



Planning Commission Staff Report

Meeting Date: September 5, 2023

Agenda Item: 9B

TENTATIVE SUBDIVISION MAP CASE NUMBER:

WTM21-012 (Nine 47 Tahoe Condo)

BRIEF SUMMARY OF REQUEST:

To allow the subdivision of approximately 2 acres into 40 airspace condominiums on a 1.11-acre common area parcel

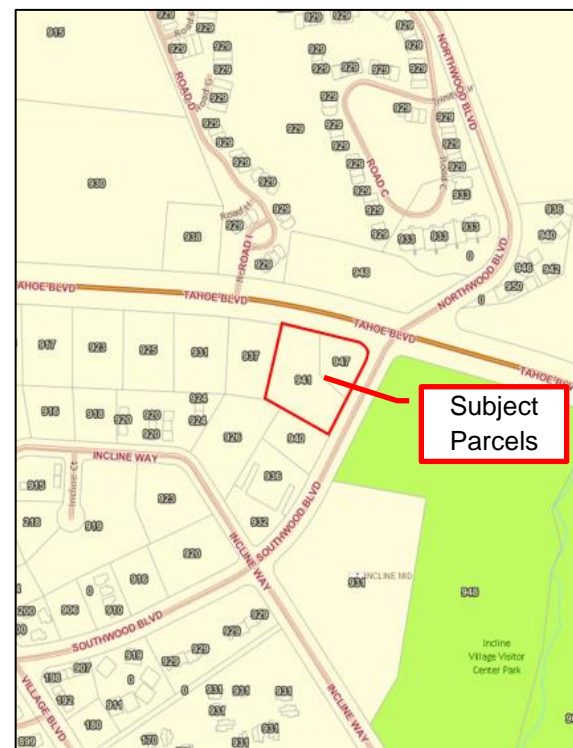
STAFF PLANNER:

Courtney Weiche, Senior Planner
Phone Number: 775.328.3608
E-mail: cweiche@washoecounty.gov

CASE DESCRIPTION

For hearing, discussion and possible action to approve a Tentative Subdivision Map for a 40-unit residential condominium project, containing 925 square feet of professional office space, on an approximately two-acre site located at 941 and 947 Tahoe Blvd. in Incline Village, Nevada. The project area is comprised of two parcels: APN 132-231-09 is 1.389 acres and APN 132-231-10 is 0.598 acres. The parcels will be legally merged into a single parcel, then divided into 40 airspace condominiums with a 1.11-acre common area parcel.

Applicant: Feldman Thiel, LLP
Property Owner: PALCAP FFIF TAHOE 1, LLC
Location: 941 and 947 Tahoe Boulevard (SR 28)
APN: 132-231-10 and 132-231-09
Parcel Size: 132-231-10: 1.389 ac
132-231-09: .598 ac
Master Plan: Incline Village Commercial – Special Area 1 (IV-C SA1)
Regulatory Zone: Incline Village Commercial – Special Area 1 (IV-C SA1)
Area Plan: Tahoe
Development Code: Authorized in Article 608, Tentative Subdivision Maps
Commission District: 1 - Commissioner Hill



Vicinity Map

STAFF RECOMMENDATION

APPROVE

APPROVE WITH CONDITIONS

DENY

POSSIBLE MOTION

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Planning Commission approve Tentative Subdivision Map Case Number WTM21-012 for Nine 47 Tahoe Condo, with the conditions included as Exhibit A to this matter, having made all ten findings in accordance with Washoe County Code Section 110.608.25.

(Motion with Findings on Page 18)

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The technical reports submitted with the project application are extensive. To review the technical reports online click [here](#) or contact Planning at Planning@washoecounty.gov to have a copy sent by email, if approved.

Tentative Subdivision Map

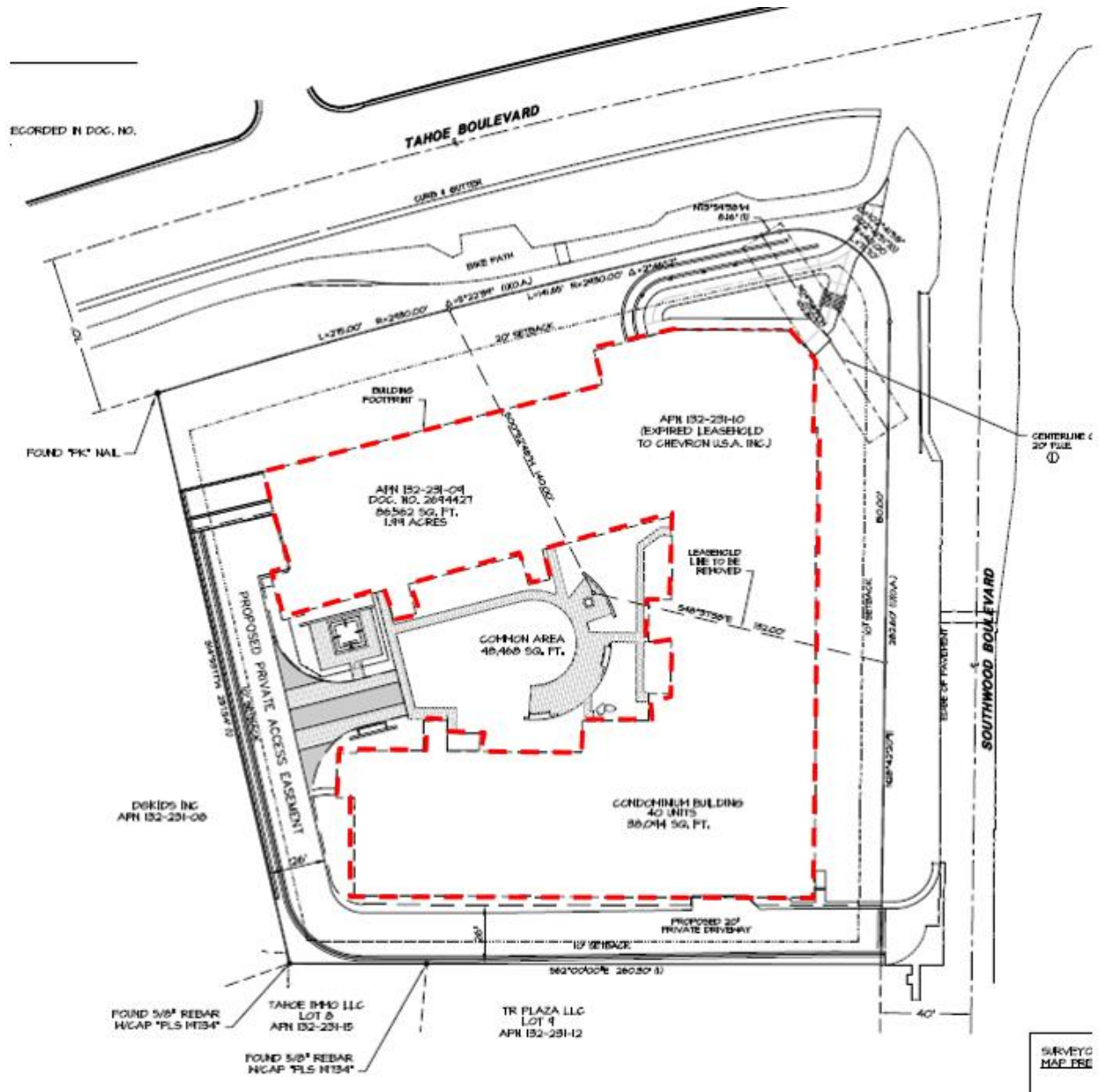
The purpose of a Tentative Subdivision Map is:

- To allow the creation of saleable lots;
- To implement the Washoe County Master Plan, including the area plans, and any specific plans adopted by the County;
- To establish reasonable standards of design and reasonable procedures for subdivision and re-subdivision in order to further the orderly layout and use of land and insure proper legal descriptions and monumenting of subdivided land; and;
- To safeguard the public health, safety and general welfare by establishing minimum standards of design and development for any subdivision platted in the unincorporated area of Washoe County.

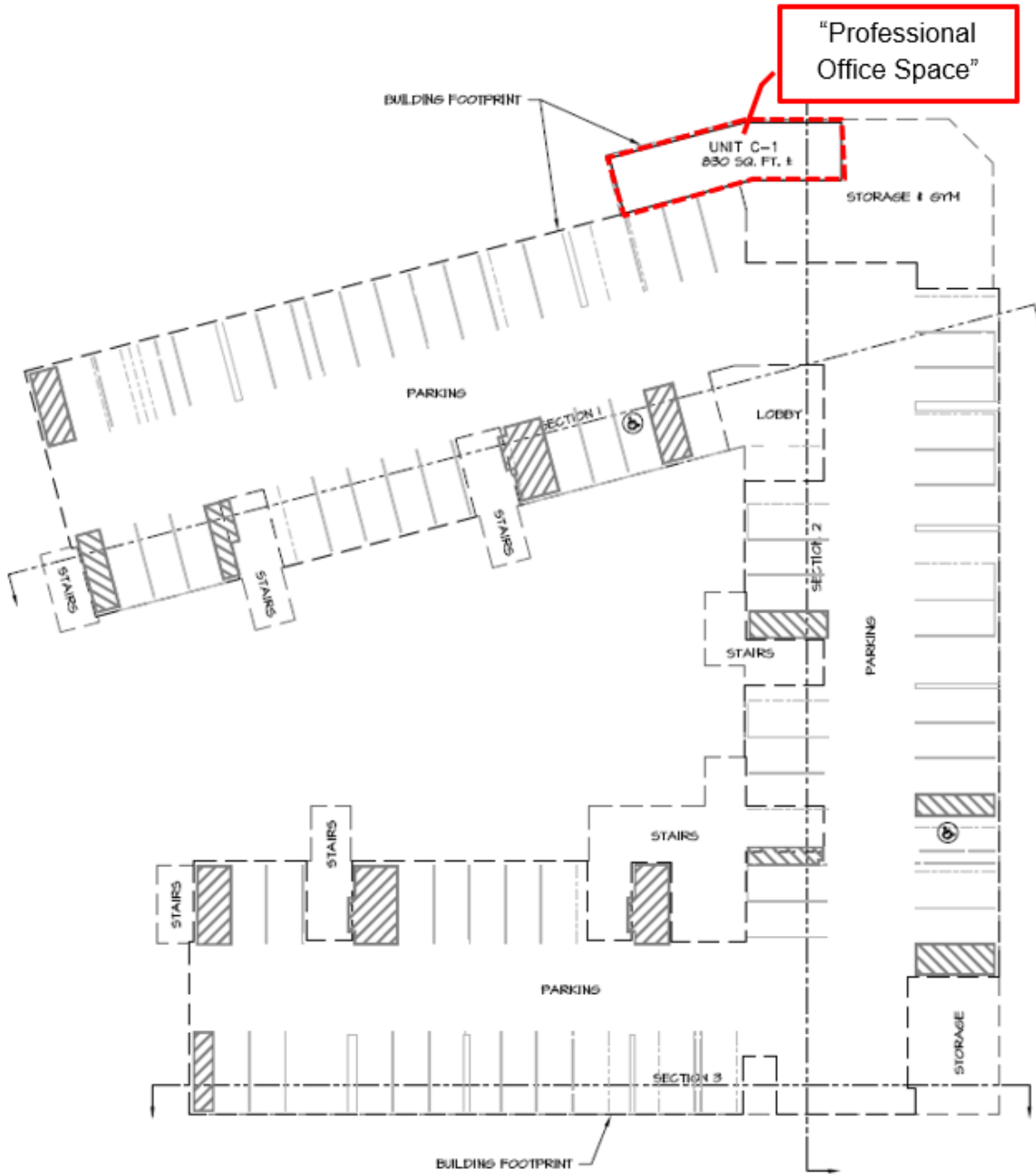
If the Planning Commission grants an approval of the Tentative Subdivision Map, that approval is subject to conditions of approval. Conditions of approval are requirements that need to be completed during different stages of the proposed project. Those stages are typically:

- Prior to recordation of a final map.
- Prior to obtaining a final inspection and/or a certificate of occupancy on a structure.
- 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.

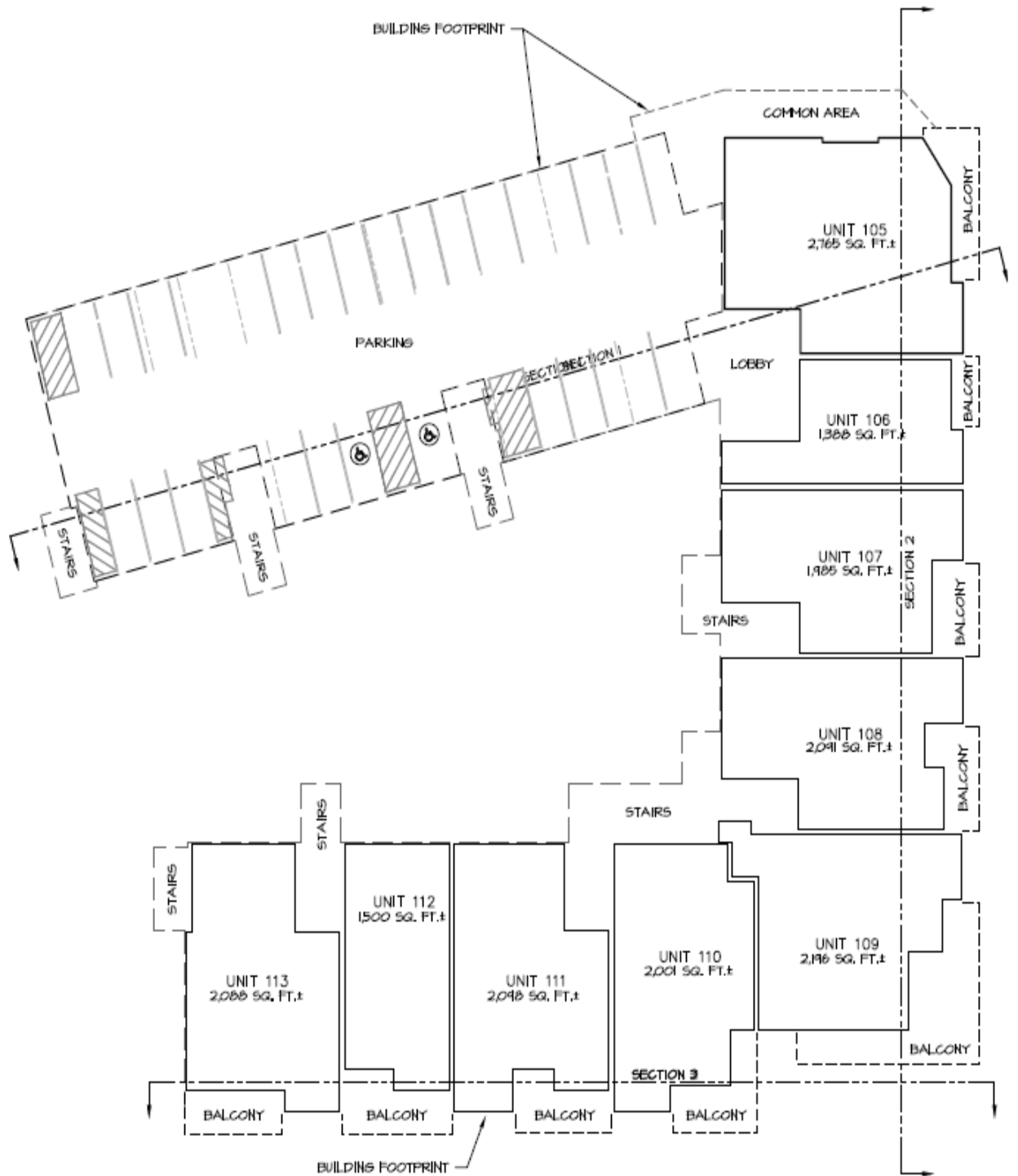
The conditions of approval for Tentative Subdivision Map Case Number WTM21-012 are attached to this staff report and will be included with the action order.



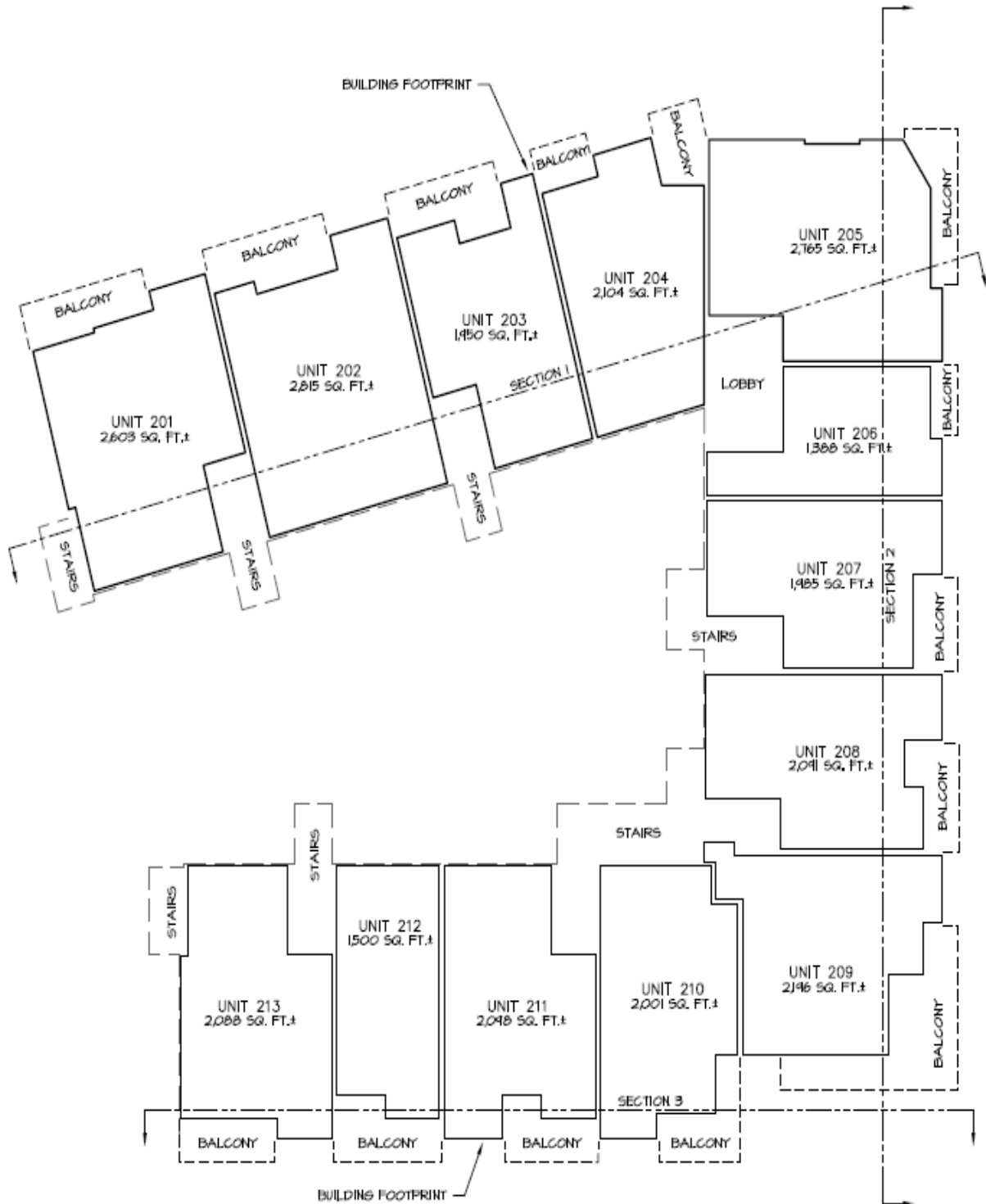
Site Plan



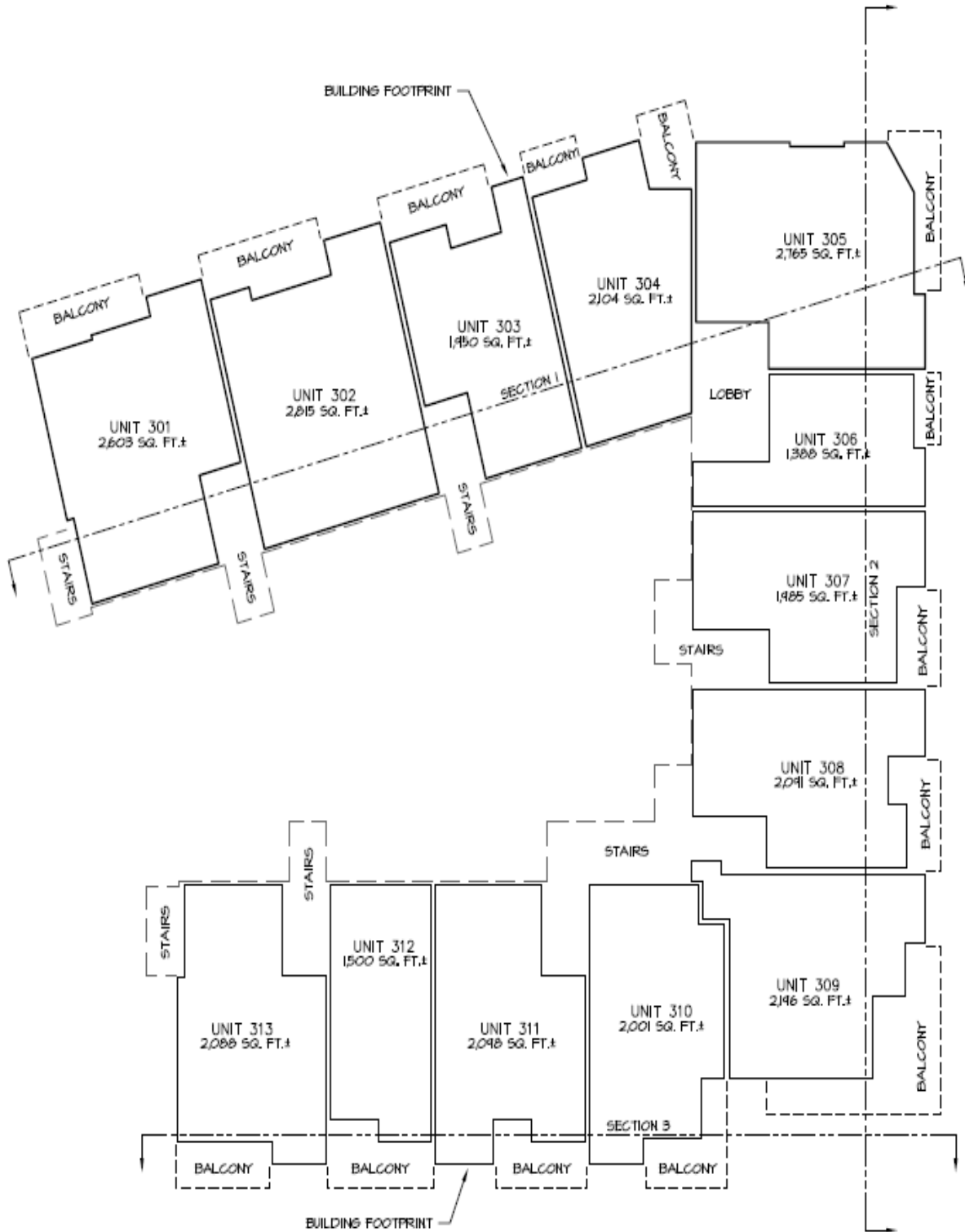
Basement Floor Plan



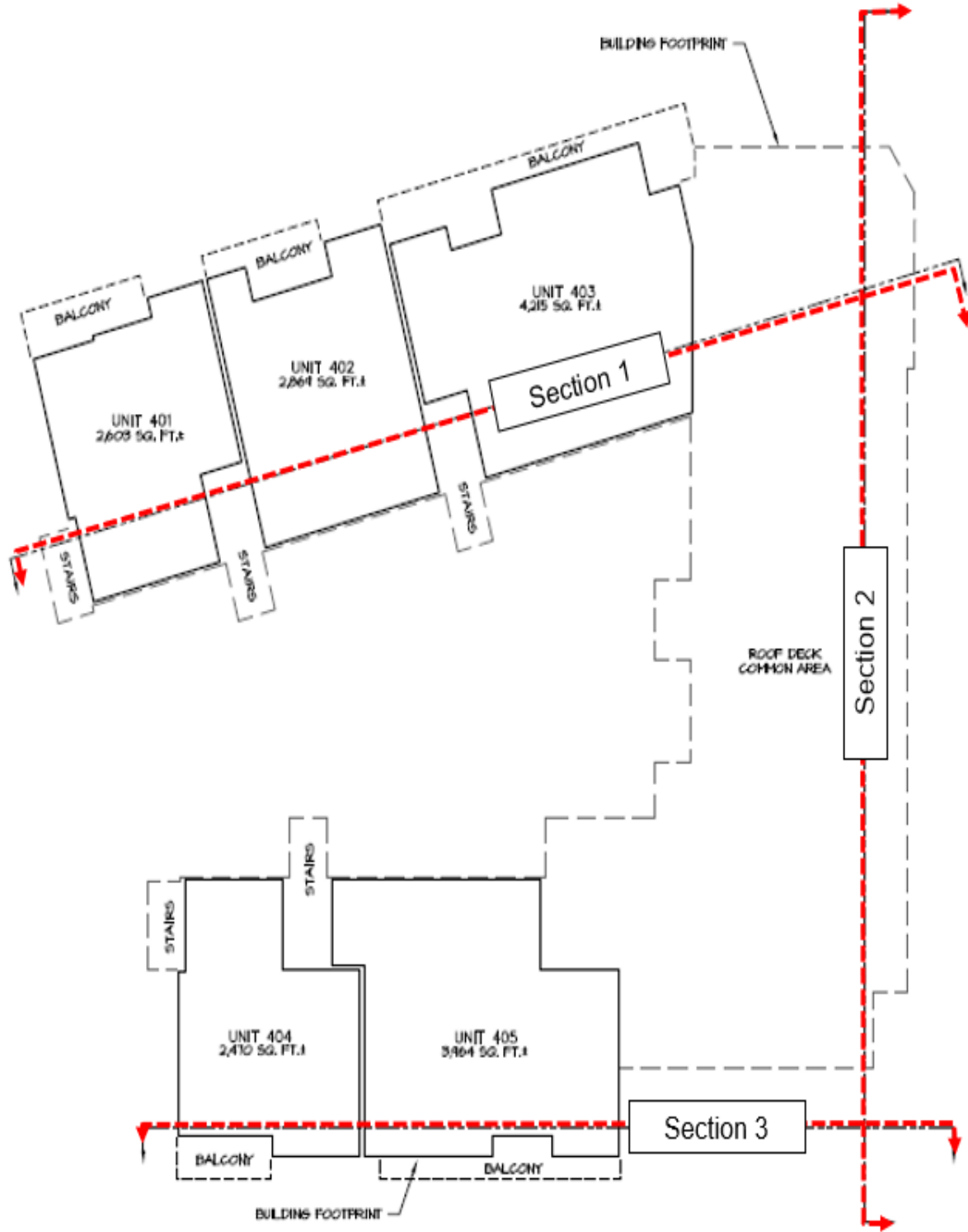
First Floor Plan



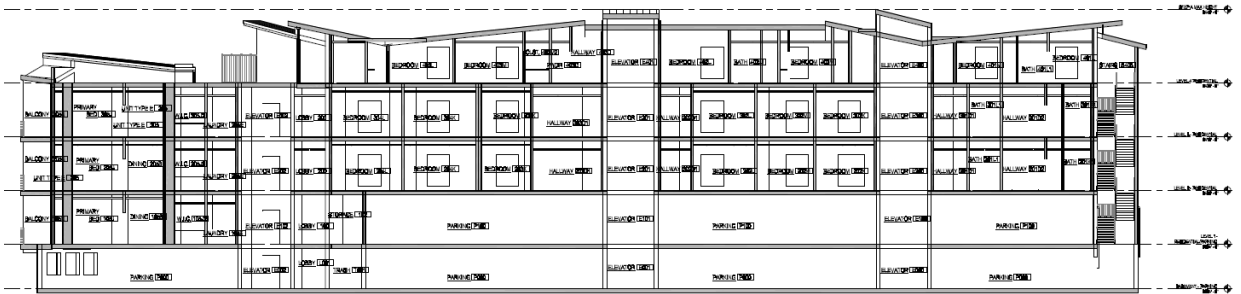
Second Floor Plan



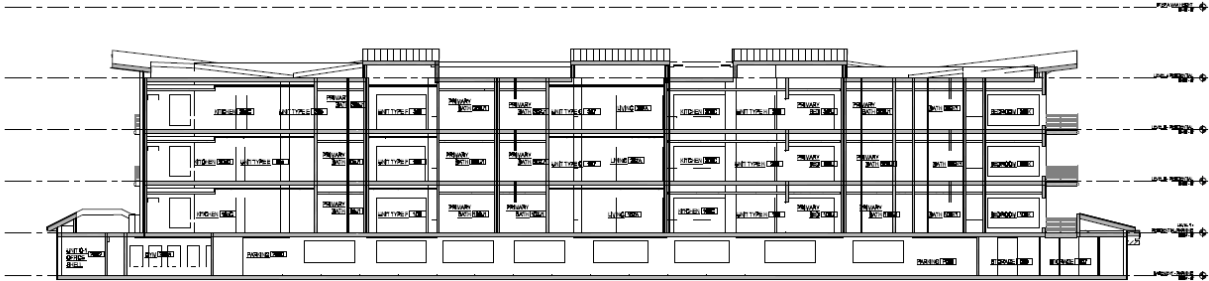
Third Floor Plan



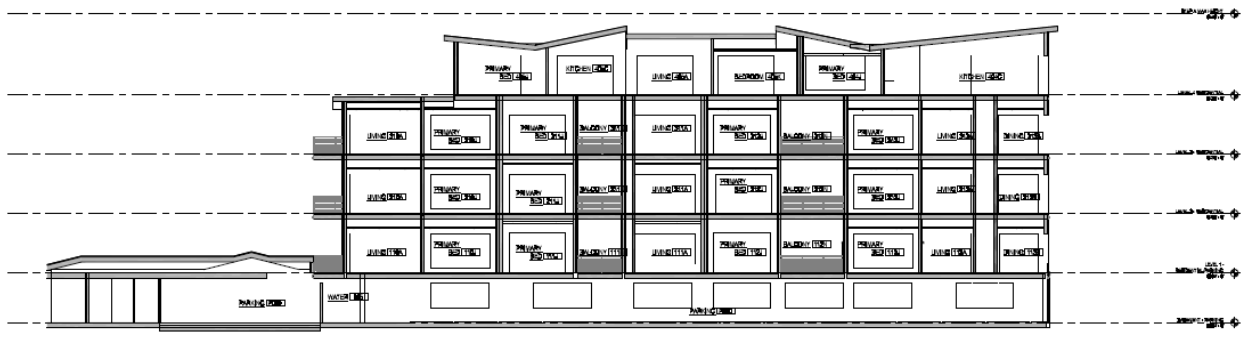
Fourth Floor Plan with Sections Identified



Airspace Exhibit Section 1



Airspace Exhibit Section 2



Airspace Exhibit Section 3



View looking south from State Route 28 (Tahoe Boulevard)

Background

In June 2022, TRPA issued a development permit for a mixed-use (multi-family and commercial) development at 941 and 947 Tahoe Boulevard (APN 132-231-09 and 132-231-10) in Special Area 1 of the Incline Village Commercial Zone (T-IVC SA1). The permitted project included 40 multi-family units and 925 square feet of commercial space. Following permit approval, the developer requested the conversion of the multi-family rental units into owner-occupied single family dwelling condominiums to TRPA, per TRPA Code of Ordinances, Chapter 39 – Subdivision, and to the County, per Article 608, Tentative Subdivision Maps. This request could not be granted because single-family condominium uses were not an allowable use in Incline Village Commercial - Special Area 1.

In response, the developer applied for a Development Code Amendment (WDCA22-0003) with the County to amend WCC 110.220.145 to add single family dwellings, limited to air space condominiums, as an allowable use in the Incline Village Commercial (IV-C)- Special Area 1 regulatory zone.

On January 17, 2023, the Washoe County Board of County Commissioners (BCC) adopted Bill No. 1888, Ordinance No. 1696, which approved a development code amendment (ref. WDCA22-0003) amending Washoe County Code Chapter 110 (Development Code), Article 220 (Tahoe Area), Sections 110.220.124 and 110.220.150. These amendments allowed single family dwellings as an allowed use in Special Area 1 when associated with an approved tentative subdivision map of multi-family into air space condominiums. The IV-C regulatory zone falls within Washoe County's Tahoe Area Plan. Therefore, the amendment required approval by the TRPA Governing Board before the subject tentative map could be processed, as TRPA has incorporated Washoe County's Development Code, Articles 220 and 220.1 as part of its adoption of the Tahoe Area Plan.

On June 28, 2023, the TRPA Governing Board approved the proposed amendment with additional mitigation measures defining and setting minimum standards for mixed-use development and workforce housing in Special Area 1.

As these additional mitigation measures are TRPA requirements, TRPA is responsible for enforcing implementation of the mitigation measures associated with the area plan amendment. The following are the TRPA mitigation measures (presented here for informational purposes only):

Subdivision of a mixed-use structure is subject to:

- TRPA's definition of "mixed-use" which broadly defines permissible non-residential uses, requires pedestrian-oriented non-residential uses on the ground floor street frontage and uses Floor Area Ratio (FAR).
- Standards requiring at least 10 percent deed-restricted housing that is substantially similar in size and layout to residential units being sold at market rate, with the option to deed-restrict more units with a smaller footprint. The standards include two options for providing deed-restricted units:
 - Building a 1:1 mix of affordable and moderate units on or off-site; or
 - Building achievable units on site and deed-restricting an off-site parcel of equal size for future affordable housing.
- No minimum parking requirement with parking and vehicle access designed to limit conflict with pedestrian circulation.
- Design standards aimed at promoting pedestrian accessibility, including transparent façade, pedestrian-oriented entry, and sidewalks.

- When a regional definition and standards are adopted, the proposed mitigation measures for Special Area 1 will be repealed and replaced by those standards.
- by those standards.

Project Evaluation

The proposed project is for the construction of a new mixed-use development that includes 40 single family dwellings – limited to air space condominiums—830 square feet of commercial floor area and 1.11 acres of common area. The residential units and commercial professional office space will be housed within a single, U-shaped building with a maximum height of 56 feet. The maximum height is regulated by TRPA which has already approved the 56-foot maximum height for the proposed development.

The project area is located at the eastern intersection of Nevada State Route 28 (SR 28) and Southwood Boulevard. Existing commercial buildings are located west and south of the project area. Multi-family residential units are located north (across from SR 28) of the project area, and recreational play fields (Incline Park) adjacent to Incline Middle School are located to the east.

The applicant indicates that there will be 1.11 acres of common area on the project site. The common area will include below-grade parking (95 spaces, 4 of which are handicap accessible), bike storage/parking, fire pits, outdoor seating, a jacuzzi, landscaping, permanent Best Management Practices (BMPs) per TRPA requirements and a rooftop terrace.

The project is fronted by both an improved pedestrian pathway and an improved bike path and is close to parks, schools, a golf course and other services. The density requirement for single-family development in Special Area 1 includes a minimum of 15 units per acre and a maximum of 25 units per acre. The proposed number of units is the equivalent of 20 units per acre. The project area was previously developed with a gas station and a restaurant. The existing development has been demolished and the site has been restored.

The project area includes two parcels (APNs 132-231-09 and 132-231-10) which will be merged to create a single parcel. The project area is within Special Area 1 of the Incline Village Commercial Regulatory Zone, within the Tahoe Area Plan. Both “Single Family Dwellings – limited to condominiums” and “Professional Offices” are now allowable uses within Special Area 1. The project area is located within a designated Town Center of the Tahoe Area Plan. The proposed height of the structure will be 56-feet, which is the maximum allowed height in the Town Center overlay.

Within a Town Center, the project area is eligible for a maximum allowable coverage of 70%. The proposed coverage, 54,895 square feet, represents approximately 63% of the combined parcel size. The applicant indicates that the design of the building will be characteristic of mountain modern style and will use a mixture of metal, wood, stone, and concrete. The applicant indicates the project will be built in accordance with industry-recognized sustainable construction and greenhouse gas reduction standards.

The airspace condominiums will range in size from 925 sf to 4,425 sf. Setbacks are determined by use type and parcel size. The setbacks for the subject parcel are 30 feet from the front and rear property lines and 12 feet from the side yard property lines. The proposed building footprint meets the required yard setbacks.

Washoe County Code Section 110.438.95 allows grading plans to be submitted and reviewed with a tentative subdivision map application. The proposed grading is consistent with all standards of Article 438, Grading, and no requests to vary standards are a part of this application.

The applicant submitted a Transportation Study, conducted by LSC Transportation Consultants, Inc. indicating the following (see Exhibit G):

- The project is forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).
- The driveway on SR 28 will be used exclusively for emergency access. As a result, all trips will be to/from the driveway on Southwood Boulevard.
- The level of service (LOS) at the site access driveway and SR 28/Village Blvd would remain acceptable with the project.
- With implementation of the proposed project, the new site driveways intersecting SR 28 and Southwood Blvd will operate at an acceptable LOS A. The intersection of SR 28/Southwood Blvd/Northwood Blvd will remain at a LOS F with a small increase in delay.
- A review of improvement options indicates that a signal or a roundabout are not warranted. Though the vehicle-hours of delay would be reduced slightly, the LOS would remain at LOS F.
- The proposed site access driveway spacing on Southwood Boulevard meets County Standards.
- The proposed driveway on Southwood Boulevard is expected to provide adequate driver sight distance.
- The project is exempt from a full “vehicle miles traveled” (VMT) analysis based on daily vehicle trip ends (DVTE)

Based on LSCs conclusions, there will be no change to the LOS associated with the proposed development of the tentative map.

Area Plan Evaluation

The subject parcel is located within the Tahoe Area Plan. The following are the pertinent policies from the Area Plan:

Relevant Area Plan Policies Reviewed

Policy	Brief Policy Description	Complies	Condition of Approval
Article 220.1 Chapter Three - Setbacks Of Structures	Residential subdivision frontages along major travel corridors should use a combination of existing vegetation, setbacks of structures, and landscape screening so that they are not readily visible from major travel corridors	Yes	No
Article 220.1 Chapter Six - Landscaping	Coverage: A minimum twenty (20) percent of the total developed land area shall be landscaped.	Yes	Yes
Policy LU1-1 Buffering	Residential uses shall be buffered from State Route 28 and adjacent commercial uses	Yes	No
Policy T3-2 New Curb Cuts on State Route 28	Prioritize local street access before allowing new curb cuts on State Route 28	Yes	No
Policy LU1-3 Finding of Compatibility	The approval of all discretionary permits in the planning area shall include a finding	Yes	No

	ensuring that compatibility between adjacent uses will be established and maintained through implementation of appropriate design standards.		
Policy LU2-9 Single Family Residential in the Incline Village Commercial Regulatory Zone	Single family dwellings shall only be allowed in the Incline Village Commercial regulatory zone when they are part of a mixed-use development or when they are affordable housing units.	Yes	Yes
Policy LU6-1 Traditional Downtown	Create a traditional small-town downtown in the Incline Village Commercial regulatory zone that serves residents' commercial needs. This regulatory zone should have a strong pedestrian orientation with multi-modal connections from nearby neighborhoods, reduce the visual prominence of automobiles, be aesthetically pleasing, and foster a sense of identity. Concentrated retail stores, restaurants, and offices should be included to promote the bustle and activity of a downtown.	Yes	Yes
Policy LU6-7 Colorful Landscaping	Encourage the coordinated planting of colorful spring flowers and colorful autumn foliage.	Yes	Yes
Policy T2-3 On-Site Pathways	All new and remodeled projects in the Incline Village Commercial and Incline Village Tourist regulatory zones shall provide on-site pedestrian/bicycle facilities which provide on-site circulation and connect to the public path system. Landscaping, street furniture, and lighting should be included with the walkways.	Yes	No

Reviewing Agencies

Washoe County Roads Supervisor reviewed the tentative map and provided comments indicating they have no concerns or conditions required.

The Nevada Department of Transportation (NDOT) provided comments and conditions indicating an encroachment permit will be required and must comply with NDOT's Standard Plans, Access Management System and Standards, Terms and Conditions Relating to Right-of-Way Occupancy Permits, and Drainage Manual requirements. NDOT did not indicate any concerns with potential roadway or intersection impacts.

Incline Village General Improvement District (IVGID) provides water, wastewater, trash and recreational services. IVGID stated in their comments and conditions they will require the submittal of a utility plan signed and wet stamped by a Nevada Licensed Engineer for all water, wastewater and trash services. The "IVGID Board of Trustee" must approve all utilities in which IVGID would supply to the project.

The following agencies/individuals received a copy of the project application for review and evaluation.

Agencies	Sent to Review	Responded	Provided Conditions	Contact
NDOT (Transportation)	X	X		
NV Highway Patrol	X			
Washoe County Building & Safety	X			
Washoe County Operations Division Director	X			
Washoe County Parks & Open Space	X	X		
Washoe County Planning & Building Director	X			
Washoe County Sewer	X			
Washoe County Street Naming	X			
Washoe County Traffic	X	X		
Washoe County Water Resource Planning	X			
Washoe County Water Rights Manager (All Apps)	X	X	X	Timber Weiss, tweiss@washoecounty.gov
WCSC Law Enforcement	X	X		
Washoe County Engineering (Land Development) (All Apps)	X			
Washoe County Engineering & Capital Projects Director (All Apps)	X	X	X	Dwayne Smith, desmith@washoecounty.gov
WCHD Air Quality	X			
WCHD EMS	X	X		
WCHD Environmental Health	X	X	X	Jim English, jenglish@washoecounty.gov; Wes Rubio, wrubio@washoecounty.gov; David Kelly,
Washoe County School District (All TMs)	X	X		
AT&T	X	X		
NV Energy	X			
Southwest Gas (cc Paiute Pipeline)	X			
Utilities, Inc.	X			
Charter Communications	X			
Incline Village Roads	X			
IVGID	X	X	X	Tim Buxton, tim_buxton@ivgid.org
IVGID - Parks	X			
Nevada Division of State Lands	X			
Nevada Tahoe Conservation District	X			
North Lake Tahoe FPD	X	X		
Tahoe Regional Planning Agency	X			
Tahoe Transportation District	X			
US Forest Service (LTBMU) 'Lake Tahoe Basin Management Unit'	X			

All conditions required by the contacted agencies can be found in Exhibit A, Conditions of Approval.

Neighborhood Meeting

A neighborhood meeting was held on January 24, 2022, at 5:30 pm at The Chateau at Incline Village, 955 Fairway Blvd, Incline Village, Nevada. A meeting summary with applicant responses is included as Exhibit D to this staff report.

Additionally, the property owner, Randy Fleisher of PAL CAP, has stated they have met individually with dozens of community members about the project and reached out to Rotary Club members, business association members and non-profits groups.

Staff Comment on Required Findings

WCC Section 110.608.25 of Article 608, *Tentative Subdivision Maps*, requires that all of the following findings be made to the satisfaction of the Washoe County Planning Commission before granting approval of a tentative map request. Staff has completed an analysis of the application and has determined that the proposal is in compliance with the required findings as follows.

- (a) Plan Consistency. That the proposed map is consistent with the Master Plan and any specific plan.

Staff Comment: The proposed tentative map is consistent with the goals and policies of the Master Plan and the Tahoe Area Plan.

- (b) Design or Improvement. That the design or improvement of the proposed subdivision is consistent with the Master Plan and any specific plan.

Staff Comment: The proposed tentative map meets the density and lot size and of the Master Plan and the Tahoe Area Plan. Once merged, the parcel will have the equivalent of 20 units per acre, which is within the maximum density for the regulatory zone.

- (c) Type of Development. That the site is physically suited for the type of development proposed.

Staff Comment: The site is physically suitable for the residential development and the site can accommodate the proposed professional office space, 40-unit single family airspace condominium and all associated uses/improvements. The conditions of approval further provide the requirements to develop the site appropriately; many of the specific design standards of Article 220.1 will be confirmed as part of the building permit review and approval.

- (d) Availability of Services. That the subdivision will meet the requirements of Article 702, Adequate Public Facilities Management System.

Staff Comment: The necessary utilities have been identified and are available and adequate in the area. The Incline Village General Improvement District (IVGID) is the provider of sewer and water service for the site. IVGID indicates that there is capacity for the proposed development. The proposed subdivision will meet the requirements of Article 702, Adequate Public Facilities Management System. Impacts associated with the proposed subdivision will be appropriately mitigated, based upon the imposition of appropriate conditions of approval as included at Exhibit A to this report.

- (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.

Staff Comment: The proposed improvements are not likely to cause substantial environmental damage or harm to endangered plants, wildlife, or their habitat. No rare or endangered animals or plants have been identified by the applicant. NDEP and NDOW were sent the Tentative Subdivision Map for review, however, no comments were received from these agencies.

- (f) Public Health. That the design of the subdivision or type of improvement is not likely to cause significant public health problems.

Staff Comment: Due to the location and design of the subdivision and type of improvements, this development 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.

Staff Comment: The proposed development has taken all easements into consideration and will not conflict with the easements in regard to utilities or public access, etc. No comments or concerns were received related to impacts on existing easements.

- (h) Access. That the design of the subdivision provides any necessary access to surrounding, adjacent lands and provides appropriate secondary access for emergency vehicles.

Staff Comment: The design of the subdivision has been reviewed by several agencies to confirm that all necessary access is available. North Lake Tahoe Fire Protection District has indicated the proposed site plan design provides appropriate access for emergency vehicles. Pedestrian access is provided at the corner of Tahoe Blvd. and Southwood Blvd.

- (i) Dedications. That any land or improvements to be dedicated to the County is consistent with the Master Plan.

Staff Comment: The common areas, including roadway access, will be under the responsibility of a future Homeowner's Association (HOA). All sewer and water improvement will be dedicated to Incline Village General Improvement District.

- (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.

Staff Comment: To the extent feasible, the development will include building materials to allow for passive or natural heating and cooling opportunities. The topographic conditions will govern the layout of the condominiums and are oriented in such a way to take advantage of passive/natural heating and cooling opportunities.

Tahoe Area Plan

Policy LU1-3 Finding of Compatibility

The approval of all discretionary permits in the planning area shall include a finding ensuring that compatibility between adjacent uses will be established and maintained through implementation of appropriate design standards.

Staff Comment: The applicant has submitted a site and landscaping plan that demonstrates sufficient buffering and visual screening from adjacent uses. Further, consistency with all standards of Article 220.1 (Tahoe Area Design Standards) will be required as part of the building permit approval process.

Recommendation

After a thorough analysis and review, Tentative Subdivision Map Case Number WTM21-012 is being recommended for approval with conditions. Staff offers the following motion for the Board's consideration.

Motion

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Planning Commission approve Tentative Subdivision Map Case Number WTM21-012 for PALCAP FFIF TAHOE 1, LLC, with the conditions included as Exhibit A to this matter, having made all ten findings in

accordance with Washoe County Code Section 110.608.25 and Tahoe Area Plan Policy LU1-3

Finding of Compatibility:

- (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.

Tahoe Area Plan

Policy LU1-3 Finding of Compatibility

Appeal Process

Planning Commission action will be effective 10 calendar days after the written decision is filed with the Secretary to the Planning Commission, unless the action is appealed to the Washoe County Board of County Commissioners, in which case the outcome of the appeal shall be determined by the Washoe County Board of County Commissioners. Any appeal must be filed in writing with the Planning and Building Division within 10 calendar days from the date the written decision is filed with the Secretary to the Planning Commission and mailed to the applicant.

Applicant: Feldman Thiel, LLP, kara@fimmtahoe.com

Property Owner: PALCAP FFIF TAHOE 1, LLP cbutler@palominocap.com



Conditions of Approval

Tentative Subdivision Map Case Number WTM21-012

The project approved under Tentative Subdivision Map Case Number WTM21-012 shall be carried out in accordance with the conditions of approval granted by the Planning Commission on September 5, 2023. 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 – Courtney Weiche, Senior Planner, 775.328.3608,
cweiche@washoecounty.gov

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this tentative subdivision map.
- b. The applicant shall include a condition response memorandum with each subsequent permit application. That memorandum shall list each condition of approval, shall provide a narrative describing how each condition has been complied with, and the location of the information showing compliance with each condition within the improvement plan set that has been submitted.

- c. The subdivision shall be in substantial conformance with the provisions of Washoe County Development Code Article 220.1, Tahoe Area Design Standards, Article 604, Design Requirements, and Article 608, Tentative Subdivision Maps.
- d. 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.
- e. 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, 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. Per WCC section 110.610.50(b), the date of the signing of the final map by the Director of Planning and Building (formally the Director of Community Development) shall constitute the date of presentation of the final map for purposes of NRS 278.
- f. 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.
- g. All final maps shall contain the applicable portions of the following jurat:

THE TENTATIVE MAP FOR WTM21-012 WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON SEPTEMBER 5, 2023.

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.

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

- h. 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.

- i. 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.

- j. Prior to acceptance of public improvements and release of any financial assurances, the developer shall furnish to Engineering Division a complete set of reproducible as-built construction drawings prepared by a civil engineer registered in the State of Nevada.
- k. The developer shall be required to participate in any applicable General Improvement District or Special Assessment District formed by Washoe County.
- l. The developer shall provide written approval from the U.S. Postal Service 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 on-site improvements.
- l. 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.
- m. Construction activities shall be limited to the hours between 7am to 7pm, Monday through Saturday only. Any construction machinery activity or any noise associated with the construction activity are also limited to these hours.
- n. Prior to any ground disturbing activity, the applicant shall submit a landscaping/architectural design plan to Planning and Building for review and approval. Said plan shall address, but not be limited to: type and color of building materials, general architectural design, parking, parking lot circulation and striping, signage, exterior lighting, fencing, trash enclosures, landscaping material (if plant material: type, size at time of planting, maturation size at full growth, period of time between planting and full growth), landscaping location, landscaping irrigation system, and financial assurances that landscaping will be planted and maintained.
- o. A certification letter or series of letters by a registered landscape architect or other persons permitted to prepare landscaping and irrigation plans pursuant to NRS 623A shall be submitted to and approved by Planning and Building. The letter(s) shall certify that all applicable landscaping provisions of Articles **[220.1, 408, 410 and 412]** of the Development Code have been met. Any landscaping plans and the letter shall be wet-stamped. The letter shall indicate any provisions of the code that the Director of Planning and Building Division has waived.
- p. All landscaping shall be maintained in accordance with the provisions found in Section 110.412.75, Maintenance. A three-year maintenance plan shall be submitted by a licensed landscape architect registered in the State of Nevada to the Planning and Building Division, prior to a Certificate of Occupancy. The plan shall be wet-stamped.
- q. Failure to comply with the conditions of approval shall render this approval null and void.

- r. 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 any common open spaces, as applicable. Provisions shall be made to monitor and maintain, for a period of three (3) years regardless of ownership, a maintenance plan for the common area or common open space area. The maintenance plan for the common area or common open space area 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. All open space identified as common area on the final map shall be privately maintained and perpetually funded by the homeowners' association. The deed to the open space and common area shall reflect perpetual dedication for that purpose. The maintenance of the common areas and related improvements shall be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.
 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 and in compliance with Article 220.1.
 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 Engineering and Capital Projects, which shall be responsible for determining compliance with these conditions.

Contact Name - Robert Wimer, P.E. 775.328.2059, rwimer@washoecounty.gov

Washoe County Engineering and Capital Projects – General Land Development and Grading Standards (County Code 110.438)

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

- 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. 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.
- i. Appropriate easements shall be granted for any existing or new utilities, with each affected final map.
- j. A design level geotechnical investigation with fault study shall be provided with the submittal of each final map.
- k. Cut slopes, fill slopes, and berms shall be setback from parcel lines and access easements in accordance with Washoe County Code Article 438.
- l. Applicant shall indicate on the plans where exported materials will be taken and a grading permit shall be obtained for the import site.

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)

Contact Name: Robert Wimer, P.E. (775) 328-2059

- 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 100-year floodplain boundaries and flood elevations shall appear on each final map. If the floodplain boundary has been conditionally changed by a Federal Emergency Management Agency (FEMA) Conditional Letter of Map Amendment (CLMA) or Conditional Letter of Map Revision (CLOMR), the date of that letter and a note to that effect shall appear on the final map. All grading and construction in these areas shall be in conformance with the Washoe County Code Article 416.
- g. The following note shall be added to each final map; "All properties, regardless of 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."
- h. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage leaving the site.
- i. The Truckee Meadows Regional Storm Water Quality Management Program Construction Permit Submittal Checklist and Inspection Fee shall be submitted with each final map.
- j. 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.
- k. 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.

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

Contact Information: Mitchell Fink, P.E. (775) 328-2050

- 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 from the Nevada Department of Transportation (NDOT), for access to, from or under roads and highways maintained by 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. Proposed landscaping and/or fencing along street rights-of-way and within median islands shall be designed to meet American Association of State Highway and Transportation Officials (AASHTO) sight distances and safety guidelines. No tree shall overhang the curb line of any public street.
- e. An Encroachment and Excavation Permit shall be obtained from Washoe County Engineering and Capital Projects Division for any utilities or other encroachments/excavations constructed within existing County roadways/rights-of-way.
- f. Streetlights shall be constructed to Washoe County standards at locations to be determined at the final design stage.
- 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. 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.
- i. Adequate snow storage easements shall be identified on the final plat.
- j. If the Engineering and Capital Projects Division does not inspect the subdivision improvements, prior to release of any financial assurances for the private improvements, the development shall provide the Engineering and Capital Projects Division with a letter prepared by a civil engineer licensed in the State of Nevada, certifying that the private improvements have been constructed in accordance with the approved plans.

Incline Village Improvement District

3. The following conditions are requirements of Utilities, which shall be responsible for determining compliance with these conditions.

Contact Name – Tim Buxton, IVGID Chief Inspector, 775.832.1246, tlb@ivgid.org

- a. The project will require a Washoe County Building Construction Permit as it will provide potential impact to our existing IVGID Water, Wastewater, Trash and Recreational Ordinances. IVGID will require the submittal of a utility plans signed and wet stamped by a Nevada Licensed Engineer for all water, wastewater and trash services. The "IVGID Board of Trustee" must approve all utilities in which IVGID would supply to this recognized project.

Washoe County Health District

4. 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 – James English, EHS Supervisor, jenglish@washoecounty.gov

- a. Prior to any final grading or other civil site improvements, a complete water system plan and Water Project submittal for the referenced proposal must be submitted to the WCHD. The plan must show that the water system will conform to the State of Nevada Design,

Construction, Operation and Maintenance Regulations for Public Water Systems, NAC Chapter 445A, and the State of Nevada Regulations Governing Review of Plans for Subdivisions, Condominiums, and Planned Unit Developments, NAC 278.400 and 278.410.

- a. The application for a Water Project shall conform to the requirements of NAC 445A.66695.
- b. Two copies of complete construction plans are required for review. All plans must include an overall site plan, additional phases that will eventually be built to indicate that the water system will be looped, all proposed final grading, utilities, and improvements for the proposed application.
 - i. Water Projects must be submitted directly to WCHD for review.
 - ii. Review of the Water Project may be concurrent with other reviews.
- b. Mass grading may proceed after approval of the Tentative Map and after a favorable review by the WCHD of a grading permit application.
 - a. The final map submittal shall include the Permitted Public Water System annexation and discovery with the mass grading permit.
- c. Improvement plans for the water system may be constructed prior to final map submittal only after Water Project approval by the WCHD.
 - a. For improvement plans approved prior to final map submittal, the Developer shall provide certification by the Professional Engineer of record that the improvement plans were not altered subsequent to final map submittal.
 - b. Any changes to previously approved improvement plans made prior to final map submittal shall be resubmitted to the WCHD for approval per NAC 278.290 and NAC 445A.66715.
- d. Construction plans for the development must be submitted to the WCHD for approval. The construction drawings must conform to the State of Nevada Regulations Concerning Review of Plans for Subdivisions, Condominiums and Planned Unit Developments, and any applicable requirements of the WCHD.
- e. Prior to approval of a final map for the referenced project and pursuant to NAC 278.370, the developer must have the design engineer or a third person submit to the satisfaction the WCHD an inspection plan for periodic inspection of the construction of the systems for water supply and community sewerage. The inspection plan must address the following and be included with the final map submittal:
 - a. The inspection plan must indicate if an authorized agency, city or county is performing inspection of the construction of the systems for water supply and community sewerage;
 - b. The design engineer or third person shall, pursuant to the approved inspection plan, periodically certify in writing to the WCHD that the improvements are being installed in accordance with the approved plans and recognized practices of the trade;
 - c. The developer must bear the cost of the inspections; and
 - d. The developer may select a third-person inspector but the selection must be approved by the WCHD or local agency. A third-person inspector must be a disinterested person who is not an employee of the developer.
- f. Prior to final map approval, a "Commitment for Service" letter from the sewage purveyor committing sewer service for the entire proposed development shall be submitted to the WCHD. The letter must indicate that the community facility for treatment will not be caused

to exceed its capacity and the discharge permit requirements by this added service, or the facility will be expanded to provide for the added service.

- a. A copy of this letter must be included with the final map submittal.
- g. Prior to final map approval, a “Commitment for Water Service” letter from the water purveyor committing adequate water service for the entire proposed development must be submitted to the WCHD.
 - a. A copy of this letter must be included with the final map submittal.
- h. The final map submittal must include a letter from Nevada Division of Environmental Protection to the WCHD certifying their approval of the final map.
- i. The final map application packet must include a letter from Division of Water Resources certifying their approval of the final map.
- j. Pursuant to NAC 278.360 of the State of Nevada Regulations Governing Review of plans for Subdivision, Condominiums, and Planned Unit Developments, the development of the subdivision must be carried on in a manner which will minimize water pollution.
 - a. Construction plans shall clearly show how the subdivision will comply with NAC 278.360.
- k. Prior to approval of the final map, the applicant must submit to the WCHD the final map fee.
- l. All grading and development activities must be in compliance with the DBOH Regulations Governing the Prevention of Vector-Borne Diseases.

Washoe County Water Rights Coordinator

5. The following conditions are requirements of Utilities, which shall be responsible for determining compliance with these conditions.

Contact Name – Timber Weiss, PE | Professional Engineer, 775.954.4626, tweiss@washoecounty.gov

- a. There are no water rights conditions for approval of this tentative map. Following the possible approval of the tentative subdivision map, the potential future project will require water supply and sewer service which in turn will require the expansion of water and sewer services.
- b. Valid water and sewer will serve letters will be required prior to approval of the final map proposed by this tentative map.

Nevada Department of Transportation

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

Contact Name – Jeff Graham – Traffic Engineer, 775.834.8382,

- c. All work proposed within or adjacent to the SR28 right of way will require an encroachment permit and must comply with NDOT’s Standard Plans, Access Management System and Standards, Terms and Conditions Relating to Right-of-Way Occupancy Permits, and the Drainage Manual current version at the time of application. Please contact the NDOT District II Permits Office at (775) 834-8330 for information about obtaining NDOT occupancy permits.

- d. The proposed construction entrance onto SR28 on page C2 in the Demo Plan cannot impede pedestrian and vehicular traffic. This will be further evaluated at a later date.
- e. Since the site is located directly adjacent to SR 28 and has the potential to effect area drainage patterns, the applicant shall obtain an occupancy permit from NDOT for the drainage encroachment.
- f. NDOT's letter does not provide for approval or disapproval of any improvements proposed by the project. NDOT review, during the occupancy permit process, may result in modification to the proposed improvements or denial.
- g. The State defers to municipal government for land use development decisions. Public involvement for community development related improvements within NDOT right of way should be considered during the municipal land use development process. Significant improvements proposed within NDOT right of way may require additional public involvement. It is the responsibility of the applicant to perform such additional public involvement.

*** End of Conditions ***

Date: July 27, 2023

To: Courtney Weiche, Senior Planner

From: Janelle K. Thomas, P.E., Senior Licensed Engineer
Robert Wimer, P.E., Licensed Engineer

Re: **947 Tahoe Condominium TM21-012** (2 Lots)

GENERAL PROJECT DISCUSSION

Washoe County Engineering staff has reviewed the above referenced application. The proposed project consists of a 40-unit condominium subdivision and is located on approximately 2 acres at the southwest corner of the intersection of Tahoe Boulevard and Southwood Boulevard. The parcel numbers include the following: 132-231-09 and 132-231-10. The parcels will be legally merged, and the 40 residential units will be subdivided into 40 airspace condominiums with a common area parcel. The Engineering and Capital Projects Division recommends approval subject to the following comments and conditions of approval, which supplement applicable County Code and are based upon our review of the site and the tentative map application prepared by NCE.

Sanitary sewer service will not be provided by Washoe County.

For questions related to sections below, please contact the staff's name referenced.

[Washoe County Engineering and Capital Projects – General Land Development and Grading Standards \(County Code 110.438\)](#)

1. 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
 - 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. 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.
- i. Appropriate easements shall be granted for any existing or new utilities, with each affected final map.
- j. A design level geotechnical investigation with fault study shall be provided with the submittal of each final map.
- k. Cut slopes, fill slopes, and berms shall be setback from parcel lines and access easements in accordance with Washoe County Code Article 438.
- l. Applicant shall indicate on the plans where exported materials will be taken and a grading permit shall be obtained for the import site.

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)

- 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
 - 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 100-year floodplain boundaries and flood elevations shall appear on each final map. If the floodplain boundary has been conditionally changed by a Federal Emergency

Management Agency (FEMA) Conditional Letter of Map Amendment (CLMA) or Conditional Letter of Map Revision (CLOMR), the date of that letter and a note to that effect shall appear on the final map. All grading and construction in these areas shall be in conformance with the Washoe County Code Article 416.

- g. The following note shall be added to each final map; "All properties, regardless of 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."
- h. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage leaving the site.
- i. The Truckee Meadows Regional Storm Water Quality Management Program Construction Permit Submittal Checklist and Inspection Fee shall be submitted with each final map.
- j. 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.
- k. 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.

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

- 3. 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 Information: Mitchell Fink, P.E. (775) 328-2050

- 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 from the Nevada Department of Transportation (NDOT), for access to, from or under roads and highways maintained by 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. Proposed landscaping and/or fencing along street rights-of-way and within median islands shall be designed to meet American Association of State Highway and Transportation Officials (AASHTO) sight distances and safety guidelines. No tree shall overhang the curb line of any public street.
- e. An Encroachment and Excavation Permit shall be obtained from Washoe County Engineering and Capital Projects Division for any utilities or other encroachments/excavations constructed within existing County roadways/rights-of-way.

- f. Streetlights shall be constructed to Washoe County standards at locations to be determined at the final design stage.
- 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. 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.
- i. Adequate snow storage easements shall be identified on the final plat.
- j. If the Engineering and Capital Projects Division does not inspect the subdivision improvements, prior to release of any financial assurances for the private improvements, the development shall provide the Engineering and Capital Projects Division with a letter prepared by a civil engineer licensed in the State of Nevada, certifying that the private improvements have been constructed in accordance with the approved plans.

From: [Roman, Brandon](#)
To: [Weiche, Courtney](#)
Subject: FW: [EXTERNAL] April Agency Review Memo I
Date: Wednesday, April 19, 2023 10:19:20 AM
Attachments: [image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)

Not sure if I forwarded this to you yet. Just in case here you go.

From: Chisholm, Kyle W <Kyle.Chisholm@WashoeSchools.net>
Sent: Monday, April 17, 2023 8:24 AM
To: Roman, Brandon <BRoman@washoecounty.gov>; Rodela, Brett A <Brett.Rodela@WashoeSchools.net>
Subject: RE: [EXTERNAL] April Agency Review Memo I

[NOTICE: This message originated outside of Washoe County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Hi Brandon,

We don't have comments on any of these cases at this time.

Regards,

Kyle Chisholm

School Property Planning Manager
Washoe County School District, Capital Projects
Office: (775) 789-3810
Email: Kyle.Chisholm@WashoeSchools.Net



From: Roman, Brandon <BRoman@washoecounty.gov>
Sent: Friday, April 14, 2023 3:11 PM
To: Rodela, Brett A <Brett.Rodela@WashoeSchools.net>; Chisholm, Kyle W <Kyle.Chisholm@WashoeSchools.net>
Subject: [EXTERNAL] April Agency Review Memo I

Good afternoon,

Please find the attached **Agency Review Memo I** with cases received in **April** by Washoe County Community Services Department, Planning and Building Division. You've been asked to review the application for **Item #3**. The item description and link to the application are provided in the memo. **Comments are due by April 27, 2023.**

Please remember to send agency review responses/comments directly to the Planner for the case, rather than replying to me.

Sincerely,

From: [Rodela, Brett A](#)
To: [Weiche, Courtney](#)
Cc: [Freund, Sandy](#); [Baxley, Randy](#); [Golden, Teresa](#)
Subject: Development Review: WTM21-012 (Tahoe Condo)
Date: Monday, December 20, 2021 10:35:01 AM
Attachments: [Washoe County School District Facilities Plan 2020-2039.pdf](#)

[**NOTICE:** This message originated outside of Washoe County -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Hello Ms./Mrs. Weiche,

Tahoe Condo proposing a 40-unit condominium project is zoned for Incline Elementary, Incline Middle, and Incline High Schools. The project is calculated to generate 0 students at each grade level.

The following table outlines current and future-projected student enrollment capacity percentages for each school:

School	2021/22	2026/27	2031/32
Incline ES	40%	38%	42%
Incline MS	44%	40%	45%
Incline HS	40%	38%	42%

The school district anticipates no conflicts with the ability to accommodate any students possibly generated by this project.

For further information as to the school district’s facilities plans through 2039, please feel free to refer to the attached facilities plan that has been approved for conformance with the Truckee Meadows Regional Planning Agency’s 20 Year Plan.

Thank you for the opportunity to comment. Please reply any further questions and/or comments pertaining to **WTM21-012 (Tahoe Condo)**.

Brett A. Rodela

GIS Analyst

Washoe County School District, Capital Projects

Office: (775) 325-8303 | Cell: (775) 250-7762



From: [GORDON, BRYSON](#)
To: [Weiche, Courtney](#)
Cc: [COOPER, CLIFFORD E](#)
Subject: May Agency Review Memo II - item#5
Date: Tuesday, May 16, 2023 8:10:11 AM

[**NOTICE:** This message originated outside of Washoe County -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Hello Courtney,

AT&T has no adverse comments or concerns with **Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominium) Revision.**

Thank you,

Bryson Gordon
MGR OSP PLNG & ENGRG DESIGN
AT&T NEVADA ROW
Office: 775-683-5223
Cell: 775-343-6655
E-mail: bg1853@att.com

From: [Program, EMS](#)
To: [Weiche, Courtney](#)
Cc: [Program, EMS](#)
Subject: FW: July Agency Review Memo I
Date: Friday, July 21, 2023 12:05:08 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[July Agency Review Memo I.pdf](#)
[image006.png](#)

Hello,

The EMS Program has reviewed the July Agency Review Memo I - Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominium) Revision – and has no concerns or questions at this time based on the information provided.

Thank you,

Sabrina.

Sabrina Brasuell

Pronouns: she/her

Office hours: 7:00AM – 3:30PM Remote on Mondays

EMS Coordinator | Epidemiology and Public Health Preparedness

Washoe County Health District

sbrasuell@washoecounty.gov | Cell: (775) 830-7118 | Office: (775) 326-6043

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



Please take our customer satisfaction survey by clicking [here](#)

From: Roman, Brandon <BRoman@washoecounty.gov>

Sent: Tuesday, July 18, 2023 9:57 AM

To: Green, Jim D. <JDGreen@washoecounty.gov>; Crump, Eric S <ECrump@washoecounty.gov>; Pekar, Faye-Marie L. <FPekar@washoecounty.gov>; Mayorga, Alexander R.

<AMayorga@washoecounty.gov>; Rosa, Genine <GRosa@washoecounty.gov>; Restori, Joshua <JRestori@washoecounty.gov>; Weiss, Timber A. <TWeiss@washoecounty.gov>; Zirkle, Brandon

<BZirkle@washoecounty.gov>; Beard, Blaine <BBeard@washoecounty.gov>; English, James

<JEnglish@washoecounty.gov>; Rubio, Wesley S <WRubio@washoecounty.gov>; Kelly, David A

<DAKelly@washoecounty.gov>; Program, EMS <EMSProgram@washoecounty.gov>; Wimer, Robert

<RWimer@washoecounty.gov>; WRWC <WRWC@washoecounty.gov>; Fink, Mitchell

<MFink@washoecounty.gov>; Handrock, Wayne <WHandrock@washoecounty.gov>; Philumalee,

Matthew <MPhilumalee@washoecounty.gov>

Cc: Gustafson, Jennifer <jgustafson@da.washoecounty.gov>; Smith, Dwayne E.

From: [John James](#)
To: [Weiche, Courtney](#)
Subject: 5. Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominium) Revision
Date: Tuesday, July 18, 2023 10:31:22 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[July Agency Review Memo I.pdf](#)

[**NOTICE:** This message originated outside of Washoe County -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Hello Courtney,

Item 5. Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominium) Revision –

NLTFPD is aware of this project and has had conversations with the design professionals about Fire Apparatus access and this element appears to be reflected in this package. NLTFPD will review it for code compliance at the time of formal submittal.

Sincerely,



John James
Fire Marshal
Office: [775.831.0351](tel:775.831.0351) x8131 | Cell: [775.413.9344](tel:775.413.9344)
Email: jjames@nltfpd.net
[866 Oriole Way | Incline Village | NV 89451](#)



From: Roman, Brandon <BRoman@washoecounty.gov>
Sent: Tuesday, July 18, 2023 9:19 AM
To: Jennifer Donohue <JDonohue@nltfpd.net>; Ryan Sommers <RSommers@nltfpd.net>; John James <jjames@nltfpd.net>
Subject: July Agency Review Memo I

Good morning,

Please remember to send agency review responses/comments directly to the Planner for the case, rather than replying to me.

Please find the attached **Agency Review Memo I** with cases received in **July** by Washoe County Community Services Department, Planning and Building Division. You've been asked to review the application for **Item #5** The item description and link to the application are provided in the memo. **Comments are due by July 27, 2023.**

Date	5-24-23
Attention	Courtney Weiche
Re	WTM21-012 (947 Tahoe Condominium) Revision
APN	132-231-10 and 132-231-09
Service Address	941 and 947 Tahoe Boulevard
Owner	PALCAP FFIF TAHOE 1, LLC

Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominium) Revision - For hearing, discussion and possible action to approve subdivision of a new 40-unit residential condominium project, with 925 square feet of "Professional Offices" space on an approximately two-acre site located at 941 and 947 Tahoe Blvd in Incline Village. The project area is comprised of two parcels: APN 132-231-09 is approximately 1.389 acres in size and APN 132-231-10 is approximately 0.598 acre in size. The parcels will be legally merged, and the 40 residential units will be subdivided into 40 airspace condominiums with a common area parcel.

- Applicant: Feldman Thiel, LLP
- Property Owner: PALCAP FFIF TAHOE 1, LLC
- Location: 941 and 947 Tahoe Boulevard (SR 28)
- Assessor's Parcel Number(s): 132-231-10 and 132-231-09
- Parcel Sizes: 132-231-10: 1.389 ac and 132-231-209 .598 ac
- Master Plan Category: Incline Village Commercial
- Regulatory Zone: Incline Village Commercial
- Area Plan: Tahoe Area
- Development Code: Authorized in Article 220 Tahoe Area and Article 810, Special Use Permits
- Commission District: 1 – Commissioner Hill
- Staff: Courtney Weiche, Sr. Planner
Washoe County Community Services Department
Planning and Building Division
- Phone: 775-328-3608
- E-mail: cweiche@washoecounty.gov

IVGID Comments: IVGID recognizes this project as a residential project. This project will require a Washoe County Building Construction Permit as it will provide potential impact to our existing IVGID Water, Wastewater, Trash and Recreational Ordinances. IVGID will require the submittal of a utility plans signed and wet stamped by a Nevada Licensed Engineer for all water, wastewater and trash services. The "IVGID Board of Trustee" must approve all utilities in which IVGID would supply to this recognized project.



JOE LOMBARDO
Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
310 Galletti Way
Sparks, Nevada 89431

TRACY LARKIN THOMASON, P.E.
Director

July 25, 2023

Washoe County Planning Division
1001 E. 9th St,
Reno, NV 89512
Attention: Courtney Weiche – Senior Planner

SENT VIA ELECTRONIC MAIL

RE: 947 Tahoe Condominium - **Case Number WTM21-012**

Dear Mrs. Weiche,

Nevada Department of Transportation (NDOT) District II staff has reviewed the application received via e-mail on July 18th, 2023 and provides comments accordingly.

947 Tahoe Condominium Development - A request has been made for **hearing, discussion and possible action to approve** subdivision of a new 40-unit residential condominium project, with 925 square feet of “Professional Offices” space on an approximately two-acre site located at 941 and 947 Tahoe Blvd in Incline Village. The project area is comprised of two parcels: APN 132-231-09 is approximately 1.389 acres in size and APN 132-231-10 is approximately 0.598 acre in size. The parcels will be legally merged and the 40 residential units will be subdivided into 40 airspace condominiums with a common area parcel.

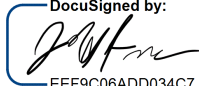
NDOT comments:

1. All work proposed within or adjacent to the SR28 right of way will require an encroachment permit and must comply with NDOT’s Standard Plans, Access Management System and Standards, Terms and Conditions Relating to Right-of-Way Occupancy Permits, and the Drainage Manual current version at the time of application. Please contact the NDOT District II Permits Office at (775) 834-8330 for information about obtaining NDOT occupancy permits
2. The proposed construction entrance onto SR28 on page C2 in the Demo Plan cannot impede pedestrian and vehicular traffic. This will be further evaluated at a later date.
3. Since the site is located directly adjacent to SR 28 and has the potential to effect area drainage patterns, the applicant should be required to obtain an occupancy permit from NDOT for the drainage encroachment.

4. This letter does not provide for approval or disapproval of any improvements proposed by the project. NDOT review during the occupancy permit process may result in modification to the proposed improvements or denial.
5. The State defers to municipal government for land use development decisions. Public involvement for community development related improvements within NDOT right of way should be considered during the municipal land use development process. Significant improvements proposed within NDOT right of way may require additional public involvement. It is the responsibility of the applicant to perform such additional public involvement.

Thank you for the opportunity to review this application. NDOT reserves the right to incorporate further changes and/or comments as these applications and design reviews progress. Should you have any questions, please contact Jeff Graham at (775) 834-8382.

Sincerely,

DocuSigned by:

EEF9C06ADD034C7...

Jeff Freeman, PE
Engineering Services Manager
District II

JF:ms

Cc: Sondra Rosenberg – Assistant Director, Planning
Mike Fuess, PE, PTOE – NDOT District Engineer
Jeff Graham – Traffic Engineer
District II Traffic Engineering Distribution List
Washoe County Planning Division
File

From: [Pekar, Faye-Marie L.](#)
To: [Weiche, Courtney](#)
Subject: May Agency Review Memo II WMPA23-0005 and WRZA23-0007 (3180 Makayla Way)
Date: Tuesday, May 30, 2023 10:27:35 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Good Morning Courtney,

I have reviewed WMPA23-0005 and WRZA23-0007 (3180 Makayla Way) and do not have any comments from Parks.

Thank you,



Faye-Marie L. Pekar, MPA
Park Planner, Planning & Building Division | Community Services Department
fpekar@washoecounty.gov |

Visit us first online: www.washoecounty.gov/csd
Planning Division: 775.328.6100 | Planning@washoecounty.gov
CSD Office Hours: Monday-Friday 8:00am to 4:00pm
1001 East Ninth Street, Reno, NV 89512



Have some kudos to share about a Community Services Department employee or experience?
Submit a nomination for a Washoe Star by clicking this link: [WASHOE STAR](#)

From: [Thomsen, Richard](#)
To: [Weiche, Courtney](#)
Subject: Name: 947 Tahoe Condominium
Date: Wednesday, May 24, 2023 12:43:11 PM
Attachments: [Outlook-nerm1oq4.png](#)
[Outlook-0epqspej.png](#)
[Outlook-3a342egh.png](#)
[Outlook-sqkhp1a.png](#)
[Outlook-wokyoj.png](#)

Courtney,

I reviewed the May Agency Memo II for Item #5 947 Tahoe Blvd, Roads has no conditions or or concerns.

Thank you



Rich Thomsen
Road Supervisor | Community Services Department
rthomsen@washoecounty.gov | Office: 775.328.2180
625 Mt. Rose Highway Incline Village NV 89451



Sent from [Mail](#) for Windows



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

October 26, 2021

FR: Chrono/PL 181-21

Ms. Courtney Weiche, Senior Planner
Community Services Department
Washoe County
PO Box 11130
Reno, NV 89520

Dear Ms. Weiche,

RE: WSUP21-0029 (Tahoe Condominium)

The Regional Transportation Commission (RTC) has received a request to approve development of 40 new residential condominiums on two (2) parcels totaling approximately 2 acres. This project is located at 941 and 947 Tahoe Boulevard (SR 28).

Tahoe Truckee Area Regional Transit currently serves this location. Please contact Will Garner at wgarner@placer.ca.gov, for possible transit improvements.

Please ask the developer to contact Scott Miklos, Trip Reduction Analyst, at 775-335-1920 or smiklos@rtcwashoe.com, to discuss implementing a Smart Trips Program. This program is beneficial as it educates residents on alternatives to driving alone, which will help reduce traffic congestion and pollution.

The RTP, RTC Bicycle/Pedestrian Master Plan and the Nevada Department of Transportation Pedestrian Safety Action Plan, all indicate that new development and re-development will be encouraged to construct pedestrian and bicycle facilities, internal and/or adjacent to the development, within the regional road system. In addition, these plans recommend that the applicant be required to design and construct any sidewalks along the frontage of the property in conformance with the stated ADA specifications.

Thank you for the opportunity to comment on this application. Please feel free to contact me at 775-332-0174 or email me at rkapuler@rtcwashoe.com if, you have any questions or comments.

Sincerely,

Rebecca Kapuler
Senior Planner

CC: Dale Keller, Regional Transportation Commission
Blaine Petersen, Regional Transportation Commission,
Sara Going, Regional Transportation Commission
Tina Wu, Regional Transportation Commission
Andrew Jankayura, Regional Transportation Commission
Scott Miklos, Regional Transportation Commission

/ Tahoe Condominium

From: [Roman, Brandon](#)
To: [Weiche, Courtney](#)
Subject: FW: [EXTERNAL] April Agency Review Memo I
Date: Wednesday, April 19, 2023 10:19:20 AM
Attachments: [image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)

Not sure if I forwarded this to you yet. Just in case here you go.

From: Chisholm, Kyle W <Kyle.Chisholm@WashoeSchools.net>
Sent: Monday, April 17, 2023 8:24 AM
To: Roman, Brandon <BRoman@washoecounty.gov>; Rodela, Brett A <Brett.Rodela@WashoeSchools.net>
Subject: RE: [EXTERNAL] April Agency Review Memo I

[NOTICE: This message originated outside of Washoe County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Hi Brandon,

We don't have comments on any of these cases at this time.

Regards,

Kyle Chisholm

School Property Planning Manager
Washoe County School District, Capital Projects
Office: (775) 789-3810
Email: Kyle.Chisholm@WashoeSchools.Net



From: Roman, Brandon <BRoman@washoecounty.gov>
Sent: Friday, April 14, 2023 3:11 PM
To: Rodela, Brett A <Brett.Rodela@WashoeSchools.net>; Chisholm, Kyle W <Kyle.Chisholm@WashoeSchools.net>
Subject: [EXTERNAL] April Agency Review Memo I

Good afternoon,

Please find the attached **Agency Review Memo I** with cases received in **April** by Washoe County Community Services Department, Planning and Building Division. You've been asked to review the application for **Item #3**. The item description and link to the application are provided in the memo. **Comments are due by April 27, 2023.**

Please remember to send agency review responses/comments directly to the Planner for the case, rather than replying to me.

Sincerely,



WASHOE COUNTY

COMMUNITY SERVICES

INTEGRITY COMMUNICATION SERVICE

1001 E. 9th St.
Reno, Nevada 89520-0027
Phone: (775) 328-3600
Fax: (775) 328-3699

July 27, 2023

TO: Courtney Weiche, Senior Planner, CSD, Planning & Development Division

FROM: Timber Weiss, Licensed Engineer, CSD

SUBJECT: Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominiums) Revised

Project description:

For hearing, discussion and possible action, to approve a tentative subdivision map to allow the development of 40 new residential condominiums Description: on an approximately two-acre site comprised of two legal lots of record.

Project located at 941 and 947 Tahoe Boulevard, also known as SR 28.
Assessor's Parcel Number(s): 132-231-09 and 132-231-10.

The Community Services Department (CSD) recommends approval of this project with the following Water Rights comments & conditions:

Comments:

The application indicates that Municipal water service will be provided by the Incline Village General Improvement District (IVGID). The application indicates that a discovery process with IVGID is ongoing.

Conditions:

There are no water rights conditions for approval of this tentative map. Following the possible approval of the tentative subdivision map, the potential future project will require water supply and sewer service which in turn will require the expansion of water and sewer services.

Valid water and sewer will serve letters will be required prior to approval of the final map proposed by this tentative map.



WASHOE COUNTY
COMMUNITY SERVICES
INTEGRITY COMMUNICATION SERVICE

1001 E. 9th St.
Reno, Nevada 89512
Phone: (775) 328-3600
Fax: (775) 328-3699

May 24, 2023

TO: Courtney Weiche, Senior Planner, CSD, Planning & Development Division

FROM: Timber Weiss, Licensed Engineer, CSD

SUBJECT: Tentative Subdivision Map Case Number WTM21-012 (947 Tahoe Condominiums)

Project description:

For hearing, discussion and possible action, to approve subdivision of a new 40-unit residential condominium project, with 925 square feet of “Professional Offices” space on an approximately two-acre site located at 941 and 947 Tahoe Blvd in Incline Village. The project area is comprised of two parcels: APN 132-231-09 is approximately 1.389 acres in size and APN 132-231-10 is approximately 0.598 acre in size. The parcels will be legally merged, and the 40 residential units will be subdivided into 40 airspace condominiums with a common area parcel.

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Assessor’s Parcel Number(s): 132-231-09 and 132-231-10.

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Comments:

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WASHOE COUNTY
COMMUNITY SERVICES
INTEGRITY COMMUNICATION SERVICE

1001 E. 9th St.
Reno, Nevada 89512
Phone: (775) 328-3600
Fax: (775) 328-3699

Valid water and sewer will serve letters will be required prior to approval of the final map proposed by this tentative map.



WWW.WASHOECOUNTY.US

April 27, 2023

Washoe County Community Services
Planning and Development Division

RE: 947 Tahoe Condominium; 132-231-09 & 10
Tentative Subdivision Map; WTM21-012

Dear Washoe County Planning Staff:

The Washoe County Health District, Environmental Health Services Division (WCHD) has reviewed the above referenced project. Approval by the WCHD is subject to the following conditions:

Tentative Map Review and Final Map Conditions per NAC 278

The WCHD requires the following conditions to be completed prior to review and approval of any final map:

1. Prior to any final grading or other civil site improvements, a complete water system plan and Water Project submittal for the referenced proposal must be submitted to the WCHD. The plan must show that the water system will conform to the State of Nevada Design, Construction, Operation and Maintenance Regulations for Public Water Systems, NAC Chapter 445A, and the State of Nevada Regulations Governing Review of Plans for Subdivisions, Condominiums, and Planned Unit Developments, NAC 278.400 and 278.410.
 - a. The application for a Water Project shall conform to the requirements of NAC 445A.66695.
 - b. Two copies of complete construction plans are required for review. All plans must include an overall site plan, additional phases that will eventually be built to indicate that the water system will be looped, all proposed final grading, utilities, and improvements for the proposed application.
 - i. Water Projects must be submitted directly to WCHD for review.
 - ii. Review of the Water Project may be concurrent with other reviews.
2. Mass grading may proceed after approval of the Tentative Map and after a favorable review by the WCHD of a grading permit application.
 - a. The final map submittal shall include the Permitted Public Water System annexation and discovery with the mass grading permit.
3. Improvement plans for the water system may be constructed prior to final map submittal only after Water Project approval by the WCHD.
 - a. For improvement plans approved prior to final map submittal, the Developer shall provide certification by the Professional Engineer of record that the improvement plans were not altered subsequent to final map submittal.
 - b. Any changes to previously approved improvement plans made prior to final map submittal shall be resubmitted to the WCHD for approval per NAC 278.290 and NAC 445A.66715.

The WCHD requires the following to be submitted with the final map application for review and approval:

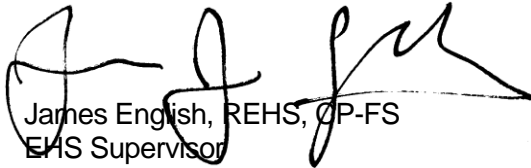


1. Construction plans for the development must be submitted to the WCHD for approval. The construction drawings must conform to the State of Nevada Regulations Concerning Review of Plans for Subdivisions, Condominiums and Planned Unit Developments, and any applicable requirements of the WCHD.
2. Prior to approval of a final map for the referenced project and pursuant to NAC 278.370, the developer must have the design engineer or a third person submit to the satisfaction the WCHD an inspection plan for periodic inspection of the construction of the systems for water supply and community sewerage. The inspection plan must address the following and be included with the final map submittal:
 - a. The inspection plan must indicate if an authorized agency, city or county is performing inspection of the construction of the systems for water supply and community sewerage;
 - b. The design engineer or third person shall, pursuant to the approved inspection plan, periodically certify in writing to the WCHD that the improvements are being installed in accordance with the approved plans and recognized practices of the trade;
 - c. The developer must bear the cost of the inspections; and
 - d. The developer may select a third-person inspector but the selection must be approved by the WCHD or local agency. A third-person inspector must be a disinterested person who is not an employee of the developer.
3. Prior to final map approval, a "Commitment for Service" letter from the sewage purveyor committing sewer service for the entire proposed development shall be submitted to the WCHD. The letter must indicate that the community facility for treatment will not be caused to exceed its capacity and the discharge permit requirements by this added service, or the facility will be expanded to provide for the added service.
 - a. A copy of this letter must be included with the final map submittal.
4. Prior to final map approval, a "Commitment for Water Service" letter from the water purveyor committing adequate water service for the entire proposed development must be submitted to the WCHD.
 - a. A copy of this letter must be included with the final map submittal.
5. The final map submittal must include a letter from Nevada Division of Environmental Protection to the WCHD certifying their approval of the final map.
6. The final map application packet must include a letter from Division of Water Resources certifying their approval of the final map.
7. Pursuant to NAC 278.360 of the State of Nevada Regulations Governing Review of plans for Subdivision, Condominiums, and Planned Unit Developments, the development of the subdivision must be carried on in a manner which will minimize water pollution.
 - a. Construction plans shall clearly show how the subdivision will comply with NAC 278.360.
8. Prior to approval of the final map, the applicant must submit to the WCHD the final map fee.
9. All grading and development activities must be in compliance with the DBOH Regulations Governing the Prevention of Vector-Borne Diseases.

April 27, 2023
947 Condominium Revision; 132-231-09 & 10
Tentative Map; WTM21-012
Page 3

If you have any questions or would like clarification regarding the foregoing, please contact Jim English, EHS Supervisor at jenglish@washoecounty.us regarding all Health District comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'James English', written over a horizontal line.

James English, REHS, CP-FS
EHS Supervisor
Environmental Health Services
Washoe County Health District

From: [English, James](#)
To: [Weiche, Courtney](#)
Subject: WTMP21-012
Date: Monday, July 31, 2023 11:34:56 AM

Hi Courtney,

WCHD EHS has reviewed the revision to the above referenced tentative map, our existing comments do not change.

Just wanted to let you know. I listed a comment to that effect in Accela.

Thanks,
Jim

James English, REHS, CP-FS

Environmental Health Specialist Supervisor | Environmental Health Services | Washoe County Health District
jenglish@washoecounty.gov | (775) 328-2434 | 1001 E. Ninth St., Bldg. B, Reno, NV 89512



WashoeEats.com

Questions about COVID-19 Vaccines in Washoe County? Visit our website at Covid19Washoe.com for information.

From: [Beard, Blaine](#)
To: [Weiche, Courtney](#)
Cc: [Zirkle, Brandon](#)
Subject: FW: July Agency Review Memo I
Date: Tuesday, July 18, 2023 10:05:16 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[July Agency Review Memo I.pdf](#)
[image006.gif](#)

Good morning,

Regarding items #3 and #5, WCSO has no recommendations and or further comment.

Thank you and have a great day!

Blaine

Blaine Beard, Captain

Patrol Division – Incline Village

625 Mount Rose Highway, Incline Village, NV 89451

Desk: 775-832-4114

Personal Cell: 775-722-5580

Email: bbeard@washoecounty.gov

Web: www.WashoeSheriff.com

From: Roman, Brandon <BRoman@washoecounty.gov>

Sent: Tuesday, July 18, 2023 9:57 AM

To: Green, Jim D. <JDGreen@washoecounty.gov>; Crump, Eric S <ECrump@washoecounty.gov>; Pekar, Faye-Marie L. <FPekar@washoecounty.gov>; Mayorga, Alexander R.

<AMayorga@washoecounty.gov>; Rosa, Genine <GRosa@washoecounty.gov>; Restori, Joshua <JRestori@washoecounty.gov>; Weiss, Timber A. <TWeiss@washoecounty.gov>; Zirkle, Brandon

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<JEnglish@washoecounty.gov>; Rubio, Wesley S <WRubio@washoecounty.gov>; Kelly, David A

<DAKelly@washoecounty.gov>; Program, EMS <EMSProgram@washoecounty.gov>; Wimer, Robert

<RWimer@washoecounty.gov>; WRWC <WRWC@washoecounty.gov>; Fink, Mitchell

<MFink@washoecounty.gov>; Handrock, Wayne <WHandrock@washoecounty.gov>; Philumalee, Matthew <MPhilumalee@washoecounty.gov>

Cc: Gustafson, Jennifer <jgustafson@da.washoecounty.gov>; Smith, Dwayne E.

<DESmith@washoecounty.gov>; Hein, Stephen <SHein@washoecounty.gov>; EHS Plan Review

<EHSPlanReview@washoecounty.gov>; West, Walt <WWest@washoecounty.gov>; Mullin, Kelly D.

<KMullin@washoecounty.gov>; Lloyd, Trevor <TLloyd@washoecounty.gov>; Thomas, Janelle K.

<JKThomas@washoecounty.gov>; Albarran, Adriana <AAlbarran@washoecounty.gov>; Emerson,

Kathy <KEmerson@washoecounty.gov>; Stark, Katherine <KRStark@washoecounty.gov>; Weiche,

Courtney <CWeiche@washoecounty.gov>; Olander, Julee <JOlander@washoecounty.gov>

Public Notice

Washoe County Code requires that public notification for a special use permit must be mailed to a minimum of 30 separate property owners within a minimum 500-foot radius of the subject property a minimum of 10 days prior to the public hearing date. A notice setting forth the time, place, purpose of hearing, a description of the request and the land involved was sent within a 500-foot radius of the subject property. A total of 58 separate property owners were noticed a minimum of 10 days prior to the public hearing date.



Public Notice Map

Case Number WTM21-012

NINE ⁴⁷ COMMUNITY MEETING NOTES
INCLINE VILLAGE, NEVADA
JANUARY 24th 2022, 5:30PM

The community meeting was held on January 24th, 2022 at 5:30pm at The Chateau at Incline Village, 955 Fairway Blvd, Incline Village, Nevada. The following are comments, questions and concerns from the individuals who attended.

Lyn Brown addressed the following:

- Concerned about 45 trees being cut down for the development. **TRPA approved the tree removal.**
- There is a need for a signal at the intersection of Southwood Boulevard and Hwy 28. **NDOT issue**
- Concerned about short term rentals. Could short term rentals be deed restricted? **A deed restriction will be**
- The community doesn't want a 4 story building. Incline is a small village and not a big city. **prohibiting STRs**
The Area Plan allows a four-story building. will be recorded
against the
properties.

Jim Lang addressed the following:

- Will the access to the building be controlled by a gate? **Garage door with opener**
- Are there sidewalks added on the site? **internal only**
- How will deliveries take place? Is there plenty of room on site for delivery trucks? **internal mail room**
- What is the proposed occupancy levels for the development?
- Are there trash rooms in the garage? **internal to garage**

Hellen Neff addressed the following:

- Where is the snow storage going to be? **courtyard and along drive per TRPA approvals**
- The intersection of Southwood Blvd and Hwy 28 is rated F currently. The development is going to bring more traffic. How can we work together to make it safe for pedestrians? A new traffic signal is needed at the intersection. **traffic study is approved. signal is out of scope**
- Helen was struck by a car a year ago, while trying to cross Hwy 28 and feels the intersection needs to be upgraded for safety.

Kathy Gillian addressed the following:

- Questions the numbers stated in the traffic study and thinks they are grossly understated.
- There needs to be a traffic light at the intersection.
- There is a luxury retail center, which is going to be built across the street, which will create more pedestrian traffic. **not applicable**
- Is there an option to have a left hand turn lane on Southwood? **not with current width**
- The parking at the skate park needs to be factored in with the parking study. **not a part of project**
nor impacts skate
park parking

- How many parking spaces are being provided, including assigned and guest parking? Are they all in the garage? **mix of assigned and guest parking**
- Can the speed limit be changed to 25 on Highway 28, if no light is installed? Could they also hire a Police Officer to be assigned to the intersection? **NDOT has jurisdiction on 28.**
- The county needs to analyze the intersection requirements with the traffic study.
- When will a decision be made on how to solve the intersection problems?
- Are they going to be delivering mail to the building? **No. The USPS will not deliver to the site. Residents will need to obtain a P.O. box.**
- Where is the snow proposed snow storage? **need to obtain a P.O. box.**
- Are there sidewalks close to the building that people can be hit by snow being shoveled off of a balcony? **sidewalks do not run under balconies**

Roxanne Dunn addressed the following:

- The intersection is unsafe and is an existing problem.
- There is a desperate need for affordable housing in Incline Village, to house people who can't afford to live in Incline. Will the development have affordable housing? **It will include 4 units of achievable housing.**
- If the affordable housing is to be off site, where is it proposed to be located? **Properties within Special Area 1 of the IVCRZ will be deed restricted for affordable housing.**

David Hessler addressed the following:

- There is a problem with too many living in one house. Will the units be deed restricted to eliminate the possibility of overcrowding in the units? **no deed restrictions for this**

Sarah Schmitz addressed the following:

- Have the developers considered Deed restrictions for Short Term Rentals? **See above.**
- Will there be EV chargers? **yes**
- What are the estimated HOA dues going to be? **This has yet to be determined.** **trash rooms have secure doors**
- Have you reached out to the Bear League? Could Bears be accidentally trapped in the garage? **doors**
- How does NDOT approval affect the application? **construction encroachment permit needed**
- How many Recreational passes will there be per unit? **IVGID standard per res unit**
- The Incline Community is willing to work together with the developer to find the right solution to resolve the traffic issues.

John D. addressed the following:

- What big milestone for the project is next?
- Are there any hurdles that would prevent the project from going forward?
- Clear Creek goes under 28. Will the site have drainage issues with TRPA? **No, TRPA has approved the project**
- Do you think the people will complain about the Skate Park, like they did with the Dairy Farm? **acoustics considered for units facing skate park**

COLLABORATIVE

DESIGN

STUDIO *architecture of experience and place*

Bruce Thompson addressed the following:

- Where will the snow on the roofs shed to? *mix of snow fence and eave snowmelt retains snow*
- Will the roofs have snow melt? *on roofs*
- What do you do with the snow on the Balconies? Where will it go?
to be cleared by residents to adjacent landscape areas

End of Comments.

Washoe County Development Application

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

Project Information		Staff Assigned Case No.: _____	
Project Name: 947 Tahoe Condominium			
Project Description: The project involves the development of 40 new residential condominiums and one commercial condominium on an approximately two-acre site.			
Project Address: 941 and 947 Tahoe Boulevard (SR 28)			
Project Area (acres or square feet): 2 acres			
Project Location (with point of reference to major cross streets AND area locator): Corner of Tahoe Blvd and Southwood Blvd			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
132-231-09	1.389		
132-231-10	0.598		
Indicate any previous Washoe County approvals associated with this application: Case No.(s). SPW2-7-96; WDCA22-0002			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: PALCAP FFIF TAHOE 1, LLP		Name: NCE	
Address: 940 Southwood Blvd		Address: PO Box 1760	
Incline Village, NV	Zip: 89451	Zephyr Cove, NV	Zip: 89448
Phone: 469.233.2260	Fax:	Phone: 775-588-2505	Fax:
Email: cbutler@palominocap.com		Email: mlefrancois@ncenet.com	
Cell: 214.269.3404	Other:	Cell: 530-386-2772	Other:
Contact Person: Chuck Butler		Contact Person: Mike Lefrancois	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Same as Owner		Name: Feldman Thiel, LLP	
Address:		Address: PO Box 1309	
	Zip:	Zephyr Cove, NV	Zip: 89448
Phone:	Fax:	Phone: 775-580-7431	Fax:
Email:		Email: kara@fmttahoe.com	
Cell:	Other:	Cell: 530-545-3522	Other:
Contact Person:		Contact Person: Kara Thiel	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Tentative Subdivision Map Application Supplemental Information

(All required information may be separately attached)

1. What is the location (address or distance and direction from nearest intersection)?

941 AND 947 TAHOE BLVD

2. What is the subdivision name (proposed name must not duplicate the name of any existing subdivision)?

947 TAHOE CONDOMINIUM

3. Density and lot design:

a. Acreage of project site	1.99 Acres
b. Total number of lots	1 lot / 41 condominium units
c. Dwelling units per acre	20 units/acre
d. Minimum and maximum area of proposed lots	condominium unit size: 925 sf min. - 4,425 sf max
e. Minimum width of proposed lots	n/a
f. Average lot size	n/a

4. What utility company or organization will provide services to the development:

a. Sewer Service	IVGID
b. Electrical Service	NV ENERGY
c. Telephone Service	AT&T
d. LPG or Natural Gas Service	SOUTHWEST GAS
e. Solid Waste Disposal Service	IVGID
f. Cable Television Service	SPECTRUM
g. Water Service	IVGID

5. For common open space subdivisions (Article 408), please answer the following:

- a. Acreage of common open space:

n/a

- b. What development constraints are within the development and how many acres are designated slope, wetlands, faults, springs, and/or ridgelines:

NONE

- c. Range of lot sizes (include minimum and maximum lot size):

n/a

d. Proposed yard setbacks if different from standard:

N/A

e. Justification for setback reduction or increase, if requested:

N/A

f. Identify all proposed non-residential uses:

N/A

g. Improvements proposed for the common open space:

lawn activity areas, spa, grills, and seating areas

h. Describe or show on the tentative map any public or private trail systems within common open space of the development:

N/A

i. Describe the connectivity of the proposed trail system with existing trails or open space adjacent to or near the property:

N/A

j. If there are ridgelines on the property, how are they protected from development?

N/A

k. Will fencing be allowed on lot lines or restricted? If so, how?

N/A

l. Identify the party responsible for maintenance of the common open space:

Homeowner's Association

6. Is the project adjacent to public lands or impacted by "Presumed Public Roads" as shown on the adopted April 27, 1999 Presumed Public Roads (see Washoe County Engineering website at <http://www.washoecounty.us/pubworks/engineering.htm>). If so, how is access to those features provided?

No

7. Is the parcel within the Truckee Meadows Service Area?

Yes No

8. Is the parcel within the Cooperative Planning Area as defined by the Regional Plan?

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, within what city? INCLINE VILLAGE
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9. Has an archeological survey been reviewed and approved by SHPO on the property? If yes, what were the findings?

No

10. Indicate the type and quantity of water rights the application has or proposes to have available:

a. Permit #	-	acre-feet per year	
b. Certificate #	-	acre-feet per year	
<input checked="" type="checkbox"/> c. Surface Claim #	-	acre-feet per year	
d. Other #	-	acre-feet per year	

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

Credit will be given for water rights associated with the previous restaurant and service station uses. The balance, if any, required to serve the project will be purchased from IVGID.

11. Describe the aspects of the tentative subdivision that contribute to energy conservation:

Triple paned glass in many windows, high efficiency radiant heating, electrical vehicle charging stations, bike room

12. Is the subject property in an area identified by Planning and Building as potentially containing rare or endangered plants and/or animals, critical breeding habitat, migration routes or winter range? If so, please list the species and describe what mitigation measures will be taken to prevent adverse impacts to the species:

No

13. If private roads are proposed, will the community be gated? If so, is a public trail system easement provided through the subdivision?

N/A

14. Are there any applicable policies of the adopted area plan in which the project is located that require compliance? If so, which policies and how does the project comply?

Policies T2-2 through T2-5: The project incorporates on-site bicycle storage and parking and the site is fronted by existing pedestrian and bike paths and is close to parks, schools, a golf course and other services. Policies T3-1 and -2: Access on 28 is for emergencies only. Policy T4-1: The site driveway intersections and SR 28/Village operate at acceptable LOS with the project. LU2-9: The development is a single-family dwelling airspace condominium and commercial space mixed-use project.

15. Are there any applicable area plan modifiers in the Development Code in which the project is located that require compliance? If so, which modifiers and how does the project comply?

Section 110.220.35, .145 and .150 apply to the Incline Village Commercial Regulatory Zone in which the project is located. The project complies with the applicable height, density, permissible use and land coverage standards.

16. Will the project be completed in one phase or is phasing planned? If so, please provide that phasing plan:

One phase

17. Is the project subject to Article 424, Hillside Development? If yes, please address all requirements of the Hillside Ordinance in a separate set of attachments and maps.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, include a separate set of attachments and maps.
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18. Is the project subject to Article 418, Significant Hydrologic Resources? If yes, please address Special Review Considerations within Section 110.418.30 in a separate attachment.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, include separate attachments.
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Grading

Please complete the following additional questions if the project anticipates grading that involves: (1) Disturbed area exceeding twenty-five thousand (25,000) square feet not covered by streets, buildings and landscaping; (2) More than one thousand (1,000) cubic yards of earth to be imported and placed as fill in a special flood hazard area; (3) More than five thousand (5,000) cubic yards of earth to be imported and placed as fill; (4) More than one thousand (1,000) cubic yards to be excavated, whether or not the earth will be exported from the property; or (5) If a permanent earthen structure will be established over four and one-half (4.5) feet high:

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

19,098 CY excavation

20. How many cubic yards of material are you exporting or importing? If exporting of material is anticipated, where will the material be sent? If the disposal site is within unincorporated Washoe County, what measures will be taken for erosion control and revegetation at the site? If none, how are you balancing the work on-site?

18,325 export - out of Tahoe Basin

21. Can the disturbed area be seen from off-site? If yes, from which directions, and which properties or roadways? What measures will be taken to mitigate their impacts?

Visible from SR28. Disturbed areas to be landscaped or restored per TRPA.

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

3:1 max slopes to be landscaped or restored per TRPA
--

23. Are you planning any berms and, if so, how tall is the berm at its highest? How will it be stabilized and/or revegetated?

No berms

24. Are retaining walls going to be required? If so, how high will the walls be, will there be multiple walls with intervening terracing, and what is the wall construction (i.e. rockery, concrete, timber, manufactured block)? How will the visual impacts be mitigated?

8.5' max high wall at driveway. Concrete proposed. Wall is below sight line from SR28.
--

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

45 total trees to be removed. Summary on Sheet C2

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

Mulch of all disturbed areas as required of TRPA; Native pine needles or wood chips.

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

irrigation in right-of-way areas not proposed

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

No

Tahoe Basin

Please complete the following questions if the project is within the Tahoe Basin:

29. Who is the Tahoe Regional Planning Agency (TRPA) project planner and what is his/her TRPA extension?

Bridget Cornell, bcornell@trpa.gov, 775.589.5218

30. Is the project within a Community Plan (CP) area? AREA PLAN:

<input type="checkbox"/> Yes	<input type="checkbox"/> No If yes, which CP? INCLINE VILLAGE COMMERCIAL REG ZONE SPECIAL AREA 1
------------------------------	--

31. State how you are addressing the goals and policies of the Community Plan for each of the following sections:

- a. Land Use:

Multiple-family dwellings are permissible as an allowed use in the IVCRZ SA 1 at a minimum and maximum density of 15 and 25 units/acre, respectively. For the two-acre site, the minimum and maximum densities are 30 units and 50 units, respectively. At 40 units, the project complies with the applicable density standards. The MFD-commercial mixed-use project can be subdivided into 40 airspace condos and a commercial condo since single-family dwelling condos are an allowed use in SA 1 when part of a mixed-use project.

- b. Transportation:

The project incorporates on-site bicycle storage and parking and the site is fronted by existing pedestrian and bike paths. This will reduce reliance on the automobile.

- c. Conservation:

The project is located in high capability land. Existing land coverage banked onsite will be used to support the project. Additional land coverage, in the form of existing coverage, will be transferred from elsewhere in the Region to the project, which is located in a Town Center. Air quality impacts will be mitigated through payment of the applicable fee. Scenic impacts will be mitigated through the use of earth tone colors, natural materials and landscape screening

- d. Recreation:

The project incorporates on-site bicycle storage and parking and the site is fronted by existing pedestrian and bike paths and is close to parks, schools, a golf course and other services

- e. Public Services:

Significant growth is not anticipated under this area plan. As a result, the plan envisions maintaining existing service levels. No major facility expansions or relocations are envisioned.

32. Identify where the development rights for the proposed project will come from:

--

33. Will this project remove or replace existing housing?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, how many units?
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34. How many residential allocations will the developer request from Washoe County?

No residential allocations will be requested. However, an allocation of 1,800 sf of CFA will be requested from the Area Plan's development rights pool for conversion to 6 RUUs.

--

35. Describe how the landscape plans conform to the Incline Village General Improvement District landscaping requirements:

Limited turf area per ordinance; native/adaptive species
--

Request to Reserve New Street Name(s)

The Applicant is responsible for all sign costs.

Applicant Information

Name: PALCAP FFIF TAHOE1, LLS

Address: 940 Southwood Blvd
941 AND 947 TAHOE BLVD

Phone : _____ Fax: _____

Private Citizen Agency/Organization

Street Name Requests

(No more than 14 letters or 15 if there is an "i" in the name. Attach extra sheet if necessary.)

NONE REQUESTED	

If final recordation has not occurred within one (1) year, it is necessary to submit a written request for extension to the coordinator prior to the expiration date of the original

Location

Project Name: 947 Tahoe Condominium

Reno Sparks Washoe County

Parcel Numbers: _____

Subdivision Parcelization Private Street

Please attach maps, petitions and supplementary information.

Approved: _____ Date: _____

Regional Street Naming Coordinator
Except where noted

Denied: _____ Date: _____

Regional Street Naming Coordinator

Washoe County Geographic Information Services

1001 E. Ninth Street
Reno, NV 89512-2845
Phone: (775) 328-2325 - Fax: (775) 328-6133

Nine 47 Tahoe Public Outreach

At least eight (8) public meetings have been held in the last year, three (3) more are scheduled in the next two months and the Planning Commission will hold a public hearing on the TSM in May 2023.

A neighborhood meeting was held on January 24, 2022, regarding the proposed Tentative Map. The TRPA Governing Board (GB) approved the Project on June 22, 2022, at a public meeting. Next, PAL CAP held a community workshop on August 22, 2022, on the Project and Amendment with more than 30 people in attendance. A public hearing on the Amendment was held at the Planning Commission (PC) on Nov. 1, 2022, and many of the comments received were on the Project. A public hearing was held at the Board of County Commissioners (BOCC) on December 13, 2022, for the first reading of the Amendment and, again, the Project was the subject of numerous public comments. TRPA made a presentation on the Amendment to the Incline Village / Crystal Bay CAB on January 3, 2023, with many people in attendance. A public hearing was held at the BOCC on January 17, 2023, for the second reading of the Amendment, which was unanimously approved. At the time of the BOCC's approval of the Amendment, more than 80 letters/emails had been submitted and dozens of people spoke during public comment about the Project. A public hearing was held on the Amendment at the February 22, 2023, TRPA Regional Plan Implementation Committee (RPIC) meeting with more than 70 public letters submitted, and several members of the public participated in the meeting. Finally, Randy Fleisher of PAL CAP has met individually with dozens of community members about the Project and reached out to Rotary Club members, business association members and non-profits groups.

Future public hearings on the Amendment, which will undoubtedly garner public comments on the Project, will be held March 8, 2023, at the TRPA Advisory Planning Commission meeting, March 22, 2023, RPIC meeting and April 26, 2023, at the TRPA GB meeting. Finally, the public will have another opportunity to comment on the Project during the PC meeting on the Project's Tentative Subdivision Map.

GENERAL NOTES

- 1. STAGING AREAS ARE TO BE COORDINATED BETWEEN THE CONTRACTOR AND COUNTY AND APPROVED BY TRPA...
2. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL INSTALL TEMPORARY BMP MEASURES AT LOCATIONS WHERE NEEDED TO CONTROL EROSION...
3. ALL EXISTING VEGETATION SHALL BE PRESERVED UNLESS SPECIFICALLY IDENTIFIED BY THE COUNTY FOR REMOVAL...
4. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE...
5. ASPHALT SHOULDER REPLACEMENT SHALL INCORPORATE A 4% ±1% CROSS SLOPE OR AS DIRECTED BY THE COUNTY...
6. ANY ROADWAY TREATMENT BY THE CONTRACTOR OR HIS SUBCONTRACTORS TO PRIVATE PROPERTY AND/OR OUTSIDE THE NOTED LIMITS OF WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR...
7. FOR TEMPORARY BMPs REFER TO SHEET D1.
8. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE PROJECT DRAWINGS, SPECIAL PROVISIONS, AND 'STANDARD SPECIFICATIONS' FOR THIS PROJECT...
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL SAFETY DURING CONSTRUCTION AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS...
10. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION...
11. INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND/OR EROSION...
12. MAINTAIN THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS...
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND SHALL REPLACE ANY MONUMENTS OBLITERATED OR DAMAGED...
14. PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL, THROUGHOUT CONSTRUCTION...
15. THE CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL IN STRICT ACCORDANCE WITH PLANS AND SPECIFICATIONS...
16. FINE GRADING ELEVATIONS, SLOPES, AND OTHER ELEVATIONS NOT SHOWN SHALL BE DETERMINED BY THE CONTRACTOR...
17. STANDARD WORK DAYS AND HOURS SHALL BE MONDAY THROUGH FRIDAY 7AM TO 7PM...
18. NOISE SHALL BE REDUCED BY THE MANDATORY USE OF MUFFLERS ON ALL CONSTRUCTION VEHICLES AND EQUIPMENT...
19. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH ACCEPTED ENGINEERING PROCEDURES AND GUIDELINES...
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DAILY REMOVAL OF ALL CONSTRUCTION MATERIALS SPOILED ON PAVED STREETS...
21. THE CONTRACTOR SHALL PURSUE THE WORK IN A CONTINUOUS AND DILIGENT MANNER...
22. THE CONTRACTOR SHALL NOTIFY ALL ENTITIES INVOLVED (PUBLIC AND PRIVATE) 48 HOURS PRIOR TO BEGINNING CONSTRUCTION...
23. ALL AREAS DISTURBED AND LEFT UNDEVELOPED FOR A PERIOD OF MORE THAN 14 DAYS SHALL BE STABILIZED...
24. NO CONSTRUCTION EQUIPMENT SHALL BE PARKED OR MATERIAL STORED ON CONCRETE OR ASPHALT SURFACES WITHOUT APPROVAL...
25. SHOULD ANY HISTORIC OR HISTORIC REMAINS/ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT...
26. THE CONTRACTOR SHALL, AT ALL TIMES DURING CONSTRUCTION, PROTECT FROM DAMAGE EXISTING IMPROVEMENTS...
27. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES EMERGENCY ACCESS TO THE PROJECT SITE...
28. THE CONTRACTOR SHALL ELIMINATE ALL MOSQUITO BREEDING PLACES WITHIN THE GRADED AREAS...
29. A GEOENGINEERING REPORT HAS BEEN PREPARED FOR THIS PROJECT...
30. THE CONTRACTOR SHALL COMPLY WITH TRPA IDLING RESTRICTIONS, NO DIESEL ENGINE IN A VEHICLE EXCEEDING 10,000 POUNDS GROSS VEHICLE WEIGHT...

SWPPP NOTES

- 1. THE CONTRACTOR SHALL SUBMIT A COPY OF THEIR NOTICE OF INTENT (NOI) TO THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP) TO BE REGULATED UNDER STORMWATER GENERAL PERMIT NV100000 AND SUBMIT A COPY OF THE RECEIPT FOR PAYMENT OF THE ANNUAL FEE OR THE LETTER OF AUTHORIZATION FROM NDEP TO THE ENGINEER...
2. BY SUBMITTING A COPY OF THE NOI AND THE RECEIPT OR AUTHORIZATION FROM NDEP, THE CONTRACTOR ACKNOWLEDGES THAT THE CONTRACTOR IS AWARE OF THE REQUIREMENTS SET FORTH IN THE STATE'S GENERAL PERMIT AND HAS DEVELOPED AND WILL DEVELOPE A SITE SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP)...
3. THE CONTRACTOR AND/OR AUTHORIZED AGENTS SHALL EACH DAY INSPECT CONDITION AND REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS-OF-WAY AS A RESULT OF CONSTRUCTION ACTIVITIES...
4. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE CONTRACTOR AND CONTRACTOR'S AGENTS DUE TO UNFORESEEN EROSION PROBLEMS...
5. TEMPORARY OR PERMANENT STABILIZATION PRACTICES SHALL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER SUBSTANTIAL CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED...
6. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, WINDICE ENTRANCE AND EXIT LOCATIONS, AND ALL BMP'S AT LEAST WEEKLY, PRIOR TO ANY FORECASTED RAIN EVENT...
7. ACCUMULATED SEDIMENT IN BMP'S SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORM WATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT UNLESS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REACHED BY 50% OR MORE.

UTILITIES:

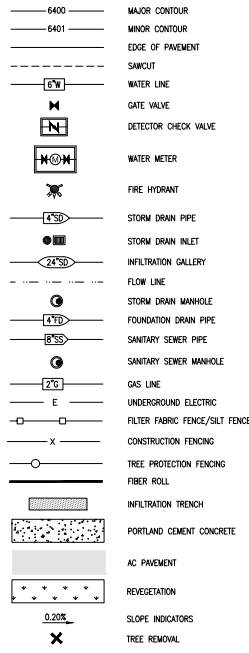
- 1. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE, WHERE EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AND ALL AFFECTED UTILITY COMPANIES TO LOCATE ALL BURIED UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATION...
2. ALL UTILITIES IMPACTED BY IMPROVEMENTS SHALL BE RAISED, LOWERED, OR RELOCATED TO ACCOMMODATE THE CONSTRUCTION OF THOSE IMPROVEMENTS...
3. WATER LINE INSTALLATION NOTES:
A. DISINFECTION AND COLIFORM TESTING PER AWWA 651-13.
B. PRESSURE TESTING PER AWWA C600.
C. ANY OPEN WATER LINES SHALL BE CAPPED AT THE END OF EACH DAY.
D. ALL MATERIALS THAT COME IN CONTACT WITH THE WATER SYSTEM SHALL BE ANSI/NSF #1 CERTIFIED LEAD FREE.
E. ALL SEWER AND WATER CONSTRUCTION TO CONFORM TO MGD APPROVALS INCLUDING 2022 REQUIREMENTS TO CONSTRUCT WATER AND SEWER.
F. ALL WATER LINES TO BE FULLY RESTRAINED CONSTRUCTION WITH THRUST BLOCKS.

SURVEY:

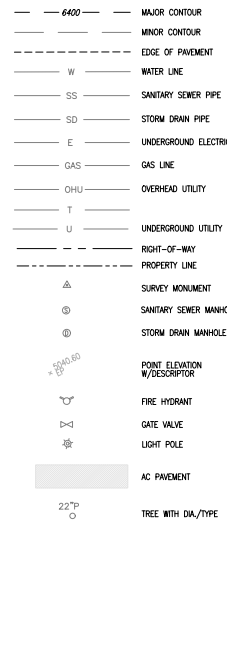
- 1. BASIS OF BEARING AND COORDINATES:
NORTH AMERICAN DATUM OF 1983/1994 (NAD 83/94), NEVADA STATE PLANE WEST ZONE, AS DETERMINED WITH REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS, OBSERVED ON JULY 23, 2021, USING TRIMBLE RB RECEIVER WITH CORRECTIONS RECEIVED FROM TRIMBLE RB BASE STATION OCCUPYING NEVADA DEPARTMENT OF TRANSPORTATION CONTROL POINT '15830304', ALL DIMENSIONS AND COORDINATES SHOWN ARE U.S. SURVEY FOOT GRID DISTANCES.
'15830304' STATE PLANE GRID COORDINATES, W/ WEST ZONE
N = 14764350.80
E = 2238247.57
2. BASIS OF ELEVATION:
A FOUND MAG NAIL AT THE NORTH WEST CORNER OF 941 TAHOE BOULEVARD (APN: 132-231-09) AS SHOWN ON THE SITE PLAN PREPARED BY ARNETTE AND ASSOCIATES
'MAG NAIL'
ELEVATION = 6406.00'

LEGEND

PROPOSED FEATURES



EXISTING FEATURES



ABBREVIATIONS

Table listing abbreviations for MANUFACTURER, MAXIMUM, MECHANICAL JOINT, MILE, MINIMUM, MISCELLANEOUS, MIDDLE OF VERTICAL CURVE, NORTH, NORTHING, NATIONAL ELECTRICAL CODE, NOT IN CONTRACT, NOT TO SCALE, NUMBER, ON CENTER, ORIGINAL GRADE, OIL/WATER SEPARATOR, PLUS OR MINUS, PORTLAND CEMENT CONCRETE OR POINT OF COMBING CURVE, PERMANENT EASEMENT, PROPERTY LINE, POSITIVE, POINT OF REVERSE CURVE, POUNDS PER SQUARE INCH, PERMISISON TO CONTRACT, PUBLIC UTILITY EASEMENT, POLYVINYL CHLORIDE, POINT OF VERTICAL INTERSECTION, PAVEMENT, RADIUS, REINFORCED CONCRETE PIPE, REINFORCED, RIGHT, RIGHT-OF-WAY, SCHEDULE, STANDARD DIMENSION RATIO, STORM DRAIN MANHOLE, SQUARE FOOT/FEET, SHEET, SANITARY SEWER MANHOLE, SANITARY SEWER CLEAN OUT, SANITARY SEWER, STAINLESS STEEL, STATION, STANDARD, SIDEWALK, SQUARE YARD, TOP BACK OF CURB, TOP OF CURB, TEMPORARY CONSTRUCTION EASEMENT, TOP OF STAIRS, TOP OF MALL, TYPICAL, UNDERGROUND ELECTRIC, UNDERGROUND TELEPHONE, VALLEY CUTTER, WATER, WATER LINE, WEST, WEST SIDE, WATER METER.



947 TAHOE
OWNER
PALCAP FFIH TAHOE 1, LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

Table with columns: NO., DATE, DESCRIPTION. Project No: 1171.01.25. DESIGNED BY: KH. DRAWN BY: KH. CHECKED BY: --- DATE: ---. DATE: 01-31-2023.

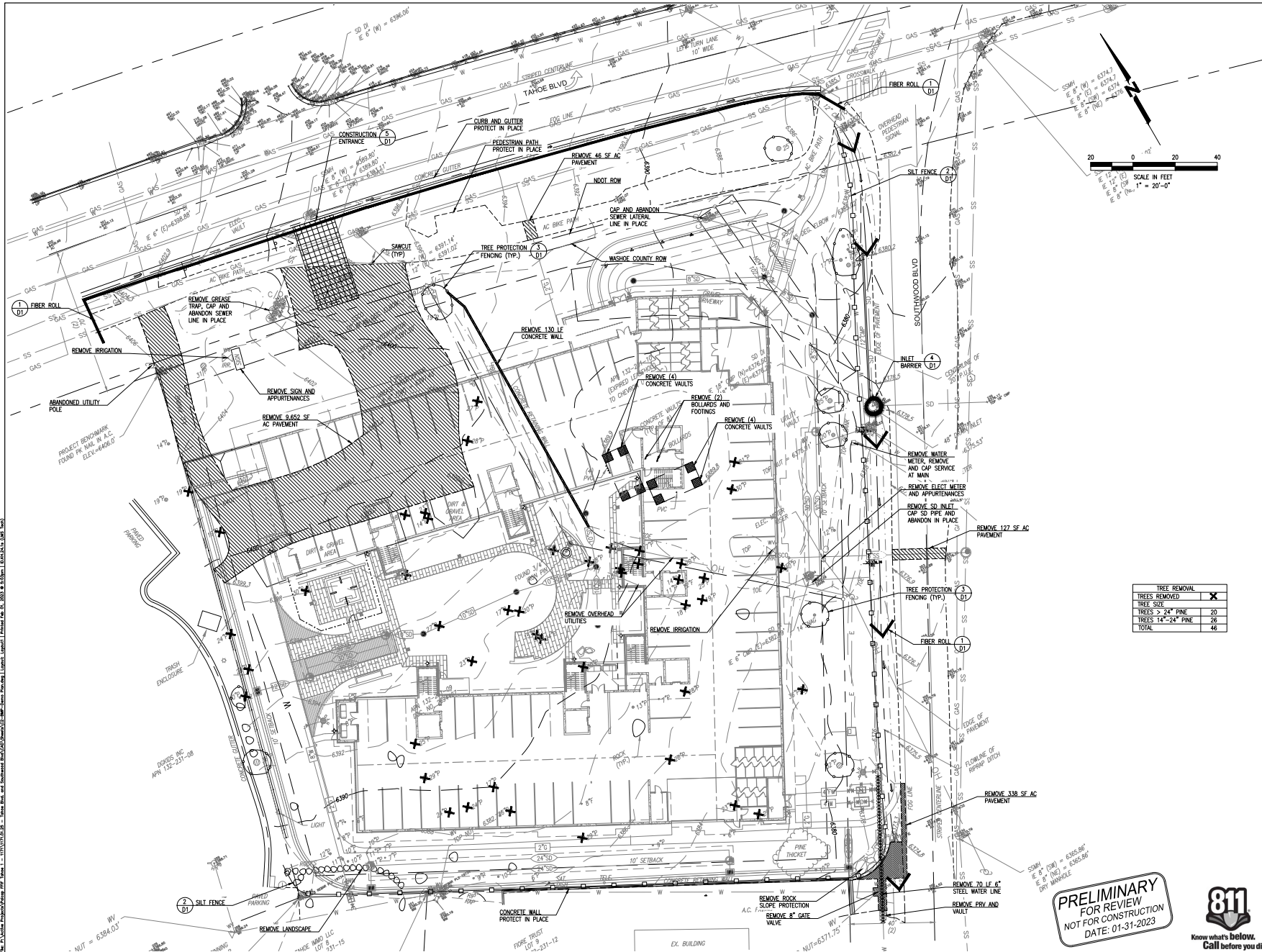
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NOTES, LEGEND, AND ABBREVIATIONS

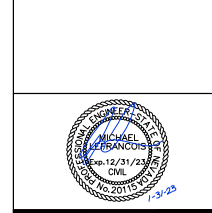
DRAWING
C1
SHEET 2 OF 23

PRELIMINARY FOR REVIEW NOT FOR CONSTRUCTION DATE: 01-31-2023





NCE
 1885 S. Arlington Ave. Suite 111
 Reno, Nevada 89509
 (775) 329-4955 * Fax (775) 329-5098



947 TAHOE

OWNER
 PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

TREE REMOVAL	
TREES REMOVED	X
TREE SIZE	
TREES > 24" PINE	20
TREES 14"-24" PINE	26
TOTAL	46

NO.	DATE	DESCRIPTION

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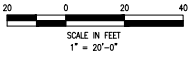
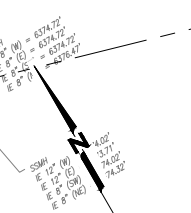
SHEET TITLE
 BMP-DEMO
 PLAN

PRELIMINARY
 FOR REVIEW
 NOT FOR CONSTRUCTION
 DATE: 01-31-2023



DRAWING
 C2
 SHEET 3 OF 23

1885 S. Arlington Ave., Suite 111
 Reno, Nevada 89509
 (775) 329-4955 * Fax (775) 329-5098



EARTHWORK QUANTITIES:
 TOTAL DISTURBED AREA - 1.96 ACRES
 TOTAL CUT - 27,342 CY
 TOTAL FILL - 332 CY
 NET CUT - 27,003 CY
 DEEPEST CUT - 28'
 DEEPEST FILL - 3.5'

NCE
 1885 S. Arlington Ave., Suite 111
 Reno, Nevada 89509
 (775) 329-4955 * Fax (775) 329-5098



947 TAHOE

OWNER
 PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

NO.	DATE	DESCRIPTION
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DESIGNED BY:	KH	
DRAWN BY:	KH	
CHECKED BY:	---	DATE
DATE:	01-31-2023	

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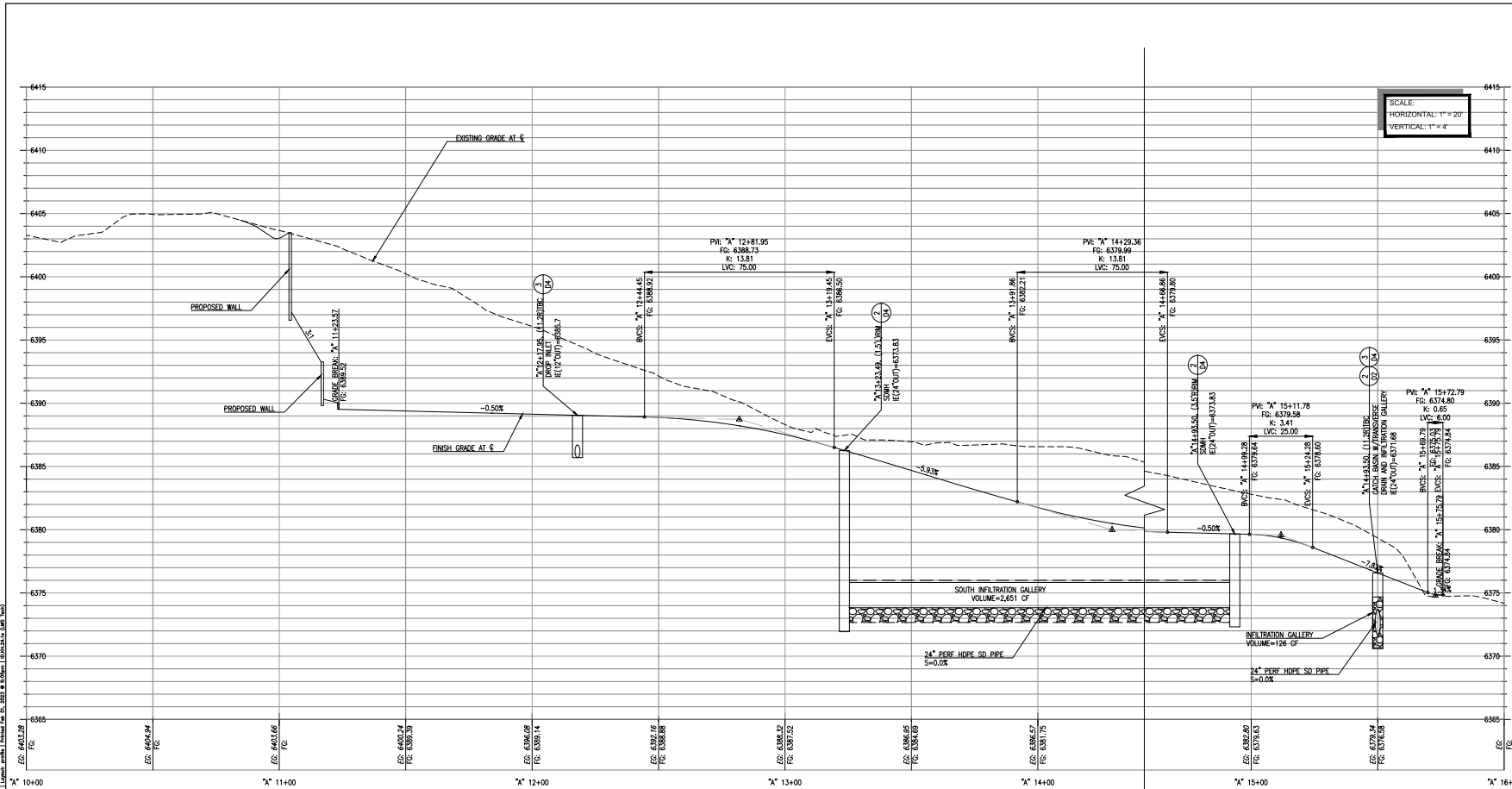
SHEET TITLE
 GRADING
 AND
 DRAINAGE

DRAWING
 C3
 SHEET 4 OF 23

PRELIMINARY
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 NOT FOR CONSTRUCTION
 DATE: 01-31-2023



P:\24\240121\240121.dwg - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM - 11/17/2021 10:52:05 AM



SCALE:
 HORIZONTAL: 1" = 20'
 VERTICAL: 1" = 4'



947 TAHOE

OWNER
 PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

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SHEET TITLE
 DRIVEWAY
 ACCESS
 PROFILE

DRAWING
 C4

SHEET 5 OF 23

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 DATE: 01-31-2023





947 TAHOE

OWNER

PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

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SHEET TITLE

STORM DRAIN
 DETAILS

DRAWING

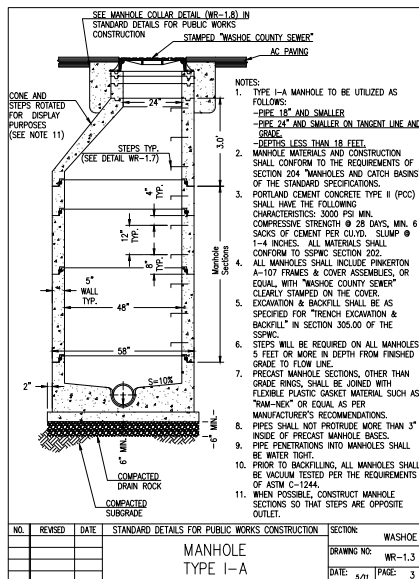
D4

SHEET 12 OF 23

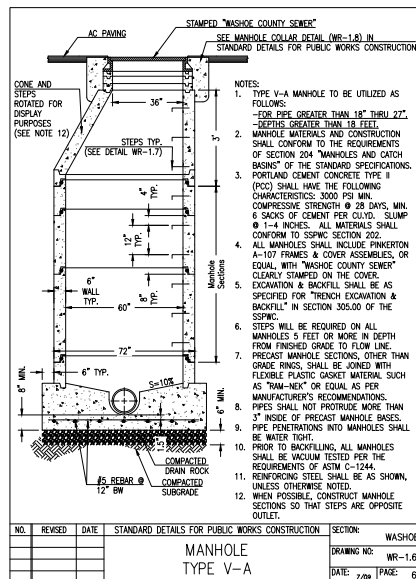
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 DATE: 01-31-2023



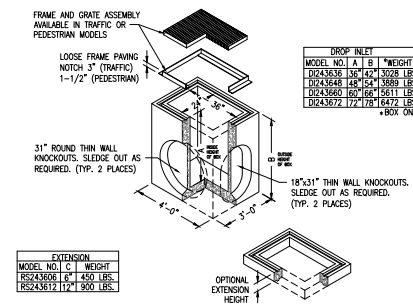
Know what's below.
 Call before you dig.



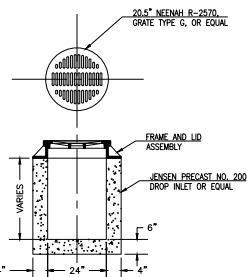
1 MANHOLE TYPE I-A
 D4 NTS



2 MANHOLE TYPE V-A
 D4 NTS



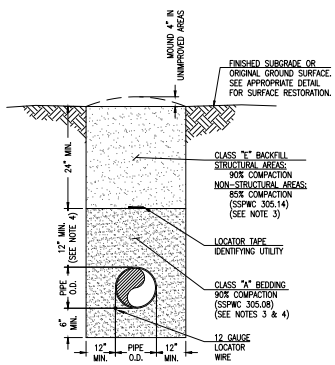
3 24"x36" DROP INLET
 D4 NTS



NOTES:
 1. USE NEENAH R-2570, GRATE TYPE G OR EQUAL FOR STORM DRAIN INLETS.

4 AREA DRAIN
 D4 NTS

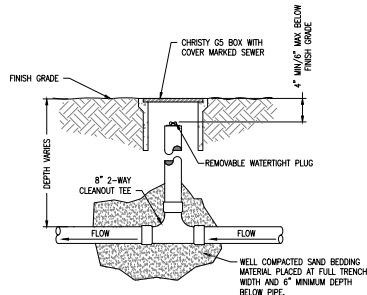
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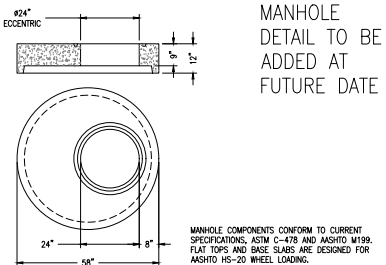
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," (SSPWC) LATEST EDITION.
2. ALL TRENCHING ACTIVITIES SHALL CONFORM TO O.S.H.A. REGULATIONS. (SSPWC 305.06)
3. COMPACTION SHALL BE PERCENT RELATIVE COMPACTION BASED ON THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 AND WITHIN $\pm 2\%$ OF OPTIMUM MOISTURE CONTENT. (SSPWC 305.14)
4. IN HIGH GROUND WATER, CLASS 'C' BEDDING TO HIGH GROUNDWATER MARK TOPPED WITH MIN. 140N FILTER FABRIC (OR APPROX. EQUAL) MAY BE USED IN LIEU OF CLASS 'A', WITH THE APPROVAL OF THE ENGINEER.

1 TRENCH DETAIL - SANITARY SEWER
D5 NTS



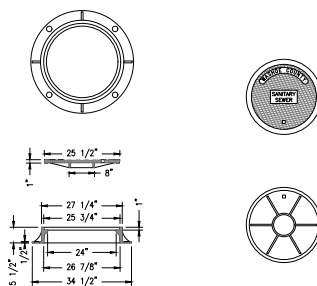
2 SANITARY SEWER CLEANOUT
D5 NTS



MANHOLE COMPONENTS CONFORM TO CURRENT SPECIFICATIONS, ASTM C-478 AND ASHTO M199. FLAT TOPS AND BASE SLABS ARE DESIGNED FOR ASHTO HS-20 WHEEL LOADING.



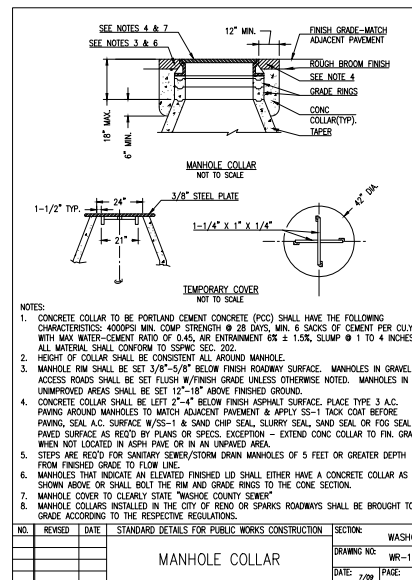
3 48" FLAT TOP MANHOLE
D5 NTS



CASTINGS MEET ASHTO M306 H-20 LOADING. CASTINGS ARE COATED WITH ASPHALTIC BASED PAINT. APPROX. WEIGHT: 290 LBS.



4 MANHOLE FRAME AND COVER
D5 NTS



NOTES:

1. CONCRETE COLLAR TO BE PORTLAND CEMENT CONCRETE (PCC) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000PSI MIN. COMP STRENGTH @ 28 DAYS, MIN. 6 SACKS OF CEMENT PER CYLD. WITH MAX WATER-CEMENT RATIO OF 0.45; AIR ENTRAINMENT $\pm 1.5\%$; SLUMP @ 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO SSPWC SEC. 232.
2. HEIGHT OF COLLAR SHALL BE CONSISTENT ALL AROUND MANHOLE.
3. MANHOLE RIM SHALL BE SET 3/8"-5/8" BELOW FINISH ROWWAY SURFACE. MANHOLES IN GRAVEL ACCESS ROADS SHALL BE SET FLUSH W/ FINISH GRADE UNLESS OTHERWISE NOTED. MANHOLES IN UNIMPROVED AREAS SHALL BE SET 12"-18" ABOVE FINISHED GROUND.
4. CONCRETE COLLAR SHALL BE LEFT 2"-4" BELOW FINISH ASPHALT SURFACE. PLACE TYPE 3 A.C. PAVING AROUND MANHOLES TO MATCH ADJACENT PAVEMENT & APPLY SS-1 THICK COAT BEFORE PAWING, SEAL A.C. SURFACE W/SS-1 & SAND CHIP SEAL, SLURRY SEAL, SAND SEAL OR FOG SEAL PAVED SURFACE AS REQ'D BY PLANS OR SPECS. EXCEPTION - EXTEND CONC COLLAR TO FIN. GRADE WHEN NOT LOCATED IN ASPH PAVE OR IN AN UNPAVED AREA.
5. STEPS ARE REQ'D FOR SANITARY SEWER/STORM DRAIN MANHOLES OF 5 FEET OR GREATER DEPTH FROM FINISHED GRADE TO FLOW LINE.
6. MANHOLES THAT INDICATE AN ELEVATED FINISHED LID SHALL EITHER HAVE A CONCRETE COLLAR AS SHOWN ABOVE OR SHALL BOLT THE RIM AND GRADE RINGS TO THE CONC SECTION.
7. MANHOLE COVER TO CLEARLY STATE "WASCO COUNTY SEWER"
8. MANHOLE COLLARS INSTALLED IN THE CITY OF RENO OR SPARKS ROADWAYS SHALL BE BROUGHT TO GRADE ACCORDING TO THE RESPECTIVE REGULATIONS.

NO.	REVISED	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION:	WASHOE

MANHOLE COLLAR

DRAWING NO:	WR-1.8
DATE:	7/29
PAGE:	8

5 MANHOLE COLLAR
D5 NTS



947 TAHOE

OWNER

PALCAP FFIF TAHOE 1, LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

PROJECT NO:	1171.01.25
DESIGNED BY:	KH
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DATE:	01-31-2023

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SHEET TITLE

SANITARY SEWER
DETAILS

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D5

SHEET 13 OF 23



947 TAHOE

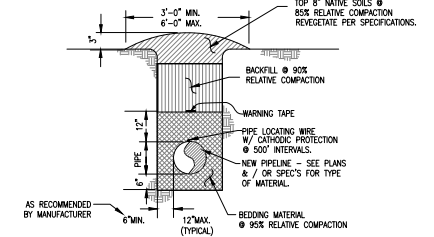
OWNER
 PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

NO.	DATE	DESCRIPTION

PROJECT NO: 1171.01.25
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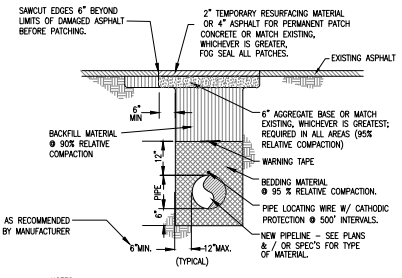
WATER DETAILS
 WATER SERVICE
 TAP & LINE
 DRAWING NO: WR-2.10
 DATE: 5/09 PAGE: 20

WATER DETAILS
 D6
 SHEET 14 OF 23



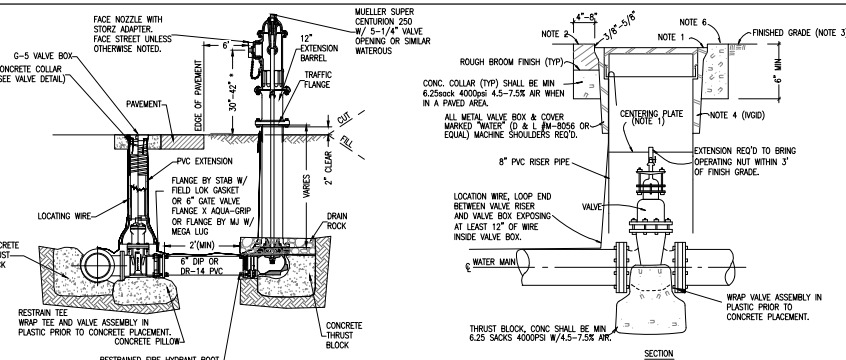
- NOTES:
- COVER TO BE MINIMUM OF 40 INCHES FROM TOP OF PIPE TO FINISHED SURFACE GRADE.
 - BOTTOM OF TRENCH SHALL BE LEVEL AND SMOOTH.
 - EXCAVATE AS NECESSARY TO MAINTAIN 8" MINIMUM BEDDING UNDER PIPE AT COUPLINGS AND HUBS OF FITTINGS.
 - ALL BEDDING MATERIAL SHALL BE COMPACTED PRIOR TO SHAPING TRENCH & INSTALLATION OF PIPE.
 - ALL PROTRUDING ROCKS TO BE REMOVED.
 - IF SAWCUT IS WITHIN 36" OF EDGE OF PAVEMENT, VALLEY CUTTER, CURB & GUTTER, OR PREVIOUS PATCHING REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE THE ENTIRE SECTION.
 - ALL TRENCHES TO BE "COLD PATCHED" WITHIN 24 HRS. AFTER BACKFILLING IS COMPLETED OR COVERED WITH STEEL PLATES AND BARRICADED TO SATISFACTION OF WASHOE COUNTY AND OWNER.

4 TRENCH DETAIL - UNPAVED AREA
 D6 NTS



- NOTES:
- COVER TO BE A MINIMUM OF 40 INCHES FROM TOP OF PIPE TO FINISHED SURFACE GRADE.
 - BOTTOM OF TRENCH SHALL BE LEVEL AND SMOOTH.
 - EXCAVATE AS NECESSARY TO MAINTAIN 6" MINIMUM BEDDING UNDER PIPE AT COUPLINGS AND HUBS OF FITTINGS.
 - ALL BEDDING MATERIAL SHALL BE COMPACTED PRIOR TO SHAPING TRENCH & INSTALLATION OF PIPE.
 - ALL PROTRUDING ROCKS TO BE REMOVED.
 - IF SAWCUT IS WITHIN 36" OF EDGE OF PAVEMENT, VALLEY CUTTER, CURB & GUTTER, OR PREVIOUS PATCHING REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE THE ENTIRE SECTION.
 - ALL TRENCHES TO BE "COLD PATCHED" WITHIN 24 HRS. AFTER BACKFILLING IS COMPLETED OR COVERED WITH STEEL PLATES AND BARRICADED TO SATISFACTION OF WASHOE COUNTY AND OWNER.

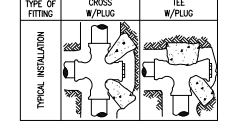
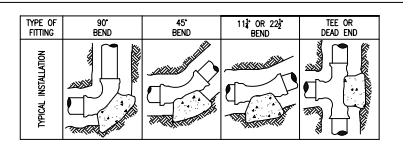
3 TRENCH DETAIL - PAVED AREA
 D6 NTS



- NOTES:
- HYDRANTS SHALL BE ENAMELED RED.
 - ALL HYDRANTS SHALL HAVE (2) 2-1/2" HOSE NOZZLES AND (1) 4-1/2" STEAMER NOZZLE. ALL TRENCHES SHALL BE NATIONAL STANDARD.
 - OPERATING NUT SHALL BE 1-1/2" PENTAGON.
 - HYDRANT W/ AQUA-GRIP SHAFT OR STAIR W/ FIELD LOK GASKET
 - CONFIRM HYDRANT LOCATION WITH NUTLOG AND USGD PRIOR TO PLACEMENT
 - TWO (2) BOLLARDS ARE REQUIRED. LOCATION AS DETERMINED IN FIELD BY NUTLOG AND USGD.
 - DISTANCE FROM CURB INSIDE EXISTS
 - SEE TRENCH DETAIL FOR BACKFILL REQUIREMENTS.

1 FIRE HYDRANT ASSEMBLY
 D6 NTS

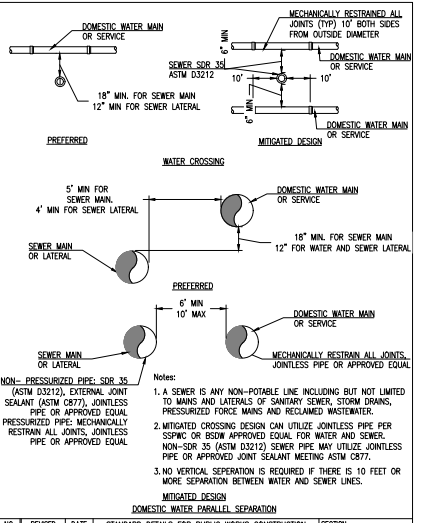
2 VALVE INSTALLATION
 D6 NTS



MINIMUM THRUST BLOCK BEARING AREA (SQ. FT.) - SEE NOTE 2						
TYPE OF FITTING	90° BEND	45° BEND	11 1/2° OR 22 1/2° BEND	TEE OR DEAD END	TEE W/ PLUG	CROSS W/ PLUG
4"	2	1	1	2	2	2
6"	4	4	2	4	4	4
8"	7	4	2	5	7	7
10"	12	6	3	8	12	12
12"	16	10	5	12	16	16
14"	20	12	6	14	20	20
16"	27	15	8	18	27	27
18"	45	25	13	32	45	45
24"	65	35	18	48	65	65

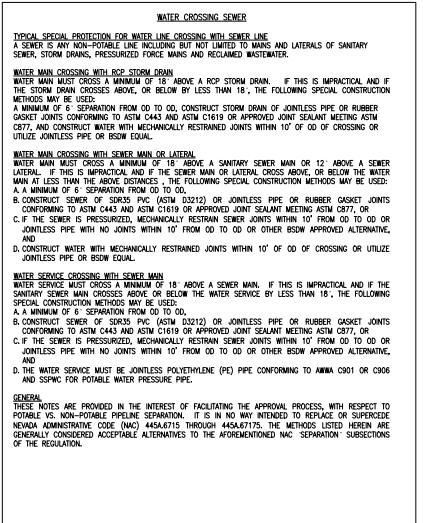
- NOTES:
- THRUST BLOCKS TO BE CONSTRUCTED OF 4000 PSI CONCRETE PER SECTION 202.04 OF THE SSPWC.
 - MINIMUM AREAS GIVEN ARE FOR PRESSURE CLASS 250 PIPE AT TEST PRESSURE OF 150 P.S.I., WITH 2000 P.S.I. BEARING CAPACITY. INSTALLATIONS USING DIFFERENT PIPE, TEST PRESSURES, AND/OR SOIL TYPES SHOULD ADJUST AREAS ACCORDINGLY, SUBJECT TO APPROVAL OF ENGINEER.
 - BLOCKS TO BE PLACED AGAINST UNDISTURBED SOIL.
 - JOINTS AND FACE OF PLUGS TO BE KEPT CLEAR OF CONCRETE.
 - WRAP ALL FITTINGS WITH POLY WRAP PRIOR TO CONCRETE PLACEMENT.

5 THRUST RESTRAINT
 D6 NTS



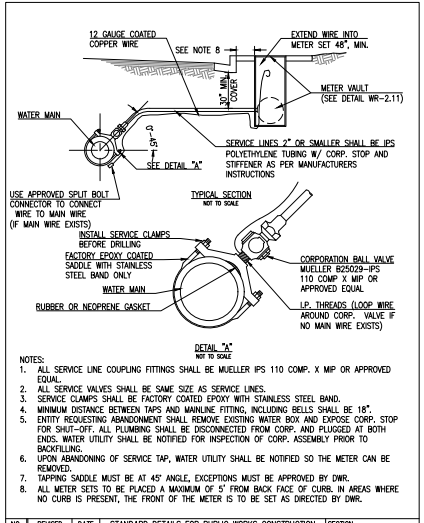
NO.	REVISED	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION:	WASHOE

6 WATER & SEWER SEPARATIONS
 D6 NTS



NO.	REVISED	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION:	WASHOE

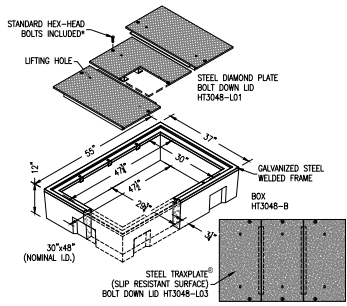
7 WATER SERVICE TAP & LINE
 D6 NTS



NO.	REVISED	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION:	WASHOE

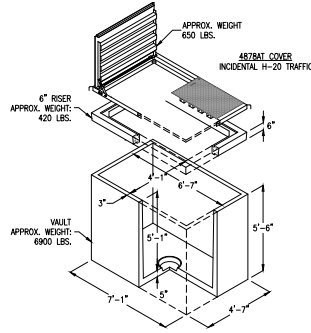
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 DATE: 01-31-2023



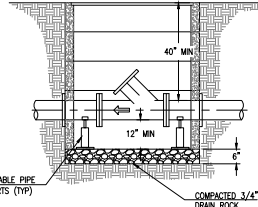
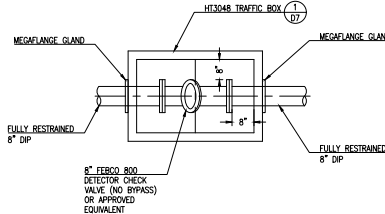


PART NO.	PRODUCT	DESCRIPTION	APPROX. WEIGHT	QTY. PER PALLET
HT3048-B	BOX	30"x48"x12" CONCRETE TRAFFIC RATED BOX (COMES STANDARD WITH HEX BOLTS)	541	3
HT3048-E	EXTENSION	30"x48"x12" CONCRETE EXTENSION	568	3
HT3048-L01	LD	STEEL DIAMOND PLATE BOLT DOWN LID	331	
HT3048-L03	LD	STEEL TRAMPLATE BOLT DOWN SLIP RESISTANT LID	331	

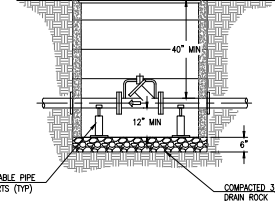
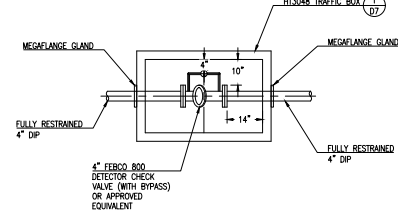
GALVANIZING AVAILABLE ON ALL STEEL LIDS



2 MODEL 557-U VAULT
NTS

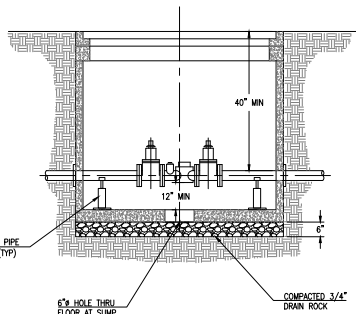
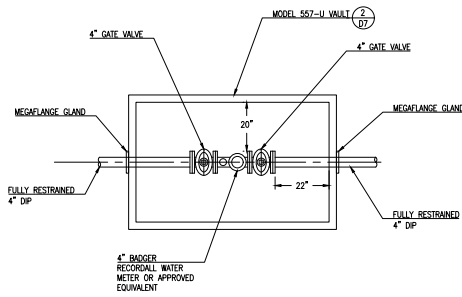


3 8" DETECTOR CHECK VALVE
NTS

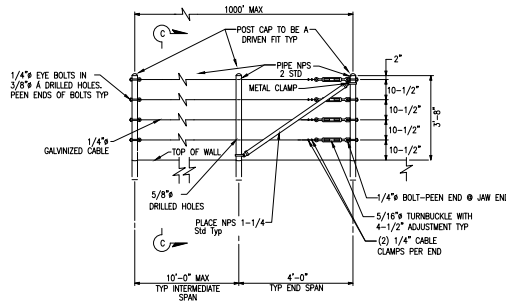
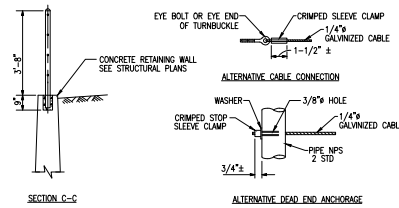


4 4" DETECTOR CHECK VALVE
NTS

1 HT3048 TRAFFIC BOX
NTS



5 4" WATER METER
NTS



- NOTES:
1. MAXIMUM DISTANCE BETWEEN TURNBUCKLES SHALL BE 200'-0"±.
 2. INTERMEDIATE TURNBUCKLES TO BE PLACED IN ADJACENT SPANS.
 3. CABLE SHALL NOT BE SPLICED BETWEEN INTERMEDIATE TURNBUCKLES AND END POSTS.
 4. POSTS TO BE VERTICAL.
 5. ALIGNMENT OF HOLES IN POSTS MAY VARY TO CONFORM TO SLOPE OF TOP OF RETAINING WALL.
 6. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.
 7. LINE POSTS SHALL BE BRACED HORIZONTALLY AND TRUSSED DIAGONALLY IN BOTH DIRECTIONS AT INTERVALS NOT TO EXCEED 1000'.
 8. POST PROCKETS TO BE CENTERED IN TOP OF WALL.
 9. TYPICAL END SPANS, BRACED IN BOTH DIRECTIONS, SHALL BE CONSTRUCTED AT CHANGES IN LINE WHERE THE ANGLE OF DEFLECTION IS 15° OR MORE.
 10. PROVIDE THIMBLES AT ALL CABLE LOOPS.

6 CABLE RAILING
NTS



947 TAHOE

OWNER

PALCAP FFIF TAHOE 1, LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO. DATE DESCRIPTION

PROJECT NO: 1171.01.25

DESIGNED BY: KH

DRAWN BY: KH

CHECKED BY: --- DATE ---

DATE: 01-31-2023

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SHEET TITLE

DETAILS

DRAWING

D7

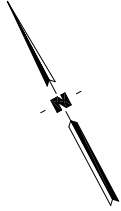
SHEET 15 OF 23

PRELIMINARY
FOR REVIEW
NOT FOR CONSTRUCTION
DATE: 01-31-2023

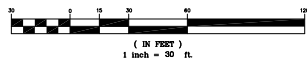


LEGEND

- ∅ SET 5/8" REBAR W/CAP STAMPED PLS 1624
- FOUND MONUMENT AS NOTED
- DIMENSION POINT - NOTHING FOUND OR SET
- (1) GRANT DEED TO PALCAP FFIF TAHOE I, LLC, RECORDED IN DOC. NO. 5104654, WASHOE COUNTY OFFICIAL RECORDS.



GRAPHIC SCALE



RECORD DOCUMENTS:

THIS SURVEY IS BASED ON THE LEGAL DESCRIPTION PROVIDED IN A PRELIMINARY TITLE REPORT BY SIGNATURE TITLE, ESCROW NO. LAKEVIEW-HO-CAL, DATED JANUARY 27, 2023.

THE FOLLOWING DOCUMENTS AFFECT THE PARCELS:

13. An easement as granted to Sierra Pacific Power Company and Bell Telephone Company of Nevada to construct, operate and maintain power and communication lines and incidental purposes, by instrument recorded November 15, 1962, in Book 656, Page 519, as Document No. 51852, Deed Records. SAID EASEMENT APPEARS TO AFFECT A PORTION OF THE SOUTHEASTERLY RIGHT-OF-WAY OF SOUTHWOOD BLVD. AND DOES NOT ENCUMBER THE SUBJECT PARCEL.
14. Covenants, conditions and restrictions, as contained in a Deed recorded June 12, 1965, in Book 684, Page 168, as Document No. 506514, of Deed Records, Washoe County, Nevada, but omitting any covenants or restrictions, if any, but not limited to those based on race, color, religion, sex, sexual orientation, familial status, marital status, disability handicap, national origin, ancestry or source of income as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law. SEE DOCUMENT FOR PARTICULARS.
15. An easement for public utilities, and incidental purposes, as set forth in an instrument recorded June 12, 1965, in Book 684, Page 168, as Document No. 506514, Deed Records. SAID EASEMENT IS A STRIP OF LAND 20' IN WIDTH AS SHOWN HEREON.
16. The terms, covenants, conditions and provisions as contained in an instrument, entitled "Environmental Covenants" by and between SIGHT AIR GROUP, LLC, a Nevada corporation as "Owner, Chevron Environmental Management Company ("CEMC") and The State of Nevada, Department of Conservation and Natural Resources, Division of Environmental Protection ("DENR"). Owner and CEMC collectively recorded July 11, 2011, as Document No. 412123, Official Records. SEE DOCUMENT FOR PARTICULARS.

GENERAL NOTES

1. THIS MAP IS IN SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF THE WASHOE COUNTY DEVELOPMENT CODE.
2. SEE ENGINEERING CIVIL PLANS FOR GRADING, DRAINAGE, EROSION CONTROL AND TOPOGRAPHIC INFORMATION.
3. SEE SHEETS 2-4 OF 5 FOR UNIT BOUNDARY INFORMATION.
4. SEE SHEET 5 OF 5 FOR UNIT VERTICAL BOUNDARY INFORMATION.

BASIS OF BEARINGS AND COORDINATES

NORTH AMERICAN DATUM OF 1983/1984 (NAD 83/1984), NEVADA STATE PLANE WEST ZONE AS DETERMINED WITH REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS OBSERVED ON JULY 25, 2022, USING TRIMBLE R6 RECEIVER WITH CORRECTIONS RECEIVED FROM TRIMBLE R6 BASE STATION OCCUPYING NEVADA DEPARTMENT OF TRANSPORTATION CONTROL POINT "1583003A". ALL DIMENSIONS AND COORDINATES SHOWN ARE U.S. SURVEY FOOT GRID DISTANCES.

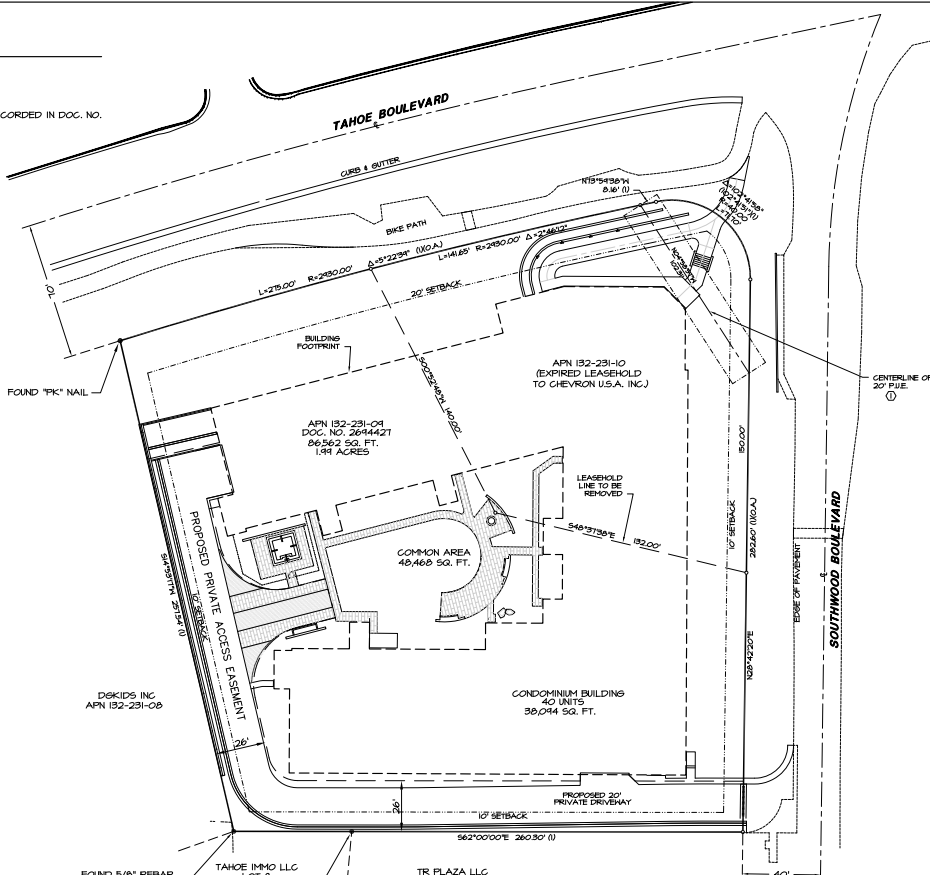
"1583003A" STATE PLANE GRID COORDINATES, NV WEST ZONE
 N = 14164350.00
 E = 2298247.51

BASIS OF ELEVATION:

A FOUND MGS NAIL AT THE NORTHWEST CORNER OF 441 TAHOE BOULEVARD (APN: 132-231-01) AS SHOWN ON THE SITE PLAN PREPARED BY ARNETT & ASSOCIATES.
 "MGS NAIL"
 ELEVATION = 6406.00'

NOTES

1. THE COMMON ELEMENT (CE) IS THE ENTIRE SUBDIVISION SHOWN HEREON INCLUDING ALL LAND BENEATH EXCLUDING ALL UNITS, BUT INCLUDING ALL LIMITED COMMON ELEMENTS (LCE). ALL COMMON ELEMENTS SHALL BE "PRIVATELY" MAINTAINED AND PERPETUALLY FUNDED BY THE HOMEOWNERS ASSOCIATION. THE TERM "COMMON ELEMENT" IS SYNONYMOUS WITH "COMMON AREA" AS DEFINED IN NRS 117.010.
2. EXCEPT WHERE OTHERWISE NOTED, SANITARY SEWER AND STORM WATER DRAINAGE FACILITIES ARE PRIVATELY MAINTAINED AND PERPETUALLY FUNDED BY THE OWNERS OF THE COMMON ELEMENT.
3. NO HABITABLE STRUCTURES SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGICAL TIME.
4. THE HOMEOWNERS ASSOCIATION SHALL MAINTAIN ALL WATER & SEWER LINES WITHIN THE SHOWN COMMON AREA TO THE CONNECTION TAP AT I.V.G.I.D.'S PUBLIC SEWER & WATER MAINS.
5. DETENTION/FILTRATION AND OTHER STORM DRAINAGE FACILITIES, AS WELL AS THE COMMON AREA AND THE PRIVATE DRIVEWAYS SHALL BE PERPETUALLY FUNDED AND PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.



SITE INFORMATION

441 & 947 TAHOE BLVD.
 INCLINE VILLAGE, NV
 APN: 132-231-01 & 10, WASHOE COUNTY, NEVADA
 LANDS DESCRIBED IN DOC. NO. 5104654, MCOR

LAND USE INFORMATION

TOTAL LOT AREA = 86,562 S.F. (1.91 ACRES)
 COMMON AREA = 49,469 S.F. (1.13 ACRES)
 LAND USE DESIGNATION: SPECIAL AREA (TOWN CENTER) OF THE INCLINE VILLAGE COMMERCIAL (IV) REGULATORY ZONE OF THE TAHOE AREA PLAN

ZONING: MFD (MULTI-FAMILY DWELLING)
 SETBACKS: FRONT - 20'
 SIDE - 10'
 REAR - 10'

DENSITY

TOTAL LOT AREA = 86,562 S.F. (1.91 ACRES)
 TOTAL PROPOSED RESIDENTIAL UNITS = 40
 TOTAL PROPOSED COMMERCIAL UNITS = 1
 PROPOSED DENSITY = 20 UNITS/ACRE
 ALLOWABLE DENSITY: (MULTI-FAMILY DWELLING (MFD))
 15 UNITS/ACRE MINIMUM
 25 UNITS/ACRE MAXIMUM

SURVEYOR/ MAP PREPARER: ARNETT & ASSOCIATES, INC.
 120 COUNTRY CLUB DR. NO. 13
 INCLINE VILLAGE, NV 89451
 PHONE: (775) 831-0610
 KENNETH R. ARNETT, P.L.S.
 KEN@ARNETTCONSULTANTS.COM

LANDOWNER: PALCAP FFIF TAHOE I, LLC
 940 SOUTHWOOD BLVD., SUITE 101
 INCLINE VILLAGE, NV 89451
 PHONE: (775) 831-0180
 KEVIN HANNA
 KEVIN@GREENWOOD-HOMES.COM

CIVIL ENGINEER: NCE
 1825 S. ARLINGTON AVE. SUITE 111
 RENO, NV 89504
 PHONE: (775) 580-2505 (X 234)
 MICHAEL LEFRANCOIS, PE
 MLEFRANCOIS@NCE.NET

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 RENO, NV 89504
 PHONE: (775) 340-7771
 PETER GROVE, AIA
 PETER@COLLABORATIVEDESIGNSTUDIO.COM

ATTORNEY: FELDMAN THIEL, LLP
 625 U.S. HIGHWAY 50
 ZEPHYR COVE, NV 89448
 PHONE: (775) 580-7431
 KARA THIEL
 KARA@FTHIAH.COM



**947 TAHOE
 A CONDOMINIUM**

OWNER

**PALCAP FFIF TAHOE I,
 LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451**

NO.	DATE	DESCRIPTION
	1/31/23	

PROJECT NO: 00-09-05
DESIGNED BY: KA
DRAWN BY: JT
CHECKED BY: ___ **DATE:** ___

DATE: 12-01-2021

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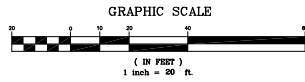
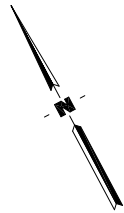
SHEET TITLE

**TENTATIVE
 SUBDIVISION MAP**

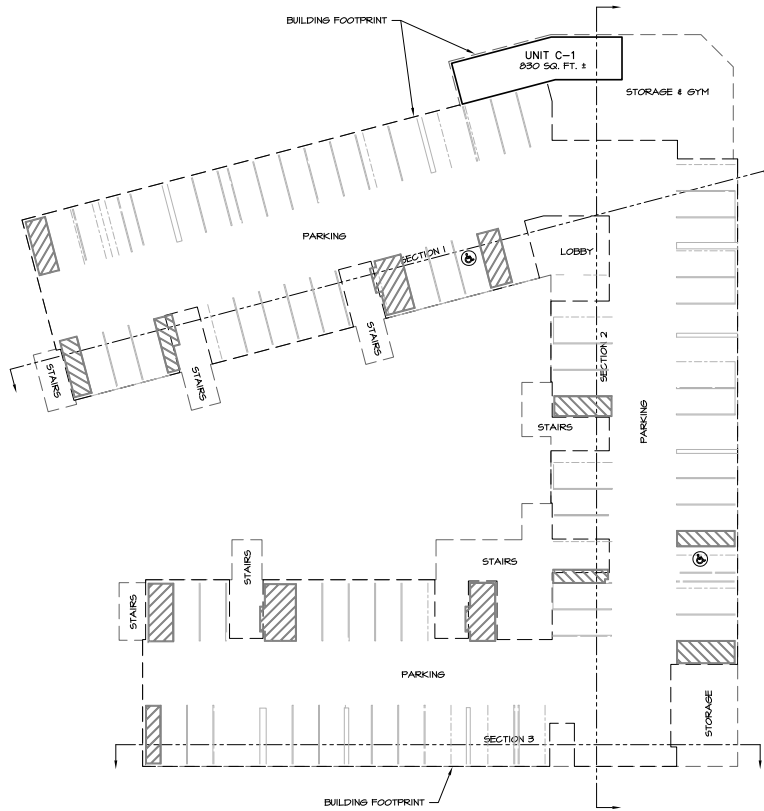
DRAWING

TM1

SHEET 16 OF 23

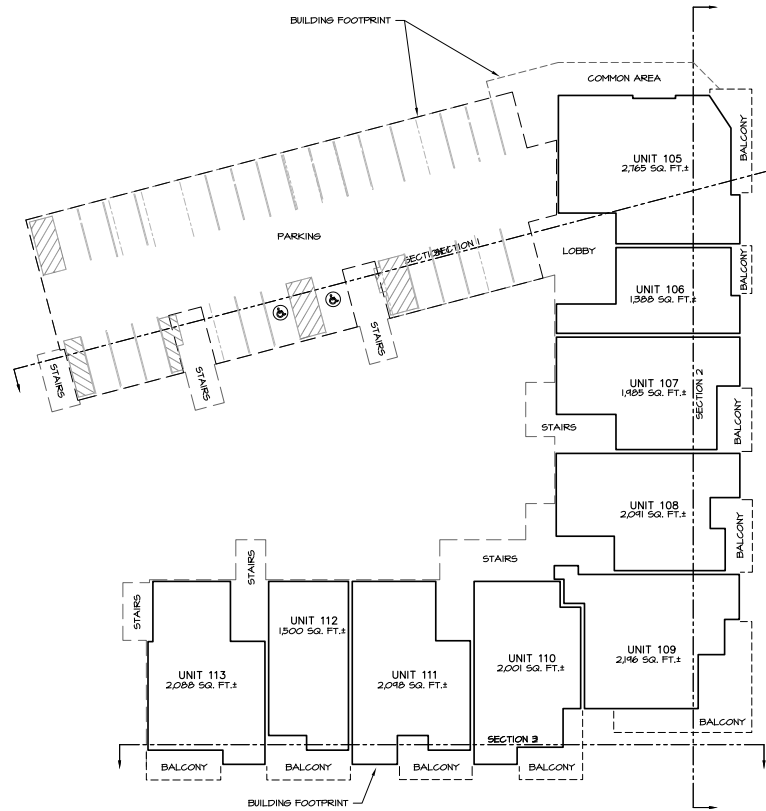


NOTE: THERE ARE 95 PARKING SPACES TOTAL, 4 OF WHICH ARE HANDICAP ACCESSIBLE (2 ON THE BASEMENT LEVEL AND 2 ON LEVEL 1). THE VAN ACCESSIBLE SPACE IS ON LEVEL 1.



BASEMENT LEVEL

NOTE: SEE SHEET TMS FOR SECTIONS



1ST FLOOR



947 TAHOE
A CONDOMINIUM

OWNER
PALCAP FFIF TAHOE 1, LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

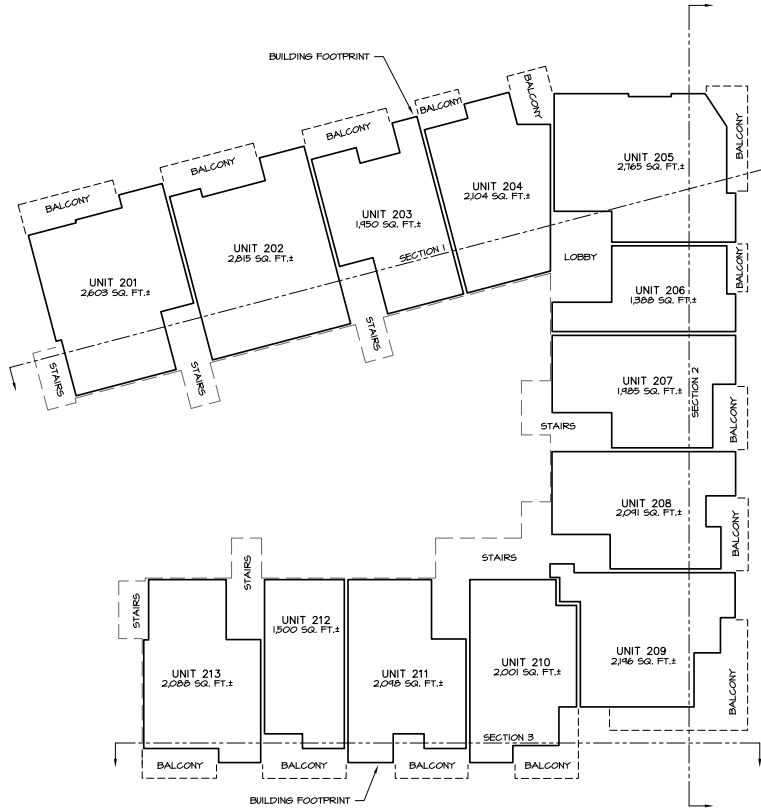
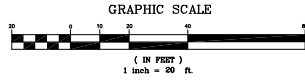
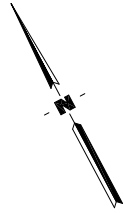
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DESIGNED BY: KA
DRAWN BY: JT
CHECKED BY: ___ DATE: ___
DATE: 12-01-2021

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SHEET TITLE
TENTATIVE
SUBDIVISION MAP

DRAWING
TM2

SHEET 17 OF 23



2ND FLOOR



3RD FLOOR

NOTE: SEE SHEET TM3 FOR SECTIONS



947 TAHOE
A CONDOMINIUM

OWNER

PALCAP FFIF TAHOE 1,
LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

PROJECT NO: 00-09-05
 DESIGNED BY: KA
 DRAWN BY: JT
 CHECKED BY: --- DATE: ---
 DATE: 12-01-2021

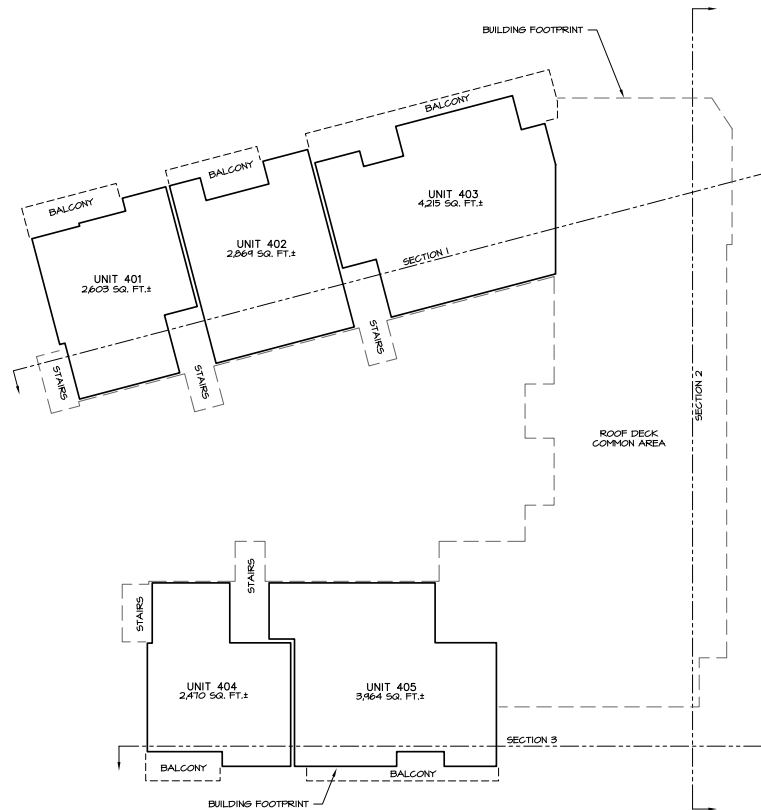
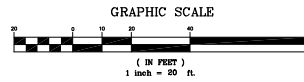
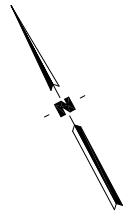
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SHEET TITLE

TENTATIVE
SUBDIVISION MAP

DRAWING
TM3

SHEET 18 OF 23



PENTHOUSE FLOOR

NOTE: SEE SHEET TMS FOR SECTIONS



**947 TAHOE
A CONDOMINIUM**

OWNER
**PALCAP FFIF TAHOE 1,
LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451**

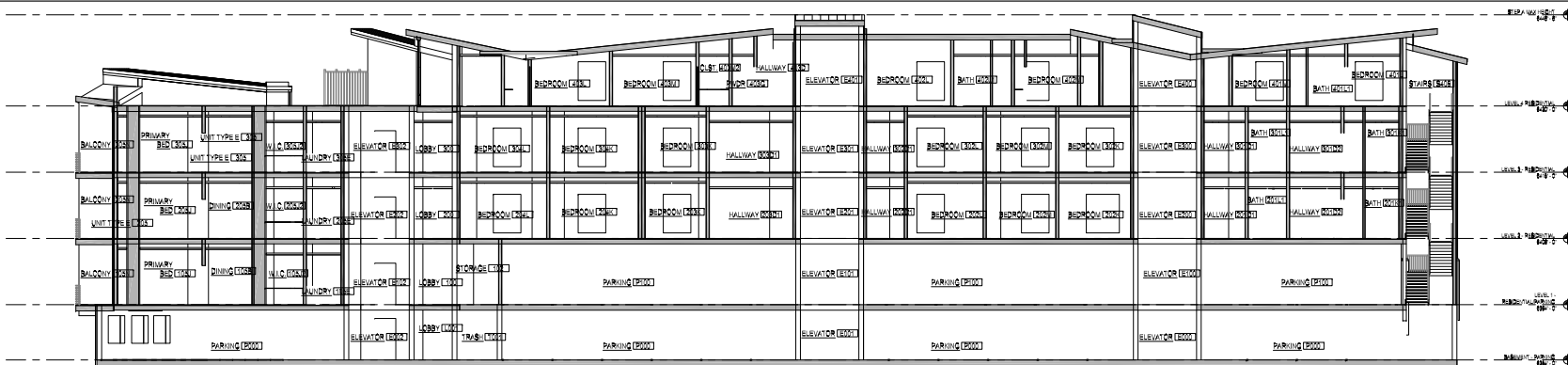
NO.	DATE	DESCRIPTION
PROJECT NO:	00-09-05	
DESIGNED BY:	KA	
DRAWN BY:	JT	
CHECKED BY:	---	DATE
DATE:	12-01-2021	

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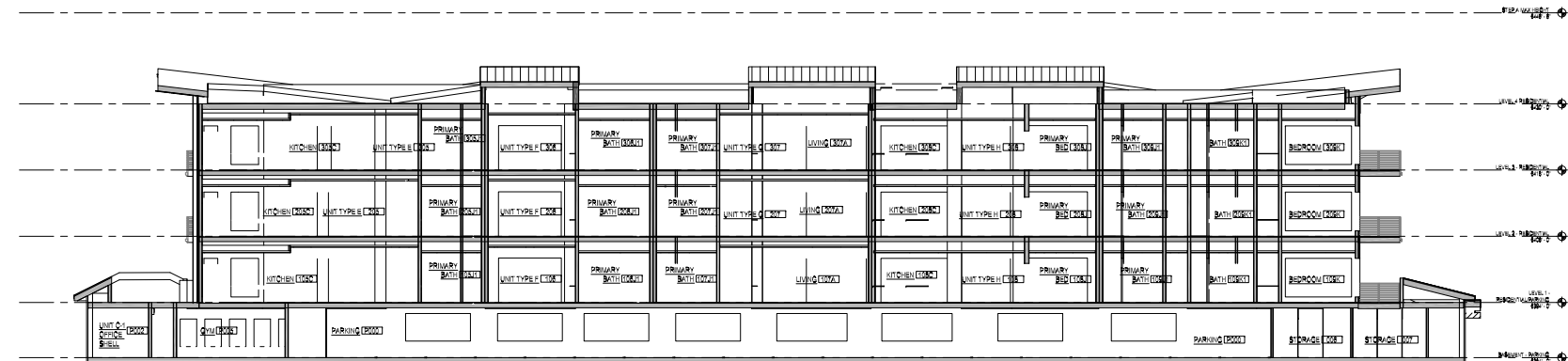
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**TENTATIVE
SUBDIVISION MAP**

DRAWING
TM4

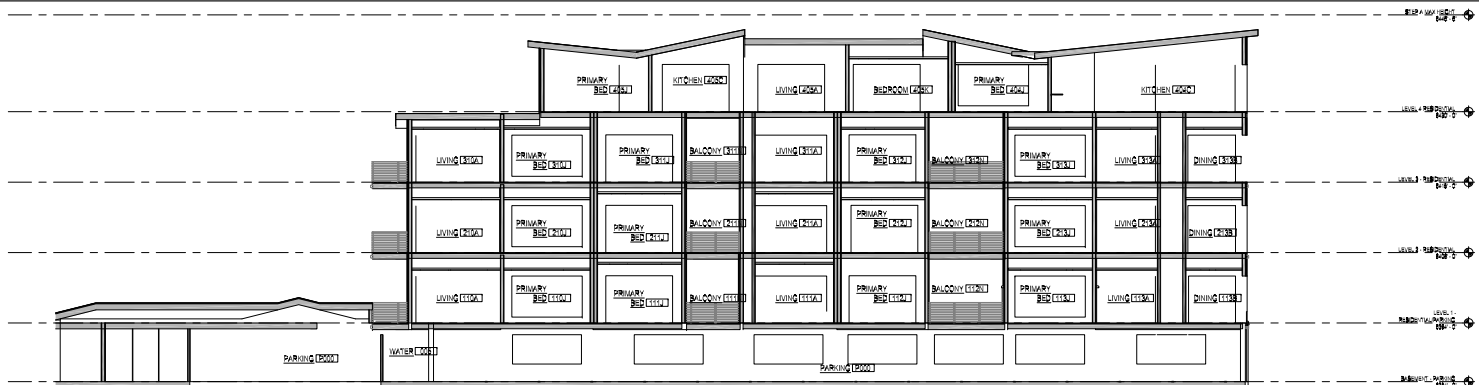
SHEET 19 OF 23



SECTION 1



SECTION 2



SECTION 3



947 TAHOE
A CONDOMINIUM

OWNER

PALCAP FFIF TAHOE 1,
LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

PROJECT NO: 00-09-05
DESIGNED BY: KA
DRAWN BY: JT
CHECKED BY: --- DATE ---
DATE: 12-01-2021

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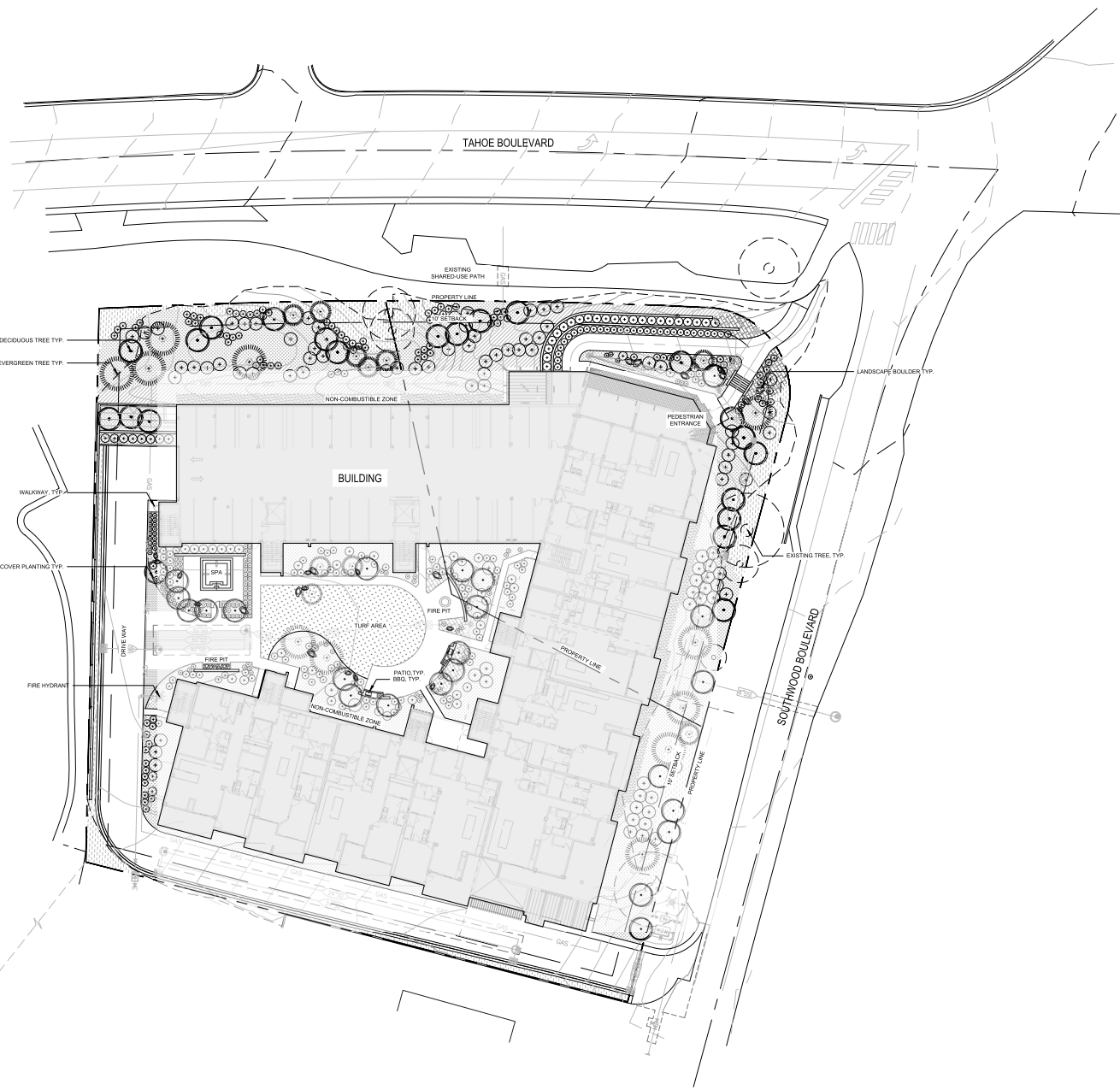
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TENTATIVE
SUBDIVISION MAP

DRAWING
TM5

SHEET 20 OF 23

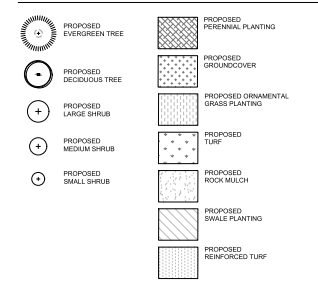
AIRSPACE EXHIBIT
SCALE: 1"=10'



PLANT LIST

ABBR.	BOTANICAL NAME	COMMON NAME	TYPE	SPACING
EVERGREEN TREES				
PA-15	Pinus jeffreyi	Jeffrey Pine	15' Tall	See Plan
PF-15	Pinus ponderosa	Ponderosa Pine	15' Tall	See Plan
CC-10	Calocedrus decurrens	Incense Cedar	10' Tall	See Plan
DECIDUOUS TREES				
AR-2	Acer palmatum	Japanese Maple	2" cal.	See Plan
AG-2	Amelanchier canadensis 'Eben' Form	Servicberry	2" cal.	See Plan
PT-2	Populus tremuloides	Quaking Aspen	2" cal.	See Plan
PT1-2	Populus tremuloides	Quaking Aspen	1.5" cal.	See Plan
SHRUBS				
CF	Cornus atrovirens	Red Osier Dogwood	5 gal.	48" O.C.
PO	Physocarpus opulifolius 'Seward'	Summer Wine Nematik	5 gal.	36" O.C.
PA1	Pinus mugo mugo	Mugo Pine	5 gal.	36" O.C.
PF	Potentilla fruticosa 'Abbotswood'	Abbotswood Potentilla	5 gal.	36" O.C.
SP	Saxifraga oppositifolia	Dwarf Arctic Willow	5 gal.	48" O.C.
SB	Spiraea x bicolorata 'Anthony Waterer'	Anthony Waterer Spiraea	5 gal.	48" O.C.
SC	Symphoricarpos x chenaultii 'Nanook'	Creeeping Snowberry	1 gal.	24" O.C.
PERENNIALS / GROUNDCOVERS				
AM	Achillea millefolium	Monardella Yarrow	1 gal.	24" O.C.
NF	Nepeta x faassenii 'Walker's Low'	Catmint 'Walker's Low'	1 gal.	24" O.C.
DC	Diastemma cespitosa	Uplift Hair Grass	1 gal.	24" O.C.
HS	Helictotrichon sempervirens	Blue Oat Grass	1 gal.	24" O.C.
ORNAMENTAL GRASS				
	Bouteloua gracilis	Blue Grama Grass	1 gal.	24" O.C.
	Diastemma cespitosa	Tufted Hair Grass	1 gal.	24" O.C.
	Elymus glaucus	Blue Wildrye	1 gal.	24" O.C.
	Elymus triticoides	Creeeping Wildrye	1 gal.	24" O.C.
	Poa annua	Big Bluegrass	1 gal.	24" O.C.

PLANTING LEGEND

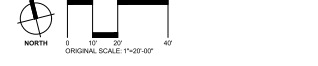


LANDSCAPE PLANTING NOTES

1. Refer to Civil Engineer's utility and grading and drainage plans as required. If actual site conditions vary from what is shown on the plans, contact the Landscape Architect for direction as to how to proceed.
2. Verify locations of pertinent site improvements installed under other sections. If any part of this plan cannot be followed due to site conditions, contact Landscape Architect for instructions prior to commencing work.
3. Exact locations of plant materials shall be approved by the Landscape Architect in the field prior to installation. Sizes or otherwise listed on proposed planting list for review. Landscape Architect reserves the right to adjust plants to exact location in field.
4. Verify plant counts and species list. Quantities are provided as Owner information only. If quantities on plan list differ from graphics, indicators, then graphics shall prevail. If graphics are inconclusive contact Landscape Architect for clarification.
5. Perform excavation in vicinity of underground utilities and existing foundation depths with care and if necessary, by hand. The Contractor bears full responsibility for the work and disruption or damage to utilities and existing foundations shall be repaired or replaced immediately at no expense to the Owner.
6. Tree/shrubs shall bear same relation to finished grade as it bears to existing in place of growth. However, at no point shall it be less than 1 inch above adjacent finish grade.
7. Trees shall be planted a minimum of 15 feet from face of building and a minimum of 4 feet from edge of pavement, except as approved by Landscape Architect.
8. Shrubs shall be planted a minimum of 3 feet from face of building and a minimum of 12 inches from edge of pavement, except as approved by Landscape Architect.
9. All other plants (perennials, grasses, groundcover, annuals) shall be planted a minimum of 12 inches from face of building and a minimum of 6 inches from edge of pavement, except as approved by Landscape Architect.
10. Provide matching forms and sizes for plant materials within each species and size designated on the drawings.
11. Prune newly planted trees only as directed by Landscape Architect.
12. Finish grades of planting areas and areas shall be true and meet accuracy and comply with adjacent parking, grading, positive drainage. Slopes 1:1 or steeper shall be provided at planting area transitions to adjacent pavement as indicated to allow for runoff installation.
13. Provide specified slopes as divider between planting beds and strip edges.

IRRIGATION NOTE

A combination of sub-surface, trough resistant plant material and an efficient irrigation system is proposed for the project. An automatic controller with multiple functions will be used to generate different pressure zones and moderate the rates of application of water to a zone by zone basis. Rain sensors will monitor the operation of the system and shut it off during natural rain events. The irrigation system shall include, but not be limited to, the following: electrical expansion tanks. Overhead sprinklers will only be used for turf areas. Plant species have been grouped with similar water requirements on common zones to match precipitation levels and eviters.



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NOT FOR CONSTRUCTION

947 Tahoe

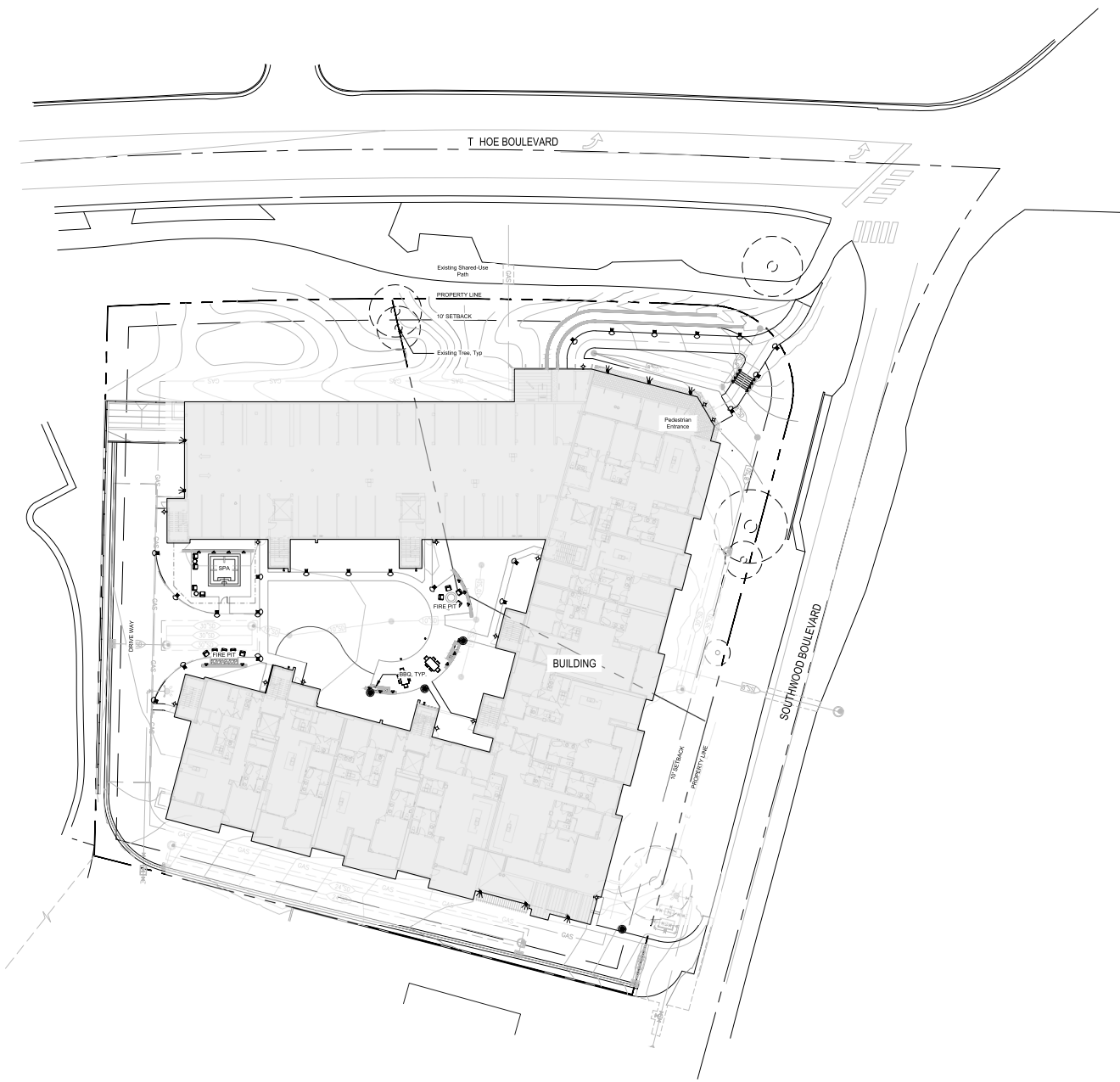
A.P.N. 132-213-09
 INCLINE VILLAGE, NV 89451
 WASHOE COUNTY

JOB NO. 882
 DATE: 24-2023
 REVISIONS:

TENTATIVE MAP
 SUBMITTAL

Planting Plan
 AGENCY STAMP

L1.0



- LIGHTING LEGEND:**
- Bollard Light
 - Recessed Wall Scones
 - Door Scones
 - Building/Eave-Mounted Down Light
 - Pedestrian Pole Lights
 - Wall Scones

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947 Tahoe

A.P.N. 132-213-09
 INCLINE VILLAGE, NV 89451
 WASHOE COUNTY

JOB NO. 882
 DATE 2-8-2023
 REVISIONS:

TENTATIVE MAP
 SUBMITTAL

Site Lighting Plan

AGENCY STAMP

L2.0





SNOW MANAGEMENT LEGEND:

-  Snow Storage
-  Snow Removal



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947 Tahoe

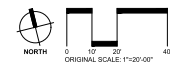
A.P.N. 132-213-09
 INCLINE VILLAGE, NV 89451
 WASHOE COUNTY

JOB NO. 882
 DATE: 2-8-2023
 REVISIONS:

TENTATIVE MAP
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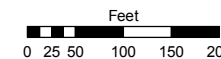
Snow Management Plan
 AGENCY STAMP

L3.0

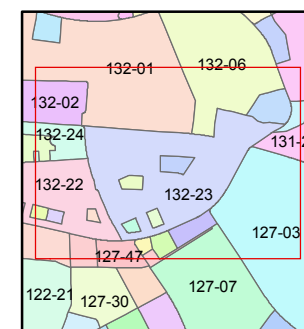
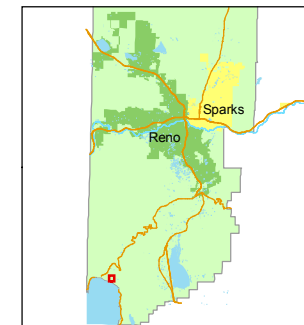


STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
Joshua G. Wilson, Assessor

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



1 inch = 200 feet



created by: KSB 4/13/2009

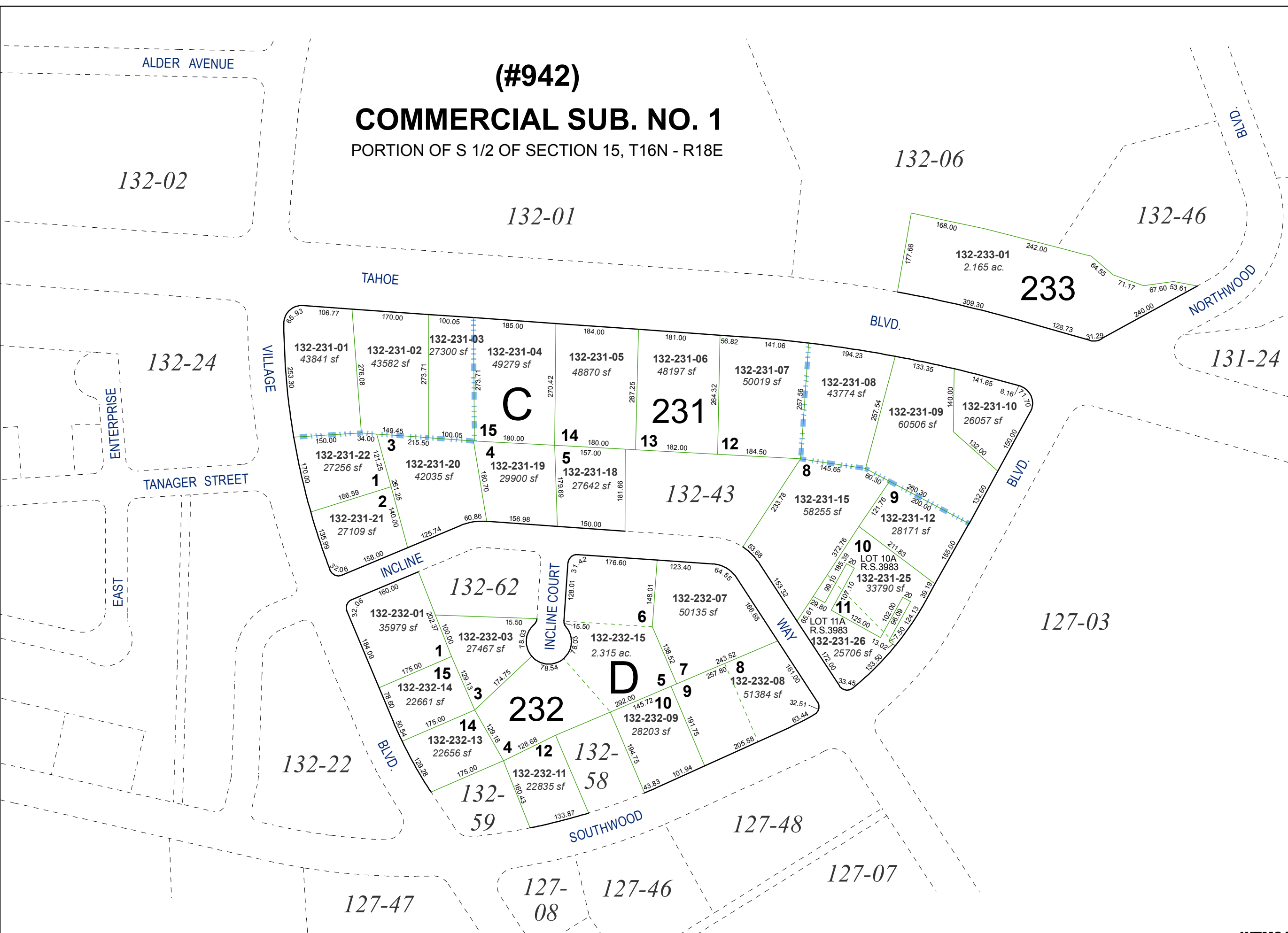
last updated: CFB 07/30/2010

area previously shown on map(s)

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

(#942)
COMMERCIAL SUB. NO. 1

PORTION OF S 1/2 OF SECTION 15, T16N - R18E



Consulting Civil Engineers
P.O. Box 18449
Reno, Nevada 89511
PH (775) 853-9100
FAX (775) 853-9199

July 1, 2021
Project No. 21073.001

Mr. Kevin Hanna
PAL CAP FIFF Tahoe I, LLC
940 Southwood Boulevard, Suite 101
Incline Village, Nevada 89451
Email: kevin@greenwood-homes.com

Subject: **Geotechnical Assessment
Southwood Condominiums
941 and 947 Tahoe Boulevard
Incline Village, Washoe County, Nevada 89451
APN's: 132-231-09 and 132-231-10**

Dear Mr. Hanna:

This report presents the results of Reno Tahoe Geo Associates' (RTGA's) geotechnical assessment for a proposed 5-story condominium building to be located on two adjoining parcels at 941 Tahoe Boulevard and 947 Tahoe Boulevard in Incline Village, Washoe County, Nevada (APN's: 132-231-09 and 132-231-10). This report provides the information required by Washoe County. The project location is shown on Plate 1.

A limited subsurface field investigation was included in this geotechnical assessment. Therefore, it is important that RTGA be involved during grading and construction to confirm that the site conditions are as anticipated and to make any necessary revisions to our recommendations.

PROJECT DESCRIPTION

The proposed project site is composed of two adjoining irregularly shaped parcels totaling 1.987 acres located at 941 Tahoe Boulevard and 947 Tahoe Boulevard (corner parcel), Incline Village, Washoe County, Nevada. The parcels are bounded to the north by Tahoe Boulevard, to the east by Southwood Boulevard, and to the south and west by developed privately owned parcels. Access is by existing paved and gravel private driveways from Tahoe Boulevard and Southwood Boulevard. A site plan

including the existing property lines and the proposed condominium building footprint is presented on Plate 1.

The two parcels are currently undeveloped, unoccupied, and without above ground structures. The corner lot, 947 Tahoe Boulevard, was formerly occupied by a Chevron gas station. 941 Tahoe Boulevard is located on the south and west sides of 947 Tahoe Boulevard and formerly had a building used as a restaurant located in the north-central portion of the parcel near Tahoe Boulevard. The southern portion of this parcel does not appear to have undergone any historic development. An approximately 4-foot high retaining wall located on the west edge of the corner lot along its north-south property line. The formerly developed portions of each parcel are approximately level and the levelled portion of 947 Tahoe Boulevard is approximately 8 feet lower than the levelled portion of the western parcel. From Tahoe Boulevard, the combined parcels slope from approximately 6,406 feet at the northwest corner to 6,379 feet at the southeast corner where they meet Southwood Boulevard, resulting in an overall site slope of approximately 7 percent to the southeast.

We understand that a new, 5-story condominium complex with covered parking will be constructed with anticipated cuts of up to 20 feet and fills on the order of 8 feet or less. E-mail correspondence indicates the complex will be supported on concrete slab with a concrete and steel structure. Structural loads were not available at the time of this report and were assumed for the purposes of this proposal. Estimated vertical structural loads are not expected to exceed 50 kips at isolated columns and 2 kips to 4 kips per linear foot along continuous wall foundations for long-term loading conditions. Once plans are made available, we may need to modify our recommendations if the actual construction scope differs.

REFERENCES

The following information was provided to RTGA in the course of this investigation and serves as the basis of our understanding of the project type and scope.

- Topographic Survey, Arnett & Associates, Inc., 941 & 7 947 Tahoe Boulevard, Washoe County, Nevada, October 30, 2020.

- ALTA/NSPS Land Title Survey, 941 & 7 947 Tahoe Boulevard, Washoe County, Nevada, October 30, 2020.

The following published and unpublished references were also reviewed during preparation of this report.

- ASCE, 2019, ASCE 7 Hazard Tool, accessed June 2021;
- Natural Resources Conservation Service (NRCS) *Web Soil Survey in Google Earth*, accessed June, 2021;
- *Washoe County Real Property Assessment Data*, Washoe County website accessed June 2021;
- Saucedo, George J. 2005, *Geologic Map of the Lake Tahoe Basin, California and Nevada*, California Geological Survey;
- United State Geologic Survey (USGS), Quaternary Fault and Fold Database of the United States, (<http://earthquake.usgs.gov/hazards/qfaults/>), accessed August 2020.

We also reviewed nearby projects and our previous experience in the project area in developing these recommendations.

FIELD EXPLORATION

Our selection of field exploration locations was based on the anticipated project layout and site access. The subsurface exploration consisted of three test pits and a shear-wave velocity survey, which were located in the field by visual sighting and/or measuring from existing features at the site. The exploration locations shown on Plate 1 should be considered accurate only to the degree implied by the methods used.

Refraction Microtremor Survey (ReMi)

A Refraction Microtremor (ReMi) geophysical array was utilized to obtain shear-wave velocity measurements to determine the Seismic Design Category and estimate the depth to competent bedrock. ReMi provides a means to obtain a basic subsurface profile in an essentially continuous profile without physical investigations across the explored location. The results of the ReMi survey are presented both as a one-dimensional vertical profile and a two-dimensional transect on Plate 2.

Test Pit Excavation

Three test pits were excavated using a Link-Belt 145 X 2 excavator. Our engineer visually classified soils encountered in the test pit according to the Unified Soil Classification System (USCS) and obtained bulk samples for further identification and laboratory testing. Soil conditions encountered are presented on the test pit logs on Plates 3 through 5. A description of the USCS used to identify the site soils and a test pit log legend are presented on Plate 6.

After the test pits were completed, they were backfilled with excavated soil using the equipment on site. Backfill was loosely placed and not compacted to the requirements typically specified for engineered fill. Structures, slabs supported on grade, or pavements located over these areas may experience excessive settlement. Removal and re-compaction of test pit backfill may be required prior to construction of improvements over this area.

LABORATORY TESTING

Laboratory tests were performed on selected samples to aid in soil classification and to evaluate physical properties of the soils, which may affect the geotechnical aspects of project design and construction. Gradation analysis and plasticity index (Atterberg Limits) was performed for a sample of site soils. Laboratory test results can be found on the test pit logs (Plates 3 through 5) and on Plates 7 and 8 at the end of this report. In addition, one soil sample of sandy lean clay collected from 12 feet depth in TP-01 was submitted for soil corrosivity analysis. Results of laboratory testing for this sample will be reported under separate cover when they are received.

SOIL AND GEOLOGIC CONDITIONS

According to Saucedo et al. (2005), the site is underlain by unnamed gravels, sand, and alluvium of Pliocene and/or Pleistocene age. Based on published information by NRCS and site observation, the native soils have been categorized as Inville gravelly coarse sandy loam, 2 to 9 percent slopes, stony, and within the hydrologic soil group A. The soil is well drained, with a saturated permeability of 2 to 6 inches per hour. According to Saucedo et al. (2005), the site is underlain by undivided glacial outwash deposits of Holocene or Pleistocene age.

Based on test pit excavations, laboratory analysis of soil samples, and the seismic survey conducted at the site, the subsurface conditions consist of greater than 15 feet thickness of silty gravel with sand,

cobbles, and boulders, over highly-weathered bedrock. Sandy lean clay was logged between 11 and 13 feet depth in test pit TP-1. Clayey sand with gravel was encountered below 13 feet in test pit TP- 1.

The upper portion of bedrock, if encountered, may consist of intermixed weathered and permeable zones with harder boulder or zones where jointing is widely spaced. The bedrock typically transmits infiltrated water vertically to joint systems to sills or geologic contacts at depth, and rarely have springs or surface runoff. Boulders and bedrock may exhibit variations in density and hardness within the planned excavation.

The weighted average soil shear-wave velocity measured in the upper 100 feet of the soil horizon is 1,385 feet per second (fps) based on the ReMi measurement. Based on the shear-wave velocity profile, the soil at the ground surface is dense (material shear-wave velocities of about 800 fps to 1,000 fps). The ReMi data suggests that soft to hard rock (material greater than 1,200 fps to 2,800 fps shear-wave velocity) is present at approximately 16 to 26 feet in depth. Very hard excavation conditions may be present at shallow depths. The contractor should anticipate shallow large boulders and possibly bedrock in excavations.

No groundwater was observed in the test pits.

Seismicity and Faulting

Lake Tahoe lies within an area with moderate to high potential for strong ground shaking from large earthquakes (moment magnitude 7 or larger) in northern Nevada and California. Ground shaking can result in secondary seismic hazards such as liquefaction, seismic settlement, differential compaction, seismically induced slope instability, and rock falls. None of these hazards are present in this site due to dense soils, moderate slopes, and absence of tall rock outcrops or surface boulders. Due to the high potential for strong ground shaking from earthquakes, all structures should be designed for seismic loads in accordance with the most recently adopted International Building Code/International Residential Code.

Saucedo et al. (2005) and the USGS Fault and Fold Database indicate the nearest fault is the Incline Village Fault approximately 7,400 feet west, (Saucedo, 2005). This fault zone is assigned as a Class A Fault of undifferentiated Quaternary Age. Based on review of the above-referenced published sources, no evidence was found that would indicate the presence of active faults trending through the subject property. No portion of any active Holocene age faulting is known to cross the site at this time, nor has any direct evidence of on-site faulting been observed in the field during the subsurface exploration of this project. No additional fault studies or fault setback requirements are needed for the subject parcel.

RECOMMENDATIONS AND DISCUSSION

From a geotechnical engineering standpoint, the site may be developed as a condominium structure as planned. Based upon our review of the above-referenced material, we have developed the following conclusions. These conclusions may change if additional information becomes available or the design is changed. *Please note, it is recommended that the soil and rock conditions presented in this report be verified during construction by the project geotechnical engineer.*

- The presence of shallow boulders is expected to be a significant constraint which will result in additional costs and difficulties during construction. No other soil or groundwater constraints were observed which will preclude the development as planned.
- Soils are a loose to medium dense silty sand with varying gravel, cobble, and boulder content. Boulders greater than 6 feet diameter were encountered in test pit TP-1 and smaller boulders were found to be common in the subsurface across the site. The contractor should anticipate boulders during excavation of the planned subgrade parking area, footings, and trenches.
- In most cases, native soils, if screened to <6 inches, are suitable for reuse as structural fill under structural areas or floor slabs. This excludes clayey soils such as those found below 11 feet depth in TP-1. Native soil is suitable for subgrade below footings or slabs if in a relatively undisturbed state. The Contractor may choose to use onsite material in structural areas but should be made aware that these soils may prove difficult to moisture condition and compact. It will be far easier to backfill narrow excavations, such as between building walls and excavations, with drain rock, aggregate base, or other readily specified compactable materials.

- Imported structural fill, if required, should consist of granular material nearly free of organic debris, with a liquid limit of less than 35, a plasticity index less than 12, 100 percent passing the 4-inch sieve, and less than 30 percent passing the No. 200 sieve. All imported fill materials should be approved by the project Soils Engineer prior to being transported to the site.
- Fill should be uniformly moisture conditioned to within 2 percent of optimum moisture content and placed in layers of 8 inches or less in loose thickness. Each lift should then be compacted with appropriate compaction equipment to achieve at least 90 percent relative compaction*, unless specified otherwise. No fill material should be placed, spread, or rolled while it is frozen, thawing, or during unfavorable weather conditions.
- Fills with more than 30 percent of particles greater than ¾-inch diameter and composed of durable stone or rock fragments, including drain rock and, likely, native materials, are not applicable to conventional compaction testing and is considered “rock fill”. These materials should be uniformly moisture conditioned to above optimum moisture content and placed in thin layers not exceeding one foot in loose thickness. They should be compacted with a minimum of five passes with a large sheepsfoot compactor, such as Caterpillar 825, a large excavator with a compaction wheel, or a minimum of five passes with hand held compaction equipment in trenches or other small excavations. Compaction shall continue until no further densification or change in volume is noted. Any fill material within this category should be placed only under continuous observation and approval of the soil engineer. It is also noted that other types and sizes of compaction equipment may require thinner lifts of material.
- The 2018 International Building Code or International Residential Code should be implemented for the project seismic design. A Site Class C, per the IBC, is applicable for site soils due to the proximity of bedrock to the surface. For design purposes, the seismic criteria in the following table should be implemented.

* Wherever referenced in this report, relative compaction should be determined by comparing to the maximum density and optimum moisture content determination in accordance with ASTM D1557 Test Method for compaction curves.

SEISMIC DESIGN CRITERIA USING ASCE 7-16 <i>SOUTHWOOD CONDOMINIUM PROJECT, INCLINE VILLAGE, NEVADA</i>	
Approximate Latitude of Site	39.24874
Approximate Longitude of Site	-119.947296
Spectral Response Acceleration at Short Period (0.2 second), S_s	1.805 g
Spectral Response Acceleration at 1-Second Period, S_1	0.618 g
Site Class Selected for this Site	C
Site Coefficient, F_a	1.2
Site Coefficient, F_v	1.4
Site Spectral Response Acceleration at Short Period, S_{MS}	2.166 g
Site Spectral Response Acceleration at Long Period, S_{M1}	0.866 g
Design Spectral Acceleration Parameters, S_{DS}	1.44
Design Response Spectrum, S_{D1}	0.58
Peak Ground Acceleration (PGA)	0.77 g

- We recommend that all foundations be bottomed at a minimum depth of 24 inches below the existing ground surface. This depth will provide adequate foundation support and protect against shallow ground loosening due to frost heave.
- Foundations bottomed at least 2 feet below the final ground surface may be designed for an allowable bearing pressure of 3,000 psf, assuming a minimum footing width of 12 inches. Bearing capacity can be increased by 500 psf for each foot of increase in thickness up to 4,500 psf. Footings at greater than 10 feet depth can be designed for an allowable bearing pressure of 6,000 psf where they are on bedrock.
- The allowable bearing pressure may be increased by one-third for total loading conditions, including wind and seismic forces. For balanced backfill, the allowable bearing pressure is a net value; therefore, the weight of the foundation which extends below grade and the overlying backfill may be neglected when computing dead loads.
- Total settlement of an individual foundation will vary depending on the plan dimensions of the foundation and the actual load supported. Based upon anticipated foundation dimensions and loads, we estimate that total post-construction settlement of footings designed and

constructed in accordance with the recommendations of this report will be ½-inch. Differential settlement between similarly loaded, adjacent footings is expected to be ¼-inch, provided footings are founded on similar materials (e.g., all on native soil). Settlement of all foundations is expected to occur rapidly, generally during the construction time frame for the building. Improvements supported on non-structural fill may experience larger settlements.

- **All footing excavations should be observed by the project Soils Engineer** prior to placing reinforcing steel for concrete to verify the underlying soil conditions and recommendations contained herein are implemented during construction.
- Excavations from the surface to 15 or more feet below surface are likely to encounter boulders with intervening soil filled voids. Soil and altered rock temporary excavations may potentially be in the range of 1H:1V to 1.5H:1V. Slopes to 1H:3V feet may be generally stable below this depth, provided chain link netting is used to prevent loosening of boulders. However, RTGA should closely observe excavations below the bedrock surface to verify that loose or over-steepened zones are not present which could allow rock wedges or boulders to slide into the excavation. Steeper excavations can be implemented if required, but will generally require either soil-nail and shotcrete facing in soil and weathered bedrock, or spot nailing of bedrock blocks and wedges in intact bedrock (without shotcrete)
- If required, rock anchors or soil nails may be needed to stabilize unstable areas within the excavation wall. Rock anchors or soil nails commonly used in the area are hollow bars with 1½-inch outer diameter fitted with a drill bit of 3 to 3½-inches diameter. Soil nails are typically drilled 5 feet or more into the bedrock surface. Neat cement grout is pumped through the hollow center of the bar and create a 3½-inch-diameter annulus of grout around the bar back to the surface. For design of soil nails the ultimate grout to soil/bedrock interface is expected to be approximately 30 psi in soil to 60 psi for depths greater than 5 feet into the bedrock surface (FHA, 2005).
- Soil nail walls in theory could be used for permanent support of the uphill side of the excavation, however practically the excavation will not be neat and the excavation line will likely vary widely outside of the building line due to uneven rock joints and fractures. Careful consideration would be required for drainage and removal of groundwater seepage behind the shotcrete face so that it does not affect interior building components.

- If required, subterranean structures and retaining walls, including foundations, should be designed to resist the lateral earth pressure exerted by the retained, compacted backfill plus any additional lateral force that will be applied to the wall due to surface loads placed at or near the wall. The table below presents a list of soil design parameters for these structures.

TABLE 2 - LATERAL EARTH PRESSURES	
<u>Earth Pressure</u>	<u>Equivalent Fluid Density (pcf)</u>
Active Pressure	
Retained Slope = Level to 4H:1V	30
Retained Slope = 4H:1V to 2H:1V	40
At-Rest Pressure	
Rigidly Restrained	60
Seismic Active	
Retained Slope = Level to 4H:1V	60
Retained Slope = 4H:1V to 2H:1V	80
Allowable Passive Pressure	
Retained Slope = Level	350
Allowable Coefficient of Friction	0.45

- Surcharge loads behind walls are not factored into the recommended equivalent fluid pressures. Any anticipated surcharge load should be factored into the design in addition to the above-mentioned pressures.
- The active pressure can be used for flexible walls with a potential to dislocate. At-rest pressure should be used for building walls or restrained walls. The seismic active pressure is applicable for the earthquake condition for both at-rest and active walls.
- The values do not include hydrostatic pressures that might be caused by collected runoff water trapped behind the structure. Accordingly, wall backfill should be free draining and provisions should be made to collect and dispose of excess water that may accumulate behind earth retaining structures.
- Adequate drainage of backfill in the form of subdrains should be provided at the base of exterior walls (preferably below the joint between wall and footing) to collect and dispose of

excess water which can accumulate behind the retaining structures. The subdrain should be placed in the drain rock and be enveloped in filter fabric as shown on Plate 9. Drain rock should be densified to a non-yielding condition by placing in lifts and compacting in a manner which does not damage the waterproofing material or structurally damage the wall. Dripline trenches or surface drains should not be connected to the exterior foundation drain.

- Heavy compaction equipment or other loads which may result in lateral pressures higher than those recommended above should not be allowed within proximity to the wall, unless planned for in the structural design.
- Where retaining walls will enclose useable interior space or floors below grade, the wall should be waterproofed. Waterproofing material should consist of rubberized asphalt, polymer-modified asphalt, butyl rubber, or other approved materials capable of bridging nonstructural cracks. Joints in the membrane should be lapped and sealed in accordance with the manufacturer's recommendations. Extra attention should be paid to concrete cold joints between the wall and footing. A manufactured water-stop or key should be placed at all cold joints.
- The drain system should discharge into a properly designed infiltration trench, storm drain system, or other approved exterior location. Filter fabric (Mirafi 140N or approved alternate) should separate the drain rock from overlying fill materials to prevent sand or fines from migrating into the drain rock.
- Due to the potential for water seepage and moisture migration through concrete slab-on-grade floor and to reduce the potential for build-up of hydrostatic pressure, we recommend a drain system be constructed under slab-on-grade floors. In general, the under-slab drain system should consist of 3-inch-diameter (minimum) perforated pipe placed in at least 8-inches of drain rock and spaced at a maximum 24 feet apart. The subgrade should slope toward the perforated drainpipes and the pipes should have at least a one-percent slope.
- Crawl spaces must be built with permanent drainage, including sloped interior surfaces and/or a perimeter drain trench filled with drain rock. Positive drainage should be provided from all portions of the crawlspace to the lowest part of the crawlspace, and then under or through the perimeter footing to discharge down gradient from the structure and exterior flatwork. The

discharge should be into a properly designed infiltration trench, the storm drain system, or other approved exterior location.

- Radon is a naturally occurring, dense, odorless gas that is generated from radioactive degradation of uranium in granitic rocks decaying into isotopes which can contribute to lung cancer. Active or passive radon venting of below-grade spaces should be considered, including crawlspaces, to reduce potential for radon to diffuse into living spaces. The subfloor perforated pipe vent system under the slab-on-grade floor can be considered for passive radon mitigation.
- Finished grades should be sloped to prevent ponding of water and to direct surface water away from foundations. Impervious surfaces adjacent to the building foundation should slope away from the building at a minimum 5 percent gradient for at least 5 feet. The dripline trench should not be in direct communication with the foundation drain layer.

LIMITATIONS

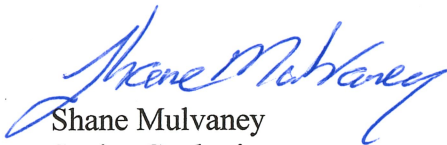
This report has been prepared for design purposes for specific application to the currently proposed project in accordance with the generally accepted standards of practice at the time the report was written. If the scope of the proposed construction changes from those described, our recommendations should be reviewed by us and may require modification. No warranty, express or implied, is made.

All parties to the project including the designer, contractor, subcontractors, etc., should be made aware of this report in its entirety. The use of information contained in this report for bidding purposes should be done at the Contractor's option and risk.

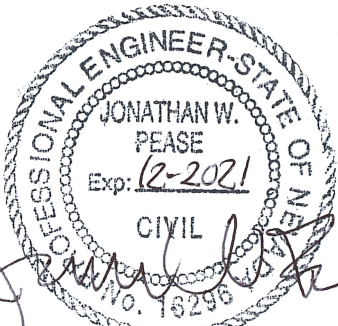
CLOSURE

We trust the report provides you with the information you require. If there are any questions, please contact our office.

Sincerely,
Reno Tahoe Geo Associates, Inc.



Shane Mulvaney
Senior Geologist

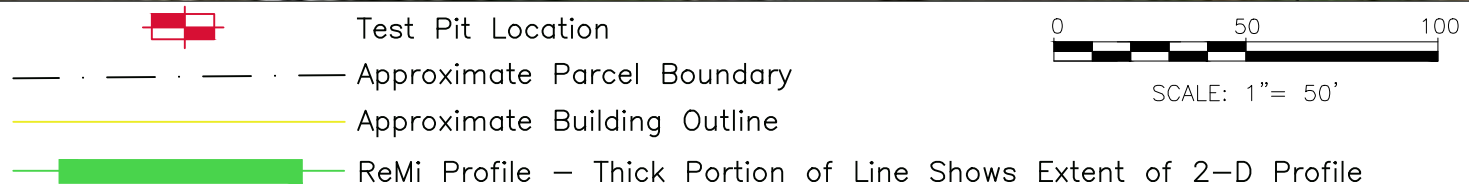
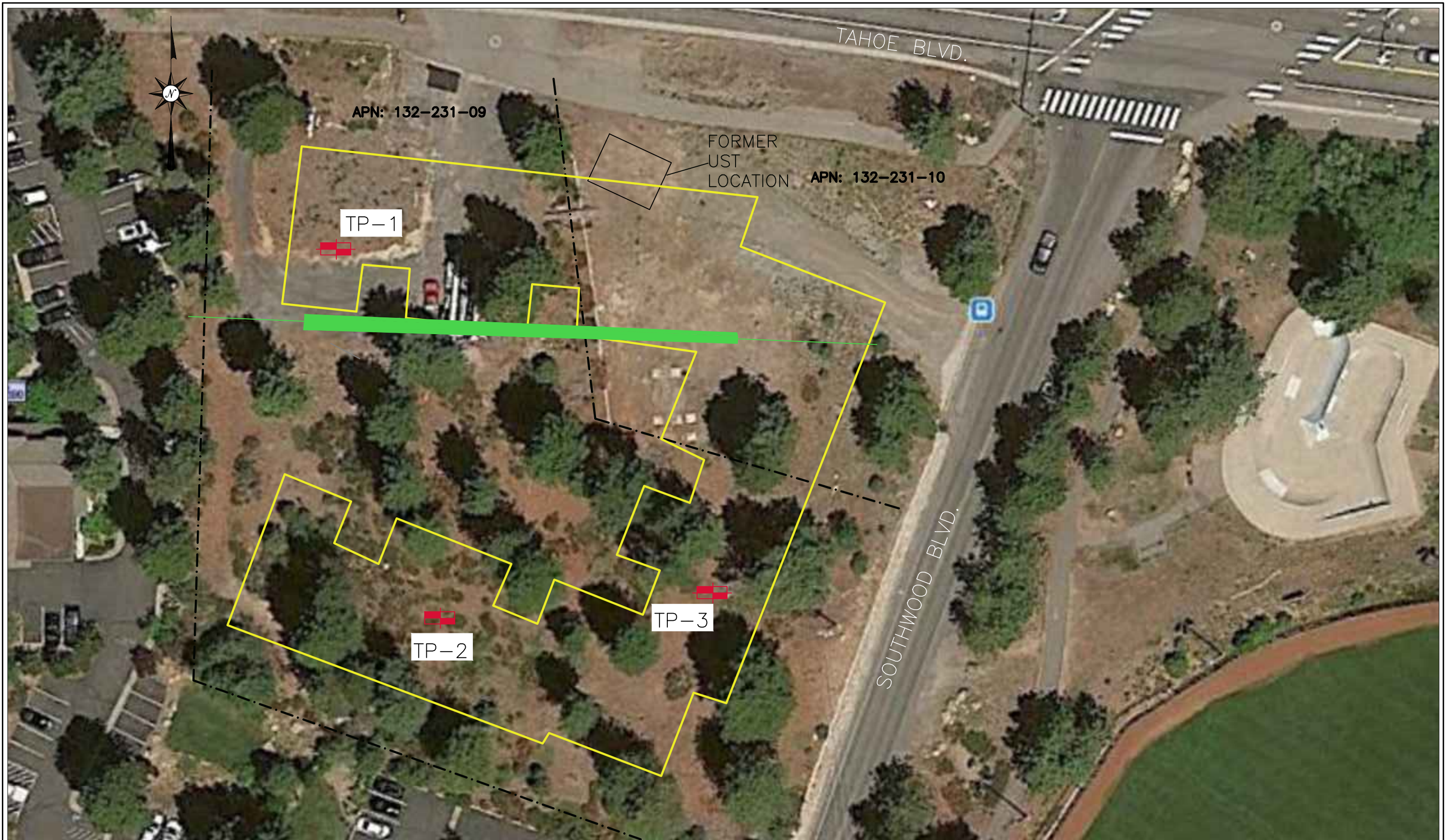


Jonathan W. Pease, PhD, PE, GE
Principal Engineer NV 16296

6-30-21

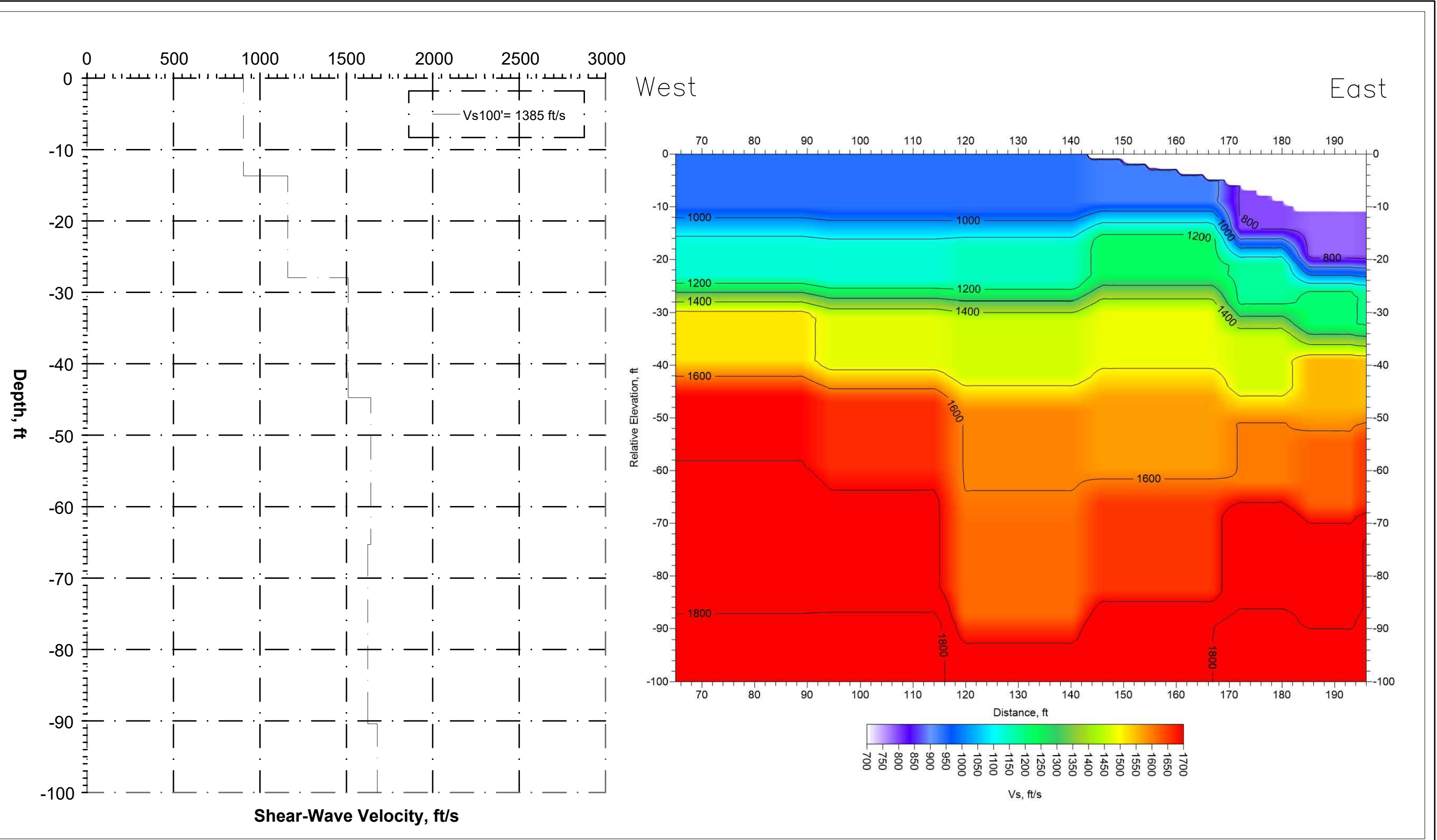
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|---------|-----------|----------------------------|
| Plates: | Plate 1 - | Site Map |
| | Plate 2 - | ReMi 1D & 2D Results |
| | Plate 3 - | Log of Test Pit TP-1 |
| | Plate 4 - | Log of Test Pit TP-2 |
| | Plate 5 - | Log of Test Pit TP-3 |
| | Plate 6 - | Soil Classification Chart |
| | Plate 7 - | Grain Size Analysis |
| | Plate 8 - | Atterberg Limits |
| | Plate 9 - | Typical Back of Wall Drain |

PLATES



Reno Tahoe Geo Associates, Inc.
 CONSULTING CIVIL ENGINEERS
 P.O. Box 18449 Reno, Nevada 89511 TEL (775)853-9100 FAX (775)853-9199
 JOB # 21073.001 APPR: _____ DATE: 05/13/2021

SITE MAP		PLATE
GEOTECHNICAL ASSESSMENT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE		1
WASHOE COUNTY	CALIFORNIA	



Reno Tahoe Geo Associates, Inc.
 CONSULTING CIVIL ENGINEERS
 P.O. Box 18449 Reno, Nevada 89511
 TEL (775)853-9100 FAX (775)853-9199
 JOB # **21073.001** APPR: _____ DATE: **06/09/2021**

REMI LINE RESULTS
 GEOTECHNICAL ASSESSMENT
 SOUTHWOOD CONDOMINIUM PROJECT
 INCLINE VILLAGE
 WASHOECOUNTY NEVADA

PLATE
2

LOG OF TEST PIT TP-1

LOCATION NORTHWEST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION _____ DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

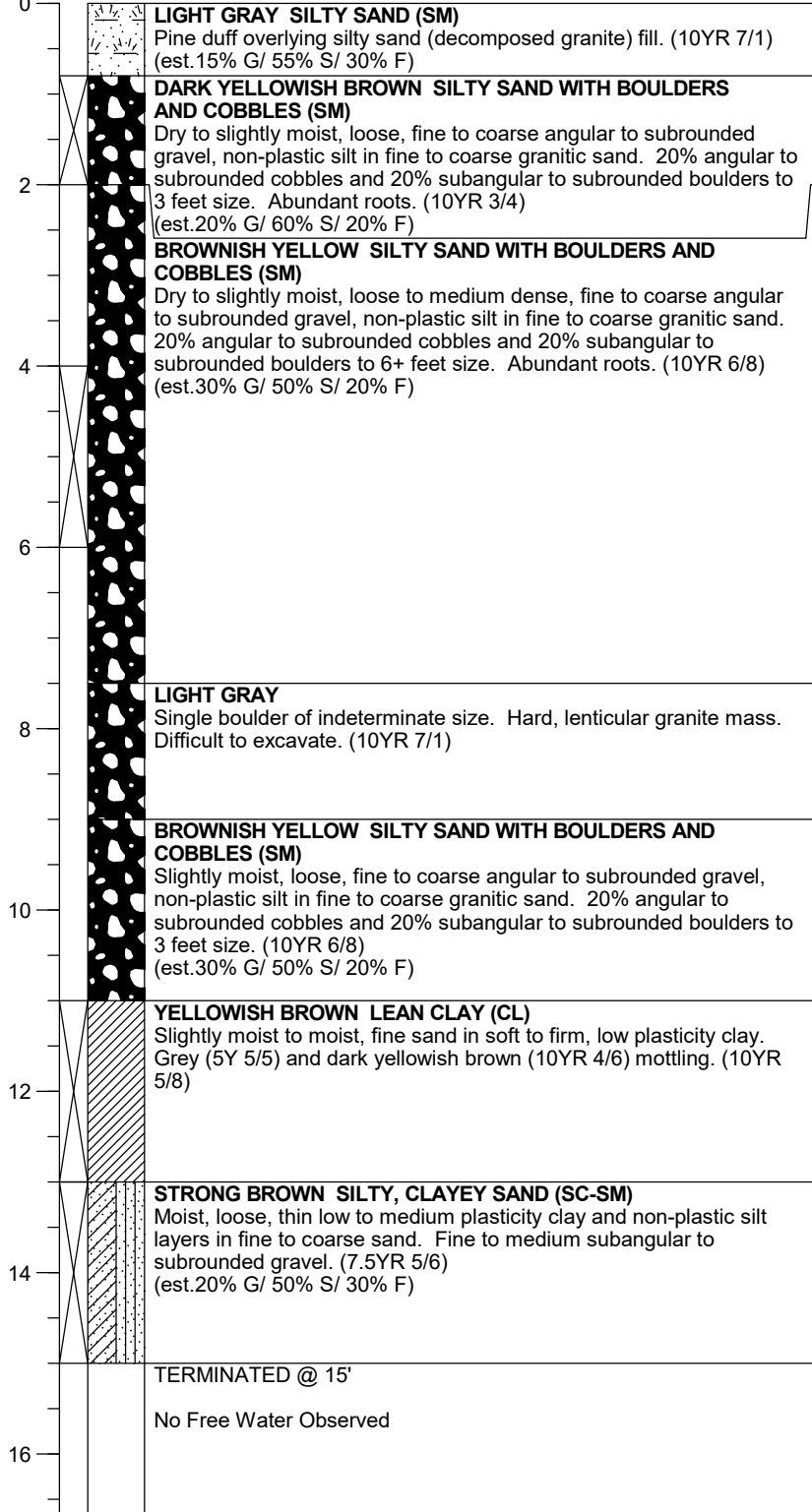
BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE



SA, Percent Passing #200 = 51%
Liquid Limit = 35
Plasticity Index = 14

LOG LETTER SIZE SOUTHWOOD CONDOS.GPJ MED DATA TEMPLATE 2015A.GDT 7/1/21



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LOG OF TEST PIT TP-1

GEOTECHNICAL ASSESSMENT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

PLATE

3

WASHOE COUNTY

NEVADA

LOG OF TEST PIT TP-2

LOCATION SOUTHWEST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION _____ DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE

0

2

4

6

8

10

12

14

16

0	<p>DARK REDDISH BROWN SILTY SAND (SM) Dry, loose, angular to subrounded gravel, non-plastic silt, in fine to coarse sand. Pine duff overlying topsoil. (2.5YR 3/4) (est.15% G/ 60% S/ 25% F)</p>
2	<p>DARK YELLOWISH BROWN SILTY SAND WITH COBBLES AND BOULDERS (SM) Dry to slightly moist, loose matrix, fine to coarse angular to subrounded gravel, non-plastic silt in fine to coarse granitic sand. 25% angular to subrounded cobbles and 20% subangular to subrounded boulders to 3 feet size. Abundant roots. (10YR 4/6) (est.20% G/ 60% S/ 20% F)</p>
8	<p>YELLOWISH BROWN SILTY SAND WITH COBBLES AND BOULDERS (SM) Dry to slightly moist, loose matrix, fine to coarse angular to subrounded gravel, non-plastic silt in fine to coarse granitic sand. 30% angular to subrounded cobbles and 5% subangular to angular boulders to 3 feet size. (10YR 5/6) (est.25% G/ 55% S/ 20% F)</p>
13	<p>TERMINATED @ 13'</p> <p>No Free Water Observed</p>

LOG LETTER SIZE SOUTHWOOD CONDOS.GPJ MED DATA TEMPLATE 2015A.GDT 7/1/21



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LOG OF TEST PIT TP-2

GEOTECHNICAL ASSESSMENT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE

WASHOE COUNTY

NEVADA

PLATE

4

LOG OF TEST PIT TP-3

LOCATION SOUTHEAST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION _____ DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

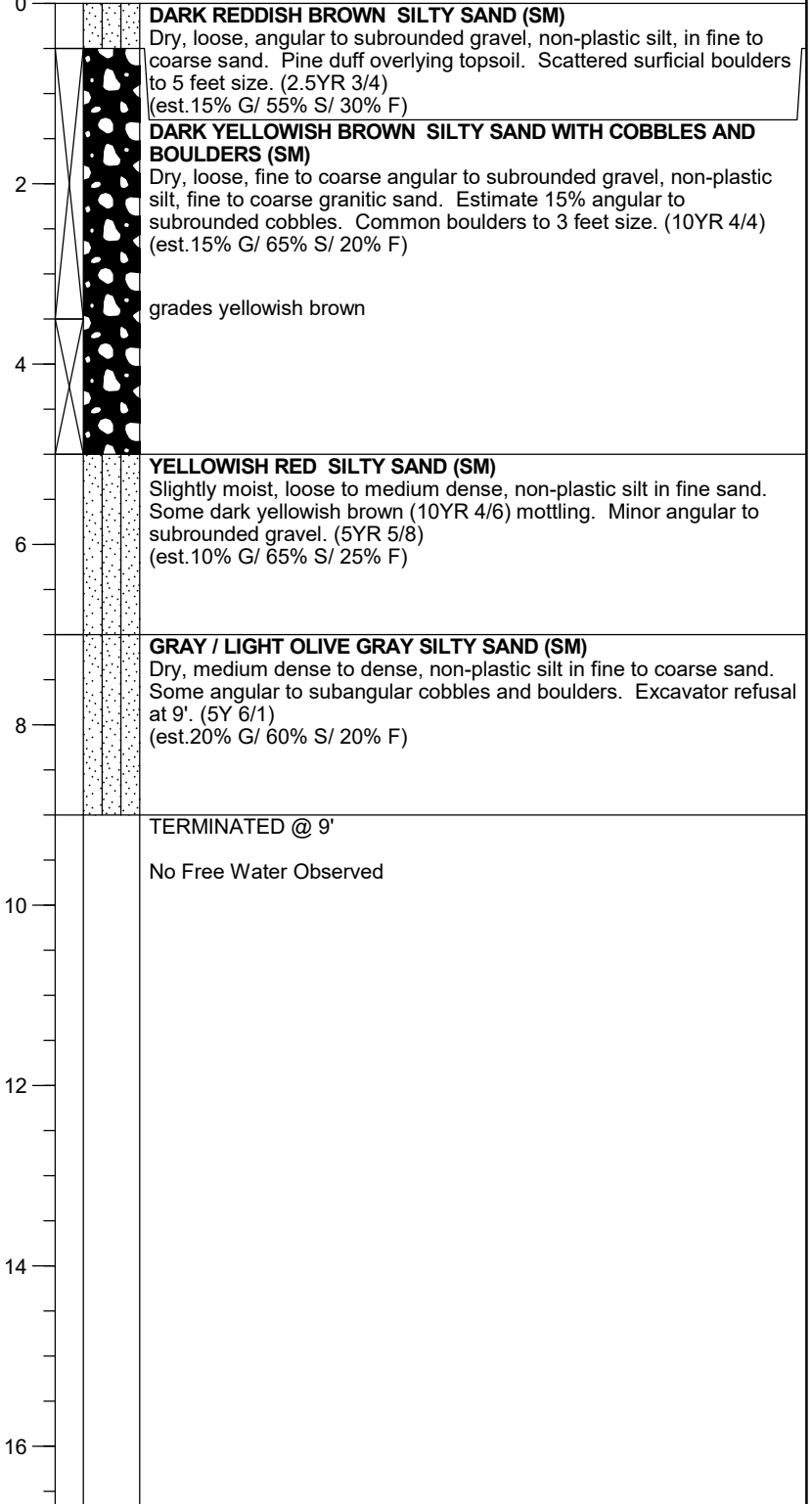
BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE



LOG LETTER SIZE SOUTHWOOD CONDOS.GPJ MED DATA TEMPLATE 2015A.GDT 7/1/21



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LOG OF TEST PIT TP-3

GEOTECHNICAL ASSESSMENT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

WASHOE COUNTY

NEVADA

PLATE

5

UNIFIED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			TYPICAL NAMES		
COARSE GRAINED SOILS	GRAVELS More than half coarse fraction is larger than No.4 sieve size	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		WELL GRADED GRAVELS, GRAVEL SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GP		POORLY GRADED GRAVELS, GRAVEL SAND MIXTURES
			GM		SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES
		GC		CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES	
	SANDS More than half coarse fraction is smaller than No.4 sieve size	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SP		POORLY GRADED SANDS, GRAVELLY SANDS
			SM		SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES
		SC		CLAYEY SANDS, POORLY GRADED SAND-SILT MIXTURE	
FINE GRAINED SOILS	SILTS AND CLAYS Liquid limit less than 50		ML		INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL		ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS Liquid limit greater than 50		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	HIGHLY ORGANIC SOILS		Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS
ROCK				COBBLES/BOULDERS	
				GRANITIC BEDROCK	
				VOLCANIC BEDROCK	

KEY TO TEST DATA

LL - Liquid Limit (in %)	Tx	320	(2600)	Shear Strength, psf	Unconsolidated Undrained Triaxial
PL - Plastic Limit (in %)	TxCU	320	(2600)	Confining Pressure, psf	Consolidated Undrained Triaxial
Gs - Specific Gravity	UC	2000			Unconfined Compression
SA - Sieve Analysis					
Consol - Consolidation	DS	36°	400	Friction Angle; Cohesion, psf	Consolidated Drained Direct Shear

SAMPLE DESIGNATION

	STANDARD PENETRATION TEST SAMPLE		SHELBY TUBE SAMPLE		OTHER "UNDISTURBED" SAMPLE
	2 1/2" OD MODIFIED CALIFORNIA SAMPLE		AUGER CUTTINGS SAMPLE		OTHER BULK OR CLASSIFICATION SAMPLE
	3" OD MODIFIED CALIFORNIA SAMPLE		LOCATION OF ROCK CORING		

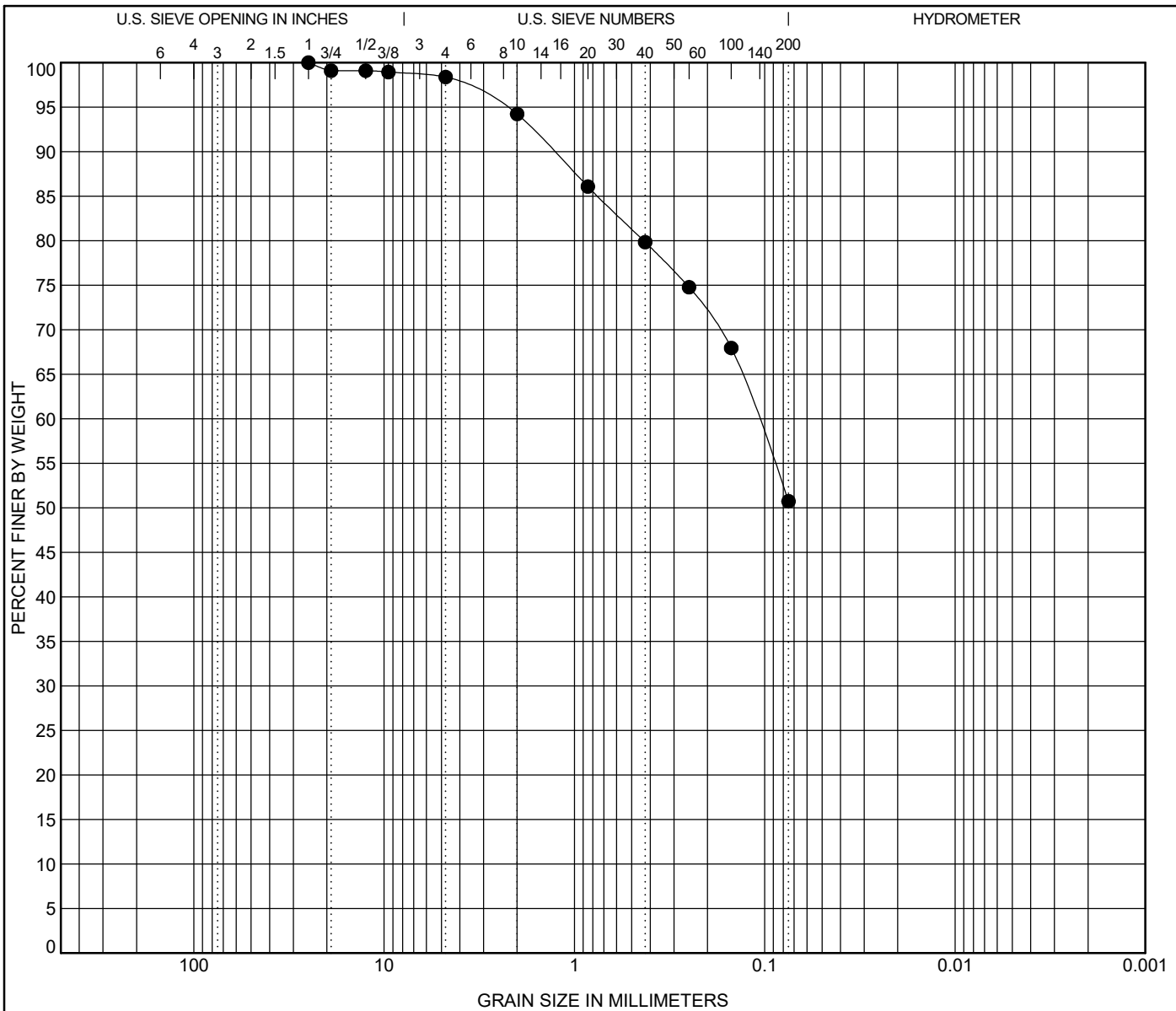
KEY TO SYMBOLS

	OBSERVED WATER LEVEL
--	----------------------

Reno Tahoe Geo Associates, Inc.
 CONSULTING CIVIL ENGINEERS
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SOIL CLASSIFICATION CHART
 GEOTECHNICAL ASSESSMENT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE
 WASHOE COUNTY NEVADA

PLATE
6



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● TP-1C 11.0	SANDY LEAN CLAY(CL)	35	21	14		

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● TP-1C 11.0	25	0.109			1.6	47.6	50.7	



GRAIN SIZE ANALYSIS

GEOTECHNICAL ASSESSMENT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE

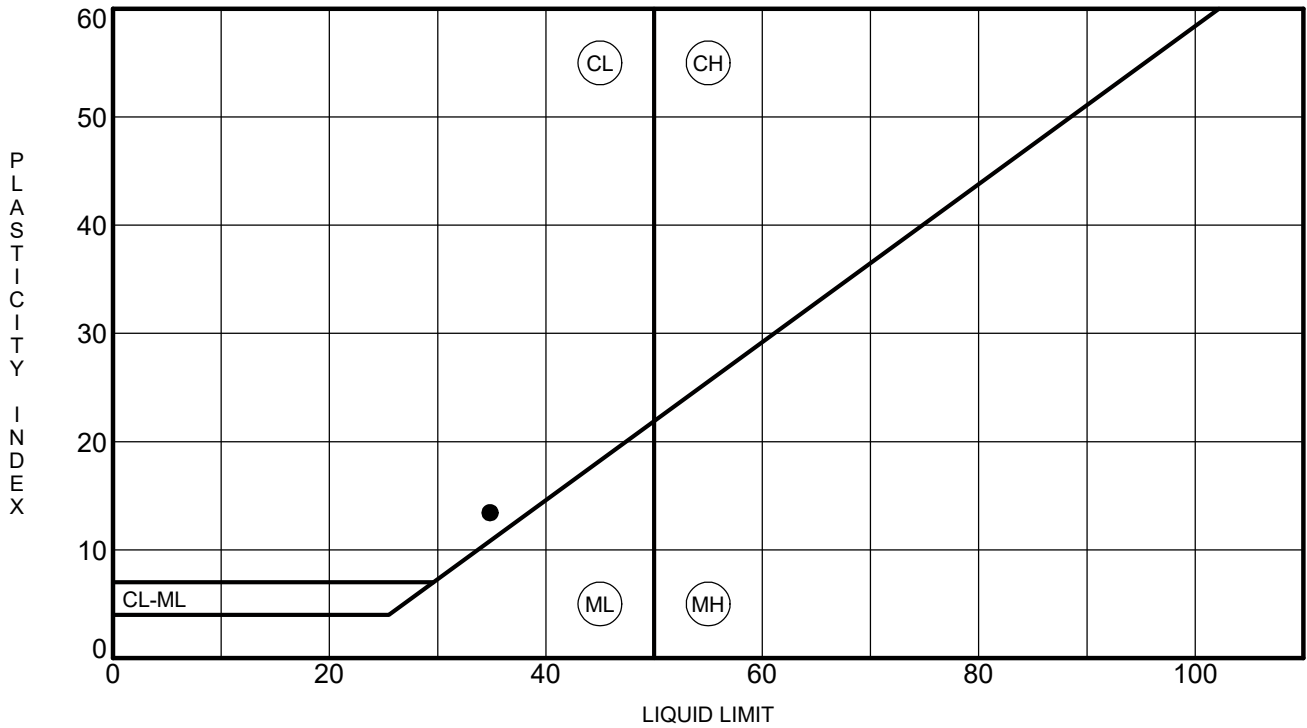
PLATE
7

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WASHOE COUNTY

NEVADA

**WTM21-012
 EXHIBIT E**



Specimen Identification	LL	PL	PI	Fines	Classification	
● TP-1C	11.0	35	21	14	51	SANDY LEAN CLAY(CL)

ATTERBERG LIMITS GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 6/18/21



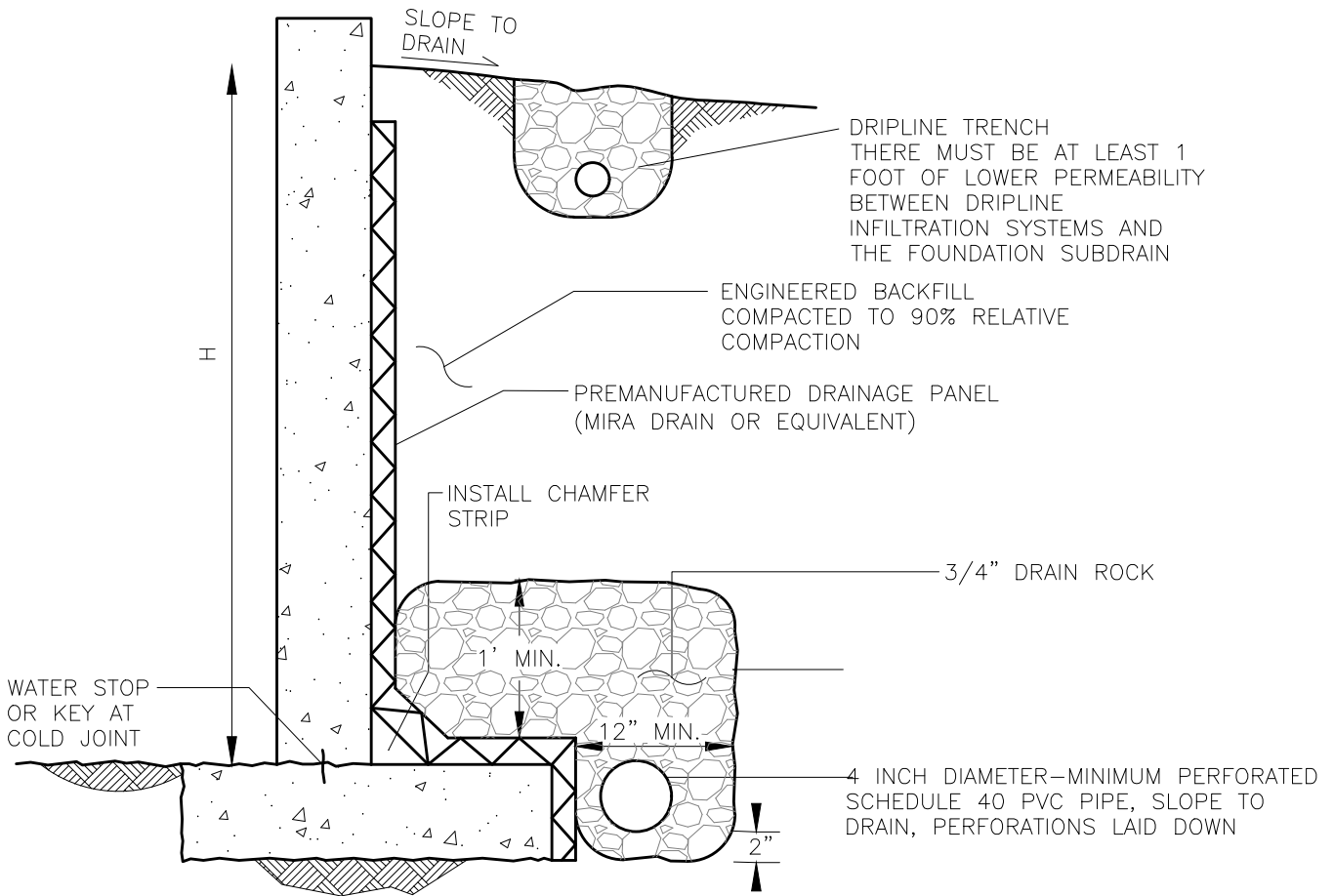
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ATTERBERG LIMITS
 GEOTECHNICAL ASSESSMENT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE

PLATE
8

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WASHOE COUNTY NEVADA



NOT TO SCALE

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DATE: **05/18/2021**

TYPICAL BACK OF WALL DRAIN

PLATE

**GEOTECHNICAL ASSESSMENT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE**

9

WASHOE COUNTY

NEVADA

Incline Residential Tahoe/Southwood *Transportation Study*

Prepared for

Greenwood Homes
940 Southwood Blvd. #101
Incline Village, NV 89451

Prepared by

LSC Transportation Consultants, Inc.
2690 Lake Forest Road, Ste. C
P.O. Box 5875
Tahoe City, CA 96145
530-583-4053

December 7, 2021

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Chapter 1 Introduction

The Incline Village Residential project is located on the southwest corner of SR 28 (Tahoe Boulevard) and Southwood Boulevard in Incline Village, Nevada. The project would consist of 40 multi-family townhomes. The site location is shown in Figure 1.

The purpose of this report is to present an analysis of the traffic and air quality impacts associated with the proposed project. Initially, existing traffic conditions near the proposed site are discussed. The proposed land uses associated with the project are then assessed in terms of the generation of new traffic. An appropriate distribution of traffic onto the adjacent roadway system is then identified. Using this distribution pattern, the forecasted generated trips are assigned to the nearby roadway system to identify the impact on intersection Level of Service (LOS). In addition, the following areas of impact are reevaluated:

1. Site access conditions and driveway spacing
2. Traffic signal warrant
3. Regional Vehicle Miles Traveled (VMT) Analysis
4. Air quality impacts



Figure 1
 Incline Village Residential - Site Location



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



The following discussion presents information regarding existing transportation conditions in the study area.

ROADWAY CHARACTERISTICS

The project site is served by the following existing roadways:

State Route 28 (Tahoe Boulevard) is the primary highway serving Lake Tahoe's north shore. It is a two-lane roadway that runs through Incline Village, Nevada from Tahoe City, California to US 50. To the west of Incline Village, State Highway 28 terminates at the junction of State Route 89 in Tahoe City, California. To the east, the highway turns south and continues along the east shore of Lake Tahoe and ends at US 50. Within Incline Village itself, State Highway 28 is designated as Tahoe Boulevard, with a posted speed limit of 35 miles per hour. The section between Village Boulevard and the eastern Northwood Boulevard/Southwood Boulevard intersection contains a center two-way left turn lane; other sections generally provide one lane in each direction, with turn lanes at major intersections.

Village Boulevard is a two-lane roadway that intersects SR 28 and provides access to primarily residential neighborhoods to the south, and residential neighborhoods as well as government offices to the north. The posted speed limit is 25 miles per hour.

Northwood Boulevard and Southwood Boulevard are two-lane roadways forming a loop roadway around the central Incline Village area. This loop is designated as Southwood Boulevard to the south of SR 28 and Northwood Boulevard to the north of SR 28. To the west of Village Boulevard, the two boulevards meet at a signalized intersection with SR 28. To the east of Village Boulevard, both meet at an unsignalized intersection with SR 28, controlled by stop signs on the Boulevard approaches to the highway. The posted speed limit is 25 miles per hour.

EXISTING TRAFFIC VOLUMES

This study is based on typical summer traffic conditions. PM turning-movement counts were conducted by LSC staff at the SR 28/Northwood Blvd/Southwood Blvd study intersection from 3:30 PM to 5:30 PM on Thursday, June 3, 2021. PM turning-movement counts were conducted by LSC at the SR 28/Village Blvd study intersection from 3:30 PM to 5:30 PM on Wednesday, June 2, 2021. Nevada Department of Transportation (NDOT) monthly variation was analyzed at the permanent location SR 28 (Tahoe Blvd) 915 feet north of Lakeshore Drive/Pinon Drive. In 2019, July was determined to be the peak month. The volumes from our counts were increased using a growth factor of 1.2 to adjust the counts to peak month conditions. The resulting 'existing no project' peak-hour traffic volumes are shown in Table 1.



Table 1: Incline Village Residential - Peak Hour Intersection Traffic Volumes

Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Existing No Project SR 28/Village Blvd SR 28/Southwood Blvd/Northwood Blvd (East) Southwood Blvd/Site Access	113	267	86	131	185	73	93	479	104	109	458	120	2218
	22	21	63	29	15	39	44	611	63	40	561	27	1533
	0	105	0	0	118	0	0	0	0	0	0	0	223
Project Net Impact SR 28/Village Blvd SR 28/Southwood Blvd/Northwood Blvd (East) Southwood Blvd/Site Access	0	0	0	0	0	0	0	3	0	0	2	0	5
	3	0	1	0	1	0	0	0	5	2	0	0	12
	1	0	0	0	0	8	4	0	1	0	0	0	14
Existing Plus Project SR 28/Village Blvd SR 28/Southwood Blvd/Northwood Blvd (East) Southwood Blvd/Site Access	113	267	86	131	185	73	93	482	104	109	460	120	2223
	25	21	64	29	16	39	44	611	68	42	561	27	1545
	1	105	0	0	118	8	4	0	1	0	0	0	237

Source: LSC Transportation Consultants, Inc.

EXISTING TRANSIT CONDITIONS

Transit services in the North Shore area are provided through the Tahoe Truckee Area Regional Transportation (TART). The bus service in this area is the TART Mainline. The Mainline Route travels the western shore of Lake Tahoe from Tahoma to the north shore at Incline Village. It operates between 6:00AM and 9:30 PM, providing one run per hour. Existing bus stops are conveniently located along SR 28 at Christmas Tree Village, Raley's, and Northwood Blvd and on Southwood Blvd at the Incline State Park within the vicinity of the project site.

In the summer of 2021, a pilot "microtransit" transit service is being operated, marketed as TART Connect. It provides free rides for passengers making app requests from 8 AM to Midnight 7 days a week. Three zones are being operated, including an Incline Village / Crystal Bay zone that encompasses the project site.

EXISTING BICYCLE AND PEDESTRIAN CONDITIONS

Bicycle Facilities

Bicycle paths, bicycle routes and bicycle lanes are provided in the vicinity of the project. A Class I bikeway (multipurpose walking and bicycling path) can be found along Village Blvd from College Drive south to Lake Shore Blvd and along the entirety of Lake Shore Blvd. A bikeway is also located starting at the eastern Southwood Blvd/SR 28 intersection that loops around clockwise and ends on Northwood Blvd at the Incline Elementary School. Class II bikeways (bike lanes) can be found along SR 28 from the western Lake Shore Blvd intersection to the eastern Lake Shore Blvd intersection.

Pedestrian Facilities

Within the vicinity of the site, multipurpose walking and bike paths are provided along SR 28 and Southwood Blvd. The SR 28/Northwood Blvd/Southwood Blvd intersection has pedestrian crosswalks on all four sides of the intersection as well as a Rectangular Rapid-Flashing Beacon (RRFB) in the East and West directions. Another RRFB is placed along SR 28 in front of the Raley's driveway. At the SR 28/Village Blvd intersection, crosswalks can be found on the west, east and south approaches of the signalized intersection.

Overall Non-Auto Access

In summary, the site is served by relatively good transit and bicycle/pedestrian access opportunities. The location near major trip generators (such as shopping) also makes the site relatively conducive to non- auto travel. Specific non-auto reductions are discussed in Chapter 3.

EXISTING AIR QUALITY CONDITIONS

Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses of the environment.

Regional Setting

Many important factors determine local and regional air quality, with the most critical being the quantity, type, and location of pollution sources. Climatic conditions, such as wind speed and direction, temperature gradients, and inversions and precipitation interact with the physical features of the landscape to determine the movement and dispersion of air pollutants.



Climate

The Lake Tahoe Air Basin is surrounded by various mountain ranges within the Sierra Nevada. The Tahoe Basin's climate is cool and dry in the summer and cold and wet in the winter. Temperatures can vary from a daily mean of 60 degrees Fahrenheit (15.6 degrees Celsius) in the summer to about 20 degrees Fahrenheit (-6.7 degrees Celsius) in the winter. Diurnal temperature ranges combine to form characteristics that affect air quality on a daily and seasonal basis. Temperature inversions with the region are generally caused by nighttime cooling of the land surface, which occurs at a faster rate than the cooling of the overlying air. These inversions can trap air pollutants near their source by limiting vertical mixing. These conditions occur most frequently in the winter.

The enclosed nature of the basin and the large diurnal temperature range combine to form specific air basin characteristics that affect air pollution concentrations on a daily and seasonal basis. Relevant to the present discussion are the issues of mixing height and temperature inversions. The "mixing height" is the height or thickness of the air blanket available for dispersion of airborne pollutants emitted near the ground surface.

Normally, air temperature decreases with an increase in elevation. When a "temperature inversion" occurs, however, temperatures within a layer of air increase with height. The two issues are related in that the presence of a temperature inversion reduces or lowers the mixing height normally available, thereby lessening the dispersion potential for pollutants in the air basin.

Inversions will trap pollutants near their emission source by precluding vertical mixing processes from dispersing the pollutants. Consequently, potential for high pollutant concentrations is greatest during strong, persistent, low-level radiation inversion conditions, which generally occur in the Lake Tahoe region during the winter months.

In the Lake Tahoe Air Basin, inversions are generally caused by nocturnal radiational cooling of the land surface, which occurs at a rate slower than the cooling of the overlying air. During summer months, the morning inversion is broken up by strong surface heating, usually by 9:00 AM to 10:45 AM. Thus, by early morning, mixing heights have typically increased to over 5,000 feet with strong vertical mixing. By mid-evening, the inversion slowly begins to form again, peaking during the early morning.

During winter months, surface heating is less pronounced, and the morning inversion may persist until noon (~50% of the time) or later. Consequently, the Lake Tahoe Basin exhibits a high potential for air pollution during the early morning hours, especially during the winter.

Standards and Thresholds

Federal, state, and regional standards exist for ambient air quality in the Tahoe Basin. The air quality plan element of the integrated regional transportation plan focuses on the need for air quality control strategies. The various federal, State of Nevada, and TRPA standards are listed in Table 2.

Table 2: Applicable Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standards		Nevada Standards	TRPA Standards
		Primary	Secondary	Concentration	Concentration
Ozone (O ₃)	1 Hour	No Standard	No Standard	No Standard	0.08 ppm
	8 Hour	0.070 ppm	Same as Primary	0.070 ppm	No Standard
Carbon Monoxide (CO)	1 Hour	35 ppm	No Standard	35 ppm	No Standard
	8 Hour	9 ppm	No Standard	9 ppm below 5000' 6 ppm above 5000'	6 ppm
Nitrogen Dioxide (NO ₂)	1 Year	53 ppb	Same as Primary	53 ppb	Maintain NO _x emissions at or below 1981 levels
	1 Hour	100 ppb	No Standard	100 ppb	No Standard
Sulfur Dioxide (SO ₂)	1 Year	No Standard	No Standard	0.030 ppm	No Standard
	24 Hour	No Standard	No Standard	0.14 ppm	No Standard
	3 Hour	No Standard	0.5 ppm	0.5 ppm	No Standard
	1 Hour	75 ppb	No Standard	75 ppb	No Standard
Particulate Matter (PM ₁₀)	1 Year	No Standard	No Standard	No Standard	50 µg/m ³ in the portion of the region within Nevada
	24 Hour	150 µg/m ³	Same as Primary	150 µg/m ³	150 µg/m ³ in the portion of the region within Nevada
Fine Particulate Matter (PM _{2.5})	1 Year	12 µg/m ³	15 µg/m ³	12 µg/m ³	15 µg/m ³ in the portion of the region within Nevada
	24 Hour	35 µg/m ³	Same as Primary	35 µg/m ³	35 µg/m ³
Sulfates	24 Hour	No Standard	No Standard	No Standard	No Standard
Lead	Rolling 3-month average	0.15 µg/m ³	Same as Primary	0.15 µg/m ³	No Standard
Hydrogen Sulfide	1 Hour	No Standard	No Standard	0.08 ppm	No Standard
Vinyl Chloride	24 Hour	No Standard	No Standard		No Standard
Visibility Reducing Particles	8 Hour (Observation)	No Standard	No Standard	No Standard	Regional 97 mi (156 km), 50% of the year 71 mi (115 km), 90% of the year Sub-regional 48 mi (78 km), 50% of the year 19 mi (31 km), 90% of the year

Source: NAAQS Table, United States Environmental Protection Agency (accessed June 2021)

Source: NAC 445B.22097 State standards of quality for ambient air (NRS 445B.210), Nevada Administrative Code (accessed June 2021)

Source: TRPA Regional Plan, Attachment 1: Resolution 82-11 Exhibit A, amended May 23, 2018



Attainment Designations

Air quality in most areas of the Lake Tahoe Air Basin is good. As shown in Table 3, the Lake Tahoe Air Basin met all the federal and state standards. The region was in non-attainment on the California side of the TRPA PM10 standard which is based on 2015 data (the most recent data available) but was shown as attainment on the Nevada side.

Table 3: Lake Tahoe Air Basin Attainment Designations

Pollutant	Federal	Nevada	TRPA
Ozone	Unclassified/Attainment	Unclassified/Attainment	Attainment
Carbon Monoxide	Unclassified/Attainment	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Unclassified/Attainment	–
Particulate Matter (PM10)	Unclassified/Attainment	Unclassified/Attainment	Attainment ¹
Particulate Matter (PM2.5)	Unclassified/Attainment	Unclassified/Attainment	Attainment
Lead	Unclassified/Attainment	Unclassified/Attainment	–
Hydrogen Sulfide	–	Unclassified/Attainment	–
Visibility Reducing Particles	–	–	Attainment

¹Attainment on Nevada side but non-attainment on California side.

Source: U.S. EPA, June 2021.

Source: Tahoe Regional Planning Agency (TRPA) Threshold Evaluation Report, 2015.

Source: Area Designations Maps / State and National, California Air Resources Board, December 2018.



Chapter 3

Trip Generation, Distribution, and Assignment

TRIP GENERATION

The first step in the analysis of future traffic impacts is to prepare an estimate of the number of trips generated by the existing site and the proposed project. Trip generation is the evaluation of the number of vehicle-trips that will either have an origin or destination at the project site. Daily Vehicle-Trip Ends (DVTE) and Peak Hour Vehicle-Trip Ends (PHVTE) need to be determined in order to analyze the potential impacts from the proposed project.

Full Buildout includes construction of the 40 multi-family units. The trip generation analysis for the proposed project land uses is summarized in Table 4.

Standard daily trip generation rates are provided in the Tahoe Regional Planning Agency's (TRPA) *Trip Table* (TRPA, 2020) and peak-hour rates are provided in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition Manual* (ITE, 2017). These standard rates are shown in Table 4.

Reduction for Non-Auto Trips

Non-auto trips, such as trips made to/from the site via bike, walking or transit, reduce the number of vehicle trips generated by the project. *2018 Summer TRPA Travel Mode Share Survey* data was reviewed. Data from the surveys conducted at locations at Incline Village near the Raley's and at the Incline Village Recreation Center. Based on responses from this group (with 60 data points), the non-automotive trip percentage was approximately 40 percent. Due to the project's location relative to commercial and shopping as well as the high school, the connecting bike and pedestrian paths, the nearby employment locations, a reduction of 20 percent non-auto travel is applied to the residential units. The non-auto reduction is less than that found at the commercial center (40 percent) due to the home to work trips and home to recreation trips which were not reflected in the commercial center area.

Trip Generation at Site Driveway

Multiplying the land use quantities by the trip rates and applying reductions for non-auto trips yields the vehicle trips generated at the site driveway for proposed project conditions. As shown in Table 4, the proposed land uses are forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveway on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of site-generated trips is defined based upon the following:

1. The site's location relative to complementary land uses and regional access points.
2. The observed pattern of existing traffic movements.
3. The driveway on SR 28 will be used exclusively for emergency access. As a result, all trips will be to/from the driveway on Southwood Boulevard.

Trip distribution patterns for vehicle trips made to/from the project are estimated and the results are shown in Table 5.



Table 4: Incline Village Residential - Trip Generation

Description	Quantity	Units	ITE Land Use Category	ITE Land Use Code	Trip Generation Rates ¹			Reduction for Non-Auto Access	Vehicle Trips at Site Driveways		
					Daily	PM Peak Hour In	PM Peak Hour Out		Daily	PM Peak Hour In	PM Peak Hour Out
Multi Family Residence	40	DU	Multi Family Housing (Mid-Rise)	221	5.44	Fitted Curve	20%	174	9	5	14

DU= Dwelling Unit
 Note 1: TRPA daily rates follow ITE for these land uses. ITE Peak hour rate.
 Source: LSC Transportation Consultants, Inc., Tahoe Regional Planning Agency (TRPA) Trip Table, and Institute of Transportation Engineers Trip Generation (10th Edition)

Table 5: Incline Village Residential - Trip Distribution

To/From	Percent
South on Southwood Blvd	15%
North on Northwood Blvd	10%
East on SR 28	20%
SR 28 Between Village and Northwood/Southwood	20%
West on SR 28	35%
Total	100%

Source: LSC Transportation Consultants, Inc.

The site-generated traffic volumes are assigned through the study intersections by applying the distribution percentages to the peak-hour vehicle trips. The resulting PM peak-hour traffic volumes estimated to be generated by the full buildout of the project are shown in Table 1. The project-generated peak-hour intersection turning movement volumes are then added to the 'no-project' volumes, yielding the 'existing with project' peak-hour intersection traffic volumes presented in Table 1.

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LEVEL OF SERVICE

LOS is a quantitative and qualitative measure of traffic conditions on isolated sections of roadway or intersections. LOS ranges from “A” (with no congestion) to “F” (where the system fails with gridlock or stop-and-go conditions prevailing). Detailed LOS definitions are included in Appendix A. As is the standard for traffic engineering analyses, intersection LOS is analyzed based upon the procedures presented in the *Highway Capacity Manual* (Federal Highways Administration, 2016) using the Synchro software application (Version 10.3, Trafficware). The LOS calculations are contained in Appendix B for further reference.

LOS Standards

The TRPA LOS standards for the Lake Tahoe Basin, established by the Tahoe Regional Planning Agency (TRPA), are set forth in the 2019 Regional Transportation Plan with the intent that the Region’s highway system and signalized intersections during peak periods shall not exceed the following:

1. LOS C on rural scenic/recreational roads,
2. LOS D in rural developed areas,
3. LOS D on urban roads, or
4. LOS D for signalized intersections - LOS E may be acceptable during peak periods not to exceed four hours per day.

The Regional Transportation Plan Mobility 2035 (TMPO/TRPA, 2012) also states that: “These vehicle LOS standards may be exceeded when provisions for multimodal amenities and/ or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the project-generated traffic in relation to overall traffic conditions on affected roadways.” (pp. 2 – 10). While the Tahoe Regional Planning Compact looks to “reduce the dependency on the private automobile,” there are currently no adopted requirements or standards regarding the quality of service of other travel modes (i.e., transit, biking, or walking) that could potentially reduce the demand on the roadway system.

The TRPA does not have a specific adopted standard for unsignalized intersections.

The Washoe County LOS Standards are set forth in the 2050 Regional Transportation Plan with the intent that roadway facilities do not exceed the following:

1. LOS D for all regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon
2. LOS E for all regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon
3. LOS F for:
 - a. 4th St/Prater Way – Evans Avenue to 15th St
 - b. Plumas St – Plumb Ln to California Ave
 - c. Rock Blvd – Glendale Ave to Victorian Ave
 - d. Virginia St – Kietzke Ln to S McCarran Blvd
 - e. Virginia St – Plumb Ln to Liberty St & 8th St to 17th St
 - f. Sun Valley Blvd – 2nd Ave to 5th Ave
 - g. Intersection of N Virginia St and Interstate 80 ramps

Existing Year Intersection Level of Service

As shown in Table 6, all study intersections currently attain the LOS thresholds during the existing year condition without the project with the exception of SR 28/Southwood Blvd/Northwood Blvd. The stop-controlled intersection of SR 28/Southwood Blvd/Northwood Blvd currently operates at LOS F.

With implementation of the proposed project the new site driveways intersecting SR 28 and Southwood Blvd will operate at an acceptable LOS A. The intersection of SR 28/Southwood Blvd/Northwood Blvd will remain at an unacceptable LOS F with a small increase in delay.

Table 6: Incline Village Residential - Existing Intersection LOS Summary

Intersection	Control Type	LOS Threshold	PM Existing No Project		PM Existing Plus Project	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
			SR 28/Village Blvd	Signalized	D	15.1
SR 28/ Southwood Blvd/ Northwood Blvd (East)	TWSC	D	99.7	F	105.4	F
Southwood Blvd/Site Access	TWSC	D	0.0	A	9.7	A

BOLD text indicates that LOS standard is exceeded.

TWSC = Two-Way Stop-Control; AWSC = All-Way Stop-Control

NOTE 1: Level of service for signalized intersections is reported for the total intersection.

NOTE 2: Level of service for roundabouts and other unsignalized intersections is reported for the worst movement.

Source: LSC Transportation Consultants, Inc.



The project would generate approximately 174 new daily one-way vehicle trips and 14 PM peak-hour vehicle trips (9 inbound plus 5 outbound) at the site access driveway. The following areas of transportation impacts are evaluated in this section:

- Analysis of the Need for a New Traffic Signal
- Intersection Level of Service (LOS)
- Site Access Plans
- Vehicle Miles Traveled (VMT)

TRAFFIC SIGNAL WARRANT ANALYSIS

NDOT has established a series of “warrants” to define conditions in which a traffic signal should be provided. This is to ensure that signals are only provided in locations where the benefit outweighs the impacts of a signal (notably, the increase in traffic delays along the major roadway). The need for a new traffic signal at the stop-controlled SR 28/Northwood Blvd/Southwood Blvd (east) is evaluated using the procedure discussed in *NDOT Access Management System and Standards* (November 2017), which relies on the warrants for a traffic signal as defined in the Manual on Uniform Traffic Control Devices (MUTCD).

The MUTCD provides a series of 8 individual warrants, addressing traffic volumes in various periods, pedestrian conditions, safety conditions and other specific factor. Of these warrants, the first to be met in typical conditions (such as at this location) is the “peak hour warrant.” This warrant is based on the volume per hour of the major street (total of both approaches) and the volume per hour on the minor street higher volume approach. These volumes are plotted in a chart; if the plotted value is higher than the specified curve, the location meets the peak-hour warrant. As shown in Figure 2, the existing-plus- project volumes fall below the curve, indicating that a traffic signal is not warranted without or with the project.

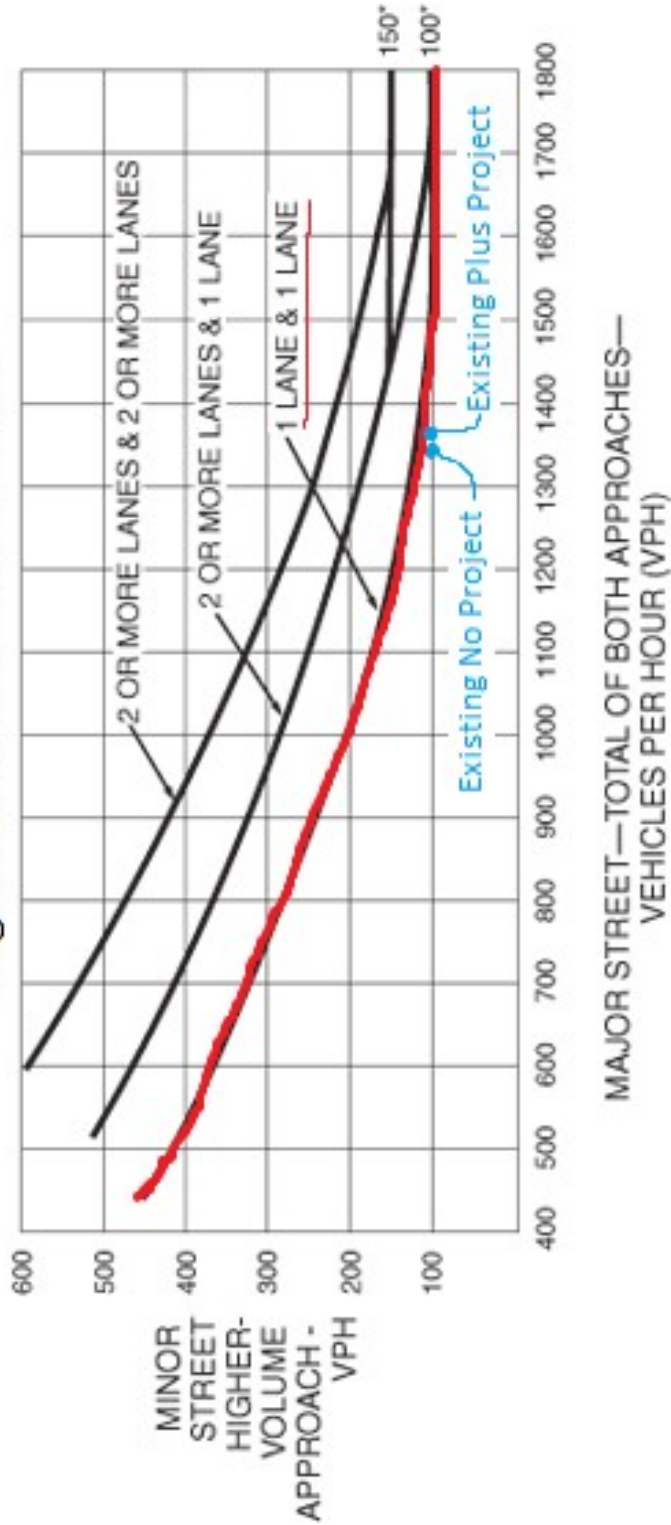
INTERSECTION LEVEL OF SERVICE (LOS)

The site driveway intersection and SR 28/Village operate at an acceptable LOS with the project. As such, no LOS mitigation is required for these intersections.

SR 28/Northwood Blvd/Southwood Blvd (East) operates at an unacceptable LOS F both with and without the project. Even though a traffic signal would improve LOS, it is not warranted at this location.

Additionally, a roundabout would also improve LOS to acceptable levels. While a warrant system specific to roundabouts has not been developed, the signal warrants typically are used as a guideline, which would indicate that a roundabout is not warranted. A roundabout at this location would be an extensive and expensive project, particularly given the grades. In addition, drivers exiting the project onto Southwood and wishing to head west on SR 28 have the option, if they see a long northbound queue at the highway intersection, to make a right turn and access the highway via Village Boulevard. This tends to limit the increase in delays. Another factor is that the proposed project’s traffic would only increase total

Figure 2 - Peak Hour Warrant



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

volumes through the 28/Northwood/Southwood intersection by 0.8 percent. Given these factors, requiring installation of a roundabout would not be appropriate.

Another option for improving access would be to expand the northbound Southwood approach at SR 28 from the existing one-lane configuration. At present, drivers wishing to make a northbound right-turn movement are often behind drivers making the more difficult northbound through or northbound left movements. To evaluate the overall delay (measured in total vehicle-hours of delay) with an additional lane, LOS was evaluated assuming the additional lanes as shown in Table 7.

Table 7: SR 28/Northwood Blvd/Southwood Blvd Northbound Approach Delay with Additional Lanes

Scenario	Northbound Lane Configuration	Northbound Volume by Movement			Northbound Delay by Movement (sec)			Vehicle Hours of Delay	% Change From Existing
		Left	Through	Right	NBL	NBT	NBR		
Existing No Project	LTR	25	21	64	67.8			1.99	--
Existing Plus Project	LTR	25	21	64	80.3			2.44	23%
Existing Plus Project	LT, R	25	21	64	101.7	101.7	14.7	1.54	-22%
Existing Plus Project	L, TR	25	21	64	87.7	28.2	28.2	1.27	-36%

Source: LSC Transportation Consultants, Inc.

This indicates the following:

- At present, northbound drivers in the peak hour experience a total of 1.99 vehicle-hours of delay.
- The additional traffic generated by the proposed project, with the existing single-lane northbound approach, would increase delay to 2.44 vehicle-hours (a 23 percent increase)
- If a right turn lane is provided (shared left/through and separate right turn lanes), total delay would be 1.54 vehicle-hours of delay, or a 22 percent reduction from current delays.
- Alternatively, if a separate left turn lane is provided along with a shared through/right lane, total delay would be 1.27 vehicle-hours or 36 percent below existing levels.

As the right-of-way of Southwood Boulevard is 80 feet in width, this widening can occur within the existing right-of-way. It is therefore recommended that a separate northbound left-turn lane be provided.

SITE ACCESS PLANS

Driver sight distance conditions are evaluated at the site access point.

Driver Sight Distance

Driver sight distance was evaluated at the proposed access intersection. According to the NDOT Road Design Guide (2019), there are two types of sight distance standards that should be met at driveways or intersections for low-speed facilities (44 MPH or Less): stopping sight distance and intersection sight distance. Intersection sight distance

requirements are meant to ensure that adequate time is provided for the waiting driver at an unsignalized intersection or driveway to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed. Intersection sight distance requirements are based upon the need for a driver to discern a gap of up to 7.5 seconds in oncoming traffic to safely choose an adequate gap. The design intersection sight distance requirements are set forth in Table 9-7 of A Policy on Geometric Design of Highways and Streets (AASHTO Green Book, 2018).

Stopping sight distance is the distance an oncoming driver on the major roadway needs to perceive an object in the travel lane (such as a turning vehicle), react to the object, and come to a safe stop. Stopping sight distance requirements are set forth in the AASHTO Green Book.

LSC staff visited the site and determined the proposed driveway is expected to provide adequate driver stopping sight distance. For intersection sight distance, the Southwood site access is adequate so long as the final landscaping plans do not hinder the intersection sight distance.

Driveway Spacing

The proposed driveway spacing along Southwood Blvd was reviewed. Driveway spacing is adequate and no mitigation needs to be performed.

Site Access Summary

In summary, a review of the site access plans indicates the following:

1. Driver sight distance is acceptable on Southwood Boulevard points so long as the final landscaping plans provide at least 440 feet of corner sight distance.
2. The proposed driveway spacing meets City standards.

VEHICLE MILES TRAVELED (VMT)

VMT analysis was conducted based on TRPA's "TRPA Project Impact Assessment Guidelines" (TRPA Draft, June 2021). This project is located in Project Impact Assessment Zone 69. The current project impact assessment process, based on daily vehicle trip ends (DVTE) identifies projects in town and regional centers that produce less than 200 DVTE:1,300 VMT as having an insignificant effect and so not requiring additional analysis." Because the project has less than the 200 DVTE requirement, the project is considered to have an insignificant effect. VMT is calculated but does not have to be considered against the standard of significance.

The projects VMT is calculated as the 'zone VMT per capita' multiplied by the 'zone persons per household' multiplied by the number of proposed units. As shown in Table 8, the resulting VMT from the residential units would total 850 VMT.

Table 8: Incline Village Residential - VMT Analysis

Trip Type	Zone VMT per Capita¹	Zone Persons per Household	Number of Proposed Units	Average Annual Daily VMT
Residential	9.24	2.30	40	850

Note 1: TRPA zone VMT per Capita for PIA zone 69
Source: LSC Transportation Consultants, Inc.

CONCLUSIONS

- The project is forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).
- The LOS at the site access driveway and SR 28/Village Blvd would remain acceptable with the project.
- The LOS at the SR 28/Northwood Blvd/Southwood Blvd intersection does not meet LOS standards without the project, which would be exacerbated by the proposed project. A review of improvement options indicates that total delay can be reduced from existing delays on the key northbound approach by providing a separate northbound left-turn lane. While delays exceeding the LOS standard will still occur, this will be an overall improvement from existing conditions.
- The proposed site access driveway spacing on Southwood Boulevard meets the City Standards.
- The proposed driveway on Southwood Boulevard is expected to provide adequate driver sight distance so long as the final landscaping plans do not hinder the corner sight distance.
- The project is exempt from a full VMT analysis and will generate about 850 total VMT.

Appendix A
LOS DESCRIPTIONS

DESCRIPTIONS OF LEVELS OF SERVICE

The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

Level of Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **Level of service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.
- **Level of service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.
- **Level of service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.
- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.
- **Level of service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.
- **Level of service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and level of service F is an appropriate designation for such points.

Appendix B
LOS OUTPUT

HCM 6th Signalized Intersection Summary

1: Village Blvd & SR 28

06/18/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘		↗	↘		↗	↘		↗	↘	
Traffic Volume (veh/h)	93	479	104	109	458	120	113	267	86	131	185	73
Future Volume (veh/h)	93	479	104	109	458	120	113	267	86	131	185	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	521	113	118	498	130	123	290	93	142	201	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	707	153	298	679	177	415	493	158	336	465	183
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	798	1489	323	793	1430	373	1099	1357	435	1000	1278	502
Grp Volume(v), veh/h	101	0	634	118	0	628	123	0	383	142	0	280
Grp Sat Flow(s),veh/h/ln	798	0	1812	793	0	1803	1099	0	1792	1000	0	1780
Q Serve(g_s), s	5.8	0.0	14.0	7.0	0.0	13.9	4.7	0.0	8.6	6.6	0.0	5.9
Cycle Q Clear(g_c), s	19.7	0.0	14.0	21.0	0.0	13.9	10.6	0.0	8.6	15.2	0.0	5.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.24	1.00		0.28
Lane Grp Cap(c), veh/h	300	0	860	298	0	856	415	0	652	336	0	647
V/C Ratio(X)	0.34	0.00	0.74	0.40	0.00	0.73	0.30	0.00	0.59	0.42	0.00	0.43
Avail Cap(c_a), veh/h	308	0	879	306	0	874	415	0	652	336	0	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	10.5	19.0	0.0	10.5	15.9	0.0	12.7	18.9	0.0	11.9
Incr Delay (d2), s/veh	0.7	0.0	3.2	0.9	0.0	3.2	1.8	0.0	3.9	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	1.2	0.0	4.7	1.3	0.0	3.7	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	13.7	19.8	0.0	13.6	17.7	0.0	16.6	19.7	0.0	12.3
LnGrp LOS	B	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		735			746			506				422
Approach Delay, s/veh		14.5			14.6			16.9				14.8
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		27.5		22.0		27.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		18.0		24.0		18.0		24.0				
Max Q Clear Time (g_c+I1), s		12.6		21.7		17.2		23.0				
Green Ext Time (p_c), s		1.4		1.1		0.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.1								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	611	63	40	561	27	22	21	63	29	15	39
Future Vol, veh/h	44	611	63	40	561	27	22	21	63	29	15	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	68	43	610	29	24	23	68	32	16	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	732	0	0	1534	1519	698	1551	1539	625
Stage 1	-	-	-	-	-	-	794	794	-	711	711	-
Stage 2	-	-	-	-	-	-	740	725	-	840	828	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	873	-	-	95	119	440	92	116	485
Stage 1	-	-	-	-	-	-	381	400	-	424	436	-
Stage 2	-	-	-	-	-	-	409	430	-	360	386	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	945	-	-	873	-	-	71	107	440	60	105	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	71	107	-	60	105	-
Stage 1	-	-	-	-	-	-	362	380	-	402	415	-
Stage 2	-	-	-	-	-	-	341	409	-	271	366	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0.6		0.6		67.8		99.7	
HCM LOS					F		F	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	163	945	-	-	873	-	-	117
HCM Lane V/C Ratio	0.707	0.051	-	-	0.05	-	-	0.771
HCM Control Delay (s)	67.8	9	-	-	9.3	-	-	99.7
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	4.2	0.2	-	-	0.2	-	-	4.4

HCM 6th TWSC
 4: Southwood Blvd./Southwoods Blvd & Site Access

06/18/2021

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	105	118	0
Future Vol, veh/h	0	0	0	105	118	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	114	128	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	242	128	128	0	-	0
Stage 1	128	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	746	922	1458	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	746	922	1458	-	-	-
Mov Cap-2 Maneuver	746	-	-	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1458	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th Signalized Intersection Summary

1: Village Blvd & SR 28

06/18/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	482	104	109	460	120	113	267	86	131	185	73
Future Volume (veh/h)	93	482	104	109	460	120	113	267	86	131	185	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	524	113	118	500	130	123	290	93	142	201	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	709	153	297	681	177	414	493	158	335	464	182
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	796	1491	322	791	1431	372	1099	1357	435	1000	1278	502
Grp Volume(v), veh/h	101	0	637	118	0	630	123	0	383	142	0	280
Grp Sat Flow(s),veh/h/ln	796	0	1812	791	0	1803	1099	0	1792	1000	0	1780
Q Serve(g_s), s	5.8	0.0	14.1	7.0	0.0	14.0	4.7	0.0	8.6	6.6	0.0	5.9
Cycle Q Clear(g_c), s	19.8	0.0	14.1	21.1	0.0	14.0	10.6	0.0	8.6	15.2	0.0	5.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.24	1.00		0.28
Lane Grp Cap(c), veh/h	300	0	862	297	0	857	414	0	651	335	0	646
V/C Ratio(X)	0.34	0.00	0.74	0.40	0.00	0.73	0.30	0.00	0.59	0.42	0.00	0.43
Avail Cap(c_a), veh/h	307	0	878	303	0	873	414	0	651	335	0	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	10.5	19.1	0.0	10.5	15.9	0.0	12.8	19.0	0.0	11.9
Incr Delay (d2), s/veh	0.7	0.0	3.3	0.9	0.0	3.2	1.8	0.0	3.9	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	1.2	0.0	4.7	1.3	0.0	3.7	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	13.8	19.9	0.0	13.7	17.8	0.0	16.7	19.8	0.0	12.4
LnGrp LOS	B	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		738			748			506			422	
Approach Delay, s/veh		14.5			14.7			16.9			14.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		27.6		22.0		27.6				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		18.0		24.0		18.0		24.0				
Max Q Clear Time (g_c+I1), s		12.6		21.8		17.2		23.1				
Green Ext Time (p_c), s		1.4		1.1		0.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.1								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	11.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			80.3			105.4		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	155	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.771	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	80.3	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	4.8	0.2	-	-	0.2	-	-	4.6

HCM 6th TWSC
 4: Southwood Blvd./Southwoods Blvd & Site Access

06/18/2021

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	1	105	118	8
Future Vol, veh/h	4	1	1	105	118	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	1	114	128	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	249	133	137	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	739	916	1447	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	738	916	1447	-	-	-
Mov Cap-2 Maneuver	738	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	768	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	9.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↕	
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			51.1			105.4		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	82	439	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.61	0.158	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	101.7	14.7	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	2.8	0.6	0.2	-	-	0.2	-	-	4.6

Intersection												
Int Delay, s/veh	9.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↔			↔	
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			41.7			105.4		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	69	246	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.394	0.376	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	87.7	28.2	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	D	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.5	1.7	0.2	-	-	0.2	-	-	4.6

MEMORANDUM

Date: 1/09/2023

To: Collaborative Design Studio

From: Mary Horvath, PE

Subject: 947 Tahoe Boulevard Proposed Infiltration Facilities

The 947 Tahoe Boulevard development is going to include approximately 58,000 square feet of impervious area which will generate a volume of 4,800 cubic feet of runoff in the 20-year, 1-hour storm event (1-inch of precipitation depth). The preliminary design includes underground storage/infiltration with a total treatment capacity of approximately 7,200 cubic feet. The infiltration facilities will be 24" or 30" High Density Polyethylene (HDPE) perforated pipe within drain rock galleries that will lie beneath the driveways and landscaped portions of the site.

Figure 1 shows the preliminary drainage of the site to four infiltration galleries:

- A – within the southern driveway (South Gallery)
- B – within a landscape area near the west side of the development (West Gallery)
- C - within the landscaped portion of the site along the eastern boundary (East Gallery)
- D – a small crossroad trench at the eastern exit of the site (Transverse Drain)

The TRPA BMP Calculation Spreadsheet is attached showing the volume of runoff compared to the volume of the proposed infiltration galleries. The BMP void calculator is also included.

The grading and drainage design sheets as well as the infiltration gallery details are attached.

Reno, NV
1885 S. Arlington Ave., Suite 111
Reno, NV 89509
(775) 329-4955

Average Void % is Determined by: $[(\text{Overall Volume} - \text{Prefab Volume}) \times 40\% + (\text{Prefab Volume} \times \text{Prefab Void Space})] / \text{Overall Volume}$

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
East Gallery	Length (ft.)	70.5	Length (ft.)	70.5						
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)	114	Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)	706.9	or Cross Sectional Area (in ²)							
Treats C	Depth (in.)		Depth (in.)	48	15.0		706.9			
	or # of Units	2								
	Prefab Void %	100%	Average Void %	56%						

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
South Gallery	Length (ft.)	174.4	Length (ft.)	174.3						
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)	111.96	Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)	452.4	or Cross Sectional Area (in ²)							
Treats A	Depth (in.)		Depth (in.)	39.96	12.0		452.4			
	or # of Units	2								
	Prefab Void %	100%	Average Void %	52%						

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
West Gallery	Length (ft.)	45.0	Length (ft.)	45.0						
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)	166.32	Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)	452.4	or Cross Sectional Area (in ²)							
Treats B	Depth (in.)		Depth (in.)	39.96	12.0		452.4			
	or # of Units	3								
	Prefab Void %		Average Void %	52%						

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
Transverse Drain	Length (ft.)	16.0	Length (ft.)	16.0						
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)	48	Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)	452.4	or Cross Sectional Area (in ²)							
Treats D	Depth (in.)		Depth (in.)	48	12.0		452.4			
	or # of Units	1								
	Prefab Void %	100%	Average Void %	52%						

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
	Length (ft.)		Length (ft.)							
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)		Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)		or Cross Sectional Area (in ²)							
	Depth (in.)		Depth (in.)							
	or # of Units									
	Prefab Void %		Average Void %							

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
	Length (ft.)		Length (ft.)							
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)		Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)		or Cross Sectional Area (in ²)							
	Depth (in.)		Depth (in.)							
	or # of Units									
	Prefab Void %		Average Void %							

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
	Length (ft.)		Length (ft.)							
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)		Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)		or Cross Sectional Area (in ²)							
	Depth (in.)		Depth (in.)							
	or # of Units									
	Prefab Void %		Average Void %							

Treatment Label	Prefab Dimensions		Overall Dimensions		Inches	to	Feet	Feet	to	Inches
	Length (ft.)		Length (ft.)							
	or Cubic Inches		or Cubic Inches							
Prefab Type	Width (in.)		Width (in.)		Radius (in)	to	Cross Sectional Area (in ²)	Gallons	to	In ³
	or Cross Sectional Area (in ²)		or Cross Sectional Area (in ²)							
	Depth (in.)		Depth (in.)							
	or # of Units									
	Prefab Void %		Average Void %							



947 TAHOE

OWNER

PALCAP FFIF TAHOE 1, LLC
 940 SOUTHWOOD BLVD.
 STE 101
 INCLINE VILLAGE, NV
 89451

NO.	DATE	DESCRIPTION

PROJECT NO:	1171.01.25
DESIGNED BY:	KH
DRAWN BY:	KH
CHECKED BY:	DATE
DATE:	12-23-2022

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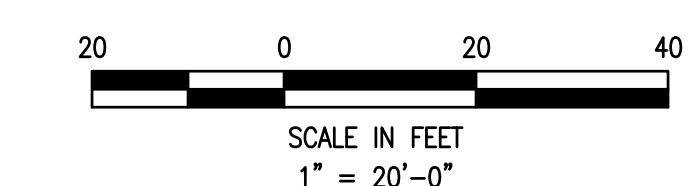
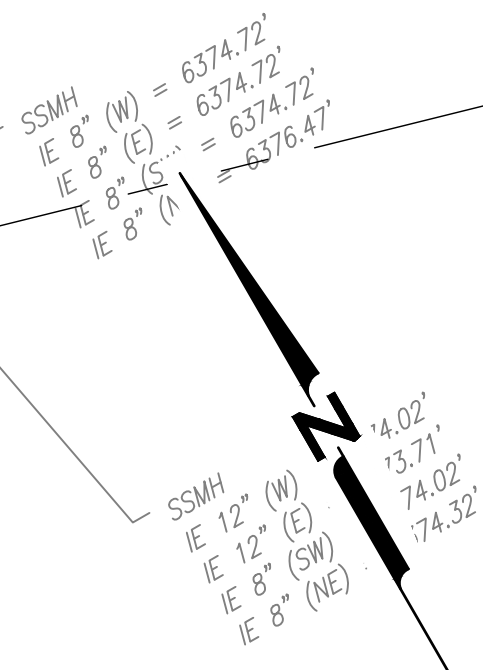
SHEET TITLE

GRADING
 AND
 DRAINAGE

DRAWING

C3

SHEET 4 OF 23



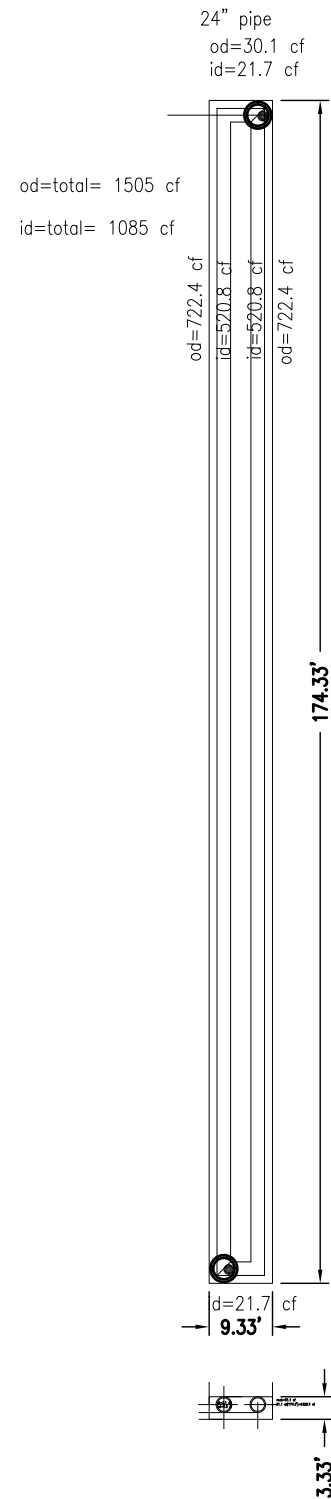
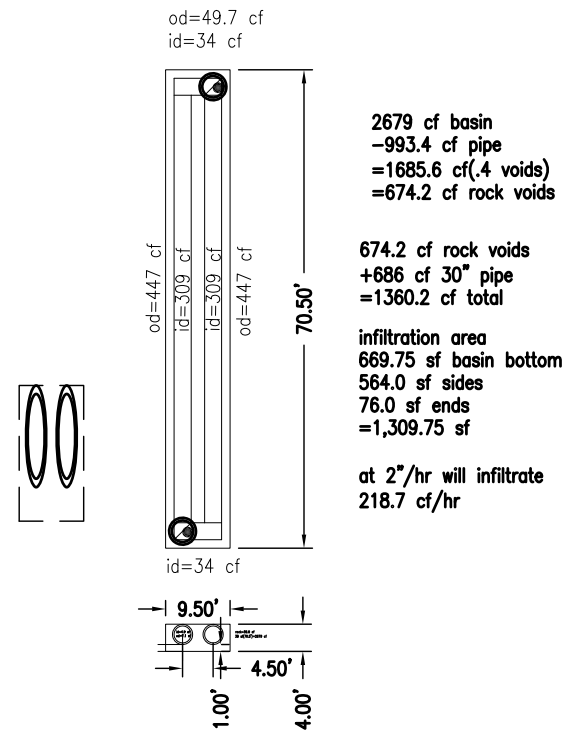
EARTHWORK QUANTITY:
 TOTAL DISTURBED AREA - 1.96 ACRES
 TOTAL CUT - 27,342 CY
 TOTAL FILL - 339 CY
 NET CUT - 27,003 CY
 DEEPEST CUT - 28'
 DEEPEST FILL - 5.5'

PRELIMINARY
 FOR REVIEW
 NOT FOR CONSTRUCTION
 DATE: 12-23-2022

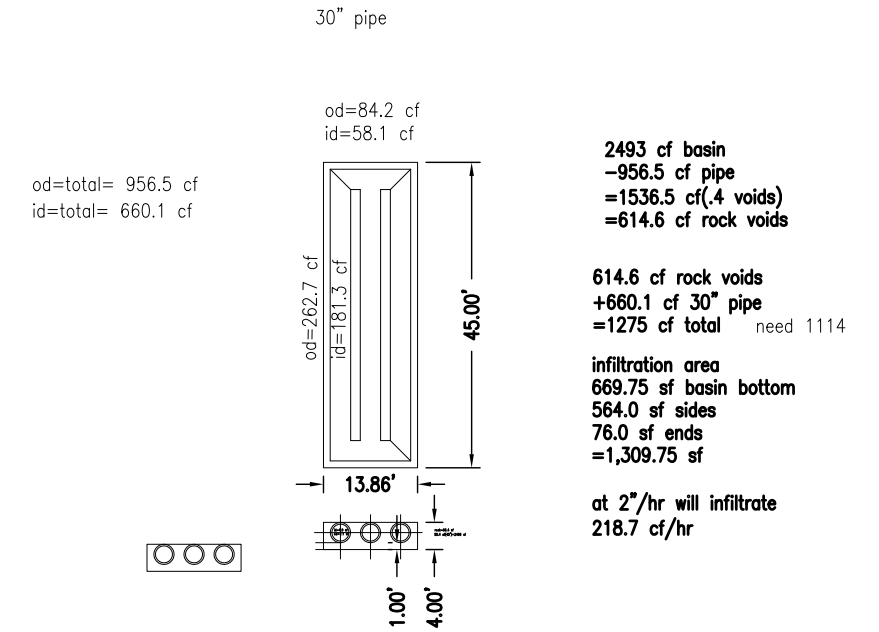


SOUTH GALLERY

EAST GALLERY



WEST GALLERY



ENTITY INFORMATION**ENTITY INFORMATION****Entity Name:** PAL CAP FFIF TAHOE 1, LLC**Entity Number:** E9511692020-1**Entity Type:** Domestic Limited-Liability Company (86)**Entity Status:** Active**Formation Date:** 10/01/2020**NV Business ID:** NV20201906691**Termination Date:** Perpetual**Annual Report Due Date:** 10/31/2022**Series LLC:** **Restricted LLC:** **REGISTERED AGENT INFORMATION****Name of Individual or Legal Entity:** INCLINE LAW GROUP, LLP**Status:** Active**CRA Agent Entity Type:****Registered Agent Type:** Commercial Registered Agent**NV Business ID:** NV20131679505**Office or Position:****Jurisdiction:** NEVADA**Street Address:** 264 VILLAGE BLVD STE 104,
Incline Village, NV, 89451, USA**Mailing Address:****Individual with Authority to Act:** Cassell Von Baeyer**Fictitious Website or Domain Name:****OFFICER INFORMATION** **VIEW HISTORICAL DATA**

Title	Name	Address	Last Updated	Status
Manager	Randall Fleisher	8333 Douglas Ave #900, Dallas, TX, 75225, USA	04/14/2021	Active
Manager	Charles L. Butler, II	8333 Douglas Ave #900, Dallas, TX, 75225, USA	04/14/2021	Active

Page 1 of 1, records 1 to 2 of 2

[Filing History](#)[Name History](#)[Mergers/Conversions](#)

Consulting Civil Engineers
P.O. Box 18449
Reno, Nevada 89511
PH (775) 853-9100
FAX (775) 853-9199

September 7, 2021
Project No. 21073.001

Tahoe Regional Planning Agency
128 Market Street
Stateline, Nevada 89449

Subject: **Soils/Hydrologic Scoping Report
Proposed Condominium Complex
941 and 947 Tahoe Boulevard
Incline Village, Washoe County, Nevada
(APN's: 132-231-09 and 132-231-10)**

Dear Reviewer:

Reno Tahoe Geo Associates, Inc, (RTGA) is requesting approval of an excavation depth for the attached soils/hydrology application based on previous approvals for nearby parcels, information within our files, and relevant published soil, and geological and topographic information. This letter is transmitted with the completed scoping application and describes the soil and hydrologic conditions at the location of the proposed Southwood Condominium Complex to be located at 941 and 947 Tahoe Boulevard, Incline Village, Washoe County (APN's: 132-231-09 and 132-231-10), (Plates 1 and 2). This letter includes our professional opinion that the proposed excavation will not intercept groundwater.

REFERENCES

The following published and unpublished references were reviewed and serve as the basis of our understanding of the project type and scope:

- Tahoe Regional Planning Agency (TRPA) Spatial Data Downloader, produced by the TRPA accessed May 2021;
- TRPA, 1987 Plan Area Statement Maps, www.trpa.org, assessed May 24, 2021;
- George J. Saucedo, et al., 2005. *Geologic Map of the Lake Tahoe Basin – California and Nevada*;

- Natural Resources Conservation Service (NRCS) *Web Soil Survey in Google Earth*, accessed June 2021;
- *Washoe County Real Property Assessment Data*, Washoe County website accessed June 2021;
- *Soil Hydrologic Approval - Waiver, IVGID Ballfield Improvement Project, 948 Incline Way, Washoe County, NV, APN 127-030-15, TRPA File Number LCAP2019-066*, Tahoe Regional Planning Agency, dated April 23, 2019;
- *Soil Hydrologic Approval - Waiver, 900 Tahoe Boulevard, Washoe County, NV, APN 132-012-04, TRPA File Number LCAP2019-135*, Tahoe Regional Planning Agency, dated June 25, 2019;
- *Soil Hydrologic Approval, Incline Business Park LLC, 919 Incline Court, Washoe County, NV, APN 132-232-15, TRPA File Number LCAP2009-0209*, Tahoe Regional Planning Agency, dated September 17, 2009;
- *Soil Hydrologic Investigation - Approval, 930 Tahoe Boulevard, Washoe County, NV, APN 132-012-02, TRPA File Number LCAP2018-00182*, Tahoe Regional Planning Agency, dated July 23, 2018;
- *Approval of Excavation for Proposed Project Based on Completed Investigation, Educational Field Studies Office, 926 Incline Way, Washoe County, APN 132-231-15, TRPA File #970281*, Tahoe Regional Planning Agency, dated June 3, 1997.

SITE CONDITIONS

The project site is shown on Plate 2. The proposed project site consists of two adjoining parcels located on the southwest corner of the east intersection of Southwood Boulevard and Tahoe Boulevard in Incline Village, Washoe County, Nevada. The corner parcel (947 Tahoe Boulevard) was formerly occupied by a Chevron gas station. The adjoining parcel (941 Tahoe Boulevard) is located on the south and west sides of the corner parcel and formerly had a building used as a restaurant located in the north-central portion of the lot near Tahoe Boulevard. There are existing driveways on both lots. An approximately 4-foot-high retaining wall is located on the west edge of the corner lot along its north-south property line. The formerly developed portions of each lot are approximately level, and the levelled portion of the corner lot is approximately 8 feet lower than the levelled portion of the western lot. The southern portion of this parcel does not appear to have undergone any historic development. Geotechnical test pit locations are shown on Plate 2.

The site is vegetated, where it has not been disturbed, with pine trees, manzanita shrubs, and other xeric upland species. No hydrophilic vegetation (such as firs, willows, or alders) was observed.

There is a single willow bush on the edge of Southwood Boulevard at the driveway entrance to the site, at about Elevation 6,379 feet, adjacent to a storm drain inlet. No other hydrophilic vegetation was noted along the right-of-way for Southwood and Tahoe Boulevard.

PROPOSED IMPROVEMENTS

We understand that a new, five-story condominium complex will be founded with a basement garage. The plan will be approximately C-shaped with three legs approximately 140 to 250 feet long and 60 feet wide. The front face of the building will be approximately 100 feet from Tahoe Boulevard and 30 feet from Southwood Boulevard. The garages will be built on two levels, with an entrance from the uphill, northwest corner to the upper garage level, and an entrance at the southeast corner into a lower garage level. The developer would like to extend the lower parking level under the south and east wings, and as far as approved, under the north wing as well.

The building outline and topographic contours for the site are shown on Plate 3. From Tahoe Boulevard the combined parcels slope from Elevation 6,406 feet at the northwest corner down to Elevation 6,380 feet at the southeast corner where they meet Southwood Boulevard, resulting in an overall site elevation change of 27 feet and an average slope of approximately 7 percent to the southeast. The existing grade within the building footprint varies from Elevation 6,403 feet to 6,382 feet.

The plan (Plate 3) shows the location of two cross sections cut on Plate 4. The finished floor level of the bottom garage level is proposed to be Elevation 6,384, and the bottom footings assuming cantilever concrete retaining walls would conservatively 4 feet lower or Elevation 6,380 feet. Total excavation depth would be 23 feet from existing grade at 6,304 feet. The southern wing would have a maximum excavation depth of approximately 14 feet due to being situated further down the slope.

NEARBY STREAM ENVIRONMENTS

Plate 5 is a map showing that the nearest Stream Environment Zone (SEZ). No springs, seeps, or hydrophilic plants are present on the subject site. Most of the vegetation is dry upland species such as pine and manzanita. The nearest SEZ, Land Capability Zone (Zone 1b) is a minor tributary of Third Creek which drains northwest to southeast approximately 160 feet northeast of the site. The

tributary of Third Creek is incised about 8 to 10 feet below adjacent upland ground surface and Tahoe Boulevard at the intersection with Northwood Boulevard. Based on the topographic elevations using a level survey, the creek level is approximately Elevation 6,378.50 to 6375 feet just north of the intersection. There are rushes and meadow grass to 4378 to 4381 feet on the edge of the creek which represent the stream environment zone vegetation. It is expected that the creek is recharging the adjacent groundwater, so that groundwater surface will dip away from the creek bed and will decrease in elevation under the site.

SOIL AND GEOLOGIC CONDITIONS

Based on published information by NRCS and site observation, the native soils have been categorized as Inville gravelly coarse sandy loam, 2 to 9 percent slopes, stony, and with the hydrologic soil group A. The soil is well drained, with a saturated permeability of 2 to 6 inches per hour. According to Saucedo et al. (2005), the site is underlain by undivided glacial outwash deposits of Holocene or Pleistocene age (Plate 7).

RTGA performed geotechnical test pits in June 2021, which are included on Plates 8 through 10. Test pit TP-1 near the northeast corner of the north wing extended to 15 feet depth, the maximum depth available to the excavator. Soils were generally a yellow brown to brownish yellow silty sand to sandy clay throughout, which was only slightly darker hue at the bottom of the test pits (7.5YR 5/6) compared to soils at 2 feet depth (10YR 6/8). A lower-permeability clay layer at 11 to 13 feet depth showed weathered sand and gravel particles but did not include mottling.

TP-2 under the south wing did not encounter the lower permeability layer nor any mottling to 13 feet or Elevation 6,375 feet, the maximum depth explored. There is no sign of hydrophilic vegetation along the adjacent edge of Southwood Boulevard with a surface at Elevation 6,376 feet at this location. TP-3 at the southeast corner of the proposed building encountered mottled soil at 5 feet depth or approximately Elevation 6,379 feet, however there is no surface evidence of hydrophilic vegetation at this location which would occur if seasonal or recent past groundwater was this high.

PROPOSED EXCAVATION DEPTH

The elevations of the building basement garage relative to the site contours are shown on Plates 3 and 4. The garage floor of the eastern leg is expected to be at about Elevation 6,384 feet and maximum depth of excavations for footings are expected to be no more than 4 feet lower (6,380 feet). For the entire length of the east leg, the depth of excavation would be approximately 5 feet on the downhill edge and 10 feet on the uphill edge, but is above the grade of adjacent Southwood Drive, which varies from Elevation 6,376 to 6,380 feet ground surface along the entire eastern edge.

The northwest wing of the building at Elevation 6,380 feet as shown on the top of Plate 4 profile X1 would be approximately 23 feet to bottom of excavation at the northwest corner but is roughly 5 feet depth at the northeast corner and is at adjacent grade of Southwood Boulevard at the east corner.

The southwest wing of the building as shown on the bottom of Plate 4 profile X2 would be approximately 15 feet to bottom of excavation at the northwest corner and 5 feet depth at the southeast corner but is above the adjacent grade of Southwood Boulevard a short distance from the east corner.

A review of TRPA records indicates eight previously approved soils/hydrologic applications, within 1,200 feet of the subject site (Plate 6). Approval letters for five requests show excavation depths ranging from 6 to 12 feet (Attachment 2). Approvals for three other parcels, APN's 132- 231-05, 132-231-06, and 132-231-18 were not found during our online search. None of the parcels showed a similar depth of approved excavation, however that may reflect the maximum depth required rather than the actual limit due to high groundwater.

We recommend that the east leg of the building parallel to Southwood Boulevard can be excavated to Elevation 6,376 feet without additional exploration, where the west edge of Southwood Boulevard shows no sign of spring activity or hydrophilic vegetation within 30 feet of the building footprint. It is logical that the maximum depth of excavation for the eastern leg of the building is above water level, as Southwood Boulevard is below the foundation level.

We recommend the southeastern wing of the building under the southern undeveloped portion of the site shows no evidence of hydrophilic vegetation to Elevation 6,380 feet and test pit TP-2 has no clayey or mottled layers, therefore excavation to Elevation 6,380 feet should be approved without additional excavation.

TABLE 1: NEARBY PROJECTS AND APPROVED EXCAVATION DEPTHS			
<i>Location</i>	<i>Proximity to Project Site</i>	<i>Approved TRPA Excavation Depth</i>	<i>Subsurface Exploration Method</i>
926 Incline Way TRPA File # 970281 APN 132-231-15	190 ft Southwest	9 Feet	Test Pit
948 Incline Way TRPA File LCAP2019-0066 APN 127-030-15	220 ft Southeast	12 Feet	Waived
930 Tahoe Boulevard TRPA File LCAP2018-0182 APN: 132-012-02	680 ft Northwest	7.5 Feet	Test pit
919 Incline Court TRPA File # LCAP2009-0209 APN: 132-232-15	725 ft Southwest	6 Feet	Test Pit
900 Tahoe Boulevard TRPA File # LCAP2019-0135 APN: 132-012-04	1,200 ft Northwest	7 Feet	Waived

We recommend the northeastern wing of the building depth of maximum past groundwater was not present in the test pit to 15 feet depth or Elevation 6,387 feet. While there are strong chroma soils in test pit TP-1, they do not vary substantially from 2 to 15 feet, as shown on the photo in Plate 11. We do not propose that the groundwater level is at 2 feet depth based on chroma, therefore the same coloring is not indicative of past shallow groundwater at 15 feet either. Vegetation at the ground surface is dry and not hydrophilic.

Alternatively, it is possible that the site was a shallow marsh area developing high chroma soils prior to grading of Tahoe Boulevard, diversion of the creek, and the culvert crossing at the intersection. However, based on the dry vegetation that has grown up on the site over the past 50-plus years, we consider any groundwater lowering and vegetation changes due to Lakeshore Boulevard are permanent at this point and should not reflect recent activity of high groundwater level.

We request approval of a maximum excavation depth to 23 feet depth to support the garage excavation. Excavation of test pits deeper than about 15 feet depth is impractical, and soil borings would be required if more information is requested.

APPLICATION CHECKLIST

- a) *Land Capability*: Class 6 based on 2008 verification.
- b) *Proposed Maximum Excavation (below existing grade)*: 12 feet for the east leg to Elevation 6,376 feet, 15 feet for the south wing or Elevation 6,380 feet, and 11 feet for the north wing or Elevation 6,391 feet.
- c) *Explanation of methodology in selection of test pits*: No additional exploration is proposed.
- d) *Volume of Spoil Material*: Approximately 7,000 cubic yards.
Temporary Spoil Storage: Hauled off site to an approved fill location.
- e) *Stream Environment Zones*: The excavation described above is not in a Stream Environment Zone. The nearest possible SEZ is an unnamed shallow channel which drains to Third Creek located approximately 160 feet northeast across Tahoe Boulevard (Plate 5).
- f) *Cross-Section through Proposed Excavation*: See Plate 4.
- g) *Nearby Approved Parcels*: See Plate 6
- h) *Statement of Need*: The proposed excavation is required to allow new construction of spread footings and parking for multiple condominium units.
- i) *Photographs*: See Plates 11, 12, 13, 14, and 15.
- j) *Vegetation*: Pine trees and manzanita. No hydrophilic or wetland species were observed.
- k) *Soil Type*: Inville gravelly coarse sandy loam, 2 to 9 percent slopes, stony.
- l) *Geologic Information*: Quaternary outwash deposits – includes Tioga and Tahoe age deposits as well as pre-Tahoe and possibly younger (Holocene) glacial deposits.
- m) *Topography*: 20H:1V in proposed building area.

CLOSURE

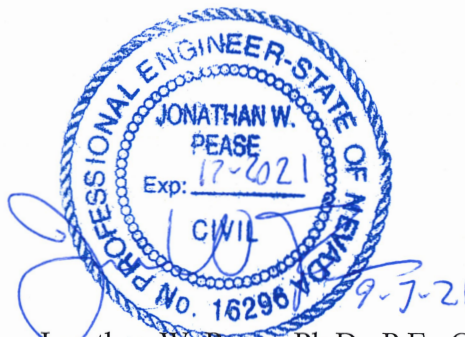
We trust that the information provided in this report provides the necessary information to favorably review this scoping report. If you have any questions regarding this report, please contact our office.

Sincerely,

Reno Tahoe Geo Associates, Inc.



Shane Mulvaney
Senior Geologist

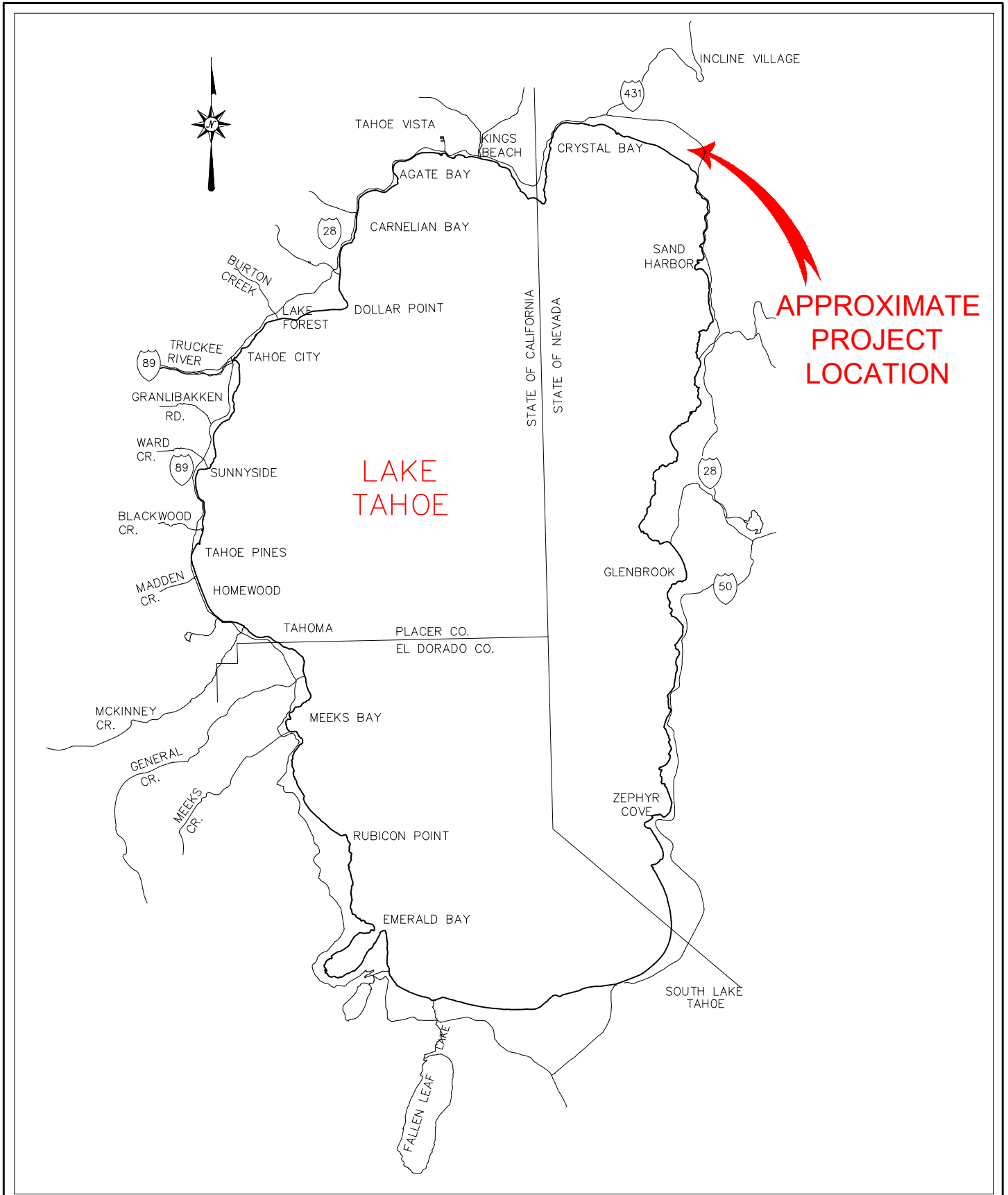


Jonathan W. Pease, Ph.D., P.E., G.E.
Civil Engineer, (NV) 16296

- | | |
|-----------------|-----------------------------------|
| Plates: Plate 1 | Vicinity Map |
| Plate 2 | Site Plan |
| Plate 3 | Basement Layout |
| Plate 4 | Cross-Sections |
| Plate 5 | SEZ Locations |
| Plate 6 | Nearby Soils/Hydrologic Approvals |
| Plate 7 | Geologic Map |
| Plates 8-10 | Logs of Test Pits |
| Plate 11 | Photo of Test Pit TP-1 |
| Plates 12-16 | Site Photos |

Attachments: TRPA Soils/Hydrologic Approval Letters for Nearby Parcels
Soils/Hydrology Scoping Report Application

PLATES



**APPROXIMATE
PROJECT
LOCATION**

**LAKE
TAHOE**


Reno Tahoe Geo Associates, Inc.
 P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100
 Reno, Nevada 89511 FAX (775)853-9199

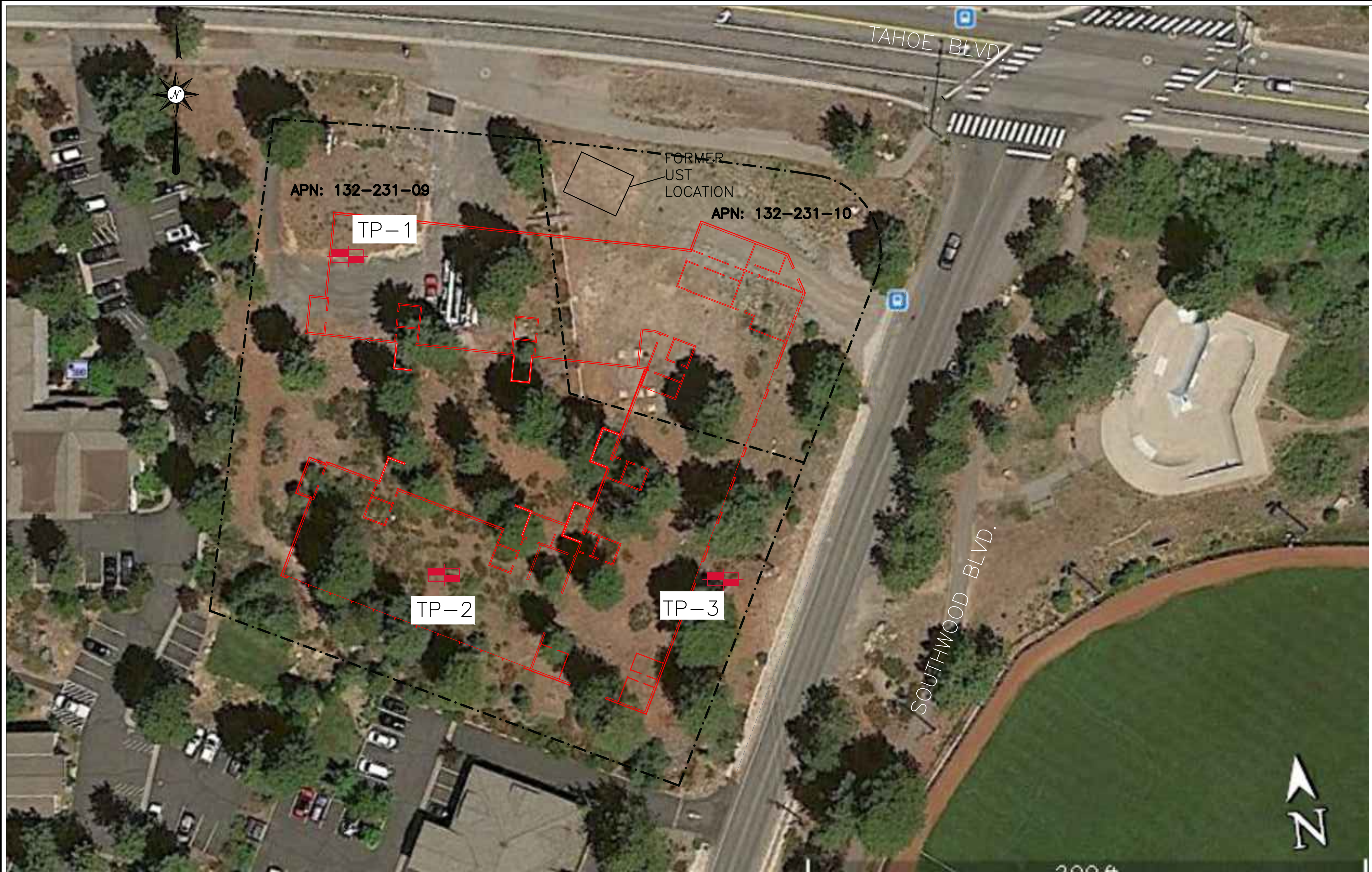
JOB # **21073.001** APPR: **JWP** DATE: **07/10/2021**




VICINITY MAP
SOIL HYDROLOGIC SCOPING REPORT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

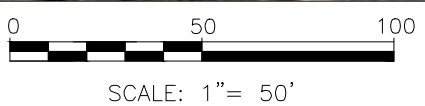
WASHOE COUNTY NEVADA

PLATE
1

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-  Test Pit Location
-  Approximate Parcel Boundary
-  Approximate Building Outline



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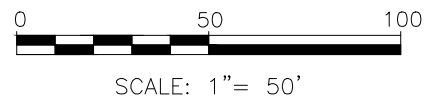
SITE MAP	
SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	
WASHOE COUNTY	CALIFORNIA

PLATE
2

J:\2021\21073.001 - Southwood Condos Incline Village\Drawings and Plans\Site Cross sections Plates 3 4.dwg 9/06/21



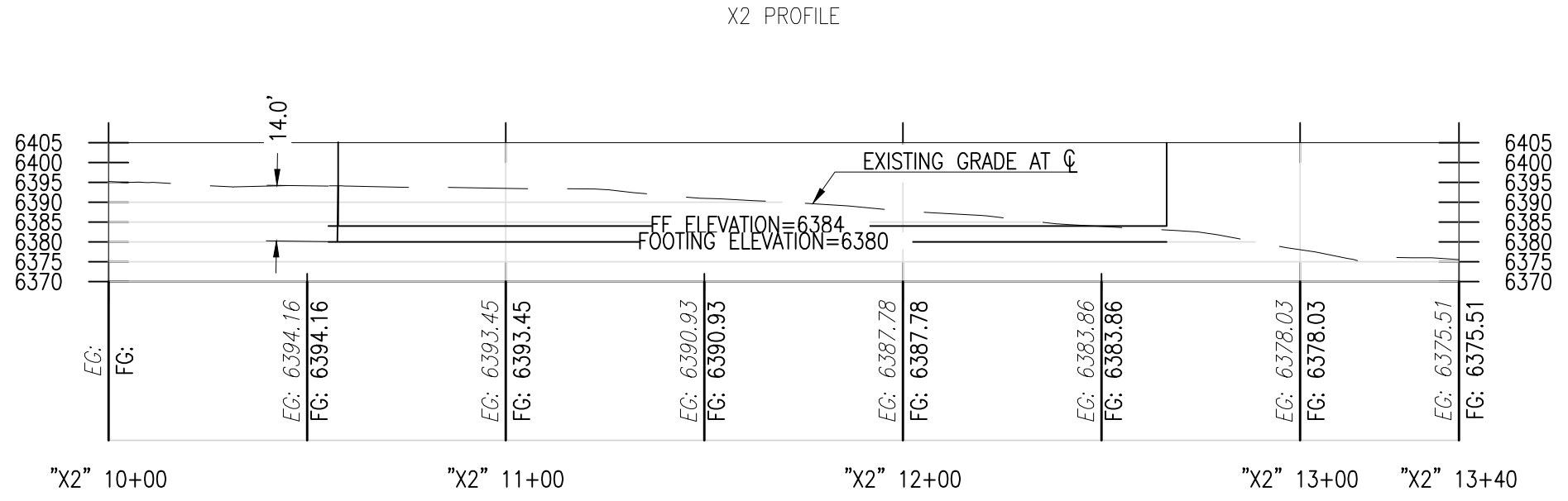
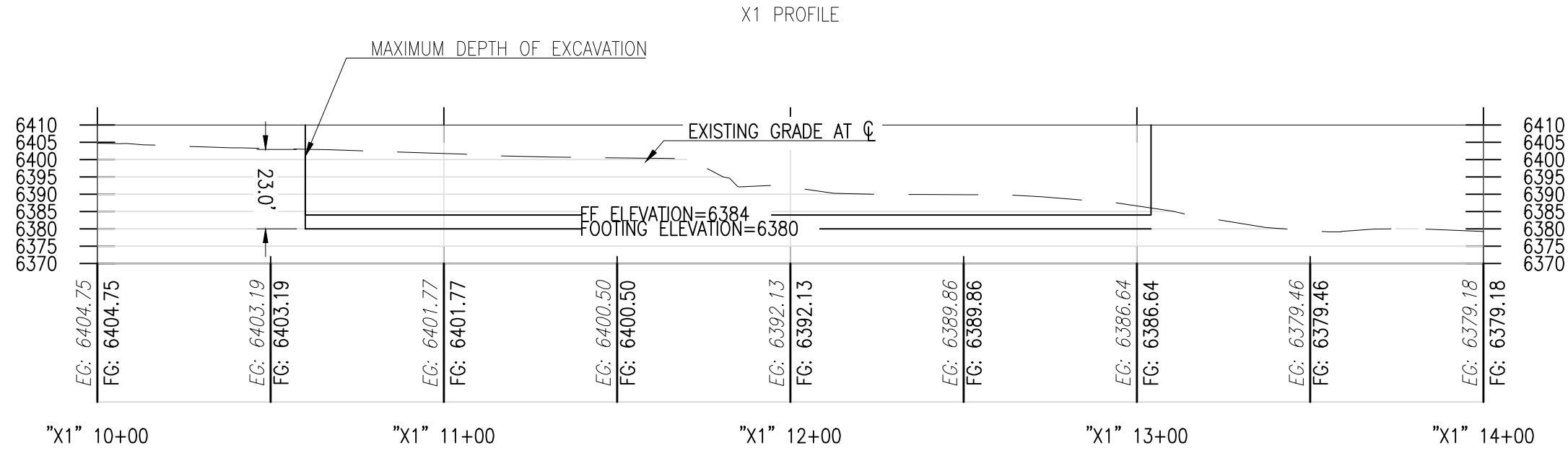
PROPOSED BASEMENT FLOOR ELEVATION 6384 FT
PROPOSED BOTTOM OF FOOTING 6380 FT



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BASEMENT LAYOUT		3
SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE		
WASHOE COUNTY		NEVADA

PLATE
3



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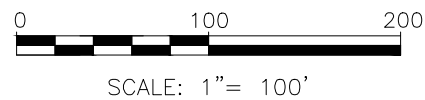
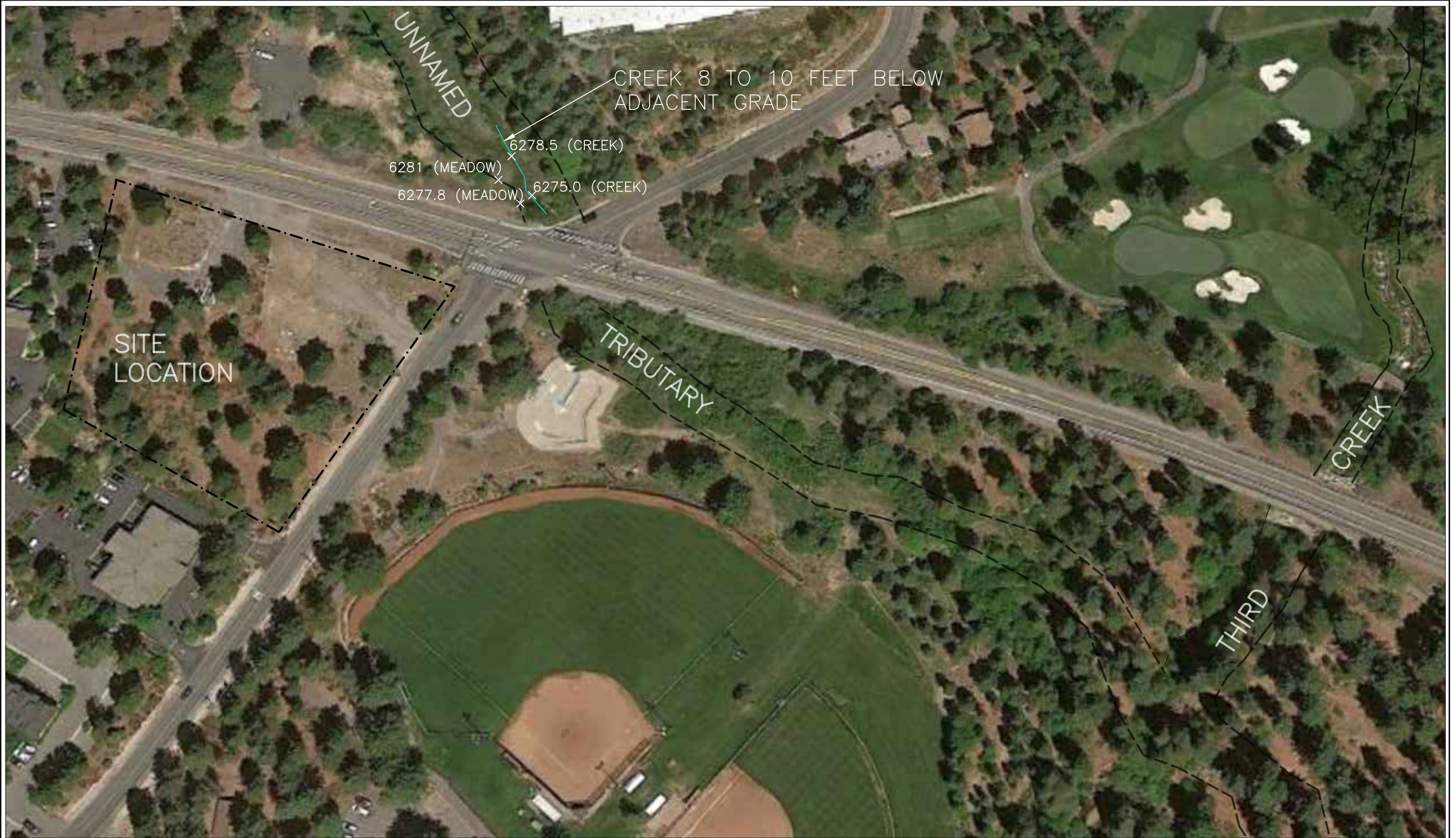
JOB # 21073.002 APPR: _____ DATE: 07/08/2021

CROSS SECTIONS
 SOIL HYDROLOGIC SCOPING REPORT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE

WASHOE COUNTY NEVADA

PLATE
4

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SEZ LOCATIONS	
SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	
WASHOE COUNTY	NEVADA

PLATE
5

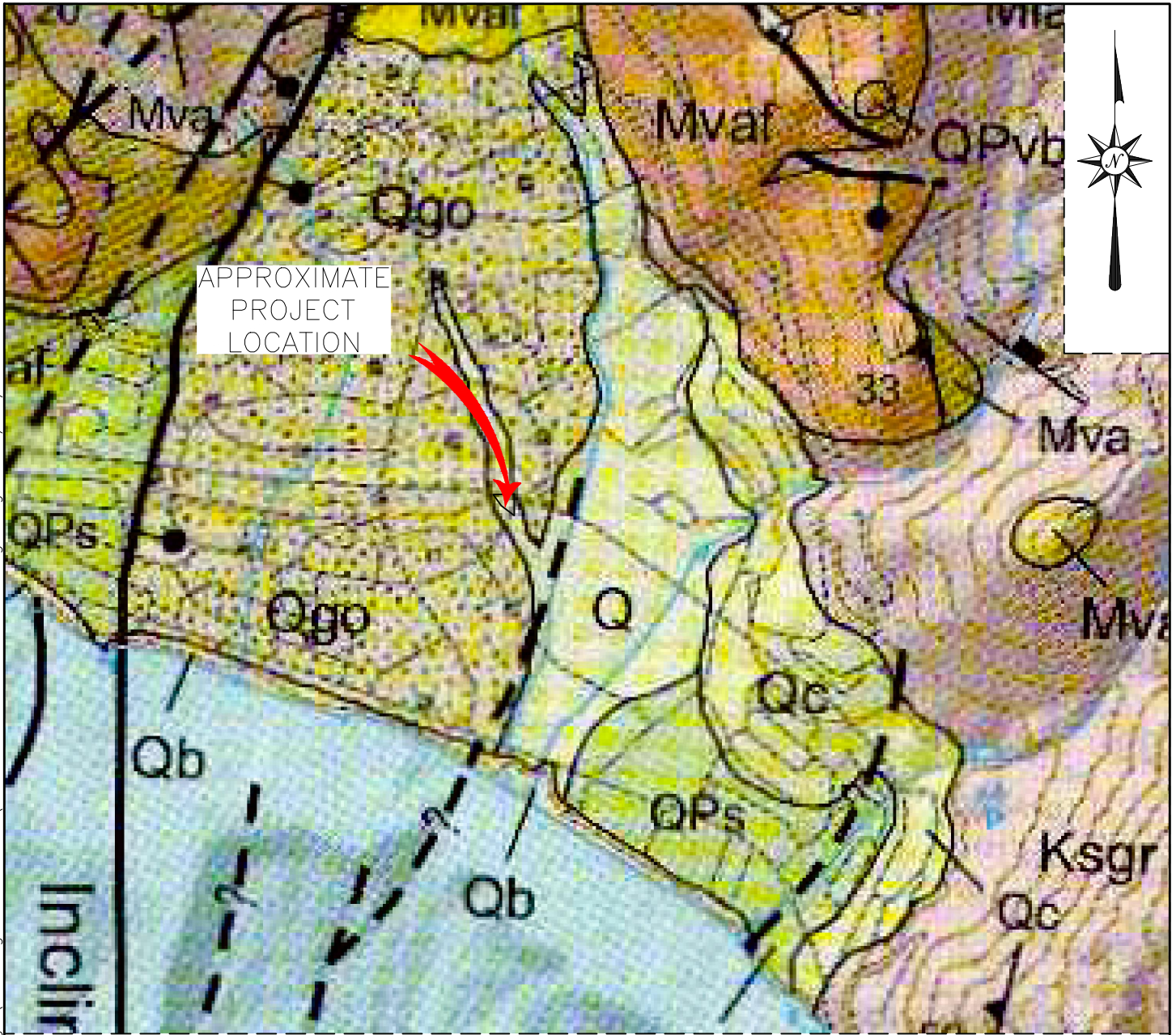
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NEARBY SOIL HYDROLOGIC APPROVALS	PLATE
SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	6
WASHOE COUNTY	NEVADA

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ALLUVIUM (HOLOCENE & PLEISTOCENE)



OUTWASH DEPOSITS (PLEISTOCENE AND HOLOCENE?)



COLLUVIUM (HOLOCENE)



UNNAMED GRAVELS, SAND, AND ALLUVIUM (PLIOCENE AND (OR) PLEISTOCENE)



SCALE: 1" = 2,000'

REFERENCE: GEOLOGIC MAP OF THE LAKE TAHOE BASIN - CALIFORNIA AND NEVADA, 2005, PREPARED BY GEORGE J. SAUCEDO

Reno Tahoe Geo Associates, Inc.
 CONSULTING CIVIL ENGINEERS
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GEOLOGIC MAP
 SOIL HYDROLOGIC SCOPING REPORT
 SOUTHWOOD CONDOMINIUMS
 INCLINE VILLAGE
 WASHOE COUNTY NEVADA

PLATE
7

LOG OF TEST PIT TP-1

LOCATION NORTHWEST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION 6402.0 DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

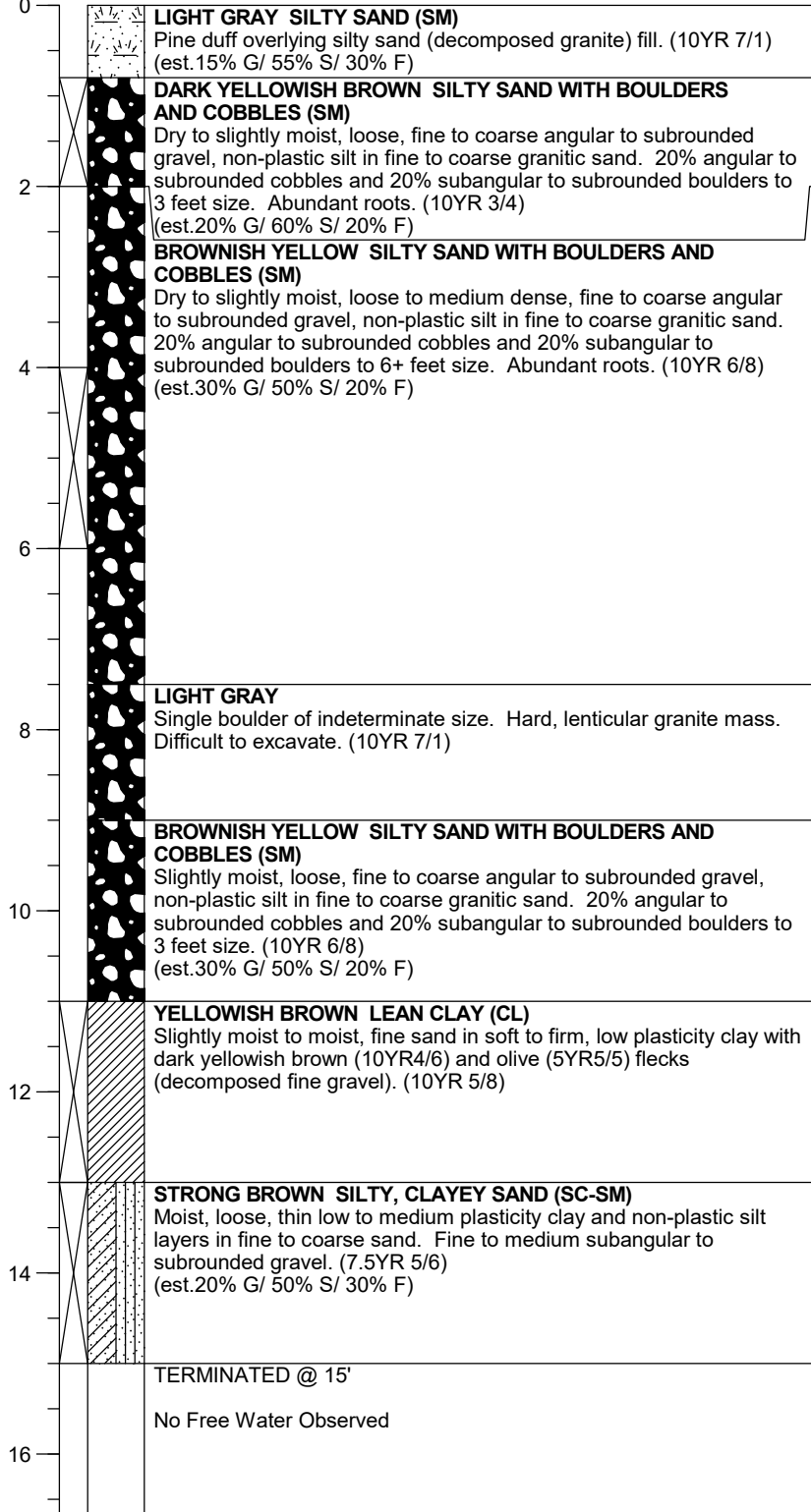
BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE



SA, Percent Passing #200 = 51%
Liquid Limit = 35
Plasticity Index = 14

LOG LETTER SIZE SOUTHWOOD SOILS HYDRO.GPJ MED DATA TEMPLATE 2015A.GDT 9/7/21



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Reno, Nevada 89511 FAX (775) 853-9199

JOB # 21073.001 APPR: _____ DATE: 6/11/2021

LOG OF TEST PIT TP-1

SOIL HYDROLOGIC SCOPING REPORT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

WASHOE COUNTY

NEVADA

PLATE

8

LOG OF TEST PIT TP-2

LOCATION SOUTHWEST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION 6388.0 DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE

0

2

4

6

8

10

12

14

16

	<p>DARK REDDISH BROWN SILTY SAND (SM) Dry, loose, angular to subrounded gravel, non-plastic silt, in fine to coarse sand. Pine duff overlying topsoil. (2.5YR 3/4) (est.15% G/ 60% S/ 25% F)</p>
	<p>DARK YELLOWISH BROWN SILTY SAND WITH COBBLES AND BOULDERS (SM) Dry to slightly moist, loose matrix, fine to coarse angular to subrounded gravel, non-plastic silt in fine to coarse granitic sand. 25% angular to subrounded cobbles and 20% subangular to subrounded boulders to 3 feet size. Abundant roots. (10YR 4/6) (est.20% G/ 60% S/ 20% F)</p>
	<p>YELLOWISH BROWN SILTY SAND WITH COBBLES AND BOULDERS (SM) Dry to slightly moist, loose matrix, fine to coarse angular to subrounded gravel, non-plastic silt in fine to coarse granitic sand. 30% angular to subrounded cobbles and 5% subangular to angular boulders to 3 feet size. (10YR 5/6) (est.25% G/ 55% S/ 20% F)</p>
	<p>TERMINATED @ 13'</p> <p>No Free Water Observed</p>

LOG LETTER SIZE SOUTHWOOD SOILS HYDRO.GPJ_MED DATA TEMPLATE 2015A.GDT 9/7/21



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JOB # 21073.001 APPR: _____ DATE: 6/11/2021

LOG OF TEST PIT TP-2

SOIL HYDROLOGIC SCOPING REPORT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

WASHOE COUNTY

NEVADA

PLATE

9

LOG OF TEST PIT TP-3

LOCATION SOUTHEAST QUADRANT OF SITE

EQUIPMENT LINK-BELT 145 X 4

ELEVATION 6384.0 DATE 6/10/21

LABORATORY TESTS

FIELD BLOWS
/6in

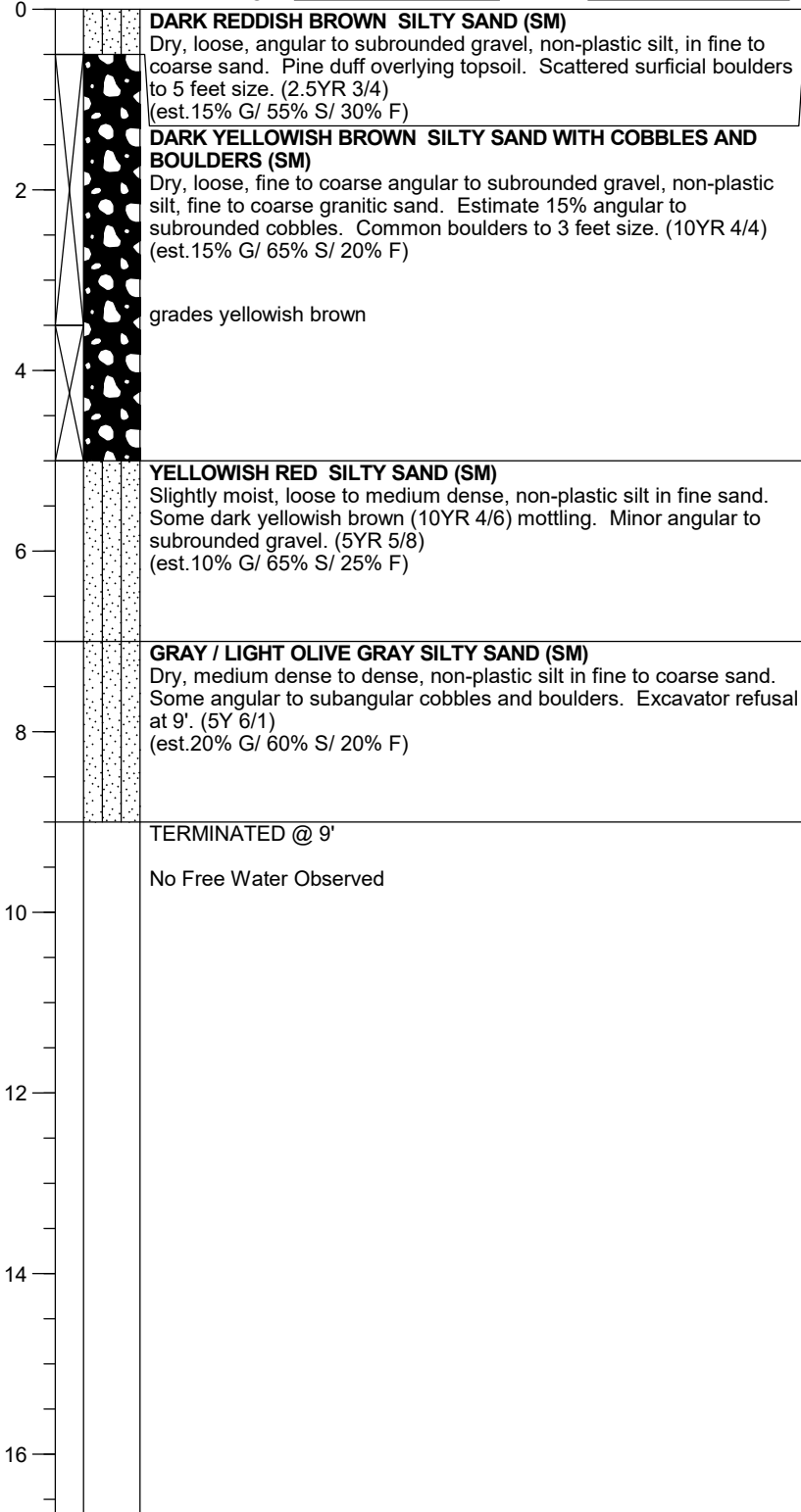
BLOWS/FT

MOISTURE
CONTENT (%)

DRY DENSITY
(pcf)

DEPTH (ft)

SAMPLE



LOG LETTER SIZE SOUTHWOOD SOILS HYDRO.GPJ_MED DATA TEMPLATE 2015A.GDT 9/7/21



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JOB # 21073.001 APPR: _____ DATE: 6/11/2021

LOG OF TEST PIT TP-3

SOIL HYDROLOGIC SCOPING REPORT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE

WASHOE COUNTY

NEVADA

PLATE


10



SOME LIGHTER
COLORS NEAR
SURFACE RESULT
FROM DRY DUST
FALLING DOWN
FROM TOP
LAYER (LOWER
ARROW MORE
REPRESENTATIVE)


BOULDERS AT
7 TO 9 FT DEPTH

2021. 6.11 1:39

 Reno Tahoe Geo Associates, Inc. P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 Reno, Nevada 89511 FAX (775)853-9199	PHOTO OF TEST PIT TP-1	PLATE
	SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	11
JOB # 21073.001 APPR: JWP DATE: 09/06/2021	WASHOE COUNTY	NEVADA




Looking SE from NW Property Corner

 <p>Reno Tahoe Geo Associates, Inc. P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 Reno, Nevada 89511 FAX (775)853-9199</p>	SITE PHOTO	PLATE
	SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	12
JOB # 21073.001 APPR: JWP DATE: 07/07/2021	WASHOE COUNTY	NEVADA




Looking NE from Center of Property

 <p>Reno Tahoe Geo Associates, Inc. P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 Reno, Nevada 89511 FAX (775)853-9199</p>	SITE PHOTO	PLATE
	SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	13
JOB # 21073.001 APPR: JWP DATE: 07/10/2021	WASHOE COUNTY	NEVADA



Looking SE from Center of Property

 <p>Reno Tahoe Geo Associates, Inc. P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 Reno, Nevada 89511 FAX (775)853-9199</p>	SITE PHOTO	PLATE
	SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE	14
JOB # 21073.001 APPR: JWP DATE: 07/10/2021	WASHOE COUNTY	NEVADA



Corner of Southwood and Tahoe Blvd. Looking Across Former Chevron Station Parcel

Reno Tahoe Geo Associates, Inc.
 CONSULTING CIVIL ENGINEERS
 P.O. Box 18449 Reno, Nevada 89511 TEL (775)853-9100 FAX (775)853-9199


JOB # **21073.001** APPR: **JWP** DATE: **07/07/2021**

SITE PHOTO
SOIL HYDROLOGIC SCOPING REPORT
SOUTHWOOD CONDOMINIUMS
INCLINE VILLAGE
WASHOE COUNTY NEVADA

PLATE
15



Looking North Along Retaining Wall, West Edge of Former Chevron Parcel

 <p>Reno Tahoe Geo Associates, Inc. P.O. Box 18449 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 Reno, Nevada 89511 FAX (775)853-9199</p>	SITE PHOTO		PLATE
	SOIL HYDROLOGIC SCOPING REPORT SOUTHWOOD CONDOMINIUMS INCLINE VILLAGE		16
JOB # 21073.001 APPR: JWP DATE: 07/07/2021	WASHOE COUNTY		NEVADA

ATTACHMENTS



Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.org

April 23, 2019

Andrew Haney
Incline Village General Improvement District
1220 Sweetwater
Incline Village, NV 89451

**SOIL HYDROLOGIC APPROVAL – WAIVER
IVGID BALLFIELD IMPROVEMENT PROJECT
948 INCLINE WAY, WASHOE COUNTY, NEVADA
APN 127-030-15, TRPA FILE NUMBER LCAP2019-0066**

Dear Mr. Haney:

Tahoe Regional Planning Agency (TRPA) staff has reviewed the Soils/Hydrologic Scoping Report Application submitted in association with the Incline Village General Improvement District Ballfield Improvement project. The proposed excavation of **12 feet below ground surface** is for installation of two pole foundations for the scoreboard. Although the excavation may intercept groundwater, the excavation is allowed pursuant to TRPA Code of Ordinances Sections 33.3.6.A.2.a (accommodation of engineering requirements for above-ground structures).

Please note that it is possible that variations in the soil or groundwater conditions could exist that are different than what has been investigated or reported. Although it is not anticipated that groundwater will be encountered during the proposed fall construction time period, if conditions are found to be wetter than expected, contact TRPA to discuss options for dewatering.

Pursuant to Rule 11.2 of the TRPA Rules of Procedure, this soils/hydrological approval may be appealed within twenty-one (21) days from the time TRPA releases any final decision.

If you have any questions, please contact me by phone at (775) 589-5247 or by email at jroll@trpa.org.

Sincerely,

A handwritten signature in black ink that reads "Julie Roll".

Julie Roll
Senior Planner



Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.org

June 25, 2019

Ryan Burlt Construction
1455 Deming Way #1
Sparks, NV 89431

SOIL HYDROLOGIC APPROVAL - WAIVER
900 TAHOE BOULEVARD, WASHOE COUNTY, NEVADA
APN 132-012-04, TRPA FILE NUMBER LCAP2019-0135

Dear Mr. Burlt:

The Tahoe Regional Planning Agency (TRPA) staff has reviewed the Soils/Hydrologic Scoping Report Application submitted in association with the Bank of America light fixture upgrade. The proposed excavation of **7 feet below ground surface** is for installation of six light poles in the bank parking lot. It is not expected that groundwater will be encountered in this location and the excavation is allowed pursuant to TRPA Code of Ordinances Sections 33.3.6.A.2.a (accommodation of engineering requirements for above-ground structures) and 33.3.6.A.2.d (public health and safety).

Please note that it is possible that variations in the soil or groundwater conditions could exist that are different than what has been investigated or reported. If conditions are found to be wetter than expected, contact TRPA immediately to discuss options for dewatering.

Pursuant to Rule 11.2 of the TRPA Rules of Procedure, this soils/hydrological approval may be appealed within twenty-one (21) days from the time TRPA releases any final decision.

If you have any questions, please contact me by phone at (775) 589-5247 or by email at jroll@trpa.org.

Sincerely,

A handwritten signature in black ink that reads "Julie Roll". The signature is fluid and cursive, with the first name being the most prominent.

Julie Roll
Senior Planner

C. Laura Fabrizio
3328 Newbliss Cir.
Ormond Beach, FL 23174

TAHOE REGIONAL PLANNING AGENCY

128 Market Street
Stateline, Nevada
www.trpa.org

P.O. Box 5310
Stateline, Nevada 89449

(775) 588-4547
Fax (775) 588-4527
Email: trpa@trpa.org

September 17, 2009

Huldrege & Kull
Pam Raynak
10775 Pioneer Trail #213
Truckee, CA 96161

RE: SOIL HYDROLOGIC APPROVAL
INCLINE BUSINESS PARK LLC, 919 INCLINE CT., WASHOE COUNTY
APN 132-232-15, TRPA FILE NUMBER LCAP2009-0209

Dear Ms. Raynak:

The Tahoe Regional Planning Agency (TRPA) staff's Land Capability Program has reviewed the Soils/Hydrologic Scoping Report Application submitted September 2, 2009. Upon reviewing the application and site visit to observe a test pit, **TRPA staff hereby approves the excavation for an infiltrating BMP to 6 feet below ground surface.**

Please note that it is possible that variations in the soil or groundwater conditions could exist at the site that are different than what has been investigated or reported. Also, changes in site conditions could occur at some time in the future due to variations in rainfall, snowfall, temperature, regional water usage, or other factors. These variations and/or changes could cause the groundwater level to be higher than interpreted. ***Because of this, the applicant is required to notify the TRPA immediately if significantly different subsurface conditions are encountered than what has been interpreted from the investigation.***


This letter only approves the depth of the excavation and does not represent approval for the project.

The TRPA has the following recommendations for the project:

1. Temporary Best Management Practices (BMPs) are to be installed and maintained prior to excavation and during all phases of the proposed project.
2. All excavated materials shall be hauled away from the site to a legally acceptable location. No fills or recontouring, other than backfill for the cut-retaining structures, shall be allowed.
3. Blasting of rocks should be kept to an absolute minimum to avoid damage to surrounding rocks and vegetation.

Pursuant to Rule 11.2 of the TRPA Rules of Procedure, this soils/hydrological approval may be appealed within twenty-one (21) days from the time TRPA releases any final decision. Thank you for your cooperation. Should you have any questions about these matters, please contact this office at (775) 589-5313.

Sincerely,


Heather Gustafson
Senior Planner / Land Capability Program Manager
Environmental Review Services
Tahoe Regional Planning Agency



**TAHOE
REGIONAL
PLANNING
AGENCY**

Mail
PO Box 5310
Stateline, NV 89449 5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775 588 4547
Fax: 775 588 4527
www.trpa.org

July 23, 2018

Kevin Provance
Black & Veatch
5885 Meadows Rd, Ste. 700
Lake Oswego, OR 97035

**SOIL HYDROLOGIC INVESTIGATION - APPROVAL
930 TAHOE BOULEVARD, WASHOE COUNTY, NEVADA
APN: 132-012-02 TRPA FILE NUMBER LCAP2018-0182**

Dear Mr. Provance:

Tahoe Regional Planning Agency (TRPA) staff reviewed the Soils/Hydrologic Report Application submitted June 26, 2018. Field conditions were evaluated onsite by TRPA contractor Phil Scoles on July 17, 2018 (exposed excavation on this date). The soil thickness is greater than 7 feet deep. No evidence of ground water (i.e. iron staining, gray soil, etc.) was observed; however, the decaying stones and boulders contain oxidized iron deposits. Such deposits are not evidence of a seasonal water table – they are a product of the natural breakdown of the rock mineralogy. There are also several soil/hydrologic investigations that occurred nearby that also lacked groundwater in the upper 9 feet (or deeper). Based on the field investigation, TRPA staff hereby approves an excavation of 7.5 feet below ground surface for the proposed retaining wall parallel to the east property line (behind the Tesla Supercharging Station currently under construction).

Please note that it is possible that variations in the soil or groundwater conditions could exist at the site that are different than what has been investigated or reported. Also, changes in site conditions could occur at some time in the future due to variations in rainfall, snowfall, temperature, regional water usage, or other factors. These variations and/or changes could cause the groundwater level to be higher than interpreted. ***Because of this, the applicant is required to notify the TRPA immediately if significantly different subsurface conditions are encountered than what has been interpreted from the investigation.***

This letter only approves the depth of the excavation and does not represent approval for the project. TRPA has the following recommendations for the project:

1. Temporary Best Management Practices (BMPs) are to be installed and maintained prior to excavation and during all phases of the proposed project.
2. All excavated materials shall be hauled away from the site to a legally acceptable location. No fills or recontouring, other than backfill for the cut-retaining structures, is allowed.

3. Blasting of rocks should be kept to an absolute minimum to avoid damage to surrounding rocks and vegetation.

Pursuant to Rule 11.2 of the TRPA Rules of Procedure, this soils/hydrological approval may be appealed within twenty-one (21) days from the time TRPA releases any final decision (**August 13, 2018**).

If you have any questions, please contact me by phone at (775) 589-5249 or by email at jroll@trpa.org.

Sincerely,



Julie Roll
Senior Planner
Current Planning Department

Cc: Andrew Levy
Tesla Motors, Inc.
3500 Deer Creek Road
Palo Alto, CA 94304

Joel Korotkin
6029 Monet Way
El Dorado Hills, CA 95762

TAHOE REGIONAL PLANNING AGENCY

308 Doria Court
Elks Point, Nevada

P.O. Box 1038
Zephyr Cove, Nevada 89448-1038

(702) 588-4547
Fax (702) 588-4527
Email: trpa@sierra.net

June 3, 1997

MR PAUL KALETA
BASIN STRATEGIES
POST OFFICE BOX 11945
ZEPHYR COVE NEVADA 89448

Dear Mr. Kaleta:

**APPROVAL OF EXCAVATION FOR PROPOSED PROJECT BASED ON COMPLETED INVESTIGATION,
EDUCATIONAL FIELD STUDIES OFFICE, 926 INCLINE WAY, WASHOE COUNTY, APN
132-231-15, TRPA FILE #970281**

The Tahoe Regional Planning Agency (TRPA) staff's Ground Water Technical Advisory Committee (GWTAC) has reviewed the final report, dated May 30, 1997, that was prepared by Darlene Barlow of Nortech. The GWTAC hereby approves the final report and agrees with the conclusions that no evidence was found to show that the proposed excavation to a total depth of 9.0 feet below ground surface (bgs) would intercept the highest recorded groundwater levels.

No groundwater, mottled, gleyed, or reduced areas in the soil profile were observed in the soil test pits to indicate seasonal groundwater levels. The GWTAC approves the depth of the proposed excavation to not exceed 9.0 feet bgs for the project.

Please note that it is possible that variations in the soil or groundwater conditions could exist at the site that are different than what has been investigated or interpreted. Also, changes in site conditions could occur at some time in the future due to variations in rainfall, snowfall, temperature, regional water usage, or other factors. These variations and/or changes could cause the groundwater level to be higher than interpreted. Because of this, the applicant is required to have a TRPA GWTAC member inspect the completed excavation to verify that it does not intercept existing or historic groundwater levels.

This letter only approves the depth of the excavation and does not represent approval for the project. A copy of this letter has been forwarded to the appropriate project reviewing department for inclusion in the project file. The project reviewing department will review the project for conformance with other applicable ordinances to determine if a conditional permit can be issued and will use this letter as an approval of the depth of the excavation only.

The TRPA GWTAC has the following recommendations for the project:


1. All excavated materials shall be hauled away from the site to a legally acceptable location. No fills, or recontouring, other than backfills for the cut-retaining structures, shall be allowed.

Mr. Paul Kaleta
June 3, 1997
Page Two

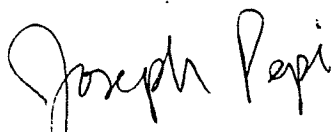
2. The excavation for the project shall be visually inspected by a TRPA GWTAC member to verify that the excavation is above the highest recorded existing or seasonal groundwater level. If groundwater is intercepted, then the excavation and foundation design shall be immediately revised to not intercept groundwater. The revised depth shall be subject to approval by the GWTAC.

Thank you for your cooperation. Should you have any questions about these matters, please contact this office at (702) 588-4547.

Sincerely,



Douglas F. Smith
TRPA GWTAC Lead Geologist
California Registered Geologist No. 6540



Joseph Pepi
TRPA GWTAC Lead Soil Scientist
Certified Professional Soil Scientist, No. 2372

DFS/jsd

c: Ms. Darlene Barlow, PE, NORTECH, 390 Freeport Blvd. #12, Sparks NV 89431
Bear Ridge Developers, Inc., PO Box 7097, Incline Village NV 89452-7097
Paul Pettersen, TRPA Senior Planner

132-231-15-3jun97-3



LSC Transportation Consultants, Inc.

2690 Lake Forest Road, Suite C

P.O. Box 5875

Tahoe City, CA 96145

530-583-4053 ▲ FAX: 530-583-5966

info@lscstrans.com ▲ www.lscstrans.com

December 3, 2021

Jodi Clouthier
Greenwood Homes
940 Southwood Blvd., Ste 101
Incline Village, Nevada 89451

RE: Incline Village Residential Trip Generation Letter

Dear Ms. Clouthier:

This letter contains the findings of our trip generation review of the proposed 40 multi-family townhomes on the southwest corner of SR 28 (Tahoe Boulevard) and Southwood Boulevard in Incline Village, Nevada.

Trip Generation

Trip generation is the evaluation of the number of vehicle-trips that will either have an origin or destination at the project site. Daily one-way vehicle-trips and peak-hour one-way vehicle-trips must be determined in order to analyze the potential impacts from the proposed project development. Since the project is located in the Tahoe Basin, daily rates are based on The *TRPA Trip Table* (April 2020) which is based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* 10th Edition.

Reduction for Non-Auto Trips

Non-auto trips, such as trips made to/from the site via bike, walking or transit, reduce the number of vehicle trips generated by the project. *2018 Summer TRPA Travel Mode Share Survey* data was reviewed. Data from the surveys conducted at locations at Incline Village near the Raley's and at the Incline Village Recreation Center. Based on responses from this group (with 60 data points), the non-automotive trip percentage was approximately 40 percent. Due to the project's location relative to commercial and shopping as well as the high school, the connecting bike and pedestrian paths, the nearby employment locations, a reduction of 20 percent non-auto travel is applied to the residential units. The non-auto reduction is less than that found at the commercial center (40 percent) due to the home to work trips and home to recreation trips which were not reflected in the commercial center area.

Trip Generation at Site Driveways

Multiplying the land use quantities by the trip rates and applying reductions for non-auto trips yields the vehicle trips generated at the site driveways for proposed project conditions. As shown in Table A, the proposed land uses are forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).

Conclusion


The project's total peak hour trip generation of 14 trips is well below the 80 peak-hour vehicle-trip threshold where a full traffic study would be required as per the *Community Service Department Planning and Building Administrative Permit Development Application Submittal Requirements* (Washoe County, Nevada, December 2018). Therefore, no further analysis is required.



Please contact our office at (530) 583-4053 with any questions or comments pertaining to this analysis.

Respectfully Submitted,

LSC Transportation Consultants, Inc.

by 

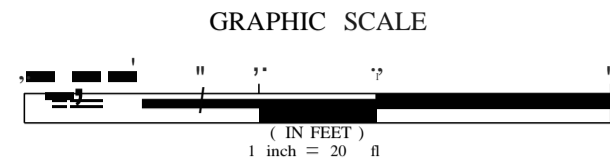
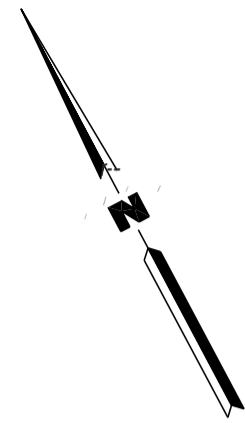
Leslie Suen, PE, Senior Engineer

LSC Transportation Consultants, Inc.

Enclosure: Table A

Table A: Incline Village Residential - Trip Generation

Description	Quantity	Units	ITE Land Use Category	ITE Land Use Code	Trip Generation Rates ¹			Reduction for Non-Auto Access	Vehicle Trips at Site Driveways		
					Daily	PM Peak Hour In	Out Total		Daily	PM Peak Hour In	Out Total
Multi Family Residence	40	DU	Multi Family Housing (Mid-Rise)	221	5.44	Fitted Curve	20%	174	9	5	14
DU= Dwelling Unit											
Note 1: TRPA daily rates follow ITE for these land uses. ITE Peak hour rate.											
Source: LSC Transportation Consultants, Inc., Tahoe Regional Planning Agency (TRPA) Trip Table, and Institute of Transportation Engineers Trip Generation (10th Edition)											



94 00 01
ACCORD MINIMUM

OWNER

PALCAP FFIF TAHOE 1, LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

PROJECT NO:	00-09-05
DESIGNED BY:	KA
DRAWN BY:	JT
CHECKED BY:	DATE
DATE:	12-01-2021

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SHEET TITLE

**TENTATIVE
SUBDIVISION MAP**

DRAWING
TMB

SHEET 18 OF 23

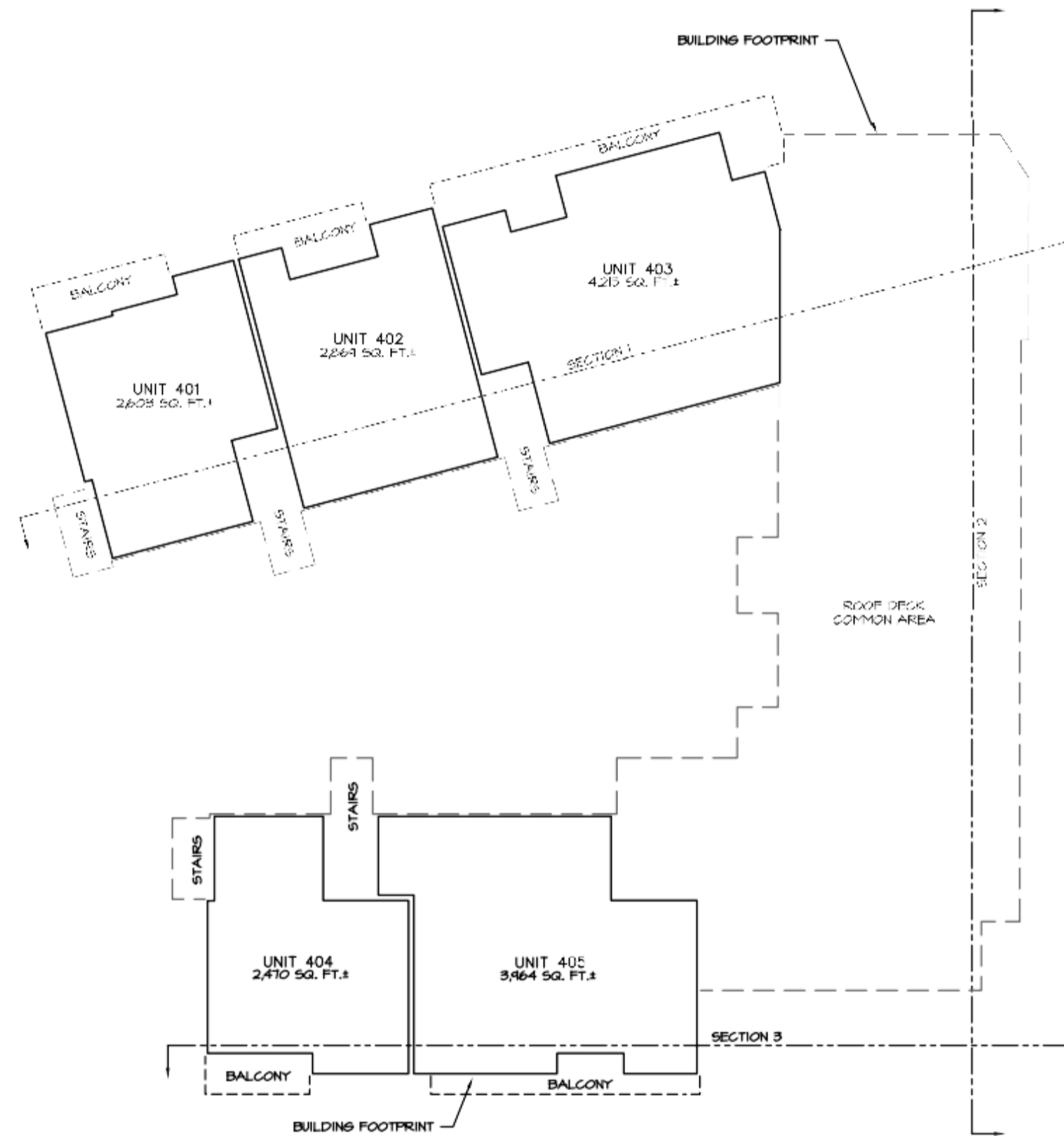
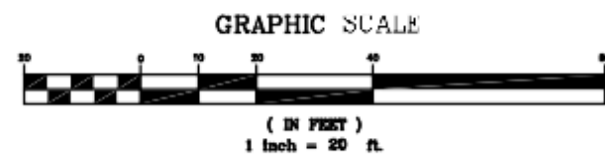
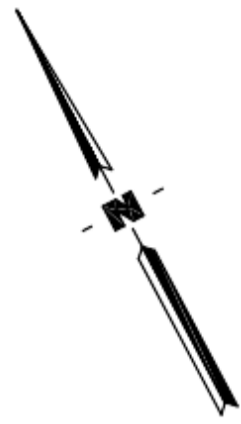


2ND FLOOR

NOTE, SEE SHEET TM5 FOR SECTIONS



3RD FLOOR



PENTHOUSE FLOOR

NOTE: SEE SHEET TM6 FOR SECTIONS



**947 TAHOE
A CONDOMINIUM**

OWNER:
**PALCAP P-H-TAHOE 1,
LLC
940 SOUTHWOOD BLVD.
STE 101
INCLINE VILLAGE, NV
89451**

NO.	DATE	DESCRIPTION

PROJECT NO: 00-09-05
DESIGNED BY: KA
DRAWN BY: JL
CHECKED BY: -- DATE: --
DATE: 12-01-2021

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SHEET TITLE
**TENTATIVE
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SHEET 19 OF 23



947 TAHOE
A COMMUNITY

OWNER

PALCAP FFIF TAHOE I,
LLC
940 SOUTHWOOD BLVD.
STE 101
110 LINE VILLAGE, NV
89451

NO.	DATE	DESCRIPTION

PROJECT NO: 00-09-05
DESIGNED BY: KA
DRAWN BY: JT
CHECKED BY: DATE
DATE: 12-01-2021

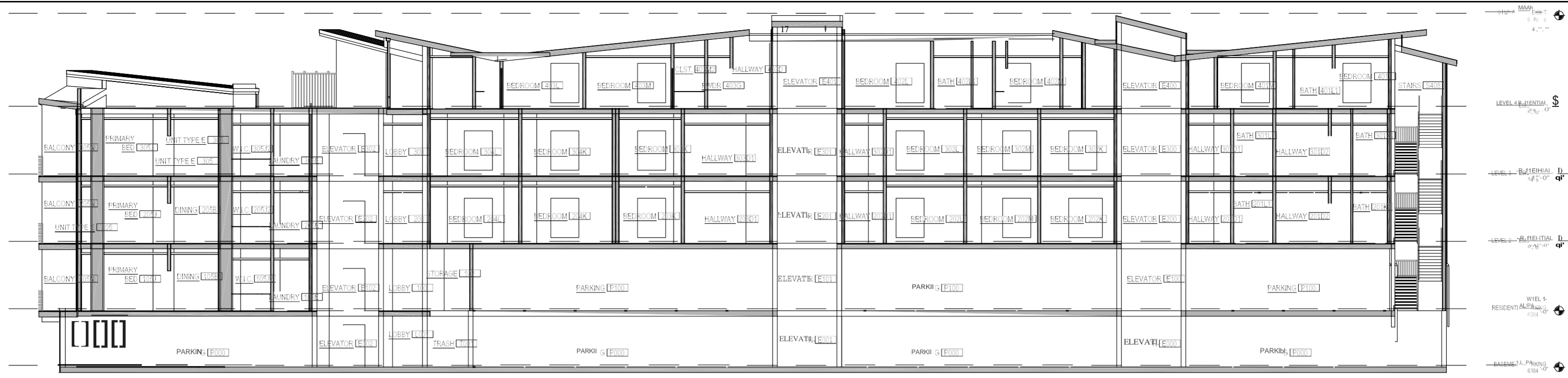
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FINAL
SUBDIVISION MAP

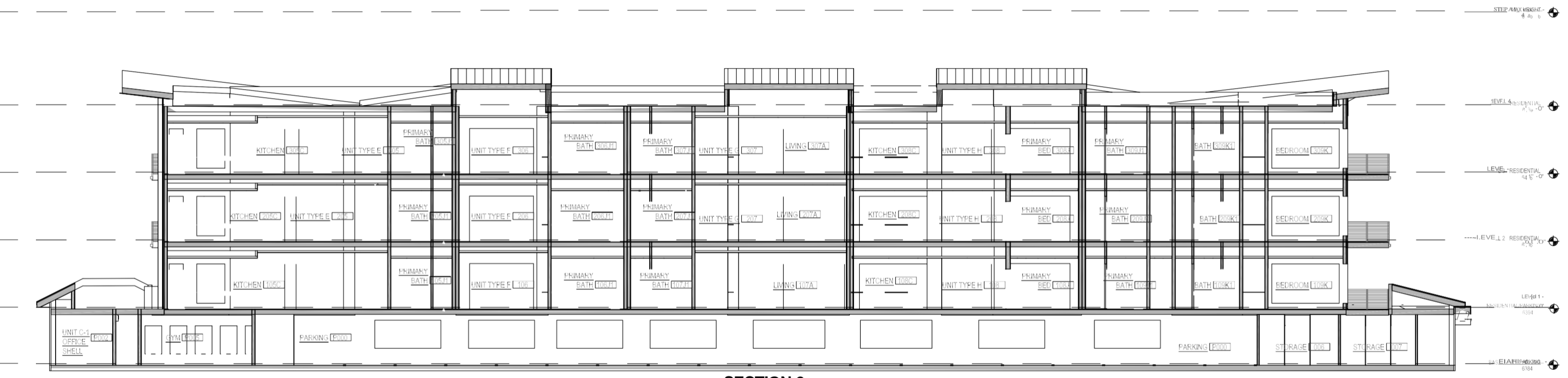
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SHEET 20 OF 23

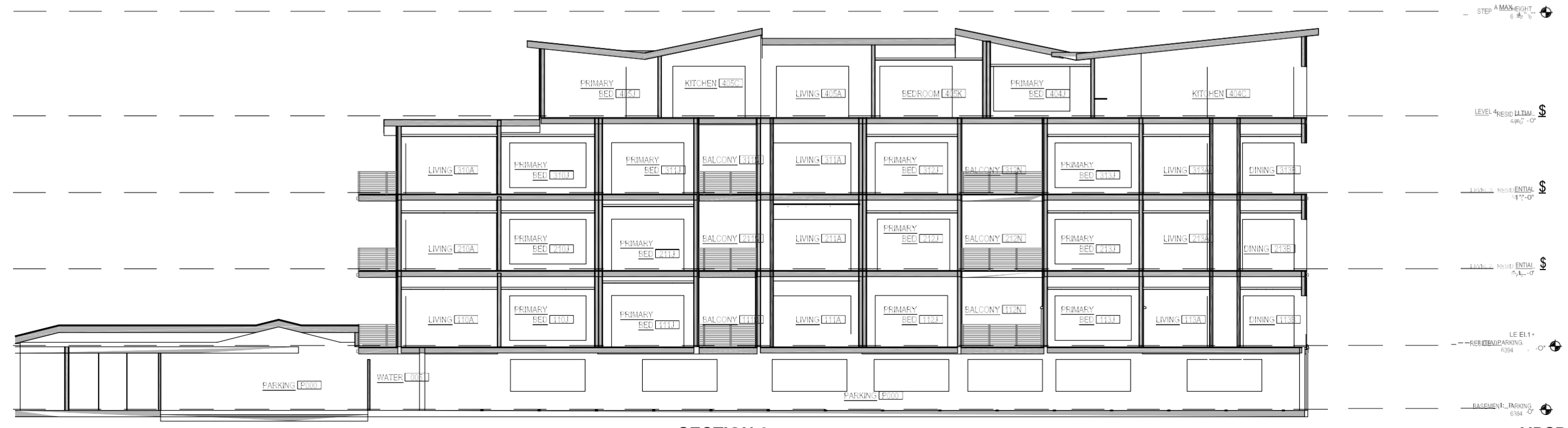
WTM21-012
EXHIBIT F



SECTION 1



SECTION 2



SECTION 3

AIRSPACE EXHIBIT
SCALE: 1"=10'

Incline Residential Tahoe/Southwood *Transportation Study*

Prepared for

Greenwood Homes
940 Southwood Blvd. #101
Incline Village, NV 89451

Prepared by

LSC Transportation Consultants, Inc.
2690 Lake Forest Road, Ste. C
P.O. Box 5875
Tahoe City, CA 96145
530-583-4053

December 12, 2021

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Chapter 1 Introduction

The Incline Village Residential project is located on the southwest corner of SR 28 (Tahoe Boulevard) and Southwood Boulevard in Incline Village, Nevada. The project would consist of 40 multi-family townhomes. The site location is shown in Figure 1.

The purpose of this report is to present an analysis of the traffic and air quality impacts associated with the proposed project. Initially, existing traffic conditions near the proposed site are discussed. The proposed land uses associated with the project are then assessed in terms of the generation of new traffic. An appropriate distribution of traffic onto the adjacent roadway system is then identified. Using this distribution pattern, the forecasted generated trips are assigned to the nearby roadway system to identify the impact on intersection Level of Service (LOS). In addition, the following areas of impact are reevaluated:

1. Site access conditions and driveway spacing
2. Traffic signal warrant
3. Regional Vehicle Miles Traveled (VMT) Analysis
4. Air quality impacts



Figure 1
 Incline Village Residential - Site Location



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



The following discussion presents information regarding existing transportation conditions in the study area.

ROADWAY CHARACTERISTICS

The project site is served by the following existing roadways:

State Route 28 (Tahoe Boulevard) is the primary highway serving Lake Tahoe's north shore. It is a two-lane roadway that runs through Incline Village, Nevada from Tahoe City, California to US 50. To the west of Incline Village, State Highway 28 terminates at the junction of State Route 89 in Tahoe City, California. To the east, the highway turns south and continues along the east shore of Lake Tahoe and ends at US 50. Within Incline Village itself, State Highway 28 is designated as Tahoe Boulevard, with a posted speed limit of 35 miles per hour. The section between Village Boulevard and the eastern Northwood Boulevard/Southwood Boulevard intersection contains a center two-way left turn lane; other sections generally provide one lane in each direction, with turn lanes at major intersections.

Village Boulevard is a two-lane roadway that intersects SR 28 and provides access to primarily residential neighborhoods to the south, and residential neighborhoods as well as government offices to the north. The posted speed limit is 25 miles per hour.

Northwood Boulevard and Southwood Boulevard are two-lane roadways forming a loop roadway around the central Incline Village area. This loop is designated as Southwood Boulevard to the south of SR 28 and Northwood Boulevard to the north of SR 28. To the west of Village Boulevard, the two boulevards meet at a signalized intersection with SR 28. To the east of Village Boulevard, both meet at an unsignalized intersection with SR 28, controlled by stop signs on the Boulevard approaches to the highway. The posted speed limit is 25 miles per hour.

EXISTING TRAFFIC VOLUMES

This study is based on typical summer traffic conditions. PM turning-movement counts were conducted by LSC staff at the SR 28/Northwood Blvd/Southwood Blvd study intersection from 3:30 PM to 5:30 PM on Thursday, June 3, 2021. PM turning-movement counts were conducted by LSC at the SR 28/Village Blvd study intersection from 3:30 PM to 5:30 PM on Wednesday, June 2, 2021. Nevada Department of Transportation (NDOT) monthly variation was analyzed at the permanent location SR 28 (Tahoe Blvd) 915 feet north of Lakeshore Drive/Pinon Drive. In 2019, July was determined to be the peak month. The volumes from our counts were increased using a growth factor of 1.2 to adjust the counts to peak month conditions. The resulting 'existing no project' peak-hour traffic volumes are shown in Table 1.



Table 1: Incline Village Residential - Peak Hour Intersection Traffic Volumes

Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Existing No Project													
SR 28/Village Blvd	113	267	86	131	185	73	93	479	104	109	458	120	2218
SR 28/Southwood Blvd/Northwood Blvd (East)	22	21	63	29	15	39	44	611	63	40	561	27	1533
Southwood Blvd/Site Access	0	105	0	0	118	0	0	0	0	0	0	0	223
Project Net Impact													
SR 28/Village Blvd	0	0	0	0	0	0	0	3	0	0	2	0	5
SR 28/Southwood Blvd/Northwood Blvd (East)	3	0	1	0	1	0	0	0	5	2	0	0	12
Southwood Blvd/Site Access	1	0	0	0	0	8	4	0	1	0	0	0	14
Existing Plus Project													
SR 28/Village Blvd	113	267	86	131	185	73	93	482	104	109	460	120	2223
SR 28/Southwood Blvd/Northwood Blvd (East)	25	21	64	29	16	39	44	611	68	42	561	27	1545
Southwood Blvd/Site Access	1	105	0	0	118	8	4	0	1	0	0	0	237

Source: LSC Transportation Consultants, Inc.

EXISTING TRANSIT CONDITIONS

Transit services in the North Shore area are provided through the Tahoe Truckee Area Regional Transportation (TART). The bus service in this area is the TART Mainline. The Mainline Route travels the western shore of Lake Tahoe from Tahoma to the north shore at Incline Village. It operates between 6:00AM and 9:30 PM, providing one run per hour. Existing bus stops are conveniently located along SR 28 at Christmas Tree Village, Raley's, and Northwood Blvd and on Southwood Blvd at the Incline State Park within the vicinity of the project site.

In the summer of 2021, a pilot "microtransit" transit service is being operated, marketed as TART Connect. It provides free rides for passengers making app requests from 8 AM to Midnight 7 days a week. Three zones are being operated, including an Incline Village / Crystal Bay zone that encompasses the project site.

EXISTING BICYCLE AND PEDESTRIAN CONDITIONS

Bicycle Facilities

Bicycle paths, bicycle routes and bicycle lanes are provided in the vicinity of the project. A Class I bikeway (multipurpose walking and bicycling path) can be found along Village Blvd from College Drive south to Lake Shore Blvd and along the entirety of Lake Shore Blvd. A bikeway is also located starting at the eastern Southwood Blvd/SR 28 intersection that loops around clockwise and ends on Northwood Blvd at the Incline Elementary School. Class II bikeways (bike lanes) can be found along SR 28 from the western Lake Shore Blvd intersection to the eastern Lake Shore Blvd intersection.

Pedestrian Facilities

Within the vicinity of the site, multipurpose walking and bike paths are provided along SR 28 and Southwood Blvd. The SR 28/Northwood Blvd/Southwood Blvd intersection has pedestrian crosswalks on all four sides of the intersection as well as a Rectangular Rapid-Flashing Beacon (RRFB) in the East and West directions. Another RRFB is placed along SR 28 in front of the Raley's driveway. At the SR 28/Village Blvd intersection, crosswalks can be found on the west, east and south approaches of the signalized intersection.

Overall Non-Auto Access

In summary, the site is served by relatively good transit and bicycle/pedestrian access opportunities. The location near major trip generators (such as shopping) also makes the site relatively conducive to non- auto travel. Specific non-auto reductions are discussed in Chapter 3.

EXISTING AIR QUALITY CONDITIONS

Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses of the environment.

Regional Setting

Many important factors determine local and regional air quality, with the most critical being the quantity, type, and location of pollution sources. Climatic conditions, such as wind speed and direction, temperature gradients, and inversions and precipitation interact with the physical features of the landscape to determine the movement and dispersion of air pollutants.



Climate

The Lake Tahoe Air Basin is surrounded by various mountain ranges within the Sierra Nevada. The Tahoe Basin's climate is cool and dry in the summer and cold and wet in the winter. Temperatures can vary from a daily mean of 60 degrees Fahrenheit (15.6 degrees Celsius) in the summer to about 20 degrees Fahrenheit (-6.7 degrees Celsius) in the winter. Diurnal temperature ranges combine to form characteristics that affect air quality on a daily and seasonal basis. Temperature inversions with the region are generally caused by nighttime cooling of the land surface, which occurs at a faster rate than the cooling of the overlying air. These inversions can trap air pollutants near their source by limiting vertical mixing. These conditions occur most frequently in the winter.

The enclosed nature of the basin and the large diurnal temperature range combine to form specific air basin characteristics that affect air pollution concentrations on a daily and seasonal basis. Relevant to the present discussion are the issues of mixing height and temperature inversions. The "mixing height" is the height or thickness of the air blanket available for dispersion of airborne pollutants emitted near the ground surface.

Normally, air temperature decreases with an increase in elevation. When a "temperature inversion" occurs, however, temperatures within a layer of air increase with height. The two issues are related in that the presence of a temperature inversion reduces or lowers the mixing height normally available, thereby lessening the dispersion potential for pollutants in the air basin.

Inversions will trap pollutants near their emission source by precluding vertical mixing processes from dispersing the pollutants. Consequently, potential for high pollutant concentrations is greatest during strong, persistent, low-level radiation inversion conditions, which generally occur in the Lake Tahoe region during the winter months.

In the Lake Tahoe Air Basin, inversions are generally caused by nocturnal radiational cooling of the land surface, which occurs at a rate slower than the cooling of the overlying air. During summer months, the morning inversion is broken up by strong surface heating, usually by 9:00 AM to 10:45 AM. Thus, by early morning, mixing heights have typically increased to over 5,000 feet with strong vertical mixing. By mid-evening, the inversion slowly begins to form again, peaking during the early morning.

During winter months, surface heating is less pronounced, and the morning inversion may persist until noon (~50% of the time) or later. Consequently, the Lake Tahoe Basin exhibits a high potential for air pollution during the early morning hours, especially during the winter.

Standards and Thresholds

Federal, state, and regional standards exist for ambient air quality in the Tahoe Basin. The air quality plan element of the integrated regional transportation plan focuses on the need for air quality control strategies. The various federal, State of Nevada, and TRPA standards are listed in Table 2.

Table 2: Applicable Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standards		Nevada Standards	TRPA Standards
		Primary	Secondary	Concentration	Concentration
Ozone (O ₃)	1 Hour	No Standard	No Standard	No Standard	0.08 ppm
	8 Hour	0.070 ppm	Same as Primary	0.070 ppm	No Standard
Carbon Monoxide (CO)	1 Hour	35 ppm	No Standard	35 ppm	No Standard
	8 Hour	9 ppm	No Standard	9 ppm below 5000' 6 ppm above 5000'	6 ppm
Nitrogen Dioxide (NO ₂)	1 Year	53 ppb	Same as Primary	53 ppb	Maintain NO _x emissions at or below 1981 levels
	1 Hour	100 ppb	No Standard	100 ppb	No Standard
Sulfur Dioxide (SO ₂)	1 Year	No Standard	No Standard	0.030 ppm	No Standard
	24 Hour	No Standard	No Standard	0.14 ppm	No Standard
	3 Hour	No Standard	0.5 ppm	0.5 ppm	No Standard
	1 Hour	75 ppb	No Standard	75 ppb	No Standard
Particulate Matter (PM ₁₀)	1 Year	No Standard	No Standard	No Standard	50 µg/m ³ in the portion of the region within Nevada
	24 Hour	150 µg/m ³	Same as Primary	150 µg/m ³	150 µg/m ³ in the portion of the region within Nevada
Fine Particulate Matter (PM _{2.5})	1 Year	12 µg/m ³	15 µg/m ³	12 µg/m ³	15 µg/m ³ in the portion of the region within Nevada
	24 Hour	35 µg/m ³	Same as Primary	35 µg/m ³	35 µg/m ³
Sulfates	24 Hour	No Standard	No Standard	No Standard	No Standard
Lead	Rolling 3-month average	0.15 µg/m ³	Same as Primary	0.15 µg/m ³	No Standard
Hydrogen Sulfide	1 Hour	No Standard	No Standard	0.08 ppm	No Standard
Vinyl Chloride	24 Hour	No Standard	No Standard		No Standard
Visibility Reducing Particles	8 Hour (Observation)	No Standard	No Standard	No Standard	Regional 97 mi (156 km), 50% of the year 71 mi (115 km), 90% of the year Sub-regional 48 mi (78 km), 50% of the year 19 mi (31 km), 90% of the year

Source: NAAQS Table, United States Environmental Protection Agency (accessed June 2021)

Source: NAC 445B.22097 State standards of quality for ambient air (NRS 445B.210), Nevada Administrative Code (accessed June 2021)

Source: TRPA Regional Plan, Attachment 1: Resolution 82-11 Exhibit A, amended May 23, 2018



Attainment Designations

Air quality in most areas of the Lake Tahoe Air Basin is good. As shown in Table 3, the Lake Tahoe Air Basin met all the federal and state standards. The region was in non-attainment on the California side of the TRPA PM10 standard which is based on 2015 data (the most recent data available) but was shown as attainment on the Nevada side.

Table 3: Lake Tahoe Air Basin Attainment Designations

Pollutant	Federal	Nevada	TRPA
Ozone	Unclassified/Attainment	Unclassified/Attainment	Attainment
Carbon Monoxide	Unclassified/Attainment	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Unclassified/Attainment	–
Particulate Matter (PM10)	Unclassified/Attainment	Unclassified/Attainment	Attainment ¹
Particulate Matter (PM2.5)	Unclassified/Attainment	Unclassified/Attainment	Attainment
Lead	Unclassified/Attainment	Unclassified/Attainment	–
Hydrogen Sulfide	–	Unclassified/Attainment	–
Visibility Reducing Particles	–	–	Attainment

¹Attainment on Nevada side but non-attainment on California side.
 Source: U.S. EPA, June 2021.
 Source: Tahoe Regional Planning Agency (TRPA) Threshold Evaluation Report, 2015.
 Source: Area Designations Maps / State and National, California Air Resources Board, December 2018.



Chapter 3

Trip Generation, Distribution, and Assignment

TRIP GENERATION

The first step in the analysis of future traffic impacts is to prepare an estimate of the number of trips generated by the existing site and the proposed project. Trip generation is the evaluation of the number of vehicle-trips that will either have an origin or destination at the project site. Daily Vehicle-Trip Ends (DVTE) and Peak Hour Vehicle-Trip Ends (PHVTE) need to be determined in order to analyze the potential impacts from the proposed project.

Full Buildout includes construction of the 40 multi-family units. The trip generation analysis for the proposed project land uses is summarized in Table 4.

Standard daily trip generation rates are provided in the Tahoe Regional Planning Agency's (TRPA) *Trip Table* (TRPA, 2020) and peak-hour rates are provided in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition Manual* (ITE, 2017). These standard rates are shown in Table 4.

Reduction for Non-Auto Trips

Non-auto trips, such as trips made to/from the site via bike, walking or transit, reduce the number of vehicle trips generated by the project. 2018 Summer TRPA Travel Mode Share Survey data was reviewed. Data from the surveys conducted at locations at Incline Village near the Raley's and at the Incline Village Recreation Center. Based on responses from this group (with 60 data points), the non-automotive trip percentage was approximately 40 percent. Due to the project's location relative to commercial and shopping as well as the high school, the connecting bike and pedestrian paths, the nearby employment locations, a reduction of 20 percent non-auto travel is applied to the residential units. The non-auto reduction is less than that found at the commercial center (40 percent) due to the home to work trips and home to recreation trips which were not reflected in the commercial center area.

Trip Generation at Site Driveways

Multiplying the land use quantities by the trip rates and applying reductions for non-auto trips yields the vehicle trips generated at the site driveways for proposed project conditions. As shown in Table 4, the proposed land uses are forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of site-generated trips is defined based upon the following:

1. The site's location relative to complementary land uses and regional access points.
2. The observed pattern of existing traffic movements.
3. The driveway on SR 28 will be used exclusively for emergency access. As a result, all trips will be to/from the driveway on Southwood Boulevard.

Trip distribution patterns for vehicle trips made to/from the project are estimated and the results are shown in Table 5.



Table 4: Incline Village Residential - Trip Generation

Description	Quantity	Units	ITE Land Use Category	ITE Land Use Code	Trip Generation Rates ¹			Reduction for Non-Auto Access		Vehicle Trips at Site Driveways		
					Daily	PM Peak Hour In	PM Peak Hour Out	Total			Daily	PM Peak Hour In
Multi Family Residence	40	DU	Multi Family Housing (Mid-Rise)	221	5.44	Fitted Curve		20%	174	9	5	14

DU= Dwelling Unit
 Note 1: TRPA daily rates follow ITE for these land uses. ITE Peak hour rate.
 Source: LSC Transportation Consultants, Inc., Tahoe Regional Planning Agency (TRPA) Trip Table, and Institute of Transportation Engineers *Trip Generation* (10th Edition)

Table 5: Incline Village Residential - Trip Distribution

To/From	Percent
South on Southwood Blvd	15%
North on Northwood Blvd	10%
East on SR 28	20%
SR 28 Between Village and Northwood/Southwood	20%
West on SR 28	35%
Total	100%

Source: LSC Transportation Consultants, Inc.

The site-generated traffic volumes are assigned through the study intersections by applying the distribution percentages to the peak-hour vehicle trips. The resulting PM peak-hour traffic volumes estimated to be generated by the full buildout of the project are shown in Table 1. The project-generated peak-hour intersection turning movement volumes are then added to the 'no-project' volumes, yielding the 'existing with project' peak-hour intersection traffic volumes presented in Table 1.



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LEVEL OF SERVICE

LOS is a quantitative and qualitative measure of traffic conditions on isolated sections of roadway or intersections. LOS ranges from “A” (with no congestion) to “F” (where the system fails with gridlock or stop-and-go conditions prevailing). Detailed LOS definitions are included in Appendix A. As is the standard for traffic engineering analyses, intersection LOS is analyzed based upon the procedures presented in the *Highway Capacity Manual* (Federal Highways Administration, 2016) using the Synchro software application (Version 10.3, Trafficware). The LOS calculations are contained in Appendix B for further reference.

LOS Standards

The TRPA LOS standards for the Lake Tahoe Basin, established by the Tahoe Regional Planning Agency (TRPA), are set forth in the 2019 Regional Transportation Plan with the intent that the Region’s highway system and signalized intersections during peak periods shall not exceed the following:

1. LOS C on rural scenic/recreational roads,
2. LOS D in rural developed areas,
3. LOS D on urban roads, or
4. LOS D for signalized intersections - LOS E may be acceptable during peak periods not to exceed four hours per day.

The Regional Transportation Plan Mobility 2035 (TMPO/TRPA, 2012) also states that: “These vehicle LOS standards may be exceeded when provisions for multimodal amenities and/or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the project-generated traffic in relation to overall traffic conditions on affected roadways.” (pp. 2 – 10). While the Tahoe Regional Planning Compact looks to “reduce the dependency on the private automobile,” there are currently no adopted requirements or standards regarding the quality of service of other travel modes (i.e., transit, biking, or walking) that could potentially reduce the demand on the roadway system.

The TRPA does not have a specific adopted standard for unsignalized intersections.

The Washoe County LOS Standards are set forth in the 2050 Regional Transportation Plan with the intent that roadway facilities do not exceed the following:

1. LOS D for all regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon
2. LOS E for all regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon
3. LOS F for:
 - a. 4th St/Prater Way – Evans Avenue to 15th St
 - b. Plumas St – Plumb Ln to California Ave
 - c. Rock Blvd – Glendale Ave to Victorian Ave
 - d. Virginia St – Kietzke Ln to S McCarran Blvd
 - e. Virginia St – Plumb Ln to Liberty St & 8th St to 17th St
 - f. Sun Valley Blvd – 2nd Ave to 5th Ave
 - g. Intersection of N Virginia St and Interstate 80 ramps

Existing Year Intersection Level of Service

As shown in Table 6, all study intersections currently attain the LOS thresholds during the existing year condition without the project with the exception of SR 28/Southwood Blvd/Northwood Blvd. The stop-controlled intersection of SR 28/Southwood Blvd/Northwood Blvd currently operates at LOS F.

With implementation of the proposed project the new site driveways intersecting SR 28 and Southwood Blvd will operate at an acceptable LOS A. The intersection of SR 28/Southwood Blvd/Northwood Blvd will remain at an unacceptable LOS F with a small increase in delay.

Table 6: Incline Village Residential - Existing Intersection LOS Summary

Intersection	Control Type	LOS Threshold	PM Existing No Project		PM Existing Plus Project	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
			SR 28/Village Blvd	Signalized	D	15.1
SR 28/ Southwood Blvd/ Northwood Blvd (East)	TWSC	D	99.7	F	105.4	F
Southwood Blvd/Site Access	TWSC	D	0.0	A	9.7	A

BOLD text indicates that LOS standard is exceeded.

TWSC = Two-Way Stop-Control; AWSC = All-Way Stop-Control

NOTE 1: Level of service for signalized intersections is reported for the total intersection.

NOTE 2: Level of service for roundabouts and other unsignalized intersections is reported for the worst movement.

Source: LSC Transportation Consultants, Inc.



The project would generate approximately 174 new daily one-way vehicle trips and 14 PM peak-hour vehicle trips (9 inbound plus 5 outbound) at the site access driveway. The following areas of transportation impacts are evaluated in this section:

- Analysis of the Need for a New Traffic Signal
- Intersection Level of Service (LOS)
- Site Access Plans
- Vehicle Miles Traveled (VMT)

TRAFFIC SIGNAL WARRANT ANALYSIS

NDOT has established a series of “warrants” to define conditions in which a traffic signal should be provided. This is to ensure that signals are only provided in locations where the benefit outweighs the impacts of a signal (notably, the increase in traffic delays along the major roadway). The need for a new traffic signal at the stop-controlled SR 28/Northwood Blvd/Southwood Blvd (east) is evaluated using the procedure discussed in *NDOT Access Management System and Standards* (November 2017), which relies on the warrants for a traffic signal as defined in the Manual on Uniform Traffic Control Devices (MUTCD).

The MUTCD provides a series of 8 individual warrants, addressing traffic volumes in various periods, pedestrian conditions, safety conditions and other specific factor. Of these warrants, the first to be met in typical conditions (such as at this location) is the “peak hour warrant.” This warrant is based on the volume per hour of the major street (total of both approaches) and the volume per hour on the minor street higher volume approach. These volumes are plotted in a chart; if the plotted value is higher than the specified curve, the location meets the peak-hour warrant. As shown in Figure 2, the existing-plus- project volumes fall below the curve, indicating that a traffic signal is not warranted without or with the project.

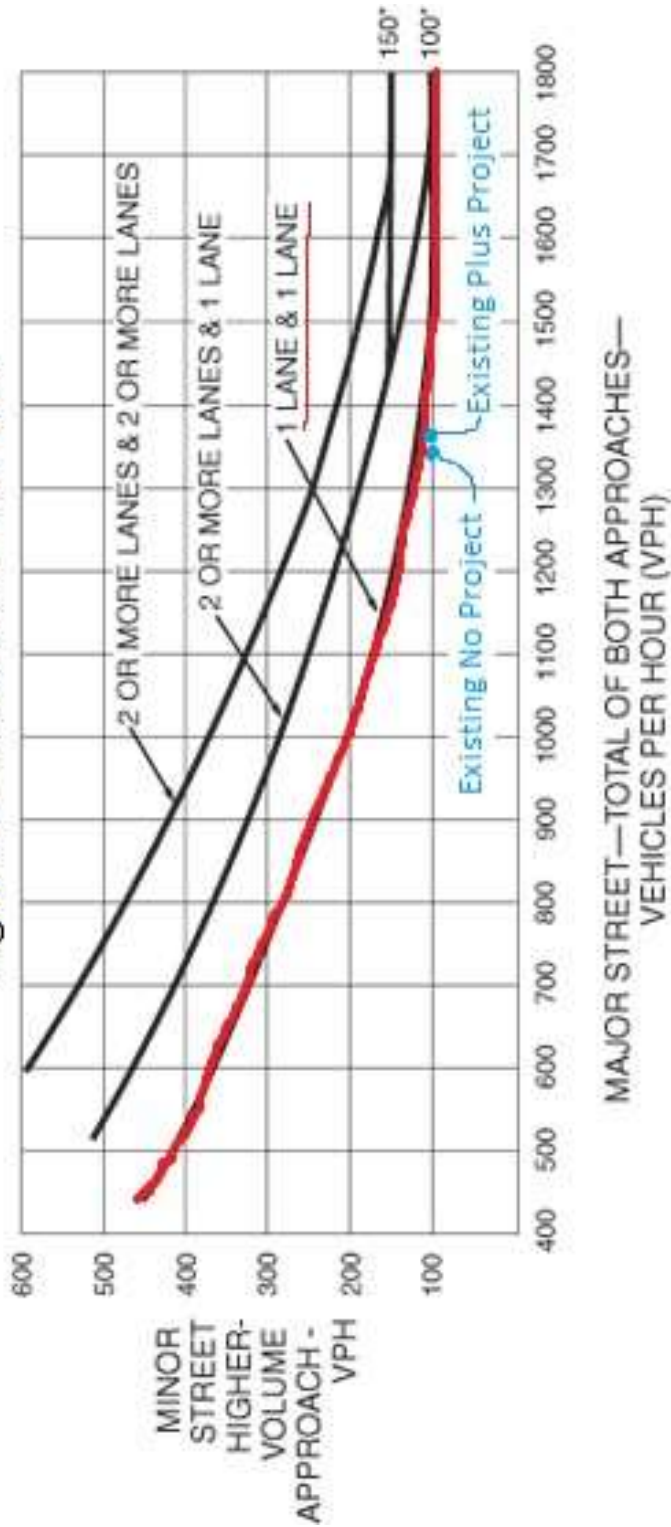
INTERSECTION LEVEL OF SERVICE (LOS)

The site driveway intersection and SR 28/Village operate at an acceptable LOS with the project. As such, no LOS mitigation is required for these intersections.

SR 28/Northwood Blvd/Southwood Blvd (East) operates at an unacceptable LOS F both with and without the project. Even though a traffic signal would improve LOS, it is not warranted at this location.

Additionally, a roundabout would also improve LOS to acceptable levels. While a warrant system specific to roundabouts has not been developed, the signal warrants typically are used as a guideline, which would indicate that a roundabout is not warranted. A roundabout at this location would be an extensive and expensive project, particularly given the grades. In addition, drivers exiting the project onto Southwood and wishing to head west on SR 28 have the option, if they see a long northbound queue at the highway intersection, to make a right turn and access the highway via Village Boulevard. This tends to limit the increase in delays. Another factor is that the proposed project’s traffic would only increase total

Figure 2 - Peak Hour Warrant



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

volumes through the 28/Northwood/ Southwood intersection by 0.8 percent. Given these factors,requiring installation of a roundabout would not be appropriate.

Another option for improving access would be to expand the northbound Southwood approach at SR 28 from the existing one-lane configuration. At present, drivers wishing to make a northbound right-turn movement are often behind drivers making the more difficult northbound through or northbound left movements. To evaluate the overall delay (measured in total vehicle-hours of delay) with an additional lane, LOS was evaluated assuming the additional lanes as shown in Table 7.

Table 7: SR 28/Northwood Blvd/Southwood Blvd Northbound Approach Delay with Additional Lanes

Scenario	Northbound Lane Configuration	Northbound Volume by Movement			Northbound Delay by Movement (sec)			Vehicle Hours of Delay	% Change From Existing
		Left	Through	Right	NBL	NBT	NBR		
Existing No Project	LTR	25	21	64	67.8			1.99	--
Existing Plus Project	LTR	25	21	64	80.3			2.44	23%
Existing Plus Project	LT, R	25	21	64	101.7	101.7	14.7	1.54	-22%
Existing Plus Project	L, TR	25	21	64	87.7	28.2	28.2	1.27	-36%

Source: LSC Transportation Consultants, Inc.

This indicates the following:

- At present, northbound drivers in the peak hour experience a total of 1.99 vehicle-hours of delay.
- The additional traffic generated by the proposed project, with the existing single-lane northbound approach, would increase delay to 2.44 vehicle-hours.
- If a right turn lane is provided (shared left/through and separate right turn lanes), total delay would be 1.54 vehicle-hours of delay. Alternatively, if a separate left turn lane is provided along with a shared through/right lane, total delay would be 1.27 vehicle-hours.

Though the vehicle-hours of delay would be reduced slightly with the addition of a separate left turn lane, the LOS would remain at LOS F.

SITE ACCESS PLANS

Driver sight distance conditions are evaluated at the site access point.

Driver Sight Distance

Driver sight distance was evaluated at the proposed access intersection. According to the NDOT Road Design Guide (2019), there are two types of sight distance standards that should be met at driveways or intersections for low-speed facilities (44 MPH or Less): stopping sight distance and intersection sight distance. Intersection sight distance requirements are meant to ensure that adequate time is provided for the waiting driver at an unsignalized intersection or driveway to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right,

without requiring through traffic to radically alter their speed. Intersection sight distance requirements are based upon the need for a driver to discern a gap of up to 7.5 seconds in oncoming traffic to safely choose an adequate gap. The design intersection sight distance requirements are set forth in Table 9-7 of A Policy on Geometric Design of Highways and Streets (AASHTO Green Book, 2018).

Stopping sight distance is the distance an oncoming driver on the major roadway needs to perceive an object in the travel lane (such as a turning vehicle), react to the object, and come to a safe stop. Stopping sight distance requirements are set forth in the AASHTO Green Book.

LSC staff visited the site and determined the proposed driveway is expected to provide adequate driver stopping sight distance. For intersection sight distance, the Southwood site access is adequate so long as the final landscaping plans do not hinder the intersection sight distance.

Driveway Spacing

The proposed driveway spacing along Southwood Blvd was reviewed. Driveway spacing is adequate and no mitigation needs to be performed.

Site Access Summary

In summary, a review of the site access plans indicates the following:

1. Driver sight distance is acceptable on Southwood Boulevard points so long as the final landscaping plans provide at least 440 feet of corner sight distance.
2. The proposed driveway spacing meets City standards.

VEHICLE MILES TRAVELED (VMT)

VMT analysis was conducted based on TRPA’s “TRPA Project Impact Assessment Guidelines” (TRPA Draft, June 2021). This project is located in Project Impact Assessment Zone 69. The current project impact assessment process, based on daily vehicle trip ends (DVTE) identifies projects in town and regional centers that produce less than 200 DVTE:1,300 VMT as having an insignificant effect and so not requiring additional analysis.” Because the project has less than the 200 DVTE requirement, the project is considered to have an insignificant effect. VMT is calculated but does not have to be considered against the standard of significance.

The projects VMT is calculated as the ‘zone VMT per capita’ multiplied by the ‘zone persons per household’ multiplied by the number of proposed units. As shown in Table 8, the resulting VMT from the residential units would total 850 VMT.

Table 8: Incline Village Residential - VMT Analysis				
Trip Type	Zone VMT per Capita¹	Zone Persons per Household	Number of Proposed Units	Average Annual Daily VMT
Residential	9.24	2.30	40	850
Note 1: TRPA zone VMT per Capita for PIA zone 69 Source: LSC Transportation Consultants, Inc.				



CONCLUSIONS

- The project is forecasted to generate a total of approximately 174 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 14 PM peak-hour vehicle-trips (9 inbound plus 5 outbound).
- The LOS at the site access driveway and SR 28/Village Blvd would remain acceptable with the project.
- The LOS at the SR 28/Northwood Blvd/Southwood Blvd intersection does not meet LOS standards without the project, which would be exacerbated by the proposed project. A review of improvement options indicates that a signal or a roundabout are not warranted. Though the vehicle-hours of delay would be reduced slightly with the addition of a separate northbound left-turn lane, the LOS would remain at LOS F.
- The proposed site access driveway spacing on Southwood Boulevard meets the City Standards.
- The proposed driveway on Southwood Boulevard is expected to provide adequate driver sight distance so long as the final landscaping plans do not hinder the corner sight distance.
- The project is exempt from a full VMT analysis and will generate about 850 total VMT.

Appendix A
LOS DESCRIPTIONS

DESCRIPTIONS OF LEVELS OF SERVICE

The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

Level of Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **Level of service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.
- **Level of service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.
- **Level of service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.
- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.
- **Level of service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.
- **Level of service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and level of service F is an appropriate designation for such points.

Appendix B
LOS OUTPUT

HCM 6th Signalized Intersection Summary

1: Village Blvd & SR 28

06/18/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷		↶	↷	
Traffic Volume (veh/h)	93	479	104	109	458	120	113	267	86	131	185	73
Future Volume (veh/h)	93	479	104	109	458	120	113	267	86	131	185	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	521	113	118	498	130	123	290	93	142	201	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	707	153	298	679	177	415	493	158	336	465	183
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	798	1489	323	793	1430	373	1099	1357	435	1000	1278	502
Grp Volume(v), veh/h	101	0	634	118	0	628	123	0	383	142	0	280
Grp Sat Flow(s),veh/h/ln	798	0	1812	793	0	1803	1099	0	1792	1000	0	1780
Q Serve(g_s), s	5.8	0.0	14.0	7.0	0.0	13.9	4.7	0.0	8.6	6.6	0.0	5.9
Cycle Q Clear(g_c), s	19.7	0.0	14.0	21.0	0.0	13.9	10.6	0.0	8.6	15.2	0.0	5.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.24	1.00		0.28
Lane Grp Cap(c), veh/h	300	0	860	298	0	856	415	0	652	336	0	647
V/C Ratio(X)	0.34	0.00	0.74	0.40	0.00	0.73	0.30	0.00	0.59	0.42	0.00	0.43
Avail Cap(c_a), veh/h	308	0	879	306	0	874	415	0	652	336	0	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	10.5	19.0	0.0	10.5	15.9	0.0	12.7	18.9	0.0	11.9
Incr Delay (d2), s/veh	0.7	0.0	3.2	0.9	0.0	3.2	1.8	0.0	3.9	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	1.2	0.0	4.7	1.3	0.0	3.7	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	13.7	19.8	0.0	13.6	17.7	0.0	16.6	19.7	0.0	12.3
LnGrp LOS	B	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		735			746			506				422
Approach Delay, s/veh		14.5			14.6			16.9				14.8
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		27.5		22.0		27.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		18.0		24.0		18.0		24.0				
Max Q Clear Time (g_c+I1), s		12.6		21.7		17.2		23.0				
Green Ext Time (p_c), s		1.4		1.1		0.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.1								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	44	611	63	40	561	27	22	21	63	29	15	39
Future Vol, veh/h	44	611	63	40	561	27	22	21	63	29	15	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	68	43	610	29	24	23	68	32	16	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	732	0	0	1534	1519	698	1551	1539	625
Stage 1	-	-	-	-	-	-	794	794	-	711	711	-
Stage 2	-	-	-	-	-	-	740	725	-	840	828	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	873	-	-	95	119	440	92	116	485
Stage 1	-	-	-	-	-	-	381	400	-	424	436	-
Stage 2	-	-	-	-	-	-	409	430	-	360	386	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	873	-	-	71	107	440	60	105	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	71	107	-	60	105	-
Stage 1	-	-	-	-	-	-	362	380	-	402	415	-
Stage 2	-	-	-	-	-	-	341	409	-	271	366	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.6			67.8			99.7		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	163	945	-	-	873	-	-	117
HCM Lane V/C Ratio	0.707	0.051	-	-	0.05	-	-	0.771
HCM Control Delay (s)	67.8	9	-	-	9.3	-	-	99.7
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	4.2	0.2	-	-	0.2	-	-	4.4

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	105	118	0
Future Vol, veh/h	0	0	0	105	118	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	114	128	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	242	128	128	0	0
Stage 1	128	-	-	-	-
Stage 2	114	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	746	922	1458	-	-
Stage 1	898	-	-	-	-
Stage 2	911	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	746	922	1458	-	-
Mov Cap-2 Maneuver	746	-	-	-	-
Stage 1	898	-	-	-	-
Stage 2	911	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1458	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th Signalized Intersection Summary

1: Village Blvd & SR 28

06/18/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷		↶	↷	
Traffic Volume (veh/h)	93	482	104	109	460	120	113	267	86	131	185	73
Future Volume (veh/h)	93	482	104	109	460	120	113	267	86	131	185	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	524	113	118	500	130	123	290	93	142	201	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	709	153	297	681	177	414	493	158	335	464	182
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	796	1491	322	791	1431	372	1099	1357	435	1000	1278	502
Grp Volume(v), veh/h	101	0	637	118	0	630	123	0	383	142	0	280
Grp Sat Flow(s),veh/h/ln	796	0	1812	791	0	1803	1099	0	1792	1000	0	1780
Q Serve(g_s), s	5.8	0.0	14.1	7.0	0.0	14.0	4.7	0.0	8.6	6.6	0.0	5.9
Cycle Q Clear(g_c), s	19.8	0.0	14.1	21.1	0.0	14.0	10.6	0.0	8.6	15.2	0.0	5.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.24	1.00		0.28
Lane Grp Cap(c), veh/h	300	0	862	297	0	857	414	0	651	335	0	646
V/C Ratio(X)	0.34	0.00	0.74	0.40	0.00	0.73	0.30	0.00	0.59	0.42	0.00	0.43
Avail Cap(c_a), veh/h	307	0	878	303	0	873	414	0	651	335	0	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	10.5	19.1	0.0	10.5	15.9	0.0	12.8	19.0	0.0	11.9
Incr Delay (d2), s/veh	0.7	0.0	3.3	0.9	0.0	3.2	1.8	0.0	3.9	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	1.2	0.0	4.7	1.3	0.0	3.7	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	13.8	19.9	0.0	13.7	17.8	0.0	16.7	19.8	0.0	12.4
LnGrp LOS	B	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		738			748			506				422
Approach Delay, s/veh		14.5			14.7			16.9				14.9
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		27.6		22.0		27.6				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		18.0		24.0		18.0		24.0				
Max Q Clear Time (g_c+I1), s		12.6		21.8		17.2		23.1				
Green Ext Time (p_c), s		1.4		1.1		0.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.1								
HCM 6th LOS				B								

HCM 6th TWSC
3: Southwoods Blvd/Northwoods Blvd & SR 28

06/18/2021

Intersection												
Int Delay, s/veh	11.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.6	80.3	105.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	155	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.771	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	80.3	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	4.8	0.2	-	-	0.2	-	-	4.6

HCM 6th TWSC
 4: Southwood Blvd./Southwoods Blvd & Site Access

06/18/2021

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	1	105	118	8
Future Vol, veh/h	4	1	1	105	118	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	1	114	128	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	249	133	137	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	739	916	1447	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	738	916	1447	-	-	-
Mov Cap-2 Maneuver	738	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	768	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	9.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			51.1			105.4		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	82	439	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.61	0.158	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	101.7	14.7	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	2.8	0.6	0.2	-	-	0.2	-	-	4.6

Intersection												
Int Delay, s/veh	9.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↔			↔	
Traffic Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Future Vol, veh/h	44	611	68	42	561	27	25	21	64	29	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	664	74	46	610	29	27	23	70	32	17	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	738	0	0	1543	1528	701	1561	1551	625
Stage 1	-	-	-	-	-	-	797	797	-	717	717	-
Stage 2	-	-	-	-	-	-	746	731	-	844	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	945	-	-	868	-	-	94	117	439	91	114	485
Stage 1	-	-	-	-	-	-	380	399	-	421	434	-
Stage 2	-	-	-	-	-	-	405	427	-	358	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	868	-	-	69	105	439	59	102	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	105	-	59	102	-
Stage 1	-	-	-	-	-	-	361	379	-	400	411	-
Stage 2	-	-	-	-	-	-	335	404	-	269	363	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			41.7			105.4		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	69	246	945	-	-	868	-	-	115
HCM Lane V/C Ratio	0.394	0.376	0.051	-	-	0.053	-	-	0.794
HCM Control Delay (s)	87.7	28.2	9	-	-	9.4	-	-	105.4
HCM Lane LOS	F	D	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.5	1.7	0.2	-	-	0.2	-	-	4.6