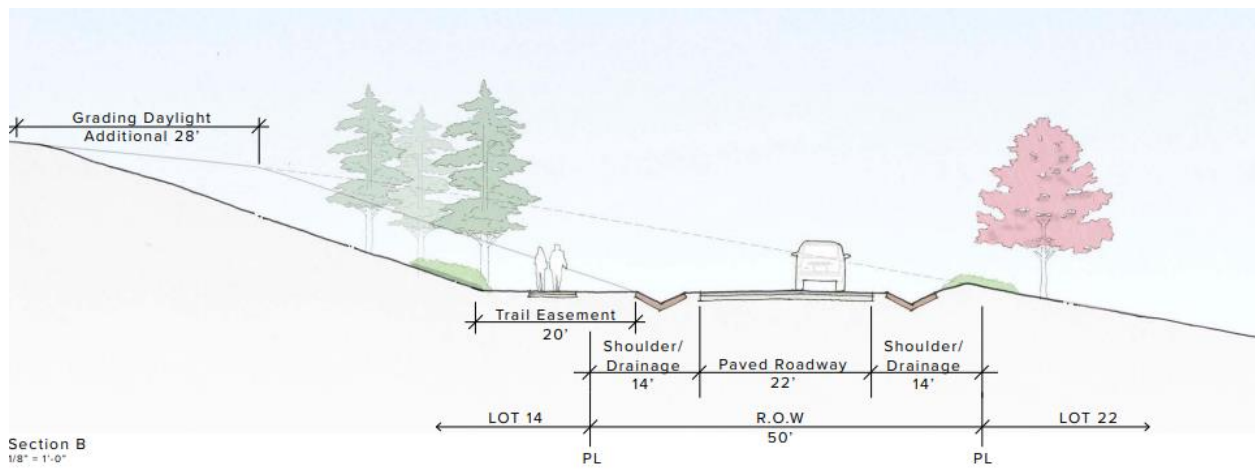


# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS PROJECT NARRATIVE



**20' Trail Easement with Fill Condition**



Section B  
1/8" = 1'-0"

**20' Trail Easement with Cut Condition**

### Surface Water Rights Irrigation Pond

The proposed irrigation pond is necessary to implement a commitment to the neighbors. The letter of agreement with the neighbors was provided to Washoe County on October 31, 2022 and was included in the applicant's presentation. The applicant remains committed to meeting this agreement.

Below is a copy of the presentation page used at the November 2, 2022 Planning Commission hearing. A copy of the letter that was provided to County staff on October 31, 2022 and is shown in Tab C within this package.

**Neighborhood Concerns and Agreement** Highlighted – add to CC&R Condition 1.q

March 9, 2022 – Primary concerns involved water, additional wells in the area Possibility of TMWA connection, and use of ex. Irrigation water.

1. **Storm water** will be collected from the private street in an open ditch method, per the Washoe County development regulations, and routed downward to a final detention area. This method allows storm water to have the maximum area and time to recharge the shallow aquifer.
2. **Irrigation water** will be routed by an HOA owned system **from the Steamboat Ditch** to each individual lot in the project, as well as HOA landscape areas. **Steamboat Ditch rights** appurtenant to the property **will remain with the property**. Any portion of such rights conveyed with individual lots will be restricted to remain appurtenant to that respective lot.
3. **Domestic water wells** will be completed and screened in the **deeper alluvial aquifer** as shown and explained in our hydrological report. No water will be directly withdrawn from the upper shallow aquifer.
4. The CC&Rs will require all **domestic wells to have meters** installed and maintained. Water consumption from each well will be limited to 1800 gallons per day. The HOA will keep a log of annual meter readings that will be available to the public upon request to the HOA.
5. The **intersection at Lakeside / Holcomb Ranch Road** will be configured and **aligned to the requirements given by NDOT**. There will not be multiple entries or exits at that corner, the existing will be consolidated per the NDOT plan.
6. **Landscaping** will be in accordance with Washoe County water use regulations. The final landscape plan **will take into account the ground conditions and availability of irrigation water**.
7. **Sanitary sewer will serve all lots**, including those above the Steamboat Ditch.
8. **An emergency exit to Bellhaven will be normally gated**, and its use restricted to situations requiring immediate access to Bellhaven, particularly in the event of an area wildfire. **There will be no connecting walking path via this emergency exit**. This exit, mandated by Washoe County, will be constructed with all required permits from authorities having jurisdiction.
9. The **Irrigation Ditch on the east side of the project will be improved to facilitate efficient water flow**, including a properly sized reinforced concrete culvert at the project street entry. Other than irrigation tailwater, no routing of runoff from any lot will be allowed to enter it. CCRs will prevent any future homeowner from encroaching on or interfering with the ditch or easement.

Applicant’s Presentation Slide from 11/1/2022 Washoe County Planning Commission Hearing

It is proposed that the irrigation pond be located in an easement on Lot 9 of the subdivision. This lot is a 10.79+/- acres and can easily accommodate the required pond. The irrigation water originates from the Steamboat Canal and will be used for irrigation of future lots and common areas. The surface water rights are already appurtenant to the subject property.

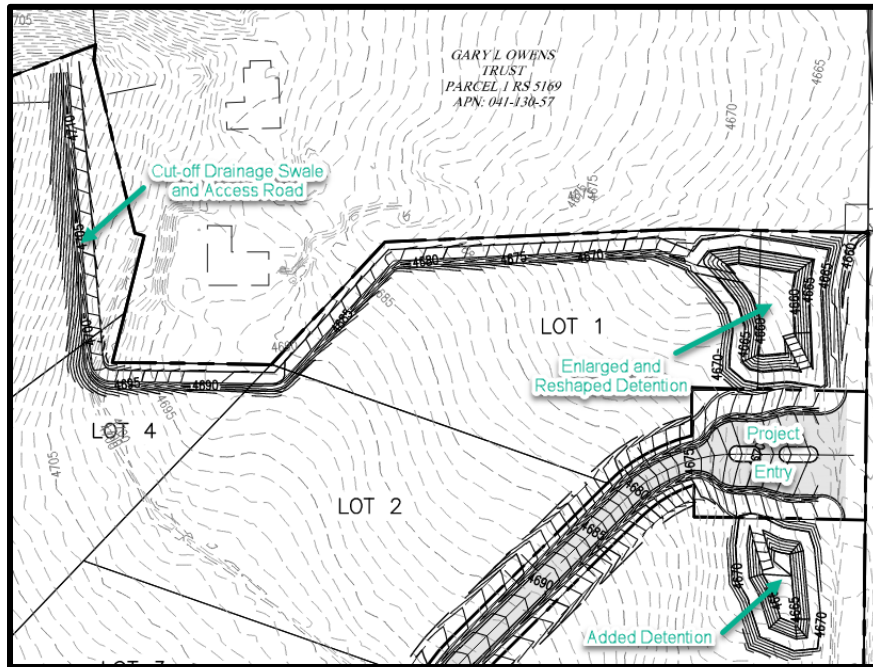
**Enlarging Detention Pond Area at Project Entry**

In late March of 2023, flooding was witnessed near the Lakeside Drive/Brady Ranch Road intersection. The detention pond design submitted with the tentative map meets the requirements of the County. The applicant believes that increasing the capacity of the detention pond beyond the County requirements and making other drainage improvements within our project will further help control runoff.

In addition to the enlarged pond, the applicant have also proposed a cut-off drainage swale between the subject property and the neighboring property to the north (APN 041-130-57). This structure further ensures that runoff is directed to the enlarged detention basin at the project entry. The described improvements are shown in the image below.

# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS PROJECT NARRATIVE



### Tentative Map Findings & Considerations

The Lakeside Custom Lot Subdivision was approved on November 1, 2022 with the Planning Commission making all findings necessary for a Tentative Map and Special Use Permits for Significant Hydrologic Resources and for Grading. This amendment of conditions request does not have any impact on the Tentative Map nor the Special Use Permit for Significant Hydrologic Resources. As such, the only legal findings that are deemed necessary for review with this amendment to condition would be applicable to the Special Use Permit for Grading. A review of these findings is provided below.

(a) Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Southwest Truckee Meadows Area Plan.

Response: As was the case with the November 1, 2022 approval, the project remains consistent with these plans.

(b) Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.

# LAKESIDE CUSTOM LOT SUBDIVISION

## AMENDMENT OF CONDITIONS

### PROJECT NARRATIVE

Response: The identified improvements that are listed in this finding will be equally or better provided with the proposed amendment of conditions. Specifically, the inclusion of a pedestrian path along at least one side of each street within the subdivision is an improvement to the overall functionality of the streets. Additionally, well water usage will be lessened by the addition of the irrigation pond to serve irrigation water for all the lots and common areas within the subdivision. Finally, the upsizing of the project detention basins at the project entry and provision of a cut-off drainage swale will provide an improved drainage system benefiting the existing and future residents of the area.

(c) Site Suitability. That the site is physically suitable for grading and for the intensity of such a development.

Response: The proposed amended grading represents disturbance to only +/-18.4% of the 72.8 acre site. This grading will provide pedestrian safety measures, an irrigation system that will use surface water rights rather than drawing from groundwater sources, as well as additional stormwater management facilities.

(d) Issuance Not Detrimental. That 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.

Response: The proposed additional grading will provide improved pedestrian safety than was originally proposed and provided on surrounding area streets, an irrigation system that will use surface water rights, and additional stormwater management to help mitigate stormwater runoff.

(e) 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.

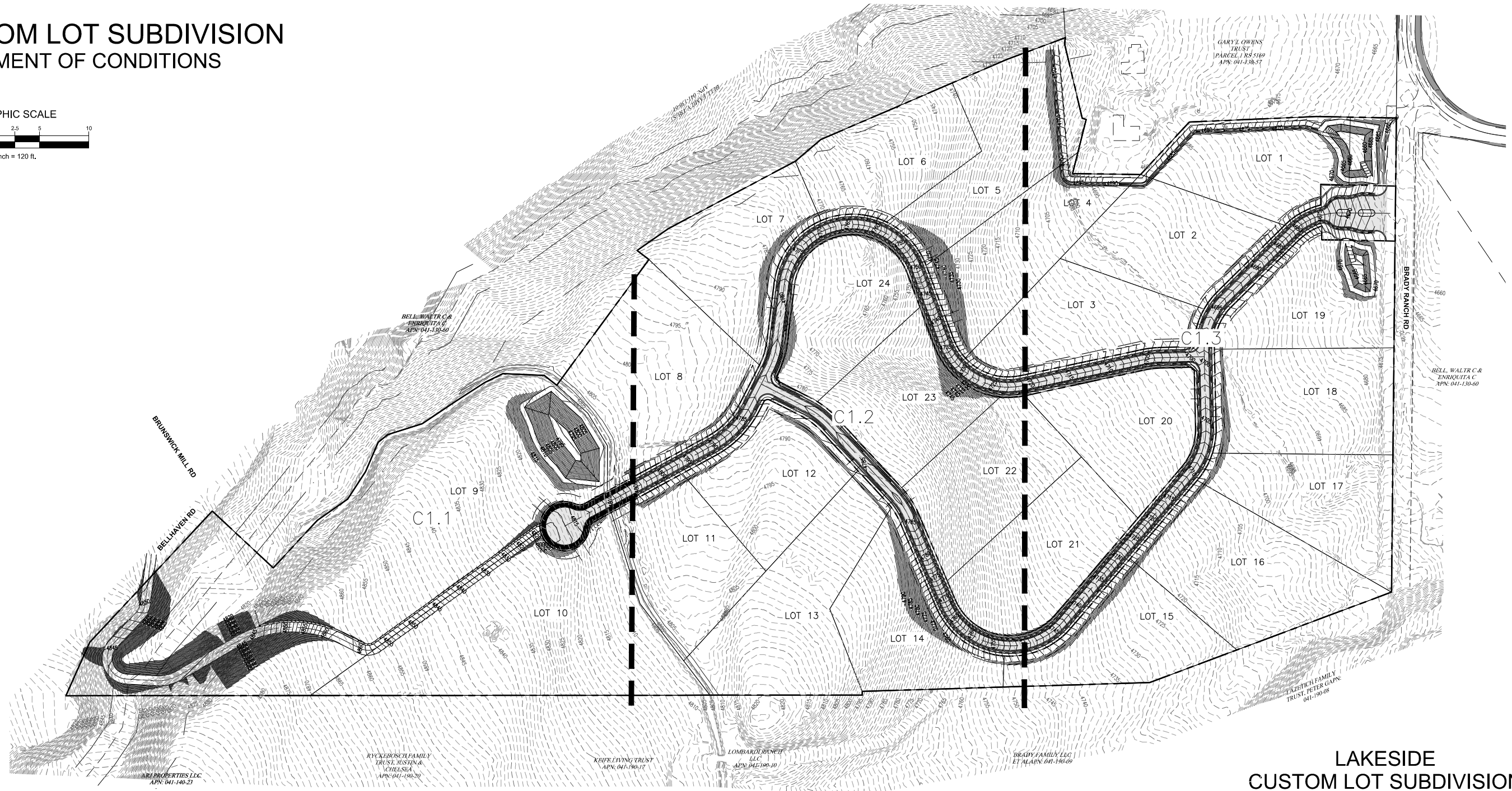
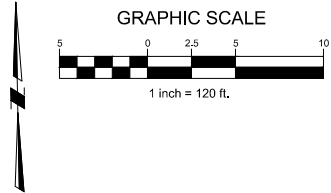
Response: There are no military installations within proximity to the subject property.



**TAB C**

# LAKESIDE

## CUSTOM LOT SUBDIVISION AMENDMENT OF CONDITIONS



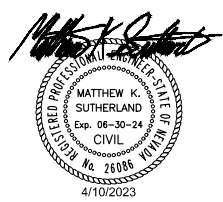
## LAKESIDE CUSTOM LOT SUBDIVISION AMENDMENT OF CONDITIONS

WASHOE COUNTY NEVADA

**cfa** **CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4-10-2023

SHEET C1.0 OF 4



LAND USE TABLE	
RESIDENTIAL LOT	24 LOTS
GROSS AREA	72.8 AC
LOT AREA	66.53 AC
STREET RIGHT-OF-WAY AREA	5.84 AC
COMMON AREA	0.43 AC
GROSS DENSITY	±0.34 D.U./AC
AVERAGE LOT SIZE	2.78 AC
LARGEST LOT SIZE	10.78 AC
SMALLEST LOT SIZE	2.00 AC

x:\Projects\21087.04\Draw\Sheet\Site\15\Amendment\COVERALL SITE.dwg APN:041-190-23 4/10/2023 11:47 AM



**GRADING NOTES**

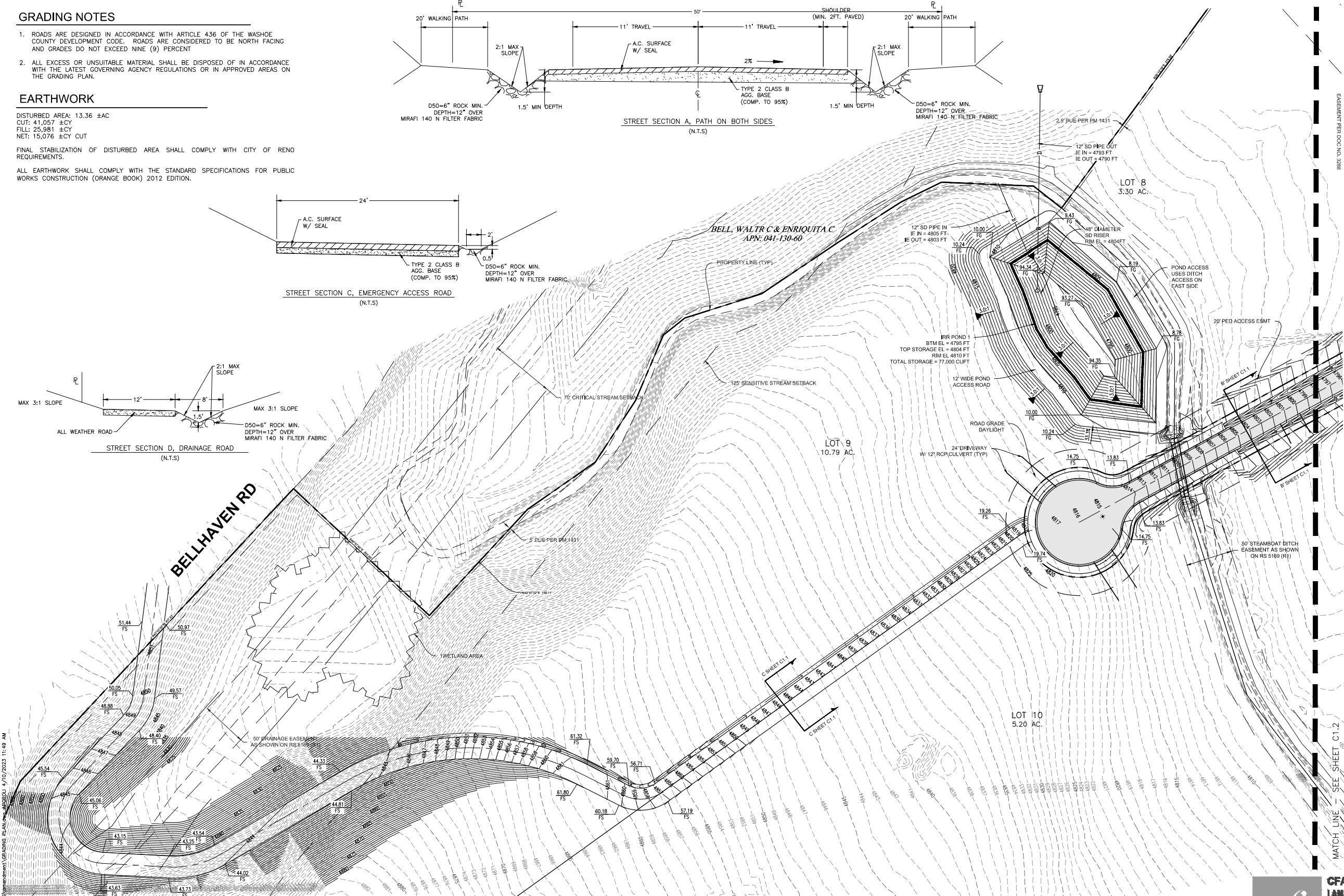
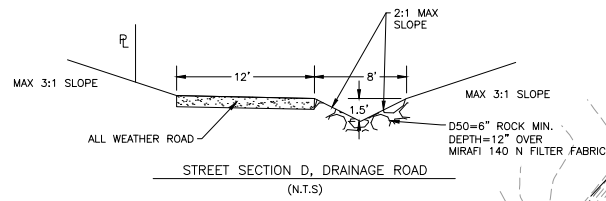
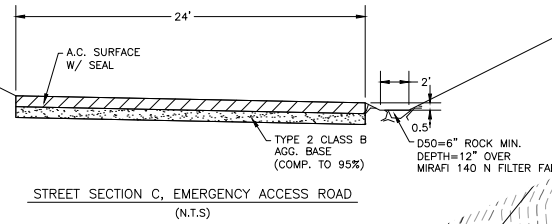
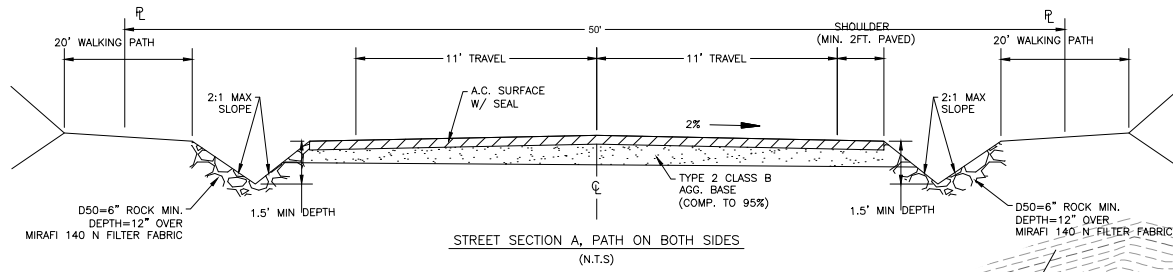
- ROADS ARE DESIGNED IN ACCORDANCE WITH ARTICLE 4.36 OF THE WASHOE COUNTY DEVELOPMENT CODE. ROADS ARE CONSIDERED TO BE NORTH FACING AND GRADES DO NOT EXCEED NINE (9) PERCENT
- ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH THE LATEST GOVERNING AGENCY REGULATIONS OR IN APPROVED AREAS ON THE GRADING PLAN.

**EARTHWORK**

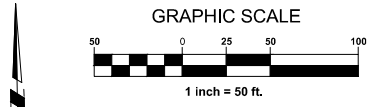
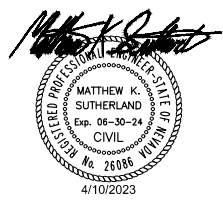
DISTURBED AREA: 13.36 ± AC  
 CUT: 41,057 ± CY  
 FILL: 25,981 ± CY  
 NET: 15,076 ± CY CUT

FINAL STABILIZATION OF DISTURBED AREA SHALL COMPLY WITH CITY OF RENO REQUIREMENTS.

ALL EARTHWORK SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012 EDITION.



EASEMENT PER DOC NO. 2888



**CAUTION - NOTICE TO CONTRACTOR**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.
- THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH PRELIMINARY OR NONAPPROVED PLANS.
- CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.

C:\Projects\21087.04\Drawings\Grading\Grading.dwg 4/10/2023 11:49 AM

ARJ PROPERTIES LLC  
 APN: 041-140-23

RYCKEBOSCH FAMILY TRUST,  
 JUSTIN & CHELSEA  
 APN: 041-100-70

**LAKESIDE  
 CUSTOM LOT SUBDIVISION  
 GRADING PLAN**  
 WASHOE COUNTY NEVADA

**CFA, INC.**  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4-10-2023

**SHEET C1.1 OF 4**



MATCH LINE - SEE SHEET C1.3

LOT 5  
2.02 AC.

LOT 4  
2.23 AC.

LOT 22  
2.21 AC.

LOT 21  
2.33 AC.

LOT 6  
2.02 AC.

LOT 23  
2.00 AC.

LOT 14  
2.40 AC.

LOT 24  
2.00 AC.

LOT 11  
2.05 AC.

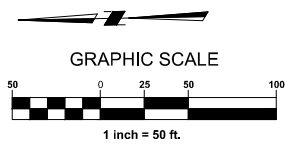
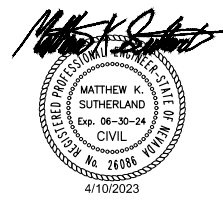
LOT 7  
2.23 AC.

LOT 12  
2.32 AC.

LOT 8  
3.30 AC.

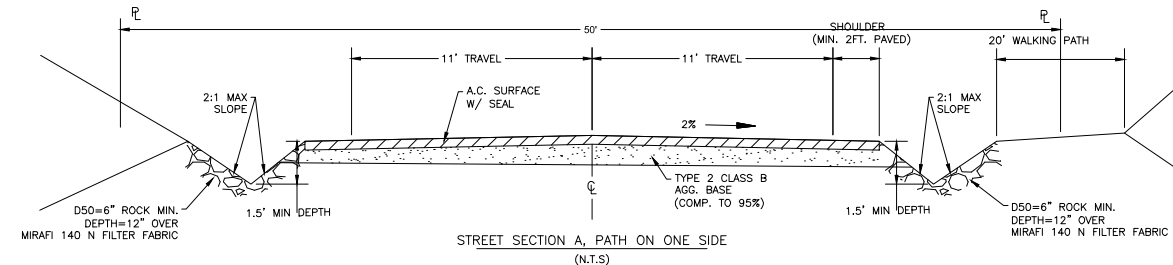
LOT 13  
2.56 AC.

MATCH LINE - SEE SHEET C1.1



**CAUTION - NOTICE TO CONTRACTOR**

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.
4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH PRELIMINARY OR NONAPPROVED PLANS.
5. CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.



**LAKESIDE  
CUSTOM LOT SUBDIVISION  
GRADING PLAN**

WASHOE COUNTY NEVADA

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4-10-2023

**SHEET C1.2 OF 4**

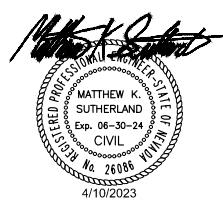
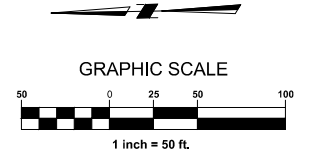
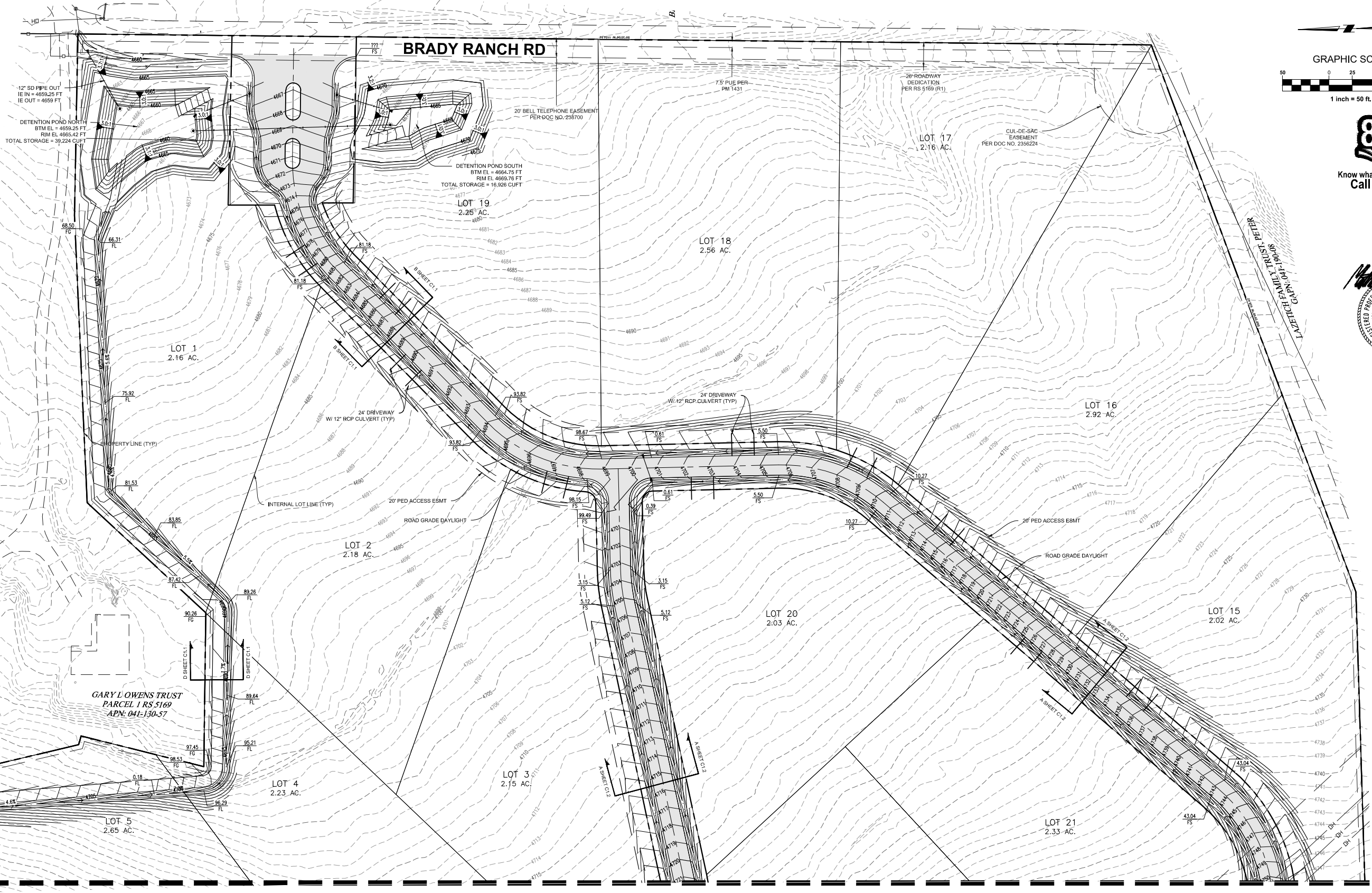
BRADY FAMILY LLC ET AL APN: 041-190-09

LOMBARDI RANCH LLC APN: 041-190-10

KEFE LIVING TRUST APN: 041-190-17

x:\Projects\21087.04\Long\Vendor\Sheets\Grading\PLAN.dwg AFB/OLU 4/10/2023 11:51 AM





**LAKESIDE  
CUSTOM LOT SUBDIVISION  
GRADING PLAN**

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

WASHOE COUNTY NEVADA

JOB NO: 21087.04 DATE: 4-10-2023

**SHEET C1.3 OF 4**

x:\Projects\21087.04\Draw\Sheet\Grading\Grading PLAN.dwg A:\P\001 4/10/2023 11:52 AM

MATCH LINE - SEE SHEET C1.3

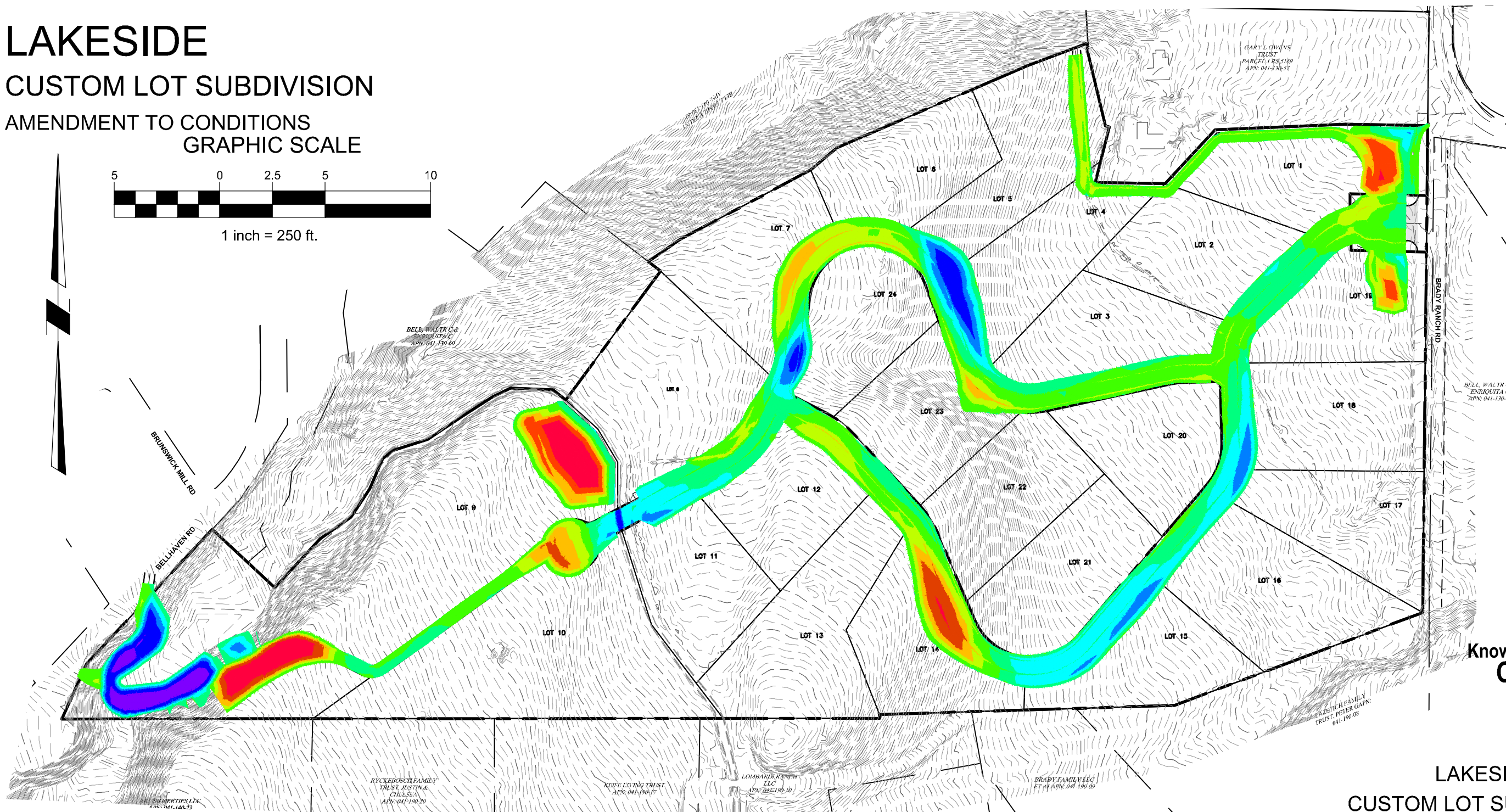
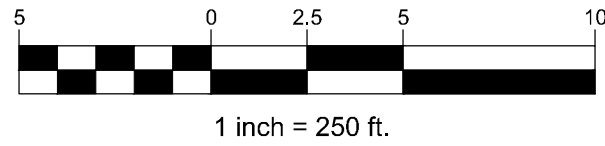


# LAKESIDE

## CUSTOM LOT SUBDIVISION

### AMENDMENT TO CONDITIONS

#### GRAPHIC SCALE



Know what's below.  
Call before you dig.

Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	-20.27	-10.00	22662.03	Red
2	-10.00	-6.00	31518.14	Orange
3	-6.00	-4.00	34806.35	Yellow
4	-4.00	-2.00	78287.46	Light Green
5	-2.00	0.00	161266.33	Green
6	0.00	2.00	128387.93	Light Blue
7	2.00	4.00	73975.85	Blue
8	4.00	6.00	22603.55	Dark Blue
9	6.00	10.00	18344.14	Dark Purple
10	10.00	17.12	9629.72	Purple

## EARTHWORK

DISTURBED AREA: 13.36 ±AC  
 CUT: 41,057 ±CY  
 FILL: 25,981 ±CY  
 NET: 15,076 ±CY CUT

*Matthew K. Sutherland*



LAKESIDE  
 CUSTOM LOT SUBDIVISION  
 AMENDMENT TO CONDITIONS  
 CUT FILL MAP  
 WASHOE COUNTY NEVADA

**cfa** CFA, INC.  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

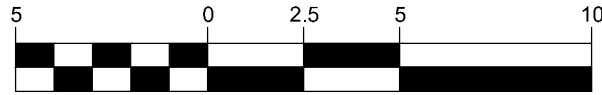
JOB NO: 21087.04 DATE: 4/10/2023

X:\Projects\21087.04\Drawings\LAND\Exhibit CUT FILL MAP.dwg #P0004 4/10/2023 9:51 AM

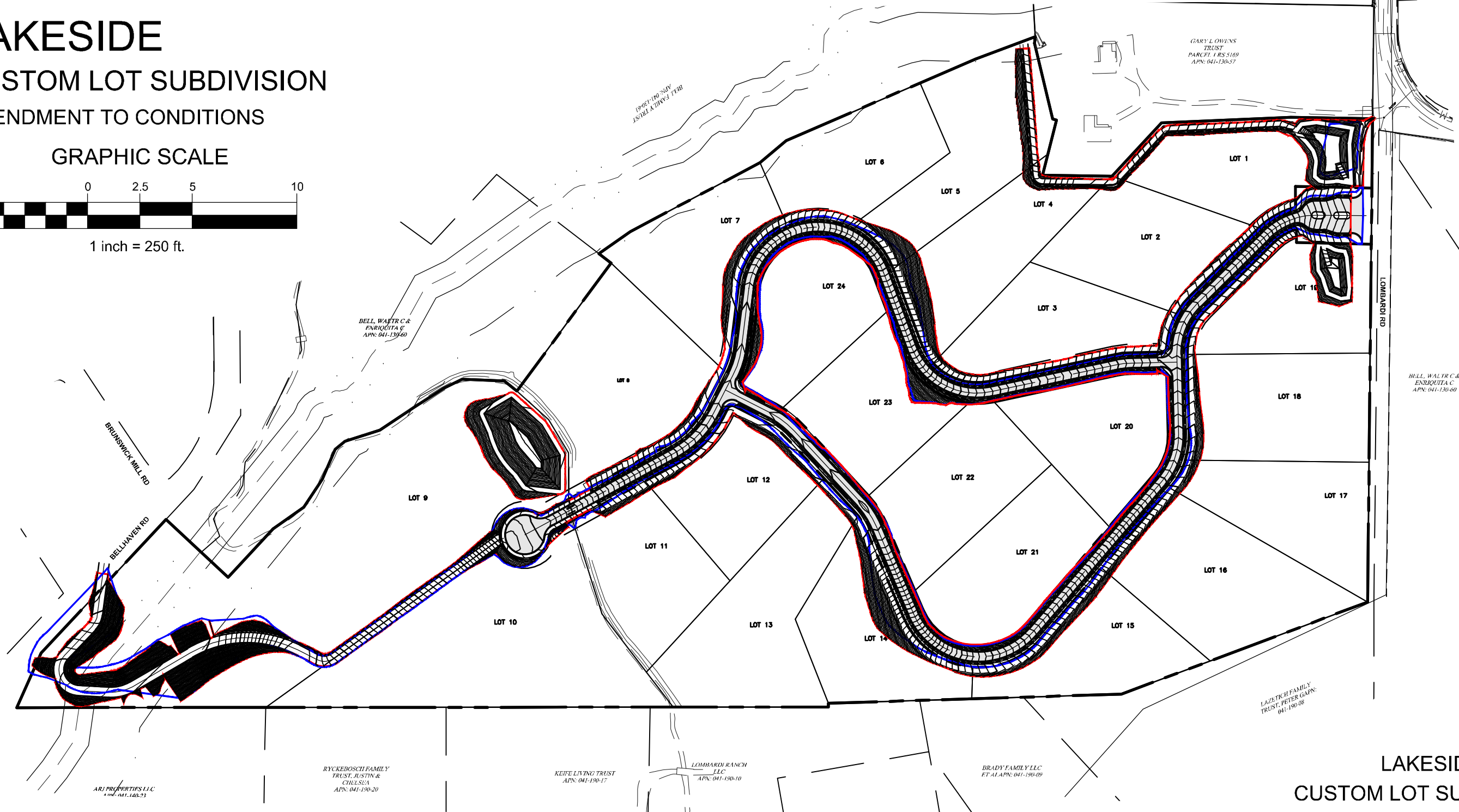


# LAKESIDE CUSTOM LOT SUBDIVISION AMENDMENT TO CONDITIONS

## GRAPHIC SCALE

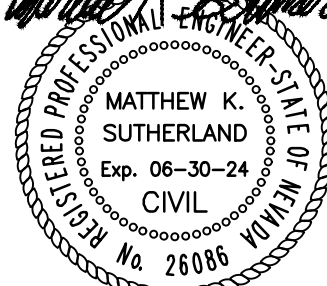


1 inch = 250 ft.



■ ORIGINAL SURFACE BOUNDARY ±8.12 AC  
■ UPDATED SURFACE BOUNDARY ±13.36 AC

*Matthew K. Sutherland*



4/10/2023

**LAKESIDE  
CUSTOM LOT SUBDIVISION  
AMENDMENT TO CONDITIONS  
GRADING COMPARISON**  
 WASHOE COUNTY NEVADA

**cfa** CFA, INC.  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4/10/2023

X:\Projects\21087.04\GIS\ENR\Grading Comparison.dwg APOROU 4/10/2023 12:12 PM

**TAB D**



Original Maps from  
11/1/2022 Approval

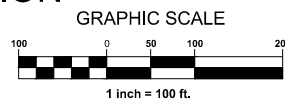
# 8900 LAKESIDE DR

## CUSTOM LOT SUBDIVISION

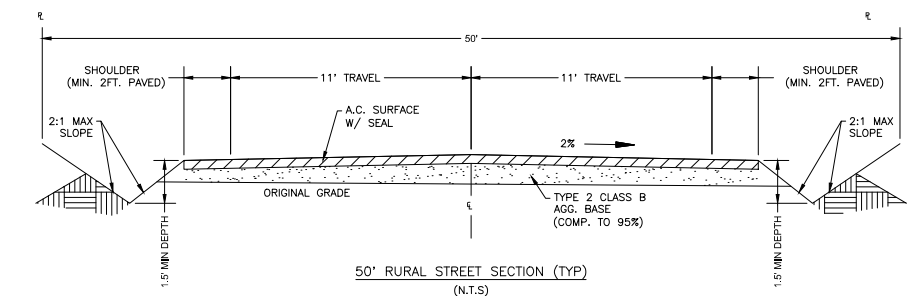
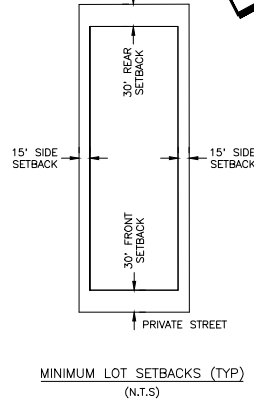
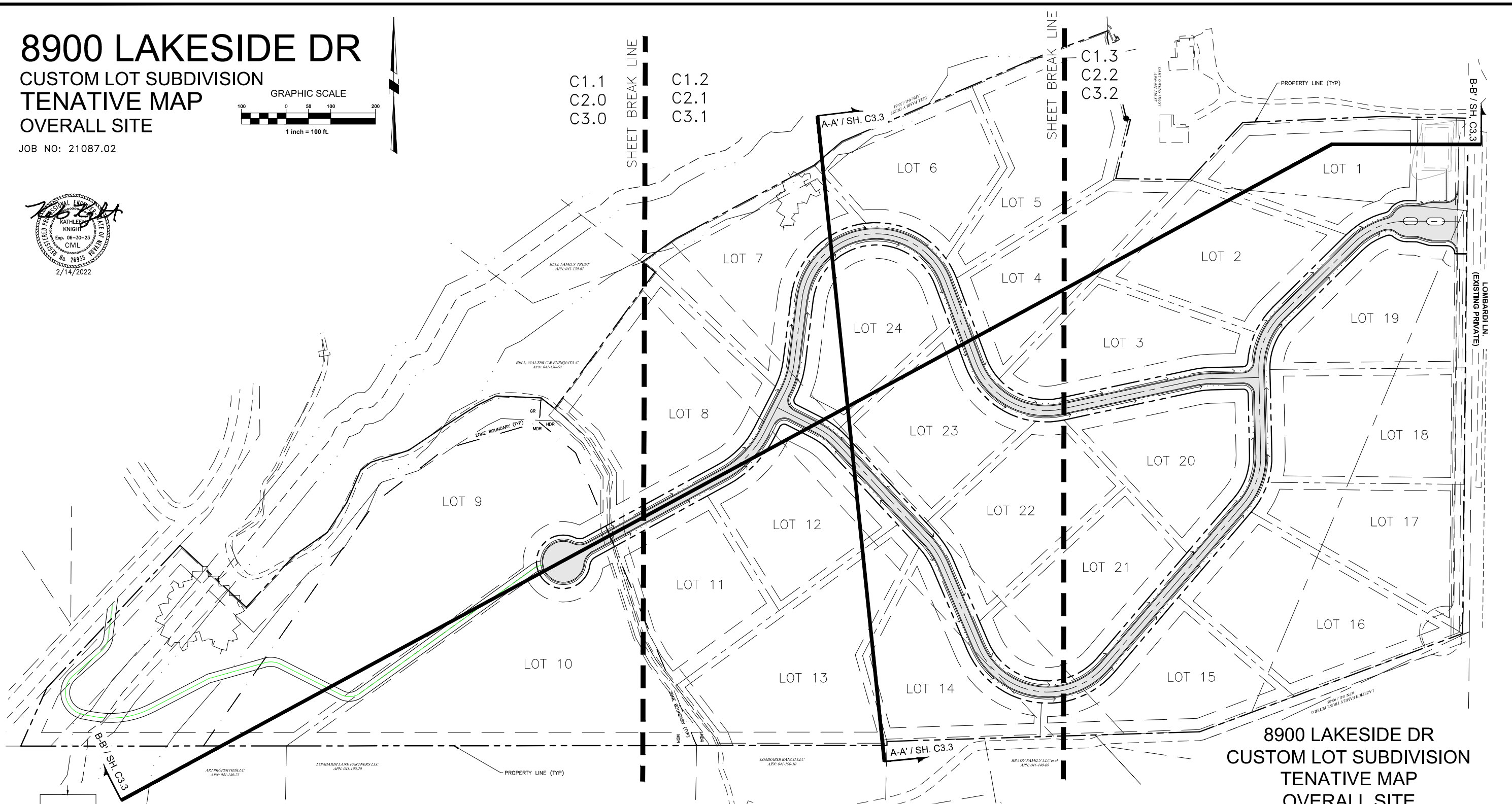
### TENATIVE MAP

#### OVERALL SITE

JOB NO: 21087.02



X:\Projects\21087\00\Drawings\TENT MAP\SHEETS\SITE PLAN.dwg (METER 2/14/2022 4:43 PM)



LAND USE TABLE	
RESIDENTIAL LOT	24 LOTS
GROSS AREA	72.8 AC
LOT AREA	66.74 AC
STREET RIGHT-OF-WAY AREA	6.06 AC
GROSS DENSITY	±0.34 D.U./AC
AVERAGE LOT SIZE	2.78 AC
LARGEST LOT SIZE	10.79 AC
SMALLEST LOT SIZE	2.01 AC

# 8900 LAKESIDE DR

## CUSTOM LOT SUBDIVISION

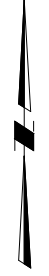
### TENATIVE MAP

#### OVERALL SITE

RENO NEVADA

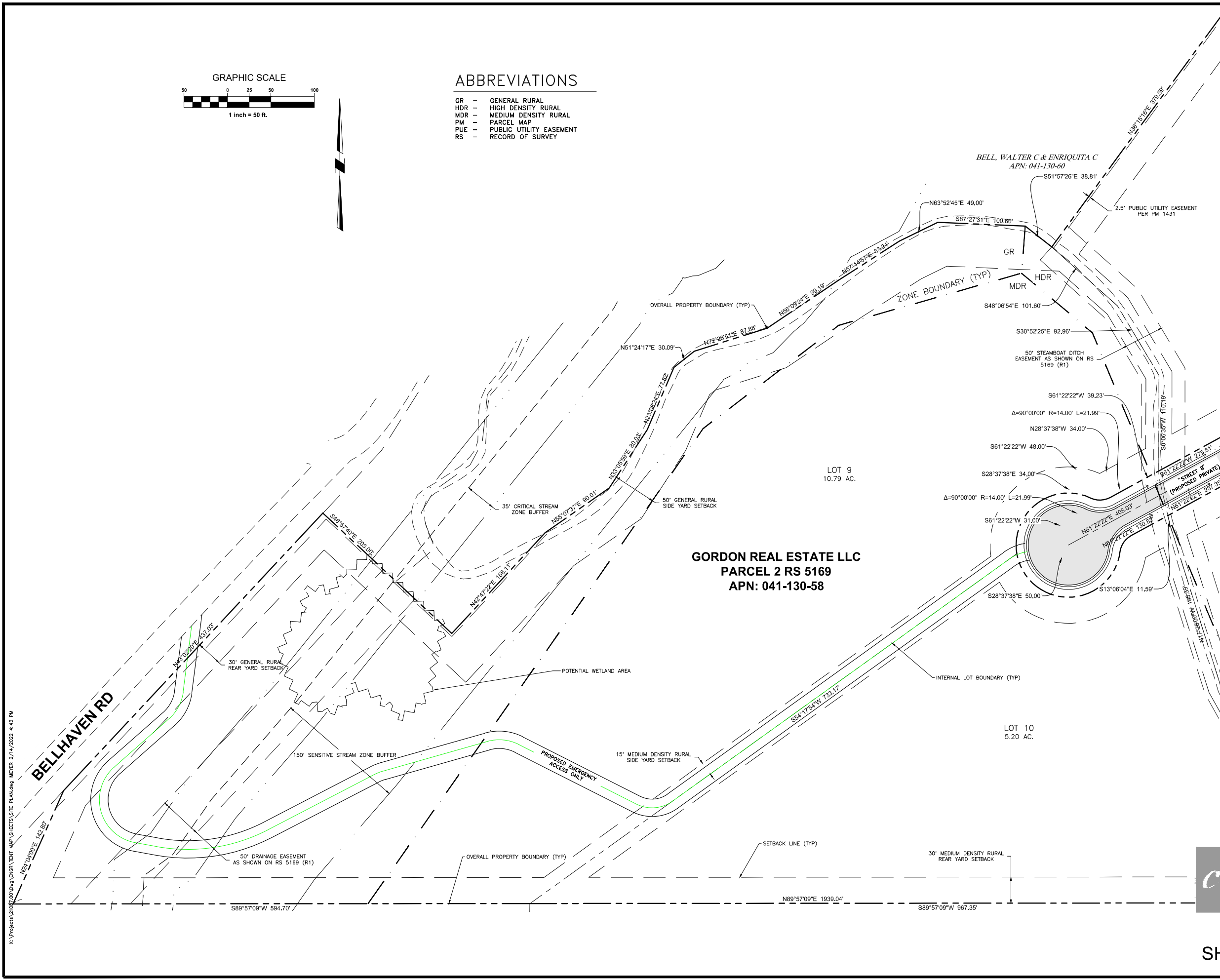
**cfa** **CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

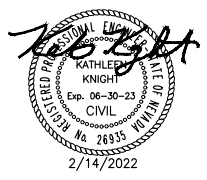


**ABBREVIATIONS**

- GR - GENERAL RURAL
- HDR - HIGH DENSITY RURAL
- MDR - MEDIUM DENSITY RURAL
- PM - PARCEL MAP
- PUE - PUBLIC UTILITY EASEMENT
- RS - RECORD OF SURVEY



SHEET C1.2



**8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENTATIVE MAP  
SITE PLAN**

RENO NEVADA

**cfa** **CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

**SHEET C1.1 OF 12**

X:\Projects\21087\21087.dwg (KATHLEEN KNIGHT) DATE PLOTTED: 2/14/2022 4:43 PM

LOT 5  
2.66 AC.

LOT 4  
2.05 AC.

LOT 22  
2.24 AC.

LOT 6  
2.09 AC.

LOT 23  
2.01 AC.

LOT 14  
2.02 AC.

LOT 24  
2.04 AC.

**GORDON REAL ESTATE LLC  
PARCEL 2 RS 5169  
APN: 041-130-58**

LOT 12  
2.08 AC.

LOT 13  
3.14 AC.

LOT 7  
2.35 AC.

LOT 8  
3.30 AC.

LOT 11  
2.02 AC.

8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
SITE PLAN

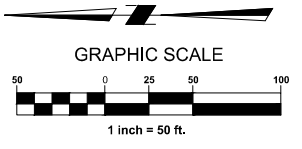
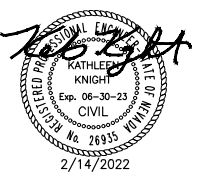
RENO NEVADA

**CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

ABBREVIATIONS

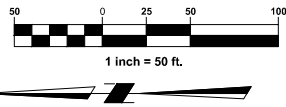
- GR - GENERAL RURAL
- HDR - HIGH DENSITY RURAL
- MDR - MEDIUM DENSITY RURAL
- PM - PARCEL MAP
- PUE - PUBLIC UTILITY EASEMENT
- RS - RECORD OF SURVEY



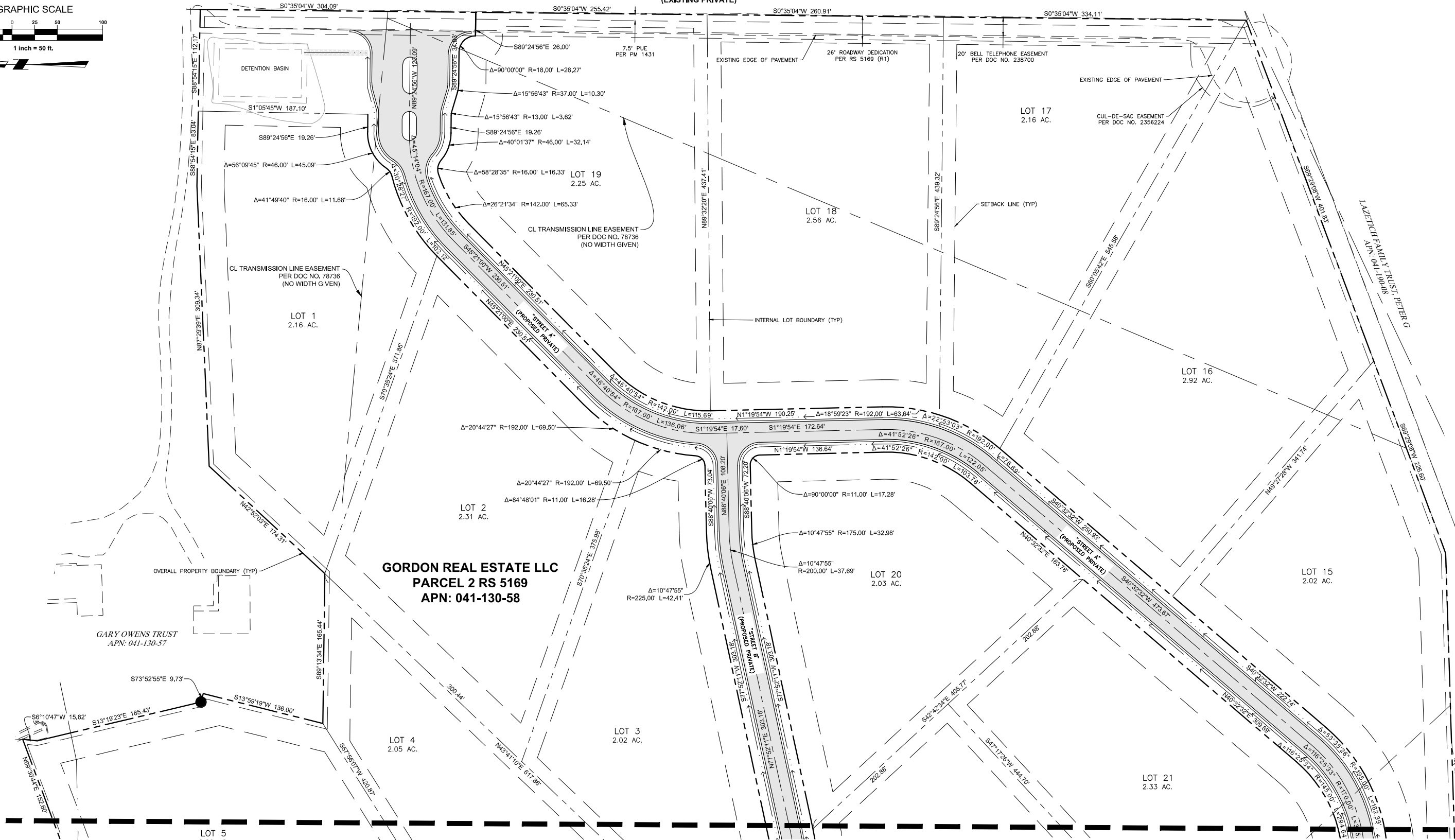
X:\Projects\21087\00\Drawings\TENT MAP\SHEETS\SITE PLAN.dwg (PLOTTER: 2/14/2022 4:44 PM)



GRAPHIC SCALE



LOMBARDI LN.  
(EXISTING PRIVATE)



ABBREVIATIONS

- GR - GENERAL RURAL
- HDR - HIGH DENSITY RURAL
- MDR - MEDIUM DENSITY RURAL
- PM - PARCEL MAP
- PUE - PUBLIC UTILITY EASEMENT
- RS - RECORD OF SURVEY

SHEET C1.2



8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
SITE PLAN  
RENO NEVADA

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

SHEET C1.3 OF 12

X:\Projects\21087.02\Drawings\TENT MAP\SHEETS\SITE PLAN.dwg (METER) 2/14/2022 4:44 PM



BELL, WALTER C & ENRIQUITA C  
APN: 041-130-60

LOT 9  
10.79 AC.

TYPE 1 SANITARY SEWER MANHOLE (TYPICAL)

8' x 4' RCB CULVERT  
STEAMBOAT DITCH

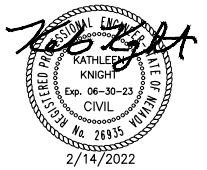
LOT 10  
5.20 AC.

(2) 20' x 10' RCB CULVERT  
W/ WING WALLS

PROPOSED EMERGENCY  
ACCESS ONLY

BELHAVEN RD

SHEET C1.2



8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
UTILITY PLAN

RENO NEVADA

**cfa** CFA, INC.  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

SHEET C2.0 OF 12

X:\Projects\21087\03\Drawings\TEXT MAP SHEETS\UTILITY PLAN.dwg (PLOT) 2/14/2022 4:44 PM

LOT 5  
2.66 AC.

LOT 4  
2.05 AC.

LOT 22  
2.24 AC.

LOT 6  
2.09 AC.

LOT 23  
2.01 AC.

LOT 14  
2.02 AC.

LOT 24  
2.04 AC.

LOT 12  
2.08 AC.

LOT 13  
3.14 AC.

LOT 7  
2.35 AC.

TYPE 1 SANITARY SEWER MANHOLE (TYPICAL)

120' TRANSMISSION POWERLINE  
EASEMENT PER DOC NO. 3288

LOT 8  
3.30 AC.

LOT 11  
2.02 AC.

SHEET C2.0

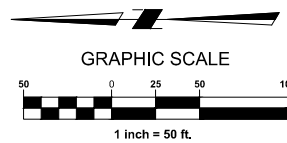
8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
UTILITY PLAN

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

RENO NEVADA

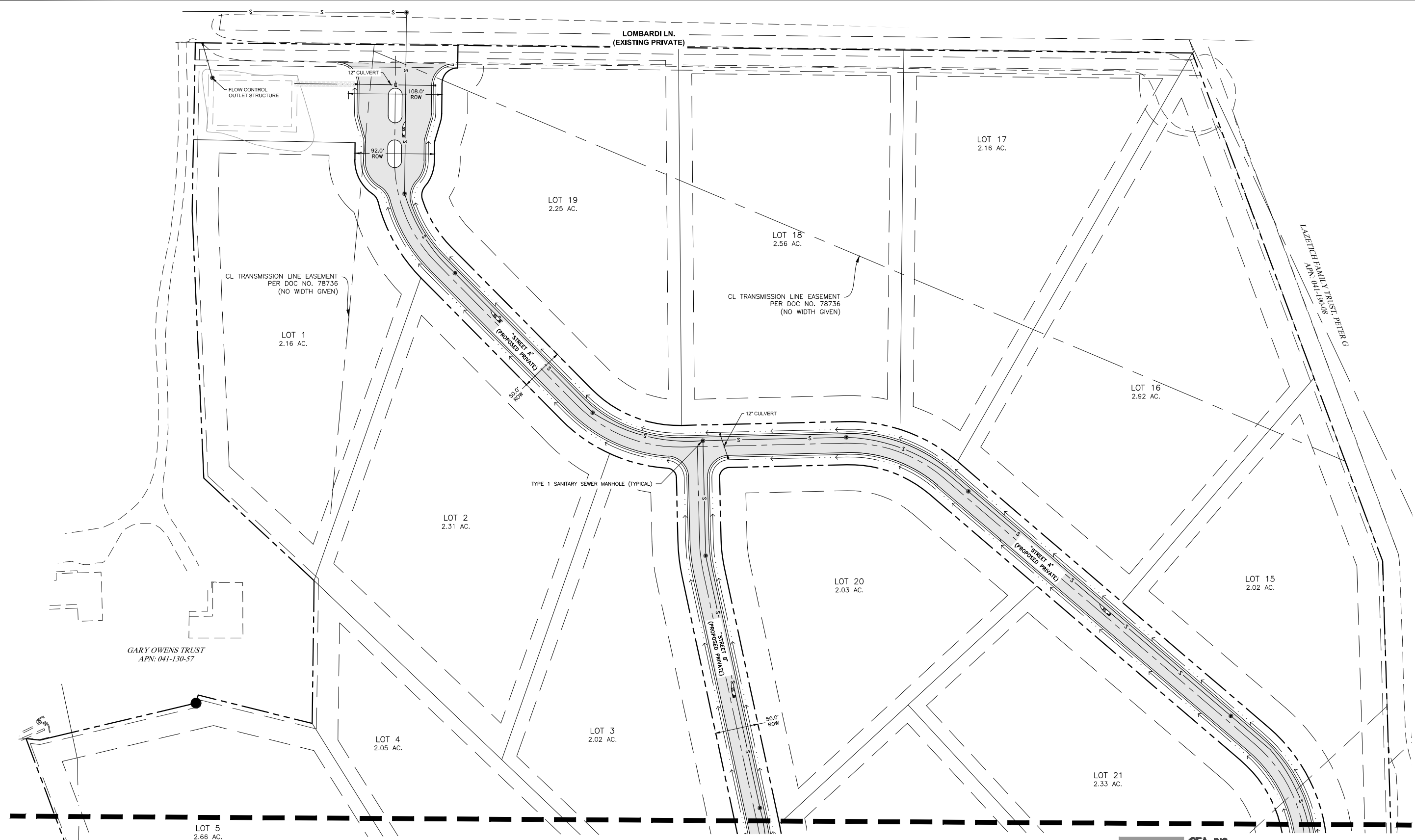
SHEET C2.1 OF 12



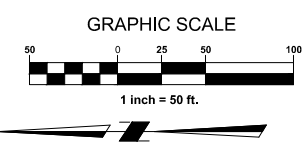
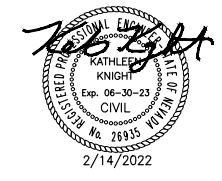
BELL FAMILY TRUST  
APN: 041-140-09

LOMBARDI RANCH LLC  
APN: 041-190-10

BRADY FAMILY LLC et al  
APN: 041-140-09



SHEET C2.1



8900 LAKESIDE DR  
 CUSTOM LOT SUBDIVISION  
 TENTATIVE MAP  
 UTILITY PLAN  
 RENO NEVADA

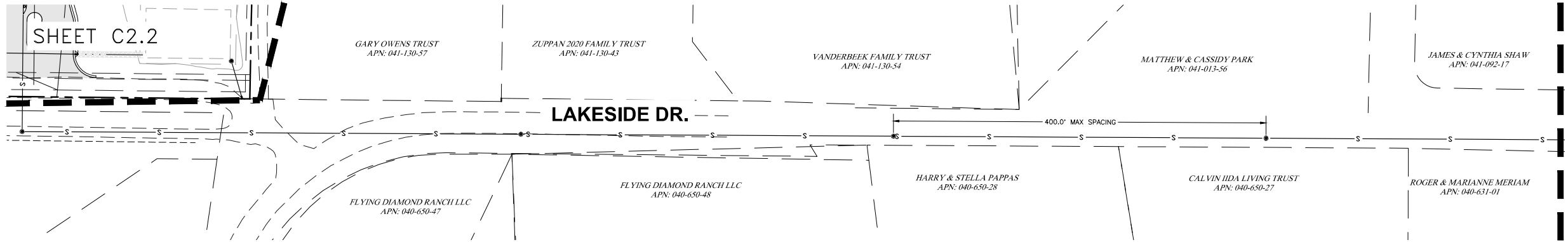
**cfa**  
**CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

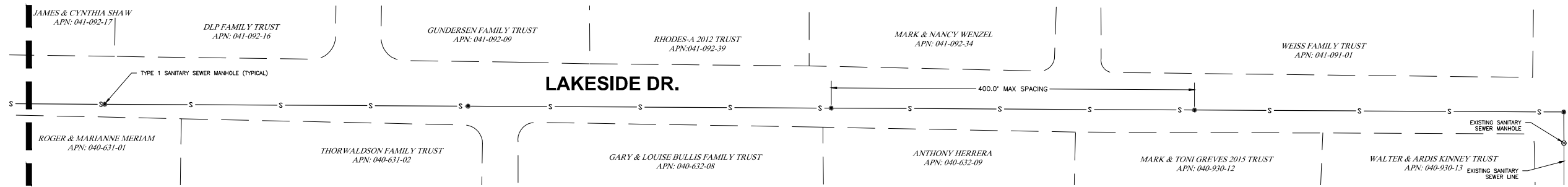
SHEET C2.2 OF 12

X:\Projects\21087\00\Drawings\TEXT MAP SHEETS\UTILITY PLAN.dwg (METER 2/14/2022 4:44 PM)

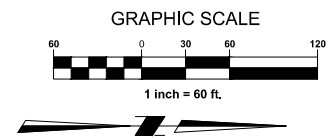




CONT. BELOW  
LAKESIDE DR



CONT. ABOVE  
LAKESIDE DR



8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
UTILITY PLAN

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

RENO NEVADA SHEET C2.3 OF 12

X:\Projects\21087\00\Drawings\TEXT MAP\SHEETS\UTILITY PLAN.dwg, METRIC 2/14/2022 4:44 PM

**GRADING NOTES**

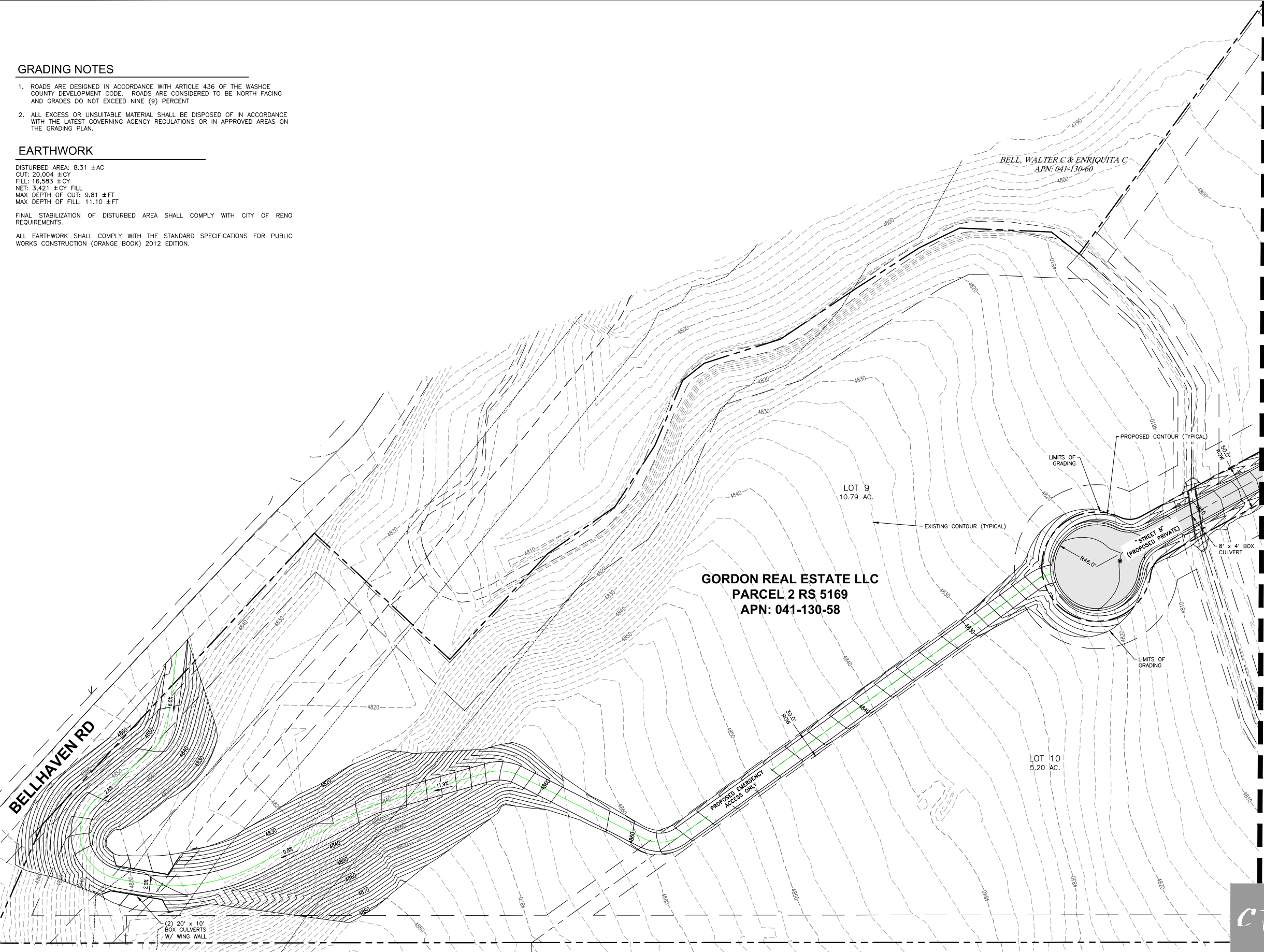
- ROADS ARE DESIGNED IN ACCORDANCE WITH ARTICLE 436 OF THE WASHOE COUNTY DEVELOPMENT CODE. ROADS ARE CONSIDERED TO BE NORTH FACING AND GRADES DO NOT EXCEED NINE (9) PERCENT
- ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH THE LATEST GOVERNING AGENCY REGULATIONS OR IN APPROVED AREAS ON THE GRADING PLAN.

**EARTHWORK**

DISTURBED AREA: 8.31 ± AC  
 CUT: 20,004 ± CY  
 FILL: 16,583 ± CY  
 NET: 3,421 ± CY FILL  
 MAX DEPTH OF CUT: 9.81 ± FT  
 MAX DEPTH OF FILL: 11.10 ± FT

FINAL STABILIZATION OF DISTURBED AREA SHALL COMPLY WITH CITY OF RENO REQUIREMENTS.

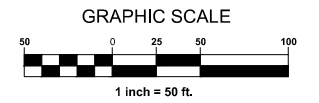
ALL EARTHWORK SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012 EDITION.



SHEET C1.2

**GORDON REAL ESTATE LLC**  
**PARCEL 2 RS 5169**  
**APN: 041-130-58**

BELL, WALTER C & ENRIQUITA C  
 APN: 041-130-60



**8900 LAKESIDE DR**  
**CUSTOM LOT SUBDIVISION**  
**TENTATIVE MAP**  
**GRADING PLAN**

RENO NEVADA

**cfa** **CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

SHEET C3.0 OF 12

X:\Projects\21087.02\21087.02.dwg SHEETS\GRADING PLAN.dwg METRIC 2/14/2022 4:44 PM

(2) 20' x 10'  
 BOX CULVERTS  
 W/ WING WALL

LOT 5  
2.66 AC.

LOT 4  
2.05 AC.

LOT 22  
2.24 AC.

LOT 6  
2.09 AC.

LOT 23  
2.01 AC.

LOT 14  
2.92 AC.

LOT 24  
2.04 AC.

**GORDON REAL ESTATE LLC  
PARCEL 2 RS 5169  
APN: 041-130-58**

LOT 7  
2.35 AC.

LOT 12  
2.08 AC.

LOT 13  
3.14 AC.

LOT 8  
3.30 AC.

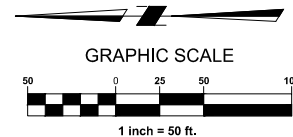
LOT 11  
2.02 AC.

**8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
TENATIVE MAP  
GRADING PLAN**

RENO NEVADA

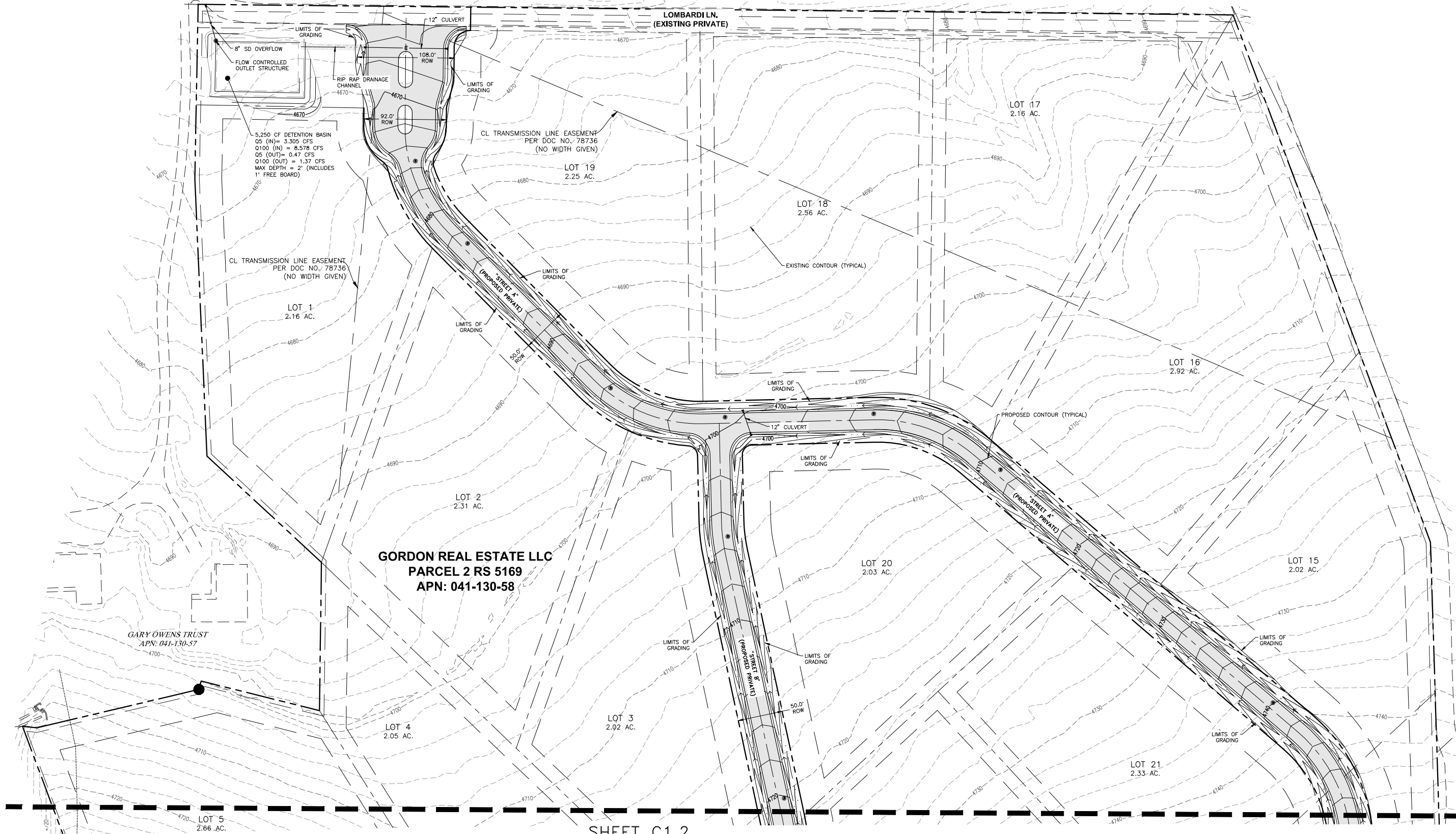
**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

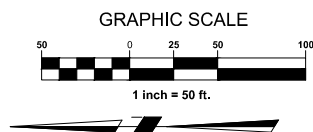


X:\Projects\21087.02\Map\GORDON\TEXT MAP\SHEETS\GRADING PLAN.dwg (METER 2/14/2022 4:44 PM)





SHEET C1.2

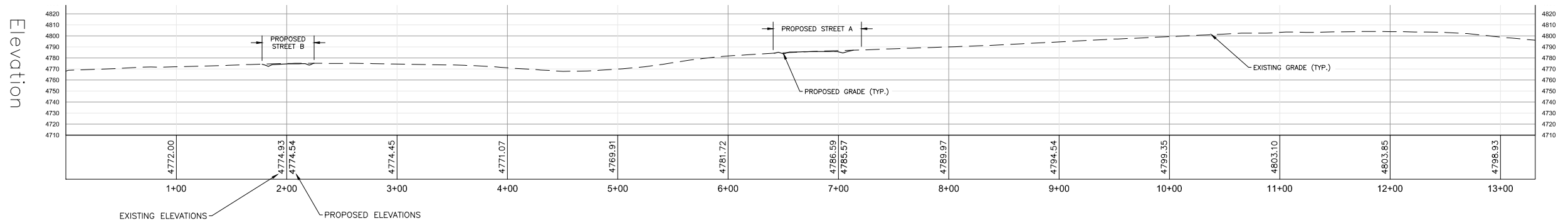


8900 LAKESIDE DR  
 CUSTOM LOT SUBDIVISION  
 TENTATIVE MAP  
 GRADING PLAN  
 RENO NEVADA

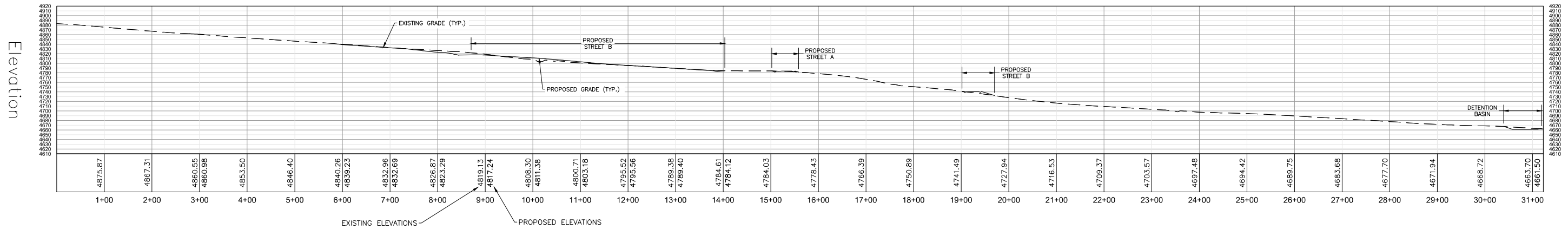
**cfa**  
**CFA, INC.**  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

SHEET C3.2 OF 12



SECTION A-A' (REF. SHEETS C1.0 FOR PLAN VIEW)  
 VERTICAL SCALE: 1" = 50' / HORIZONTAL SCALE 1" = 50'



SECTION B-B' (REF. SHEET C1.0 FOR PLAN VIEW)  
 VERTICAL SCALE: 1" = 100' / HORIZONTAL SCALE 1" = 100'

X:\Projects\21087.02\Drawings\GENERAL\TEMP MAP\SHEETS\GRADING PLAN.dwg (METER - 2/14/2022 4:44 PM)



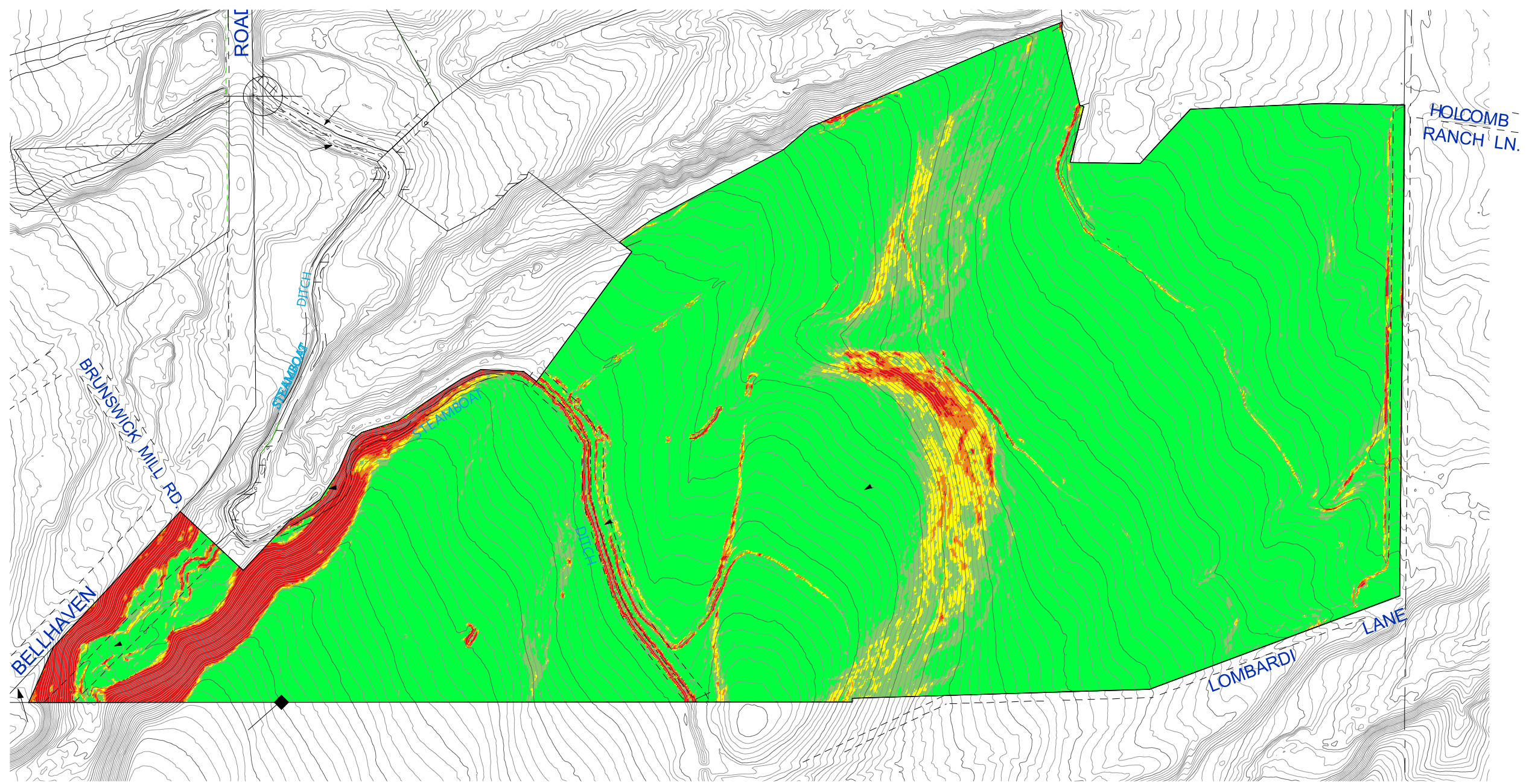
8900 LAKESIDE DR  
 CUSTOM LOT SUBDIVISION  
 TENTATIVE MAP  
 CROSS SECTION  
 RENO NEVADA

**cfa** CFA, INC.  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.02 DATE: 12-08-21

SHEET C3.3 OF 12





REV	DATE	BY

PROFESSIONAL SEAL:

**CFA, INC.**  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LANDMARK PLANNERS  
 100 CORPORATE BLDG. #1000 • BELLEVILLE, MISSOURI 63703  
 772-606-1000 FAX • 772-606-1001 E • CFA@CFAINC.COM

Number	Minimum Slope	Maximum Slope	Area (SF)	Area (Ac)	Percentage of Total Area	Color
1	0.00%	15.00%	2628799.28	60.35	82.9%	Green
2	15.00%	20.00%	235300.72	5.40	7.4%	Yellow
3	20.00%	25.00%	109502.58	2.51	3.4%	Orange
4	25.00%	30.00%	45287.04	1.04	1.4%	Red
5	30.00%	150.00%	153725.55	3.53	4.9%	Dark Red



**CAUTION - NOTICE TO CONTRACTOR**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.
- THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH PRELIMINARY OR NONAPPROVED PLANS.
- CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.

**8900 LAKESIDE DR**  
 SLOPE ANALYSIS MAP

JOB NO. 21087.02  
 DESIGNED BY  
 CHECKED BY  
 DATE 12/08/2021  
 SHEET

# **PRELIMINARY DRAINAGE REPORT**

## **8900 LAKESIDE DRIVE SUBDIVISION AMENDMENT OF CONDITIONS**

**RENO, NV**

**APRIL 2023**



**CFA, Inc.  
1150 CORPORATE BLVD.  
RENO, NV 89502**

**TABLE OF CONTENTS**

**INTRODUCTION** ..... 2

**EXISTING SITE DESCRIPTION AND DRAINAGE** ..... 2

**PROPOSED PROJECT DESCRIPTION AND DRAINAGE** ..... 2

**FLOOD ZONE** ..... 3

**HYDROLOGIC MODEL PARAMETERS** ..... 4

**METHODOLOGY** ..... 4

**HYDROLOGY** ..... 4

**DETENTION POND** ..... 5

**CONCLUSION** ..... 6

**APPENDICIES**

**APPENDIX A**

VICINITY MAP

**APPENDIX B**

FIRM MAP

IDF

**APPENDIX C**

HYDRAFLOW HYDROGRAPH CALCULATIONS

**APPENDIX D**

POND STAGE/STORAGE CALCULATIONS

**APPENDIX E**

EXISTING & PROPOSED

STORM WATER DRAINAGE PLAN



## **INTRODUCTION**

This report presents the Preliminary Hydrology Study to support the proposed development of the 8900 Lakeside Dr subdivision located on APN 041-130-58. This property is located southwest of Reno, Nevada.

The purpose of this study is to compare the existing and proposed 5-year and 100-year storm events on the site and mitigate any increase in flows based on the proposed development per the Truckee Meadows Regional Drainage Manual and represent the general stormwater conveyance system for the proposed development.

## **EXISTING SITE DESCRIPTION AND DRAINAGE**

The project site is located to the North and West of Brady Ranch Ln, southwest of the intersection with Lakeside Dr. The parcel is confined by Brady Ranch Ln to the east and undeveloped and developed single family lots to the northwest, north, and south. The Vicinity Map in Appendix A depicts the area of the proposed project.

The existing site consists of a vacant lot with native vegetation throughout. Steamboat Ditch runs through the site on the west side collecting run off from the southwestern corner. Based on aerial and field surveys conducted by CFA the site generally slopes from southwest to northeast varying from 4% to 21%. Offsite drainage coming onto the site is from the south and collected by Steamboat Ditch and transported offsite.

For analysis, the existing site was evaluated as three drainage areas totaling 72.8 acres, the largest existing drainage area flows toward Brady Ranch Road, one drainage area flows to the existing drainage ditch to the north of the property, this area will remain unaffected in the developed conditions. The last existing drainage basin flows into the Steamboat Canal which bisects the property. These drainage areas are depicted Existing Hydrology Map provided in Appendix E.

## **PROPOSED PROJECT DESCRIPTION AND DRAINAGE**

For this report it was assumed the site will be subdivided with no improvements to the lots. The only required detained flows are those associated with the proposed roadways as these roads are the only impervious areas being installed with this development. The flows from the proposed lots will not be detained since the

lots are remaining undeveloped. However, the proposed roadside ditches will be used to convey the natural drainage areas to the detention ponds as the ditches will alter the natural course of the existing drainage areas. The proposed site will drain via overland flow and via the roadside drainage ditches and culvert crossings to the proposed detention basins located in the northeast corner of the site.

For analysis, the proposed site was evaluated as five proposed drainage areas consisting of a total of 63.78 acres Acres as depicted on the Proposed Hydrology Map provided in Appendix E. The existing basin that flows to the drainage ditch to the north remained unchanged in the proposed therefore it was not included in the proposed analysis. Flows will be captured and detained on site by one of the two proposed detention ponds. An infiltration test will be performed during construction. In late March of 2023, flooding was witnessed near the Lakeside Drive/Brady Ranch Road intersection. The detention pond design submitted with the tentative map meets the requirements of the County. The applicant believes that increasing the capacity of the detention pond beyond the County requirements and making other drainage improvements within our project will further help control runoff. In addition to the enlarged pond, the applicant have also proposed a cut-off drainage swale between the subject property and the neighboring property to the north (APN 041-130-57). This structure further ensures that runoff is directed to the enlarged detention basin at the project entry. The described improvements are shown in the image below. The flows and analysis for the proposed detention pond were calculated using Hydra flow Hydrographs. These calculations are provided in Appendix C.

## **FLOOD ZONE**

According to FIRM Index Map #32019C0375E, dated January 16th, 2009, a portion of the site that will be developed is located within the following flood zone area:

- Zone X, Unshaded; flood zone areas determined to be outside the 0.2% annual chance floodplain
- Zone A, Shaded; Special Flood Hazard Areas without Base Flood Elevation (BFE)

A copy of the FIRM Index Map is in Appendix B.

## HYDROLOGIC MODEL PARAMETERS METHODOLOGY

The Rational Method is used to estimate the peak runoff resulting from a storm of given intensity and frequency falling on a specific watershed. The peak flow is expressed as:

$$Q = C i A$$

where

- Q = Peak rate of runoff, cubic feet per second
- C = Runoff coefficient
- i = Average rainfall intensity, inches per hour
- A = Watershed area, acres

Washoe County allows the use of the Rational Method for contributing areas less than 100 acres. Runoff computations were made using criteria from the Drainage Guidelines for Washoe County. Runoff coefficients were determined using Table 701 from the Truckee Meadows Regional Drainage Manual (TRDRM). Rainfall intensities were determined from the rainfall intensity-duration-frequency (IDF) curves for the site from the National Oceanic and Atmospheric Administration (NOAA) Precipitation Frequency Data Server (PFDS) and are provided in Appendix B. The initial time of concentration,  $T_{c(1)}$ , is calculated by using the TR-55 Method and the equations and calculations are provided in Appendix C.

Rational Method calculations were performed using Hydraflow Hydrographs Extension for Autodesk with the appropriate IDF curves and routing parameters. The peak flow for each drainage area is determined based on the runoff coefficient, initial time of concentration, and area (Ref. Calculations, Appendix C).

## HYDROLOGY

Peak flows for on-site watersheds were estimated for the 5- and 100-year design storms using the Rational Method, (Ref. Rational Method Calculations, Appendix C). The average C value and peak runoff for the existing conditions for the 5-year and 100-year are shown in Table 1. The proposed conditions are shown in Table 2.

Table 1						
EXISTING DRAINAGE AREA SUMMARY TABLE						
DA ID	STORM EVENT	Area (Acre)	I (in/hr)	C VALUE	TC (MIN)	RUNOFF (CFS)
E1	5YR	52.31	1.20	0.20	15	12.55
	100YR		2.95	0.50	15	77.07
E2	5YR	11.47	0.94	0.20	23	2.16
	100YR		2.32	0.50	23	13.28
E3	5YR	9.02	1.46	0.20	10	1.42
	100YR		3.58	0.50	10	8.70

Table 2						
PROPOSED DRAINAGE AREA SUMMARY TABLE						
DA ID	STORM EVENT	Area (Acre)	I (in/hr)	C VALUE	TC (MIN)	RUNOFF (CFS)
P1	5YR	12.14	1.46	0.35	10	6.16
	100YR		3.58	0.50	10	21.73
P2	5YR	11.66	1.24	0.35	14	5.07
	100YR		3.05	0.54	14	19.23
P3	5YR	17.38	1.24	0.35	14	7.56
	100YR		3.05	0.54	14	28.66
P4	5YR	11.81	1.34	0.20	12	3.17
	100YR		3.29	0.50	12	19.45
P5	5YR	10.79	0.94	0.20	23	2.03
	100YR		2.35	0.50	23	12.49

Models for the 5-year and 100-year events for existing and proposed conditions and the proposed 100 yr conditions were ran in Hydraflow. Calculations and related information are provided in Appendix C.

## DETENTION POND

All onsite flows will be directed to one of two detention ponds in the northeast corner of the site. The ponds are sized to detain the difference in peak flows between the developed and undeveloped conditions for the 5-year and 100 yr storm. As stated previously the detention will be reduced to lower than the existing conditions to help minimize downstream runoff as observed in March 2023. Table 3 shows the runoffs associated with the existing conditions vs the discharge from the pond after detention.

Table 3						
POND SUMMARY TABLE						
POND ID	STORM EVENT	DA IN	FLOW IN (CFS)	EXIST COND. FLOW (CFS)	POND VOLUME (CF)	POND DISCHARGE (CFS)
SOUTH POND	5YR	P3	7.56	NA	6,930	3.74
	100YR		28.66	NA	15,569	11.75
NORTH POND	5YR	SOUTH POND + P1 + P2 + P4 (no detention)	10.97	12.55	8,439	6.29*
	100YR		38.43	77.07	29,461	39.17*

\* - includes the flow from P4 which is not being detained

Stage/storage tables and outlet design calculation are provided in Appendix D.

**CONCLUSION**

As demonstrated in this report, the proposed drainage concept will detain significantly more than the increase associated with the 5-yr and 100-yr storm runoff onsite in compliance with the Washoe County design requirements and benefit the downstream runoff issues which are present in the existing conditions.

**REFERENCE**

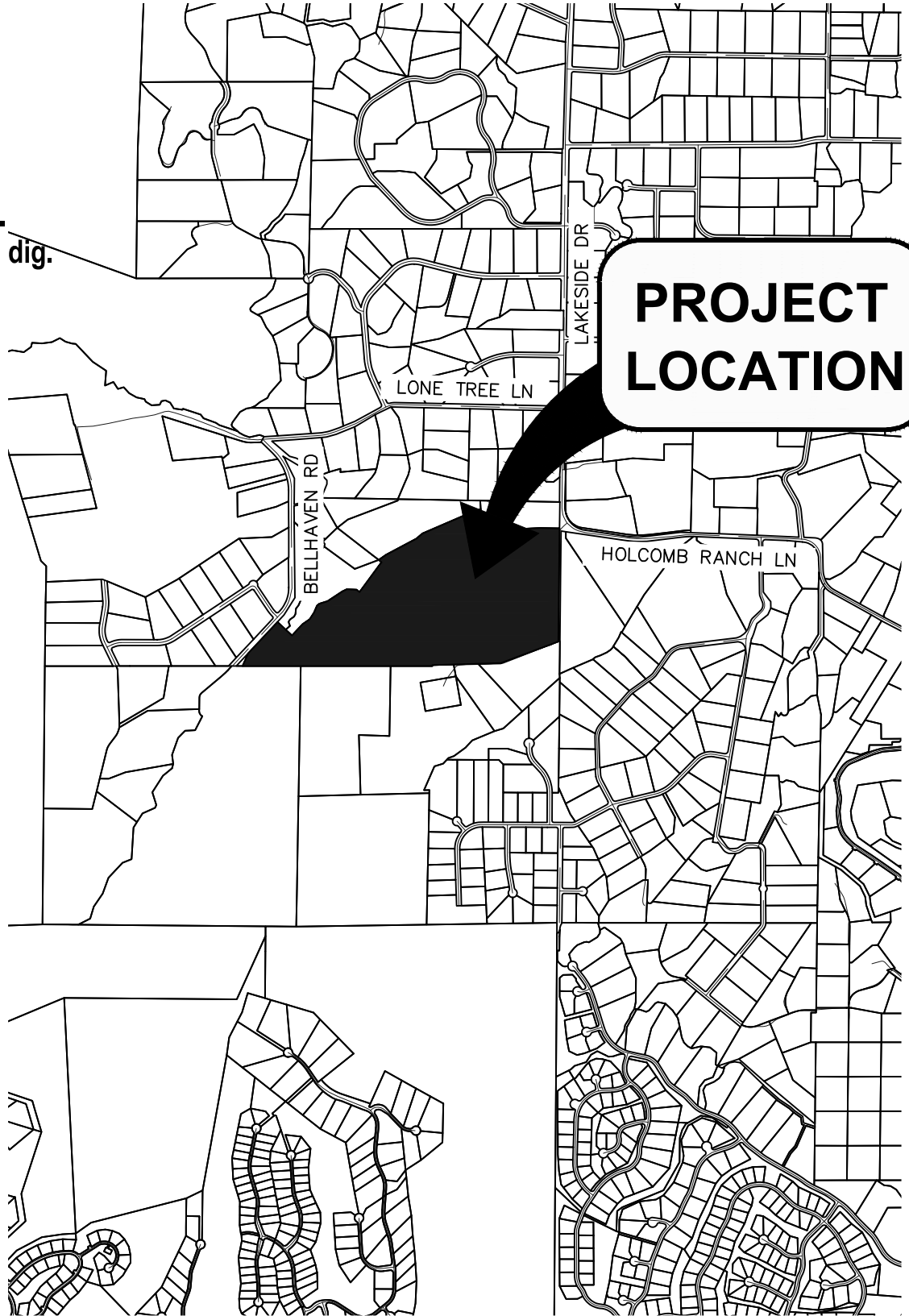
NOAA National Weather Service, *NOAA Atlas 14, Volume 1, Version 5, Reno, Nevada, US, Latitude: 39.4425°, Longitude: -119.8108°, Elevation 4710.94ft.*, (NOAA Atlas 14 Point Precipitation Frequency Estimates: NV, 2004, Revised 2011)

*Truckee Meadows Regional Drainage Manual*, April 2009





Know what's below.  
Call before you dig.



X:\PROJECTS\21087.00\DWG\ENGR\TENT MAP\EXHIBITS\VICINITYMAP.DWG <DHEIN> 12/7/2021 11:22 AM



1150 CORPORATE BLVD.  
RENO, NV 89502  
(775) 856-1150

VICINITY MAP  
for  
8900 LAKESIDE DR

RENO

NEVADA

SHEET

1

1

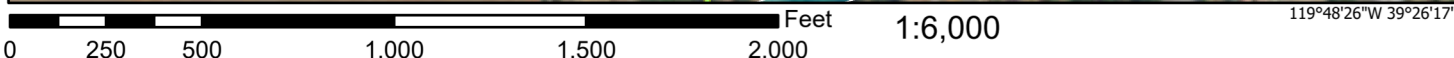
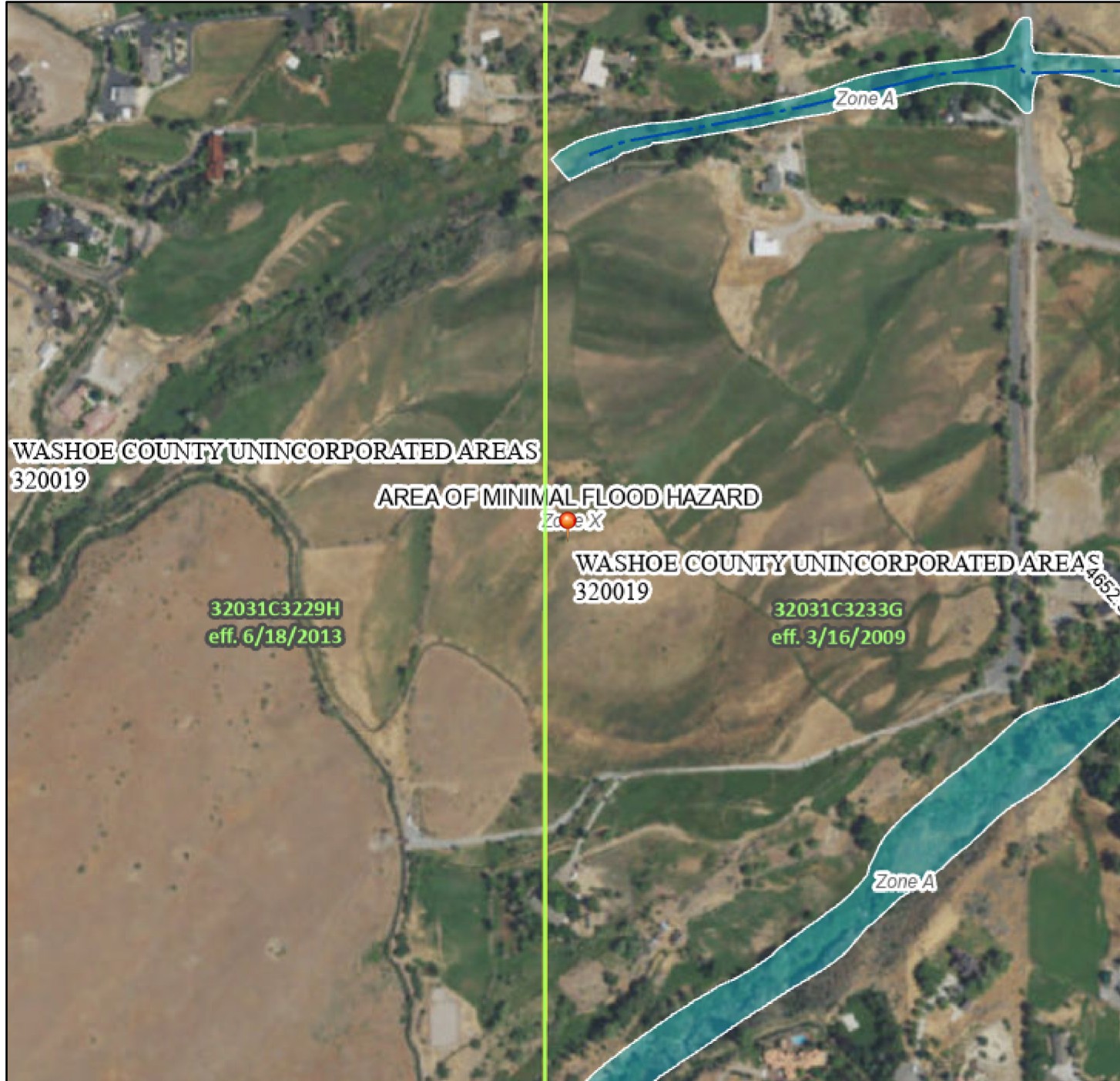
OF

**APPENDIX B**  
**FIRM MAP**  
**IDF**

# National Flood Hazard Layer FIRMette



119°49'3"W 39°26'44"N



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

## Legend

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

- |                                    |  |                                                                                                                                                                          |
|------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>                                                                                                              |
|                                    |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>                                                                                                                         |
|                                    |  | Regulatory Floodway                                                                                                                                                      |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 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 <i>Zone X</i> |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>                                                                                                            |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>                                                                                                      |
|                                    |  | Area with Flood Risk due to Levee <i>Zone D</i>                                                                                                                          |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>                                                                                                                     |
|                                    |  | Effective LOMRs                                                                                                                                                          |
| <b>GENERAL STRUCTURES</b>          |  | Area of Undetermined Flood Hazard <i>Zone D</i>                                                                                                                          |
|                                    |  | Channel, Culvert, or Storm Sewer                                                                                                                                         |
|                                    |  | Levee, Dike, or Floodwall                                                                                                                                                |
| <b>OTHER FEATURES</b>              |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation<br>17.5                                                                                                |
|                                    |  | Coastal Transect                                                                                                                                                         |
|                                    |  | Base Flood Elevation Line (BFE)                                                                                                                                          |
|                                    |  | Limit of Study                                                                                                                                                           |
|                                    |  | Jurisdiction Boundary                                                                                                                                                    |
| <b>MAP PANELS</b>                  |  | Coastal Transect Baseline                                                                                                                                                |
|                                    |  | Profile Baseline                                                                                                                                                         |
|                                    |  | Hydrographic Feature                                                                                                                                                     |
|                                    |  | Digital Data Available                                                                                                                                                   |
|                                    |  | No Digital Data Available                                                                                                                                                |
|                                    |  | Unmapped                                                                                                                                                                 |
|                                    |  | 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 **11/29/2021 at 12:44 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.



**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**

<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)<sup>1</sup></b>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.13 (0.960-1.31)	1.40 (1.20-1.64)	1.88 (1.60-2.21)	2.34 (1.98-2.76)	3.10 (2.56-3.71)	3.79 (3.04-4.61)	4.62 (3.59-5.72)	5.63 (4.19-7.14)	7.26 (5.09-9.54)	8.76 (5.87-11.8)
10-min	0.858 (0.732-0.996)	1.07 (0.912-1.25)	1.43 (1.22-1.69)	1.78 (1.51-2.10)	2.36 (1.95-2.82)	2.89 (2.31-3.51)	3.52 (2.73-4.35)	4.28 (3.19-5.44)	5.53 (3.88-7.27)	6.66 (4.46-8.97)
15-min	0.708 (0.608-0.824)	0.884 (0.752-1.04)	1.18 (1.01-1.39)	1.47 (1.24-1.74)	1.94 (1.61-2.33)	2.39 (1.91-2.90)	2.91 (2.26-3.60)	3.54 (2.64-4.49)	4.57 (3.20-6.00)	5.50 (3.69-7.42)
30-min	0.478 (0.408-0.554)	0.594 (0.506-0.698)	0.798 (0.678-0.938)	0.988 (0.838-1.17)	1.31 (1.08-1.57)	1.61 (1.29-1.95)	1.96 (1.52-2.42)	2.39 (1.78-3.02)	3.08 (2.16-4.04)	3.71 (2.48-4.99)
60-min	0.296 (0.253-0.343)	0.368 (0.313-0.432)	0.493 (0.420-0.581)	0.612 (0.518-0.724)	0.811 (0.670-0.971)	0.995 (0.796-1.21)	1.21 (0.940-1.50)	1.48 (1.10-1.87)	1.90 (1.33-2.50)	2.29 (1.54-3.09)
2-hr	0.198 (0.175-0.226)	0.244 (0.218-0.281)	0.314 (0.275-0.360)	0.372 (0.322-0.427)	0.463 (0.390-0.536)	0.544 (0.446-0.641)	0.638 (0.509-0.763)	0.757 (0.583-0.945)	0.986 (0.716-1.26)	1.19 (0.834-1.56)
3-hr	0.158 (0.142-0.178)	0.196 (0.177-0.223)	0.246 (0.220-0.278)	0.285 (0.253-0.323)	0.340 (0.296-0.388)	0.388 (0.331-0.449)	0.445 (0.373-0.522)	0.523 (0.428-0.636)	0.663 (0.525-0.850)	0.801 (0.612-1.05)
6-hr	0.112 (0.100-0.125)	0.140 (0.125-0.157)	0.173 (0.154-0.194)	0.198 (0.176-0.222)	0.231 (0.202-0.261)	0.255 (0.220-0.291)	0.279 (0.238-0.322)	0.309 (0.257-0.361)	0.358 (0.291-0.428)	0.413 (0.329-0.532)
12-hr	0.073 (0.066-0.082)	0.092 (0.083-0.103)	0.115 (0.103-0.129)	0.133 (0.119-0.149)	0.157 (0.138-0.178)	0.175 (0.152-0.200)	0.194 (0.165-0.224)	0.212 (0.177-0.248)	0.237 (0.192-0.283)	0.257 (0.204-0.313)
24-hr	0.047 (0.042-0.053)	0.059 (0.053-0.066)	0.075 (0.067-0.083)	0.087 (0.078-0.097)	0.105 (0.093-0.117)	0.119 (0.105-0.133)	0.133 (0.117-0.150)	0.148 (0.129-0.169)	0.169 (0.144-0.194)	0.186 (0.156-0.215)
2-day	0.028 (0.025-0.032)	0.035 (0.032-0.040)	0.045 (0.040-0.051)	0.053 (0.047-0.060)	0.064 (0.056-0.072)	0.073 (0.063-0.083)	0.082 (0.070-0.094)	0.091 (0.078-0.106)	0.105 (0.087-0.124)	0.116 (0.095-0.138)
3-day	0.020 (0.018-0.023)	0.026 (0.023-0.029)	0.033 (0.030-0.037)	0.039 (0.035-0.044)	0.048 (0.042-0.054)	0.055 (0.048-0.062)	0.062 (0.053-0.071)	0.070 (0.059-0.080)	0.081 (0.067-0.094)	0.090 (0.073-0.106)
4-day	0.017 (0.015-0.019)	0.021 (0.019-0.024)	0.027 (0.024-0.031)	0.032 (0.029-0.036)	0.040 (0.035-0.045)	0.046 (0.040-0.052)	0.052 (0.045-0.059)	0.059 (0.050-0.067)	0.069 (0.057-0.080)	0.077 (0.063-0.090)
7-day	0.011 (0.010-0.013)	0.014 (0.013-0.016)	0.019 (0.016-0.021)	0.022 (0.020-0.025)	0.027 (0.024-0.031)	0.031 (0.027-0.036)	0.036 (0.030-0.041)	0.040 (0.034-0.046)	0.046 (0.039-0.055)	0.052 (0.042-0.061)
10-day	0.009 (0.008-0.010)	0.011 (0.010-0.013)	0.015 (0.013-0.017)	0.018 (0.015-0.020)	0.021 (0.019-0.024)	0.024 (0.021-0.028)	0.028 (0.024-0.032)	0.031 (0.026-0.036)	0.036 (0.030-0.042)	0.039 (0.032-0.046)
20-day	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.011 (0.010-0.012)	0.013 (0.012-0.015)	0.015 (0.013-0.017)	0.017 (0.014-0.019)	0.019 (0.016-0.021)	0.021 (0.018-0.025)	0.023 (0.019-0.027)
30-day	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.010)	0.010 (0.009-0.012)	0.011 (0.010-0.013)	0.013 (0.011-0.015)	0.014 (0.012-0.016)	0.016 (0.014-0.019)	0.018 (0.015-0.021)
45-day	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.006-0.007)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.009-0.011)	0.011 (0.009-0.012)	0.012 (0.010-0.014)	0.013 (0.011-0.015)
60-day	0.003 (0.003-0.003)	0.004 (0.003-0.004)	0.005 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.008-0.011)	0.010 (0.009-0.012)

<sup>1</sup> 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.

[Back to Top](#)

**PF graphical**





**NOAA Atlas 14, Volume 1, Version 5**  
**Location name: Reno, Nevada, USA\***  
**Latitude: 39.4425°, Longitude: -119.8108°**  
**Elevation: 4710.94 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**

<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)<sup>1</sup></b>										
<b>Duration</b>	<b>Average recurrence interval (years)</b>									
	<b>1</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	<b>1000</b>
<b>5-min</b>	<b>0.094</b> (0.080-0.109)	<b>0.117</b> (0.100-0.137)	<b>0.157</b> (0.133-0.184)	<b>0.195</b> (0.165-0.230)	<b>0.258</b> (0.213-0.309)	<b>0.316</b> (0.253-0.384)	<b>0.385</b> (0.299-0.477)	<b>0.469</b> (0.349-0.595)	<b>0.605</b> (0.424-0.795)	<b>0.730</b> (0.489-0.983)
<b>10-min</b>	<b>0.143</b> (0.122-0.166)	<b>0.178</b> (0.152-0.209)	<b>0.239</b> (0.203-0.281)	<b>0.296</b> (0.251-0.350)	<b>0.393</b> (0.325-0.470)	<b>0.481</b> (0.385-0.585)	<b>0.587</b> (0.455-0.725)	<b>0.714</b> (0.532-0.906)	<b>0.921</b> (0.646-1.21)	<b>1.11</b> (0.743-1.50)
<b>15-min</b>	<b>0.177</b> (0.152-0.206)	<b>0.221</b> (0.188-0.259)	<b>0.296</b> (0.252-0.348)	<b>0.367</b> (0.311-0.435)	<b>0.486</b> (0.402-0.582)	<b>0.597</b> (0.478-0.725)	<b>0.727</b> (0.564-0.899)	<b>0.886</b> (0.660-1.12)	<b>1.14</b> (0.800-1.50)	<b>1.38</b> (0.922-1.85)
<b>30-min</b>	<b>0.239</b> (0.204-0.277)	<b>0.297</b> (0.253-0.349)	<b>0.399</b> (0.339-0.469)	<b>0.494</b> (0.419-0.585)	<b>0.656</b> (0.542-0.785)	<b>0.804</b> (0.643-0.976)	<b>0.979</b> (0.759-1.21)	<b>1.19</b> (0.888-1.51)	<b>1.54</b> (1.08-2.02)	<b>1.85</b> (1.24-2.50)
<b>60-min</b>	<b>0.296</b> (0.253-0.343)	<b>0.368</b> (0.313-0.432)	<b>0.493</b> (0.420-0.581)	<b>0.612</b> (0.518-0.724)	<b>0.811</b> (0.670-0.971)	<b>0.995</b> (0.796-1.21)	<b>1.21</b> (0.940-1.50)	<b>1.48</b> (1.10-1.87)	<b>1.90</b> (1.33-2.50)	<b>2.29</b> (1.54-3.09)
<b>2-hr</b>	<b>0.395</b> (0.350-0.452)	<b>0.489</b> (0.436-0.562)	<b>0.627</b> (0.550-0.719)	<b>0.744</b> (0.645-0.854)	<b>0.926</b> (0.780-1.07)	<b>1.09</b> (0.893-1.28)	<b>1.28</b> (1.02-1.53)	<b>1.51</b> (1.17-1.89)	<b>1.97</b> (1.43-2.53)	<b>2.39</b> (1.67-3.12)
<b>3-hr</b>	<b>0.474</b> (0.425-0.535)	<b>0.590</b> (0.533-0.669)	<b>0.738</b> (0.661-0.834)	<b>0.856</b> (0.759-0.970)	<b>1.02</b> (0.890-1.17)	<b>1.16</b> (0.995-1.35)	<b>1.34</b> (1.12-1.57)	<b>1.57</b> (1.29-1.91)	<b>1.99</b> (1.58-2.55)	<b>2.40</b> (1.84-3.15)
<b>6-hr</b>	<b>0.668</b> (0.601-0.748)	<b>0.837</b> (0.751-0.939)	<b>1.03</b> (0.925-1.16)	<b>1.19</b> (1.05-1.33)	<b>1.38</b> (1.21-1.56)	<b>1.53</b> (1.32-1.74)	<b>1.67</b> (1.42-1.93)	<b>1.85</b> (1.54-2.16)	<b>2.15</b> (1.74-2.57)	<b>2.47</b> (1.97-3.18)
<b>12-hr</b>	<b>0.882</b> (0.794-0.982)	<b>1.11</b> (0.994-1.24)	<b>1.39</b> (1.25-1.55)	<b>1.61</b> (1.43-1.80)	<b>1.90</b> (1.66-2.14)	<b>2.11</b> (1.83-2.41)	<b>2.34</b> (1.99-2.70)	<b>2.56</b> (2.14-2.99)	<b>2.85</b> (2.31-3.42)	<b>3.10</b> (2.45-3.77)
<b>24-hr</b>	<b>1.13</b> (1.02-1.26)	<b>1.41</b> (1.28-1.58)	<b>1.79</b> (1.61-2.00)	<b>2.09</b> (1.88-2.33)	<b>2.51</b> (2.24-2.81)	<b>2.85</b> (2.52-3.19)	<b>3.20</b> (2.80-3.61)	<b>3.56</b> (3.09-4.05)	<b>4.06</b> (3.46-4.66)	<b>4.45</b> (3.74-5.17)
<b>2-day</b>	<b>1.35</b> (1.20-1.52)	<b>1.69</b> (1.51-1.92)	<b>2.16</b> (1.92-2.44)	<b>2.54</b> (2.25-2.87)	<b>3.06</b> (2.69-3.48)	<b>3.48</b> (3.04-3.98)	<b>3.92</b> (3.38-4.51)	<b>4.39</b> (3.74-5.10)	<b>5.04</b> (4.20-5.93)	<b>5.55</b> (4.54-6.64)
<b>3-day</b>	<b>1.47</b> (1.32-1.66)	<b>1.86</b> (1.66-2.09)	<b>2.38</b> (2.13-2.69)	<b>2.82</b> (2.51-3.18)	<b>3.43</b> (3.03-3.88)	<b>3.93</b> (3.43-4.46)	<b>4.45</b> (3.85-5.10)	<b>5.01</b> (4.27-5.78)	<b>5.81</b> (4.84-6.79)	<b>6.45</b> (5.28-7.65)
<b>4-day</b>	<b>1.60</b> (1.43-1.80)	<b>2.02</b> (1.81-2.27)	<b>2.61</b> (2.34-2.94)	<b>3.10</b> (2.77-3.49)	<b>3.80</b> (3.36-4.29)	<b>4.37</b> (3.83-4.95)	<b>4.98</b> (4.31-5.68)	<b>5.64</b> (4.81-6.47)	<b>6.58</b> (5.49-7.66)	<b>7.35</b> (6.02-8.66)
<b>7-day</b>	<b>1.88</b> (1.67-2.13)	<b>2.39</b> (2.12-2.72)	<b>3.13</b> (2.77-3.56)	<b>3.73</b> (3.28-4.24)	<b>4.57</b> (3.99-5.21)	<b>5.24</b> (4.54-6.00)	<b>5.97</b> (5.12-6.87)	<b>6.73</b> (5.70-7.81)	<b>7.80</b> (6.48-9.18)	<b>8.67</b> (7.10-10.3)
<b>10-day</b>	<b>2.10</b> (1.86-2.39)	<b>2.69</b> (2.38-3.05)	<b>3.53</b> (3.12-4.01)	<b>4.20</b> (3.70-4.77)	<b>5.13</b> (4.48-5.84)	<b>5.86</b> (5.09-6.70)	<b>6.64</b> (5.71-7.62)	<b>7.44</b> (6.32-8.61)	<b>8.55</b> (7.14-10.0)	<b>9.42</b> (7.77-11.2)
<b>20-day</b>	<b>2.62</b> (2.33-2.97)	<b>3.34</b> (2.97-3.79)	<b>4.39</b> (3.90-4.96)	<b>5.19</b> (4.60-5.88)	<b>6.29</b> (5.54-7.12)	<b>7.14</b> (6.24-8.11)	<b>8.02</b> (6.94-9.17)	<b>8.90</b> (7.64-10.3)	<b>10.1</b> (8.54-11.8)	<b>11.0</b> (9.22-13.0)
<b>30-day</b>	<b>3.06</b> (2.73-3.48)	<b>3.92</b> (3.49-4.45)	<b>5.13</b> (4.56-5.82)	<b>6.05</b> (5.36-6.86)	<b>7.31</b> (6.43-8.30)	<b>8.28</b> (7.23-9.43)	<b>9.27</b> (8.03-10.6)	<b>10.3</b> (8.82-11.9)	<b>11.6</b> (9.86-13.6)	<b>12.7</b> (10.6-14.9)
<b>45-day</b>	<b>3.68</b> (3.28-4.11)	<b>4.71</b> (4.20-5.26)	<b>6.15</b> (5.48-6.85)	<b>7.22</b> (6.42-8.04)	<b>8.63</b> (7.63-9.64)	<b>9.68</b> (8.53-10.8)	<b>10.7</b> (9.39-12.1)	<b>11.8</b> (10.2-13.3)	<b>13.1</b> (11.2-14.9)	<b>14.1</b> (12.0-16.2)
<b>60-day</b>	<b>4.20</b> (3.73-4.71)	<b>5.40</b> (4.79-6.04)	<b>7.05</b> (6.24-7.88)	<b>8.23</b> (7.28-9.19)	<b>9.73</b> (8.59-10.9)	<b>10.8</b> (9.50-12.2)	<b>11.9</b> (10.4-13.4)	<b>12.9</b> (11.2-14.6)	<b>14.1</b> (12.2-16.1)	<b>15.0</b> (12.9-17.2)

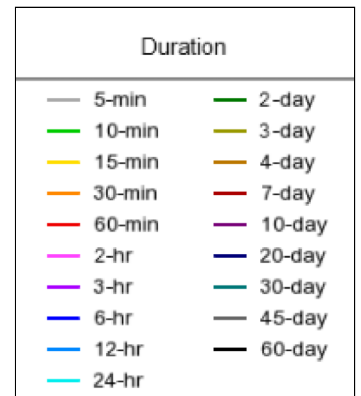
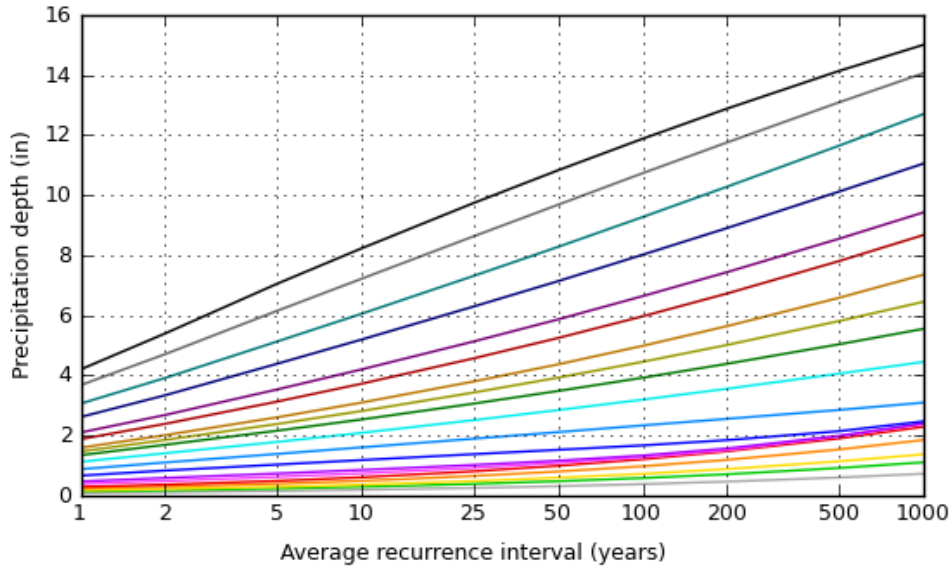
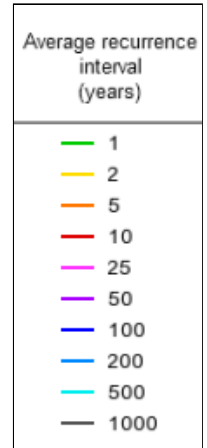
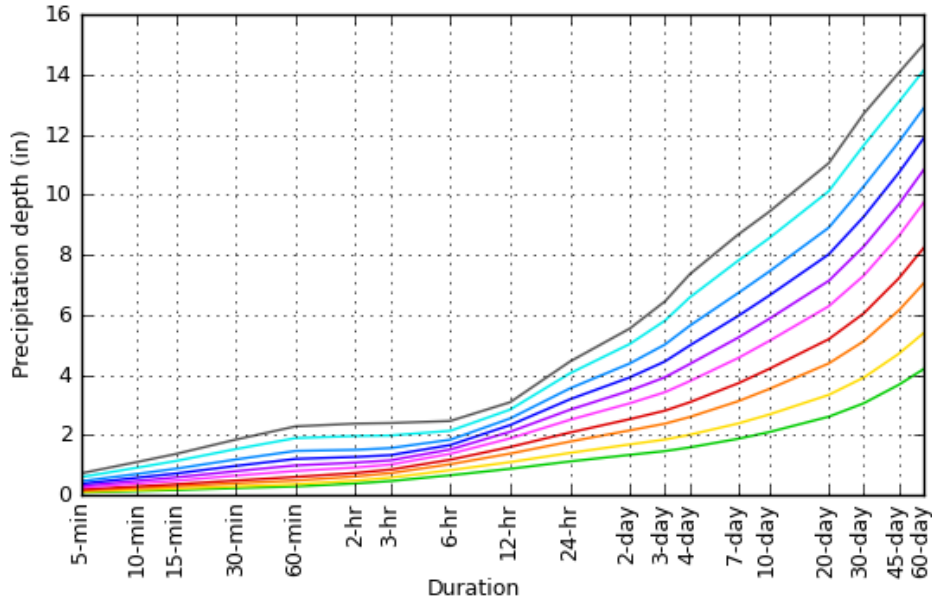
<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration 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.

[Back to Top](#)

**PF graphical**



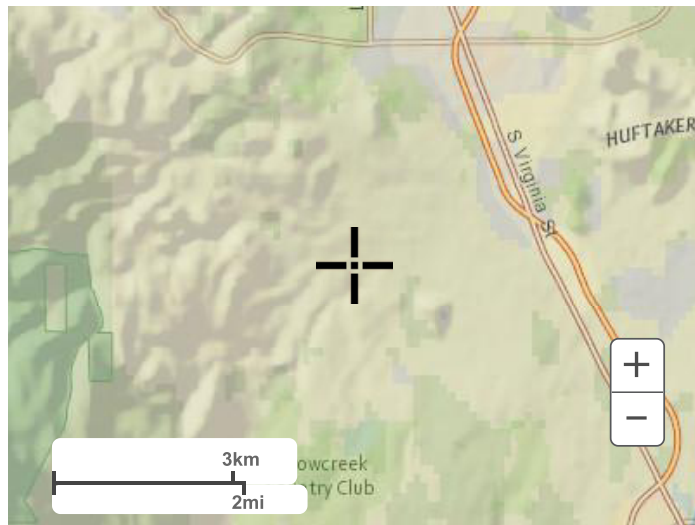
PDS-based depth-duration-frequency (DDF) curves  
 Latitude: 39.4425°, Longitude: -119.8108°



[Back to Top](#)

**Maps & aerials**

**Small scale terrain**



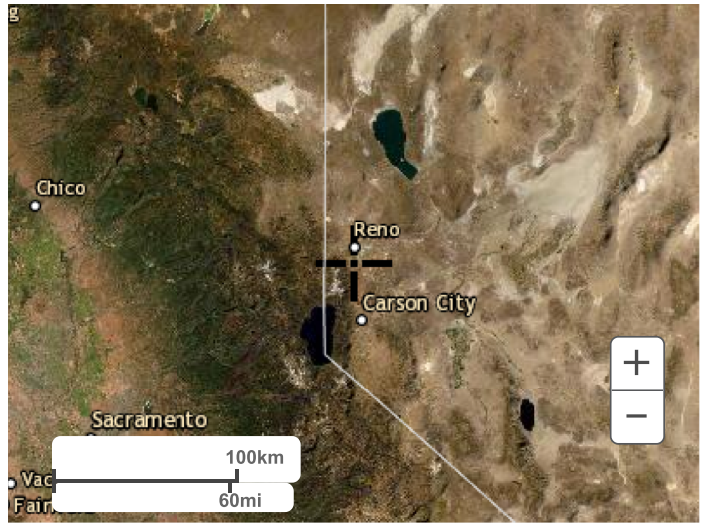
Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

---

[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](mailto:HDSC.Questions@noaa.gov)

[Disclaimer](#)

**APPENDIX C**  
**HYDRADFLOW HYDROGRAPH CALCULATIONS**

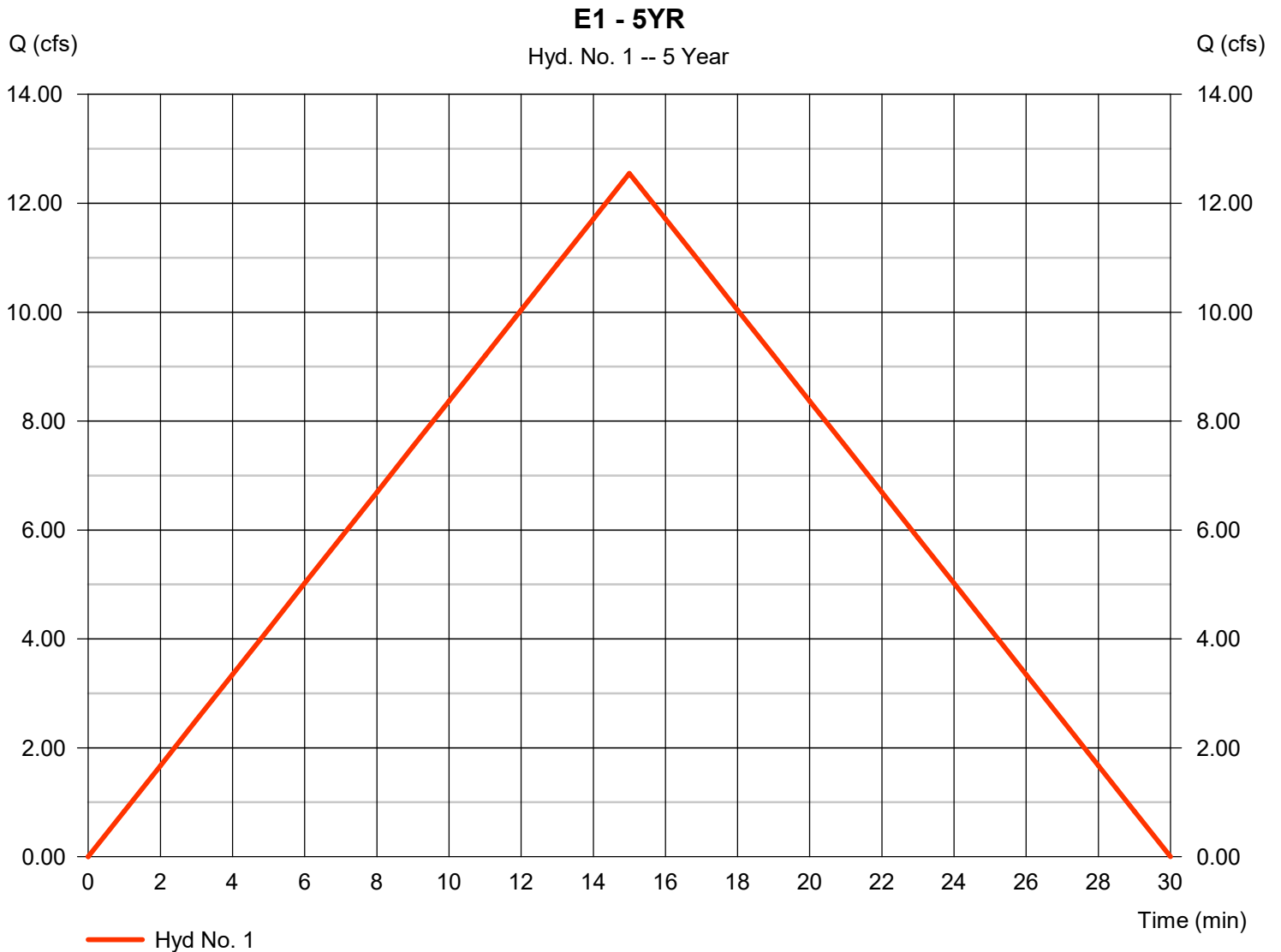


# Hydrograph Report

## Hyd. No. 1

E1 - 5YR

Hydrograph type	= Rational	Peak discharge	= 12.55 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 11,295 cuft
Drainage area	= 52.310 ac	Runoff coeff.	= 0.2
Intensity	= 1.200 in/hr	Tc by TR55	= 15.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

## Hyd. No. 2

E1 - 100YR

Hydrograph type	= Rational	Peak discharge	= 77.07 cfs
Storm frequency	= 100 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 69,362 cuft
Drainage area	= 52.310 ac	Runoff coeff.	= 0.5
Intensity	= 2.947 in/hr	Tc by TR55	= 15.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

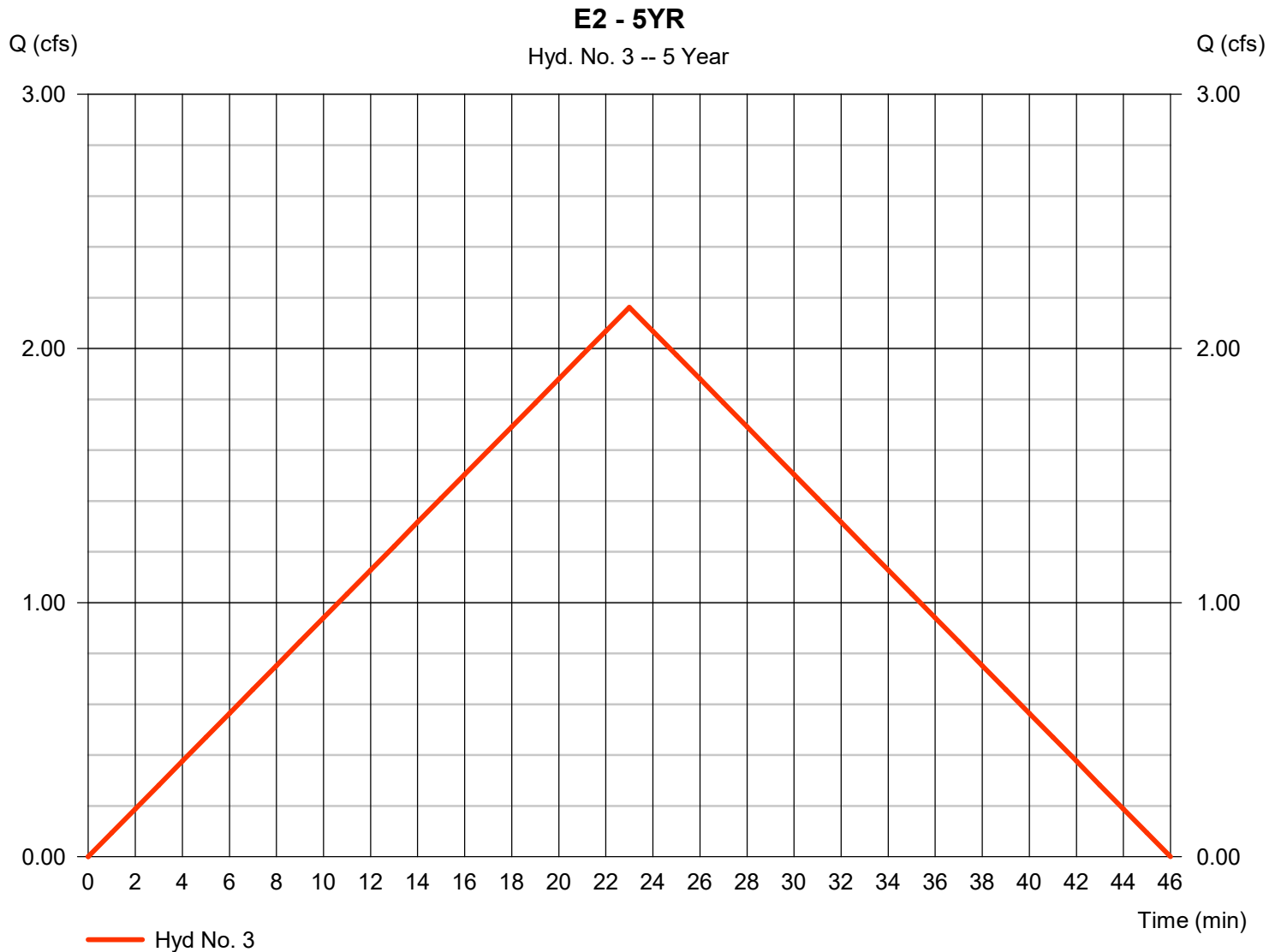


# Hydrograph Report

## Hyd. No. 3

E2 - 5YR

Hydrograph type	= Rational	Peak discharge	= 2.162 cfs
Storm frequency	= 5 yrs	Time to peak	= 23 min
Time interval	= 1 min	Hyd. volume	= 2,984 cuft
Drainage area	= 11.470 ac	Runoff coeff.	= 0.2
Intensity	= 0.942 in/hr	Tc by TR55	= 23.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

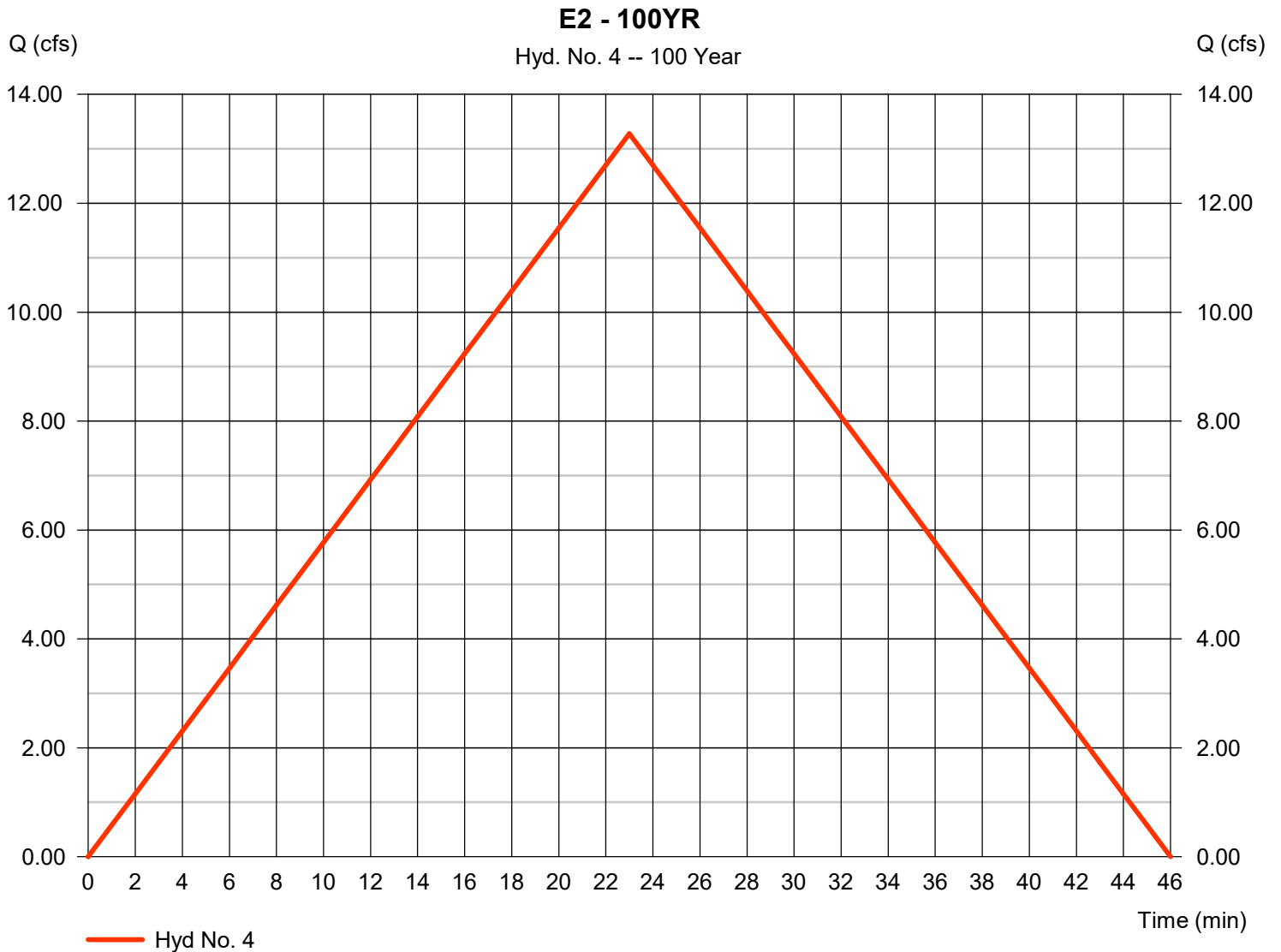


# Hydrograph Report

## Hyd. No. 4

E2 - 100YR

Hydrograph type	= Rational	Peak discharge	= 13.28 cfs
Storm frequency	= 100 yrs	Time to peak	= 23 min
Time interval	= 1 min	Hyd. volume	= 18,322 cuft
Drainage area	= 11.470 ac	Runoff coeff.	= 0.5
Intensity	= 2.315 in/hr	Tc by TR55	= 23.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1



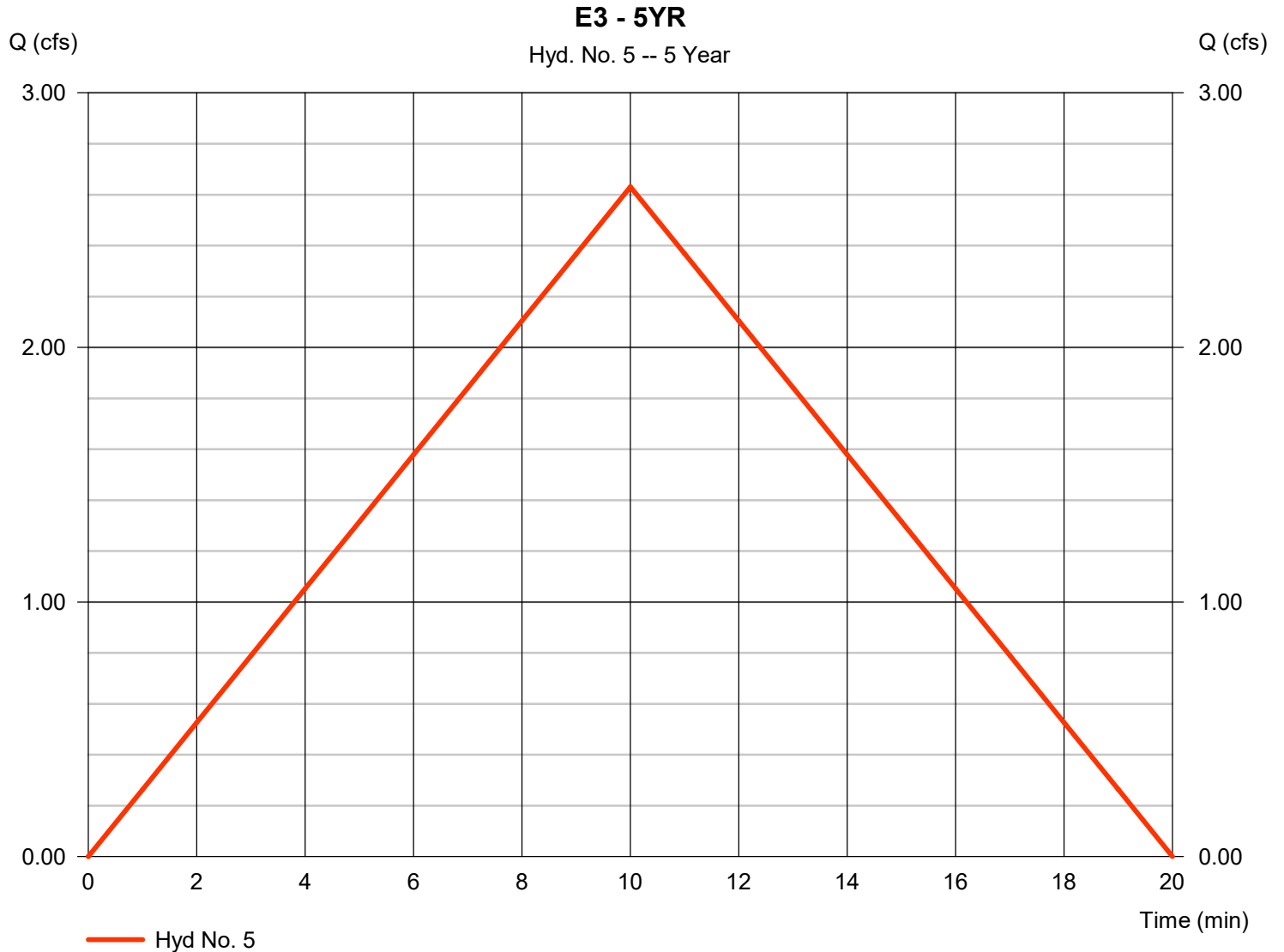


# Hydrograph Report

## Hyd. No. 5

E3 - 5YR

Hydrograph type	= Rational	Peak discharge	= 2.630 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,578 cuft
Drainage area	= 9.020 ac	Runoff coeff.	= 0.2
Intensity	= 1.458 in/hr	Tc by User	= 10.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

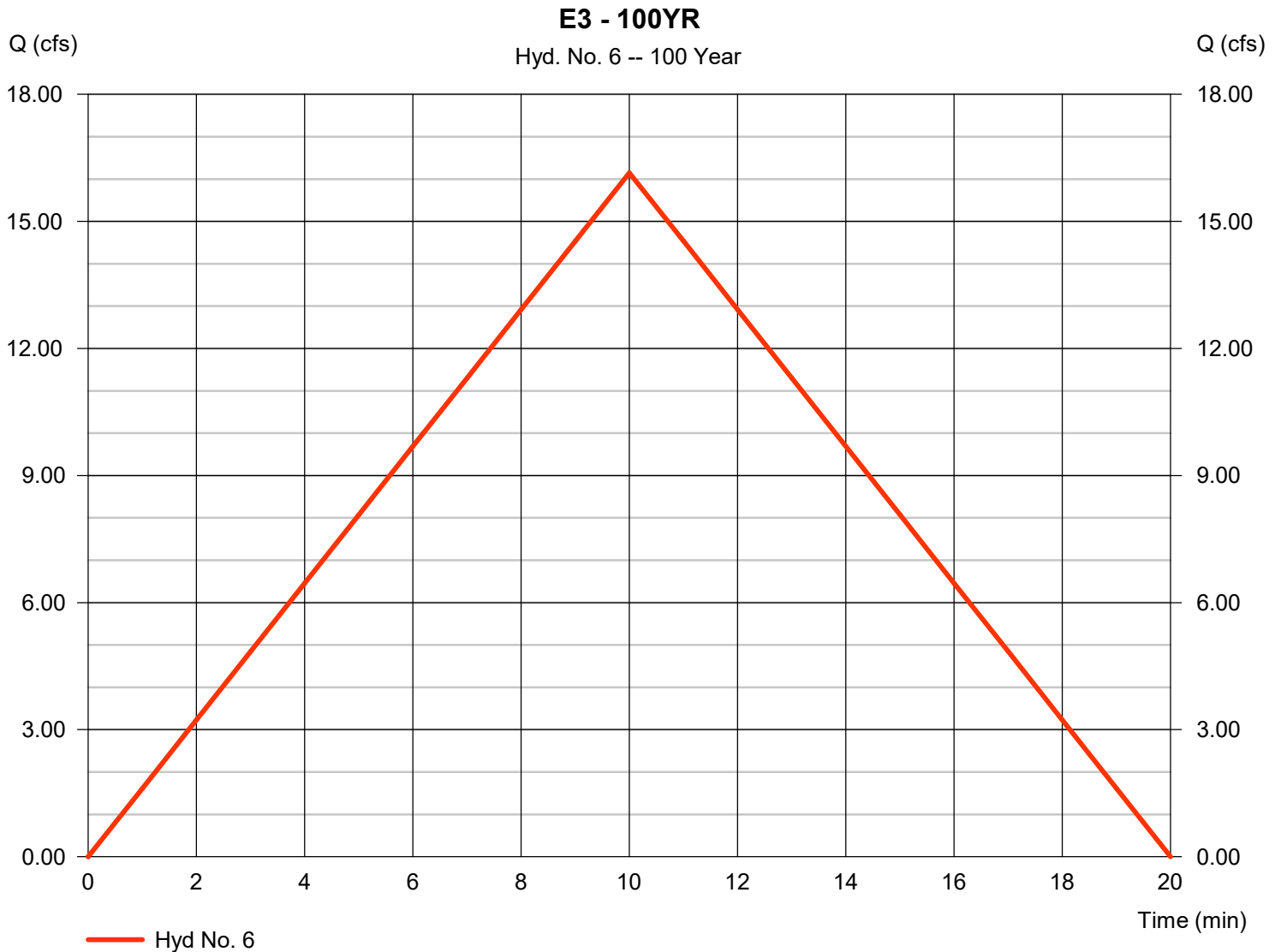


# Hydrograph Report

## Hyd. No. 6

E3 - 100YR

Hydrograph type	= Rational	Peak discharge	= 16.15 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 9,689 cuft
Drainage area	= 9.020 ac	Runoff coeff.	= 0.5
Intensity	= 3.581 in/hr	Tc by User	= 10.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

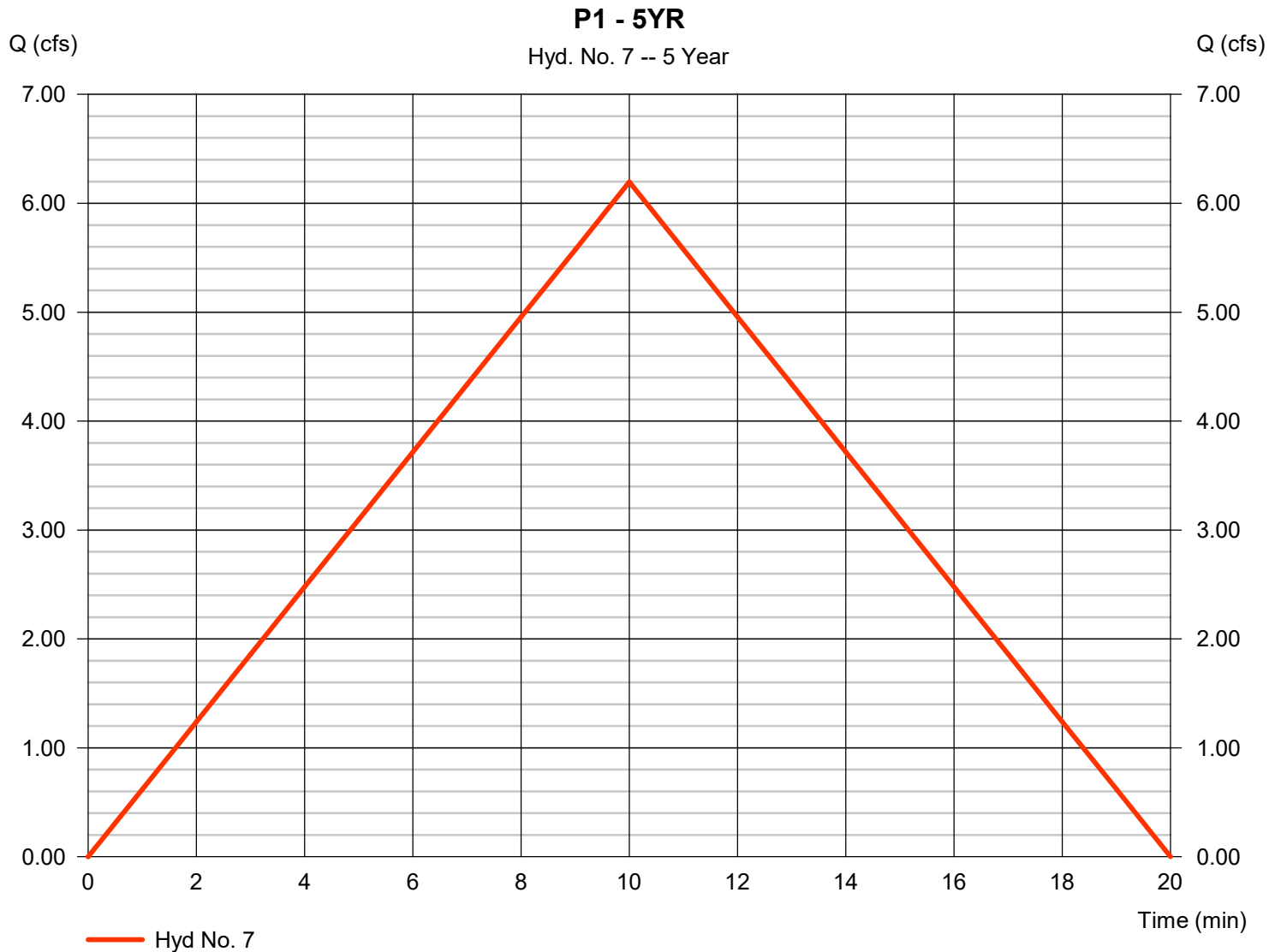


# Hydrograph Report

## Hyd. No. 7

P1 - 5YR

Hydrograph type	= Rational	Peak discharge	= 6.195 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 3,717 cuft
Drainage area	= 12.140 ac	Runoff coeff.	= 0.35
Intensity	= 1.458 in/hr	Tc by User	= 10.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

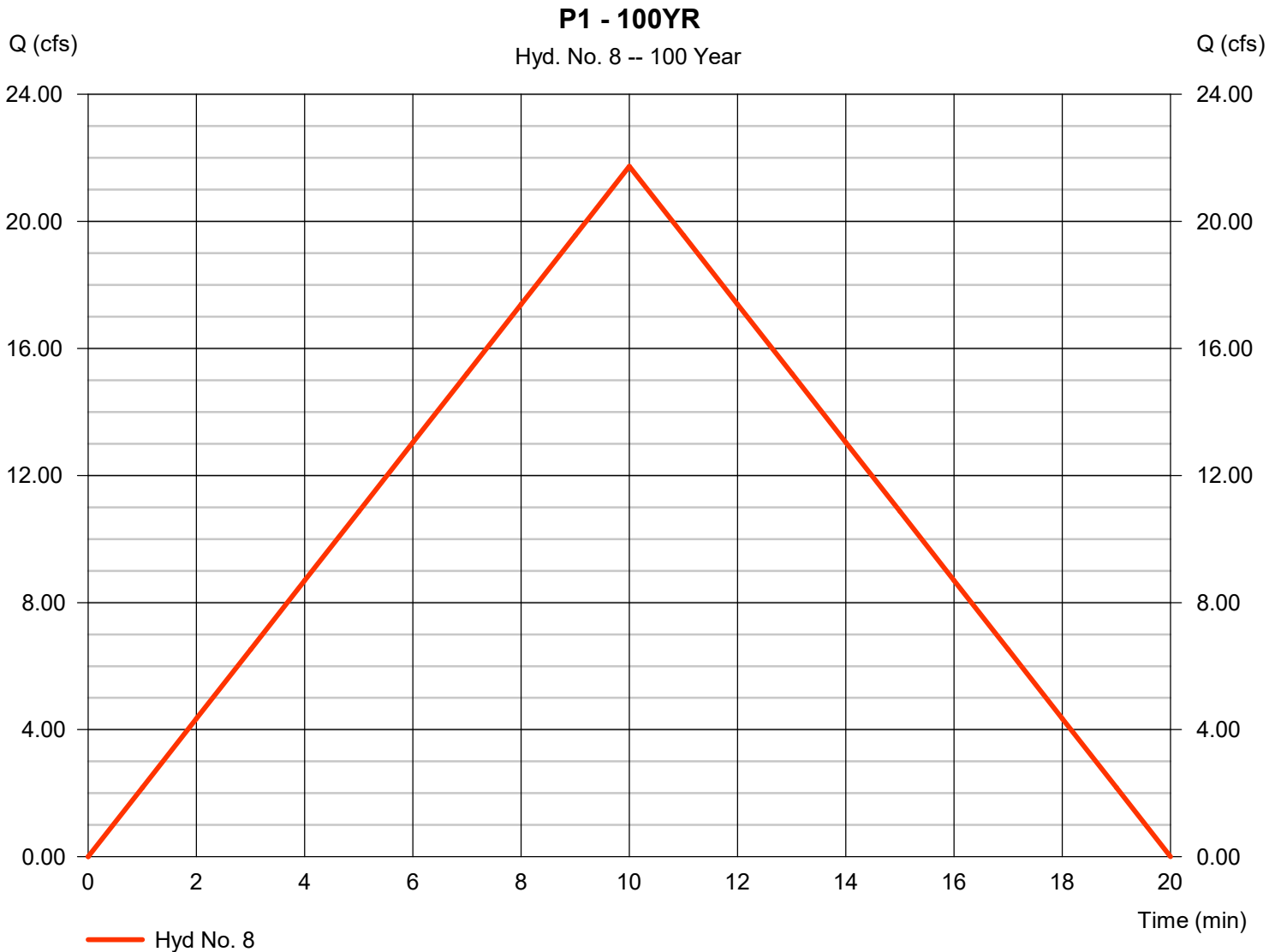


# Hydrograph Report

## Hyd. No. 8

P1 - 100YR

Hydrograph type	= Rational	Peak discharge	= 21.73 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 13,040 cuft
Drainage area	= 12.140 ac	Runoff coeff.	= 0.5
Intensity	= 3.581 in/hr	Tc by User	= 10.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1



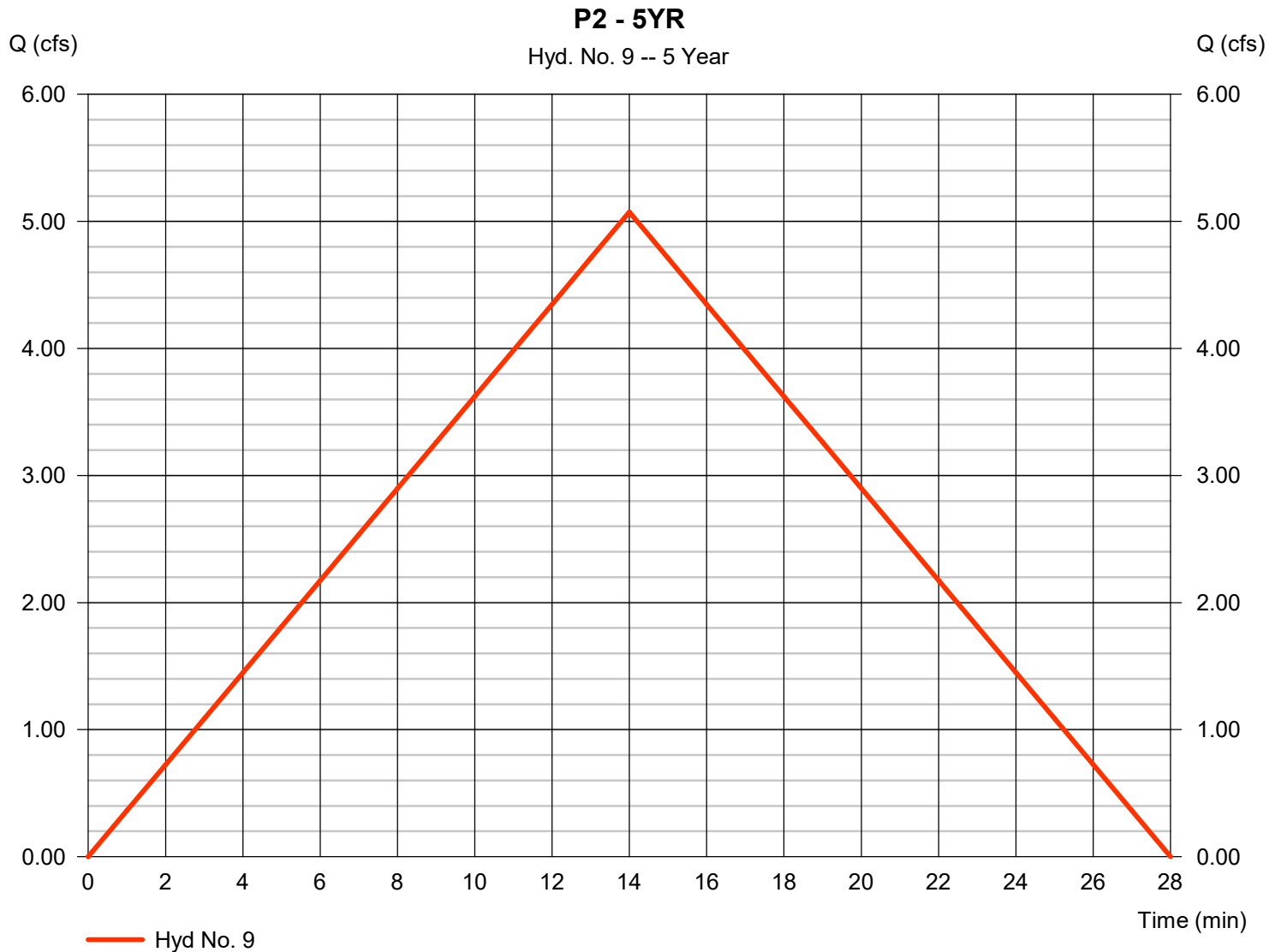


# Hydrograph Report

## Hyd. No. 9

P2 - 5YR

Hydrograph type	= Rational	Peak discharge	= 5.073 cfs
Storm frequency	= 5 yrs	Time to peak	= 14 min
Time interval	= 1 min	Hyd. volume	= 4,261 cuft
Drainage area	= 11.660 ac	Runoff coeff.	= 0.35
Intensity	= 1.243 in/hr	Tc by TR55	= 14.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

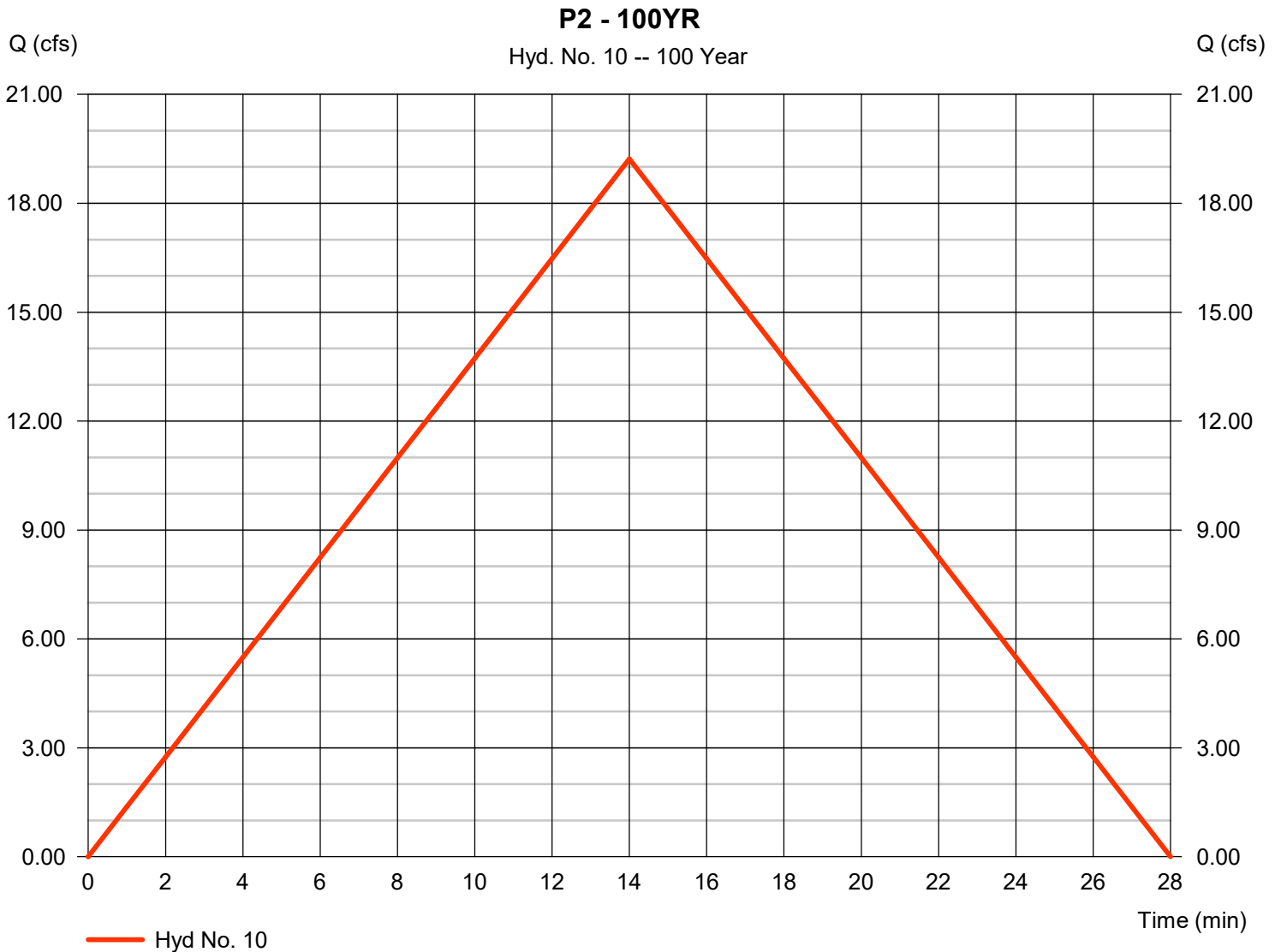


# Hydrograph Report

## Hyd. No. 10

P2 - 100YR

Hydrograph type	= Rational	Peak discharge	= 19.23 cfs
Storm frequency	= 100 yrs	Time to peak	= 14 min
Time interval	= 1 min	Hyd. volume	= 16,149 cuft
Drainage area	= 11.660 ac	Runoff coeff.	= 0.54
Intensity	= 3.053 in/hr	Tc by TR55	= 14.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

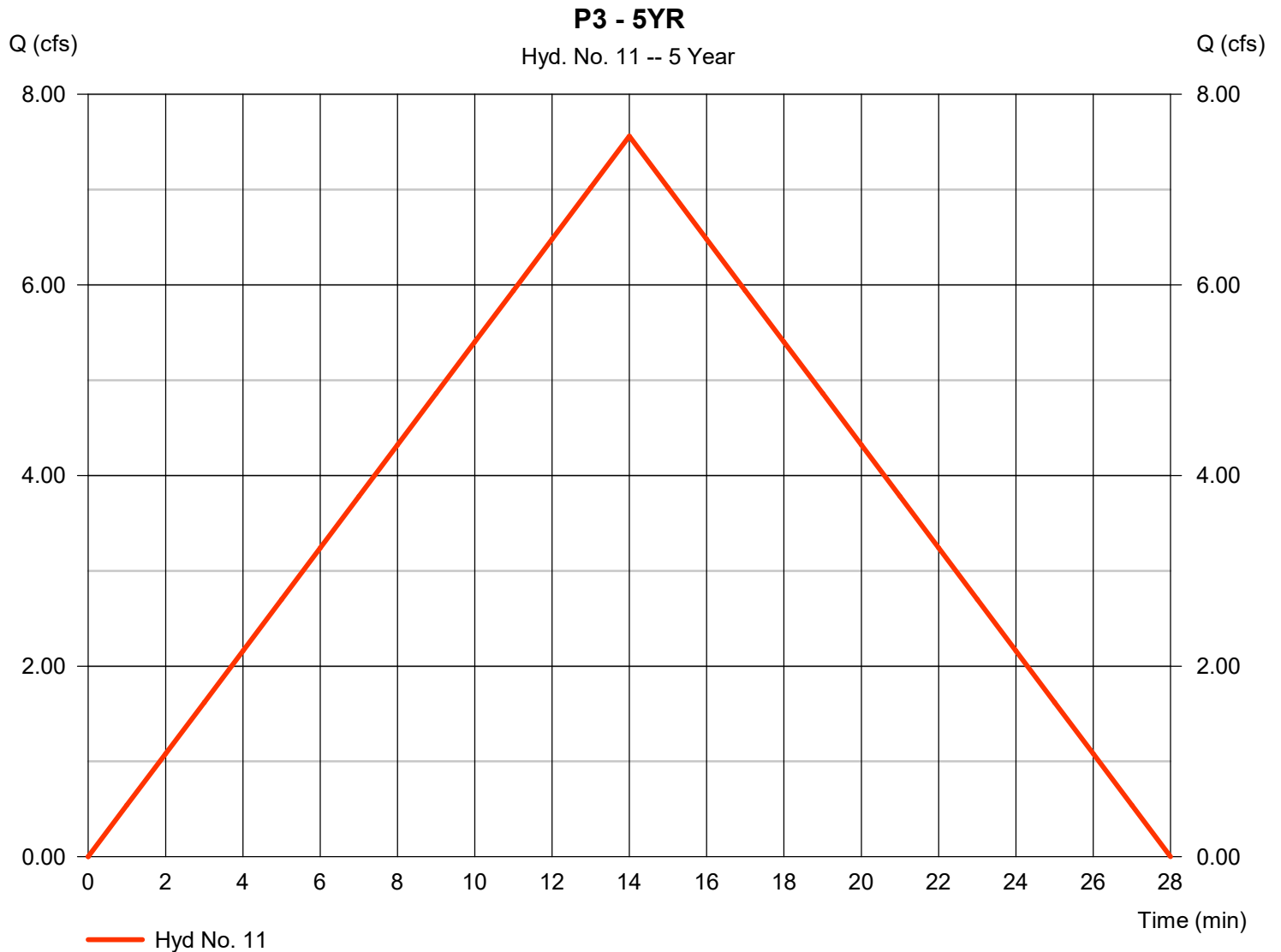


# Hydrograph Report

## Hyd. No. 11

P3 - 5YR

Hydrograph type	= Rational	Peak discharge	= 7.562 cfs
Storm frequency	= 5 yrs	Time to peak	= 14 min
Time interval	= 1 min	Hyd. volume	= 6,352 cuft
Drainage area	= 17.380 ac	Runoff coeff.	= 0.35
Intensity	= 1.243 in/hr	Tc by User	= 14.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

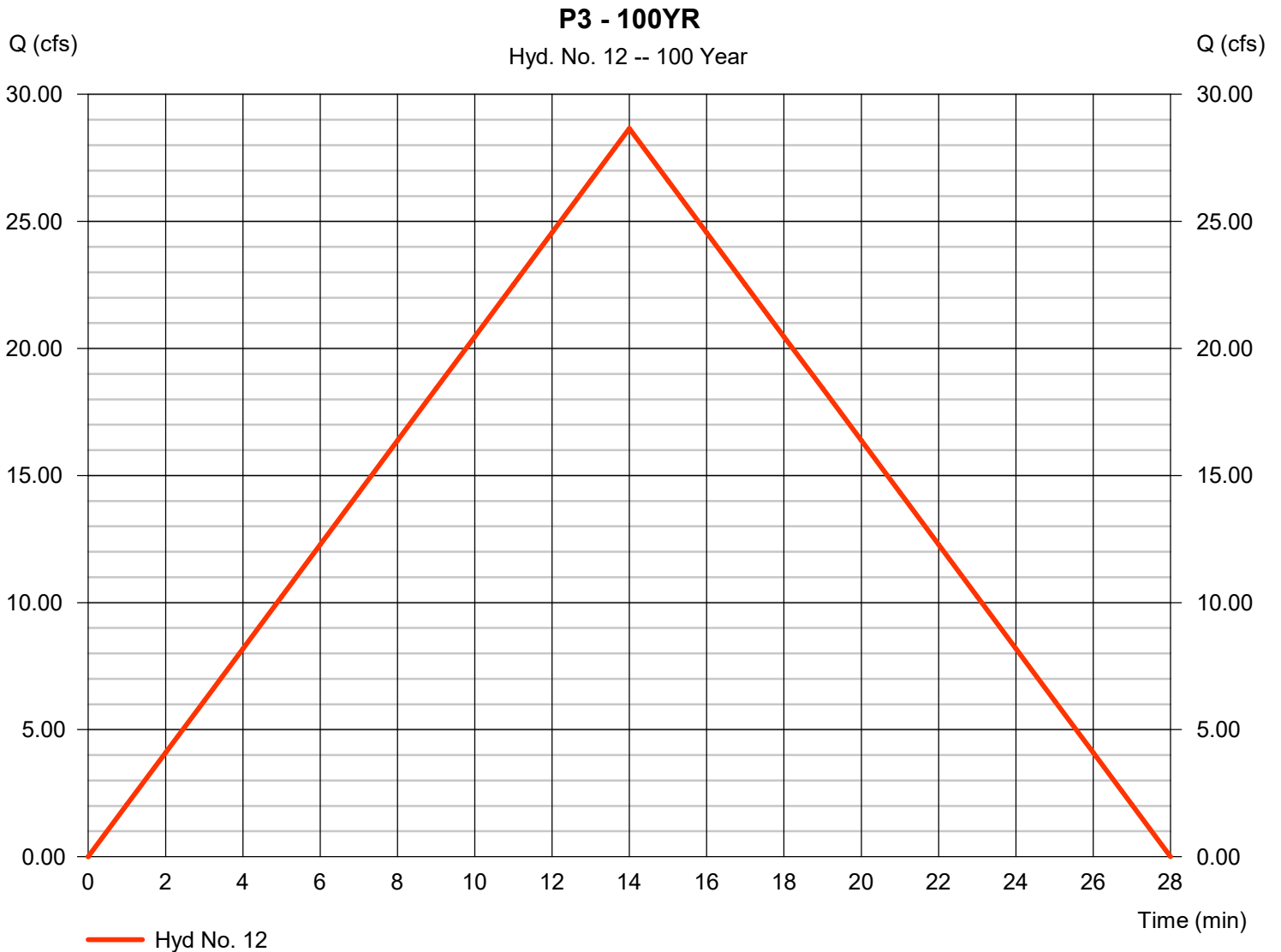


# Hydrograph Report

## Hyd. No. 12

P3 - 100YR

Hydrograph type	= Rational	Peak discharge	= 28.66 cfs
Storm frequency	= 100 yrs	Time to peak	= 14 min
Time interval	= 1 min	Hyd. volume	= 24,071 cuft
Drainage area	= 17.380 ac	Runoff coeff.	= 0.54
Intensity	= 3.053 in/hr	Tc by TR55	= 14.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

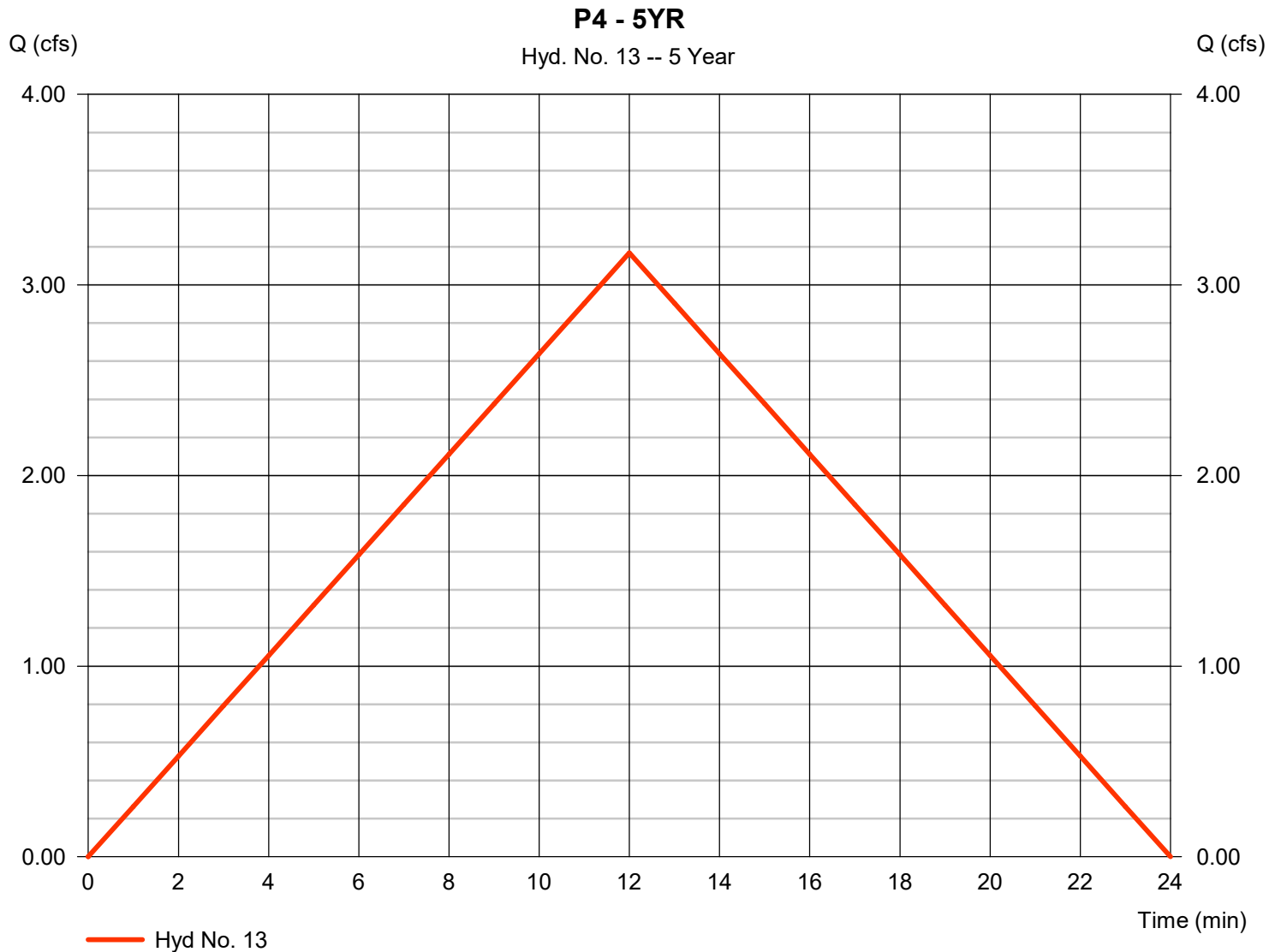


# Hydrograph Report

## Hyd. No. 13

P4 - 5YR

Hydrograph type	= Rational	Peak discharge	= 3.168 cfs
Storm frequency	= 5 yrs	Time to peak	= 12 min
Time interval	= 1 min	Hyd. volume	= 2,281 cuft
Drainage area	= 11.810 ac	Runoff coeff.	= 0.2
Intensity	= 1.341 in/hr	Tc by TR55	= 12.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1



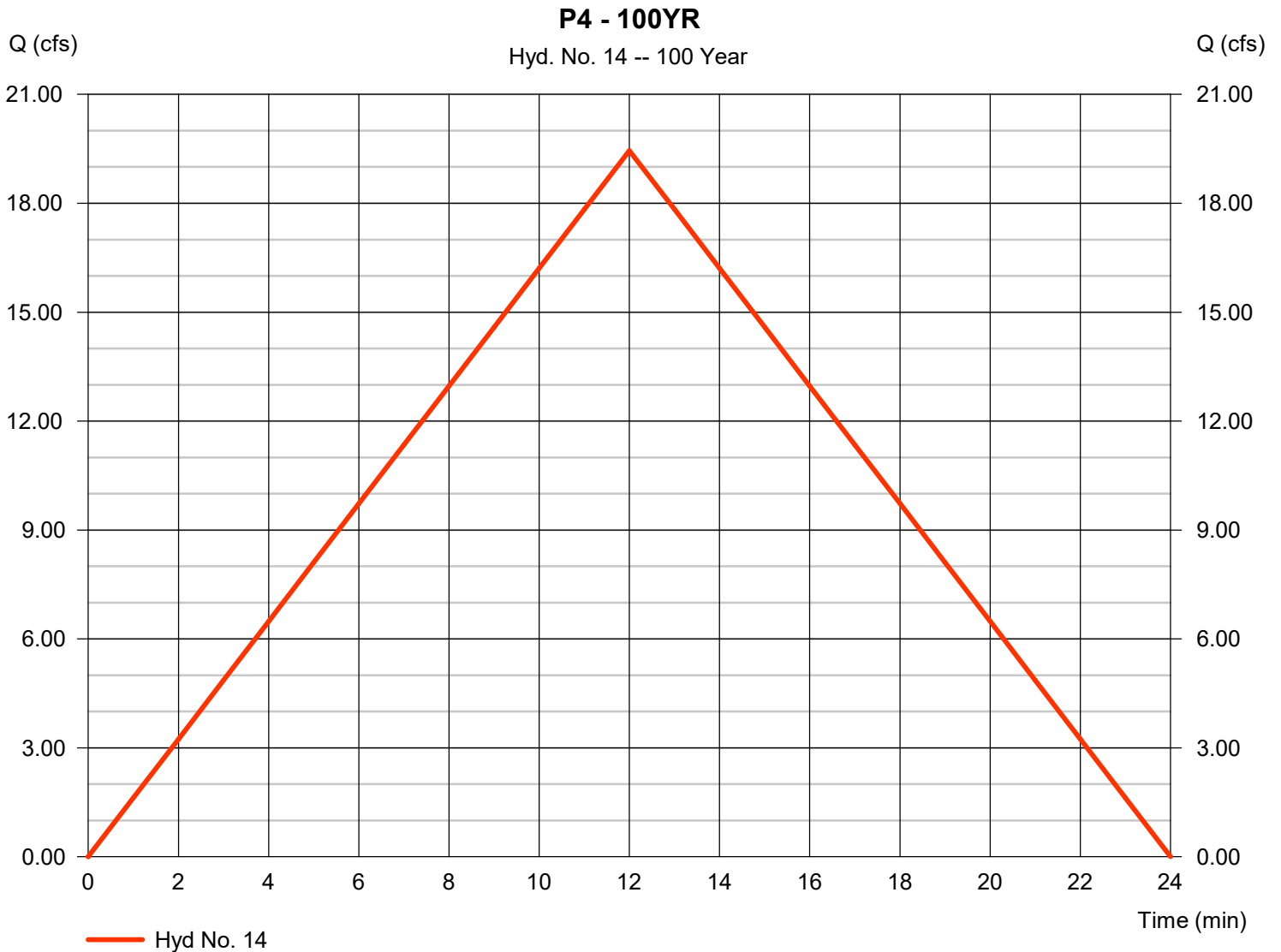


# Hydrograph Report

## Hyd. No. 14

P4 - 100YR

Hydrograph type	= Rational	Peak discharge	= 19.45 cfs
Storm frequency	= 100 yrs	Time to peak	= 12 min
Time interval	= 1 min	Hyd. volume	= 14,006 cuft
Drainage area	= 11.810 ac	Runoff coeff.	= 0.5
Intensity	= 3.294 in/hr	Tc by TR55	= 12.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

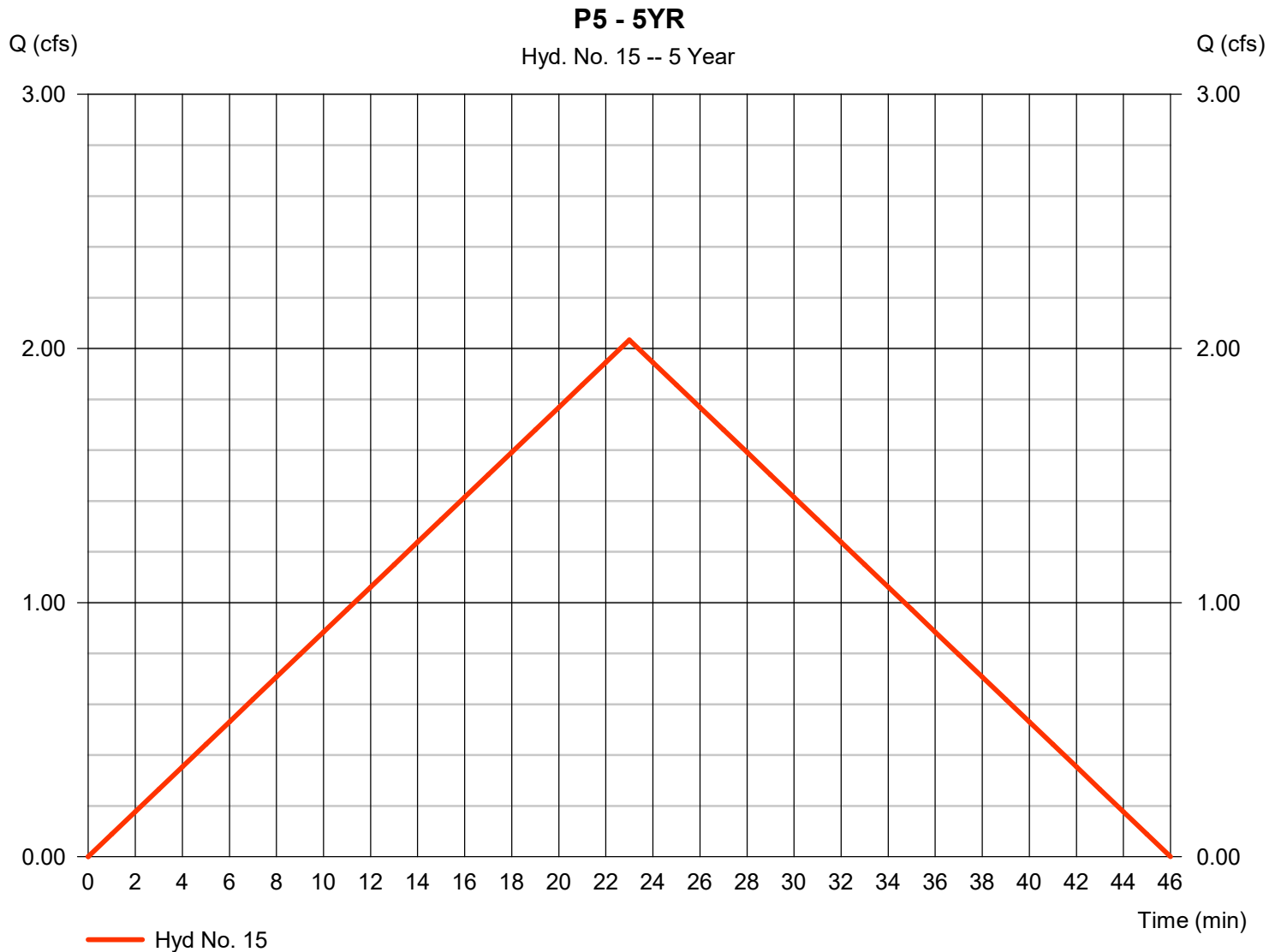


# Hydrograph Report

## Hyd. No. 15

P5 - 5YR

Hydrograph type	= Rational	Peak discharge	= 2.034 cfs
Storm frequency	= 5 yrs	Time to peak	= 23 min
Time interval	= 1 min	Hyd. volume	= 2,807 cuft
Drainage area	= 10.790 ac	Runoff coeff.	= 0.2
Intensity	= 0.942 in/hr	Tc by User	= 23.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1

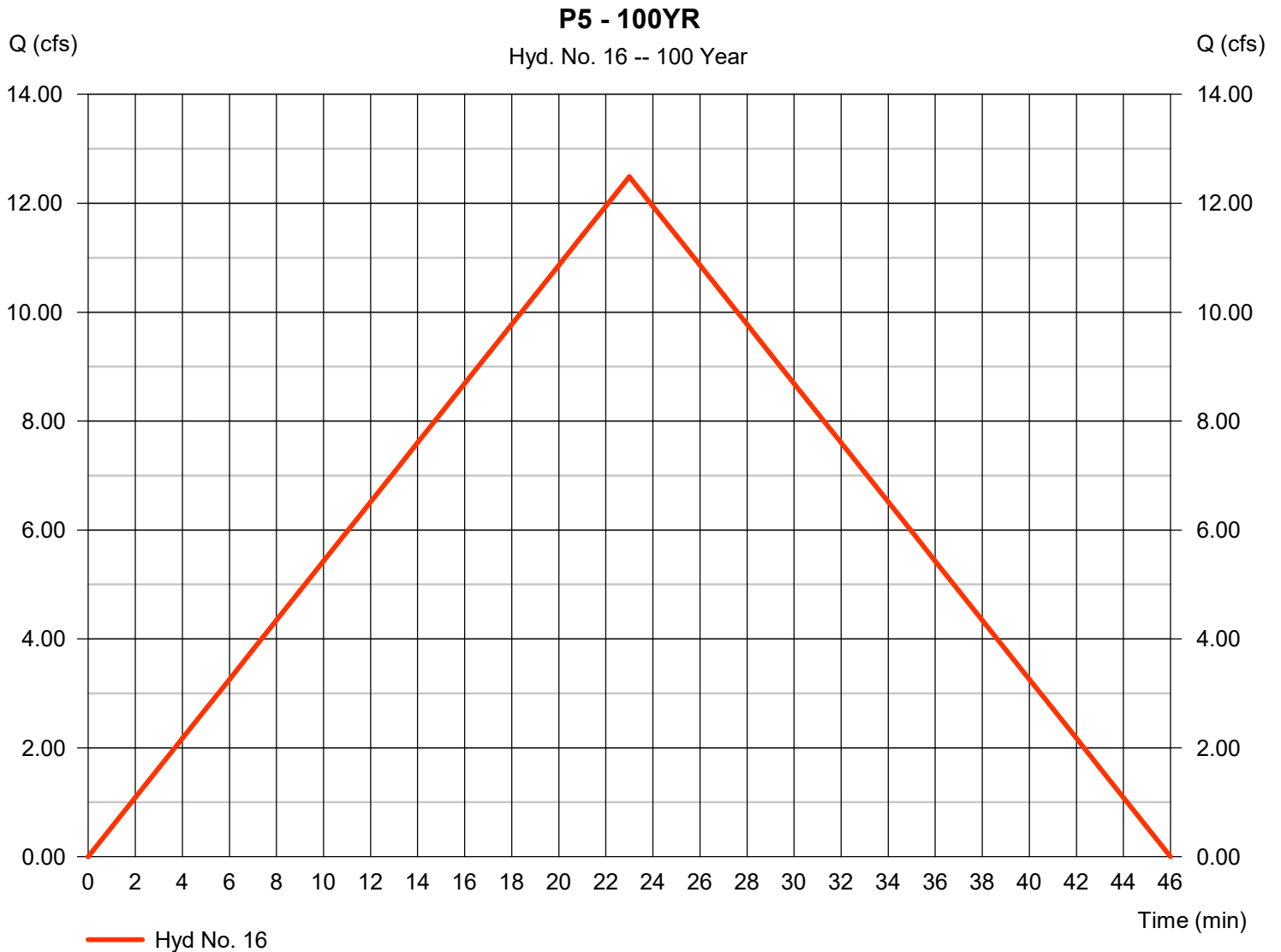


# Hydrograph Report

## Hyd. No. 16

P5 - 100YR

Hydrograph type	= Rational	Peak discharge	= 12.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 23 min
Time interval	= 1 min	Hyd. volume	= 17,236 cuft
Drainage area	= 10.790 ac	Runoff coeff.	= 0.5
Intensity	= 2.315 in/hr	Tc by User	= 23.00 min
IDF Curve	= Lakeside IDF.IDF	Asc/Rec limb fact	= 1/1



**APPENDIX D**  
**POND STAGE/STORAGE CALCULATIONS**





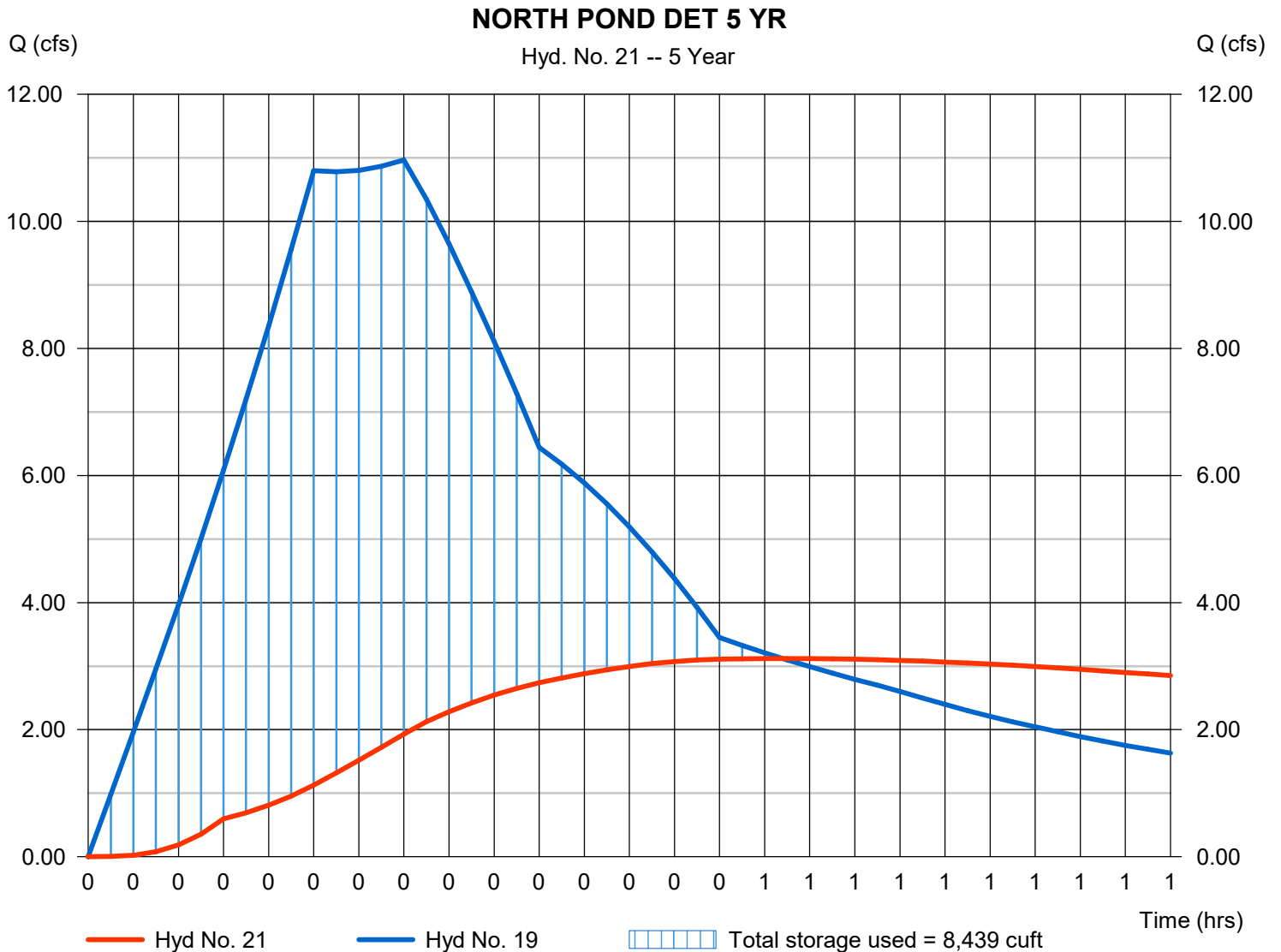
# Hydrograph Report

## Hyd. No. 21

### NORTH POND DET 5 YR

Hydrograph type	= Reservoir	Peak discharge	= 3.120 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.52 hrs
Time interval	= 1 min	Hyd. volume	= 17,616 cuft
Inflow hyd. No.	= 19 - NORTH POND INFLOW	Max. Elevation	= 4661.52 ft
Reservoir name	= DETENTION POND NORTH	Max. Storage	= 8,439 cuft

Storage Indication method used.



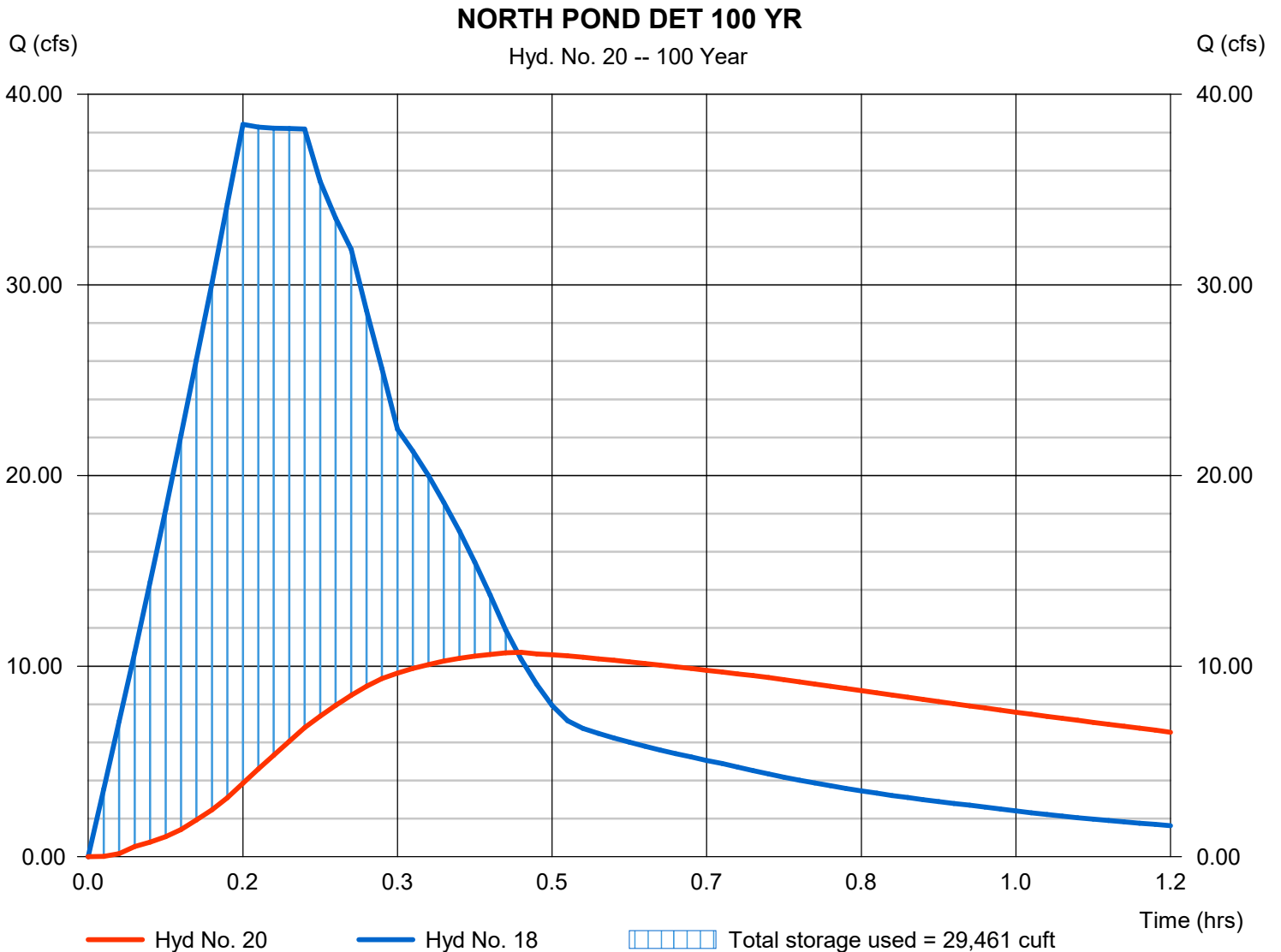
# Hydrograph Report

## Hyd. No. 20

### NORTH POND DET 100 YR

Hydrograph type	= Reservoir	Peak discharge	= 10.72 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.47 hrs
Time interval	= 1 min	Hyd. volume	= 53,098 cuft
Inflow hyd. No.	= 18 - NORTH POND INFLOW - MAX. YR	Max. Elevation	= 4664.41 ft
Reservoir name	= DETENTION POND NORTH	Max. Storage	= 29,461 cuft

Storage Indication method used.





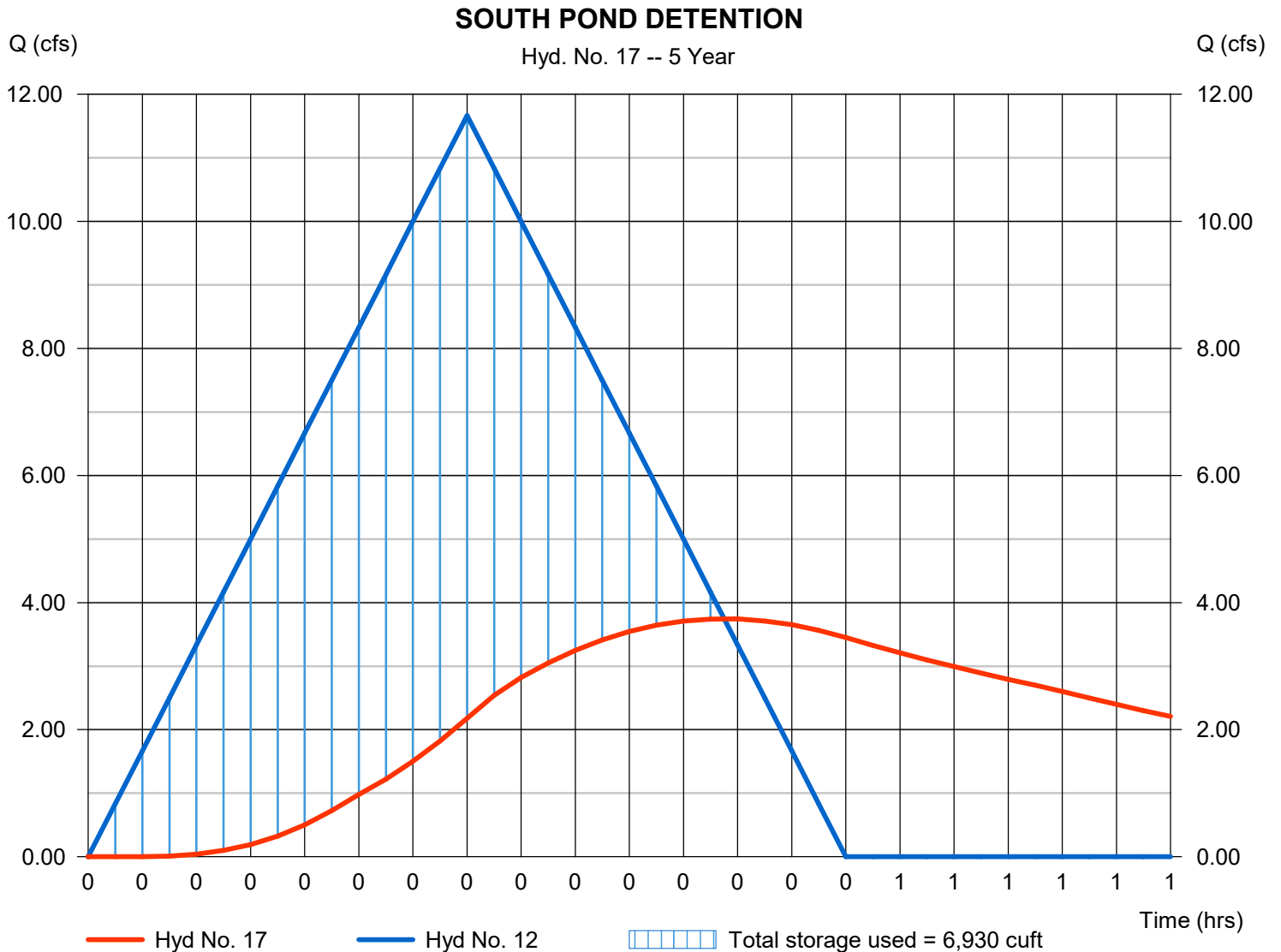
# Hydrograph Report

## Hyd. No. 17

### SOUTH POND DETENTION

Hydrograph type	= Reservoir	Peak discharge	= 3.742 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.40 hrs
Time interval	= 1 min	Hyd. volume	= 9,643 cuft
Inflow hyd. No.	= 12 - P3 - 100YR	Max. Elevation	= 4667.52 ft
Reservoir name	= DETENTION POND SOUTH	Max. Storage	= 6,930 cuft

Storage Indication method used.



# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

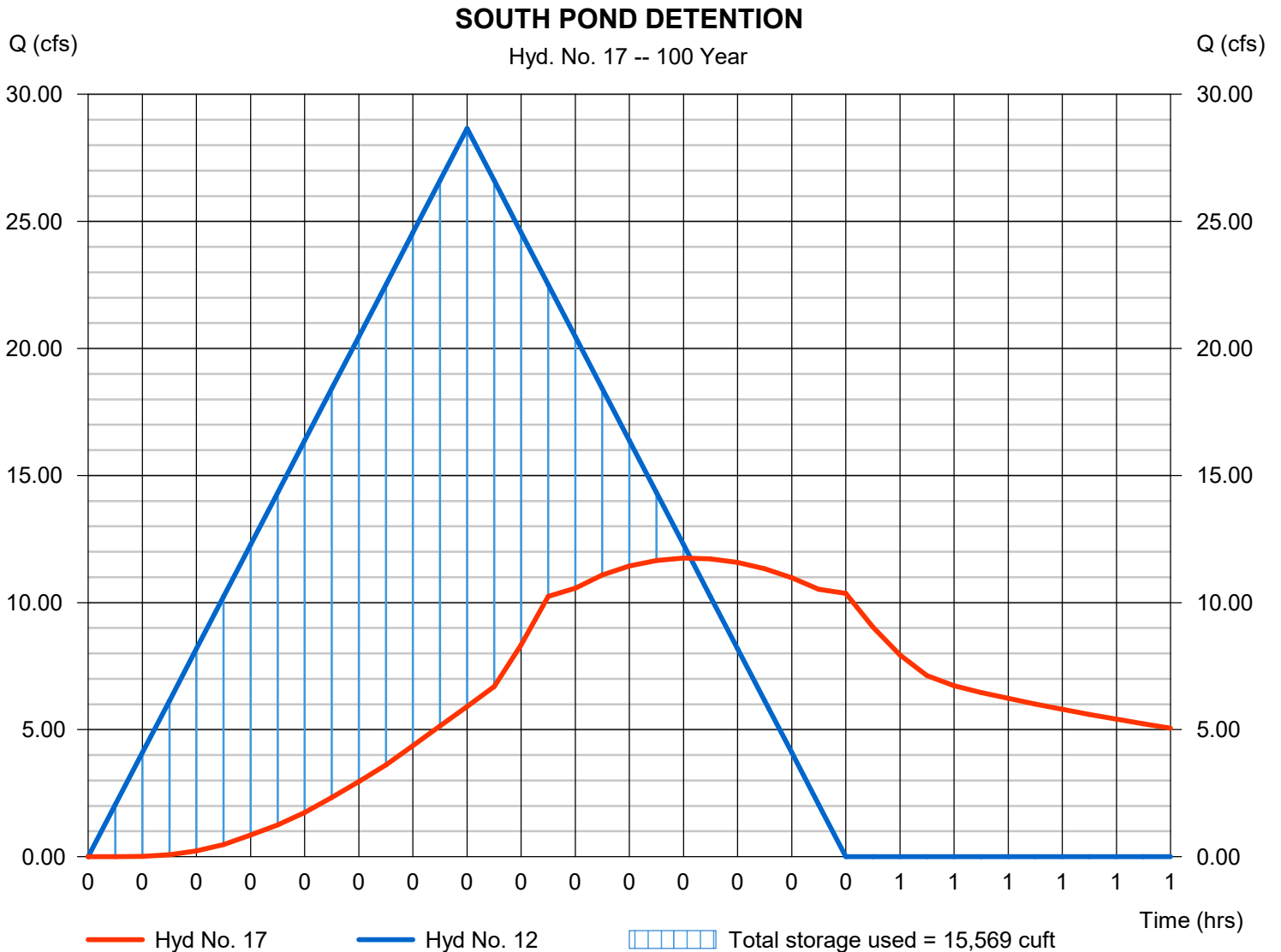
Monday, 04 / 10 / 2023

## Hyd. No. 17

### SOUTH POND DETENTION

Hydrograph type	= Reservoir	Peak discharge	= 11.75 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.37 hrs
Time interval	= 1 min	Hyd. volume	= 23,914 cuft
Inflow hyd. No.	= 12 - P3 - 100YR	Max. Elevation	= 4669.50 ft
Reservoir name	= DETENTION POND SOUTH	Max. Storage	= 15,569 cuft

Storage Indication method used.



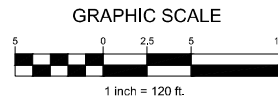


**APPENDIX E**  
**EXISTING & PROPOSED**  
**STORM WATER DRAINAGE PLAN**

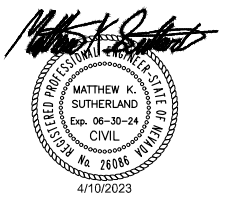
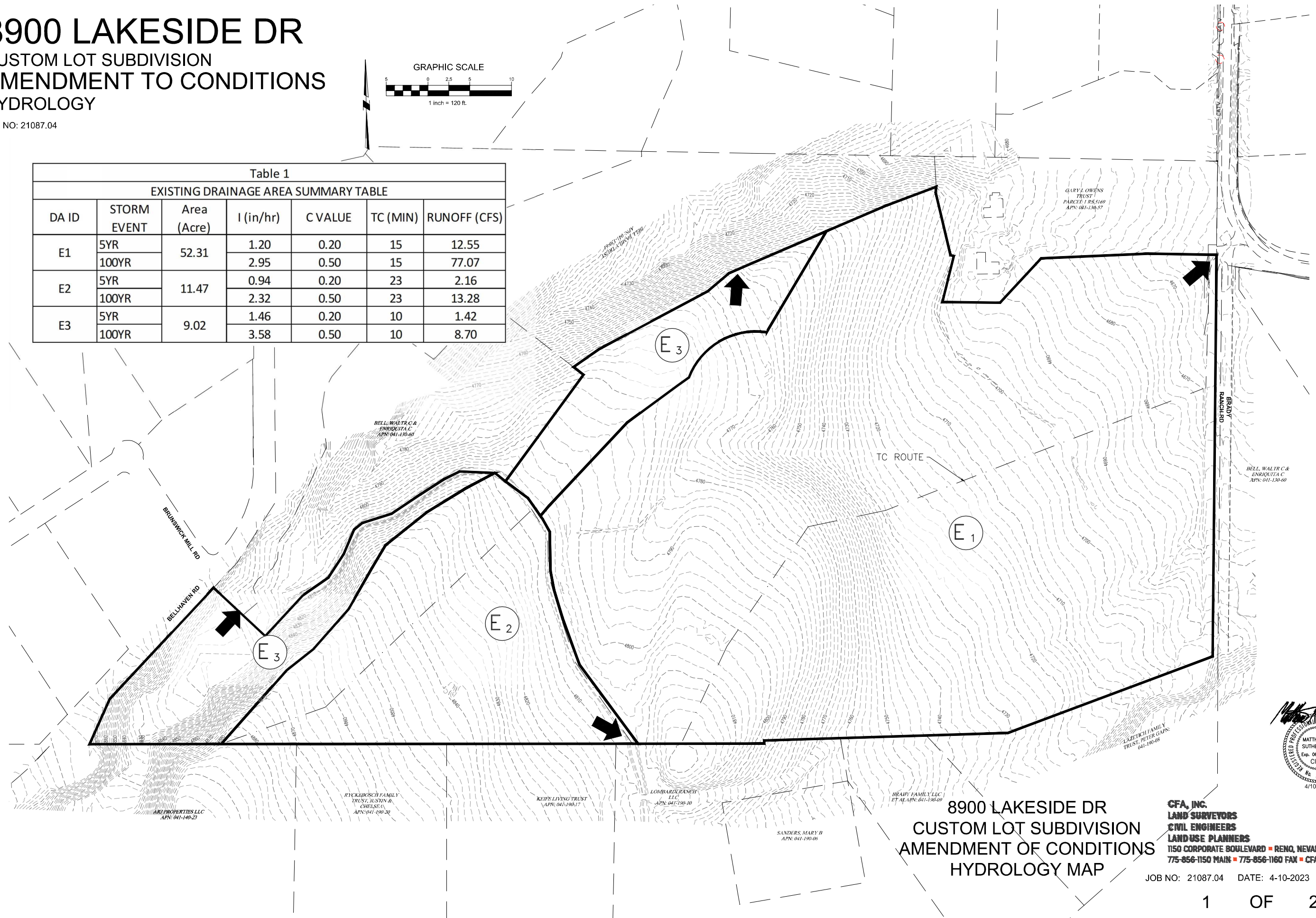
# 8900 LAKESIDE DR

## CUSTOM LOT SUBDIVISION AMENDMENT TO CONDITIONS HYDROLOGY

JOB NO: 21087.04



DA ID	STORM EVENT	Area (Acre)	I (in/hr)	C VALUE	TC (MIN)	RUNOFF (CFS)
E1	5YR	52.31	1.20	0.20	15	12.55
	100YR		2.95	0.50	15	77.07
E2	5YR	11.47	0.94	0.20	23	2.16
	100YR		2.32	0.50	23	13.28
E3	5YR	9.02	1.46	0.20	10	1.42
	100YR		3.58	0.50	10	8.70



8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
AMENDMENT OF CONDITIONS  
HYDROLOGY MAP

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4-10-2023



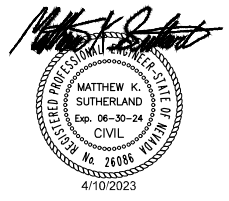
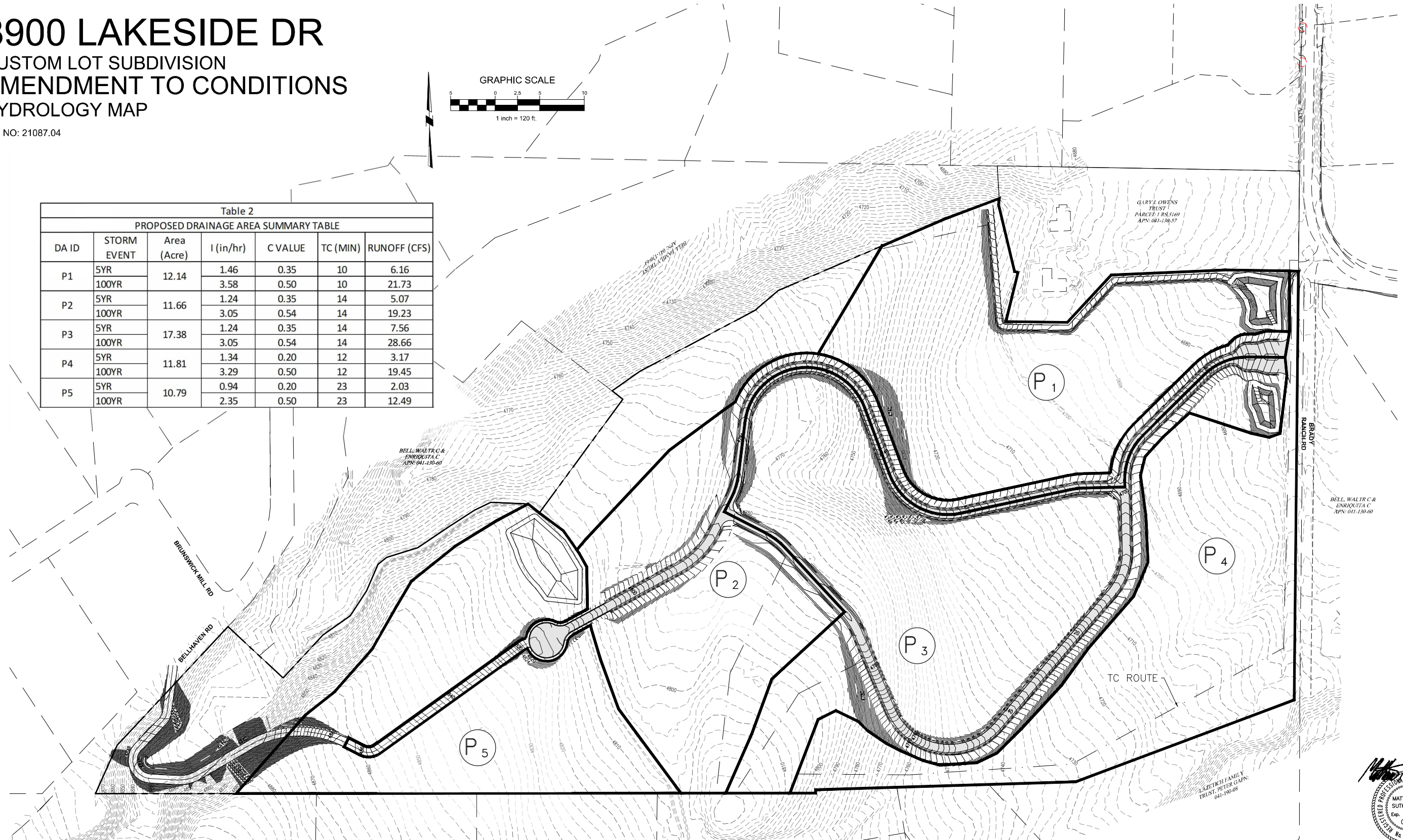
# 8900 LAKESIDE DR

## CUSTOM LOT SUBDIVISION AMENDMENT TO CONDITIONS HYDROLOGY MAP

JOB NO: 21087.04



DA ID	STORM EVENT	Area (Acre)	I (in/hr)	C VALUE	TC (MIN)	RUNOFF (CFS)
P1	5YR	12.14	1.46	0.35	10	6.16
	100YR		3.58	0.50	10	21.73
P2	5YR	11.66	1.24	0.35	14	5.07
	100YR		3.05	0.54	14	19.23
P3	5YR	17.38	1.24	0.35	14	7.56
	100YR		3.05	0.54	14	28.66
P4	5YR	11.81	1.34	0.20	12	3.17
	100YR		3.29	0.50	12	19.45
P5	5YR	10.79	0.94	0.20	23	2.03
	100YR		2.35	0.50	23	12.49



8900 LAKESIDE DR  
CUSTOM LOT SUBDIVISION  
AMENDMENT TO CONDITIONS  
HYDROLOGY MAP

**CFA, INC.**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502  
775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

JOB NO: 21087.04 DATE: 4-10-2023



**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**

October 31, 2022

VIA E-MAIL: [jolander@washoecounty.org](mailto:jolander@washoecounty.org)

Julee Olander  
Washoe County Community Services  
1001 E. Ninth St., Bldg A  
Reno, NV 89512

**RE: WTM21-013 (LAKESIDE CUSTOM LOT SUBDIVISION) - MEMORANDUM OF APPLICANT AGREEMENT WITH NEIGHBORS**

Dear Julee,

The project applicant, 8900 Lakeside LLC, by and through its principals Roger Davidson and Adam Giordano, have had multiple meetings with neighbors who also represent others living in the immediate area. The meetings were productive and resulted in the following items that the applicant agrees to carry out to address neighborhood concerns.

1. Storm water will be collected from the private street in an open ditch method, per the Washoe County development regulations, and routed downward to a final detention area. This method allows storm water to have the maximum area and time to recharge the shallow aquifer.
2. Irrigation water will be routed by an HOA owned system from the Steamboat Ditch to each individual lot in the project, as well as HOA landscape areas. Steamboat Ditch rights appurtenant to the property will remain with the property. Any portion of such rights conveyed with individual lots will be restricted to remain appurtenant to that respective lot.
3. Domestic water wells will be completed and screened in the deeper alluvial aquifer as shown and explained in our hydrological report. No water will be directly withdrawn from the upper shallow aquifer.
4. The CC&Rs will require all domestic wells to have meters installed and maintained. Water consumption from each well will be limited to 1800 gallons per day. The HOA will keep a log of annual meter readings that will be available to the public upon request to the HOA.
5. The intersection at Lakeside / Holcomb Ranch Road will be configured and aligned to the requirements given by NDOT. There will not be multiple entries or exits at that corner, the existing will be consolidated per the NDOT plan.
6. Landscaping will be in accordance with Washoe County water use regulations. The final landscape plan will take into account the ground conditions and availability of irrigation water.
7. Sanitary sewer will serve all lots, including those above the Steamboat Ditch.
8. An emergency exit to Bellhaven will be normally gated, and its use restricted to situations requiring immediate access to Bellhaven, particularly in the event of an area wildfire. There will be no connecting walking path via this emergency exit. This exit, mandated by Washoe County, will be constructed with all required permits from authorities having jurisdiction.
9. The Irrigation Ditch on the east side of the project will be improved to facilitate efficient water flow, including a properly sized reinforced concrete culvert at the project street entry. Other than irrigation tailwater, no routing of

runoff from any lot will be allowed to enter it. CCRs will prevent any future homeowner from encroaching on or interfering with the ditch or easement.

We believe the above items, which go beyond county and state requirements, address the primary concerns previously expressed. In the best interest of the both the neighbors and the applicant, we ask that these be memorialized with the project approval.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. David Snelgrove', written over a horizontal line.

R. David Snelgrove, AICP  
Planning & Right-of-Way Manager



**WASHOE COUNTY**  
**COMMUNITY SERVICES DEPARTMENT**  
**Planning and Building Division**  
**Planning Program**

1001 EAST 9<sup>TH</sup> STREET  
 RENO, NEVADA 89512-2845  
 PHONE (775) 328-6100  
 FAX (775) 328.6133

**Planning Commission Action Order**

**Tentative Subdivision Map Case Number WTM21-013 and Special Use Permit Case Number WSUP22-0010 (Lakeside Custom Lot Subdivision)**

Decision: **Approval with Conditions**  
 Decision Date: November 1, 2022  
 Mailing/Filing Date: November 2, 2022  
 Property Owner: Gordon Real Estates, LLC  
 Staff Planner: Julee Olander, Planner  
 Phone: 775.328.3608  
 E-Mail: [jolander@washoecounty.gov](mailto:jolander@washoecounty.gov)

**Tentative Subdivision Map Case Number WTM21-013 and Special Use Permit Case Number WSUP22-0010 (Lakeside Custom Lot Subdivision) –For hearing, discussion, and possible action to approve:**

1. 1. A tentative subdivision map to divide one parcel of 72.8 acres into 24 lots, with lot sizes ranging from 2.01 to 10.29 acres.
2. 2. A special use permit for major grading: the proposal exceeds the major grading threshold and will result in ±8.31 acres of disturbance including ±20,004 CY of cut material and ±16,583 CY of fill material; a roadway that traverses a slope of 30% or greater; construction of earthen structures greater than 4-½ feet high; and grading in the Critical Stream Zone, which is subject to all requirements of Article 418, Significant Hydrologic Resources. The applicant is also requesting a variance of the development code standards found in WCC 110.438.45(c), that finish grading shall not vary from the natural slope by more than ten (10) feet in elevation, in order to construct earthen structures and a driveway.

- Applicant: 8900 Lakeside, LLC
- Property Owner: Gordon Real Estates, LLC
- Location: 8900 Lakeside Drive
- APN: 041-130-58
- Parcel Size: 72.8 acres
- Master Plan: Rural Residential (RR)
- Regulatory Zone: 16% (11.65 acres) Medium Density Rural (MDR), 78% (56.78 acres) High Density Rural (HDR) & 6% (4.37 acres) General Rural (GR)
- Area Plan: Southwest
- Development Code: Authorized in Article 608, Tentative Subdivision Maps; Article 418, Significant Hydrologic Resources, and Article 438, Grading Standards
- Commission District: 2 – Commissioner Lucey





To: Gordon Real Estates, LLC  
Subject: WTM21-013 and WSUP22-0010 (Lakeside Custom Lot Subdivision)  
Mailing Date: April 6, 2022  
Page: Page 2 of 3

Notice is hereby given that the Washoe County Planning Commission granted approval with conditions of the above referenced case number based on the findings in accordance with Washoe County Code Chapter 110 (Development Code) *Article 418, Significant Hydrologic Resources; Article 438, Grading Standards; and Article 608, Tentative Subdivision Maps*. If no appeals have been filed within 10 calendar days after the Mailing/Filing date shown on this Action Order, the approval by the Washoe County Planning Commission is final. If filed, an appeal stays any further action on the permit until final resolution of the appeal. An appeal shall be filed in accordance with the provisions found in Article 912, *Establishment of Commissions, Boards and Hearing Examiners*, of the Development Code. This decision is based on having made all five findings in accordance with Washoe County Code Section 110.810.30:

- (a) Plan Consistency. That the proposed map is consistent with the Master Plan and any specific plan;
- (b) Design or Improvement. That the design or improvement of the proposed subdivision is consistent with the Master Plan and any specific plan;
- (c) Type of Development. That the site is physically suited for the type of development proposed;
- (d) Availability of Services. That the subdivision will meet the requirements of Article 702, Adequate Public Facilities Management System;
- (e) Fish or Wildlife. That neither the design of the subdivision nor any proposed improvements is likely to cause substantial environmental damage, or substantial and avoidable injury to any endangered plant, wildlife or their habitat;
- (f) Public Health. That the design of the subdivision or type of improvement is not likely to cause significant public health problems;
- (g) Easements. That the design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through, or use of property within, the proposed subdivision;
- (h) Access. That the design of the subdivision provides any necessary access to surrounding, adjacent lands and provides appropriate secondary access for emergency vehicles;
- (i) Dedications. That any land or improvements to be dedicated to the County is consistent with the Master Plan; and
- (j) Energy. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision.

And having addressed the Special Review Considerations in Washoe County Code Section 110.418.30:

- (a) Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Southwest Truckee Meadows Area Plan;
- (b) Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an



To: Gordon Real Estates, LLC  
Subject: WTM21-013 and WSUP22-0010 (Lakeside Custom Lot Subdivision)  
Mailing Date: April 6, 2022  
Page: Page 3 of 3

adequate public facilities determination has been made in accordance with Division Seven;

- (c) Site Suitability. That the site is physically suitable for grading and for the intensity of such a development;
- (d) Issuance Not Detrimental. That 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;
- (e) 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.

This Action Order is issued subject to the attached conditions and Washoe County development standards. Please contact the planner assigned to your project at the above-referenced phone number within seven days of receipt of this Order to review the steps necessary to satisfy the Conditions of Approval. Any business license, certificate of occupancy or final approval shall not be issued until all of the Conditions of Approval (attached) are satisfied. Additionally, compliance shall be required with all federal, state and local statutes, ordinances, and regulations applicable to the approved project.

**This Action Order does not authorize any development, to include building construction and grading, without the required permits from the Washoe County Planning and Building Division, Building Program.**

Washoe County Community Services Department  
Planning and Building Division

  
\_\_\_\_\_  
Trevor Lloyd  
Secretary to the Planning Commission

TL/JO/LK

Enclosure: Conditions of Approval

Applicant: 8900 Lakeside, LLC, 1049 Dressler Lane, Reno, NV 89460  
Property Owner: Gordon Real Estates, LLC; E-mail: [roger@thomascreekdevelopment.com](mailto:roger@thomascreekdevelopment.com)  
Consultant: Dave Snelgrove, CFA, Inc.; E-mail: [dsnelgrove@cfareno.com](mailto:dsnelgrove@cfareno.com)  
Action Order xc: Jennifer Gustafson, District Attorney's Office; Keirsten Beck, Assessor's Office; Rigo Lopez, Assessor's Office; Walt West / Rob Wimer, Engineering and Capital Projects; Dale Way, Truckee Meadows Fire Protection District; Truckee Meadows Regional Planning Agency



INTEGRITY



EFFECTIVE  
COMMUNICATION



QUALITY  
PUBLIC SERVICE



# Conditions of Approval

Tentative Subdivision Map Case Number WTM21-013 and Special Use Permit Case Number WSUP22-0010

The project approved under Tentative Subdivision Map Case Number WTM21-013 and Special Use Permit Case Number WSUP22-0010 shall be carried out in accordance with the conditions of approval granted by the Planning Commission on November 1, 2022. Conditions of approval are requirements placed on a permit or development by each reviewing agency. These conditions of approval may require submittal of documents, applications, fees, inspections, amendments to plans, and more. These conditions do not relieve the applicant of the obligation to obtain any other approvals and licenses from relevant authorities required under any other act.

**Unless otherwise specified**, all conditions related to the approval of this tentative subdivision map shall be met or financial assurance must be provided to satisfy the conditions of approval prior to the recordation of a final subdivision map. The agency responsible for determining compliance with a specific condition shall determine whether the condition must be fully completed or whether the applicant shall be offered the option of providing financial assurance. All agreements, easements, or other documentation required by these conditions shall have a copy filed with the County Engineer and the Planning and Building Division.

Compliance with the conditions of approval related to this tentative subdivision map is the responsibility of the applicant, his/her successor in interest, and all owners, assignees, and occupants of the property and their successors in interest. Failure to comply with any of the conditions imposed in the approval of the tentative subdivision map may result in the institution of revocation procedures.

Washoe County reserves the right to review and revise the conditions of approval related to this tentative subdivision map should it be determined that a subsequent license or permit issued by Washoe County violates the intent of this approval.

For the purpose of conditions imposed by Washoe County, “may” is permissive and “shall” or “must” is mandatory.

Conditions of approval are usually complied with at different stages of the proposed project. Those stages are typically:

- Prior to recordation of a final map.
- Prior to obtaining a final inspection and/or a certificate of occupancy.
- Prior to the issuance of a business license or other permits/licenses.
- Some “conditions of approval” are referred to as “operational conditions.” These conditions must be continually complied with for the life of the project.

**The Washoe County Commission oversees many of the reviewing agencies/departments with the exception of the following agencies.**

- **The DISTRICT BOARD OF HEALTH, through the Washoe County Health District, has jurisdiction over all public health matters in the Health District. Any conditions set by the Health District must be appealed to the District Board of Health.**

**STANDARD CONSIDERATIONS FOR SUBDIVISIONS**  
**Nevada Revised Statutes 278.349**

Pursuant to NRS 278.349, when contemplating action on a tentative subdivision map, the governing body, or the planning commission if it is authorized to take final action on a tentative map, shall consider:

- (a) Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;
- (b) The availability of water which meets applicable health standards and is sufficient for the reasonably foreseeable needs of the subdivision;
- (c) The availability and accessibility of utilities;
- (d) The availability and accessibility of public services such as schools, police and fire protection, transportation, recreation and parks;
- (e) Conformity with the zoning ordinances and master plan, except that if any existing zoning ordinance is inconsistent with the master plan, the zoning ordinance takes precedence;
- (f) General conformity with the governing body's master plan of streets and highways;
- (g) The effect of the proposed subdivision on existing public streets and the need for new streets and highways to serve the subdivision;
- (h) Physical characteristics of the land such as floodplain, slope and soil;
- (i) The recommendations and comments of those entities reviewing the tentative map pursuant to NRS 278.330 and 278.335; and
- (j) The availability and accessibility of fire protection, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands.

FOLLOWING ARE CONDITIONS OF APPROVAL REQUIRED BY THE REVIEWING AGENCIES. EACH CONDITION MUST BE MET TO THE SATISFACTION OF THE ISSUING AGENCY.

**Washoe County Planning and Building Division**

1. The following conditions are requirements of the Planning and Building Division, which shall be responsible for determining compliance with these conditions.

**Contact Name – Julee Olander, Planner, 775-328-3627, [jolander@washoecounty.gov](mailto:jolander@washoecounty.gov)**

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this tentative subdivision map.
- b. The subdivision shall be in substantial conformance with the provisions of Washoe County Development Code Article 604, Design Requirements, and Article 608, Tentative Subdivision Maps.
- c. Final maps and final construction drawings shall comply with all applicable statutes, ordinances, rules, regulations and policies in effect at the time of submittal of the tentative map or, if requested by the developer and approved by the applicable agency, those in effect at the time of approval of the final map.

- d. In accordance with NRS 278.360, the sub-divider shall present to Washoe County a final map, prepared in accordance with the tentative map, for the entire area for which a tentative map has been approved, or one of a series of final maps, each covering a portion of the approved tentative map. The final map shall be recorded within four years after the date of approval of the tentative map or within two years of the date of approval for subsequent final maps. On subsequent final maps, that date may be extended by two years if the extension request is received prior to the expiration date.
- e. Final maps shall be in substantial compliance with all plans and documents submitted with and made part of this tentative map request, as may be amended by action of the final approving authority.
- f. All final maps shall contain the applicable portions of the following jurat:

THE TENTATIVE MAP FOR **WTM21-013** WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON **DATE**.

THIS FINAL MAP, **MAP NAME AND UNIT/PHASE #**, MEETS ALL APPLICABLE STATUTES, ORDINANCES AND CODE PROVISIONS, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP, AND ALL CONDITIONS HAVE BEEN MET.

**[Omit the following paragraph if this is the first and last (only) final map.]**

THE NEXT FINAL MAP FOR **<WTM CASE NUMBER>** MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE PLANNING AND BUILDING DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION **THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_** BY THE PLANNING AND BUILDING DIRECTOR. THE OFFER OF DEDICATION FOR **STREETS, SEWERS, ETC.** IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

---

KELLY MULLIN, DIRECTOR  
PLANNING AND BUILDING

**Jurat for ALL SUBSEQUENT FINAL MAPS**

THE TENTATIVE MAP for **WTM21-013** APPROVED **<denied>** BY THE WASHOE COUNTY PLANNING COMMISSION ON **<date>**.

THE FIRST FINAL MAP FOR THIS TENTATIVE MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON **<date of Planning and Building Director's signature on first final map>**. **[Omit the following if second map.]** THE MOST RECENTLY RECORDED FINAL MAP, **<subdivision name and prior unit/phase #>** FOR THIS TENTATIVE MAP



WAS APPROVED AND ACCEPTED FOR RECORDATION ON *<date of Planning and Building Director's signature on most recent final map>* *[If an extension has been granted after that date – add the following]*: A TWO YEAR EXTENSION OF TIME FOR THE TENTATIVE MAP WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON *<date of last Planning Commission action to extend the tentative map>*.

THIS FINAL MAP, *<subdivision name and unit/phase #>*, MEETS ALL APPLICABLE STATUTES, ORDINANCES AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP; AND ALL CONDITIONS HAVE BEEN MET.

*[Omit the following paragraph if this is the last final map.]*

THE NEXT FINAL MAP FOR **WTM21-013** MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE PLANNING AND BUILDING DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, *<add two years to the current expiration date unless that date is more than two years away>* OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

*<Insert Merger and Re-subdivision option as applicable>*

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_ BY THE WASHOE COUNTY PLANNING AND BUILDING DIRECTOR. THE OFFER OF DEDICATION FOR *<streets, sewers>* IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

---

KELLY MULLIN, DIRECTOR,  
PLANNING AND BUILDING DIVISION

- g. A note shall be placed on all grading plans and construction drawings stating:

NOTE

Should any cairn or grave of a Native American be discovered during site development, work shall temporarily be halted at the specific site and the Sheriff's Office as well as the State Historic Preservation Office of the Department of Conservation and Natural Resources shall be immediately notified per NRS 383.170.

- h. The final map shall designate faults that have been active during the Holocene epoch of geological time, and the final map shall contain the following note:

NOTE

No habitable structures shall be located on a fault that has been active during the Holocene epoch of geological time.

- i. The developer and all successors shall direct any potential purchaser of the site to meet with the Planning and Building Division to review conditions of approval prior to the final sale of the site. Any subsequent purchasers of the site shall notify the Planning and Building Division of the name, address, telephone number and contact person of the new purchaser within thirty (30) days of the final sale.
- j. Construction work hours will be limited to 7am to 7pm Monday to Saturday.
- k. Any imported earthen materials shall be “certified weed free” in order to prevent the spread of noxious weeds within the county.
- l. An onsite noxious weeds management plan needs to be developed to ensure weed seeds do not impact other areas. All native seed mixes shall be certified noxious weed free prior to its dispersal on the site.
- m. The grading on site shall be in compliance with applicable best management practices to minimize erosion. The grading plan shall also be designed to prevent construction drainage and materials from increasing sedimentation impacts to Dry Creek and Steamboat Ditch and to minimize impervious surfaces.
- n. The applicant shall address the requirements for critical and sensitive stream zone buffer areas for Dry Creek, for all development within these zones, as required by Washoe County Code Article 418.
- o. Any removal of existing vegetation shall be replaced with native riparian plant species for erosion and weed control as required by Washoe County Code Article 412.
- p. The applicant shall identify and acknowledge all recorded easements prior to the recordation of the final map.
- q. Conditions, covenants, and restrictions (CC&Rs), including any supplemental CC&Rs, shall be submitted to Planning and Building staff for review and subsequent forwarding to the District Attorney for review. The final CC&Rs shall be signed and notarized by the owner(s) and submitted to Planning and Building with the recordation fee prior to the recordation of the final map. The CC&Rs shall require all phases and units of the subdivision approved under this tentative map to be subject to the same CC&Rs. Washoe County shall be made a party to the applicable provisions of the CC&Rs to the satisfaction of the District Attorney’s Office. Said CC&Rs shall specifically address the potential for liens against the properties and the individual property owners’ responsibilities for the funding of maintenance, replacement, and perpetuation of the following items, at a minimum:
  1. Maintenance of public access easements, common areas, and common open spaces. Provisions shall be made to monitor and maintain, for a period of three (3) years regardless of ownership, a maintenance plan for the common areas. The maintenance plan for the common areas shall, as a minimum, address the following:
    - a. Vegetation management;
    - b. Watershed management;
    - c. Debris and litter removal;
    - d. Fire access and suppression; and

- e. Maintenance of public access and/or maintenance of limitations to public access.
2. All drainage facilities and roadways not maintained by Washoe County shall be privately maintained and perpetually funded by the homeowners association.
3. The project, if adjacent to undeveloped land shall maintain a fire fuel break of a minimum 30 feet in width until such time as the adjacent land is developed.
4. Locating habitable structures on potentially active (Holocene) fault lines, whether noted on the recorded map or disclosed during site preparation, is prohibited.
5. All outdoor lighting on buildings and streets within the subdivision shall be down-shielded.
6. Washoe County will not assume responsibility for maintenance of the private street system of the development nor will Washoe County accept the streets for dedication to Washoe County unless the streets meet those Washoe County standards in effect at the time of offer for dedication.
7. Mandatory solid waste collection.

### **Washoe County Engineering and Capital Projects**

2. The following conditions are requirements of the Washoe County Engineering and Capital Projects Division which shall be responsible for determining compliance with these conditions.  
**Contact Name – Robert Wimer, P.E. 775-328-2059, [rwimer@washoecounty.gov](mailto:rwimer@washoecounty.gov)**
  - a. Final maps and final construction drawings shall comply with all applicable statutes, ordinances, rules, regulations, and policies in effect at the time of submittal of the tentative map or, if requested by the developer and approved by the applicable agency, those in effect at the time of approval of the final map.
  - b. Prior to acceptance of public improvements and release of any financial assurances, the developer shall provide as-built construction drawings in an acceptable digital format prepared by a civil engineer licensed in the State of Nevada.
  - c. The developer shall provide written approval from the U.S. Postal Service (USPS) concerning the installation and type of mail delivery facilities. The system, other than individual mailboxes, must be shown on the project construction plans and installed as part of the onsite improvements.
  - d. A complete set of construction improvement drawings, including an onsite grading plan, shall be submitted to the County Engineer for approval prior to finalization of any portion of the tentative map. Grading shall comply with best management practices (BMPs) and shall include detailed plans for grading and drainage on each lot, erosion control (including BMP locations and installation details), slope stabilization and mosquito abatement. Placement or disposal of any excavated material shall be indicated on the grading plan.
  - e. All open space shall be identified as common area on the final map. A note on the final map shall indicate that all common areas shall be privately maintained and perpetually funded by the Homeowners Association. The maintenance of the common areas shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.
  - f. Any existing easements, facilities or utilities that conflict with the development shall be relocated, quitclaimed, and/or abandoned, as appropriate.
  - g. Any easement documents recorded for the project shall include an exhibit map that shows the location and limits of the easement in relationship to the project.

- h. All existing overhead utility lines shall be placed underground, except electric transmission lines greater than 36 kilovolts, which can remain above ground.
- i. With each affected final map, provide written approval from all utility provider(s) for any improvements located within their easement or under or over their facilities.
- j. Appropriate easements shall be granted for any existing or new utilities, with each affected final map.
- k. A design level geotechnical investigation with fault study shall be provided with the submittal of each final map.
- l. Cut slopes, fill slopes, and berms shall be setback from parcel lines and access easements in accordance with Washoe County Code Article 438.
- m. Prior to recordation of the affected final map, an ASTM E1527-13 Phase I Environmental Site Assessment shall be submitted for all parcels or right-of-way dedicated to Washoe County.
- n. Prior to the issuance of Certificates of Occupancy for properties created within this development, the developer shall provide to the Engineering and Capital Projects Division a letter prepared by a civil engineer licensed in the State of Nevada, certifying that all public and private improvements have been constructed in accordance with the approved plans and specifications, to the satisfaction of the County Engineer.

**Washoe County Engineering and Capital Projects – Flood Hazards (County Code 110.416), Storm Drainage Standards (County Code 110.420), and Storm Water Discharge Program (County Code 110.421)**

3. The following conditions are requirements of the Washoe County Engineering and Capital Projects Division which shall be responsible for determining compliance with these conditions.

**Contact Name – Robert Wimer, P.E. 775-328-2059, [rwimer@washoecounty.gov](mailto:rwimer@washoecounty.gov)**

- a. The conditional approval of this tentative map shall not be construed as final approval of the drainage facilities shown on the tentative map. Final approval of the drainage facilities will occur during the final map review.
- b. Prior to finalization of the first final map, a master hydrology/hydraulic report and a master storm drainage plan shall be submitted for approval.
- c. Prior to finalization of any portion of the tentative map, a final, detailed hydrology/hydraulic report for that unit shall be submitted.
- d. Any increase in storm water runoff flow rate resulting from the development and based on the 5-year and 100-year storm(s) shall be detained onsite.
- e. Prior to the finalization of the first final map, an operation and maintenance plan for the maintenance of the project's storm water basin(s) and drainage channel(s) shall be developed in accordance with the Washoe County Code Article 421. The Operation and Maintenance Plan shall be incorporated into the project CC&Rs.
- f. The following note shall be added to each final map; "All properties, regardless if they are located within or outside of a FEMA Special Flood Hazard Area, may be subject to flooding. The property owner is required to maintain all drainage easements and natural drainages and not perform or allow unpermitted and unapproved modifications to the property that may have detrimental impacts to surrounding properties."
- g. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage leaving the site.

- h. Prior to approval of any final map, building permit, or grading permit, the developer will submit written confirmation from the Steamboat Ditch Company, that they have reviewed and approved any ditch crossings, protective fencing or storm water discharge facilities that may impact the ditch.
- i. For developments upgradient of water supply ditch channel, shall not contribute flows greater than pre-development flows (110.420.35a)
- j. The Truckee Meadows Regional Storm Water Quality Management Program Construction Permit Submittal Checklist and Inspection Fee shall be submitted with each final map.
- k. Drainage swales that drain more than two lots are not allowed to flow over the curb into the street; these flows shall be intercepted by an acceptable storm drain inlet and routed into the storm drain system.
- l. A note on the final map shall indicate that all drainage facilities not maintained by Washoe County shall be perpetually maintained by a homeowner's association. The maintenance and funding of private drainage facilities shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.
- m. Prior to issuance of a grading permit or approval of the affected final map, the developer shall obtain a permit from the COE for any work within the wetlands/waters of the U.S., or a letter from the COE indicating that a permit is not required. A copy of the permit/letter shall be submitted.
- n. A note on all affected final maps shall state that the owner, buyers, assigns or interest holders of any lots hereon, hereby agree that all existing irrigation flows crossing these parcels shall be perpetuated. Any legal rights to water from the ditches crossing this property shall be honored and the right of access for maintenance and operation will not be denied to valid holders of those rights.
- o. Maintenance access and drainage easements shall be provided for all existing and proposed drainage facilities. All drainage facilities located within Common Area shall be constructed with an adjoining minimum 12-foot wide all-weather access road. Maintenance access road(s) shall be provided to the bottom of proposed storm water basins as well as over County owned and maintained storm drainage facilities.
- p. The hydrology report for each phase shall include sizing the driveway culverts for that phase such that they will pass the onsite 100-year flow. The driveway culvert sizes shall be identified on the improvement plans for each phase.
- q. Drainage easements shall be provided for all storm runoff that crosses more than one lot.
- r. Any rights-of-way/easements for irrigation ditches, associate structures and their maintenance shall be reserved with the finalization of the affected final map or prior to issuance of a grading permit. Any relocation of the irrigation facilities shall maintain the quantity, quality, elevation and point of delivery of the ditch unless an alternate alignment and discharge point is approved by the affected owners of the irrigation waters.

**Washoe County Engineering and Capital Projects – Street Design Standards (County Code 110.436)**

- 4. The following street design conditions are requirements of the Washoe County Engineering and Capital Projects, which shall be responsible for determining compliance with these conditions.

**Contact Name – Mitchell Fink, P.E. 775-328-2050, [mfink@washoecounty.gov](mailto:mfink@washoecounty.gov)**



- a. All roadway improvements necessary to serve the project shall be designed and constructed to County standards and specifications and/or financial assurances in an appropriate form and amount shall be submitted.
- b. An Occupancy Permit shall be obtained for the proposed connection to Lakeside Drive from the Nevada Department of Transportation (NDOT) and a copy of said permit shall be submitted to the County Engineer prior to finalization of the affected final map.
- c. Street names shall be reviewed and approved by the Regional Street Naming Coordinator.
- d. Streetlights shall be constructed to Washoe County standards at locations to be determined at the final design stage.
- e. AASHTO clear zones shall be determined for all streets adjacent to retaining walls or slopes steeper than 3:1. If a recoverable or traversable clear zone cannot be provided, an analysis to determine if barriers are warranted shall be submitted for approval.
- f. Appropriate curve warning signs and/or a lower speed limit shall be determined and posted on all horizontal roadway curves that do not meet the standard Washoe County 25-mile per hour design speed.
- g. Appropriate transitions shall be provided between the existing and proposed improvements at all proposed street connections. This may include removal of existing pavement.
- h. Any streetlights that do not meet Washoe County standards shall be placed outside Washoe County right-of-way. These streetlights shall be private, and the CC&Rs shall indicate operation and maintenance of the streetlights shall be the responsibility of the Homeowners Association. The County Engineer and the District Attorney's Office shall determine compliance with this condition.
- i. A paved secondary or emergency access road with appropriate easements (Access or Emergency) shall be provided. The County Engineer and the Fire Marshall shall determine compliance with this condition.
- j. Prior to final map approval provide recorded documentation of legal access to property from Lakeside. (Deed, Easement, etc.).
- k. The conditions, covenants and restrictions (CC&Rs) shall prominently note to the satisfaction of the District Attorney's Office and the County Engineer that Washoe County will not assume responsibility for maintenance of the development's private street system or accept the streets for dedication to Washoe County unless the streets meet those Washoe County standards in effect at the time of the offer of dedication.
- l. Adequate snow storage easements shall be identified on the final plat.
- m. Proposed landscaping and/or fencing along street rights-of-way and within median islands shall be designed to meet AASHTO sight distances and safety guidelines. A minimum vertical clearance of 13.5 feet shall be maintained over all private streets, and no tree shall overhang the curb of any public street.
- n. A minimum onsite stacking length of 50 feet and an adequately sized turnaround outside the gate is required prior to any security gate. Vehicle stacking at a gate shall not back up into the adjacent street right-of-way.

**Washoe County Engineering and Capital Projects – Utilities (County Code 422 & Sewer Ordinance)**

5. The following utility conditions are requirements of Washoe County Engineering and Capital Projects Division, which shall be responsible for determining compliance with these conditions.

**Contact Name – Timber Weiss, P.E., 775-954-4626, [tweiss@washoecounty.gov](mailto:tweiss@washoecounty.gov)**

- a. The applicant shall conform to all conditions imposed by intergovernmental agreements required to provide sewer service to the subject project, and, if required, be a party to any such agreements.
- b. All fees shall be paid or deferred in accordance with Washoe County Ordinance prior to the approval of each final map.
- c. Improvement plans shall be submitted and approved by CSD prior to approval of the final map. They shall be in compliance with Washoe County Design Standards and be designed by a Professional Engineer licensed to practice in the State of Nevada.
- d. The applicant shall submit an electronic copy of the street and lot layout for each final map at initial submittal time. The files must be in a format acceptable to Washoe County.
- e. The applicant shall construct and/or provide the financial assurance for the construction of any on-site and off-site sanitary sewer collection systems prior to signature on each final map. The financial assurance must be in a form and amount acceptable to the CSD.
- f. Approved improvement plans shall be used for the construction of on-site and off-site sanitary sewer collection system. The CSD will be responsible to inspect the construction of the sanitary sewer collection system.
- g. The on-site and extended sanitary sewer collection system must be offered for dedication to Washoe County along with the recordation of each final map.
- h. Easements and real property for all sanitary sewer collection systems and appurtenances shall be in accordance with Washoe County Design Standards and offered for dedication to Washoe County along with the recordation of each final map.
- i. A master sanitary sewer report for the entire tentative map shall be prepared and submitted by the applicant's engineer at the time of the initial submittal for the first final map which addresses:
  1. The estimated sewage flows generated by this project,
  2. Projected sewage flows from potential or existing development within tributary areas,
  3. The impact on capacity of existing infrastructure,
  4. slope of pipe, invert elevation and rim elevation for all manholes,
  5. Proposed collection line sizes, on-site and off-site alignment, and half-full velocities,
  6. Analysis of potential contributory sewer areas, with the limits being the Truckee Meadows Services Area Boundary, and
  7. Potential stubs to be included in the sewer infrastructure design to facilitate the future expansion of the sewer collection system within and around Lakeside Drive.
- j. No Certificate of Occupancy will be issued until all the sewer collection facilities necessary to serve each final map have been completed, accepted and engineer prepared as-built drawings are delivered to the utility. As-built drawings must be in a format acceptable to Washoe County.
- k. No permanent structures (including rockery or retaining walls, building's, etc.) shall be allowed within or upon any County maintained utility easement.
- l. A minimum 30-foot sanitary sewer and access easement shall be dedicated to Washoe County over any facilities not located in a dedicated right of way.

- m. The developer will be responsible to fund the design and construction of major infrastructure such as pump structures, controls, telemetry and appurtenances, lift stations, force mains, sewer mains, interceptor and wastewater treatment facilities necessary to accommodate the project. The developer will design the infrastructure to Washoe County standards. Washoe County will inspect the infrastructure.
- n. The CSD shall reserve the right to over-size or realign the design of infrastructure to accommodate future development as determined by accepted engineering calculations. Funding shall be the responsibility of the developer.
- o. It is the responsibility of the developer to fund, design and construct sewer infrastructure from the project area to the nearest active sewer main. The developer is responsible for the acquisition of all permits, easements, rights-of-way and/or agreements required to support the extension of the sewer infrastructure. The off-site sewer infrastructure extension must also be offered for dedication to Washoe County. Washoe County will inspect the off-site sewer infrastructure extension within Washoe County right-of-way.
- p. The developer is required to provide sewer infrastructure plans to the City of Reno for their independent review. City of Reno connection fees must be paid, and a City of Reno will-serve letter must be obtained prior to the signing of the final map.
- q. Nevada Department of Transportation approval of the sewer infrastructure design is required prior to the signing of the final map.

#### **Washoe County Health District - Air Quality Management Division**

6. The following conditions are requirements of the Health District, which shall be responsible for determining compliance with these conditions. The District Board of Health has jurisdiction over all public health matters in the Health District. Any conditions set by the Health District must be appealed to the District Board of Health.

**Contact Name – Genine Rosa, Environmental Engineer II, 775-784-7204,  
[grosa@washoecounty.gov](mailto:grosa@washoecounty.gov)**

- a. Dust Control Permit will be required prior to breaking ground, failure to do so may result in enforcement action resulting in a Notice of Violation with associated fines. For Dust Control Permit questions call AQMD at 775-784-7200 or visit [www.OurCleanAir.com](http://www.OurCleanAir.com). Link to application: [Dust Control Permit Application](#)

#### **Washoe County Health District – Environmental Health Services**

7. The following conditions are requirements of the Health District, which shall be responsible for determining compliance with these conditions. The District Board of Health has jurisdiction over all public health matters in the Health District. Any conditions set by the Health District must be appealed to the District Board of Health.

**Contact Name – David Kelly, HS Supervisor, 775-328-2434,  
[dakelly@washoecounty.gov](mailto:dakelly@washoecounty.gov)**

- a. Future well installation is proposed as part of this map. Permits for well installation will be required from EHS.
- b. The current proposal is for lots to be served by municipal sewer. Any change to utilize septic will require different lot sizes and new review.

#### **Washoe County Water Management Planner Coordinator**

8. The following conditions are requirements of Washoe County Water Management Planner Coordinator, who shall be responsible for determining compliance with these conditions.

**Contact Name – Timber Weiss, P.E., 775-954-4626, [tweiss@washoecounty.gov](mailto:tweiss@washoecounty.gov)**

- a. The subject parcel is not near any municipal, quasi-municipal or private water delivery infrastructure; therefore, resulting parcels will rely on Individual Domestic wells as their source of domestic water supply.
- b. Washoe County code requires that the applicant for a parcel map or subdivision map with parcels served by an individual domestic well, to bring forth an approved and recorded **“Affidavit of Relinquishment for Domestic Wells”** by the Nevada State Engineer’s office. The applicant shall complete the relinquishment process with the State Engineer’s office and record the approved form with the County Recorder’s office and submit a recorded copy to Washoe County as a pre-requisite to approval of their parcel map.
- c. Washoe County retains the authority to impose its own review and reject water rights which do not comply with Washoe County code and area plans. *Therefore, a preview of water rights intended to support the project (prior to relinquishment process) will be helpful for both the applicant and Washoe County staff.*
- d. The ground water rights subject to relinquishment MAY NOT be supplemental ground water which supplement primary surface water rights.
- e. The amount of water rights necessary is 2.00 acre-feet of ground water rights per newly created parcel. The original parcel is deemed exempt from the relinquishment process. In the way of an example, if one parcel is subdivided into a total of 4, there are 3 newly created parcels and one existing or remains thereof. This subdivision map will create 24 newly created parcels which will require the relinquishment of 48.00 acre-feet of ground water rights.
- f. The water rights must be in good standing with the State of Nevada, with current title. The water rights must be from the same hydrographic basin as the lands subject to the subdivision map and comply with the appropriate area plan.

**Truckee Meadows Fire Protection District**

9. The following condition is a requirement of the Truckee Meadows Fire Protection District, which shall be responsible for determining compliance with this condition.

**Contact Name – Brittany Lemon, Fire Captain 775-326-6079, [blemon@tmfpd.us](mailto:blemon@tmfpd.us)**

- a. This project shall meet and comply with all requirements of currently adopted TMFPD fire codes, ordinances, and standards at the time of construction to include infrastructure for fire apparatus access roads and water supply. <https://tmfpd.us/fire-code/>
- b. At the entryway, they will need to maintain 20 feet of fire apparatus access on each side of the delineator. If the gate is an automatic gate a Click 2 Enter as well as a Knox Switch will be required for emergency access.
- c. We also want to confirm that all of the roads comply with our radius requirements of 28 inside, 52 outside.
- d. If any homes that are built are over 5,000 square feet living space NPFA 13D residential fire sprinklers will be required.
- e. The main entrance shall have a minimum of 20 feet of width on each side of the median at the main entrance and that the 20 feet on each side of the median shall continue to the point that the road narrows to two lanes.
- f. A bulb turnaround at the end of the road between lots 9 & 10. The bulb and all turns in the development shall accommodate turning radii of 28 feet inside and 52 feet outside.

**Washoe County Regional Parks and Open Space Program (Parks Program)**

10. The following conditions are requirements of Washoe County Water Parks and Open Space Program, who shall be responsible for determining compliance with these conditions.

**Contact: Joanne Lowden, Park Planner, 775-328-2039, [jlowden@washoecounty.gov](mailto:jlowden@washoecounty.gov)**

- a. Any imported fill materials shall be “certified weed free” to prevent the spread of noxious and invasive weeds within Washoe County.
- b. The delineated wetlands shall be identified on the final subdivision map.
- c. To ensure that wetlands, wetland buffers, and natural groundwater recharge areas are preserved and conserved pursuant to Master Plan policies LUT.13.2 and C.13.3.2, and Southwest Truckee Meadows Area Plan Policy SW.17.2, grading and development of the parcels containing delineated wetlands shall be sited and designed to avoid the wetlands unless no feasible alternative exists. Should encroachment into the wetlands be necessary, Army Corp of Engineering permits shall be required.

\*\*\* End of Conditions \*\*\*