



Planning Commission Staff Report

Meeting Date: June 6, 2017

Subject: Tentative Subdivision Map Case Number: TM16-009 and Special Use Permit: SW16-003 - Ascenté

Applicant: Symbio Development, LLC.

Agenda Item Number: 8E

Project Summary: To merge and re-subdivide two parcels totaling 632 acres to create a 225 lot single family common open space subdivision and construct a 560,000 gallon water storage tank

Recommendation: **Approve with Conditions**

Prepared by: Trevor Lloyd - Senior Planner & Kelly Mullin - Planner
Planning and Development Division
Washoe County Community Services Department
775.328.3620 & 775.328.3608

Phone: 775.328.3620 & 775.328.3608

E-Mail: tlloyd@washoecounty.us & kmullin@washoecounty.us

Descriptions

Tentative Subdivision Map Case Number TM16-009 (Ascenté Subdivision) – For possible action, hearing and discussion to approve the first phase of a merger and re-subdivision of two parcels totaling 632 acres to create a 225 lot single family common open space subdivision. Lots will range in size from 10,120 square feet (± 2.3 acres) to 91,450 square feet (± 2.09 acres) with lot sizes averaging approximately 24,450 square feet ($\pm .56$ acres), and;

Special Use Permit Case Number SW16-003 (Ascenté Water Tank) – For possible action, hearing and discussion to approve a 560,000 gallon water storage tank, sewer lift and water pump stations to support the Ascenté development within the 632-acre Ascenté property.

- Applicant: Symbio Development, LLC.
- Property Owners: Gary Nelson and Jeannie Janning (CWH 2011 & WBH 2011 Irrevocable Trusts)
NNVI Partners LLC
- Location: South of Fawn Lane and East of Shawna Lane
- Assessor's Parcel Numbers: 045-252-14 & 15
- Parcel Size: 632.13 acres (total)
- Master Plan Category: Suburban Residential and Open Space
- Regulatory Zone: Medium Density Suburban (MDS), Low Density Suburban (LDS) and Open Space (OS)
- Area Plan: Forest
- Citizen Advisory Board: Southwest Truckee Meadows/Washoe Valley
- Development Code: Article 408 Common Open Space Developments, Article 608 Tentative Subdivision Maps and Article 810 Special Use Permits
- Commission District: 2 – Commissioner Lucey
- Section/Township/Range: Section 1, T17N, R19E, MDM, Washoe County, NV

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Conditions of Approval for Tentative Map.....Exhibit A
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 Relevant Forest Area Plan Policies Exhibit C
 Comments from Reviewing Agencies..... Exhibit D
 Ascenté Design Guidelines Handbook.....Exhibit E
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 Public Comment Letters..... Exhibit H
 Public Notice Map Exhibit I
 Hillside Development and Determination of Developable Area Report..... Exhibit J
 Soil Sampling and Analytical Testing Summary Report.....Exhibit K
 Southwest Truckee Meadows Approved Unbuilt Map Exhibit L
 Ascenté Maps Exhibit M
 Project Application Available online at <http://bit.ly/2rk4Spz>

Tentative Subdivision Map Process

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.

Special Use Permit Process

The purpose of a Special Use Permit is to allow a method of review to identify any potential harmful impacts on adjacent properties or surrounding areas for uses that may be appropriate within a regulatory zone; and to provide for a procedure whereby such uses might be permitted by further restricting or conditioning them so as to mitigate or eliminate possible adverse impacts. If the Planning Commission grants an approval of the Special Use Permit, 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:

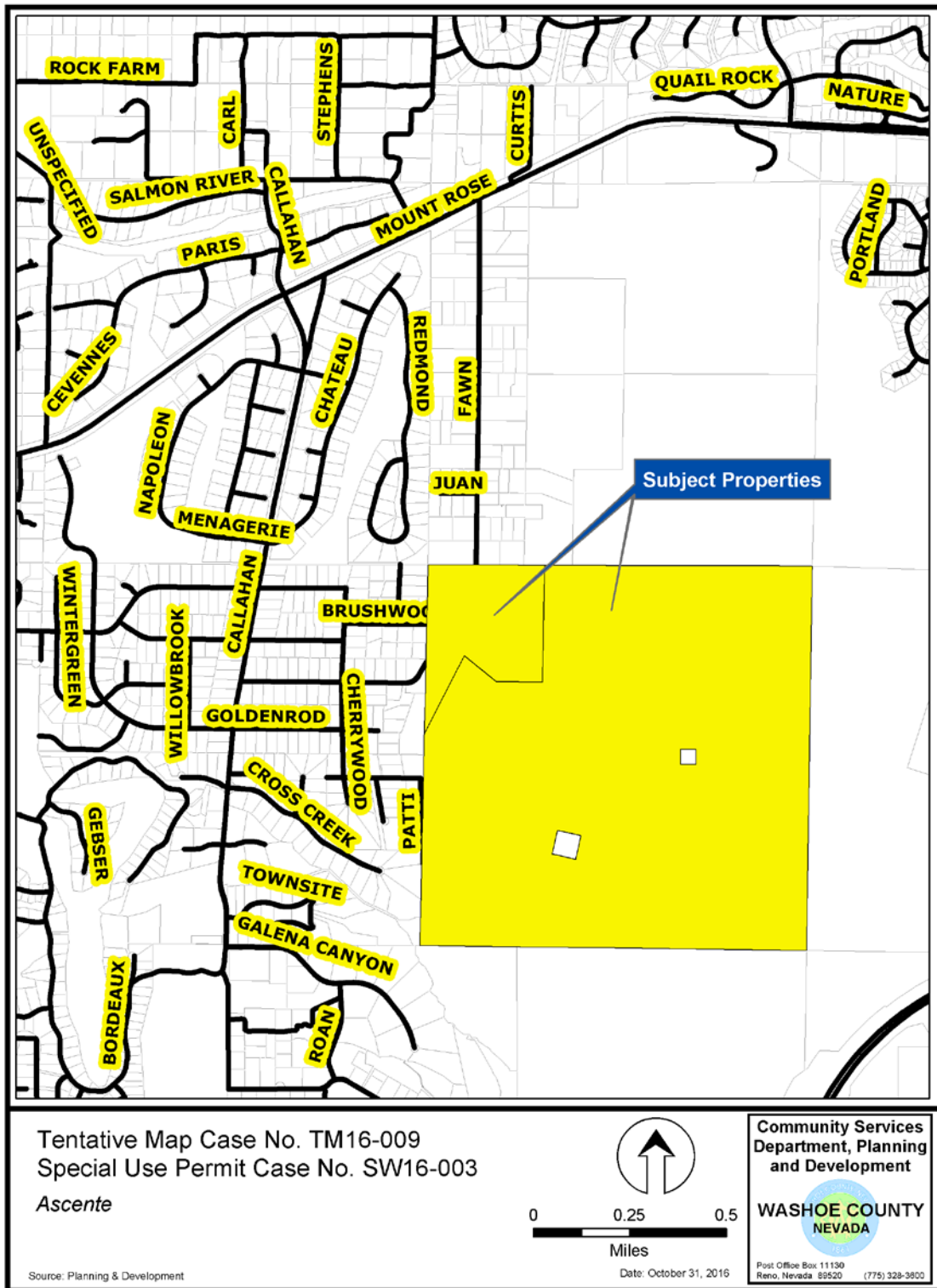
- Prior to permit issuance (i.e. a grading permit, a building permit, etc.)
- Prior to obtaining a final inspection and/or a certificate of occupancy on a structure
- Prior to the issuance of a business license or other permits/licenses

Some Conditions of Approval are referred to as “Operational Conditions.” These conditions must be continually complied with for the life of the business or project.

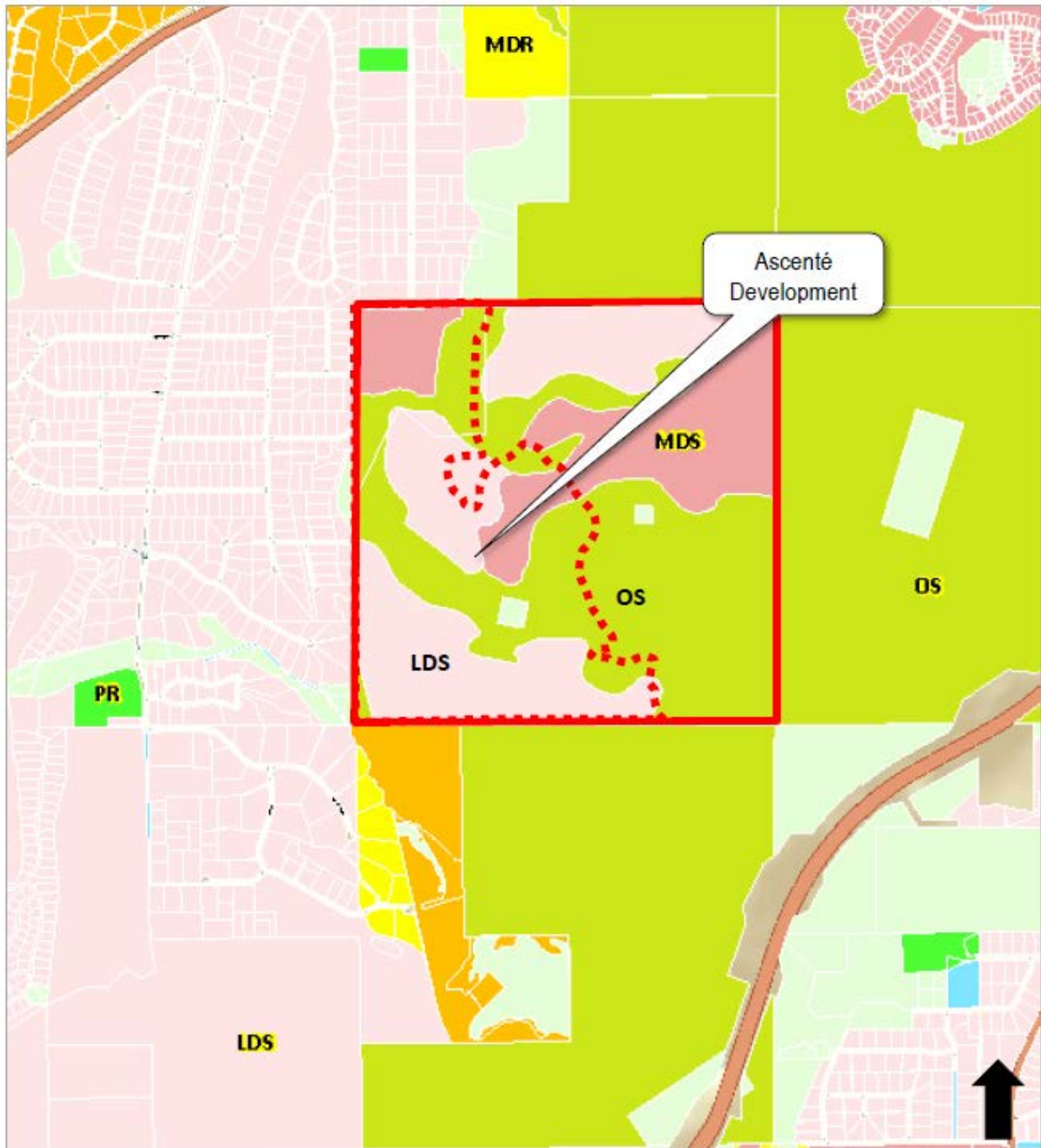
The Conditions of Approval for Tentative Subdivision Map Case Number TM16-009 and for Special Use Permit Case Number SW16-003 are attached to this staff report and will be included with the Action Order if the application is approved by the Planning Commission.

The subject property contains the regulatory zone designations of Medium Density Suburban (MDS), Low Density Suburban (LDS) and Open Space (OS). The property is 632 acres in size and the total number of lots that can be built on the property is 632 lots within the MDS and LDS areas of the property. Also, the proposed water tank and other infrastructure are allowed within any of the regulatory zones on the property. The Special Use Permit is required for the water

tank and associated infrastructure. The applicant is seeking the approval of this tentative map and special use permit from the Planning Commission. The complete application is available on the Washoe County Planning and Development website at the following link: <http://bit.ly/2rk4Spz>.

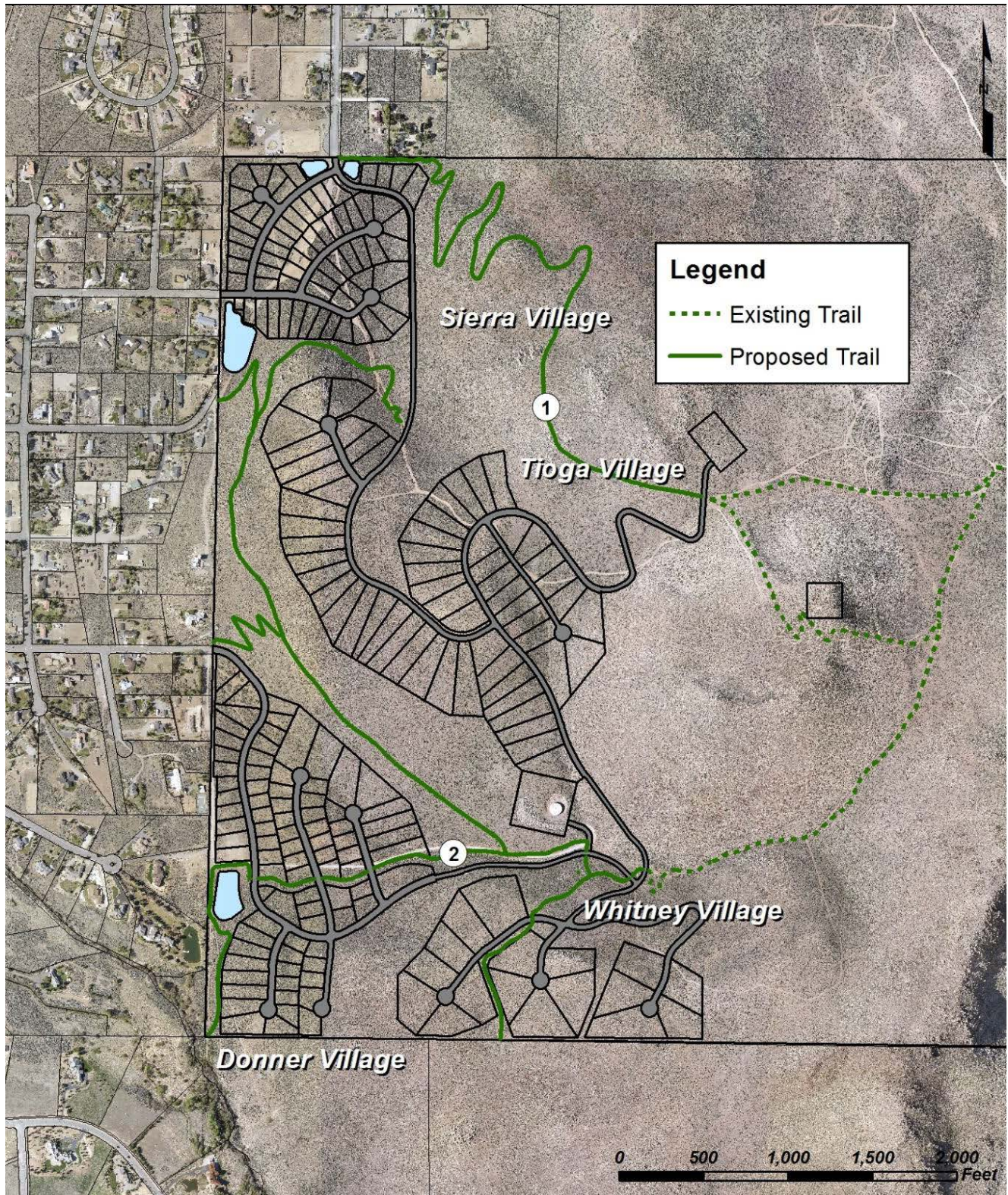


Vicinity Map



- MDS – Medium Density Suburban (3 du/acre)
- LDS – Low Density Suburban (1 du/acre)
- OS – Open Space

Regulatory Zone Map
(Dashed red line represents Phase 1 boundary)



Site Plan for Phase 1 Development

Tentative Map Project Evaluation

Overview

The applicants are asking to develop a 225 lot subdivision within 225 acres of a 632 acre property. The site is located at the southern terminus of Fawn Lane and eastern end of Shawna Lane, within the boundaries of the Forest Area Plan. The site contains a mix of Medium Density Suburban (MDS), Low Density Suburban (LDS) and Open Space (OS) regulatory zones on the property. The 632-acre property has an overall density that allows for 632 residential units. The Forest Area Plan identifies the need to preserve the suburban/rural character of the area by clustering homes and preserving open space corridors on steep slopes. The proposed tentative map provides for the clustering of 225 lots on a total of 225 acres, of which 80 acres (35%) will remain open space.

Washoe County is responsible for ensuring that the proposed development meets minimum requirements of the Development Code and complies with the goals and policies of the Washoe County Master Plan, of which the Forest Area Plan is a component. The regulatory zoning and associated allowable density has already been established. Therefore, the purpose of the review and analysis for this tentative map is to determine whether this development can be adequately served by Washoe County in compliance with established Codes and policies and how this development can be best served by Washoe County. It is not the function of a tentative map review process to determine whether 225 residential units at this location is an appropriate use of the land. Staff has spent considerable time meeting with the applicants, both on-site and in numerous meetings, and has addressed each applicable provision and policy to ensure that the proposed development meets Washoe County's stringent criteria.

The application was originally submitted on September 15, 2016 as the first phase of a two-phase project. The initial application requested approval for 281 lots. After significant feedback from the community, and numerous meetings with staff regarding concerns with the original design, the applicants made substantial changes to the project proposal and submitted an updated application April 17, 2017. The table on the following page summarizes key differences between the initial request and the updated version.

Comparison Between October Submittal and April Redesign			
Area of Impact	October Design	April Redesign	Improvements
Number of lots	281 lots	225 lots	Reduction of 56 lots
Project size	281 acres	225 acres	Reduction of 56 acres
Impacts on schools	76 students	61 students	Reduction of 15 students
Traffic	2,674 Average Daily Trips	2,141 Average Daily Trips	Reduced traffic by 20%
Fawn Lane	No roadway improvements proposed	Installation of traffic calming devices and construction of a pedestrian pathway along Fawn Lane right-of-way.	Increased safety for both vehicular and pedestrians on Fawn Lane.
Storm Drain	On-site storm drain mitigation meets County standards	Added on-site flood mitigation and designed detention basins to be over sized to handle additional storm drainage.	Improves drainage design for overall Callahan Ranch area and protects neighboring homes.
Lot Buffering Between Existing Neighborhoods and New Development	Limited perimeter homes to single-story	Added 40' wide buffer adjacent to existing homes. Added 20' wide buffer next to Patti Lane.	Buffer areas will be HOA maintained.
Grading	170 acres disturbance 1.7M cu. yd. cut 1.5 cu. yd. fill	124 acres disturbance 610K cu. yd. cut 521 cu. yd. fill	27% less disturbed area Cut volume: 64% less Fill volume: 65% less (Also reduced max. cut heights by 32% and max. fill heights by 40%)

Source: TM16-009 Project Application

Master Plan Designation/Category & Regulatory Zone History

In February of 2004, a 41 lot subdivision known as Golden Sage Estates was approved on the subject property. The subdivision map expired and the development was never constructed. At that time, the property had a mix of High Density Rural (HDS), General Rural (GR), Parks and Recreation (PR) and Open Space (OS) master plan designations (in 2004, the County was using the one map system wherein master plan designations equated to regulatory zoning). Similarly, this previous approved tentative map also accessed off of Fawn and Shawna Lanes.

The current master plan categories and regulatory zones of the subject property were established with the adoption of the Forest Area Plan update on September 9, 2010. The subject property now known as Ascenté was formerly known as Matera Ridge. The property was changed to a mix of regulatory zones that included Medium Density Suburban (MDS), Low Density Suburban (LDS) and Open Space (OS) with an overall residential density of 632 dwelling units which matched the gross acreage of the property. Additionally, the Matera Ridge property was relocated from the South Valleys Area Plan into the Forest Area Plan.

During the processing for the Forest Area Plan update, there was a significant amount of meetings and public involvement, and during that time the representatives of the Matera Ridge

property expressed their support for the proposed Forest Area Plan which included all of the goals and policies which were eventually adopted. The property owners represented that the Forest Area Plan would “enable Matera Ridge to be an environmental showcase community in Northern Nevada;” and they “committed to a land plan that does minimal damage to the natural habitat through site specific grading and the use of stepped foundations wherever required.” The Matera Ridge representatives committed to developing on slopes less than 25 percent only and also committed that at least 80 percent of the structures would be built on 20 percent slopes or less.

The Matera Ridge representatives further committed to build and dedicate to Washoe County the extension of Thomas Creek Parkway from the intersection at Mt. Rose to Matera Ridge across from the United States Forest Service property as the primary access road. The Ascenté applicants will adhere to this commitment with the second phase of this development which will be located along the other side of the ridge directly east of the proposed (first phase) of this development.

All of the commitments and representations provided by the previous owners of the Ascenté property (Matera Ridge) were used as criteria to support the intensification of the property when the Forest Area Plan update was adopted.

Existing Conditions/Constraints

The Forest Area Plan identifies a substantial portion of the subject site as containing slopes over 15%, as well as slopes over 30%. A small portion of the project area is also identified as potentially containing wetlands. As identified in Washoe County Code (WCC) Section 110.424.05, properties containing slopes of 15% or greater on 20% or more of the site must abide by the standards within Article 424, *Hillside Development*. Article 424 establishes provisions for developing, preserving and protecting hillsides and ridgelines within Washoe County, and the subject property’s significant slopes trigger the requirement for the development to abide by those standards. An analysis of the project against the provisions of Article 424 is provided in the “Grading and Drainage” and “Hillside Development” sections of this staff report.

The MDS and LDS portions of the property are largely, but not exclusively, located on the less constrained portions of the site. The Open Space areas are largely comprised of slopes over 30%. The subject property is generally covered in native low-lying vegetation, and contains no more than a few trees.

The subject parcels are located within the Matera Ridge Mixed Use Overlay District (MRMUOD) in the Forest Area Plan and are therefore subject to additional development standards identified within the Area Plan. An analysis of the proposed development in comparison to the MRMUOD standards was conducted as part of this review.

Subdivision Design and Compatibility

The 225-lot subdivision is divided into four “villages” with large swaths of common open space dividing them (see map on page 7 of this staff report). Per WCC Chapter 110 (Development Code), Article 408, *Common Open Space Development*, common open space subdivisions allow for variations of lot size below minimum regulatory zone standards when doing so preserves or provides for open space, protects natural scenic resources, or results in a more

efficient use of land. Common open space subdivisions generally result in lot clustering and smaller lot sizes, but do not allow for more dwelling units than what are allowed by the underlying regulatory zones.

The tentative map identifies approximately 80-acres of the ±225-acre project area as common open space, equating to 35% of the Phase 1 site. As proposed, the common open space areas would serve a variety of functions, including trailheads and a trail network, drainage areas, detention basins, and undeveloped terrain. The applicant has indicated that all common open space is proposed to be maintained by a Homeowners' Association and restricted to non-motorized uses.

The site's topographic constraints largely guide the placement of the villages and lots. Areas with steep slopes are preserved as open space. Lot sizes in this proposed common open space subdivision range from 10,120 sq. ft. (±.23 ac.) to 91,450 sq. ft. (±2.1 ac.), with an average lot size of 24,450 sq. ft. (±.56 ac.) Proposed setbacks vary, with Sierra Village (in the northwest corner of the property) reflecting standard MDS setbacks of 20-feet from the front and rear property lines, and 8-feet on the sides. Tioga and Whitney villages have standard LDS setbacks of 30-feet from the front and rear property lines, and 12-feet on the sides. Donner Village mimics Tioga and Whitney, with the exception that front and rear yard setbacks are reduced to 20-feet for cul-de-sac lots.

To the southwest of the project site is a 35-acre High Density Rural (HDR) property. To the northeast, east and south of the subject property are federally-owned parcels zoned Open Space.

To the north and west of the proposed development are residential properties with Low Density Suburban regulatory zones that range from one to five acres in size. In comparison, the lots within the Ascenté project that border these lots range in size from ¼ to ¾ acres in size. There are several areas of the Washoe County Code and Washoe County Master Plan that require buffering, screening and/or parcel-matching when new development is proposed adjacent to existing development. These are as follows:

- Article 408, *Common Open Space Development* – Section 110.408.45(c), *Screening and Buffering of Adjoining Development* – “Provisions shall be made to assure adequate screening and buffering of existing and potential developments adjoining the proposed common open space development.”
- Forest Area Plan Policy 2.10: “The impact of development on adjacent land uses will be mitigated. The appropriate form of mitigation may include, but will not be limited to, open space buffering or parcel matching and should be determined through a process of community consultation and cooperation. Applicants shall be prepared to demonstrate how the project conforms to this policy.”
- Forest Area Plan Policy 2.18(e): “Primary structures shall be buffered from the adjacent residential areas outside the MRMUOD in a manner that preserves the suburban/rural character of the existing development. Buffering can include but is not limited to: areas

of open space, clustering or otherwise locating behind ridges or outcroppings, and significant landscaping.”

The applicant has addressed these requirements by incorporating a minimum 40-foot-wide common open space buffer adjacent to the existing development north and west of Sierra Village. To the west of Donner Village, this buffer is 20-feet in width where it is adjacent to Patti Lane. It then expands out to 40-feet in width further south. The proposed development’s design guidelines require that perimeter lots immediately adjacent to existing home sites be limited to single story homes. The applicants are also proposing a 20-foot-wide landscape buffer at the rear of these properties. Additionally, perimeter lots of Sierra Village and Donner Village are limited to single-story homes.

Water

Truckee Meadows Water Authority (TMWA) will require annexation of the project into TMWA’s Retail Service Territory as well as dedication of water resources, approval of the water supply plan by the local health authority, the execution of a Water Service Agreement, payment of fees, and the construction and dedication of infrastructure in accordance with TMWA rules and tariffs. Additionally, TMWA has limited uncommitted capacity in the Mt. Rose Water System service area, which is eligible for commitment on a first come, first served basis. Unless otherwise agreed to by TMWA in writing, TMWA’s ability to provide water service is subject to, and conditioned on, completion of construction and commencement of operations of the Mt. Rose Water Treatment Plant and the availability of uncommitted capacity at the time of submittal of the final parcel map and application for a will-serve commitment for the Project.

Prior to final approval, a “Commitment for Water Service” letter from the water purveyor committing adequate water service for the entire proposed development must be submitted to this Division. A copy of this letter must be included with any Final Map submittal. Prior to acceptance of public improvements and release of any financial assurances, the developer shall furnish to the water and sewer provider(s) and Engineering and Capital Projects Division a complete set of reproducible as-built construction drawings prepared by a civil engineer registered in the State of Nevada. The project is proposed to connect to four existing water main stubs at Brushwood Way, Cedarwood Drive, Shawna Lane, and near Cross Creek Lane. These connections would be subject to final design approval.

Staff has received input from some neighboring residents who are concerned that the additional water usage necessary for this development will further cause wells in the area to fail. However, since TMWA has taken over as the purveyor of water they have been able to more efficiently provide water service to the community due to their available resources. Recent TMWA improvements such as the developments of the Arrowcreek/Mt. Rose conjunctive use facilities are allowing for significant reduction in groundwater pumping, resulting in increased groundwater storage. In their June 21, 2016 letter from TMWA, which was written at the request of the applicants prior to the submittal of the first (original) application, it states *“By Expanding our Aquifer Storage and Recovery (ASR) Program and supplementing the local groundwater supplies with Truckee River and creek water in the near future, TMWA’s goal is to actually pump less groundwater from the Mt. Rose and Galena fan aquifer than we do today. The new rules for water rights dedication will mitigate new groundwater pumping from the development, and the groundwater sustainability improvements which TMWA is implementing will allow TMWA to recharge the wells and supplement the local groundwater supplies with Truckee River and creek water. As a result, the project will have a net zero impact on the groundwater resources on an annual basis”*.

Sewer

Sewer service will be provided by Washoe County, with treatment at the Truckee Meadows Water Reclamation Facility. Some parcels within Whitney Village will be serviced by individual sanitary sewer force mains, although the majority of the project will use 8" gravity sanitary sewer systems. Wastewater will be conveyed to lift stations before being pumped to existing County infrastructure. Two lift stations will be needed for the project – one at Sierra Village and another at Donner Village. Both lift stations will be underground in manhole structures with an access door. A control cabinet will be visible above-ground for each station. The lift stations will be enclosed within fenced parcels designated for utilities.

Design Guidelines

The applicants have created the *Ascenté Design Guidelines Handbook* (included with the project application) to provide design standards for developers and homeowners within the project area. These standards are intended to protect the rural character of the surrounding community and address topics such as: fencing, lighting, defensible space, buildable area, height restrictions, grading, walls, and landscaping. The *Handbook* incorporates many of the requirements present in the Forest Area Plan policies applicable to this property, such as open space buffering, retaining wall heights, area-appropriate landscaping, and trail construction.

Traffic

According to the traffic study prepared by Traffic Works, the proposed development is projected to generate up to 2,143 average daily trips (ADT) with 169 AM peak hour and 225 PM peak hour trips. Per the application, the project has been intentionally designed to minimize increased traffic on "local" classified streets while maintaining County design standards for "collector" classified streets. It is anticipated that based on the design of the subdivision, the bulk of the new traffic will access the development via Fawn Lane and the remainder of the new traffic will access the development via Shawna Lane through Tannerwood Drive and Goldenrod Drive connecting to Callahan Road. Callahan Road, Fawn Lane, Tannerwood Drive, Goldenrod Drive and Cherrywood Drive are currently operating at a level of service (LOS) "C" and will continue to operate at LOS "C" following buildout of the development. Even after full buildout of the project, all four of the identified roadways will operate at acceptable level of service levels. All local streets will carry less than 1,000 ADT and Fawn Lane will carry less than 2,000 ADT following buildout of the project.

The development of this project will cause the southbound approach of Callahan Road which involves the turning movements exiting from the Monte Vista development on the north side of the Mt. Rose Highway/Callahan Road intersection to operate at a LOS "F" during the PM peak hour. However, it should be understood that Ascenté does not physically add any traffic to the southbound approach (north leg), but does add traffic to the northbound approach, eastbound right-turn, and westbound left-turn movements which increases the delay time to the southbound approach turning movement. The LOS F represents a failing grade for a particular roadway segment or intersection movement. This movement currently operates at a LOS E during the PM peak hour. The Mt. Rose Callahan Road northbound, eastbound and westbound approaches will operate at acceptable LOS conditions following development of the project. Staff has imposed a condition that limits the number of lots on this property that access Fawn Lane and Shawna Lane to the 225 lots currently proposed. Any additional development will require the construction of an access through the property to the north which is currently owned by the United States Forest Service.

Fawn Lane and Shawna Improvements

The development will include a number of improvements on Fawn Lane and Shawna Lane to help mitigate the project's effects on the local street network and to help maintain rural livability for existing and future residents. These improvements will include speed management and traffic calming features on Fawn Lane, an equestrian/pedestrian path along Fawn Lane, an acceleration lane on Mt. Rose Highway at Fawn Lane, school bus waiting area at the Shawna Lane/Millie Lane, the placement of stop signs at the Cherrywood Drive/Cedarwood Drive intersection and the installation of a stop sign on the Goldenrod Drive/Cherrywood Drive intersection's westbound approach for safety purposes.

Fawn Lane has been designated a collector within the Forest Area Plan Streets and Highways System Plan. Several additional improvements will be made to Fawn Lane in support of the project; some of these improvements include speed management/traffic calming, an equestrian/pedestrian/ bike path and an acceleration lane on Mt. Rose Highway at Fawn Lane. The pathway alongside Fawn Lane will connect to the proposed extensive trail system with the Ascenté property allowing for significantly improved pedestrian/equestrian/bike access to the higher elevations of the property. All of the improvements along Fawn Lane will be completed within the Washoe County right of way or within property owned by the Federal Government. No privately owned property along Fawn Lane will be used for the proposed improvements. Additional improvements will include the construction of a school bus waiting area at the Shawna Lane/Millie Lane intersection. Additionally, a stop sign will be installed on the Goldenrod Drive/Cherrywood Drive intersection's westbound approach for safety purposes.

Grading and Drainage

The proposed development will result in approximately 610,000 cubic yards of excavation. Only minimal earthen material will be exported from the site resulting from the clear and grub process. The maximum cut and fill slopes on site will not exceed a 3:1 slope. In order to minimize the grading, the applicants will utilize rockery walls not to exceed 10 feet in height. The rocks used for the construction of the walls will come from the earthen materials excavated during construction/excavation of the site. Methods used to prevent erosion and to control dust will include hydro-seeding (revegetation), temporary irrigation, silt fences, fiber rolls and/or straw matting. Where development requires significant site grading, the grading shall blend into and appear to be an extension of the natural landscape.

Currently, natural drainage flows are conveyed through the site by a network of natural channels and surface sheet flows that currently enter the residential neighborhood to the west and are directed through a network of drainage channels and pipes toward Galena Creek. A portion of the existing flows near the southwest corner currently enter a .46 acre pond which is privately owned within APN 045-471-53. To accommodate the peak flows resulting from the Ascenté development, the design includes four detention basins to maintain the pre-development conditions. The proposed subdivision design will provide an adequate drainage and storage system for the 5-year and 100 year storm events to ensure the safety and well-being of current and future surrounding residents.

Policy F.2.1 of the Forest Area Plan prohibits cut and fill slopes greater than 8 feet in height. The plans were revised to address this policy and ensure compliance. The grading for the development has been scaled back significantly in large part to ensure adherence to this policy. As a result, the grading now complies with the other provision of policy F.2.1 as well which requires grading for residential purposes to minimize disruption to natural topography, the utilization of natural contours and slopes, complementing the natural characteristics of the

landscape and preserving the existing vegetation and ground cover to minimize erosion. Per policy F.2.1(d), any grade changes greater than 8 feet in height shall be stabilized using one or more engineered retaining walls and the wall colors shall blend with the adjacent undisturbed hillsides.

The project is located downstream of existing Mt. Rose Estates development and a stormwater retention basin. The final design for this development needs to accommodate emergency overflow or overtopping of the offsite retention basin either through the lots using drainage easements and swales or a peripheral drainage catchment routing offsite flow to a drainage outfall.

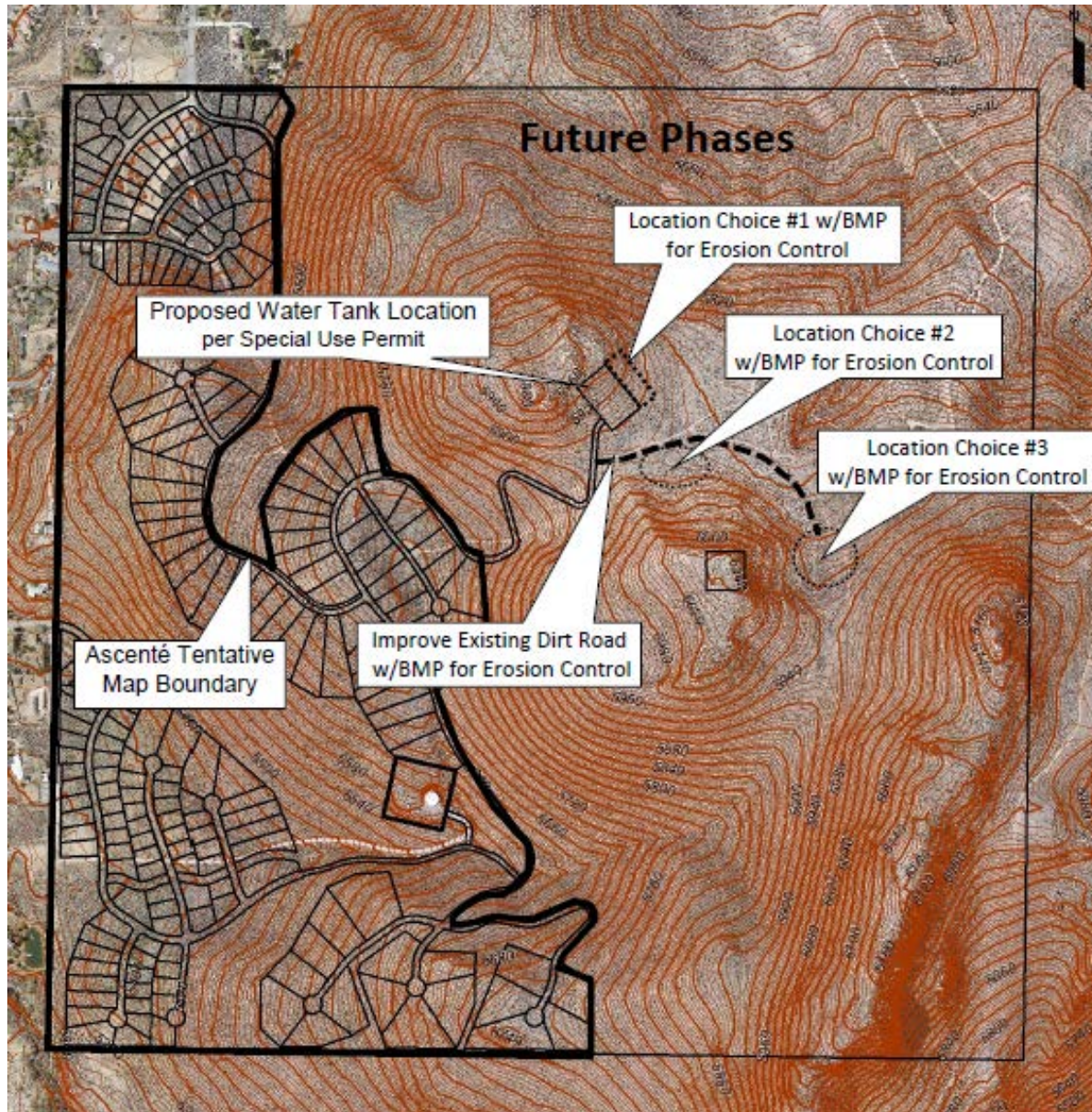
The existing residential development located south of Cedarwood is comprised of private streets/driveways and the drainage system is not well improved or defined. Accordingly, Low Impact Development (LID) design practices need to be employed to reduce volumetric flow and nuisance flows through existing development. WCC Chapter 110, Article 420, *Storm Drainage Standards*, does permit the use of LID. Given the limited offsite stormwater conveyance and potential impacts to existing development, the Ascenté project should employ LID practices. The design of the project will also involve the clustering of development on less sensitive areas of the property to keep more land in a natural undisturbed state and limit the clearing and grading of native vegetation to help reduce other impacts associated with development. Groundwater recharge areas shall be incorporated into the site planning and enhanced whenever possible. LID standards shall be incorporated to enhance groundwater recharge and manage stormwater runoff.

Washoe County will require compliance with stringent storm drainage standards to ensure erosion controls and minimize impacts to the natural environment. The proposed drainage improvements will convey storm drain flows throughout the community via a network of drainage swales, drop structures, culverts and detention basins. The design and hydrologic studies of the proposed Ascenté community have been conducted in compliance with the drainage guidelines for the Truckee Meadows Regional Drainage Manual (TMRDM). Adverse effects to the drainage system due to increased storm runoff with the construction of this proposed development have been addressed by the implementation of over-sized detention basins. The design significantly reduces peak flows entering the adjacent community and ultimately reduces the peak flow entering Galena Creek.

All cut and fill slopes throughout the development will utilize 3:1 maximum slopes with the exception of drainage facilities. All disturbed areas will be re-vegetated with hydroseeding that will be temporarily irrigated in combination with silt fences, fiber rolls or straw matting to prevent erosion. During the November 12, 2016 and May 11, 2017 Citizen Advisory Board meetings, there was a great deal of discussion and concern regarding the negative impacts associated with crushing of rocks on site. Washoe County staff has included a condition that prohibits the crushing of rock within the subject property. Additionally, there was significant concern with extensive blasting. The applicants have represented that blasting is not anticipated, however, staff has included a condition that if blasting is required, a blasting mitigation plan will be part of the permitting process and will be completed by a qualified contractor along with a ground vibration monitoring consultant.

Washoe County shall require the posting of a financial assurance (bond/security) for re-vegetation, post construction stormwater quality management, etc., to ensure the completion of construction improvements in the event that the site has been disturbed and any work is discontinued. Such financial assurance(s) are required prior to the recording of any final map.

The application proposes to balance the excavated materials on site. The map below shows the proposed locations to temporarily store the excess materials. All of these site locations shall be located east of the proposed water storage tank and will not be visible from off-site locations. It is proposed that the excess materials will be used for the second phase of the development. The maximum height for any of these stockpiles shall not exceed six feet tall.



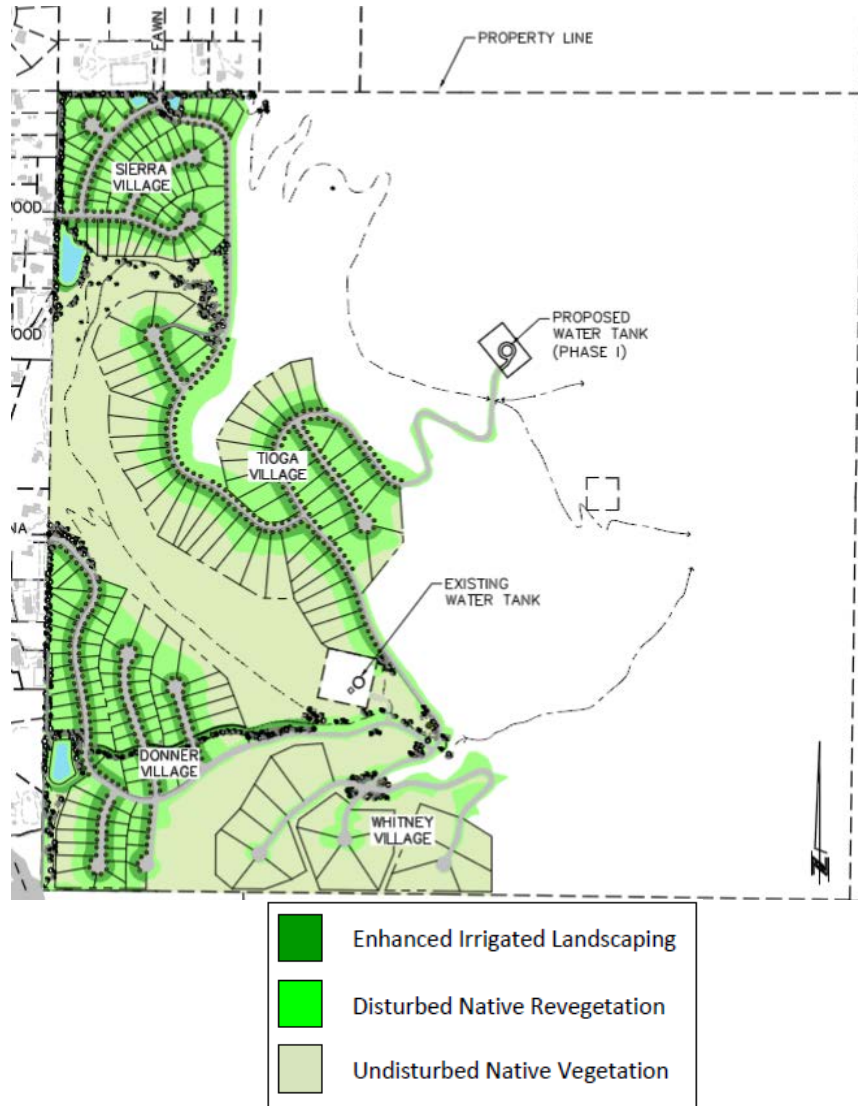
Site Balancing of Graded Materials Map

Hillside Development and Protection of Ridgelines

The proposed tentative map as currently designed, in stark contrast with the previously submitted design, is in substantial compliance with the design guidelines within WCC Chapter 110, Article 424, *Hillside Development*. Following many meetings and discussions between the applicants and staff that were held over a period of several months, the applicants returned with

a plan which greatly preserves the natural features of the landscape and minimizes the perception of an engineered landscape. The development will limit the terracing of the land and instead will use retaining walls in a minimal fashion by following the natural contours of the property to the extent possible. Additionally, the proposed development will limit the clearing and grading of the native vegetation.

In keeping with the hillside development standards, the lot sizes have been reduced and the lots have been clustered within the more developable areas of the property in order to limit/reduce disturbances to the more sensitive and constrained portions of the property. The development also utilizes natural drainage flows and minimizes runoff discharge through the four proposed stormwater detention basins.



Site Plan/Disturbance Map

Soils/Geotechnical Report

All applications for tentative subdivision maps require the submittal of a preliminary geotechnical report prepared by a Nevada registered civil engineer, including soils characteristics sufficient for use in tentative structural design (i.e. street sections, building pads, etc.) and potential geologic hazards. Staff will require the submittal of a final geotechnical report prior to the

recordation of the first final map. This final geotechnical report will include field exploration, soils testing, a rock rippability study and a fault study.

According to the preliminary geotechnical analysis provided in the application, the soils over a majority of the site generally consists of clayey sands and gravels with a shallow depth to bedrock. The shallow depth to bedrock can mean that heavy equipment and possibly blasting may be necessary to help grade the site. The depth to groundwater is approximately 10 to 20 feet below grade along the southwest portion of the property with groundwater depths anticipated to exceed 20 feet below grade at the remaining portions of the site. The final geotechnical report will determine the location of any active faults and Washoe County will restrict the placement of residential structures on such faults. The existing geotechnical/geological conditions are not uncommon to northwestern Nevada and can be mitigated utilizing conventional engineering and construction practices.

Neighboring residents have raised concerns regarding the possibility of environmental contamination from lead dust resulting from historical 100+ year old mill operations, specifically the neighboring mine operations of the Hatch Brothers Quartz Mill and Smelter which operated from 1860 to 1867. During that time period, it processed thousands of tons of ore in a process called stamp milling. The primary concern is that the Ascenté site is located downwind from the site of the previous mill and smelter location; however, the applicants have submitted soil sampling and analytical testing summary report. In response to these concerns, the applicants consulted with a geotechnical firm (McGinley and Associates) who prepared a soil sampling and analytical testing summary report dated October 3, 2016 (Refer to Exhibit I), it should be noted that there are no Washoe County or statutory requirements for the applicant to perform and submit such report. According to the soils report, it appears that the lead concentrations within the proposed development site are consistent with background conditions; the lead concentrations in all collected soils samples were below both the nationwide and Nevada background levels for lead in soils. The observed lead concentrations are also well below the Nevada Division of Environmental Protection's reportable concentration and the EPA's screening level for residential soils.

Landscaping, Buffering, Trails and Common Area Improvements

The applicants are proposing a significant landscaping component as part of the development of the subdivision. The Ascenté project features landscaping within the common open space, entry monumentation, a pedestrian and equestrian trail system and rockery retaining walls throughout the development. The landscape plan submitted as part of the application includes tree-lined streets, visual enhancement of the natural drainage ways and stormwater detention facilities by means of planting a mix of evergreen and deciduous trees and shrubs. Additionally, the plan will include a significant amount of landscaping within all of the buffer areas that abut the existing residential properties. Staff has also included a condition that the landscaping plans are to be reviewed and approved by the Design Review Committee (DRC) prior to the issuance of a grading permit. The DRC will review the overall landscaping design, plant materials, irrigation plan, etc. A revegetation plan will also be developed for disturbed areas. The revegetation plan will include a plan to use the topsoil/vegetation stripping, stockpiling and reapplication. All revegetated area will be temporarily irrigated until the revegetation is established.

There are no buffering or lot adjacency requirements within the Washoe County Development Code; however, there is an open space buffering requirement within the Forest Area Plan (Policy F.2.10). The Development Code provisions which address adjacency standards found within WCC Section 110.434.25 were only valid through the term of the 2002 Regional Plan. When the 2007 Regional Plan was adopted, these standards expired (refer to WCC Section

110.434.10, *Applicability*). These expired lot adjacency standards required either a lot matching or a 200 foot buffer from an established subdivision sharing a common property line. It was determined that such rigid standards were often problematic and did not offer enough flexibility in subdivision design and were therefore not retained within the 2007 Regional Plan. The design standards prepared by the applicant will require that perimeter lots immediately adjacent to existing homes will include a minimum 20 foot wide landscape buffer. Only a short segment of the proposed development will include a 20 foot wide buffer and that buffer will share a common property line that abuts a 60 foot wide access easement with existing roadway. The remaining buffers will all be a minimum of 40 feet wide and most other buffers will be significantly wider than 40 feet.

The design standards will strictly regulate the individual lot landscapes such that the landscaping designs and plant materials, etc., will be in keeping with the native desert vegetation. All common area landscaping will be maintained by the homeowners association.

Ascenté will offer considerable pedestrian opportunities to include trails and sidewalks throughout the development. The trails plan proposed as part of this development will provide a significant public benefit to the community. The proposed trail network provides the opportunity for equestrian, mountain biking and pedestrian access to the common open space areas within Ascenté. The plan will include trail heads, points of access/trail connections and trail improvements that will enhance recreational uses/activities within the Forest Area Plan. The development will also provide a trail alongside Fawn Lane that will connect to the Ascenté trail system. No privately owned lands will be utilized for the construction of the trail along Fawn Lane. The trails and common open space will be a beneficial use for the public but will be maintained by the homeowners association and will strictly be for non-motorized uses.

Lighting

All exterior lighting will follow the “dark skies” principles and be designed to light only the areas necessary for reasonable levels of safety and security. No street-lights are proposed with this development.

Washoe County Schools

Washoe County schools in the Southwest Truckee Meadows/Forest area are currently nearing capacity and the proposed development will further impact the existing schools. The proposed development is expected to generate 34 elementary school students, 10 middle school students and 17 high school students and is currently zoned for Hunsberger Elementary School, Pine Middle School and Galena High School. According to the Washoe County School District (WCSD), Hunsberger Elementary School is operating at 101 percent of base capacity, Pine Middle School is operating at 93 percent of base capacity and Galena High School is operating at 86 percent of base capacity. With the passage of Washoe County Question 1, WCSD now has sustainable, adequate funding for building and repairing schools (“capital” funding). Per WCSD-adopted Policy 6111, most elementary schools will transition to a multi-track year round schedule when their enrollment reaches 120 percent of capacity and most middle and high schools will be converted to a double session calendar when enrollment exceeds 120 percent of capacity. Fortunately, none of the identified schools above are approaching the 120 percent capacity; however, in the event that these schools exceed such capacity, assignments to the closest schools with available capacity may be implemented for students in this development. Staff has requested a condition requiring that a disclosure shall be made by the developer to each homebuyer/renter on their closing/rental documents that K-12 students in this subdivision

may be assigned to the nearest WCSD schools with available capacity in the event that the currently zoned schools cannot accommodate additional students.

Fire Impacts

The applicant must comply with all requirements of the Wildland Urban Interface Code (IWUIC). As such, there shall be adequate defensible space and appropriate water for fire suppression and the Truckee Meadows Fire Protection District (TMFPD) shall require that each residence is equipped with a fire sprinkler. Also, TMFPD shall require Ascenté to be designed in accordance with the requirements of WCC Chapter 60 and Nevada Administrative Code (NAC) 477.

Relevant Forest Area Plan Policies

When analyzing the proposed tentative map, it is necessary to determine if the development is consistent with the Washoe County Master Plan, including the Goals and Policies of the Forest Area Plan and the Area Plan's Vision and Character Statement. The following are excerpts from the Character Statement of the Forest Area Plan.

Growth in the planning area is managed to minimize negative impacts on the area's character, impacts related to light, air, and water pollution, wildlife and wildlife habitat, and the blending of new development with any existing development. The Forest Area Plan is intended to serve as a guide for growth and development while protecting the area's unique natural resources as well as its scenic and rural heritage.

Whenever feasible, grading complements the original contours of the landscape and minimizes disruption to the natural topography. Assertions that this type of grading is not feasible are strongly questioned and before alternatives are permitted, feasibility is reviewed by all applicable agencies within Washoe County.

As described in the previous section on "Hillside Development and Protection of Ridgelines," the applicants significantly revised their initial application in order to address community and staff concerns, especially in relation to the impacts described in the Character Statement excerpts above. Substantial changes were made to subdivision design in order to reduce disruption to the natural topography, provide buffering between proposed and existing development, decrease traffic impacts, and improve stormwater mitigation measures above what is generally required in the Development Code.

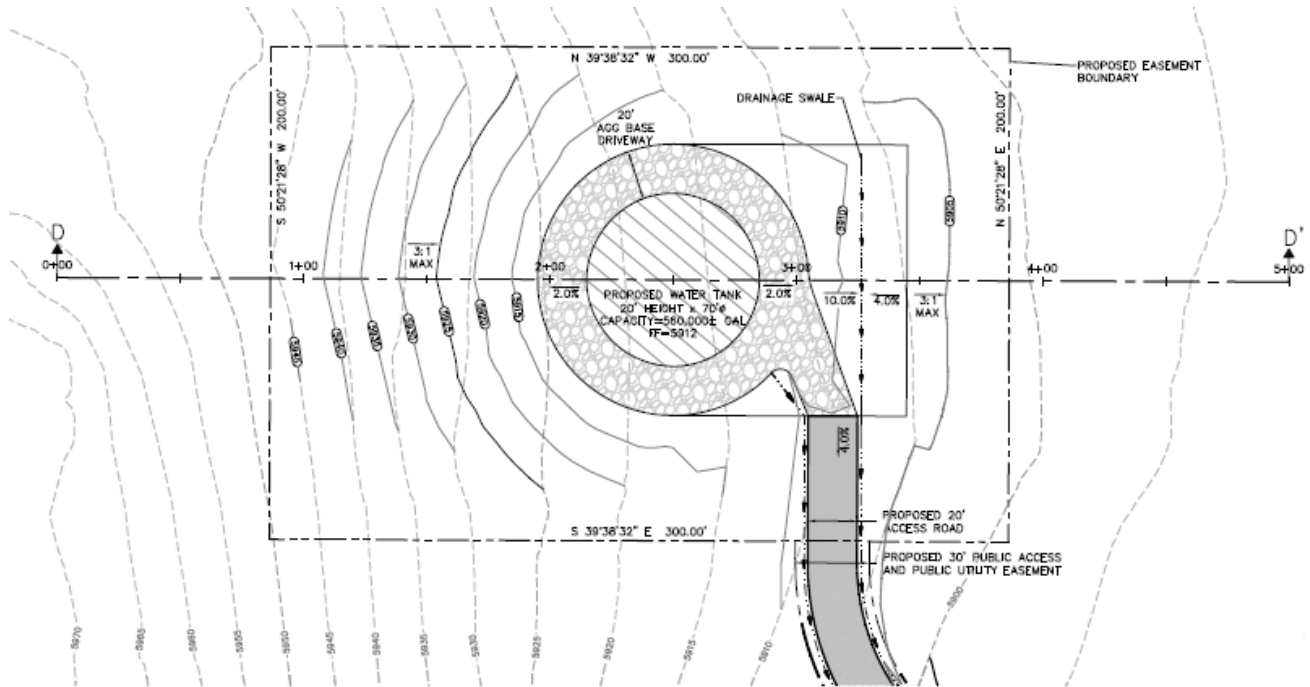
There are numerous policies from the Forest Area Plan relevant to this project (see Exhibit B). Various aspects of the many policies are addressed throughout this staff report. Staff has conducted a thorough analysis of the project details against applicable policies to ensure they are met, and provided recommended conditions of approval where necessary.

Special Use Permit (Water Tank and Booster Pump Station) Evaluation

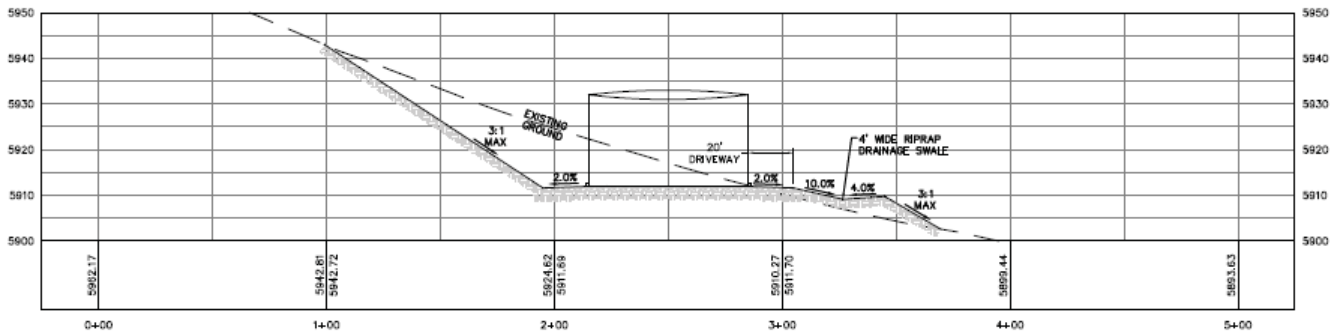
In order to support the development of the Ascenté Tentative Map, the applicants are proposing the construction of a 560,000 gallon water storage tank. The proposed water tank will be located directly north of the Tioga Village area of the development, within a newly created 1.38-ac. public utility easement. The tank is proposed to be 20-feet tall and 70-feet in diameter. A 20-foot-wide access road will allow for servicing of the tank. Grading to create the tank pad will be limited to slopes no steeper than 3:1. Graded areas will be required to be revegetated and stabilized. Recommended conditions of approval include painting the tank in a neutral (dark earthen) color to blend with the surrounding environment, revegetating disturbed areas, and ensuring that any fencing is non-reflective.

The proposed booster pump station will be located at the existing water tank site directly north of the Whitney Village area, and will be situated within a 16-foot-high concrete masonry building measuring approximately 800 square feet in size. These measurements may vary based on pump equipment required inside the structure. Final design will be completed by TMWA.

Below is the site plan and cross section of the proposed water tank:



CROSS SECTION D-D'



South Truckee Meadows/Washoe Valley Citizen Advisory Board (STM/WV CAB)

The original project design was presented at the November 10, 2016 STM/WV Citizen Advisory Board (CAB) meeting and the revised project was presented at the May 11, 2017 CAB meeting. After lengthy testimony from the residents who were in attendance, the STM/WV CAB recommended denial of the proposed tentative map at the second meeting. Both meetings were very well attended and considerable amount of community testimony was heard at both

meetings. The concerns raised included, but were not limited to, the impacts from the additional traffic on local streets and on Mt. Rose Highway, impacts from the grading, crushing of rock, extensive blasting, excessive cuts and fill from excavation, lack of adequate buffering/adjacency, increased flooding, impacts to schools and residential wells, incomplete geotechnical analysis with a lack of fault information, contaminated soils resulting from historic mining in the area, a need for bonding in the event the project fails, a preference for the use of a connection to Thomas Creek rather than using Fawn Lane and Shawna Lane, concerns with fire hazards and a lack of adequate emergency access. For a complete discussion of the concerns raised by the community, refer to the draft minutes from the CAB meetings attached to this staff report as Exhibit D.

Community Workshops

Prior to the submittal of the application to Washoe County, the applicants hosted several community workshops. The applicants first introduced the project concept at the June 5, 2016 SWTM/WV CAB Meeting. The two workshops were held on June 25, 2016 and August 4, 2016. Both workshops took place at the South Valleys Library and much of the community input was incorporated into the initial conceptual design.

Reviewing Agencies

The following agencies received a copy of the project application for review and evaluation:

- Washoe County Community Services Department
 - Engineering and Capital Projects Division
 - Planning and Development Division
 - Regional Parks and Open Space
 - Traffic
 - Utilities (Sewer)
 - Nevada Division of Environmental Protection
 - Nevada Division of Water Resources
 - Nevada Department of Transportation
 - Nevada Department of Wildlife
 - Regional Transportation Commission
 - Truckee Meadows Fire Protection District
 - Truckee Meadows Water Authority
 - U.S. Fish & Wildlife
 - U.S. Forest Service
 - Washoe County Health District
 - Air Quality Management Division
 - Environmental Health Services Division
 - Vector-Borne Disease Prevention Program
 - Washoe County School District
 - Washoe-Storey Conservation District
 - NV Energy and Charter Communications
- Washoe County Planning and Development Division addressed common area standards, lot sizes, landscaping, CC&Rs, grading, timing of final map submittals, and other associated matters.

Contact: Trevor Lloyd, 775.328.3620, tlloyd@washoecounty.us and Kelly Mullin, 775.328.3608, kmullin@washoecounty.us

- Washoe County Engineering and Capital Projects Division addressed grading, drainage, stormwater management, maintenance of common area, easements, roadway improvements, low impact design, and other associated matters.
Contact: Leo Vesely, 775.328.2313, lvesely@washoecounty.us and Walt West, 775.328.2310, wwest@washoecounty.us
- Washoe County Utility Services requires improvement plans for construction of sanitary sewer collection system(s), system design, sanitary sewer report, fees, and easements.
Contact: Tim Simpson, 775.954.4648, tsimpson@washoecounty.us
- Washoe County Health District addressed water system requirements, inspection plans, mass grading, commitment of service letters, and other associated matters.
Contact: Wes Rubio, 775.328.2635, wrubio@washoecounty.us
- Regional Parks and Open Space provided comments and conditions regarding public trail easements.
Contact: Dennis Troy, 775.328.2059, dtroy@washoecounty.us
- Washoe County School District identified current and anticipated capacity at nearby schools, and highlighted the District's overcrowding strategies.
Contact: Mike Boster 775.232.1571, mboster@washoeschools.net
- Truckee Meadows Fire Protection District commented on defensible space provisions, fire suppression, access, and other fire safety standards.
Contact: Amy Ray, 775.326.6000, aray@fmfpd.us
- Truckee Meadows Water Authority (TMWA) provided comments on annexation into TMWA's retail service territory, area capacity, water rights dedication, fees and infrastructure.
Contact: Amanda Duncan, 775.834.8035, aduncan@tmwa.com
- Nevada Department of Transportation (NDOT) provided comments related to transferability of approaches, access, occupancy permits, and mitigation strategies.
Contact: Jae Pullen, 775.834.8300, jpullen@dot.state.nv.us
- Nevada Division of Environmental Protection (NDEP) stated that the developer will need to obtain coverage under NDEP's Construction Stormwater Permit prior to any grading.
Contact: Patrick Mohn, 775.687.9419, pmohn@ndep.nv.gov
- Nevada Department of Wildlife provided comments related to mule deer habitat and development of a mitigation plan, and options for enhancing habitat values in surrounding areas.
Contact: Mark Freese, 775.688.1500, markfreese@ndow.org
- Regional Transportation Commission (RTC) addressed proposed roadway improvements, pedestrian and bicycle facilities, sidewalks and Regional Road Impact Fees.
Contact: Rebecca Kapuler, 775.332.0174, rkapuler@rtcwashoe.com

Staff Comment on Required Findings

Tentative Subdivision Map Findings (WCC Section 110.608.25)

WCC Section 110.608.25 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.

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

Staff Comment: The tentative map, with the proposed Conditions of Approval, meets all of the applicable goals and policies of the Washoe County Master Plan and the Forest Area Plan. The proposed development takes into consideration the policies of the Area Plan, including those required within the Matera Ridge Mixed Use Overlay District. This includes, but is not limited to: grading, landscaping, buffering, trails, dark sky lighting and stormwater improvements.

- 2) 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 all of the density and common open space criteria of the Washoe County Master Plan and the Forest Area Plan. Parcel sizes smaller than MDS and LDS standards are enabled through Article 408, *Common Open Space Development*, allowing clustering of lots and significant amounts of area preserved for open space. The subdivision design takes into consideration the policies of the Area Plan, including those required within the Matera Ridge Mixed Use Overlay District.

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

Staff Comment: Although the site presents significant topographical constraints, the proposed subdivision design: utilizes the flatter areas for home sites where possible; has reduced overall grading to the extent possible; establishes specific areas where development can occur on steeper lots backing up to common open space; and, uses a variety of methods to preserve open space and natural terrain.

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

Staff Comment: There are adequate public services available to serve the proposed development. The project includes an associated 560,000 gallon water tank and booster pump station. Water service will be provided through the Truckee Meadows Water Authority once the project is annexed into their retail service area. Community sanitary sewer service will be provided through Washoe County, with treatment occurring at the Truckee Meadows Water Reclamation Facility.

- 5) 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 application was sent to the Nevada Department of Wildlife (NDOW) and comments have been provided regarding the proposed development and nearby mule deer habitat. Per these comments, staff has included a recommended condition of approval requiring the applicant to work with NDOW to create a Wildlife Mitigation Plan that meets NDOW criteria. The proposed improvements are not anticipated to cause substantial environmental damage, or substantial injury to any endangered plant, wildlife or their habitat.

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

Staff Comment: The design of the subdivision has been reviewed by the Health District and will comply with all generally applicable public health standards. This includes, but is not limited to a review of the proposed water system, sanitary sewer system, and compliance with standards regarding vector-borne diseases.

- 7) 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 design of the subdivision includes primary and secondary (emergency vehicle) road access, pedestrian sidewalks and various access and utility easements. Proposed conditions of approval regarding any existing/relocated easements have been provided by the Engineering and Capital Projects Division, as well as conditions from Regional Parks and Open Space for the establishment of new trail easements through the property.

- 8) 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 provides necessary access to surrounding adjacent lands and provides an appropriate secondary gated emergency vehicle access via Brushwood Way. A trail network is proposed that provides equestrian, bike and pedestrian access to common open space areas within the project, as well as connectivity to public land off-site.

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

Staff Comment: Any improvements to be dedicated to the County are proposed or conditioned to be consistent with the Master Plan and County Code requirements.

- 10) 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: The development's design guidelines require that individual home sites consider solar orientation as part of the site planning process. Additionally, the applicant states that with the subdivision design clustering lots within each village, significant amounts of open space are left undisturbed, leading to reduced impervious surface and a better built environment.

Special Use Permit Findings (WCC Section 110.810.30)

WCC Section 110.810.30 and the Forest Area Plan require that all of the following findings be made to the satisfaction of the Washoe County Planning Commission before granting approval of a special use permit in the Forest Area Plan planning area. Staff has completed an analysis of the application and has determined that the proposal is in compliance with the required findings as follows.

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

Staff Comment: The proposed water tank, booster pump and lift stations support the proposed development and are consistent with the policies, standards and maps of the Master Plan and Forest Area Plan. Recommended conditions of approval are included in order to minimize any potential visual impact of these facilities.

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

Staff Comment: This special use permit is limited to the proposed water tank, sewer lift and water booster pump stations and associated on-site infrastructure. These facilities will be constructed to the appropriate standards required by the Truckee Meadows Water Authority and Washoe County Utilities, and will serve the associated development.

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

Staff Comment: The proposed locations for these facilities are appropriate to serve the associated development. The two lift stations will be below ground, and the booster pump station will be situated on the existing water tank site. Grading for the new water tank pad will result in slopes no steeper than 3:1, which will be revegetated in accordance with Washoe County policy.

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

Staff Comment: With the recommended conditions of approval provided by various reviewing agencies, the impacts of the proposed use will be sufficiently mitigated to meet this finding.

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

Staff Comment: No military installation is located within the required noticing distance. Therefore, this project is not anticipated to have a detrimental effect on the location, purpose or mission of any military installation.

Forest Area Plan Findings (for Special Use Permits)

F.12.3 The granting of special use permits in the Forest planning area must be accompanied by a finding that no significant degradation of air quality will occur as a result of the permit.

Staff Comment: The water tank and booster/lift stations will not result in a significant degradation of air quality. Grading will be required to comply with best management practices to reduce impact to air quality.

F.2.13 The approval of all special use permits and administrative permits must include a finding that the community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.

Staff Comment: The community character is not anticipated to be affected by the proposed utility facilities. Recommended conditions of approval have been included to minimize potential impacts, including conditions related to facility appearance, grading and re-vegetation.

Recommendation

Those agencies which reviewed the application recommended conditions in support of approval of the project or provided no comment. After a thorough analysis and review, Tentative Subdivision Map Case Number TM16-009 and Special Use Permit Case Number SW16-003 are 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 TM16-009, with the conditions of approval included as Exhibit A to this matter, and Special Use Permit Case Number SW16-003, with the conditions of approval included as Exhibit B for this matter, for Ascenté, having made all findings in accordance with Washoe County Code Sections 110.608.25 and 110.810.30, and the Forest Area Plan:

Tentative Subdivision Map Findings (WCC Section 110.608.25)

- 1) Plan Consistency. That the proposed map is consistent with the Master Plan and any specific plan;
- 2) Design or Improvement. That the design or improvement of the proposed subdivision is consistent with the Master Plan and any specific plan;
- 3) Type of Development. That the site is physically suited for the type of development proposed;
- 4) Availability of Services. That the subdivision will meet the requirements of Article 702, Adequate Public Facilities Management System;

- 5) 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;
- 6) Public Health. That the design of the subdivision or type of improvement is not likely to cause significant public health problems;
- 7) 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;
- 8) Access. That the design of the subdivision provides any necessary access to surrounding, adjacent lands and provides appropriate secondary access for emergency vehicles;
- 9) Dedications. That any land or improvements to be dedicated to the County is consistent with the Master Plan; and
- 10) Energy. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision.

Special Use Permit Findings (WCC Section 110.810.30)

- a) Consistency. The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan;
- b) Improvements. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;
- c) Site Suitability. The site is physically suitable for the type of development and for the intensity of development;
- d) Issuance Not Detrimental. Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area; and
- e) Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Forest Area Plan Findings (for Special Use Permits)

- F.12.3 No significant degradation of air quality will occur as a result of the permit.
- F.2.13 The community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.

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 Commissioners, in which case the outcome of the appeal shall be determined by that Board. Any appeal must be filed in writing with the Planning and Development Division within 10 calendar days after the written decision is filed with the Secretary to the Planning Commission.

xc: Owner/Applicant: Symbio Development, LLC, Attn: Paul Tanguay and Michael Barnes,
6151 Lakeside Drive, Reno, NV 89511

Representatives: CFA, Inc., Attn: Angela Fuss, 1150 Corporate Blvd., Reno, NV 89502

Representatives: Lumos and Assoc., Attn: Tom Young, 9222 Prototype Drive, Suite 200,
Reno, NV 89521



Conditions of Approval

Tentative Subdivision Map Case Number TM16-009

The project approved under Tentative Subdivision Map Case Number TM16-009 shall be carried out in accordance with the Conditions of Approval granted by the Planning Commission on June 6, 2017. 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 or to abide by all other generally applicable Codes, and neither these conditions nor the approval by the County of this project/use override or negate any other applicable restrictions on uses or development on the property.

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 issuance of a grading or building permit. 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 Development 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 initiation 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.

- **The NEVADA DEPARTMENT OF TRANSPORTATION (NDOT) is directed and governed by its own board. Therefore, any conditions set by the Nevada Department of Transportation must be appealed to that Board.**

<p style="text-align: center;">STANDARD CONSIDERATIONS FOR SUBDIVISIONS Nevada Revised Statutes 278.349</p>

Pursuant to NRS 278.349, when contemplating action on a Tentative Subdivision Map, the Planning Commission 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 Development Division

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

Contact Name – Trevor Lloyd, 775.328.3620, tlloyd@washoecounty.us and Kelly Mullin, 775.328.3608, kmullin@washoecounty.us

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this tentative map.
- b. The tentative map shall be in substantial conformance with the provisions of Washoe County Code Chapter 110, Article 604, Design Requirements, and Article 608, Tentative Subdivision Maps.
- c. 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.
- d. 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.
- e. All final maps shall contain the applicable portions of the following Jurat:

The Tentative Map for TM case number for (map name) was APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON DATE.

THIS FINAL MAP, MAP NAME AND UNIT/PHASE #, MEETS ALL APPLICABLE STATUTES, ORDINANCES AND CODE PROVISIONS, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ITS CONDITIONS, WHICH ARE INCORPORATED HEREIN BY THIS REFERENCE, AND THOSE CONDITIONS HAVE BEEN SATISFIED FOR RECORDATION OF THIS MAP, EXCEPT THAT THE "OPERATIONAL CONDITIONS" CONTAINED IN THE RECORDED ACTION ORDER SHALL REMAIN IN FULL FORCE AND EFFECT IN PERPETUITY.

IF ALL LOTS ON THIS MAP ARE REVERTED TO ACREAGE AND A NEW SUBDIVISION APPROVAL IS OBTAINED AT A FUTURE DATE, THE PROVISIONS OF THIS APPROVAL SHALL BE NULL AND VOID, UPON APPROVAL BY WASHOE COUNTY OF THOSE ACTIONS.

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

THE FIRST FINAL MAP FOR THIS TENTATIVE MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON date of Planning and Development Director's signature on first final map. THE MOST RECENTLY RECORDED FINAL MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON date of Planning and Development Director's signature on most recent final map. (If an extension has been granted after that date – add the following): A TWO YEAR EXTENSION OF TIME FOR THE

TENTATIVE MAP WAS APPROVED BY THE WASHOE CO9UNTY PLANNING COMMISSION ON _____.

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

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

MOJRA HAUENSTEIN, DIRECTOR,
PLANNING AND DEVELOPMENT DIVISION

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

NOTE

Should any prehistoric or historic remains/artifacts be discovered during site development, work shall temporarily be halted at the specific site and the State Historic Preservation Office of the Department of Museums, Library and Arts shall be notified to record and photograph the site. The period of temporary delay shall be limited to a maximum of two (2) working days from the date of notification.

- g. 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.

- h. Sierra Village and Donner Village homes located along the outer perimeter of the project site shall be limited to a single-story. No variance shall be issued to waive or alter this standard.
- i. The applicant shall work with the Nevada Department of Wildlife (NDOW) to create a Wildlife Mitigation Plan acceptable to NDOW. Prior to final map approval, the applicant shall provide evidence to the Planning and Development Division that such a plan has been created to NDOW's satisfaction. Ensuring compliance with the elements of this plan shall be the responsibility of NDOW.

- j. The developer and all successors shall direct any potential purchaser of the site to meet with the Planning and Development 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 Development Division of the name, address, telephone number and contact person of the new purchaser within thirty (30) days of the final sale.
- k. Prior to any ground disturbing activity, the applicant shall submit a landscaping/architectural design plan to the Planning and Development Division for review and approval by the Design Review Committee. Said plan shall address, but not be limited to: exterior lighting, fencing, 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.
- l. A certification letter or series of letters by a registered landscape architect or other persons permitted to prepare landscaping and irrigation plans pursuant to N.R.S. 623A shall be submitted to and approved by the Planning and Development Division / Design Review Committee. The letter(s) shall certify that all applicable landscaping provisions of Articles **[408, 410 and 412]** of the Development Code have been met. Any landscaping plans and the letter shall be wet-stamped.
- m. All landscaping shall be maintained in accordance with the provisions found in WCC 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 Development Division prior to a Certificate of Occupancy. The plan shall be wet-stamped.
- n. Conditions, covenants, and restrictions (CC&Rs), including any supplemental CC&Rs, shall be submitted to the Planning and Development Division staff for review and subsequent forwarding to the District Attorney for review and approval. The final CC&Rs shall be signed and notarized by the owner(s) and submitted to the Planning and Development Division 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 and common open spaces. Provisions shall be made to monitor and maintain, for a period of three (3) years regardless of ownership, a maintenance plan for the common open space area. The maintenance plan for the 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 open space on the final map shall be privately maintained and perpetually funded by the homeowners association. The deed to the common open space shall reflect perpetual dedication for that purpose. The maintenance of the common open space 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.
- 6. No motorized vehicles shall be allowed on the platted common open space.
- 7. Mandatory solid waste collection.
- 8. Fence material (if any), height, and location limitations, and re-fencing standards. Replacement fence must be compatible in materials, finish and location of existing fence.
- 9. Incorporate all applicable policies F.2.1 through F.2.16 of the Forest Area Plan.
- o. The common open space owned by the homeowners association shall be noted on the final map as "common open space" and the related deed of conveyance shall specifically provide for the preservation of the common open space in perpetuity. The deed to the open space and common area shall reflect perpetual dedication for that purpose. The deed shall be presented with the CC&Rs for review by the Planning and Development staff and the District Attorney.
- p. No additional units within the property will be approved/recorded that use either Fawn Lane or Shawn Lane as the primary means of access.
- q. The applicant shall submit a noxious weeds control plan. This plan shall be developed through consultation with the Washoe County Health District, the University of Nevada Cooperative Extension, and/or the Washoe-Storey Conservation District.
- r. Grade changes greater than eight (8) feet in height shall be stabilized using one or more engineered retaining walls.
- s. If any blasting is required during the project grading, a blasting mitigation plan will be submitted with the grading plan(s). The blasting mitigation plan will be completed by a qualified contractor.
- t. The project shall be fully annexed into TMWA service area, and a valid water will serve letter must be presented prior to the approval of each final map.
- u. A disclosure shall be made by the developer to each homebuyer on their closing documents that K-12 students in this subdivision may be assigned to the nearest

- Washoe County School District school(s) with available capacity in the event that the zoned schools cannot accommodate additional students.
- v. Any earthen materials stockpiled on the property shall not exceed a maximum height of six (6) feet tall.
 - w. Setbacks for lots on cul-de-sacs within the Donner Village area of the development shall have reduced setbacks of 20 feet from front and rear property lines.
 - x. The applicant shall record deed restrictions prohibiting development within the open space (OS) regulatory zone within any residential lot.
 - y. Washoe County shall require temporary irrigation for all revegetated areas and will not release the bond(s) associated with revegetation of the disturbed areas prior to 80 percent of reestablishment of vegetation.

Washoe County Engineering and Capital Projects Division

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

Contact Name – Leo Vesely, 775.328.2313, vesely@washoecounty.us and Walt West, 775.328.2310, wwest@washoecounty.us

- 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 furnish to the water and sewer provider(s) and Engineering and Capital Projects Division a complete set of reproducible as-built construction drawings prepared by a civil engineer registered in the State of Nevada.
- c. The developer shall be required to participate in any applicable General Improvement District or Special Assessment District formed by Washoe County. The applicable County Department shall be responsible for determining compliance with this condition.
- d. 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 onsite improvements. The County Engineer shall determine compliance with this condition.
- e. 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 (BMP's) 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. The County Engineer shall determine compliance with this condition.
- f. All open space shall be identified as common open space on the final map. A note on the final map shall indicate that all common open space shall be privately maintained and perpetually funded by the Homeowners Association. The County Engineer shall determine compliance with this condition. The maintenance of the common areas shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.
 - g. Any existing easements or utilities that conflict with the development shall be relocated, quitclaimed, and/or abandoned, as appropriate. The County Engineer shall determine compliance with this condition.
 - h. 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. The County Engineer shall determine compliance with this condition.
 - i. All existing overhead utility lines shall be placed underground, except electric transmission lines greater than 100 kilovolts, which can remain above ground. The County Engineer shall determine compliance with this condition.
 - j. With each affected final map, provide written approval from NV Energy for any improvements located within their easement or under their facilities. The County Engineer shall determine compliance with this condition.
 - k. Appropriate easements shall be granted for any existing or new utilities, with each affected final map. This includes, but is not limited, to electrical lines, water lines, and drainage maintenance access. The County Engineer shall determine compliance with this condition.
 - l. Rock crushing activities shall not be allowed on-site.
 - m. A design level geotechnical investigation with fault study shall be provided with the submittal of each final map.

Drainage and Storm Water Discharge

- n. 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 and will be based upon the final hydrology report.
- o. Prior to finalization of the first final map, a master hydrology/hydraulic report and a master storm drainage plan shall be submitted to the County Engineer for approval. The County Engineer shall determine compliance with this condition.
- p. Prior to finalization of any portion of the tentative map, a final, detailed hydrology/hydraulic report for that unit shall be submitted to the County Engineer. All storm drainage 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 provided. The County Engineer shall determine compliance with this condition.

- q. Any increase in stormwater runoff resulting from the development and based on the 5 year and 100 storm(s) shall be detained onsite. The County Engineer shall determine compliance with this condition.
- r. Standard reinforced concrete headwalls or other approved alternatives shall be placed on the inlet and outlet of all drainage structures, and grouted rock riprap shall be used to prevent erosion at the inlets and outlets of all culverts to the satisfaction of the Engineering and Capital Projects Division.
- s. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage leaving the site to the satisfaction of the Engineering and Capital Projects Division.
- t. The Truckee Meadows Regional Stormwater Quality Management Program Construction Permit Submittal Checklist and Inspection Fee shall be submitted with each final map. The County Engineer shall determine compliance with this condition.
- u. In medians with irrigated landscaping adjacent to the curb, a subdrain system shall be installed a minimum of one foot behind the back face of curb to intercept drainage from the landscaping. The system shall be tied to the storm drain system or an acceptable alternative drainage system. The County Engineer shall determine compliance with this condition.
- v. Drainage swales that drain more than two lots are not allowed to flow over the curb into the street; these flows shall be intercepted by an acceptable storm drain inlet and routed into the storm drain system. The County Engineer shall determine compliance with this condition.
- w. A note on the final map shall indicate that all drainage facilities not maintained by Washoe County shall be privately maintained and perpetually funded by a homeowners association. As an alternative to a homeowners association, the developer may request the establishment of a County Utility Service Area under which fees would be paid for maintenance of the proposed storm drainage detention facility. The fee amount will be based on the additional service above that normally provided by the County to maintain new stormwater facilities dedicated by the developer (i.e., curb and gutter, drop inlets and piping). The County Engineer shall determine compliance with this condition. The maintenance and funding of these drainage facilities shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.
- x. The maximum permissible flow velocity (that which does not cause scour) shall be determined for all proposed channels and open ditches. The determination shall be based on a geotechnical analysis of the channel soil, proposed channel lining and channel cross section, and it shall be in accordance with acceptable engineering publications/calculations. Appropriate linings shall be provided for all proposed channels and open ditches such that the 100-year flows do not exceed the maximum permissible flow velocity. The County Engineer shall determine compliance with this condition.

- y. All slopes steeper than 3:1 shall be mechanically stabilized to control erosion. As an alternative to riprap, an engineered solution (geofabric, etc.) may be acceptable. The County Engineer shall determine compliance with this condition.
- z. Drainage easements shall be provided for all storm runoff that crosses more than one lot. The County Engineer shall determine compliance with this condition.
- aa. Maintenance access roadways 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' wide gravel access road. Maintenance access road shall be provided to the bottom of proposed detention basins as well as over County owned and maintained storm drainage facilities. County Engineer shall determine compliance with this condition.
- bb. Provide a drainage and maintenance access easement across adjacent parcel(s) from where flows from detention basin 4 exit the site to the flow line of Galena Creek.
- cc. The design of the northwest corner of the subdivision located downstream from the existing retention basin located in the Mt. Rose Estates Phase 2 development basin shall provide for emergency or overtopping flow from the existing retention basin. The County Engineer shall determine compliance with this condition.
- dd. With the submittal of the 1st Final Map, an LID design plan including plans and details shall be prepared for the project and implemented with each final map. The LID plan shall be prepared to minimize the increased volume of runoff and prevention of non stormwater discharge (nuisance flow) from the site with particular emphasis on the Cedarwood Drive hydrobasin. The LID design shall determine the viability of individual lot LID concepts. The plans shall include the design of the Cedarwood Drive detention basin capable of retaining a minimum 2 year storm volume in addition to the required onsite detention of the 5-year and 100-year increase peak flow. The retained volume shall be designed to percolate in accordance with Washoe County Health District requirements. Percolation testing and a gravel backfilled infiltration gallery shall be included in the design of the retention/detention basin. County Engineer shall determine compliance with this condition.
- ee. Common Area or offsite drainage draining onto residential lots shall be perpetuated through or around residential lots and drainage facilities capable of passing a 100-year storm shall be constructed with the subdivision improvements to perpetuate the storm water runoff to improved or natural drainage facilities. The County Engineer shall determine compliance with this condition.
- ff. For roadside ditches proposed to be filled along Fawn Lane to facilitate pedestrian path construction, piping of the ditch is acceptable providing that drainage swales and drop inlets are provided to capture roadway and/or private drainage. The drainage system shall be provided to prevent roadway drainage from draining into private property or to convey drainage from private property in the right-of-way.

Traffic and Roadway

- gg. 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 provided. The County Engineer shall determine compliance with this condition.
- hh. Street names shall be reviewed and approved by the Regional Street Naming Coordinator.
- ii. 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. The County Engineer shall determine compliance with this condition.
- jj. For any utilities placed in existing County streets, the streets shall be repaired to the satisfaction of the County Engineer. At a minimum, this will require full depth removal and replacement of asphalt for half the street width, or replacement of non-woven pavement reinforcing fabric with a 2" asphalt overlay for half the street width. Type II slurry seal is required for the entire street width with either option. Full width street improvements may be required if the proposed utility location is too close to the centerline of the existing street.
- kk. Streetlights shall be constructed to Washoe County standards at locations to be determined at the final design stage. The County Engineer shall determine compliance with this condition.
- ll. AASHTO clear zones shall be determined for all streets adjacent to retaining walls or slopes steeper than 3:1. If a recoverable or traversable clear zone cannot be provided, an analysis to determine if barriers are warranted shall be submitted for approval. The County Engineer shall determine compliance with this condition.
- mm. All retaining walls that are within the slope failure wedge from Washoe County right-of-way shall be constructed of reinforced masonry block or reinforced concrete and designed by an engineer licensed in the State of Nevada. The County Engineer shall determine compliance with this condition. The maintenance of the retaining walls shall be by Homeowners Association and the CCR's shall clearly identify the HOA's maintenance responsibilities of retaining walls.
- nn. No retaining walls that retain soil from the County right-of-way shall be located within a plowed snow storage easement. The County Engineer shall determine compliance with this condition.
- oo. The "no-load" street section (Ascente Crest Trail) from the project boundary at Sierra Pass extending to Rock House Peak shall include a pedestrian sidewalk on one side of the street.
- pp. With Appropriate curve warning signs and/or a lower speed limit shall be determined and posted on all horizontal roadway curves that do not meet the

- standard Washoe County 25-mile per hour design speed. The County Engineer shall determine compliance with this condition.
- qq. Appropriate transitions shall be provided between the existing and proposed improvements at all proposed street connections. This may include removal of existing pavement. The County Engineer shall determine compliance with this condition.
 - rr. Any streetlights that do not meet Washoe County standards shall be placed outside Washoe County right-of-way. These streetlights shall be private, and the CC&R's shall indicate operation and maintenance of the streetlights shall be the responsibility of the Homeowners Association. The County Engineer and the District Attorney's Office shall determine compliance with this condition.
 - ss. Horse paths located within the development shall be located outside Washoe County street right-of-way. The County Engineer shall determine compliance with this condition.
 - tt. With the submittal of the 1st final map a natural surface pedestrian path along Fawn Lane within Washoe County right-of-way or approved easement from the Ascente project north to the Mt. Rose highway shall be designed and constructed with the subdivision improvements to the satisfaction of the County Engineer and NDOT.
 - uu. With the submittal of the 1st final map that accesses Shawna Lane, a school bus stop on Shawna Lane shall be designed and constructed with subdivision improvements. The bus stop will consist of a widened paved shoulder to provide a location for the children to wait for a bus that is outside the travelled way. The location and design will be to the satisfaction of the County Engineer and the Washoe County School District.
 - vv. With the submittal of the 1st final map, an acceleration lane on Mount Rose Highway at Fawn Lane shall be designed and constructed with the subdivision improvements to the satisfaction of the County Engineer and NDOT.

Washoe County Health District

3. 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, 775.328.2434, jenglish@washoecounty.us

- 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 Health District. 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.

- i. The application for a Water Project shall conform to the requirements of NAC 445A.66695.
 - ii. 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
- b. Mass grading may proceed after approval of the Tentative Map and after a favorable review by this Health District of a grading permit application
 - i. The final map submittal shall include a Truckee Meadows Water Authority 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 this Health District.
 - i. 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
 - ii. Any changes to previously approved improvement plans made prior to final map submittal shall be resubmitted to this Health District for approval per NAC 278.290 and NAC 445A.66715
- d. Construction plans for the development must be submitted to this Health District 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 this Health District
- 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 this Health District 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.
 - i. 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;
 - ii. The design engineer or third person shall, pursuant to the approved inspection plan, periodically certify in writing to this Health District that the improvements are being installed in accordance with the approved plans and recognized practices of the trade;
 - iii. The developer must bear the cost of the inspections; and

- iv. The developer may select a third-person inspector but the selection must be approved by the Health District 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 this Health District. 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 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 this Health District. 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 Health District 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 Health District 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 Planning and Development - Parks

- 4. The following conditions are requirements of the Planning and Development Division, Parks, which shall be responsible for determining compliance with these conditions.

Contact Name – Dennis Troy, 775.328.2059, dtroy@washoecounty.us

- a. Applicant shall provide a 30 foot wide non-motorized, public access trail easement for all trails located within the development. These easements shall be identified on the final map and recorded concurrently.
- b. Applicant shall Provide a non-motorized, public access trail easement and trail connecting Shawna Lane to the south along the western property line of APN 045-252-15 connecting into the existing trail easements located on the adjacent property (Fuquay, APN 148-070-21). This alignment will provide a trail connector into existing trails easements that are in place connecting the O'Brien Trailhead

to Callahan Park trail system. The trail shall be constructed to Washoe County Green Book standards and located outside of any drainage infrastructure.

Truckee Meadows Fire Protection District

5. The following conditions are requirements of the Truckee Meadows Fire Protection District, which shall be responsible for determining compliance with these conditions.

Contact Name – Amy Ray, 775.326.6000, aray@tmfpd.us

- a. Defensible space provisions, in accordance with the IWUIC Washoe County Code 60 and NAC 477 shall be provided in the Design Criteria and be adhered to within the Development.
- b. TMFPD shall be provided with a digital copy of the HOA/CCR agreement for review, comment and approval prior to its adoption.
- c. Water for fire suppression shall be a minimum of 1,000 gpm for 1 hour at 20 psi. Verification of this flow shall be provided by the water purveyor prior to approval. Fire hydrants shall be provided. The layout and placement of hydrants shall be approved by TMFPD prior to installation. Hydrants shall be equipped with Storz connections.
- d. Secondary access shall be provided for the Development. Access shall meet the minimum standards of Washoe County Code Chapter 60.
- e. Slopes shall be in accordance with Washoe County Code.
- f. No speed humps shall be provided within the Development. Traffic calming devices shall be submitted to TMFPD for review, comment and approval prior to installation, and be in accordance with the WCC Chapter 60.
- g. Cul-de-sacs shall maintain a 50 foot radius, 100 foot diameter.
- h. Access to common areas for vegetation maintenance and management shall be provided.

Washoe County Utilities

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

Contact Name – Timothy Simpson, 775.954.4601, tsimpson@washoecounty.us

- a. All fees shall be paid or deferred in accordance with Washoe County Ordinance prior to the approval of each final map.
- b. Improvement plans shall be submitted and approved by CSD prior to approval of the final map. They shall be in compliance with Washoe County Design Standards and be designed by a Professional Engineer licensed to practice in the State of Nevada.

- c. The Applicant shall submit an electronic copy of the street and lot layout for each final map at initial submittal time. The files must be in a format acceptable to Washoe County.
- d. The Developer shall construct and/or provide the financial assurance for the construction of any on-site and off-site sanitary sewer collection systems prior to signature on each final map. The financial assurance must be in a form and amount acceptable to the CSD.
- e. Approved improvement plans shall be used for the construction of on-site and off-site sanitary sewer collection systems. The CSD will be responsible to inspect the construction of the sanitary sewer collection systems.
- f. The sanitary sewer collection systems must be offered for dedication to Washoe County along with the recordation of each final map.
- g. Easements and real property for all sanitary sewer collection systems and appurtenances shall be in accordance with Washoe County Design Standards and offered for dedication to Washoe County along with the recordation of each final map.
- h. A master sanitary sewer report for the entire tentative map shall be prepared and submitted by the applicant's engineer at the time of the initial submittal for the first final map which addresses:
 - i. the estimated sewage flows generated by this project,
 - ii. projected sewage flows from potential or existing development within tributary areas,
 - iii. the impact on capacity of existing infrastructure,
 - iv. slope of pipe, invert elevation and rim elevation for all manholes, proposed collection line sizes, on-site and off-site alignment, and half-full velocities
- i. No Certificate of Occupancy will be issued until all the sewer collection facilities necessary to serve each final map have been completed, accepted and completed as-built drawings delivered to the utility. As-built drawings must be in a format acceptable to Washoe County.
- j. No permanent structures (including rockery or retaining walls, building's, etc.) shall be allowed within or upon any County maintained utility easement.
- k. A minimum 12-foot wide all weather sanitary sewer access road shall be constructed to facilitate access to off-site sanitary sewer manholes.
- l. If any major infrastructure such as pump structures, controls, telemetry and appurtenances, lift stations, force mains, sewer mains and interceptor are necessary to accommodate the project, the Developer will be responsible to fund the design and construction. However, the actual design will be the responsibility of the CSD. Prior to initiation of design the Developer shall pay the estimated design costs to Washoe County. The CSD may either provide such design in-house, or select an outside consultant. When an outside consultant is to be selected, the CSD and the Developer shall jointly select that consultant.

- m. The CSD shall reserve the right to over-size the design of infrastructure to accommodate future development as determined by accepted engineering calculations. Funding shall be the responsibility of Washoe County. Washoe County shall either participate monetarily at the time of design and/or shall credit an appropriate dollar amount to the Developer at the time of recordation of the subdivision map.

Nevada Department of Transportation

- 7. The following conditions are requirements of the Nevada Department of Transportation (NDOT), which shall be responsible for determining compliance with these conditions. NDOT is directed and governed by its own board. Therefore, any conditions set by NDOT must be appealed to that board.

Contact Name – Jae Pullen, 775.834.8300

- a. Existing approaches are personal and not transferable with the sale of property. If the property changes ownership or use, the new property owner will need to apply for an encroachment permit for access to the state highway.
- b. The Nevada Department of Transportation will require an occupancy permit for any work performed within the State's right-of-way. Please contact the Permit Office at (775) 834-8330 for more information regarding the occupancy permit
- c. Prior to any grading adjacent to the NDOT right-of-way, a Drainage Report, including a grading plan, and a Drainage Form must be submitted to the Permit office. Please contact the Permit Office at (775) 834-8330 for more information.
- d. Report does not include full build-out of development. The traffic report shall be amended such that each phase shall include traffic mitigation strategies and recommendations.

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



Conditions of Approval

Special Use Permit Case Number SW16-003

EXHIBIT B

The project approved under Special Use Permit Case Number SW16-003 shall be carried out in accordance with the Conditions of Approval granted by the Planning Commission on June 6, 2017. 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 or to abide by all other generally applicable Codes, and neither these conditions nor the approval by the County of this project/use override or negate any other applicable restrictions on uses or development on the property.

Unless otherwise specified, all conditions related to the approval of this Special Use Permit shall be met or financial assurance must be provided to satisfy the Conditions of Approval prior to issuance of a grading or building permit. 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 Development Division.

Compliance with the Conditions of Approval related to this Special Use Permit 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 Special Use Permit may result in the initiation of revocation procedures.

Washoe County reserves the right to review and revise the Conditions of Approval related to this Special Use Permit 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 permit issuance (i.e., grading permits, building permits, etc.).
- 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 or business.

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 Development Division

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

Contact Name – Trevor Lloyd, 775.328.3620, tlloyd@washoecounty.us and Kelly Mullin, 775.328.3608, kmullin@washoecounty.us

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit.
- b. The applicant shall submit complete construction plans and building permits shall be issued within four years from the date of approval by Washoe County. The applicant shall complete construction within the time specified by the building permits.
- c. The applicant shall attach a copy of the action order approving this project to all administrative permit applications (including building permits) applied for as part of this administrative permit.
- d. A note shall be placed on all construction drawings and grading plans stating:

NOTE

Should any prehistoric or historic remains/artifacts be discovered during site development, work shall temporarily be halted at the specific site and the State Historic Preservation Office of the Department of Museums, Library and Arts shall be notified to record and photograph the site. The period of temporary delay shall be limited to a maximum of two (2) working days from the date of notification.

- e. The water storage tank shall be painted a dark, non-reflective earthen color to blend with the surrounding hillsides.

Washoe County Engineering and Capital Projects Division

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

Contact Name – Leo Vesely, 775.328.2313, lvesely@washoecounty.us

- a. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMP's) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. All grading shall comply with County Code Article 438, Grading Standards. Silts shall be controlled on-site.
- b. All existing and proposed easements shall be shown on the site and/or grading plan. The County Engineer shall determine compliance with this condition.

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



WASHOE COUNTY

Planning and Development

INTEGRITY COMMUNICATION SERVICE

Community Services Dept.
P.O. Box 11130
Reno, Nevada 89520-0027
Phone: (775) 328-6100
Fax: (775) 328-6133

EXHIBIT C

To: Washoe County Planning Commission
RE: Tentative Map Case No. TM16-009 (Ascente), Exhibit C
Date: May 22, 2017
Planners: Trevor Lloyd and Kelly Mullin
775.328.3620 and 775.328.3608
tlloyd@washoecounty.us and kmullin@washoecounty.us

Relevant Area Plan Policies

The following Forest Area Plan policies are relevant to the tentative subdivision map request for Ascente (TM16-009), and the associated special use permit request (SW16-003) for a water tank and booster pump/sewer lift stations:

- F.2.1** When feasible, given utility access constraints, grading for residential purposes after the date of final adoption of this plan will:
- Minimize disruption to natural topography.
 - Utilize natural contours and slopes as specified in Article 424 of the Washoe County Development Code.
 - Complement the natural characteristics of the landscape.
 - Preserve existing vegetation and ground coverage to minimize erosion.
 - Minimize cuts and fills. Cut and fill slopes greater than eight (8) feet in height are prohibited. Grade changes greater than eight (8) feet in height shall be stabilized using one or more engineered retaining wall(s). Wall colors shall blend with the adjacent undisturbed hillside.
 - Large construction activities that support the development of new subdivisions or commercial and civic projects shall stabilize areas not developed within 60 days and shall be required to obtain a dust control permit.
- F.2.2** Site development plans in the Forest planning area must submit a plan for the control of noxious weeds. The plan should be developed through consultation with the Washoe County District Health Department, the University of Nevada Cooperative Extension, and/or the Washoe-Storey Conservation District. The control plan will be implemented on a voluntary compliance basis.
- F.2.3** Applicants required to present their items to the Citizen Advisory Board (CAB) must submit a statement to staff regarding how the final proposal responds to the community input received from the CAB.
- F.2.4** During review of tentative maps and other development proposals, Staff will review the adequacy of the minimum standards established under this plan; and upon a finding that a standard is inadequate to implement these goals, may recommend to the Planning Commission other similar standards as necessary to implement the relevant goal. Said similar standards may include, but are not limited to, perimeter parcel matching and alternative construction materials.

TM16-009 & SW16-003
EXHIBIT C

To: Washoe County Planning Commission
Subject: TM16-009, Exhibit C
Date: May 22, 2017
Page: 2

- F.2.8** All landscape designs will emphasize the use of native and low water requirement vegetation, with non-native and atypical vegetation integrated sparingly into any landscaped area.
- F.2.9** Prior to their incorporation into the Development Code, the standards established in policies F.2.1-F.2.16 will be implemented through tentative map conditions, improvements plans, CC&Rs, deed restrictions, or other methods deemed as appropriate by the Director of Community Development. When appropriate, Washoe County staff shall establish the implementation measures as conditions of tentative map approval.
- F.2.10** The impact of development on adjacent land uses will be mitigated. The appropriate form of mitigation may include, but will not be limited to, open space buffering or parcel matching and should be determined through a process of community consultation and cooperation. Applicants shall be prepared to demonstrate how the project conforms to this policy.
- F.2.11** Development activities should be designed to support the efficient use of infrastructure and the conservation of recharge areas, habitat, and open vistas.
- F.2.12** Proposals for special use permits to establish non-residential uses in a residential regulatory zone will be subject to a Public Health Impact Review (PHIR), to be conducted jointly by Community Development staff and Washoe County District Health Department Staff. The specific content and methodology of the PHIR will be determined by the Washoe County District Health Department with the cooperation of the Washoe County Community Development Department, on a case-by-case basis.
- F.2.13** The approval of all special use permits and administrative permits must include a finding that the community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.
- F.2.16** The Matera Ridge Mixed-Use Overlay District (MRMUOD) is hereby established as depicted on the Forest Area Plan Character Management Plan map. Development in the Matera Ridge Overlay District is subject to the additional minimum review standards and development guidelines found below.
- The following factors combine to create the need to establish special criteria for development in this area:
- a. Relatively large geographic area.
 - b. Historical role as a "community separator."
 - c. Potential to significantly contribute to the implementation of the Washoe County Land Use and Transportation Element and the Truckee Meadows Regional Plan.
 - d. Location relative to existing development and infrastructure.
 - e. Existence of key resources as identified in the Regional Open Space Plan
- F.2.17** The intent of the MRMUOD is to ensure:

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- a. Opportunities for residential development of mixed housing types.
- b. Opportunities for local serving non-residential uses.
- c. Diverse employment opportunities.
- d. Development will be sited to blend with the surrounding developed and open space lands located south of the Mt. Rose Highway.
- e. Development will minimize and mitigate its impacts on those key resources identified in the Regional Open Space Plan.
- f. Development will be compatible with and enhance the scenic quality of the Mt. Rose Highway corridor.
- g. Development will promote the sustainable development goals of Washoe County.
- h. Development will contribute to the community character, promote neighborhood, and create a sense of place founded in the quality of life that comes with environmental and community responsibility.

F.2.18 The Washoe County Development Code will further incorporate and describe this district. MRMUOD Development Criteria:

- a. All development, including buildings, site plans, and civic or public uses shall be constructed consistent with an established green building standard for energy efficiency, renewable content, waste management, and general environmental performance.
- b. Any necessary public infrastructure such as water or waste water facilities shall be located, landscaped and designed in a manner that prevents any negative impact to any existing residential development.
- c. The development shall incorporate a view shed plan that will direct the location and intensity of development within the overlay district. Infrastructure that impacts the view shed of adjacent properties shall be designed such that negative impacts to the view shed are mitigated. The view of the property shall be designed such that architectural styles, lighting, infrastructure, landscaping, and site design blend with the natural features of the land.
- d. Alternative design standards which serve to preserve the natural features of the landscape and minimize the perception of an engineered landscape should be utilized whenever possible. These alternative designs can include but are not limited to hillside adaptive development standards. These standards are intended to prevent the extensive use of terracing and similar site preparation techniques that severely reconfigure the natural landscape.
- e. Primary structures shall be buffered from the adjacent residential areas outside the MRMUOD in a manner that preserves the suburban/rural character of the existing development. Buffering can include but is not limited to: areas of open space, clustering or otherwise locating behind ridges or outcroppings, and significant landscaping.
- f. Key cultural and natural resources will be protected in development plans.
- g. The Regional Open Space Plan will be consulted and when indicated archaeological and wildlife surveys shall be conducted to determine areas of concern for key natural and cultural resources. The results of these surveys will be used to plan for the best possible maintenance of these resources. Mitigation plans must be provided for identified resources not protected in development plans.

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- h. Gated-communities shall be limited to small clusters of residential units such that through access for the public is maintained on all collectors and arterials. No more than one third of the total residential units proposed in the proposed development may be “gated.”
- i. A comprehensive trails plan shall be developed that maintains access to public lands that border the planning area. The trails plan will be consistent with the Forest Recreational Opportunities Plan map.
- j. The development plan must include a civic use component such as, but not limited to, public art, recreation, or assembly.
- k. Commercial development should be primarily focused on providing a range of services or employment to the local community. Civic and recreational uses may serve the sub-region. Non-residential uses which seek to take advantage of the nearby recreational opportunities in the Sierra are also encouraged.
- l. Secure bicycle storage and parking must be provided for all development proposals that will generate employment and/or inbound customer trips that access services offered by the development.
- m. Ground water recharge areas shall be incorporated into the site planning and enhanced whenever possible. Low Impact Development (LID) standards shall be utilized to enhance groundwater recharge and manage storm water runoff.

F.6.2 Washoe County will cooperate with other agencies, institutions, and local residents to ensure that recreational, educational and scientific activities based on the area’s key resources will be supported and encouraged, particularly where those activities contribute to the character of the local community and are beneficial to the broader region. Washoe County will work with private landowners and developers to ensure that the goals of the Regional Open Space Plan are met and adhered to. The County will explore alternative funding sources for acquisition, maintenance, and operation.

F.7.2 The Washoe County Departments of Community Development and Public Works will establish and oversee compliance with design standards for grading that minimize the visual impact of all residential and non-residential hillside development, including road cuts and driveways. See Policy 2.1 regarding grading under Goal Two.

F.7.3 The grading design standards referred to in F.7.2 are intended to, at a minimum, ensure that disturbed areas shall be finished, fill slopes will not exceed a 3:1 slope, and that hillside grading will establish an undulating naturalistic appearance by creating varying curvilinear contours.

F.7.4 When necessary to mitigate the impact of road cuts, driveways and similar features on prominent hillsides, staff may require the installation of landscaping that will significantly soften the visual impact within three years of installation. Maintenance plans for these landscaped areas may be required.

F.7.5 County will review its revegetation Policy, require additional funds be set aside for revegetation, and mandate 80% reestablishment of vegetation prior to release of the bonds.

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- F.10.5** As new residential and commercial properties develop in the Forest planning area, the Washoe County Department of Regional Parks and Open Space will review development proposals for potential trail connections and request any necessary trail easements.
- F.12.3** The granting of special use permits in the Forest planning area must be accompanied by a finding that no significant degradation of air quality will occur as a result of the permit. As necessary, conditions may be placed on special use permits to ensure no significant degradation of air quality will occur. The Department of Community Development will seek the advice and input of the Air Quality Division of the Department of Health in the implementation of this policy.
- F.13.1** Development proposals, with the exception of single family homes and uses accessory to single family homes, within the Forest planning area will include detailed soils and geo-technical studies sufficient to:
- a. Ensure structural integrity of roads and buildings.
 - b. Provide adequate setbacks from potentially active faults or other hazards.
 - c. Minimize erosion potential.
 - d. Tentative subdivision maps must identify the locations of all active faults.
- F.14.1** Prior to the approval of master plan amendments, tentative maps, public initiated capital improvements, or any project impacting 10 or more acres in the Forest planning area, the Nevada Department of Wildlife will be contacted and given an opportunity to provide conservation, preservation, or other wildlife and habitat management input to the project.
- F.16.3** Washoe County will work to ensure that the action of one property owner does not adversely impact the properties and rights of other property owners, as measured by increased flood peaks, flood stage, flood velocity, erosion, and sedimentation.
- F.21.1** Tentative subdivision maps will not be approved for any development until the infrastructure and resource needs of that development have been evaluated by the Department of Water Resources and found consistent with all applicable water and wastewater resources and facilities plans.



Washoe County COMMUNITY SERVICES DEPARTMENT *Engineering and Capital Projects Division*

Date: May 11, 2017, revised May 18, 2017
To: Trevor Lloyd, Planning and Development Division
From: Leo R. Vesely, P.E., Engineering and Capitol Projects Division
Re: **TM16-009**
APN 045-252-14 & 15
Ascente Subdivision (225 Lots)

Recommended Conditions of Approval

The following conditions of approval should be applied to this proposed project. Conditions in italics are standard Engineering Conditions.

GENERAL CONDITIONS

- 1. 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.*
- 2. Prior to acceptance of public improvements and release of any financial assurances, the developer shall furnish to the water and sewer provider(s) and Engineering and Capital Projects Division a complete set of reproducible as-built construction drawings prepared by a civil engineer registered in the State of Nevada.*
- 3. The developer shall be required to participate in any applicable General Improvement District or Special Assessment District formed by Washoe County. The applicable County Department shall be responsible for determining compliance with this condition.*
- 4. 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 onsite improvements. The County Engineer shall determine compliance with this condition.*
- 5. 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 (BMP's) 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. The County Engineer shall determine compliance with this condition.*
- 6. 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 County Engineer shall determine compliance with this condition.*

The maintenance of the common areas shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.

- 7. Any existing easements or utilities that conflict with the development shall be relocated, quitclaimed, and/or abandoned, as appropriate. The County Engineer shall determine compliance with this condition.*
- 8. 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. The County Engineer shall determine compliance with this condition.*
- 9. All existing overhead utility lines shall be placed underground, except electric transmission lines greater than 100 kilovolts, which can remain above ground. The County Engineer shall determine compliance with this condition.*
- 10. With each affected final map, provide written approval from NV Energy for any improvements located within their easement or under their facilities. The County Engineer shall determine compliance with this condition.*
- 11. Appropriate easements shall be granted for any existing or new utilities, with each affected final map. This includes, but is not limited, to electrical lines, water lines, and drainage maintenance access. The County Engineer shall determine compliance with this condition*
- 12. Rock crushing activities shall not be allowed on-site.*
- 13. A design level geotechnical investigation with fault study shall be provided with the submittal of each final map.*

DRAINAGE and STORM WATER DISCHARGE PROGRAM :
(COUNTY CODE 110.420 and 110.421)

Discussion

The project is located downstream of existing Mt. Rose Estates development and a stormwater retention basin. The final design for this development needs to accommodate emergency overflow or overtopping of the offsite retention basin either through the lots using drainage easements and swales or a peripheral drainage catchment routing offsite flow to a drainage outfall.

The existing residential development located south of Cedarwood is comprised of private streets/driveways and the drainage system is not well improved or defined. Accordingly, Low Impact Development (LID) design practices need to be employed to reduce volumetric flow and nuisance flows through existing development. Washoe County Code Article 420 does permit the use of LID. Given the limited offsite stormwater conveyance and potential impacts to existing development, the Ascente project should employ LID practices.

The following are drainage conditions of approval:

- 1. 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 and will be based upon the final hydrology report.*
- 2. Prior to finalization of the first final map, a master hydrology/hydraulic report and a master storm drainage plan shall be submitted to the County Engineer for approval. The County Engineer shall determine compliance with this condition.*

3. *Prior to finalization of any portion of the tentative map, a final, detailed hydrology/hydraulic report for that unit shall be submitted to the County Engineer. All storm drainage 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 provided. The County Engineer shall determine compliance with this condition.*
4. *Any increase in stormwater runoff resulting from the development and based on the 5 year and 100 storm(s) shall be detained onsite. The County Engineer shall determine compliance with this condition.*
5. *Standard reinforced concrete headwalls or other approved alternatives shall be placed on the inlet and outlet of all drainage structures, and grouted rock riprap shall be used to prevent erosion at the inlets and outlets of all culverts to the satisfaction of the Engineering and Capital Projects Division.*
6. *The developer shall provide pretreatment for petrochemicals and silt for all storm drainage leaving the site to the satisfaction of the Engineering and Capital Projects Division.*
7. *The Truckee Meadows Regional Stormwater Quality Management Program Construction Permit Submittal Checklist and Inspection Fee shall be submitted with each final map. The County Engineer shall determine compliance with this condition.*
8. *In medians with irrigated landscaping adjacent to the curb, a subdrain system shall be installed a minimum of one foot behind the back face of curb to intercept drainage from the landscaping. The system shall be tied to the storm drain system or an acceptable alternative drainage system. The County Engineer shall determine compliance with this condition.*
9. *Drainage swales that drain more than two lots are not allowed to flow over the curb into the street; these flows shall be intercepted by an acceptable storm drain inlet and routed into the storm drain system. The County Engineer shall determine compliance with this condition.*
10. *A note on the final map shall indicate that all drainage facilities not maintained by Washoe County shall be privately maintained and perpetually funded by a homeowners association. As an alternative to a homeowners association, the developer may request the establishment of a County Utility Service Area under which fees would be paid for maintenance of the proposed storm drainage detention facility. The fee amount will be based on the additional service above that normally provided by the County to maintain new stormwater facilities dedicated by the developer (i.e., curb and gutter, drop inlets and piping). The County Engineer shall determine compliance with this condition. The maintenance and funding of these drainage facilities shall also be addressed in the CC&Rs to the satisfaction of the District Attorney's Office.*
11. *The maximum permissible flow velocity (that which does not cause scour) shall be determined for all proposed channels and open ditches. The determination shall be based on a geotechnical analysis of the channel soil, proposed channel lining and channel cross section, and it shall be in accordance with acceptable engineering publications/calculations. Appropriate linings shall be provided for all proposed channels and open ditches such that the 100-year flows do not exceed the maximum permissible flow velocity. The County Engineer shall determine compliance with this condition.*
12. *All slopes steeper than 3:1 shall be mechanically stabilized to control erosion. As an alternative to riprap, an engineered solution (geofabric, etc.) may be acceptable. The County Engineer shall determine compliance with this condition.*
13. *Drainage easements shall be provided for all storm runoff that crosses more than one lot. The County Engineer shall determine compliance with this condition.*
14. *Maintenance access roadways 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' wide gravel access road. Maintenance access road shall be provided to the bottom of proposed detention basins as well as over County owned and*

maintained storm drainage facilities. County Engineer shall determine compliance with this condition.

15. Provide a drainage and maintenance access easement across adjacent parcel(s) from where flows from detention basin 4 exit the site to the flow line of Galena Creek.
16. The design of the northwest corner of the subdivision located downstream from the existing retention basin located in the Mt. Rose Estates Phase 2 development basin shall provide for emergency or overtopping flow from the existing retention basin. The County Engineer shall determine compliance with this condition.
17. With the submittal of the 1st Final Map, an LID design plan including plans and details shall be prepared for the project and implemented with each final map. The LID plan shall be prepared to minimize the increased volume of runoff and prevention of non stormwater discharge (nuisance flow) from the site with particular emphasis on the Cedarwood Drive hydrobasin. The LID design shall determine the viability of individual lot LID concepts. The plans shall include the design of the Cedarwood Drive detention basin capable of retaining a minimum 2 year storm volume in addition to the required onsite detention of the 5-year and 100-year increase peak flow. The retained volume shall be designed to percolate in accordance with Washoe County Health District requirements. Percolation testing and a gravel backfilled infiltration gallery shall be included in the design of the retention/detention basin. County Engineer shall determine compliance with this condition.
18. Common Area or offsite drainage draining onto residential lots shall be perpetuated through or around residential lots and drainage facilities capable of passing a 100-year storm shall be constructed with the subdivision improvements to perpetuate the storm water runoff to improved or natural drainage facilities. The County Engineer shall determine compliance with this condition.
19. For roadside ditches proposed to be filled along Fawn Lane to facilitate pedestrian path construction, piping of the ditch is acceptable providing that drainage swales and drop inlets are provided to capture roadway and/or private drainage. The drainage system shall be provided to prevent roadway drainage from draining into private property or to convey drainage from private property in the right-of-way.

TRAFFIC AND ROADWAY (COUNTY CODE 110.436)

1. *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 provided. The County Engineer shall determine compliance with this condition.*
2. *Street names shall be reviewed and approved by the Regional Street Naming Coordinator.*
3. *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. The County Engineer shall determine compliance with this condition.*
4. *For any utilities placed in existing County streets, the streets shall be repaired to the satisfaction of the County Engineer. At a minimum, this will require full depth removal and replacement of asphalt for half the street width, or replacement of non-woven pavement reinforcing fabric with a 2" asphalt overlay for half the street width. Type II slurry seal is required for the entire street width with either option. Full width street improvements may be required if the proposed utility location is too close to the centerline of the existing street.*
5. *Streetlights shall be constructed to Washoe County standards at locations to be determined at the final design stage. The County Engineer shall determine compliance with this condition.*

6. *AASHTO clear zones shall be determined for all streets adjacent to retaining walls or slopes steeper than 3:1. If a recoverable or traversable clear zone cannot be provided, an analysis to determine if barriers are warranted shall be submitted for approval. The County Engineer shall determine compliance with this condition.*
7. *All retaining walls that are within the slope failure wedge from Washoe County right-of-way shall be constructed of reinforced masonry block or reinforced concrete and designed by an engineer licensed in the State of Nevada. The County Engineer shall determine compliance with this condition. The maintenance of the retaining walls shall be by Homeowners Association and the CCR's shall clearly identify the HOA's maintenance responsibilities of retaining walls*
8. *No retaining walls that retain soil from the County right-of-way shall be located within a plowed snow storage easement. The County Engineer shall determine compliance with this condition.*
9. The "no-load" street section (Ascente Crest Trail) from the project boundary at Sierra Pass extending to Rock House Peak shall include a pedestrian sidewalk on one side of the street.
10. With Appropriate curve warning signs and/or a lower speed limit shall be determined and posted on all horizontal roadway curves that do not meet the standard Washoe County 25-mile per hour design speed. The County Engineer shall determine compliance with this condition.
11. Appropriate transitions shall be provided between the existing and proposed improvements at all proposed street connections. This may include removal of existing pavement. The County Engineer shall determine compliance with this condition.
12. Any streetlights that do not meet Washoe County standards shall be placed outside Washoe County right-of-way. These streetlights shall be private, and the CC&R's shall indicate operation and maintenance of the streetlights shall be the responsibility of the Homeowners Association. The County Engineer and the District Attorney's Office shall determine compliance with this condition.
13. Horse paths located within the development shall be located outside Washoe County street right-of-way. The County Engineer shall determine compliance with this condition.
14. With the submittal of the 1st final map a natural surface pedestrian path along Fawn Lane within Washoe County right-of-way or approved easement from the Ascente project north to the Mt. Rose highway shall be designed and constructed with the subdivision improvements to the satisfaction of the County Engineer and NDOT.
15. With the submittal of the 1st final map that accesses Shawna Lane, a school bus stop on Shawna Lane shall be designed and constructed with subdivision improvements. The bus stop will consist of a widened paved shoulder to provide a location for the children to wait for a bus that is outside the travelled way. The location and design will be to the satisfaction of the County Engineer and the Washoe County School District.
16. With the submittal of the 1st final map, an acceleration lane on Mount Rose Highway at Fawn Lane shall be designed and constructed with the subdivision improvements to the satisfaction of the County Engineer and NDOT.



Community Development Department

MEMORANDUM

Date: April 28, 2017
To: Trevor Lloyd, Senior Planner, Washoe County Planning Department
From: Heather Manzo, Assistant Planner
Subject: Courtesy Review for Development Proposal TM16-009 (Ascente)

Thank you for the opportunity to review the above referenced project. The proposed project is located outside of the City of Reno Sphere of Influence and is not anticipated to have a significant impact on properties within the City. City of Reno Community Development staff does not have further comment regarding this request.

Engineering - Kimble No Comments.txt
From: Corbridge, Kimble
Sent: Tuesday, April 25, 2017 11:41 AM
To: Lloyd, Trevor
Cc: Mullin, Kelly; Vesely, Leo
Subject: TM16-009 Ascente

I have no conditions of comments from the Roads. Engineering will address all roadway conditions.

Thx,
Kimble

Kimble O. Corbridge, P.E., CFM
Washoe County Community Services Department
KCorbridge@washoecounty.us | o 775.328.2041 | f 775.328.3699 | 1001 E. Ninth St.,
A-255,
Reno, NV 89512

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WASHOE COUNTY

COMMUNITY SERVICES DEPARTMENT

Engineering and Capital Projects Division

"Dedicated to Excellence in Public Service"

1001 East 9th Street PO Box 11130 Reno, Nevada 89520 Telephone: (775) 328-2040 Fax: (775) 328-3699

INTEROFFICE MEMORANDUM

DATE: May 04, 2017
TO: Trevor Lloyd, Planning and Development Division
FROM: Leo R. Vesely, P.E., Engineering and Capitol Projects Division
SUBJECT: **WSUP17-0008**
APN 084-110-29
PROJECT OHLONE

I have reviewed the referenced special use permit case and recommend the following conditions:

1. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMP's) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. All grading shall comply with County Code Article 438, Grading Standards. Silts shall be controlled on-site.
2. All existing and proposed easements shall be shown on the site and/or grading plan. The County Engineer shall determine compliance with this condition.

LRV/lrv

**WASHOE COUNTY
HEALTH DISTRICT**
ENHANCING QUALITY OF LIFE

May 3, 2017

Trevor Lloyd, Senior Planner
Washoe County Community Services
Planning and Development Division
PO Box 11130
Reno, NV 89520-0027

RE: Ascente; APN 045-252-14
Tentative Subdivision Map; TM16-009

Dear Mr. Lloyd:

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 Health District. 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.
2. Mass grading may proceed after approval of the Tentative Map and after a favorable review by this Health District of a grading permit application.
 - a. The final map submittal shall include a Truckee Meadows Water Authority 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 this Health District.
 - 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 this Health District 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 this Health District 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 this Health District.
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 this Health District 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 this Health District 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 Health District 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 this Health District. 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 this Health District.
 - 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 Health District 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 Health District 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.

05/03/2017
Ascente; APN 045-252-14
Tentative Subdivision Map; TM16-009
Page 3

If you have any questions or would like clarification regarding the foregoing, please contact Wes Rubio, Senior Environmental Health Specialist at wrubio@washoecounty.us regarding all Health District comments.

Sincerely,

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

James English, REHS, CP-FS
EHS Supervisor
Waste Management/Land Development Programs

JE:wr

Cc: File - Washoe County Health District

From: Mark Freese
To: [Mullin, Kelly](#); [Teresa Lloyd](#); [Michael Barnes](#)
Subject: RE: FW: April Agency Review Memo
Date: Wednesday, May 24, 2017 9:36:53 AM

Ms. Mullin,

I am out on vacation and didn't get a chance to revise the letter prior to leaving. Please share the original letter with the commission as it contains important wildlife information. Please note (or include this email) that at the time the letter was sent, we were under the impression that the development area was Forest Service as depicted by our erroneous Gis layers. After further investigation, we realized that the land is actually private property. The wildlife habitat values haven't changed for this area; however, now that we understand the property is private our approach has changed and we are working cooperatively With Mr. Barnes on a mitigation plan.

Thank you,

Mark Freese

Sent from my Verizon 4G LTE Smartphone

---- Mark Freese wrote ----

Mark Freese
Western Region Supervising Habitat Biologist
Nevada Department of Wildlife
1100 Valley Road
Reno, NV 89512
P: (775) 688-1145
F: (775) 688-1889

“...I feel that the high tension at which the average man has been living is wrecking entirely too many nervous systems. Hunting and fishing is the best nerve tonic I know, and I believe that a greater opportunity for the average citizen to engage in this type of outdoor recreation would greatly promote both the health and happiness of our people.” A. Willis Robertson

This message is intended only for the named recipient. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.



BRIAN SANDOVAL
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE

1100 Valley Road
Reno, Nevada 89512
(775) 688-1500 • Fax (775) 688-1595

October 13, 2016

TONY WASLEY
Director

JACK ROBB
Deputy Director

LIZ O'BRIEN
Deputy Director

Trevor Lloyd and Kelly Mullin
Washoe County Community Services Department
Planning and Development Division
One East First Street
Reno, NV 89505

Subject: Ascente Development Project

Dear Mr. Lloyd and Ms. Mullin:

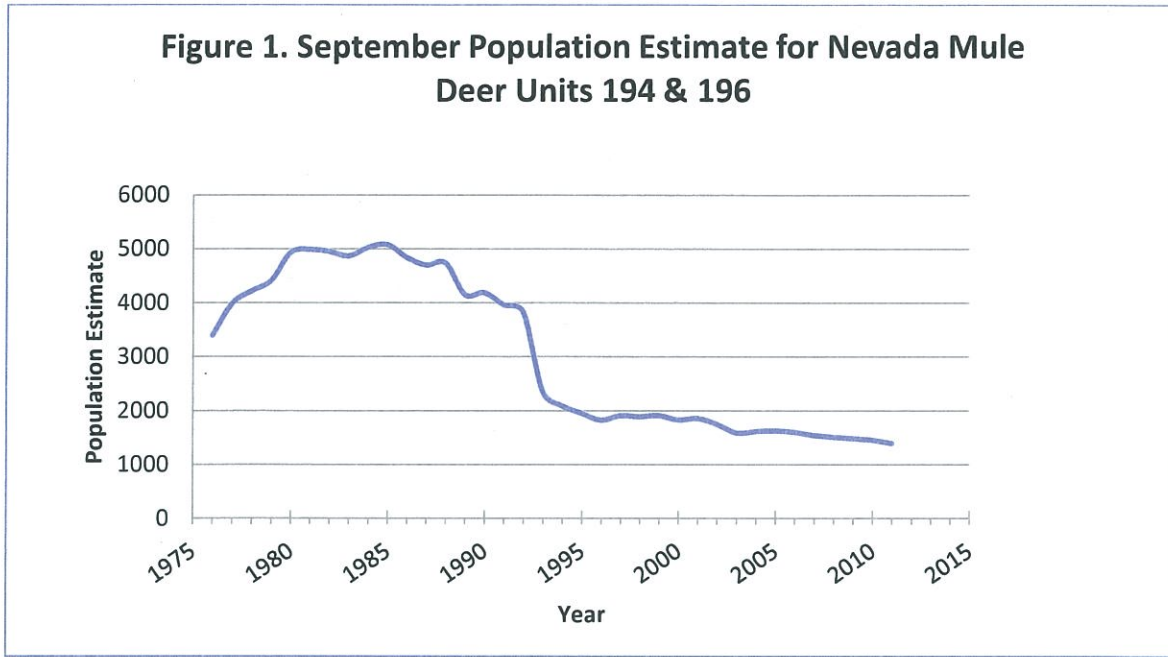
Thank you for providing the Nevada Department of Wildlife (NDOW) with the opportunity to review the Ascente Development Project proposed plan. We greatly appreciate this pre-project coordination and your consideration of the associated wildlife and their habitats. The following measures are provided to assist in minimizing and mitigating development impacts to the wildlife that also call Washoe County home.

The Steamboat Hills, where the Ascente Development Project is located, contains intact, high quality sagebrush and bitterbrush communities that provide crucial habitat for mule deer. Mule deer are a species of conservation priority for NDOW as identified in Nevada's Wildlife Action Plan. Further, they are a key wildlife species in the Washoe County Master Plan, and are a local species of importance for ecological and economic reasons. Unfortunately, mule deer have experienced severe population declines within the Loyalton-Truckee Deer Herd Area, which includes the Steamboat Hills (Fig. 1). Much of the decline in deer numbers can be attributed to, "a combination of factors including, but not limited to, loss of habitat through human encroachment, significant mortality on highways and railroads, reduced habitat productivity resulting from natural vegetational changes, and harassment caused by greatly increased human recreational use" (1982 Loyalton-Truckee Deer Herd Plan). Given these issues still exist with urban and ex-urban development; we continue to witness reductions in carrying capacity of the local herds due to permanent loss of crucial winter range.

The cumulative impacts of permitting developments in important wildlife habitat areas surrounding the City of Reno and in Washoe County continues to erode wildlife habitat resulting in local and regional population declines (e.g., mule deer), which is counter to the Washoe County Master Plan (WCMP). The WCMP discusses the protection, conservation, and enhancement of key wildlife and their habitats and promotes sustainable natural resource management. To help achieve the WCMP, we recommend that Washoe County keep the Steamboat Hills area undeveloped or acquire and designate it as open space to protect this crucial winter range for mule deer and other wildlife. Instead of permitting development in this mule deer rich area, which will lead to a reduced carrying capacity, we recommend permitting development that occurs as infilling (i.e., within the larger development matrix as opposed to outside or on the fringe) and in areas with low to no wildlife habitat values. If the intent of the WCMP regarding protection of important areas for wildlife cannot be implemented and this development is permitted, we encourage Washoe County and the developers to establish a mitigation plan to help offset realized impacts by enhancing habitat values in surrounding areas. The mitigation plan developed in coordination with NDOW, would be similar to that of the West Meadows Estates project and help reduce population declines. Although, mitigating these impacts will be helpful, we recognize that mitigation is likely to not be able to offset the permanent loss of the Steamboat Hills.

TM16-009 & SW16-003
EXHIBIT D

Figure 1. September Population Estimate for Nevada Mule Deer Units 194 & 196



We encourage Washoe County to work cooperatively with the developers and housing associations to develop a comprehensive understanding that mule deer and other wildlife will coexist with them. Human-wildlife conflicts will occur due to displacement and encroachment into wildlife habitats in this area and will need to be addressed; however, our agency lacks sufficient manpower to address complaints. To reduce the potential for wildlife conflict, we recommend planting species resistant to deer and rabbit browsing. Additionally, a noxious weed plan should be developed to prevent introduction and spread of undesirable species into adjacent wildlife habitats. The plan should include prevention measures, inventory, monitoring, as well as treatment and a means of funding these activities. Lastly, we recommend that bear resistant trash containers be used to minimize food subsidies and to reduce the probability of dangerous human-wildlife encounters.

Thank you again for this opportunity to comment. We look forward to working with Washoe County and further discussing the Ascente Development Project. Please let us know if you have any questions, concerns, or need additional information.

Sincerely,

Mark Freese
Supervisory Habitat Biologist

Literature

California Department of Fish and Game. 1982. Loyalton-Truckee Deer Herd Plan. California Department of Fish and Game, Sacramento, USA.

California Fish and Game and Nevada Department of Wildlife. 2010. Interstate Deer Project: Loyalton-Truckee Deer Herd Report and Management Plan Update.



MEMORANDUM

DEPARTMENT OF REGIONAL PARKS AND OPEN SPACE



PLANNING DIVISION

TO: Trevor Lloyd, Senior Planner

FROM: Dennis Troy, Park Planner *DT*

DATE: May 8, 2017

SUBJECT: Tentative Subdivision Case Number TM16-009 (Ascente)

Tentative Subdivision Case No. TM16-009 - Ascente

The proposed development lies within South Valley Park District 1C, and is adjacent to the future alignment of the Jones/Galena Creek Trail system. This trail system will provide a valuable connection from O'Brien Trailhead in Pleasant Valley up to Callahan Park, the access easements for this trail system are in place. Additionally, this trail system is identified in the Washoe County Regional Open Space and Natural Resource Management Plan and the Park District 1C Master Plan as a Primary Trail Corridor, and is also included in the Forest Area and Southwest Truckee Meadows Area Plans Recreational Opportunities Plan Elements.

Recommended Conditions of Approval

1. Applicant shall provide a 30'-wide non-motorized, public access trail easement for all trails located within the development. These easements shall be identified on the final map and recorded concurrently.
2. Sheet L1.5 identifies "Pedestrian/Equestrian amenities" at the trail head locations. Please provide clarification as to what these amenities are.
3. Sheet L.1.3 notes an "access (see civil)" on the southern property line adjacent to the detention basin. However, on sheet C3.2 calls out this same alignment as a drainage.
4. Please provide a non-motorized, public access trail easement and trail connecting Shawna Lane to the south along the western property line of APN 045-252-15 connecting into the existing trail easements located on the adjacent property (Fuquay 148-070-21). This alignment will provide a trail connector into existing trails easements that are in place connecting the O'Brien Trailhead to Callahan Park trail system. The trail shall be constructed to Washoe County Green Book standards and located outside of any drainage infrastructure.



MEMORANDUM

DEPARTMENT OF REGIONAL PARKS AND OPEN SPACE

PLANNING DIVISION



TO: Trevor Lloyd, Senior Planner

FROM: Dennis Troy, Park Planner

DATE: May 8, 2017

SUBJECT: Special Use Permit Case Number SW16-003 (Ascente)

The Washoe County Parks Division has reviewed and prepared the following comments/conditions related to the Special Use Permit Case Number SW16-003 for the development of a 560,000 gallon water storage tank and grading for the proposed Ascente Development.

Comments: The proposed water storage tank is located within the Steamboat Hills which offer beautiful rolling hills that are rich in geothermal activity and host unique plant species like Steamboat Buckwheat. This area was also once inhabited by the Washoe and Paiute tribes. It is expected that prehistoric cultural resources can be found within this area. As the proposed water storage tank is located within the sphere of influence for Mount Rose Scenic Byway Corridor Management Plan, Washoe County Department of Regional Parks and Open Space is requiring that the project be consistent with the Mount Rose Scenic Byway Corridor Management Plans design standards and be conditioned as follows.

Conditions:

1. **Preserve Views and Scenic Vistas/Protect Viewsheds**
Manage development and grading to preserve mountain views and avoid mass grading and large rock cuts visible from the highway

GUIDELINES: GRADING & ROCK CUTS

- a. Grading should minimize the visual impact of all residential and non-residential hillside development, including road cuts and driveways.
- b. Grade to create natural-looking slopes where feasible. Have diversity in gradient and profile rather than uniform slopes.
- c. Create landforms that respond to the uniqueness of the site, the surrounding landscape and the roadway travel experience.
- d. Utilize naturalized retaining and terracing where needed.
- e. Create smooth landform transitions that blend with the natural terrain.
- f. Development should be designed to follow the natural contours when possible.
- g. Conduct careful rock geology, site, and cost analysis, and design rock cuts to avoid the need for rock fall protection fencing.
- h. Design rock cuts to be natural in form, texture, and color in relationship to the surrounding landforms.



MEMORANDUM

DEPARTMENT OF REGIONAL PARKS AND OPEN SPACE



PLANNING DIVISION

- i. Blend rock cuts to match natural rock forms and use naturalized bedding planes to avoid creating an unnatural rock face .
 - j. Ensure all designed landforms are natural in appearance and blend with the topography and geology of the surrounding landscape.
 - k. Match new rock and soil excavations with existing rock and soil using rock staining, soil-coloring treatments, and/ or accelerated weathering techniques.
 - l. Utilize naturalized grading and terracing where possible instead of rock fall protection fencing.
2. GUIDELINES ARCHITECTURAL CHARACTER
- a. Colors should be limited to earth tones so that the color blends in with natural surroundings. Brighter accent colors may be used but should be limited so that the overall building (structure) blends with the environment.
 - b. Highly reflective materials are undesirable because of their tendency to create uncomfortable glare conditions.



NEVADA DIVISION OF
**ENVIRONMENTAL
 PROTECTION**

STATE OF NEVADA
 Department of Conservation & Natural Resources
 Brian Sandoval, Governor
 Bradley Crowell, Director
 Greg Lovato, Administrator

May 4, 2017
 BOB SACK
 DISTRICT HEALTH
 P.O. BOX 11130
 RENO NV 89520

RECEIVED
MAY - 8 2017
 WASHOE COUNTY
 COMMUNITY DEVELOPMENT

**Re: Tentative Map – Ascente
 225 lots in Washoe County**

Dear Mr. SACK:

The Nevada Division of Environmental Protection has reviewed the above referenced subdivision and recommends approval of said subdivision with respect to water pollution and sewage disposal, provided that the Washoe County commits to provide sewage service to said subdivision.

Please note that if the developer of this subdivision will disturb more than one acre, he/she is required to obtain coverage under NDEP’s Construction Stormwater General Permit NVR100000. A Notice of Intent must be filed electronically and submitted with a \$200 fee prior to commencing any earth-disturbing activities at the site. Visit NDEP’s Bureau of Water Pollution Control’s website at: http://ndep.nv.gov/bwpc/storm_cont03.htm for more information about this permit.

Sincerely,

Ryan Fahey, Staff Engineer
 Technical Services Branch
 Bureau of Water Pollution Control

cc:

Washoe County Department of Water Resources, Utility Division, P.O. 11130 Reno 89520
 Comprehensive Planning, P.O. 11130 Reno 89520
 Engineer: LUMOS & ASSOCIATES 9222 Prototype Dr. Reno, NV 89521
 Developer Name: SYMBIO DEVELOPMENT, LLC. 6151 Lakeside Dr., Ste. 1000 Reno, NV 89511

Control No. 11225



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

May 2, 2017

FR: Chrono/PL 183-17

Mr. Trevor Lloyd, Planner
Community Services Department
Washoe County
P.O. Box 11130
Reno, NV 89520-0027

RE: TM16-009 (Ascente) and SW16-003 (Ascente)

Dear Mr. Lloyd,

The Regional Transportation Commission (RTC) has reviewed this request for a request for a tentative subdivision map for possible action, hearing, and discussion to approve the first phase of a merger and re-subdivision of two parcels totaling 632 acres to create a 225 lot single family common open space subdivision and a special use permit to approve a 560 gallon water storage tank to support the Ascente development on a proposed 1.32 acre site within the 632 acre Ascente property. This property is located south of Fawn Lane and East of Shawna Lane.

In addition to the comments provided in RTC's letter dated January 11, 2017, the traffic study included with the current application proposes to construct an acceleration lane on Mt. Rose Highway at Fawn Lane. While the intersection is anticipated to operate within an acceptable level of service, the acceleration lane is presented as a safety improvement and will not be eligible for Regional Road Impact Fee waivers.

The RTP, the 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. Also, 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
Planner

Attachment

RK/jm

Copies: Mojra Hauenstein, Washoe County Community Services
Kelly Mullin, Washoe County Community Services
Jae Pullen, NDOT District II
Daniel Doenges, Regional Transportation Commission
Julie Masterpool, Regional Transportation Commission
Tina Wu, Regional Transportation Commission
David Jickling, Regional Transportation Commission

/532 Ascente 05022017

RTC.txt

From: Rebecca Kapuler <rkapuler@rtcwashoe.com>
Sent: Tuesday, May 02, 2017 3:20 PM
To: Retired Renocop@earthlink.net
Cc: Info; Lloyd, Trevor; Ascente Opposed Ken allen; Mullin, Kelly; Daniel Doenges
Subject: RE: New Ascente development Proposal/ Please forward as appropriate

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Mr. Church,

Thank you for contacting me about the Ascente development project which is located south of Fawn Lane and east of Shawna Lane.

Trevor Lloyd and Kelly Mullin are the Washoe County Community Services Department Planning and Development Division staff working on this project and I have copied them both on this email. This project is under the jurisdiction of the Washoe County; therefore, any conditions required for this or other development cases within the County's jurisdiction fall under their codes and process.

RTC commented on TM16-009 (Ascente) and SW16-003 (Ascente) projects and letters were submitted

to Mr. Lloyd and Ms. Mullin stating the following:

"The RTP, the 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. Also, 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."

Please feel free to contact me if you have additional comments or questions. Safety is a priority to the RTC and we appreciate your comments on this matter.

Respectfully,
Rebecca

Rebecca Kapuler

Planner
Regional Transportation Commission, Washoe County
PO Box 30002/89520
1105 Terminal Way, Suite 211
Reno, NV 89502
Tel-775.332.0174 Fax-775.348.0450
rkapuler@rtcwashoe.com

From: Retired Renocop@earthlink.net [mailto:renocop@earthlink.net]
Sent: Tuesday, April 25, 2017 8:44 AM
To: Rebecca Kapuler <rkapuler@rtcwashoe.com>

Page 1

**TM16-009 & SW16-003
EXHIBIT D**

RTC.txt

Cc: Info <Info@rtcwashoe.com>; Washoe County Planner Trevor Lloyd
<TLloyd@washoecounty.us>;
Ascente Opposed Ken allen <desbyvirginia@gmail.com>
Subject: New Ascente development Proposal/ Please forward as appropriate

Please see attached letter. RTC input is sought. Please make this letter and
attachments part of any file at RTC and Washoe County.

Jeff Church
775 544 7366

-----Forwarded Message-----

From: "Lloyd, Trevor"
Sent: Apr 24, 2017 10:29 AM
To: "Retired Renocop@earthlink.net"
Subject: RE: Ascente

See the following link:

https://www.washoecounty.us/csd/planning_and_development/applications/files-planning-development/comm_dist_two/2017/files/TM16-009_ap_April%2017.pdf

Trevor Lloyd
Senior Planner | Washoe County Community Services Department | Planning & Development
Division
tlloyd@washoecounty.us | (775) 328-3620 | F(775) 328-6133 | 1001 E. Ninth St., Bldg.
A, Reno, NV 89512

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

From: Retired Renocop@earthlink.net [mailto:renocop@earthlink.net]
Sent: Monday, April 24, 2017 8:54 AM
To: Lloyd, Trevor
Subject: Ascente

Rumor is Ascente resubmitted a proposal. May we see it if true?

Jeff



Washoe County COMMUNITY SERVICES DEPARTMENT

Engineering and Capital Projects

October 4, 2016

To: Trever Lloyd, MPA, Senior Planner
From: Timothy Simpson, P.E., Licensed Engineer
Subject: TM16-009, Ascente, Parcel 045-252-14 & 045-252-15

The Community Services Department (CSD) has reviewed the subject application and has the following comments:

1. The applicant is proposing to develop a 281-lot, single-family residential subdivision. The project is located at the terminus of Fawn Lane and west of the terminus of Shawna Lane approximately one mile south of Mt Rose Hwy (SR431).
2. Sanitary sewer will be provided by Washoe County and treatment will be at the Truckee Meadows Water Reclamation Facility.

The Community Services Department (CSD) recommends approval provided the following conditions are met:

1. All fees shall be paid or deferred in accordance with Washoe County Ordinance prior to the approval of each final map.
2. Improvement plans shall be submitted and approved by CSD prior to approval of the final map. They shall be in compliance with Washoe County Design Standards and be designed by a Professional Engineer licensed to practice in the State of Nevada.
3. The Applicant shall submit an electronic copy of the street and lot layout for each final map at initial submittal time. The files must be in a format acceptable to Washoe County.
4. The Developer shall construct and/or provide the financial assurance for the construction of any on-site and off-site sanitary sewer collection systems prior to signature on each final map. The financial assurance must be in a form and amount acceptable to the CSD.
5. Approved improvement plans shall be used for the construction of on-site and off-site sanitary sewer collection systems. The CSD will be responsible to inspect the construction of the sanitary sewer collection systems.
6. The sanitary sewer collection systems must be offered for dedication to Washoe County along with the recordation of each final map.

7. Easements and real property for all sanitary sewer collection systems and appurtenances shall be in accordance with Washoe County Design Standards and offered for dedication to Washoe County along with the recordation of each final map.
8. A master sanitary sewer report for the entire tentative map shall be prepared and submitted by the applicant's engineer at the time of the initial submittal for the first final map which addresses:
 - a. the estimated sewage flows generated by this project,
 - b. projected sewage flows from potential or existing development within tributary areas,
 - c. the impact on capacity of existing infrastructure,
 - d. slope of pipe, invert elevation and rim elevation for all manholes,
 - e. proposed collection line sizes, on-site and off-site alignment, and half-full velocities.
9. No Certificate of Occupancy will be issued until all the sewer collection facilities necessary to serve each final map have been completed, accepted and completed as-built drawings delivered to the utility. As-built drawings must be in a format acceptable to Washoe County.
10. No permanent structures (including rockery or retaining walls, building's, etc.) shall be allowed within or upon any County maintained utility easement.
11. A minimum 12-foot wide all weather sanitary sewer access road shall be constructed to facilitate access to off-site sanitary sewer manholes.
12. If any major infrastructure such as pump structures, controls, telemetry and appurtenances, lift stations, force mains, sewer mains and interceptor are necessary to accommodate the project, the Developer will be responsible to fund the design and construction. However, the actual design will be the responsibility of the CSD. Prior to initiation of design the Developer shall pay the estimated design costs to Washoe County. The CSD may either provide such design in-house, or select an outside consultant. When an outside consultant is to be selected, the CSD and the Developer shall jointly select that consultant.
13. The CSD shall reserve the right to over-size the design of infrastructure to accommodate future development as determined by accepted engineering calculations. Funding shall be the responsibility of Washoe County. Washoe County shall either participate monetarily at the time of design and/or shall credit an appropriate dollar amount to the Developer at the time of recordation of the subdivision map.

TMWA Comments.txt

From: Duncan, Amanda <ADuncan@tmwa.com>
Sent: Thursday, May 04, 2017 10:50 AM
To: Lloyd, Trevor
Cc: Zimmerman, John; Enloe, John
Subject: Tentative Subdivision Map Case TM 16-009 & Special Use Permit Case Number SW16-003 (Ascente)

Trevor,
These are TMWA's comments for these cases:

Truckee Meadows Water Authority (TMWA) will require Annexation of the project into TMWA's Retail Service Territory as well as dedication of water resources, approval of the water supply plan by the local health authority, the execution of a Water Service Agreement, payment of fees and the construction and dedication of infrastructure in accordance with TMWA rules and tariffs.

Additionally, TMWA has limited uncommitted capacity in the Mt. Rose Water System service area, which is eligible for commitment on a first come, first served basis. Unless otherwise agreed to by TMWA in writing, TMWA's ability to provide water service is subject to, and conditioned on, completion of construction and commencement of operations of the Mt. Rose Water Treatment Plant and the availability of uncommitted capacity at the time of submittal of the final parcel map and application for a will-serve commitment for the Project.

Prior to final approval, a "Commitment for Water Service" letter from the water purveyor committing adequate water service for the entire proposed development must be submitted to this Division. A copy of this letter must be included with the Final Map submittal.

Prior to acceptance of public improvements and release of any financial assurances, the developer shall furnish to the water and sewer provider(s) and Engineering and Capital Projects Division a complete set of reproducible as-built construction drawings prepared by a civil engineer registered in the State of Nevada.

Thank you!

Amanda Duncan, ARWP
Land Agent
Truckee Meadows Water Authority
1355 Capital Blvd. | Reno, NV 89502
O: (775) 834-8035, M: (775) 815-7195
aduncan@tmwa.com | www.tmwa.com

Our vision is to enhance the quality of life in the Truckee Meadows by delivering exceptional, customer-focused water services.



WASHOE COUNTY
COMMUNITY SERVICES
INTEGRITY COMMUNICATION SERVICE

P.O. Box 11130
Reno, Nevada 89520-0027
Phone: (775) 328-3600
Fax: (775) 328-3699

May 1, 2017

TO: Trevor Lloyd, Senior Planner, CSD, Planning & Development Division
FROM: Vahid Behmaram, Water Management Planner Coordinator, CSD
SUBJECT: Tentative Subdivision Map Case Number TM16-009 (Ascenté)

Project description:

This application is proposing to approve the first phase of a merger and re-subdivision of two parcels totaling 632 acres to create a 225 lot single family common open space subdivision. Lots will range in size from 10,120 square feet (.23 acres) to 91,450 square feet (2.09 acres) with lot sizes averaging approximately 24,450 square feet (.56 acres).

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

- 1) The project shall be fully annexed into TMWA service area, and a valid water will serve letter must be presented prior to the approval of each final map.



Washoe County School District

425 East Ninth Street * P.O. Box 30425 * Reno, NV 89520-3425
Phone (775) 348-0200 * (775) 348-0304 * www.washoeschools.net

Board of Trustees: Angela Taylor, President * Katy Simon Holland, Vice President * Scott Kelley, Clerk *
Debra Feemster * Veronica Frenkel * John Mayer * Malena Raymond * Traci Davis, Superintendent

3 May, 2017

Kelly Mullin
Trevor Lloyd
Washoe County Planning & Development
P.O. Box 11130
Reno, NV 89520-0027

RE: **TM16-009 (Ascenté)**

Dear Ms. Mullin and Mr. Lloyd,

225 new single-family residential units will impact Washoe County School District facilities. This project is currently zoned for the following schools:

Hunsberger Elementary School

- **Estimated project impact = 34** new ES students (**225** single-family units x **.149** ES students per unit)
- **Base Capacity = 750**
- **2016-2017 Enrollment = 758**
- **% of Base Capacity = 101%**
- **2016-2017 Enrollment with PROJECT = 792**
- **% of Base Capacity with PROJECT = 106%**
- **Overcrowding Strategies:**
 - **Hunsberger** ES has **2** portable buildings (**4** classrooms) in use that provide temporary space for an additional **100** students.
 - Per WCSD-adopted Policy 6111, most elementary schools will transition to a multi-track year-round schedule^a when their enrollment reaches 120% of capacity.
 - Assignment to the closest elementary school with available capacity may be used for students in this development.



Pine Middle School

- **Estimated project impact = 10** new MS students (225 single-family units x .046 MS students per unit)
- **Base Capacity = 1,096**
- **2016-2017 Enrollment = 1,020**
- **% of Base Capacity = 93%**
- **2016-2017 Enrollment with PROJECT = 1,030**
- **% of Base Capacity with PROJECT = 94%**
- **Overcrowding Strategies:**
 - The **Pine** MS property may be able to accommodate portable classrooms if necessary and if funding for the units is available.
 - Per adopted District Policy 6111, most middle schools will be converted to a double session^b calendar when enrollment exceeds 120% of capacity.
 - Assignment to the closest middle school with available capacity may be used for students in this development.

Galena High School

- **Estimated project impact = 17** new HS students (225 single-family units x .075 HS students per unit)
- **Base Capacity = 1,692**
- **2016-2017 Enrollment = 1,450**
- **% of Base Capacity = 86%**
- **2016-2017 Enrollment with PROJECT = 1,467**
- **% of Base Capacity with PROJECT = 87%**
- **Overcrowding Strategies:**
 - The **Galena** HS property may be able to accommodate portable classrooms if necessary and if funding for the units is available.
 - Per adopted District Policy 6111, high schools will convert to a double session calendar^b when enrollment exceeds 120% of capacity.
 - Assignment to the closest high school with available capacity may be implemented for students in this development.

With the passage of Washoe County Question 1, the Washoe County School District now has sustainable, adequate funding for building and repairing schools (“capital” funding). Here are the three things to know as we move forward with using this funding to address overcrowding and repairs:

1. **Overcrowding and needed repairs will be addressed as quickly as possible, but solutions will take time.** The District’s problems with overcrowding and backlogged repair needs are the result of more than a decade without adequate capital funding, and will not be solved overnight.
 - o We should be able to avoid Double Sessions at middle and high schools.
 - o We cannot avoid Multi-Track at the elementary level, but will work to eliminate it as quickly as possible.
2. **We want to hear from you.** Capital projects must first be approved by an independent group of community members, and only then go to the school district’s Board of Trustees. All discussions take place in open, public meetings. The community is invited and encouraged to attend these meetings and give input there, through our online form, or by contacting Riley Sutton, our community outreach person on these issues, at 348-0278 or rsutton@washoeschools.net.
3. **Transparency is a top priority.** Past spending and future projects are posted on our Data Gallery (<http://datagallery.washoeschools.net/>). Capital projects follow the public bidding process, which can also be viewed there. We will continue to develop these tools as we go forward to further engage the public in the work we are doing. If you have an idea for other information you would like us to present or ways we could better present current information, please let us know

Definitions:

- a) **Multi-Track Year-Round Calendar (MTYR):** The school is divided into four groups (“tracks”) which start and end the school year on different dates, with only three tracks attending school at any one time. This can decrease overcrowding by as much as 25%.
- b) **Double Sessions:** Two “schools” are operated out of one building; the school is divided into two separate groups which start and end the day at different times, with no overlap. Double Sessions have not been done in WCSD for over 30 years; all details are still in process in terms of exact start and end times, division of the school, and more. Other school districts in Nevada, which have more recent experience with Double Sessions, ran the first high school session from 5:55am to 11:55am and the second session ran from approximately 12:00 p.m. to 6:00 p.m. Double Sessions can relieve overcrowding by as much as 50%.

Thank you for the opportunity to comment.

Mike Boster

Mike Boster

School Planner

14101 Old Virginia Road

Reno NV USA 89521

Washoe County School District Capital Projects

775.789.3810

mboster@washoeschools.net



STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

District II
310 Galletti Way
Sparks, Nevada 89431
(775) 834-8300 FAX (775) 834-8319

October 20, 2016

BRIAN SANDOVAL
Governor

RUDY MALFABON, P.E., Director

Washoe County
Planning and Development Division
P.O. Box 11130
Reno, NV 89520-0027

TM16-009
Ascenté: Symbio Development, LLC.
SR-431, Mt Rose Highway

Attention: Mr. Trevor Lloyd, Senior Planner & Kelly Mullin, Planner

Dear Mr. Lloyd and Ms. Mullin:

I have reviewed Tentative Subdivision Map request to approve the first phase of a merger and re-subdivision of two parcels totaling 632 acres to create a 281 lot single family common open space subdivision. Lots will range in size from 10,200 square feet (.23 acres) to 80,900 square feet (1.85 acres) with lot sizes averaging approximately 21,300 square feet (.34 acres), APN 045-252-14 and 045-252-15.

The development is located south of Fawn Lane and east of Shawna Lane. I have the following comments:

1. Existing approaches are personal and not transferable with the sale of property. If the property changes ownership or use, the new property owner will need to apply for an encroachment permit for access to the state highway.
2. The Nevada Department of Transportation will require an occupancy permit for any work performed within the State's right-of-way. Please contact the Permit Office at (775) 834-8330 for more information regarding the occupancy permit.
3. Prior to any grading adjacent to the NDOT right-of-way, a Drainage Report, including a grading plan, and a Drainage Form must be submitted to the Permit office. Please contact the Permit Office at (775) 834-8330 for more information.
4. Traffic Works' submitted traffic impact study, dated June 22, 2016, determined the proposed development will generate up to 2,674 average daily trips with 212 AM peak hour and 285 PM peak hour. This traffic will impact State Route 431 at the intersection of Callahan Road and Fawn Lane.
 - At the intersection of Mt Rose Highway (State Route 431) and Callahan Road, Mt Rose Highway is a 5 lane roadway (two through lanes (westbound/eastbound) and one left turn lane). For the south approach there is an existing eastbound acceleration lane.
 - At the intersection of Mt Rose Highway and Fawn Lane (3-leg), there is no eastbound acceleration lane. The existing pave bus facility impacts the potential for a future acceleration lane. The bus parking would need to be located further west to accommodate an acceleration lane from Fawn Lane.
 - After reviewing the trip distribution, it appears the development's traffic impact is not directly affecting the north approach's left turn LOS F (southbound-to-eastbound). The

increased right turn volumes at Callahan Road approach has little impact to the left turn movement.

- Report does not include full build-out of development. Each phase should include traffic mitigation strategies and recommendations.

Recommend that the report be amended to include full build-out and mitigation strategies for each additional phase.

5. NDOT recommends reviewing and/or developing a Washoe County access management plan for this corridor to better understand and accommodate future roadway needs.
 - The Ascenté Phase 1 impacts the intersection of Callahan Road and Fawn Lane. These intersections currently do not meet signal warrants but presents safety concerns with the left turn movement during peak hour. While a roundabout can be installed to mitigate the safety concerns, it is costly. Alternative intersection modifications such as offsetting two 3-leg intersections instead of an unsignalized 4-leg intersection and restricting turning movements may be necessary to improve safety.
 - There is currently a traffic signal at the intersection of Mt Rose and Thomas Creek Road. There is no south approach leg. Is there a way the developer can construct a phase further east that would tie into the Thomas Creek Road intersection instead of the proposed Phase 1? This would be a beneficial improvement. Ascenté Development traffic would utilize the existing signal and have minimal impact on Callahan Road.
 - This collector road to the Thomas Creek intersection should also service traffic from the Edmonton Drive area to improve mobility.
6. The state defers to municipal government for land use development decisions. Public involvement for Development related improvements within the NDOT right-of-way should be considered during the municipal land use development public involvement process. Significant public improvements within the NDOT right-of-way developed after the municipal land use development public involvement process may require additional public involvement. It is the responsibility of the permit applicant to perform such additional public involvement. We would encourage such public involvement to be part of a municipal land use development process.

Thank you for the opportunity to review this development proposal. NDOT reserves the right to incorporate further changes and/or comments as the design review advances. I look forward to working with you and your team, and completing a successful project. Please feel free to contact me at (775)834-8300, if you have any further questions or comments.

Sincerely,

DocuSigned by:
Jae Pullen
DC6D2FB6D946439...

10/21/2016

Jae Pullen, PE, PTOE
District II Engineering Services

cc: Thor Dyson, District Engineer
File

ds
TD

1355 Capital Blvd. • P.O. Box 30013 • Reno, NV 89520-3013
☎ 775.834.8080 • ☎ 775.834.8003

June 21, 2016

Symbio Development, LLC
6151 Lakeside Drive, Suite 1000
Reno, NV 89511

RE: Ascenté Community Information Meeting

This letter is provided as background information on drinking water issues for the Ascenté Community Information Meeting #1, scheduled for Saturday, June 25, 2016.

It is important to note that the Truckee Meadows Water Authority (TMWA) is a water purveyor, which is required to respond to developments approved by local governments. When, where and what type of growth occurs is solely within the land-use entitlement and planning functions of cities, counties and regional planning agencies. TMWA's water-supply planning is designed to facilitate delivery of safe and reliable water supplies, if and when land-use entitlements are granted. TMWA's integrated planning process ensures that long-term water resources, facility capacity and funding mechanisms are in place to meet current and future water supply and demand conditions.

TMWA took over the water system serving the Callahan Ranch area as of January 1, 2015. The water system was previously owned and operated by Washoe County. At TMWA, we recognized that we would need to implement programs to move treated surface water from the Truckee River and various creeks into the former Washoe County and STMGID systems due to their dependence upon groundwater and the continued decline in water levels aggravated by the ongoing drought. Please refer to "TMWA's Plan for Groundwater Sustainability on the Mt. Rose Fan" (copy attached) mailed to area residents in July of 2015.

Since taking over, TMWA has implemented new rules for water rights dedication to mitigate new groundwater pumping. The adopted rules, water rights dedication policies and Water Service Facility Charges for this area require developers to dedicate supplemental surface water supplies when dedicating groundwater for new service in the area. Supplemental surface water resources (Truckee River, Whites and Thomas Creeks) are a key component of the area's water resource management plan and are necessary to ensure a sustainable water supply for existing customers, domestic well owners and new development in the area.

Earlier this spring, TMWA completed construction of the Arrowcreek / Mt. Rose Conjunctive-Use Phase 1 Facilities as described in the Groundwater Sustainability Plan. These improvements are operational and have been delivering Truckee River water to the Callahan Ranch area as of about May 4, 2016. These improvements do not provide 100% of the water supply, but have allowed us to reduce pumping at several wells in the Arrowcreek and Mt. Rose water systems.

TMWA is also expanding its Aquifer Storage and Recovery (ASR) Program in the area. ASR occurs during the fall, winter and spring when water use in the community drops to approximately one-fourth of its peak summer usage, making Truckee River water available for recharge. ASR is the process of injecting treated surface water into the groundwater aquifer when the wells are not in use. The more water we can recharge and store during the off-peak season, the more water we will have available during the summer. It's like money in the bank.

*Truckee Meadows Water Authority is a not-for-profit, community-owned water utility,
overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.*

1355 Capital Blvd. • P.O. Box 30013 • Reno, NV 89520-3013
☎ 775.834.8080 • ☎ 775.834.8003


Recently, as part of the ASR program, TMWA performed rehabilitation work (preventive maintenance) on a well referred to as Tessa East, off of Napoleon Drive. TMWA had a drilling contractor working on the well for several weeks, but we did not deepen the well. In addition, we made improvements at the westernmost of the two wells (Tessa West) which will allow us to recharge the well with treated surface water this coming fall and winter. TMWA also reduced the pumping rate at the two Tessa wells by about 40% to further reduce local impacts to nearby domestic wells.

Future plans to bring supplemental surface water resources to the area as described in the Groundwater Sustainability Plan include a new water main along Arrowcreek Parkway, and construction of a small drinking water treatment plant off of Whites Creek. By expanding our ASR Program and supplementing the local groundwater supplies with Truckee River and creek water in the near future, TMWA's goal is to actually pump less groundwater from the Mt. Rose and Galena fan aquifer than we do today.

In regard to the proposed Ascenté development, TMWA understands that Phase 1 will be less than 300 homes and that groundwater rights are proposed to be dedicated to serve the Phase 1 project. The new rules for water rights dedication will mitigate new groundwater pumping from the development, and the groundwater sustainability improvements which TMWA is implementing will allow TMWA to recharge the wells and supplement the local groundwater supplies with Truckee River and creek water. As a result, the project will have a net zero impact on the groundwater resources on an annual basis.

Lastly, TMWA's policy is that "growth pays for growth." In practice, that means the service plans developed for growth do not negatively impact existing water users, and where practical, result in improvements to the water system as a whole. To that end, TMWA will require the Ascenté improvements to integrate with the existing water system in the Callahan Ranch area, and will require Ascenté to participate in TMWA's groundwater stabilization efforts and fund their share of existing and future facilities as described in this letter.

Sincerely,



John P. Enloe, P.E.
Director, Natural Resources Planning and Management

TMWA's Plan for Groundwater Sustainability on the Mt. Rose Fan

Due to dependence upon groundwater and the continued decline in water levels aggravated by the ongoing drought, it is necessary to provide a supplemental source of supply for the water systems located on the upper Mt. Rose and Galena fan areas. These areas currently rely on groundwater wells for 100 percent of their water supply.

TMWA is implementing a \$7.8 million groundwater sustainability / conjunctive use plan for the Mt. Rose and Galena fan areas. The plan includes three projects which will deliver limited amounts of treated surface water from the Truckee River to the area to replenish wells:

- Arrowcreek/Mt. Rose Conjunctive-Use Facilities, in service January 2016
- Expanded Conjunctive-Use Facilities/Aquifer Storage and Recovery Program, scheduled to be constructed in 2016-2017
- South Truckee Meadows General Improvement District (STMGID) Conjunctive-Use Facilities, scheduled to be constructed in 2017-2018

These facility improvements are included in TMWA's existing budget and will not affect rates.

Conjunctive use management maximizes use of surface water when it's available, thereby reducing groundwater pumping. This approach allows us to meet demands with surface water, and to rest and recharge specific wells when enough surface water is available. The more water we can recharge and store during the off-peak season, the more we will have available when river and creek flows are low. It's like money in the bank.

In order to provide for the long-term sustainability of the local groundwater aquifer, TMWA's plan also includes a small (8,800 square foot) water treatment plant off of Whites and Thomas Creeks. When adequate creek flows are available, a portion of the flow will be diverted to the water treatment plant, and sufficient flows will remain downstream in both creeks to maintain wildlife and habitat needs, as well as downstream irrigation requirements.

By supplementing the groundwater resource with water supplies from both the Truckee River and Thomas and Whites Creeks, TMWA's goal is to pump less groundwater from the Mt. Rose and Galena fan aquifer than we do today, even with additional development.

TMWA is a water purveyor required to respond to development approved by local governments, we do not set growth policy. Our role is to provide a reliable, high-quality water supply to homes and businesses within our service territory. TMWA's integrated planning process ensures the long-term water resources, facility capacity and funding mechanisms are in place to meet current and future water supply and demand conditions.

Project History / Timeline:

2002 Washoe County South Truckee Meadows Facility Plan - The County's Facility Plan recognized that, "The upper treatment plant is an integral component of the recommended water supply plan ... Most importantly, it will provide recharge water and/or offset winter groundwater pumping in the upper Mt. Rose fan area."

July 20, 2011 - The Washoe County Board of County Commissioners approved its recommended program for mitigation of unreasonable adverse effects of municipal pumping on domestic wells in the Mt. Rose/Galena Fan area, and Washoe County Domestic Well Mitigation Policy.

August 26, 2014 - TMWA Domestic Well Mitigation Workshop

Residents voiced broad concerns relating to the long-term health of the groundwater aquifer, including:

- What commitments will TMWA make to prevent further impacts to domestic wells;
- How long it will take to bring surface water to the area;
- What is to prevent TMWA from pumping the wells and sending the water out of the area;
- General concerns about surface water quality compared to groundwater;
- Stabilizing water levels, resource sustainability;
- Concerns over past land development approvals
- Drought, water conservation;
- Lack of transparency.

October 15, 2014 - TMWA Board of Directors public meeting: TMWA adopts Mt. Rose / Galena Fan Domestic Well Mitigation Program, effective upon the closing date of the successful merger of Washoe County Community Service Water Utility and STMGID into TMWA.

April 15, 2015 - TMWA Board of Directors public meeting: Rule Change 1st Reading

May 21, 2015 - TMWA Board of Directors public meeting: Rule Change 2nd Reading

The newly adopted rules, water rights dedication policies and Water Service Facility Charges for this area require developers to dedicate supplemental surface water (creek) supplies when dedicating groundwater for new service in the area.

Project History / Timeline (continued):

July, 2015 - Letter on groundwater sustainability and conjunctive use projects sent to 8,000 area residents and businesses.

November 18, 2015 - TMWA Board of Directors public meeting: Water Treatment Plant Parcel Purchase Agreement

November 18, 2015 - Monte Vista Home Owners Association Meeting

December 15, 2015 – Mt. Rose Water Treatment Plant Special Use Permit Application filed with Washoe County

January 1, 2016 - Open House invitations (1,500 +/-) and Status Report letters (6,500 +/-) sent to area residents

January 11, 2016 – TMWA Mt. Rose Water Treatment Plant Open House (South Valleys Library)

South Truckee Meadows / Washoe Valley Citizen's Advisory Board - Thursday January 14, 2016, 6:00 p.m. at the South Valleys Library

District Forum hosted by Commissioner Lucey - Thursday January 21, 2016, 6:00 p.m. at the South Valleys Library

Washoe County Board of Adjustment - Thursday, February 4, 2016, 1:30 p.m. at the County Commission Chambers, 1001 E. 9th Street, Building A, 1st Floor, Reno.

The entire SUP application may be reviewed at:

https://www.washoecounty.us/csd/planning_and_development/applications/files-planning-development/comm_dist_two/sb15-012w.pdf



DESIGN GUIDELINES



**PREPARED FOR WASHOE COUNTY
APRIL 2017**



SYMBIO DEVELOPMENT, LLC

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APPENDIX

 2012 INTERNATIONAL WILDLAND URBAN INTERFACE CODE

 2012 WUI CODE GUIDE (REVISED 11-25-13)

 2012 FIRE CODE AMENDMENTS

 FIRE ADAPTED COMMUNITIES – WASHOE COUNTY

PROJECT CONSULTANTS





INTRODUCTION

Ascenté is a residential development with approved zoning located in the Steamboat Hills south of Mt. Rose Highway and east of Callahan Road in southwest Reno, Nevada. Ascenté proposes a total of 225 residential clustered home sites on 225-acres for an overall average density of one home per acre. Four distinct villages are designed with each offering varying homesite lot sizes to accommodate different new home product types.

Ascenté is named for its panoramic views of the Carson Range as they climb or “ascend” the Sierra Nevada Mountains. The villages and streets are named after Sierra Nevada mountain peaks and passes. The Sierra Village, Tioga Village, Donner Village and Whitney Village home sites average more than one-half acre in size in addition to 80-acres dedicated as common open space and right-of-way’s. The Ascenté site design features landscaped common areas, entry monumentation, a pedestrian and equestrian trail system, and native rockery retaining walls. Symbio Development, LLC is the master developer for the Ascenté project.

PURPOSE AND VISION

The intent of these design guidelines is to create a cohesive theme designed to promote community image and identity, and to provide direction for implementation. A uniform common themed graphic will be designed for all signage related to major entries and identification of the neighborhoods. The design should reflect the authentic character promoted by these guidelines that defines a set of guidelines that are visionary, aesthetically distinct and complimentary of the project and its surroundings.

In planning, design and imagery – Ascenté responds to the natural setting of the Sierra sagebrush foothills and takes advantage of the sweeping westward views of Mount Rose and the Carson Range. These standards and design guidelines will ensure that the character of the landscape is protected and enhanced for the enjoyment of all homeowners of Ascenté, both now and in the future. The primary design goals include;

- Design standards and guidelines that links the villages with master plan features
- Design that responds to the natural settings and topography
- Preservation of views to Mount Rose and the Carson Range of the Sierras
- Minimizing visual impacts of development by incorporating visually diverse design elements
- Providing connectivity to common open space and existing neighborhoods

HOW TO USE THESE GUIDELINES

STANDARD

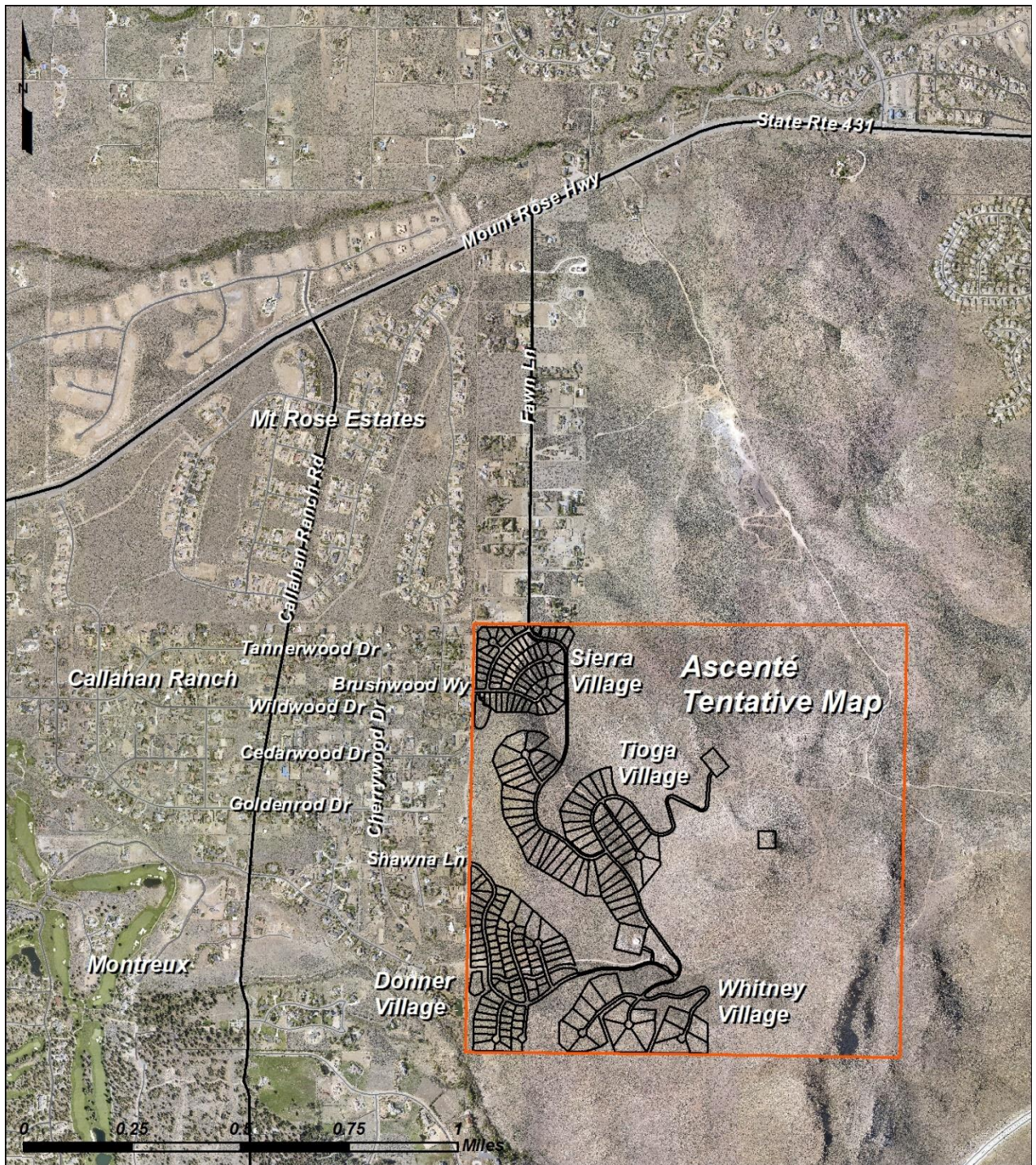
A standard describes features and qualities which are mandated and measurable. Standards use the term “shall” and “must” to indicate compliance. The implementation and enforcement of these standards are described in the Implementation Section as to definition, implementation, and enforcement via the final maps, recorded instruments, and covenants, conditions and restrictions (CC&R’s). Variances may be permitted by a process, which is defined in the Implementation Section. Standards not outlined in the Design Guidelines will defer to Washoe County Code and/or the Manager, as defined in the Implementation Section.

GUIDELINES

Guidelines are recommendations that align the goals of the community to respond to the natural setting and minimize disturbances. Guidelines are not required for approval and therefore use terms such as “may” and “encourage” and provide guidelines for architectural control interpretation of design and other non-measurable criteria.

APPROVAL PROCESS

Refer to the Implementation Section in the back of these Design Guidelines.



SITE DESIGN AND COMMUNITY CHARACTER

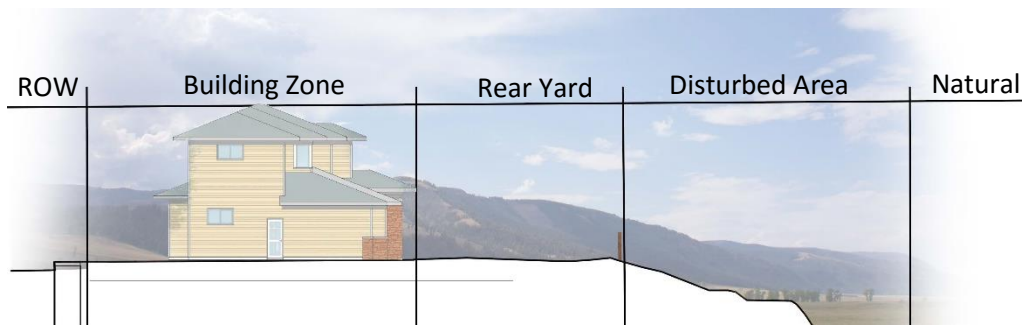
SITE PLANNING

Site planning for individual home site relies heavily on the individual character of the natural site. The location and design of proposed structures must relate to the terrain, locations of trees and boulders, solar orientation and views. Privacy from adjacent neighbors, near-by right-of-way and shared commons spaces should be considered.

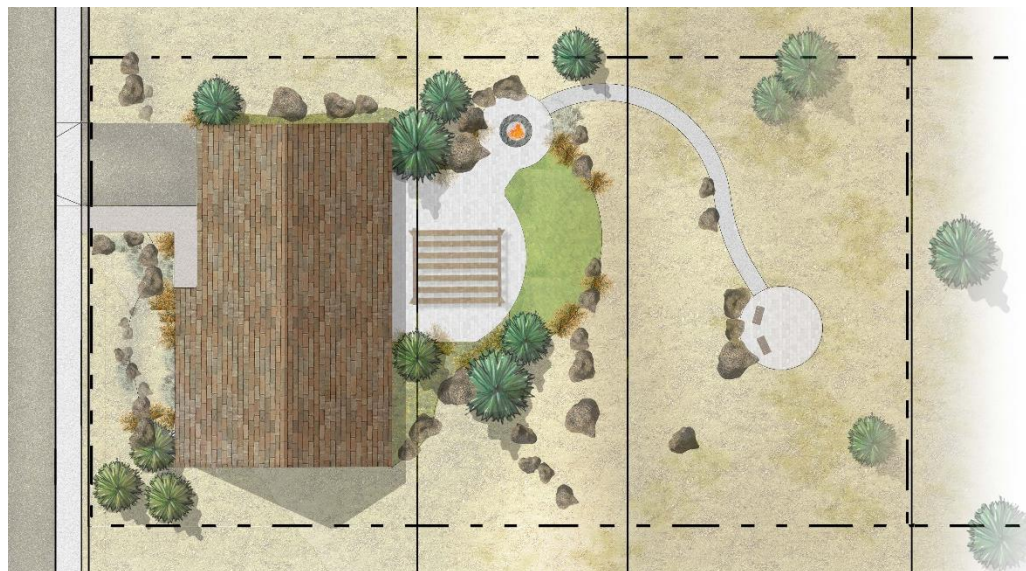
A height restriction that only effects the Ascenté Sierra and Donner Village perimeter lots with common property lines adjacent to and immediately bordering existing home sites shall be limited to single story homes.

Drainageways and detention facilities shall be designed to meet Washoe County’s 100-year flood plain management requirements and shall be maintained by the home owner’s association (HOA). The HOA shall grant emergency access to all drainage ways to Washoe County.

Drainage and landscape corridors may be combined so that drainageways may meander. All utilities, except for the existing, will be designed with landscaping to screen from the view of the roadway within the limitations of access and maintenance.



Cross Section of Typical Lot That Backs Common Open Space



Plan View of Typical Lot That Backs Common Open Space

BEST USES	Landscaped Front Yard Building Envelope Irrigation Privacy Fencing	Patios Gas Fire Pit Gathering Space Irrigation Landscaping	Seating Area Gas Fire Pit Native Revegetation Open Fencing Temporary Irrigation	No Improvements No Irrigation Property Line – Open Fencing
NOT ALLOWED	Non-Approved Landscaping Material (per CC&R)	Structures Higher Than Residence	Any Structure (incl. Pergolas or Shade) Privacy Fencing Irrigation	No Use Allowed

FENCING

Fencing provides privacy and defines property boundaries, but is often too dominant, visually undesirable, and obstructs areas that transition to surrounding open space. The following describes the type of fencing and the areas and locations fencing is allowed in all four villages of Ascenté. These areas within each

residential lot include the front, side, and rear yard, transition area, undisturbed/natural area, and property line fencing. Fencing with sharp protrusions or “spikes” that may affect mule deer and wildlife habitat are prohibited.

“Privacy fencing” is defined as solid fencing, not to exceed a maximum height of six (6) feet along any common property line. A common property line is any property line shared by two or more properties.

“Open Fencing” is defined as three rail split fencing, not to exceed a height of four (4) feet.

- Open fencing shall include a similar themed design throughout all the Ascenté villages
- Open fencing on village perimeters may be specified by the Manager to insure consistency

“Facilities Fencing” is defined as enclosure fencing used to secure facilities such as water storage tanks, sewer lift stations and booster pumps. The type and location of fencing is per Washoe County standards, yet where chain link fencing is used, privacy slats and vegetation is required for screening.

“Transition Area” is defined as the designated area between the rear yard and any adjacent common open space (See

illustration) or right-of-way. Transition Areas may be sloped or include drainage areas. Transition Areas will be designated on the final map, corresponding recorded easements, CC&R’s, and/or other instruments as implemented by the Manager (See Implementation Section).



“Transitional Fencing” is defined as any fencing that transitions from a Privacy Fencing to Open Fencing. This type of fencing shall be:

- Open Fencing
- Open Fencing may follow parallel with the slope.
- Horizontal stair stepping is not required.

STANDARDS

Fencing requirements vary based on the location of the property. The following standards shall apply:

- 1) Privacy fencing is permitted in rear and side yards when not adjacent to common open space.
- 2) The type of fencing used along perimeter lots with common property lines adjacent to and immediately bordering existing properties (outside the Ascenté parcel boundaries) may vary and will be finalized at final map with input from each existing property owner and Washoe County Community Services at the time of construction.
 - a) This provision is not intended to convey any third-party rights.
- 3) Side yard fencing should be held back a minimum of eight feet from the face of any structure so that the fence does not align with the front corner of the house.
- 4) Side yard fencing should step down to four feet height at or before the rear most wall or vertical structural element of the residence.
- 5) Fencing will be natural in color. No painting is permitted. Clear coat stain only is permitted.
- 6) Fencing along trail corridors or common open space shall be limited to Open Fencing.
 - a) No solid fencing is permitted

- adjacent to trail corridors.
- b) Only open fencing will be used adjacent to trail corridors.
 - c) Wire mesh is permitted on fences and will be made of black vinyl clad wire mesh or painted equivalent.
 - d) No chain link fencing is allowed unless associated with outdoor sport courts or Facility Fencing.
 - i) Privacy slats are required for Facility Fencing and shall be earth tone in color.
 - ii) Privacy slats are not allowed for outdoor sports courts.
 - iii) Sports court chain link must be a dark colored vinyl clad, painted, or equivalent.
 - e) Gates are permitted in residential lot fencing to access open space.
 - f) Fencing plans shall be reviewed and pre-approved by the Manager, as defined in the Implementation Section.

EXTERIOR LIGHTING

All exterior lighting shall follow “Dark Sky” principles and be carefully designed to light only the areas needed for reasonable levels of safety and security, eliminating as much outdoor lighting as possible. Street lights are prohibited.

Exterior light guidelines:

- Focus all light downward for lighting on identification signs and entries.
- Located and installed to prevent spillover lighting onto adjoining properties.
- Provide proper shielding of the light source
- Use of timing mechanisms or daylight mechanism in appropriate situations to shut off lights when they are not needed.
- No motion lighting is permitted.
- No up-lighting is permitted.
- Low voltage lighting for yards are allowed but must be approved by the Manager.

EXTERIOR DOWN LIGHT EXAMPLES



DEFENSIBLE SPACE DESIGN CRITERIA

Refer to Washoe County Code 60 and NAC 477

Many of the Ascenté home sites are directly adjacent to common open space with a potential threat of wildfires. To minimize potential wildfires and increase the home's survivability, the final map plans shall meet the 2012 International Wildland Urban Interface Code (2012 IWUIC), as amended and adopted by Washoe County Code 60 (WCC 60) and NAC477 with the following conditions:

STANDARDS

- Defensible space provisions shall be provided in the Design Criteria and adhered to within the Ascenté development.
- Fire hydrants shall be provided with the layout and placement of hydrants approved by Truckee Meadows Fire Protection District (TMFPD) prior to installation. Hydrants shall be equipped with Storz connections. Water for fire suppression shall be a minimum of 1,000 gpm for 1 hour at 20 psi with verification of flow provided by the water purveyor prior to final map approval.
- Secondary access shall be provided and shall meet the minimum standards of WCC 60.
- No speed bumps are allowed within the development. Traffic calming devices shall be submitted to TMFPD for review and comment prior to installation, and be in accordance with WCC 60.
- Cul-de-sacs shall maintain a minimum of 50-ft radius, 100-ft diameter.

- Access to common areas for vegetation maintenance and management shall be provide at final map.
- A defensible space and wildland interface program for both the common open space and individual lots will be approved by the Manager, as a part of the CC&R's and enforced by the HOA.
- A digital copy of the HOA/CC&R agreement shall be submitted to the Truckee Meadows Fire Protection District (TMFPD) for review, comment and approval at the time of each final map.

The following standards shall be included in the CC&R's, implemented by the individual homeowners, and enforced by the HOA:

RESIDENTIAL AREAS

Within 30 feet of the home:

1. Remove any dead vegetation.
2. Create a separation between layers of plants to eliminate fuel "ladders" to the home itself.
3. Do not plant ornamental grasses below windows that could shatter with heat.

Beyond the 30 feet to the lot edges adjacent to common open space areas:

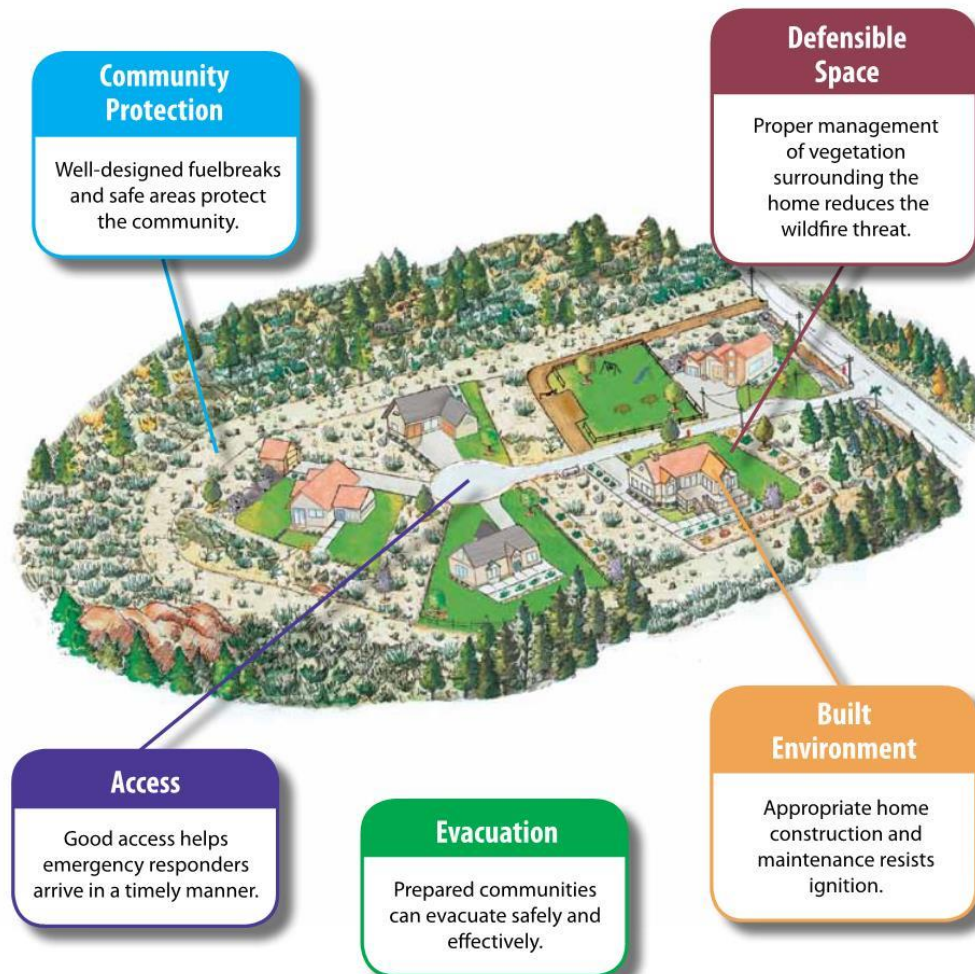
1. Homeowners shall use recommended plant lists approved by Washoe County.
2. Rock mulches shall be used in planter areas. No wood mulches are allowed.
3. As regular maintenance, remove all dead or flammable vegetation and

- weeds. Eliminate fallen leaves and prune dried ornamental grasses.
4. Emphasize the use of deciduous shrubs and trees rather than evergreen types.
 5. Remove the lower branches of trees up to 8 feet above the ground as the trees matures.
 6. Keep vegetation clear of raised decks.

COMMON OPEN SPACE AREAS

1. Areas outside of lots shall be the responsibility of the HOA. Fuel breaks will be created and maintained by the HOA.
2. Within fuel breaks, all dead plants shall be removed, along with any dead branches. Highly flammable vegetation will be removed, including annual weeds. Native vegetation will be thinned. In areas with bare soil from grading operations, fire resistant crested wheat grasses will be seeded.
3. Remove lower branch trees up to a height of 10 feet above the ground.

Elements of a Fire Adapted Community



LANDSCAPE STANDARDS

Landscape standards shall conform to Washoe County Development Code Article 412 Landscaping.

Revegetation and landscaping of drainageways, detention basins, common open space, roadway right-of-way and buffers shall be installed with each respective Village improvements and maintained by the HOA or similar mechanism, and will not be part of individual lots. Plans for landscaping shall be submitted with each respective final map for approval.

WALLS

Cut or fill slopes greater than 8 feet in height shall have stepped or terraced retaining walls. Where retaining walls are proposed, native on-site rocks where will be reused when possible. Rock walls with a 10-foot maximum height are allowed when located outside of public right-of-way, within common open space, that do not structurally support the roadway. Rock walls with a maximum height of 6-feet are allowed within residential lots.

REVEGETATION OF DISTURBED AREAS

A revegetation plan shall be prepared to include topsoil/vegetation stripping, stockpiling, screening and re-application. Disturbed areas are to be protected using temporary Best Management Practices (BMP) to minimize soil erosion. The plan shall include a native seed mix, drought tolerant vegetation and low impact design principles. All revegetated slopes and disturbed areas shall be temporarily irrigated until vegetation is established. All irrigation will include automatic valves and controllers.

COMMON OPEN SPACE LANDSCAPING

Landscaping shall be required at entrance gateways, around storm water detention facilities, roadway right-of-way's, buffers, trailheads and the common open space adjacent to proposed lots. Landscaping will use drought tolerant native vegetation or non-native ornamental plant species designed to address aesthetics, as deemed appropriate by the Manager.

ROCK WALL MATERIALS



TM16-009 & SW16-003

EXHIBIT E
ASCENTÉ

COMMON OPEN SPACE PERIMETER BUFFERS

Perimeter lots in the Sierra and Donner Villages adjacent to existing residential homes require a perimeter buffer as follows:

- Incorporate a 40-foot wide perimeter buffer immediately adjacent to existing homes that start at the back yard common property line and run along the entire length of the property line of each individual lot unless adjacent to Patti Lane.
- Incorporate a 20-foot wide perimeter buffer immediately adjacent to Patti Lane's 60-foot roadway right-of-way easement.

The perimeter buffer will consist of drainage improvements, maintenance access, trails and landscaping. The landscaping requires a mix of native shrubs, trees and ground material with height and massing to provide screening between adjacent existing lots. The spacing and massing of trees will minimize disturbance of view sheds of hillside or mountain views. Perimeter buffer areas will be finalized at final map.

INDIVIDUAL LOTS

Individual lot front yard landscaping shall:

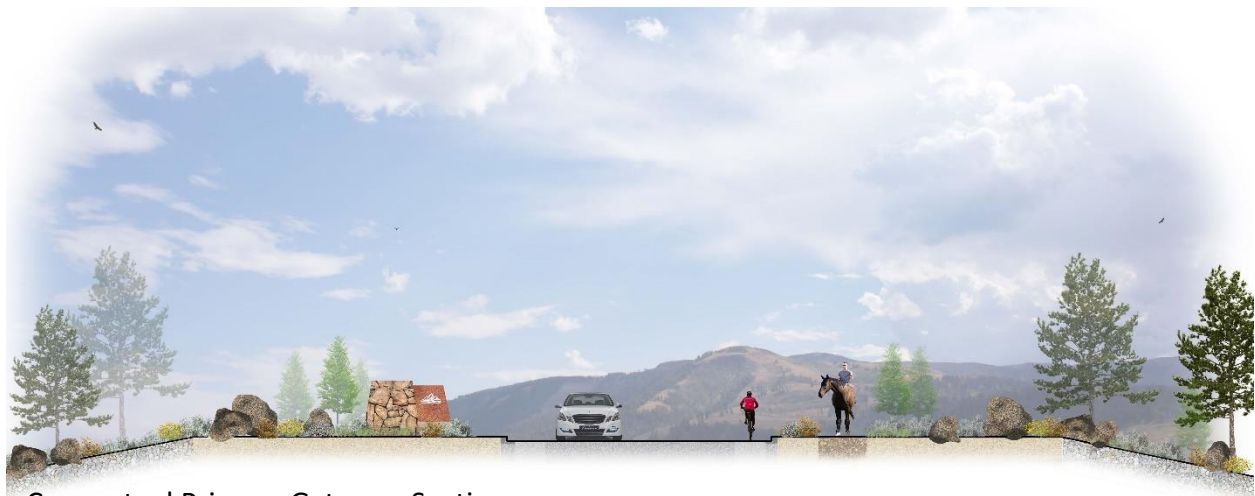
- Minimize turf areas
- Minimize the use of irrigation
 - Temporary irrigation of disturbed transitional areas is permitted until vegetation has been established.
 - Irrigation of undisturbed/natural areas are prohibited and enforced per conditions within the Ascenté Design Guidelines Implementation section provisions.
- Consist of native and regionally appropriate plant material and blend into the natural landscape.
- Limit the use of ornamentals to entryways and immediately adjacent to the structure.
- Reflect patterns from the surrounding natural landscaping avoiding formal, regimented landscaping.
- Use native colored mulches and rock for ground treatments.
- Meet the approval of the Manager.

ROADWAYS AND CONNECTIVITY

Refer to Washoe County Development Code Article 436 Street Design Standards.

STREETS

- Five-foot wide concrete sidewalks will be constructed on one side only of thoroughfare streets, and only as required to connect to trails providing walkable interconnectivity between all villages and common open space. Sidewalks are not required on streets with cul-de-sacs.
- Street sections may be narrowed where street parking is prohibited or limited to one side of the street.
- Exceptions to standards within Washoe County Development Code Article 436, as amended, by the approval of the Washoe County Engineer.



Conceptual Primary Gateway Section

COMMON OPEN SPACE & TRAILS

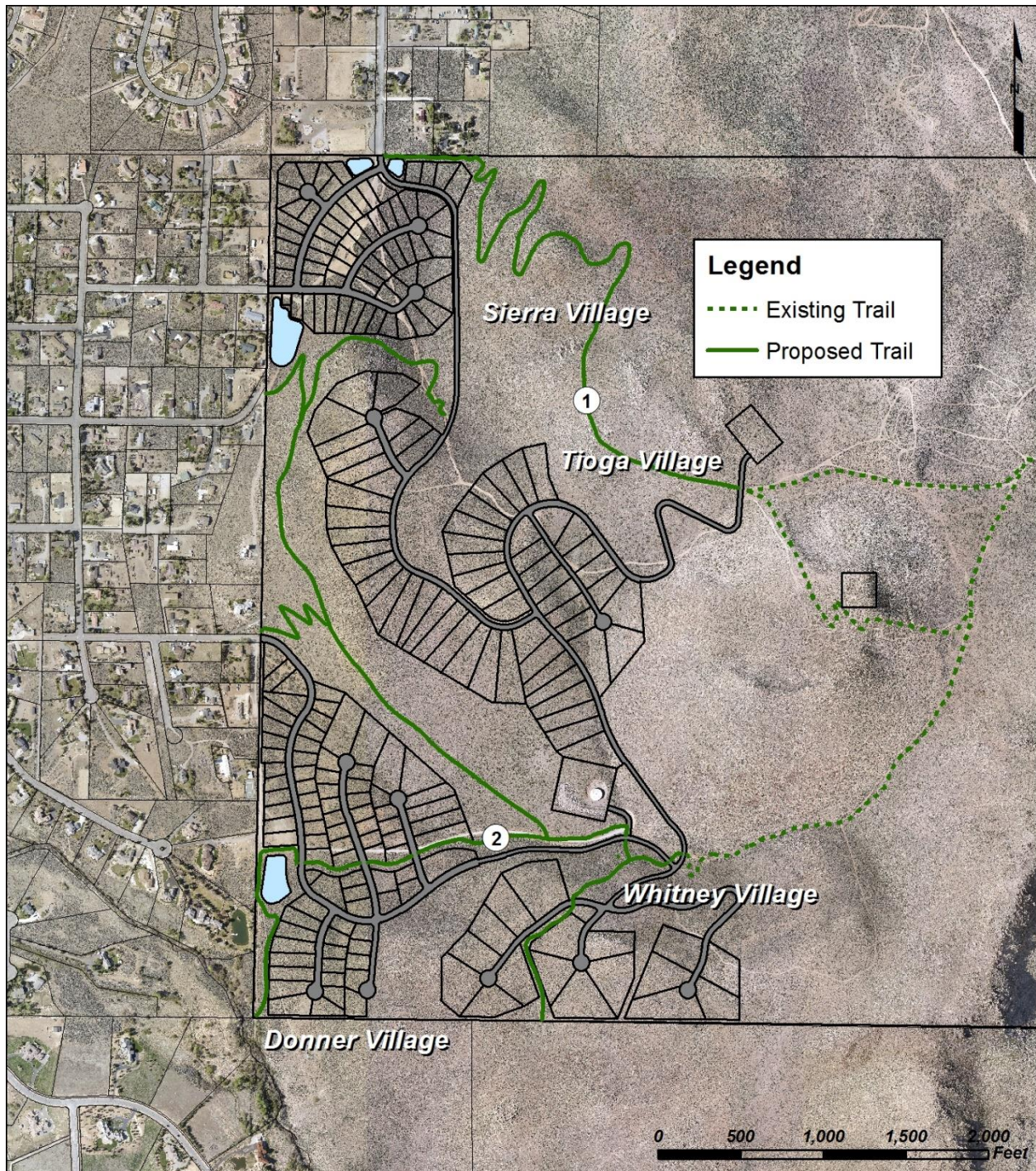
The common open space includes common open space areas, trails, detention basins, drainage areas, trailheads, points of access, some easements, and undeveloped areas that preserve natural features such as rock outcropping and native vegetation. The proposed trail network provides the opportunity for equestrian, mountain biking, and pedestrian access to common open space areas within Ascenté, as well as connectivity to public properties outside the boundaries of Ascenté.



Typical Trail Section

The trail connections are intended to provide recreation and scenic value throughout the site and connection to adjacent existing neighborhoods. The common open space and trail improvements will be constructed in phases with each village, providing construction and maintenance and continuity within the development. The trails and common open space shall be maintained by the HOA.

Only non-motorized uses will be allowed, except for pedal assisted bicycles supplemented by batteries. The proposed trails should minimize potential erosion and shall be constructed three (3) feet in width using native soil. Trailheads shall incorporate signage and monumentation to easily identify the trail.

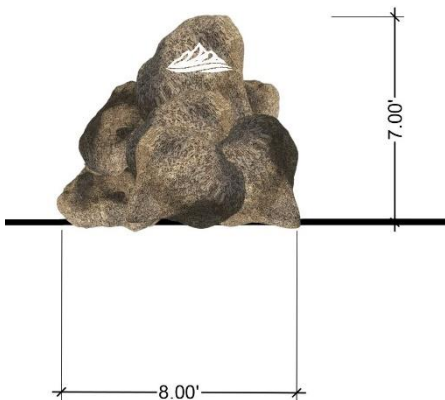
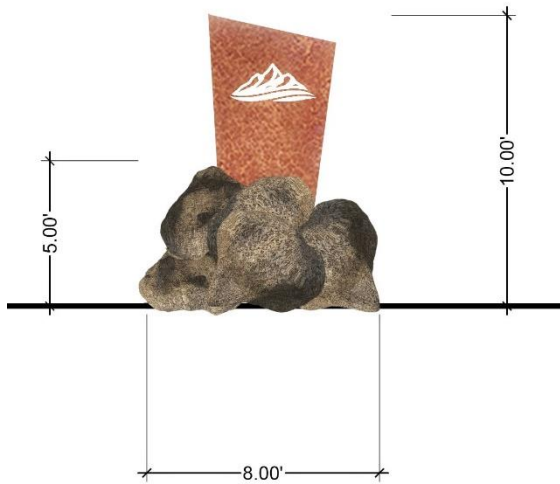
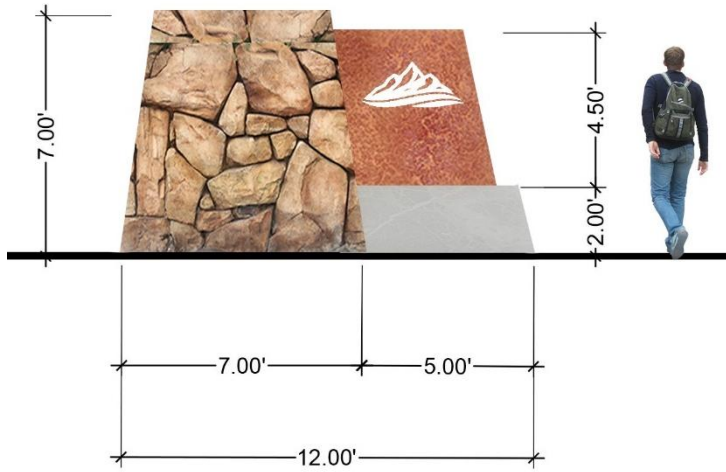


COMMUNITY AND NEIGHBORHOOD GATEWAYS

Community and neighborhood gateways will provide the marketing identity for each of the villages. The materials used for the monumentation will consist primarily of Corten steel, ornamental metal, wood, and on-site rock, or faux-rock that is similar in color to on-site rock.



The following are conceptual designs of community gateways. Final design of each community and neighborhood gateway requires the Manager's approval.



Gateway Monumentation Signage

signs are conceptual and subject to final design

RECOMMENDED SIGNAGE MATERIALS



Corten Steel



Board Formed Concrete



On-Site Stone



Glulam Wooden Beams

IMPLEMENTATION

OBJECTIVES

The objective of this Implementation chapter is to establish the following:

1. To create a clearly defined path of implementation and enforcement for Ascenté Design Guidelines, so that they can be adopted as part of the Washoe County tentative map conditions of approval. The implementation requires the Manager to implement and enforce the Design Guidelines as required for the mutual benefit of all the collective villages with respect to their shared common open space areas.
2. Require the identification of all easements (landscape, access, utility, conservation or others) and notes that will be:
 - a. Separately recorded easements with legal descriptions and map showing the easements consistent with each contemplated Ascenté final map.
 - b. Consistent with these Design Guidelines to be incorporated into each Ascenté final map.
3. Require the creation of CC&R's for each Ascenté homeowner's association consistent with the above and containing provisions for an Architectural Control Committee ("ACC") for the maintenance and adoption of rules and regulations governing architectural review, approval, and enforcement.

MANAGER

These Design Guidelines apply to Ascenté (the "Project") and shall be initially managed by Symbio Development, LLC, the developer who maintains legal control over the Project's approved tentative map properties ("Master Developer"). The Master Developer shall review and approve final map plans, materials and applications within the Project. The Master Developer intends to sell parcels and assign legal control over to merchant home developer(s) ("Builder Developer(s)") for each respective final map(s) within the Project. When the rights of the Master Developer are designated or assigned to another entity or individual, the Master Developer shall notify Washoe County in writing and provide documentation of the change in ownership for said parcels.

The Master Developer and Builder Developer(s) shall collectively or by individual action, be referred to as the "Manager" and shall continue throughout the development as the Manager until one or more Home Owners Association (HOA) or other entity is authorized to serve the role of Manager. The Manager shall have the authority to reasonably interpret and apply these Design Guidelines as contained herein consistent with the Washoe County Development Code. Figures and graphic representations contained herein are intended as general visual aids in understanding the intent of the various requirements and do not represent any actual lot or building plan, nor are they intended to serve as exhaustive examples of every possible situation.

DUTIES

The Manager shall have the following duties, responsibilities, and authority:

1. Establish an HOA to maintain all common space area improvements as follows:
 - a. Open channel storm drainageways and detention basins
 - b. Landscaping, irrigation, trails, community gateways
 - c. Enforce irrigation restrictions
2. To implement all agreements, easements (landscape, drainage, access, utility, conservation or others) and corresponding notes consistent with these Design Guidelines to be incorporated into each final map within the Project, and separately recorded easements with legal descriptions and maps showing the easements consistent with each final map within the Project. Said easements shall be simultaneously recorded with each corresponding final map recordation.
3. To establish Covenants, Conditions and Restrictions (CC&R's) and the creation of an Architectural Control Committee ("ACC") to incorporate and/or adopt these Design Guidelines, all final map notes and easements, and all recorded easements into rules and regulations covering architectural review, approval, and enforcement for the benefit of the individual final map parcel owners and their respective common areas.

CC&R's

Covenants, Conditions and Restrictions shall be legally binding provisions that apply to all property owners in all Ascenté final map subdivisions. The CC&R's constitute covenants that run with the land and bind successors-in-title.

The subdivision's CC&R's provides for the creation of the specific HOA to manage the CC&R provisions. The bylaws of the HOA shall provide for the creation of a Board of Directors that is charged with managing the association's business. Among the responsibilities of the Board is the enforcement of standards of construction in and appearance of the subdivision, maintaining common areas, drainageways, detention basins, enforcing irrigation restrictions, and setting and collecting an annual assessment. Interpretation of the provisions of the CC&R is also part of the Boards responsibility.

RULES FOR ADOPTION

1. Purpose Statement for HOA's - Said corporation is organized to promote the health, safety and welfare of the residents within the boundaries of Ascenté to own, acquire, build, operate and maintain common areas, trails, and personal properties incident thereto, hereinafter referred to as the "Common Areas", to supplement Washoe County street services; to incur indebtedness; to fix assessments (or charges) to be levied against the property; to enforce any and all covenants, conditions and restrictions, and agreements applicable to the property; to pay taxes, if any, on the Common Areas; and insofar as permitted by law, to implement and enforce any other requirements that, in the opinion of the Board of Directors, shall promote the common benefit and enjoyment of the residents of the properties. It is intended that this corporation be organized and operated to carry out exempt functions as set forth in Section 528 of The Internal Revenue Code. (Emphasis added)

ASCENTE RESIDENTIAL CONSTRUCTION TAX

The homes in Ascenté will yield approximately \$225,000 (225 units X \$1,000 per unit) in Residential Construction Tax (RCT) or park funds. Each respective final map applicant shall be responsible for constructing the amenities and trails within its respective borders of Ascenté. Each final map applicant may receive a refund of the RCT fees up to 100% of the collected fees based upon qualified costs. Washoe County will collect the RCT fees in accordance with its usual practices, procedures and applicable law. Disbursement shall be made by Washoe County to each respective final map applicant from the collected RCT funds. Reimbursement shall occur after completion of the various program elements with inspection and final approval by Washoe County Parks and Recreation. Each respective final map applicant shall submit a request for reimbursement upon completion and including copies of invoices paid in sufficient detail to identify the purpose of the expenditures. The County shall promptly review the invoices and issue reimbursements with 60 days from the date of the invoice and supporting materials received.

- To qualify for RCT reimbursement, facilities and features must be available to all Washoe County residents.
- At the time of each final map submittal, a breakdown of estimated costs for applicable trails, trailheads, and amenities shall be provided.

MISCELLANEOUS

1. Construction of roadways and other improvements shall be completed in accordance with applicable final map.
2. Whitney Village custom homes may be subject to separate special use permits for exceeding grading thresholds, as required in the Washoe County Development Code. Individual homes must be consistent with these Design Guidelines.
3. All construction sites shall be kept in clean, workmanlike order. Adjacent lots, streets, and common areas shall be kept free of construction materials, waste, and debris.
4. Construction hours of operation shall meet Washoe County Building Department code.
5. Additional signage and traffic control shall be required during construction per Washoe County requirements.
6. Erosion control measures shall be installed and maintained to Washoe County and Nevada State codes prior to commencing any construction. In performing any grading, site improvements, or construction upon the premises, adequate provision shall be made for handling the run-off of surface waters in a manner which will not damage streets or adjoining properties, and at all times, construction shall be conducted in such a manner as to preserve lateral support for adjoining properties and prevent significant adverse impact to adjacent lots.
7. At its sole discretion, the Manager may grant reasonable adjustments and interpretations from the provisions of these design guidelines and requirements to accommodate special requests, innovative designs, or where such change is consistent with the overall character and design. Manager must take into account the potential impacts on the adjacent property owners. All adjustments and interpretations must be in conformance with Washoe County Development Codes, as amended.

8. There shall be no third-party beneficiaries to these Design Guidelines and requirements. Only a Manager or its authorized designee may request an administrative modification to these Design Guidelines in writing to the Director of Community Development. Each final map application submitted to the County shall provide a checklist demonstrating the adherence to each of the above components in the proposed final map.

APPENDIX

2012 INTERNATIONAL WILDLAND URBAN INTERFACE CODE

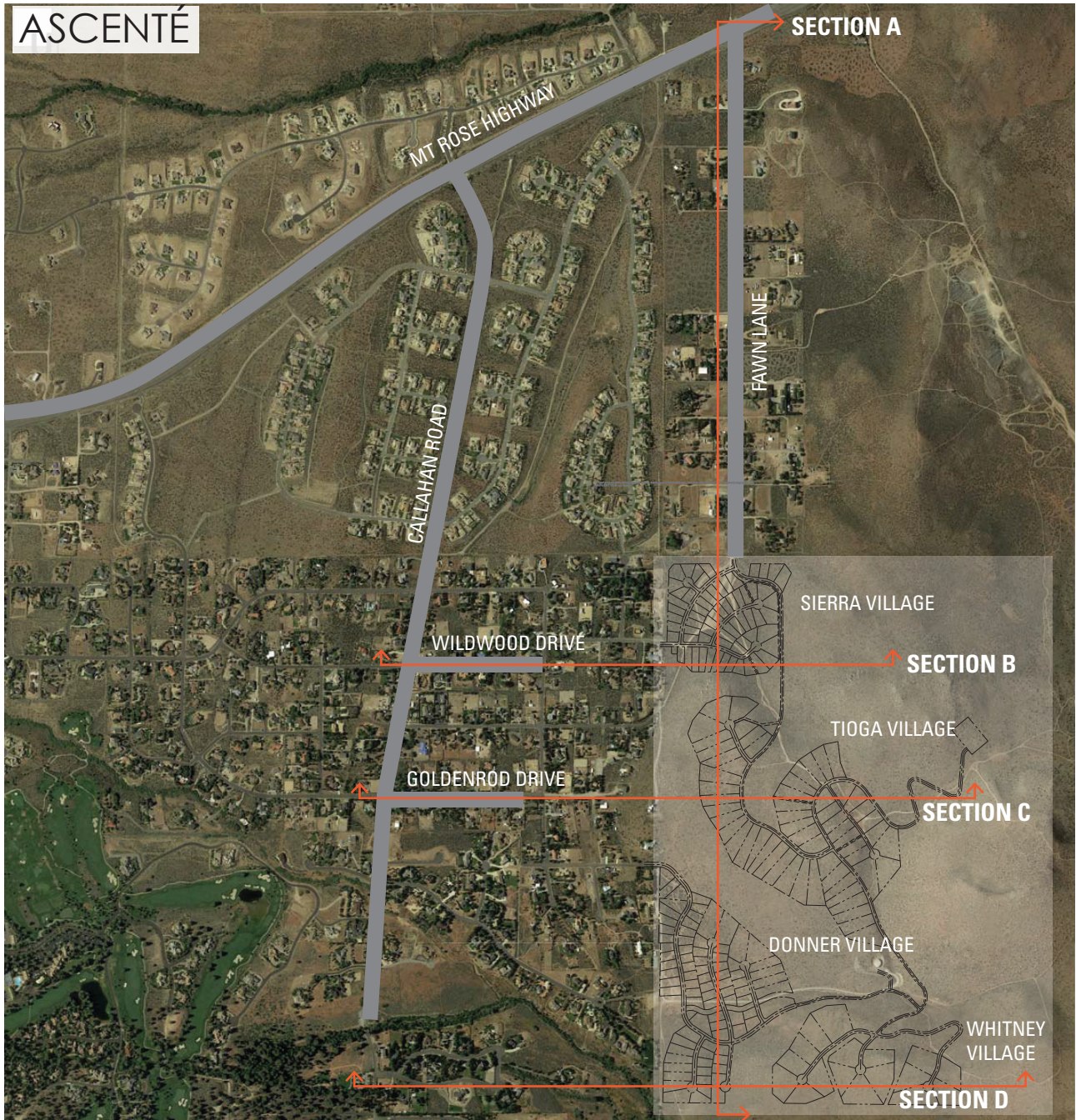
2012 WUI CODE GUIDE (REVISED 11-25-13)

2012 FIRE CODE AMENDMENTS

FIRE ADAPTED COMMUNITIES – WASHOE COUNTY

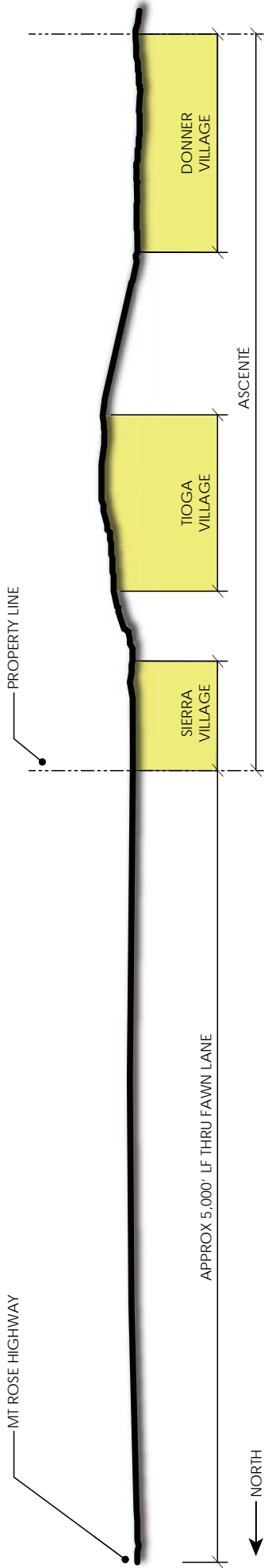
ASCENTÉ REFERENCE MAP

This map provides reference to the locations of the section lines through the proposed villages, along with lot lines, street names and surrounding areas.



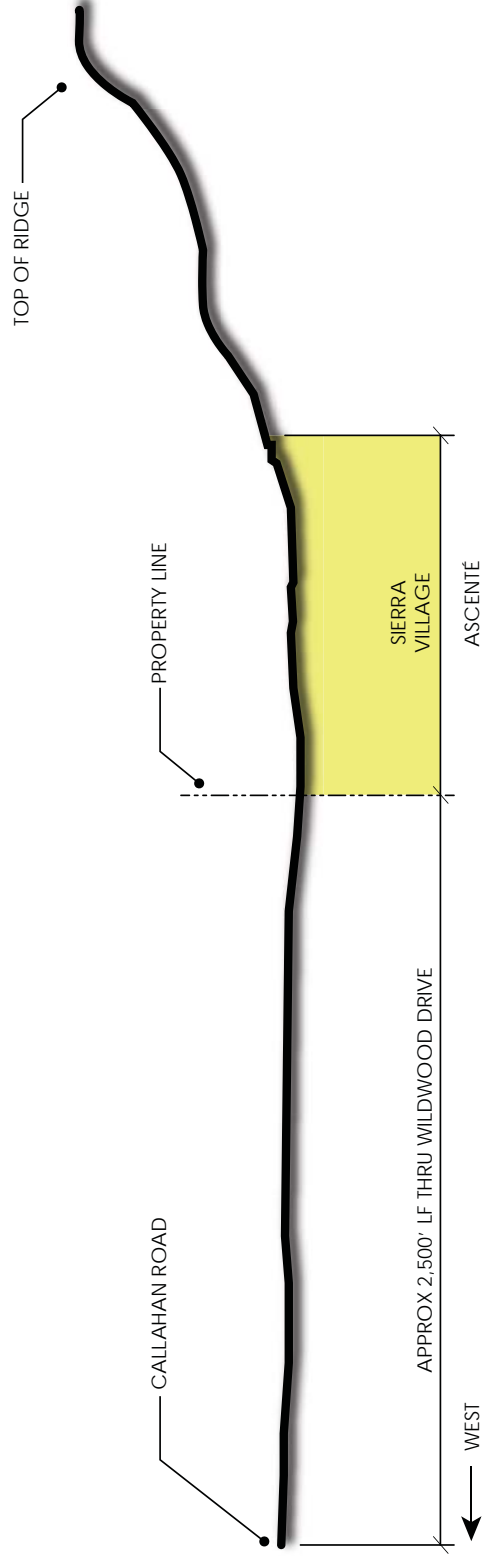
SECTION A - MT ROSE

Section from Mt Rose Highway through Fawn Lane, continuing through the proposed villages on site.



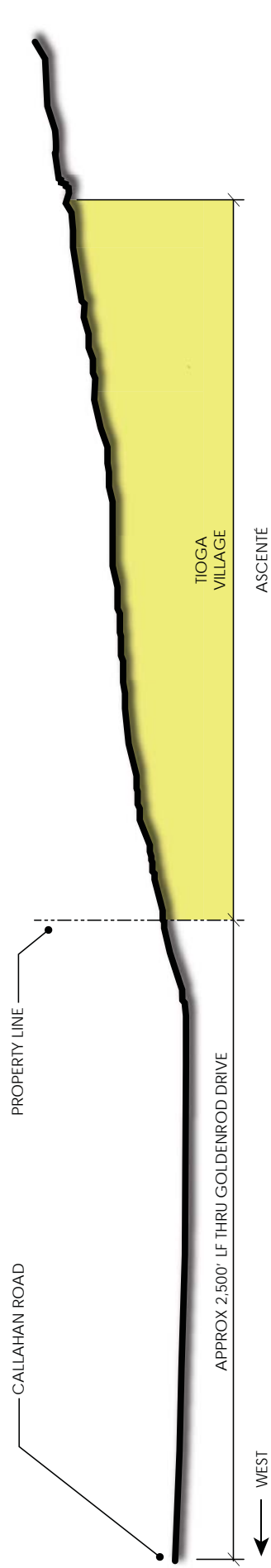
SECTION B - SIERRA VILLAGE

Section from Callahan Drive through Wildwood Drive, continuing through Sierra Village and to the top of ridge.



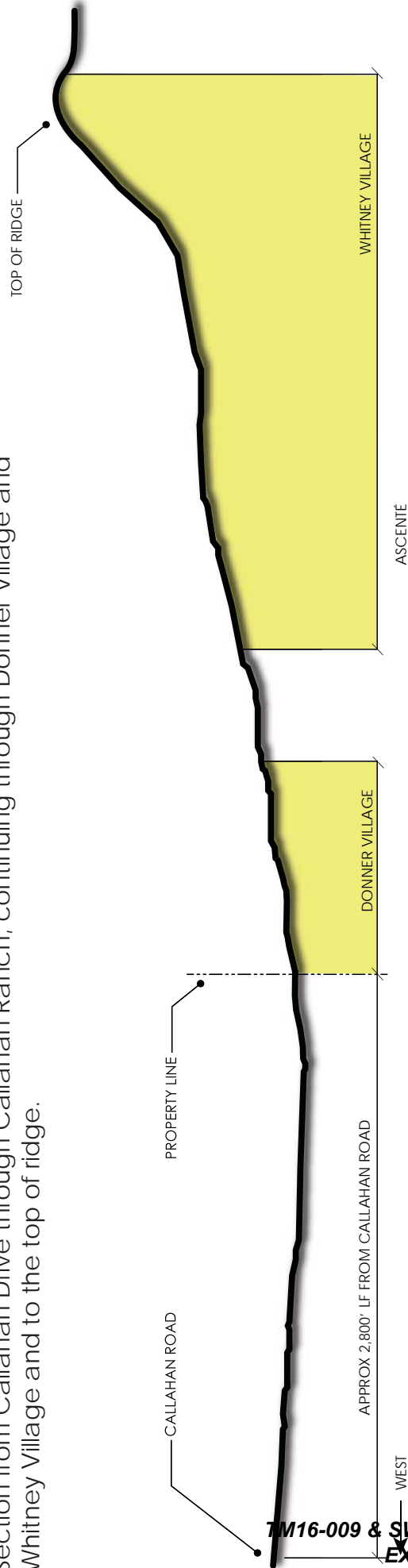
SECTION C - TIOGA VILLAGE

Section from Callahan Drive through Goldenrod Drive, continuing through Tioga Village.



SECTION D - DONNER VILLAGE AND WHITNEY VILLAGE

Section from Callahan Drive through Callahan Ranch, continuing through Donner Village and Whitney Village and to the top of ridge.



TM16-009 & SW16-003
EXHIBIT E



South Truckee Meadows/Washoe Valley Citizens Advisory Board

MEMORANDUM

Date: May 11, 2017
To: Roger Pelham, Washoe County Planner
Re: **Ascente (Tentative Subdivision Map M16-009, Special Use Permit SW16-003)**
From: Misty Moga, Recording Secretary

The following is an excerpt from the South Truckee Meadows/Washoe Valley Citizen Advisory Board on May 11, 2017.

6. DEVELOPMENT PROJECT UPDATES – The project description is provided below with links to the application or you may visit the Planning and Development Division website and select the Application Submittals page: www.washoecounty.us/comdev/da/da_index.htm. These items have previously been heard by the Citizen Advisory Board.

6A. Ascente (Tentative Subdivision Map M16-009, Special Use Permit SW16-003) – Update and discussion by the Citizen Advisory Board members regarding proposed changes to the Ascente development project South of Fawn Lane and East of Shawna Lane that were developed based on community feedback to include project design, access, traffic, drainage/water, grading and density. The two permit requests for a permit include a tentative subdivision map (Case Number TM16-009) to create a 225 lot single family common open space subdivision and Special Use Permit (Case Number SW16-003) to approve water storage tank. This item was previously heard at the STMWV CAB meeting on November 10, 2016 and is available for review online or by visiting www.washoecounty.us/cab Discussion from both the November 10, 2017 meeting and May 11, 2017 Citizen Advisory Board meeting will be provided to the Washoe County Planning Commission.

- Applicant/Property Owner: Applicant: Symbio Development, LLC. Property Owner: Gary Nelson and Jeanie Janning, NNVI Partners LLC
- Location: South of Fawn Lane and East of Shawna Lane
- Assessor’s Parcel Numbers: 045-252-14 & 045-252-15
- Staff: Trevor Lloyd tlloyd@washoecounty.us, 775-328-3620 and Kelly Mullin, kmullin@washoecounty.us, 775- 328-3608
- Reviewing Body: Tentatively scheduled to be heard the Planning Commission on June 6, 2017.

Trevor Lloyd, Washoe County and Development Planner
The Project is a continuation from last 2016 which came before this board last fall
As results from last meeting with CAB, there have been changes to the proposal:

- 225 lots – lower traffic, student counts
- Significant change to design and grading
- Schedule to be heard at June 6, 6:30 pm planning commission meeting – Commissioner Chambers

Angela Fuss gave an powerpoint overview :

- Concerns raised at the November CAB:
 - Too many homes
 - No buffers to existing neighbors
 - Too much traffic
 - Too much grading
 - Existing storm drain problems

Proposed project redesign:

- Added 40 ft wide open space buffers between existing and proposed perimeter lots with single story homes next to existing homes.
- Modified design guidelines to require standards for LID, fencing, grading, landscaping and site planning
- Reduced grading which reduced disturbance to the hillside native vegetation
- Reduced lot count which assures reduction to traffic and Shawna and Fawn
- Increased drainage trail corridor width from Galena Creek through the project
- Proposed changes in density
- Reduction of 56 lots – 20% reduction

Proposed Changes to traffic:

- Reduced traffic by 20%

- Added acceleration lane to Mt. Rose Highway
- Added traffic calming on Fawn Lane
- Added equestrian/biking/pedestrian trails to Fawn Lane
- Added/removed stop signs on residential roads
- Added school bus stop at Shawna Lane/Millie Lane.

Proposed Storm Drain Improvements:

Added drainage channel to accommodate potential overtopping from the existing retention basins at the Estates at Mt. Rose Detention basin #1, #2, #3 – oversized by more than 20% for improved sediment control, #4 detention basin

Next Steps – planning commission hearing June 6

Public Comment:

Ryan Loetscher, represent the community; express concerns. Created a website to inform the community of the Ascente project. What this new proposal does not address: incomplete geo tech studies, lead testing incomplete, construction issues, traffic safety, fire/emergency issues, zoning violations, changing the nature of the neighborhood, connectivity for 220 new homes, parks and trails, water and well protection, wildlife studies. When will phase II be part of the overall plan. The area forest plan is not being followed. They should follow code. Is this a new plan? what is the value of the neighborhood. New infrastructure support.

LeRoi Porter said she is a natural and environmental scientist, worked at UNR for 23 years for health and safety department. She will discuss the geology and faults hazards. Development in fault areas should be discouraged to protect public safety. Ascente has more than one fault. Insufficient and incomplete is how Ascente’s own geology team classified their geotechnical research report. Adding that ‘a field exploration sampling and testing program should be complete to verify. There are no question that the faults are there as determined by State and Washoe County geologists. The faults are there, but don’t know where they are. She showed on a map the faults stop on the Ascente map. The faults don’t stop at the northern property and extend into the property.

Kris Hemline spoke about environmental impact assessment. No geotechnical study has been conducted. How can they make assumptions. Need robust geotechnical studies. Mt Rose Estates conducted this study as required. They have to conduct 600 cubic yard blasting and grading. They don’t know how deep they will have to blast or grade. How will they protect the community. How will the blasting be mitigated. They don’t have any data. How can they conduct this without field data. The potential geological hazards are not documented. We need to see how.

Jack Broadhurts said he lives on Goldenrod Drive; he showed a slide of Fawn Lane with Callahan ranch; emergency exits cross the faults. The prior owner, Hans Burkhart, left this area a park due to the faults. According to County development code – development in earthquake fault area is to be discouraged. No habitable structure or structure whose integrity is critical to maintaining the public health and safety, shall be located on a fault that has been active during the Holocene epoch of geologic time or as determined by site specific geologic study.

Chip Porter said he is a geological engineer and this is insufficient geological study. He provided detail study to Washoe County staff. His consulting company use to be hired to find active faults. He showed two geological maps spliced together to show faults crossing and entering the subject site. The Ascente project is located with faults projecting into the site. There is a boundary fault on the heavy development part of the site and they are active. The estates development identified the faults and submitted plans of development to avoid building on the faults. The red lines on the map show suspect faults. They have done no work to identify the faults and activities. In absence of research, I urge you to deny this project.

John Beach said he lives off of Callahan Road. August 2016, Robert Parker said in a report in the RGJ that the soil in the Ascente project reported lead on the property. He produced environmental toxic studies for 32 years. He worked with the EPA for 14 years for clean-up sites. They don’t have enough kind of measurements of concentrations with soil samples. They didn’t take enough sampling. The back ground analysis was bad. Contamination is there, and they don’t how much is there. Data shows the concentrations are above EPA numbers of the site. It’s the County responsibility. Deny the application until correct sampling to show adults and children will be safe.

Public member said this proposal calls for 2.5 years for preparation. Ascente studies said the toughest rocks are on the site. The pad for water tank site requires rock removal. Ascente’s own geological study says ‘soils are very shallow before hitting bedrock.’ They have to remove the rocks. The County must conduct soil and geological studies. The proposal states that no material will be imported or exported during the construction phase (except for asphalt and cement). So all rock that is to be moved must be crushed on site allowed for backfill of trenches and building pads. Their proposal doesn’t indicate what they will do with all this rock.

Janis Foltz said crushers would be located on site, 300 yards from existing homes or less. The construction process is schedule of 2.5 years. Not to mention the dust. The forest plan says this can't be forced on other communities. County precedent has not allowed rock crushing next to existing neighborhoods and should not be allowed here. 1000 yards of andsite rock should not be crushed on their property. Impact of quality of life and dust. They must haul if they don't crush on site. The only route would be Fawn lane – 30,000 trips of 10 yard containers hauling off site. What would this do to the road and existing neighbors. How can they move forward without addressing this issue. They do not have the right to harm their neighbors.

Nancy Davis spoke about amount of grading for non typical terrain and trenching; they expect to conduct extensive blasting. There are many protocols when you are blasting. We don't know what Ascente's protocols will be. Continuous blast monitoring stations will be needed for the protection of existing residents located within the blasting zone. Fly rock can easily escape blasting pads damaging nearby homes. This will go on for 2.5 years. Where do homeowners go to? Livestock and pets along with residents will have a very hard time dealing with 2 years of blasting. Wells will be affected in the area. If it is affected, the home could be abandoned because they can't connect to municipal water. Can they get their repairs paid by the LLC. There needs to be restrictions on traveling on roads during blasting. There are no fire hydrants on Fawn Lane areas. Ascente has a right to do what they want on their property, but not affect other communities.

Marty Moran said he is on ground zero where all is happening. All the sound generated. He investigated the sound of a tractor and it's 85db. There will be a lot of tractors idle. Within the zone of 10-300 yards within Ascente, workers have to wear hard hat and hearing protection. Neighbors don't have this protection. Rock crushers and tractors can be louder than 100 db. The current residential and rural character of the neighborhood should not be made to suffer 2.5 years of construction noise, blasting and rock crushing. Forest planning area document states that they cannot have a cut greater than 8 feet. Tentative map talks about cut and roads of 96 foot cut and fill. Does Ascente have the best plan for the area. The next issue is water – 25 million gallons for construction. There is no mention of where the construction site will get its water. Will it use the same potable water that the neighborhood uses or will it import all the water from outside sources.

Joel Ellis said he has lived on Fawn Lane for 30 years. This site will need many millions of gallons of water to control dust and for compaction over the 2.5 year life for the construction. They will bring dump trucks, construction trucks. We already have a water problem; don't just dump it on the ground for this development. If the water source is somewhere outside the construction site, our roads must support the weight of the daily supply of water. He said he won't be able to pull out of his driveway with all the construction traffic. The size and nature of the road cut that will link all three subdivisions is not allowed under the forest plan. We bought out there because it's quiet. We are long time resident – concern with safety, construction. We don't see our livelihood destroyed.

Marium Samuelson said the residents of community came together because our neighborhood is at risk. We bought because we love the character of the subdivision. There is plenty of space around our home. The traffic won't allow for us to walk the neighborhood. We can hear the wildlife and the dark skies allow us to reflect our quality of life in this area. The character statement outlines the growth and desired character. We spent time and energy towards rural character for chickens, donkeys, and vineyards. This plan will drastically change this. 800 car trips on our quiet roads. Continuous noise and damage on roads; this will impact the quality of life.

Julie Moran spoke about rights and responsibility. The forest area plan outlines future development. Washoe County and residents worked hard to development plan. The forest area plan, the impact of development , must be mitigated – including but not limited, parcel matching, consultation and cooperation, and should conform to policy. The plan says Development will blend with nearby development, and will be compatible and enhance scenic corridor and enhance character area. Please reflect if this plan meets the blend. She showed a google earth map and overlay of development. It will take up all the area. It's not a neighborhood view shed. It doesn't keep the integrity. It negatively impacts and doesn't mitigate issues.

Mary Cook spoke about Ascente's proposal seismic shaking, flood, and traffic increases - it will create chaos during evacuation. Ascente does have a right to development, but don't have the right to impact downstream neighbors. Neighborhood roads increase is unacceptable - 200% increase in traffic. The streets are narrow. We are at risk of harm; it's a burden. Fire and danger is potential risk. The Callahan and Fawn Lane have received two evacuation orders in the past few years. There is no fire fighting access. There are no hydrants. Fires in the area move out of the southwest. During red flag days, fires can move 3 miles per hour. There are only two exits, which will be compromised. They must show the potential fire mitigations.

Kailey spoke about trail connectivity. We appreciate the access to trails. The trails proposed are too steep. Concerns are not being addressed. They have not addressed the mitigation to infrastructure regarding fire protection and fire exits. We ask the County to go back to the drawing boards.

Laura McHarg said this is an unsafe, unacceptable proposal. Insurance bond and cash bond is how most municipalities handle risk. No offers to build walkways, parks, roadways. It's full of what if. What about current residents and accountability for potential damages by poor performance by the contractor.

Chuck Price spoke about what happens when an LLC fails. Washoe County and tax payers lose if they fail to meet financial obligations. We require a cash bond during damages during site preparation. They should hold a bond for 3 years after completion to make sure all mistakes have been taken care of. Abandonment would leave a huge scar for tax payers to clean up. Do you remember the Reynen and Bardis/Callamont scare. Abandonment of the project is very possible due to the geological issues that this project will face. The abandonment would leave a huge scar on the face of the Steamboat hills with the tax payers. It makes good neighbors. Traffic studies are just studies and not what will actually happen. We just wait to see what the public really does. They will not undertake any infrastructure upgrades. The bond can pay for the upgrades. Bond should be 3 years beyond final buildout. Should tax payers pay for those shortcomings.

Gretchen Kvaal said there are 100 private wells. Who will fix the loss of water level or damage to the wells. There will be blasting and shaking. What will be the effect to the well. No one will guarantee. Monteaux development impacted the wells in Callahan Ranch before and paid for residents to connect to municipal water source who had damaged wells. 5, 10, 50 or 100 year flood events, and could Ascente make flooding worse. Ascente geological report said blasting could cause damage to properties and wells. Who will pay for the damage. We are asking for a cash bond to protect residents and County.

Russell Monette is a 23 year resident. Appropriate mitigation would include open space buffering and matching lot with community consultation; must show how that will conform to this policy. Allow for zoning changes, Ascente, the forest area plan requires buffering, MRMOD, to separate the current residents from new resident. If it isn't maintained after build out, cash bond can pay for these issues. According to Forest plan F218E, suburban rural character requires buffering with open space, ridges, outcropping or landscaping. Trails and trailhead parking can be covered in cash bond to protect the current residents. When you move the dirt in Nevada and you have a dust storm. A cash bond can help with dust.

Martha Campbell said traffic will increase on adjacent road by 40% with no mitigations. It will have negative impact. Assumptions in traffic impact study are flawed: 45% more projected traffic, report claims. Traffic estimates are low balled. The traffic report assumes only Donner Village will use Shawna Lane as its primary access – this is unrealistic. If only 3 Whitney village homes choose to use Shawna Lane, Cherrywood become a collector street with requisite improvements. Traffic study does not account for cumulative. Callahan road will see increase of 800 trips a day based on the Ascente traffic plan plus 2,000 more trips of the already approved projects. This brings Callahan road to near capacity of 95%, the intersection will be over capacity. Models are no better than the assumptions that go into them.

Ruth Hagan said she lives on Mountain Shadow Lane; she spoke about Mt. Rose access at Thomas Creek Road. Original developer of Madera Ridge, Hugh Hemple, received special zoning in the Madera ridge plan based on implied access from the proposed collector at the stop light on Mt. Rose. The Thomas creek intersection should logically then be the main access for this development. Safety is the most important reason that Ascente obtain direct access to the project off Mt. rose highway. And by the way, the project includes just under a million dollars in regional road impact fees. There is no guarantee. Yellow line shows phase II development from Thomas Creek road. Ascente has another 300+ homes planned for Phase II. The traffic study is a Trojan horse waiting for the phase I to be approved.

Janet Raydon said Ascente will add 2,000-4,000 new tips to existing roads but has no funds directed to improve them. Why are there codes. Lot adjacency standard states that parcel size matching is required. If you put a new subdivision in, you have to match the lots. The buffering was addressed but does not follow the law. It proposes a 40 foot buffer, they need 200 feet. Without paths or sidewalks, how do we ride our bikes or jog. Tannerwood drive has no sidewalks, please remember our safety and quality of life contrary to Ascente conclusions.

Sandy Evarts said they live adjacent to project. He showed a presentation of storm water path. He spoke about the drainage report. The problem there is no well definite drainage network. Flooding is a common problem since 2005 when changes were made. He spoke about drainage prior to 2002; it was intercepted with ditches. Clearing vegetation created runoff. Storm water from area south of Fawn Lane followed a path along the base of the Steamboat hills. It traverses some County right-a-ways but mostly private properties. He showed pictures from this past winter with flow paths. There are no drainage easement on private properties.

Lisa Madison spoke about Ascente storm water flood path across properties and overflow paths. Very few flow paths are on County easements. She showed pictures of excess of stormwater and flow path on private backyards. Storm water discharge from primary

and secondary flow channels. The fish pond was filled with silt. Runoff from Ascentee from the property south of Fawn Lane was greatly enhanced by brush removal and soil compaction. This work was conducted by previous owners of the Ascente property.

Trudy Allen spoke about Ascente storm water runoff conceptual drainage report. Detention basins at low impact design. Ascente HEC model of storm water runoff from their first proposal. No outlet 1 to Cedarwood drive Q5= 21.3 cfs and Q100=225 cfs. By law a developer must maintain the same level of storm water runoff that naturally occurs at a project site. It was fortuitous that in October 2016, we had 5 year event. This information was passed on to the County who gave it to Ascente. She showed a graph of Callahan ranch precipitation January 4 -10 cumulative water of two storms.

Sue Gulas spoke about Ascente post storm calibration; she identified a channel where storm water leaves their property, they estimated discharge from the 100 year storm. They estimated the parameters and estimated the discharge. She showed a HEC modeling. They now estimate the outflow of Sierra Village from 5 year event 4.5 cubic feet per second. They estimated it down from previous proposal. A 1.5 foot H-flume was installed on private property where runoff from Ascente's property could be measured. It was used to calculate discharge – it was much more accurate than Ascente's estimates. She showed the interval storm, and total discharge graph for January 4th, 5 year event.

David Sater showed a graph that showed rainfall and runoff and the lagtime graph. He said a culvert on Shawna Lane clogged with sediment from the Ascente property which diverted some of the storm water away from the drainage ditch and H-flume. One of the alternative storm water flow paths when discharge excess 2 cubic feet per second. Washoe County suggested Ascente use low impact design to reduce storm water runoff. This is a great idea. Ground water recharge is very important in our area where declining water levels have been occurring for many years. Ascente is putting homes and roads on all the flat areas of project site. There will be no place to put storm water runoff.

Ryan Loetscher said Ascente modeling effort still over predicts storm water runoff from their property adjacent to Fawn Lane. Need to keep their storm water discharge to Cedarwood drive to 1.3 cfs for 5 year recurrence interval storm. Should work with property owners to lessen their storm water impacts to existing neighborhood. Need to describe in detail their low impact design entails and how it will be implemented. The county needs to impose a cash bond on Ascente in the event their storm water runoff floods existing neighborhoods. After all of this, there is no way, by good conscious or law, should they build. None of these people are going anywhere if this gets approved. There are traffic, flood and safety concerns.

Lee Connolly said they have lived on Fawn Lane for 17 years. He said it's about the way of life. He said he was considering open growth. He said hearing the lack of honesty and is against it. It doesn't matter where you live, it will negatively impact us. There will be more traffic and less safety. You are not going to control the flooding. It's only down 50 homes from the first proposal. A horse trail, a horse path down Fawn Lane. He said he is not going to ride a horse on Fawn Lane. And to install a pedestrian or equestrian or path will take away from personal property. He said he wants his way of life. He said he wants to know where the developers live so I can drive 3,000 a day to see how they like it. Does no body believe in horse properties anymore. He said he doesn't want to see stucco homes outside his window. He said neighbors have to disclose there is this development coming when trying to sell their home. Lee said Fawn Ln is a corridor road. He said he didn't realize it. It's easy to support when it doesn't affect them.

Ken Taylor thanked the neighbors for presentation. There are problems with project. Geotechnical, traffic, please consider.

Karen Holstrom said she lives on Goldenrod. She spoke about noise from blasting. How many of you hear the Mt. Rose avalanche blasting, and the 580 construction blasting. Please take that into consideration. She said her road with increase traffic will be detrimental. It will be an impact during walks.

Ginger Pierce said she use to be the CAB president. She said Bridge over Galena creek install was delayed due to fault. Galena means Lead. Why were the 3 previous owners so eager to sell to us. How many water rights do you own? They don't come with the land. You must purchase it. Do you have a 'will serve; from TMWA.

Lynn Chesco asked the board to consider the traffic and rural roads with no shoulders. We have kids riding up and down Callahan and people walking dogs and horses. We live in snow country which narrows the roads with berms. The weather changes drastically as you go up. Consider the connector roads. They have not been maintained. Please consider this project carefully.

MOTION: Pat Phillips moved to deny approval until problems discussed be addressed. Jason Katz seconded the motion. Motion passed unanimously.

Jim Rummings said we will pass these comments along to the County. Jason Katz said he recommends the County review the blasting and water flow issues.



South Truckee Meadows/Washoe Valley Citizen Advisory Board

DRAFT: Approval of these draft minutes, or any changes to the draft minutes, will be reflected in writing in the next meeting minutes and/or in the minutes of any future meeting where changes to these minutes are approved by the CAB. Minutes of the regular meeting of the South Truckee Meadows Citizen Advisory Board held November 10, 2016, at 6:00 P.M. at the South Valleys Library at 15650A Wedge Parkway, Reno, Nevada.

1. *CALL TO ORDER/ DETERMINATION OF QUORUM - Meeting was called to order at 6:00PM

Member Present: Jim Rummings, Patricia Phillips, Marsy Kupfersmith (alternate), Bob Vaught (alternate), Jason Katz, Steven Kelly, Kimberly Rossiter. A quorum was determined.

2. *PLEDGE OF ALLEGIANCE - Jim Rummings led the Pledge of Allegiance

3. *PUBLIC COMMENT - No public comment.

4. APPROVAL OF AGENDA FOR THE MEETING OF NOVEMBER 10, 2016 - Jason Katz moved to approve the agenda for November 10, 2016. Patricia Phillips seconded the motion to approve the agenda for November 10, 2016. Motion passed unanimously.

5. APPROVAL OF THE MINUTES FOR THE MEETING OF SEPTEMBER 8, 2016 – Steven Kelly moved to approve the meeting minutes of September 8, 2016. Jason Katz seconded the motion to approve the meeting minutes of September 8, 2016. Motion passed unanimously.

6.*PUBLIC OFFICIAL REPORTS -

6A. *Washoe County Commissioner –Please feel free to contact Commissioner Lucey at blucey@washoecounty.us or (775) 328-2012.

Bob Lucey apologized for being late. He said it's exciting to see the attendance tonight with very active citizens. Commissioner Lucey gave an update

Fire Station Project: He discussed road concerns on Foothill; he said he sits on RTC and they are working to make improvements on Foothill to improve public safety. The fire station's location is paramount. It services the south, foothills, southern parts of area, Holcomb Ranch. This will improve service times. Chief Moore has worked diligently to improve the coverage and service response times. We have difficulty servicing the areas due to the county map. He said he pledges to make sure that station doesn't interrupt the community.

Little Valley Fire: He said they are doing what they can do work with the families who were affected by the fire. He thanked TMFPD for their hard work. Chief Moore and his staff worked diligently in those conditions. No air supports, and they fought by hand crews. 23 homes were lost. They are working with social services for those families. Commissioner Lucey thanked Sarah Tone for working with the families.

Elections: He said no matter what the outcome is, we will make it work. He said recreational Marijuana passed; gun laws passed for background pass; deregulations of energy. He said we lost key race seats on federal delegations. He said he will be working with incoming senators.

Public forums: Outreach process formatted to encourage participation instead of structured meeting. He said they host public forums to encourage feedback. He asked the audience what they want to hear and discuss: Public safety

Ascenté project: He said he has spoken to residents and developers. He said he has concerns about the development. He said this is a place to voice concerns. He said he has concerns about entrance and exits on Fawn Lane and local impacts to the area. He said he is in discussions with staff.

Federal Public Land Bill: Currently in the process of drafting legislation for congress. He said he met with groups about getting access. He said its recognize as Washoe County Economic and Conservation bill. The driving factor behind the bill is to get control of the usage of our land. Nevada is the 3rd most urbanized state – Reno, Sparks, Las Vegas, and the rest of land is Fed government land, approximately 85%. The other counties have been working on lands bills as well. He said they are working together to get aspects right with wilderness, OHV, ranchers, farmers, public. He said they want to make sure all entities concerns are met. If you have concerns, please visit our website: www.washoecounty.us. He said there will be more public forums to discuss those issues.

7. DEVELOPMENT PROJECTS – The project description is provided below with links to the application or you may visit the Planning and Development Division website and select the Application Submittals page: www.washoecounty.us/comdev/da/da_index.htm.

7A. Special Use Permit Case Number SB16-010 (Truckee Meadows Fire Protection District, Station Number 14) – Request for community feedback, discussion and possible recommendation to approve the construction and operation of a new fire station (Safety Services Use Type).

- **Applicant/Property Owner:** Truckee Meadows Fire Protection District.
- **Location:** Southeast corner of Foothill Road and Broken Hill Road
- **Assessor's Parcel Number:** 044-300-19
- **Staff:** Roger Pelham, 775-328-3622, rpelham@washoecounty.us
- **Reviewing Body:** This case is tentatively scheduled to be heard by the Board of Adjustment Dec 1, 2016

Angela Fuss, CFA, gave a presentation:

- Truckee Meadows Fire Protection District Station #14 Special Use Permit
- Allow relocating fire station to new location
- Existing fire station was originally volunteer fire station then became a permanent fire station 30 years ago. It's was a Reno fire station owned by TMFPD. After the deconsolidation, it became TMFPD station; it wasn't a feasible fire station. The location doesn't work. It's old, dated, disrepair.
- New location will serves Reno to Storey County border. It needs to be centrally located.
- New site is located on Foothill and Brokenhill Road which is great access to S. Virginia and 395.
- The new station will sit on a 3 acre parcel, zoned MDS medium density suburban
- Residential properties near the new location

She reviewed the site plan:

- 10K sq ft building
- Parking areas
- Sidewalks
- Signal lighting/emergency vehicle crossing signal and striping
- Future expansion: training tower, living quarters for fire fighters, chief and battalion chief. 48 hour shifts. Parking for public is off of Foothill Road. Brokenhill drive is for employees. The fire trucks will be go east away from residential development. They have added features such as sidewalks, signal lighting, signage and striping.
- Future expansion will include a training tower will be built within the next few years along with the expansion.

- Landscaping: 35 trees providing
- Landscaping required (20%)
- Angela showed a site design concept of the building
- It will be placed on a vacant lot
- The property surround land is mixed use in Reno

Comments:

- Susan Gulas said it's a rural road. She is concerned for the road in and out. She asked if there will be more than one lane for the trucks. Angela said the trucks will leave on Foothill. She said in the future, they may widen the road, but doesn't need to widen it now. This station currently gets 2-10 calls a day; it won't get a lot of activity.
- Jim Rummings asked about the cattle. She said none are that lot.
- Nancy Davis asked about plans for solar panel for roofs. Angela said those aren't in the plan.
- Jason Katz asked about the location. It's across the street from residences. He asked why it wasn't moved further away. Angela showed the map and its benefits of location. Secondary access is possible at this location.
- The drive way is 60 foot wide. They will have the ability to use that space.
- Patricia asked about the sirens. Angela said there are policies about sirens they follow.
- Jason Katz asked if this is standard to build in residential versus commercial. Angela said there is no standard. They need to honor their 8 minute response time and this location would accomplish that response time.
- Jason asked about feedback from the neighbors. Angela said they sent letters to the surrounding area. December 1st, this case will go before the Board of Adjustments meeting. She said she received one email.
- Sherry Banter asked what will happen to the old facility. Charlie Moore said they will most likely sell the property.

MOTION: Steven Kelly moved to approve Case Number SB16-010. Jason Katz seconded the motion to approve the Case number SB16-010. The motion passed unanimously.

7B. Tentative Subdivision Map Case Number TM16-009 (Ascenté) and Special Use Permit SW16-003 –

Request for community feedback, discussion and possible recommendation to approve the first phase of a merger and re-subdivision of two parcels totaling 632 acres to create a 281 lot single family common open space subdivision. Lots will range in size from 10,200 square feet (.23 acres) to 80,900 square feet (1.85 acres) with lot sizes averaging approximately 21,300 square feet (.49 acres). Special use permit request is for review for approval of a 560,000 gallon water storage tank to support the Ascenté development on a proposed 1.32 acre site within the 632 acre Ascenté property.

- **Applicant/Property Owner:** Symbio Development, LLC.
- **Location:** South of Fawn Lane and East of Shawna Lane
- **Assessor's Parcel Number(s):** 045-252-14 & 15
- **Staff:** Washoe County Senior Planner Trevor Lloyd, 775-328-3620, tlloyd@washoecounty.us Washoe County Planner Kelly Mullin, 775-328-3608, kmullin@washoecounty.us
- **Reviewing Body:** This case is tentatively scheduled to be heard by the Planning Commission Jan 3, 2016

Angela Fuss gave a presentation for Phase 1, tentative map for Ascenté

- 281 luxury homes
- 632 acres; 1 mile south Mt. Rose Highway
- Privately owned land for 100 years.

History of the property:

Forest area plan update – policy document

- 2010 the plan was adoption – 3-4 years of meetings to discuss forest area development.
- MRMUOD (Matera Ridge Mixed use overlay district)
- Approved zoning for 632 homes, common open space development
- Reached out to community before submitting applications
- Reached out to 500 property owners. Fawn to Callahan. 118 for first community meeting, 57 at second meeting; toured site, HOA meetings
- Tentative map – creates new parcels
- Preliminary studies: sewer, drainage, utilities, water, traffic, geotechnical, cultural, etc.
- Phase 1 – 281 lots on 281 acres (1 home per acre)

- Common open space – average lot size ½ acre; 43% open space as part of the design
- Access: Fawn Lane; Shawna lane; brushwood way
- Based on the meetings – this is what they told us about access.
- County sewer lines – TMWA
- Common open space – allows for protection of habitat, recharge area and open space. She said common open space will provide trails maintained by HOA.
- Trail network: Equestrian use; mountain biking; pedestrian; public access; tied to forest service to the north and east.
- Trailhead signage.

Tentative map, public hearing process

- Final map – final design process – reviewed at the staff level
- Market research: Need for luxury living \$600-950K base price. Providing amenities as part of the map.
- Timeline: Build out in 2018; final build out by 2025. Subject to continued market demand. She said they are the master developers; the home builders will have the site plans.

Design guidelines:

- Front yard xeriscape landscaping; water conservation; trails; signage; lighting; grading; rockery walls; fencing types; buffering; building height limitations; CC&Rs, conditioned with tentative map; recorded with the final map. Connected to the property for the lifetime of the property.
- Defensible space guidelines
- Residential fire sprinklers
- Cul-de-sacs

Traffic:

- Two points of access: Fawn Lane primary, Shawna Lane is secondary
- 70% would use Fawn Lane
- Brushwood would be emergency gate access
- Cedarwood Drive would not be a vehicular access
- Over \$1.2K in impact fees

New traffic:

- ITE study used national standard rate: 9.52 daily trips per home on average
- Fawn lane homes currently generate less at 6.63 trips per home
- Washoe County averages 8.27 trips per single family resident unit (2012)
- Acceptable levels of service – Service level D; service levels are met with this project.
- The traffic engineer reviewed the design criteria standard & Land Use Transportation element policies – there is flexibility with carrying capacity of the roadways of new and existing.
- Discussing a proposed acceleration lane on Mt. Rose/Fawn lane
- Add an equestrian path on Fawn Lane
- School bus waiting area on Goldenrod Drive (widest area; opportunity for bus stop)

Angela referred an article about concerns about lead

Facts about lead:

- 88 different soil samples; there is no lead
- Washoe County Health said there is no concern for lead
- EPA Federal level for residential is 400 ppm
- Nevada levels are 21.14 ppm; Ascenté property had 14 ppm levels

Geotechnical review:

- Soil conditions, fault lines, ground water
- There is no active fault
- Final design will conduct how deep the soil and soil conditions

Facts about water:

- TMWA will provide water
- They will pay for supplemental water rights – they currently have 200 acre feet of water rights
- Putting water in the mid well; TMWA took over in 2015, they have been putting water in the wells.
- Zero impact on ground water
- Each unit will pay a connection fee of \$10K per unit for putting water in wells.

Drainage: Detention basin designed per requirement

- 4 detention basins
- Designed to handle storms flows from 5 year and 100 year storm events.
- Complies with the Truckee Meadows Regional Drainage manual
- Utilizes low impact design standards
- Reduces runoff

Facts about schools:

- Zoned for Hunsberger Elementary, Pine Middle School, Galena High school.

Conclusion:

- History – privately owned; 2010 zoned for development
- Conformance with zoning
- Provides public access to trails and open space
- Design guidelines to enforce development
- No impact on surrounding wells/septic users

Brian Raydon said there are issues with governing document, the Washoe County Forest Area Plan. He also spoke about traffic. Traffic study shows 2,600 trips, but it claims no significant impacts. He appreciates the equestrian trail. He spoke about said openness, the buffering; Washoe County Development standards of 12K sq ft. Buffering and the parcel size match. He said buffering needs to be established. He said he has concerns with Traffic. He said he doesn't agree with it. More homes would make certain roads become collector status. There is no place to go or walk when there is more traffic.

Brad Lyles said he is concerns with traffic. He said he walks his dogs; he is opposed to them using Shawna Lane. He said he is in favor of them using Thomas Creek Road. He said the county commissioner mentioned his concerns. He said he has lived in Callahan Ranch for a long time. He said the fault maps have been proposed are not adequate. They couldn't trench to conduct a study. They need to finish their geologic study. He said don't accept this until they finish.

Todd Maher spoke about surface water drainage on Steamboat where it will be developed. He said Callahan got developed with drainage down Cherrywood. He showed a runoff display. He said in the 2000s, sagebrush was cleared, and storm water runoff came down the path (the red trail on his display). He said in the Winter of 2006 was a big winter, filled and overflowed and damaged parts of Callahan from flooding. Ascenté developers determined some pre-existing conditions and estimated the capacity during a flood. He said we had a flooding event on October 16. It was more like 1 or 2 cu ft per second. Something has to be done with the storm water system.

He spoke about ground water. He said the basin was designated in 1988 – 1978 and it was over developed. There were water problems back then. Sierra reflections, St. James, Calle Monte were developed. There were ground water issues. The conjunctive use program by TMWA is to pump water from Truckee, blending with ground water in subbasin; an aquifer recovery program. He said the domestic wells have problems. We had to supply 2 acre feet per home of water rights; if the house uses more water than 6.5 acre feet, then TMWA will be responsible to supply the difference between assigned and used water. 1:1 basis from the Thomas Creek aquifer recovery is not yet proven.

Chuck Price said this is a severe impact on school district. He said his 3 children attended those schools. He believe the kids will not receive the same education with the Ascenté project. Growth will make impacts on the

schools. Hunsberger is overcrowded. The passage of WC1 will start the relief, but we might be forced to become multitrack and multi sessions. The struggling student will struggle to join the workforce. It's not right for our children or our community.

Ken Allen said he lives on Shawna Lane, front and center of the controversy. He gave 12 points of contention for the Ascenté project. There are 3 different area plans: Washoe County, Forest Plan, and Scenic Highway. These are important, and they need to meet the regulations. There are 5 LLCs; the property has been cut up with limited liability. There are surrounding neighborhoods that will be impacted if something goes wrong. Ascenté can walk away and we are left with it. He said we need to be good neighbors. If they break it, overwhelm, destroy, they need to pay for it. The developers' infrastructure is paid by the developer. It will carry it on our shoulders. He asked how we make them a good neighbor. He said he builds drugstores and puts up bonds. He said we could do this here. \$10 million dollar bond for 10 years. This project is not necessary. An additional access road is planned for phase 2. He said they are going to add 300 homes to the same exits. He said there is a fault all over this land. Additional exits will require cuts for the solid rock. It will facilitate their phase 2. He said we can close Shawna to fire exit, close Brushwood to fire exit, and Fawn Lane for fire exit. He said the geography creates an amphitheater. He said we must require the sight and sound buffering before they lower the first blade. In the geological report, blasting is required. He asked what they going to do with the neighbors. What do with the horses do when they blast. This is not a good project. It has problems. Water has been mentioned. He said in regards to the bond, if they crack the aquifer during blasting, they are done. He said each lot will be able to see each other. He said you shouldn't be able to see them according to the forest plan. There are geological issues. They want to put in 230 pads. It took them a month to build one. There are 3 trenches required; if they can't do that, and they walk, we have nothing unless they have a bond. We need another traffic study. He said they underestimated. They didn't mention Shawna Lane. Traffic will move from Rural to Collector status. They can't bring a D10 down our roads, they can't make our turns. There are no street lights, and we walk our dogs on the roads. 2,000 cars are going down the roads every day. Once they get in, they will have to move massive amounts of materials. The open spaces proposed are on 30 degree slopes. There is no trailhead parking. They don't exit the property as currently proposed. If we go to the next step, we need a bond in order to not put it on the tax payers' shoulders. He said he was a developer. This will raise the price of the new lots by \$2K with a bond. This will give current homeowners insurance. If there is a bond, they broke it, they will fix it.

Ken Genz he said he has lived on Fawn Lane for 40 years. He said it's too emotional for this. He said he has always lived in a rural place. The county changed his zoning from rural into a suburban. He said when we first moved there, it was a dirt road to Callahan and cows; most of the Callahan family left. He said there has been fires, earth quakes. He said he has been snowed-in and snowed out during the years. He said he doesn't think he will survive. He said he ran livestock all his life. He asked if they hired someone from New York City to develop the trails. He said they propose a drainage pit and trailhead on the same side on his property. He said you don't hear about the human side. He said they grew up on dirt roads. He said 12 years ago, they started leveling for Sierra Village. He said they live on the low end of the aquifer. 45 residence had to re-drilled their wells. He said the committed use on the aquifer is over 113%. He said you will hear more from me in writing.

Ginger Pierce said she was the CAB chair during the area plan. She said she is working on the Pleasant Valley Area Plan. She said they didn't know this group is fighters. The developers are the 3rd; there were two others that went belly up. She said some of the new wells are not legal. She asked for a TMWA well survey. She said there are fault lines. There is one between her house and garage and it has moved an inch since she bought there. The new bridge has moved 4.5 inches. She said she expects to see everyone next year.

Cathy G. said she is underwater after the 5 year flood problem that occurred a month ago. It's not from rain coming from her property. She said it comes from Mt. Rose estates, going over the holding area into the center of her property. She said if it's on your property, it's not a county property. She asked how she will address that now and in the future with the Ascenté property. She asked if she will have to put drainage to avert Ascenté.

Dan Graffam said he has lived in Callahan Ranch for 30 years. He said he was a former land planner in the area. He said he can provide insight. The earth quakes and faults have affected the area. WC1 did pass; that area is scheduled for anything except for a middle school. The overcrowded schools will get the attention first. We are on the low end of the list. He read Forest Service Plan, F2.1 about parcel mapping. He said there are

severe grading limits. He explained the cuts and slopes and degrees in the development. He said he has been disillusioned by being a developer in this area.

Sandy Evarts said his property abuts the Ascenté project. He displayed a map. He reviewed the 4 detention ponds. He showed a picture of the Mt. Rose detention pond during the October 16 rain. Once it fills, it overflows. He said he wants to see a dam system. He showed a picture of flooding from the rain that crosses properties. He showed a picture of a culvert and drop box to take the water under the property onto another culvert and drop box, and onto Susan's property. In the October storm, the ditch overflowed onto her property. It flows besides her fence into the culvert. He showed the movement of water through properties. He said retention pond has filled several times over the years. He showed land with an earthquake fault. He showed a fish pond. He showed the property damage on the drainage path, retention damage.

Janice Melena said she lives in Callahan Ranch. She said she is concerned about noise levels due to traffic, trash, county services, school buses, neighbors, construction, blasting and clearing. The proposed area is in a canyon. On Callahan, if those roads can't take that traffic from these services, they will be diverted to Callahan. There will be loss of wilderness views. She said we haven't heard anything about wildlife impact. She said when you put more homes the wildlife won't have a place to go. There will be ambient lighting from additional housing. She said one acre lot sizes would be more appropriate.

Amanda Safford said she lives in Callahan ranch. She said these are resources without contributions. They will use existing county roads for construction and access. The small neighborhoods will be inundated. Access isn't direct. There are blind corners. There are some roads not included on their traffic study. There will be increased traffic, noise, and dust. It will shift the character of the neighborhood. They have proposed improvements to current infrastructure except for Fawn which is sufficient. No traffic calming proposed. The developer proposes road building to Mt Rose in phase 2. They should start phase 2 before phase 1. No parks or schools are proposed in the development. The trails are difficult for a lot of us. They aren't contributing. We haven't heard enough about the wildlife impact. They will take a lot and contribute a little. Needs to enhance, not destroy our community.

Jeff Church said to visit the website www.mtrosesceniccorridor.com website. He said they fought previously proposed development which is now deforested, gravel, and an eyesore. He said they have boxes of photographs. They fought Matera Ridge. CC&Rs can be changed unless it's deeded with the property. He said if he can't have 2-3 houses on his property, neither can they. He said Chief Green said he opposed this development. The County Road 49 is on the map. They can use that without coming down other properties. Fawn is not a collector. It has no sidewalks, people back their cars into that street; there are 3 bus stops on that street. It doesn't meet the definition of collector. He said we will see promises broken. He said he couldn't get in and out with the fire evacuation. The WC1 figures are flawed. It's in litigations. In 2010, Matera Ridge promised to put land aside for schools and parks. He said when they say 'open space,' it means it's too slope to build on.

Lee Conley said he lives on Fawn Lane. He had his neighbors raise their hands. He said we have technical things that need to be taken care of. Way of life hasn't been addressed. He said he plans on dying on Fawn Lane. He said there is already traffic. He said we brought on Fawn Lane in order to ride his horses. He said there isn't anywhere for a horse trail. He said there is going to be 681 houses. Issues will be compounded. Fawn Lane is not a collector street. Development needs to be responsible. It's not acceptable.

Shari Bainter requested a copy of the presentation

John Royce said he has been on Mountain Meadow Lane for 40 years. He said he built some of the homes in the 1970s in the Callahan Ranch area. He said he had to deepen the well. He said the county said they would pay for it the first time and owner paid the second time. They want to put meters on wells and eliminate outside water. He said your gardens and trees are going to die. He said he doesn't want his water shut off due to poor calculations.

Mary Jo Spirow said she has been on Fawn Lane for 30 years. She said there are 300+ cars a day going down Fawn Lane. She said she doesn't want 1000 cars a day going down her street a day. There is no center line

divider; there are ditches. She said if they widen the road, then will you take our property. She asked where the sewer tie-ins are that they talked about. She said we aren't on the sewer. She asked where the water is going to come from. She said we don't want to hook into city water. We have livestock, raised children, and they love the water, and they don't want to lose that.

Cathy Bowling thanked Chairman Rummings for giving extra time to the speakers. She said she has been here a long time. The Ascenté geology study is inadequate. A geological engineer wrote a report based on Ascenté's report. She reviewed the fault lines maps. A developer already filed bankruptcy on 45 homes up there. They could exchange for forest service land that butts up to the highway. She said 3 sections of forest service land would solve their problems. She said they have information from an engineer from the Sommerset development. This is a much more challenging area. She encouraged the land swap to avoid challenges and problems.

Diana Langs said the Truckee Meadow plan has a constraints map. Anything over 30% incline, you can't develop on. The community development code did away with buffering to match the parcel; a 5 acre lot with 5 acre buffer which Mountain Gate had to match the buffering. Commissioner Lucey is proud of the bill he is sponsoring. They get first grab at the land, and developers get the second grabs. It will be developed within the next years. We need to work with Lucey to change the law of projects with significant impacts; projects of regional significances. That law needs to be changed back.

Ken Taylor said he has lived on Fawn Lane for 30 years. He spoke about the traffic issues on Fawn Lane. He said they have to conduct excavation of 1.6 million cubic yards which is a football field size with 1000 feet of material. People back cars into Fawn Lane, and there are bus routes. If this go forwards, there must be commitment for pedestrian on Fawn Lane which must happen before the project begins. There is no connection of Callahan to new project because of the gate. The houses will be 300 feet apart. You will have to drive 3 miles to go around because of the gate. There needs to be a connection. He understands that some want the gate to reduce traffic on their street, but unfortunately we need the access. The traffic impacts are more than what they say.

Trevor Lloyd, Washoe County Planner, said this project will be heard on January 3rd by the Planning Commission. He said they will be creating a staff report with recommendation. He said that will be available on the website. He said if you have your comments written please provide that to tlloyd@washoecounty.us or Kelly Mullen. He said we review those letters and forwarded it to the board. Jim Rummings asked for project updates. Trevor Lloyd said it would be premature to give an analysis prior to staff report. Trevor said we would like to have the report out prior to Christmas. It's ideal to get all materials from the public by the end of November.

Allen Gibson said he has been in Callahan for a long time. He said there are some lots of ¼ acre. He asked how that will impact the properties with greater acreage. He asked if they will be given presumptive entitlement. Trevor said anyone can request a change. Anyone is entitled to that request. It's a tentative map request process. If you wanted to change your uses, density, it's your right.

A public member said a bad fire; how do you address fire. Ascenté hasn't been able to answer our questions. It needs to be fully vetted before dumped on the planning commission.

Patricia Phillips said it's not their right to use the established neighborhood. They don't own you.

MOTION: Steven Kelly moved to deny the Ascenté project (Tentative Subdivision Map Case Number TM16-009). Patricia seconded the motion to deny the Ascenté project case number TM16-009. The vote was 4 to 1 in favor to deny the Ascenté project case TM16-009. Kimberly Rossiter voted against the denial. Kimberly said they are doing a good job of listening to the community.

8.*COUNTY UPDATE –Please feel free to contact the Office of the County Manager at (775) 328-2000. To sign up to receive email updates from the County visit www.washoecounty.us/cmail. (This item is for information only and no action will be taken by the CAB).

9.*CHAIRMAN/BOARD MEMBER ITEMS/NEXT AGENDA ITEMS - No items were discussed.

10.*PUBLIC COMMENT –

Troy Marley said capitalism is part of this world. He said he doesn't understand how density was put in place on that rural land. He said the flood plan is bad. They aren't thinking for the community. He thanked the county for looking into it. It's a mess. He said to soften the density in that area and reduce the impacts on that school, surround area.

A public member wanted to ask questions to the developers.

A public member said that we have to have an easement on their property, why don't they have to have them.

A public member said there will be tradesmen coming with landscapers, designers, fedex coming and going every day. The new homeowners will need these services.

A public member asked if there has been a study on Mt. Rose highway. Everyone has to wait to pull out into traffic.

Pete Stoke said the traffic study isn't accurate. The numbers don't jive. It's not equipped for those numbers.

ADJOURNMENT - the meeting adjourned at 9:00 p.m.

Number of CAB members present: 7

Number of Public Present: 150

Presence of Elected Officials: 1

Number of staff present: 3

Respectfully submitted by: Misty Moga



ENGINEERS ■ LAND SURVEYORS
PLANNERS ■ LANDSCAPE ARCHITECTS

May 15, 2017

Trevor Lloyd, Senior Planner
Washoe County Community Development
1001 E. 9th Street
Reno, NV 89512

RE: ASCENTÉ CAB COMMENT RESPONSE LETTER

Dear Trevor,

Below is a letter summarizing the November 10th and May 11th South Truckee Meadows/Washoe Valley Citizen Advisory Board (CAB) comments and questions on the Ascenté development. Most of the comments heard at the CAB meetings were in the form of statements and comments, rather than questions. The comments have been summarized and grouped according to topic area.

Geotechnical Comments

The public expressed concerns that the geotechnical information presented in the application is inadequate and did not include a field investigation.

The proposed request is a special use permit and tentative subdivision map. The Washoe County tentative map application requires submittal of a preliminary geotechnical report prepared by a Nevada registered civil engineer, including soils characteristics sufficient for use in tentative structural design (i.e. street sections, building pads, etc.) and potential geologic hazards. All this information has been submitted with the application package, as required. A final geotechnical investigation and report is not required by Washoe County Code for the tentative map entitlement process, as suggested by the public comment. A final geotechnical report, including field exploration, soil testing, rock rippability study, and recommendations are required and will be prepared with submittal of the final map.

Public comment indicated that massive blasting over a 2.5-year period will be required to construct the project.

The preliminary geotechnical report, dated April 12, 2017, states *“The shallow depth to bedrock can mean that heavy equipment, possibly blasting, will be needed to grade the site.”* As explained in the comments above, a rippability study will be conducted after the tentative map approval and prior to submittal of the final map to Washoe County. Rocky material is expected to be ripped using conventional earthmoving equipment. Blasting is not anticipated, however if required, a blasting mitigation program will be part of the

building/grading permit process and will be completed by qualified contractors together with ground vibration monitoring consultants.

Public comment indicated that half of the excavated rock will need to be hauled off-site or a crushing operation will be placed 300 yards from existing homes.

It is anticipated that rock excavated during construction will be placed on-site and as outlined in the application, as part of the areas of the project requiring fill. The project is designed to balance between cut and fill quantities resulting in no off-haul of excavated material. The public comments seemed to refer more to mining operations or operations associated with an aggregate facility, as described in Washoe County Development Code Article 332. An aggregate facility is not a part of this project nor this development application.

The Ascenté project is located with faults projecting onto the site. They have done no work to identify the faults.

Our preliminary review dated April 12, 2017 states: *“We reviewed the Preliminary Revised Geological Maps of the Reno Urban Area, Nevada published in 2011 by Ramelli, Henry, and Walker. (fig 7.) Ramelli, et al. shows a north/south trending possible concealed fault between the Tsd and Qol2 soils. The glacial fill masks the actual fault location and it is likely located some distance westerly of the Tsd and Qol2 surface interface. We recommend a site investigation by trenching to be conducted to prove or disprove the possible concealed fault location in the project area. This investigation should occur prior to final map.”* As stated in the preliminary report, a complete fault field investigation, including trenching, will occur prior to the final map. If active faults are found, appropriate setbacks to structures will be provided, as is like other developments in the immediate vicinity and greater Truckee Meadows area.

Grading Comments

Public comment indicated the project has 96 feet of cut depth.

The maximum cut depth is 29 feet with an average cut depth of 5.7 feet, as detailed on the tentative map grading plan. The overall earthwork grading has been reduced 64% between the initial tentative map submittal that had 281 lots and the proposed tentative map submittal with 225 lots.

Dust Comments

This project will cause dust during construction.

The project is required by Washoe County Code and NRS to obtain a dust permit from the Nevada Department of Environmental Protection. This permit will provide conditions to minimize dust from the project site.

Trail Comments

Public comment indicated the planned trails are too steep and access will be hampered after project development.

The private property is currently made up of existing trails that have been created over time by weather conditions and by people using the land for recreational use. The trails range from flat to greater than 30% slopes, with the flatter sections being near the existing residential areas. New pedestrian trails will be designed in accordance with acceptable trail standards. The US Forest Service Trail Accessibility Guidelines (FSTAG) 2013 Update is an acceptable standard and identifies a maximum slope of 5%, 10%, and 12% for maximum length between resting intervals of 200', 30', and 10', respectively.

Water Comments

Public comments questioned whether the developer had adequate water rights and a will-serve letter.

TMWA has provided an "Acknowledgement of Water Service" letter dated September 8, 2016, which is included in the application. This acknowledgement "*determined the Project is within the Truckee Meadows Water Authority's retail water service area*" and "*is agreeable to supplying water to the Project.*" The application also includes a dedication agreement, a water rights deed, two assignment agreements, and eleven (11) permit numbers providing evidence of over 199 acre feet of water rights that the Applicant either owns or is contracted to purchase. Will-Serve Commitment Letters are not issued until a final map is approved which cannot happen until after a tentative map approval.

This project will cause our wells to go dry.

The TMWA letter dated June 21, 2016 addressing drinking water issues for Ascenté, also included in the application, states, "*By Expanding our Aquifer Storage and Recovery (ASR) Program and supplementing the local groundwater supplies with Truckee River and creek water in the near future, TMWA's goal is to actually pump less groundwater from the Mt. Rose and Galena fan aquifer than we do today.*" Also "*The new rules for water rights dedication will mitigate new groundwater pumping from the development, and the groundwater sustainability improvements which TMWA is implementing will allow TMWA to recharge the wells and supplement the local groundwater supplies with Truckee River and creek water. As a result, the project will have a net zero impact on the groundwater resources on an annual basis.*" Depending on the final water demand calculation at final map, the first phase of the Ascenté project anticipates paying approximately \$4 million towards the ASR program.

Storm Drain Comments

The project will have great impacts and cause flooding to downstream properties from stormwater runoff. This is evident by the flooding that has occurred this year.

Public comment indicated the preliminary drainage report represented the existing drainage facilities in the downstream neighborhood consisted of pipes and channels. This is a misrepresentation of the actual condition with minimal improvements. Page one of the preliminary drainage report, dated April 2017, indicates the flows are "*directed through an existing network of drainage channels, **natural areas**, and pipes towards Galena Creek.*" Page eight of the report further describes "*... limited drainage improvements and*

poorly placed structures downstream from the Ascenté community, along Cedarwood Drive, Cherrywood Drive, Shawna Lane, and Cross Creek Lane. The drainage route covers private property and is unavailable for improvement without the individual property owner's approval. In many instances, the existing homes/improvements are constructed within the natural drainage area with minimal or non-existent improvements to divert runoff around the homes/improvements."

This condition of inadequate drainage facilities downstream from projects is common in the Truckee Meadows region. The Washoe County Code as well as the Truckee Meadows Drainage Manual anticipates this condition, and requires development to meet rigorous standards with respect to limiting runoff to existing conditions for the 5-year and 100-year storm events and includes not increasing impacts to downstream properties.

The flooding that occurred this year was not caused by the Ascenté project, as no construction has taken place on the property. However, the development team is concerned with improving the downstream condition and has designed detention basins that are 20% larger than required by Washoe County Code. Increasing the detention basin size will reduce the peak flow rate after development between 14% and 20% less than predevelopment conditions for the 5-year event and between 30% to 53% for the 100-year event. Therefore, development of the Ascenté project will reduce negative impacts to downstream properties.

Concerns were raised over water will be diverted into the private fishpond located downstream from Donner Village. Flooding this year caused sediment to impact the fishpond.

Flooding and sedimentation that occurred this year was not caused by the Ascenté project. No development or construction activities have taken place on the property. However, the development team is concerned with improving the downstream condition. The proposed Ascenté project has designed improvements that once constructed, will reduce runoff and sediment from the existing condition. Erosion control, best management practices (BMPs) and the new detention basins will minimize erosion from occurring both during and after construction.

Currently, the existing runoff conditions from the proposed Donner Village directly enters a fishpond located downstream to a neighboring western parcel as well as runoff from neighboring properties to the north. As shown on the tentative map grading plan, runoff from the proposed Donner Village detention basin will be directed southward directly to Galena Creek and bypass the private fishpond, thus reducing flow conditions to the pond below existing flow rates. The Ascenté project has been designed to help mitigate runoff conditions that currently exist and negatively impact adjacent properties.

Calibration of the hydrology model was not done properly and the model still overestimates the runoff from the project. Public comment indicated the neighbors have established a flow gauge (H-flume) and have been measuring flow rate data since the fall of 2016.

Calibration of the HEC-HMS hydrology model was conducted using acceptable practices and in consultation with Washoe County Engineering staff. The Ascenté development team is interested in the flow gauge (H-

flume) location and the data being collected from the neighbors beginning in the fall of 2016. The team requests that the data collected by the neighbors be made available to the county engineering to make further refinements to the calibrations. Runoff calculations will be finalized with adjustments to the basin sizing as part of the final map submission.

Traffic Comments

Traffic Safety should be addressed.

The project proposes to construct safety improvements that serve all roadway users that would experience the highest increases in traffic as follows:

- A new acceleration lane on Mt. Rose Highway at Fawn Lane
- New traffic calming features on Fawn Lane
- A multi-purpose trail on Fawn Lane for equestrian and pedestrian uses
- STOP sign improvements on Cherrywood Drive
- A school bus waiting area on Shawna Lane.

At the build-out of Ascenté, all of the roadways in the study area will experience traffic levels below the County's standards which include livability goals. Therefore, any further mitigations are not justified.

Evacuation routes will be impacted by the project.

The project improves emergency evacuation options to the adjoining community by providing additional paved emergency routes through the project that do not currently exist. This includes Brushwood Way and Shawna Lane.

Consider the construction traffic that will be on Fawn Lane.

Construction traffic volumes will be notably lower on both a daily and peak hour basis than the volumes outlined in the traffic impact study. Grading of the site is a cut and fill operation with minimal off-haul and import. There will certainly be construction traffic on Fawn and Shawna Lane, however, the worst-case impacts on traffic operations have been detailed in the traffic study. Phasing of the safety improvements are outlined in the traffic study to be constructed early in the build-out with the additional purpose of managing construction traffic.

The roadway classifications on affected roadways need to be changed.

All roadways within the study area, post project, are expected to be well within County criteria for both livability and level of service. Fawn Lane and Callahan Road were designated as public collector roads by Washoe County in 1992 and 1998 respectively. All other roads in the study area are "local" classification streets. No classification changes to the affected roadways are justified due to the Ascenté project.

Traffic projections have been "low balled".

The traffic study volumes are based on the nationally and locally accepted Institute of Transportation Engineer (ITE) standard average rate for single family homes. The application of the standard average rate

for each home accounts for fluctuations between various residents. The suggestion that a rate of 20 trips per day per home should be used is tremendously outside any standard engineering practice.

Review routing of the project traffic.

The project lot layout and roadway configuration were intentionally redesigned to minimize new travel on Shawna Lane and provides a greater degree of assurance in the travel routes. Travel routes, distances, and delays were all taken into consideration to determine the traffic distribution. Whitney Village's roadway connections are clearly directed toward Fawn Lane.

Cumulative traffic conditions should be considered.

The traffic impact study includes a discussion on cumulative traffic volumes and a thorough discussion of the Mt. Rose Hwy/Callahan Road intersection under cumulative conditions. Local streets east of Callahan Road, which are the subject of this study, would not be affected by other approved projects. Additionally, Callahan Road has significant remaining traffic capacity. Fawn Lane will not be subject to any further cumulative traffic. Each proposed project is responsible for addressing its own impacts to the road network.

A stop light should be required at Mt. Rose Hwy/Callahan Road.

This intersection is discussed at length in the traffic study. A signal is not appropriate nor warranted due to the Ascenté project.

The MRMUOD requires Ascenté to use the future Thomas Creek Rd. extension to connect directly to Mt. Rose Highway and not the Fawn Lane or Shawna Lane roads that dead-end into the project.

Fawn Lane and Callahan Road were designated as public collector roads by Washoe County in 1992 and 1998 respectively. Two previous tentative maps were approved for the Ascenté property utilizing the Fawn Lane and Shawna Lane access roads, as well as the Callahan Ranch neighborhood roads to the Callahan Road collector. The Forest Area Plan update (FAP Update), adopted in 2010, created the 632 acre MRMU Overlay District (MRMUOD). Ascenté is a 225 acre portion of the MRMUOD west of its ridgeline. Even though the FAP update went through a 5-year process and more than 30 public meetings from 2005 through 2010 before its final adoption, there are three (3) specific sections in the adopted final version of the FAP Update identifying specific roadway requirements but there is no language in the MRMUOD or anywhere in the FAP Update requiring the property to use a Thomas Creek Rd. extension to connect to Mt. Rose Highway. The MRMUOD, as well as eight (8) other references in the FAP Update does repeatedly call for adherence to the County Land Use Transportation Element (LUTE) and directs the Community Development Department to *"require new developments that are adjacent to older neighborhoods to connect to existing roads and trails."* The proposed Ascenté project is in substantial compliance with the 2010 FAP Update and LUTE. The traffic analysis included in the application, indicates that the proposed Fawn Lane collector and Shawna Lane access roadways, the Callahan Road collector, and the other neighborhood roads connecting them are well within County level of service standards for acceptable traffic impacts. The FAP Update did add an unidentified dash line shown as a future "Proposed Collector" connecting the MRMUOD property to Mt. Rose Highway. The Ascenté developers have agreed to use the Proposed Collector for any future tentative maps approved in the MRMUOD and not Fawn Lane or the Callahan Ranch roadways after the 225 home Ascenté

project. This means that the remaining 407 homes that zoning allows for the remainder of the MRMUOD property will only use roadways that connect directly to Mt. Rose Highway, except for emergency vehicles or evacuation routes.

If Phase 1 of Ascenté is approved, Phase 2 will also use be able to use Fawn Lane and the Callahan Ranch roadways. This is their “Trojan horse” strategy.

The developer has agreed and proposes to limit vehicular traffic and access onto Fawn Lane and Callahan Ranch area roadways to only the 225 homes proposed for this Ascenté tentative map application. This means that the remaining 407 homes that zoning allows for the remainder of their property will only use roadways that connect directly to Mt. Rose Highway, except for emergency vehicle use or evacuation routes. Any future phases for those homes will require new traffic studies and County approval of future access plans.

Consider traffic impacts on quality of life.

The County has established “livability” volumes for local and collector streets that are in place for establishing a reasonable level of traffic on residential streets with driveways. The roadways currently carry very low volumes and the addition of the Ascenté project traffic is within the County’s policies. Any increase of traffic below these livability values has already been deemed a less than significant impact by County standards.

We don’t need an acceleration lane on Mt. Rose Highway.

Safety is a primary consideration for any proposed development. The Ascenté project proposes to improve safety that benefits new and existing residents as follows:

- A new acceleration lane on Mt. Rose Highway at Fawn Lane
- New traffic calming features on Fawn Lane
- A multi-purpose trail on Fawn Lane for equestrian and pedestrian uses
- STOP sign improvements on Cherrywood Drive
- A school bus waiting area on Shawna Lane

There is not barely any traffic on Goldenrod Dr. today and I can’t turn my dog loose with more traffic.

Traffic volumes are indeed very low and there is sufficient capacity and space for the additional traffic. All the roadways in the study area will experience traffic levels below the County’s livability standards and further mitigation is not justified.

These are rural roads with no shoulders. Snow berms narrow the roadway.

All of the paved roadway widths within the study area meet County standards based upon their roadway designations. The County requires a 10-foot easement from edge of pavement along both sides of all roadways for snow storage when the streets are plowed. All of the roadways within the study areas meet snow storage within the road right-of-way’s. Any additional mitigation of the roadways is not required.

Lead Contamination Comments

The submittal package did not provide sufficient evidence that the site is not contaminated with lead.

Based upon the article by Bob Parker published in the Reno Gazette Journal, the developers contracted with McGinley & Associates Environmental Engineers provided lead testing of the Ascenté site. They collected and tested 88 soil samples by and tested using the United States Environmental Protection Agency's (USEPA) approved methods. Lead concentrations in the collected samples ranged from a low 4.34 parts per million (ppm) to high of 18.4 ppm. USEPA lead concentration levels approved for residential soil may contain a maximum of 400 ppm. Typical Nevada soils average 21.1 ppm and throughout the United States the average is 25.8 ppm. The Ascenté soil results showed lead levels average 10.5 ppm. Lead concentrations in all the collected soil samples from Ascenté were below both the nationwide and Nevada background levels for lead in soils. The observed lead concentrations are below the Nevada Division of Environmental Protection's reportable concentration and the USEPA's screening level for residential soils.

The Washoe County District Health Department and the Nevada Department of Environmental Protection reviewed the test results and concluded that no special conditions are required related to lead contamination or clean-up based on the results.

Bonding Comments

The developers should be forced to provide a cash bond for the project, its impacts and any negative impacts resulting from the project three years after it is constructed.

Washoe County already has in place, in Article 610 Section 110.610.40, subdivision bond/security requirements for landscaping, post construction storm water quality management, and all improvements located in the public right-of-way to insure the completion and performance of the constructed improvements. Bond/security agreements are required at the time of the final map.

Zoning Comments

The property does not comply with the Washoe County zoning or building setbacks.

The proposed Ascenté tentative map complies with the Forest Area Plan and Washoe County zoning, setbacks, density and intensity requirements. The site plan incorporates a clustered development design and provides for common open space that preserves and protects steep slopes and rock outcroppings. The clustered development provides the community with designated trails for walking, biking and horseback riding. The design also creates a more environmentally friendly design by providing habitat for wildlife, naturally filtering storm water, reducing storm water runoff from impervious surfaces, and protecting the natural features of the site. The subject property was approved for residential development, as part of the Forest Area Plan that was adopted in 2010, and the proposed Ascenté project is in conformance with that approved plan.

This proposed Ascenté site plan conforms to the land use policies for development on hillsides using cluster development design to protect the environment and preserve open space. Common open space or clustered development means a technique, whereby minimum lot sizes may be reduced below the regulatory zone

requirements for residential uses if compensating amounts of open space are provided within the same development. This type of smart development allows for structures to be grouped on smaller lots, provided the total density for the development is not exceeded. The Ascenté tentative map proposes 225 lots on 225 acres.

Wide common open space buffers have been incorporated on all parcel located adjacent to and existing neighborhood. In addition, those lots are limited to only allow single story homes, so as not to block the view of existing residence.

Parcel Matching Comments

The project does not conform to the parcel matching or buffering standards outlined in Section 110.434.25 of the Development Code.

Articles 434 and 822 of Washoe County Development Code are intended to implement certain portions of the October 17, 2002 Regional Plan Settlement Agreement and to function as the master documents for the settlement agreement. That agreement has since expired and the provisions of Section 110.434.25 no longer apply.

While the Forest Area Plan does not specify minimum requirements for buffering between lots or standards for maintaining the areas rural character, primary structures are required to be buffered from the adjacent residential areas outside the Matera Ridge Mixed Use Overlay District (MRMUOD) in a manner that preserves the suburban/rural character of the existing development. Buffering can include, but is not limited to: areas of open space, clustering or otherwise locating behind ridges or outcroppings, and significant landscaping. The Ascenté project identifies key elements that will be implemented into the project that go above and beyond the requirements of the Forest Area Plan, and have been incorporated to better serve the surrounding community. Buffering between proposed lots and adjacent residential areas has been provided. A 40' wide open space buffer has been added between existing and proposed homes on the project perimeter. Parcels adjacent to Patti Lane, a 60' wide right-of-way, has an additional 20' wide common open space buffer for a total of 80' wide.

Failure of LLC Comments

What happens to the property if the LLC fails?

When an LLC fails and declares bankruptcy, a bankruptcy court determines if repayment of debt can be restructured whereby the LLC comes out of bankruptcy, or if the debt cannot be restructured, then the assets are sold off to pay off the creditors. A performance bond to guarantee completion of improvements is required by Washoe County per Article 610, Section 110.610.40 at the time of final map. If a property under development fails to complete any improvements, then the County Commissioners may cause the bond to be forfeited in the amount necessary to finish the uncompleted portion of the work.

Fire Safety Comments

Wild fires are a major concern for the existing residents. The Ascenté development will slow down our ability to safely evacuate in a timely manner and negatively impact our safety.

The Ascenté development has an entire section devoted to Defensible Space Guidelines as a part of the Design Guidelines that will be conditioned with the tentative map and recorded as part of the final map. In addition, the roadway design improves emergency evacuation options by providing new paved emergency routes through the project that do not currently exist. Brushwood Way has been designed as an emergency evacuation route. Ascenté will be providing additional water storage, new fire hydrants, and new roadways to assist the Truckee Meadows Fire Protection District in the event a fire occurs in this area.

Many of the Ascenté home sites are directly adjacent to common open space subject to a potential threat of wildfires. To minimize potential wildfires and increase the home's survivability, the final map plans shall meet the 2012 International Wildland Urban Interface Code (2012 IWUIC), as amended and adopted by Washoe County Code 60 (WCC 60) and NAC477 with the following conditions:

STANDARDS

- Defensible space provisions shall be provided in the Design Criteria and adhered to within the Ascenté development.
 - Fire hydrants shall be provided with the layout and placement of hydrants approved by Truckee Meadows Fire Protection District (TMFPD) prior to installation. Hydrants shall be equipped with Storz connections. Water for fire suppression shall be a minimum of 1,000 gpm for 1 hour at 20 psi with verification of flow provided by the water purveyor prior to final map approval.
 - Secondary access shall be provided and shall meet the minimum standards of WCC 60.
 - No speed bumps are allowed within the development. Traffic calming devices shall be submitted to TMFPD for review and comment prior to installation, and be in accordance with WCC 60.
 - Cul-de-sacs shall maintain a minimum of 50-ft radius, 100-ft diameter.
 - Access to common areas for vegetation maintenance and management shall be provide at final map.
 - A defensible space and wildland interface program for both the common open space and individual lots will be approved by the Manager, as a part of the CC&R's and enforced by the HOA.
- A digital copy of the HOA/CC&R agreement shall be submitted to the Truckee Meadows Fire Protection District (TMFPD) for review, comment and approval at the time of each final map.

The following standards shall be included in the CC&R's, implemented by the individual homeowners, and enforced by the HOA:

RESIDENTIAL AREAS

Within 30 feet of the home:

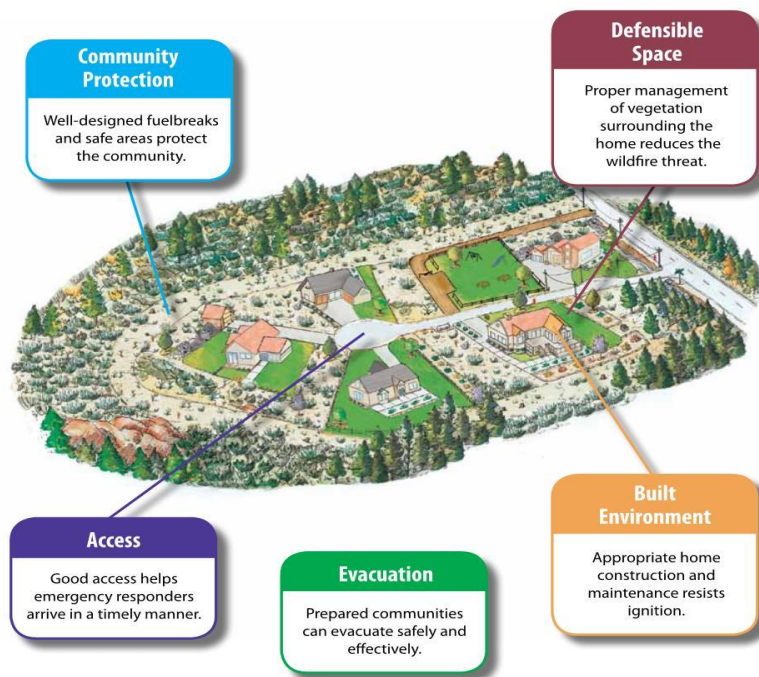
1. Remove any dead vegetation.
2. Create a separation between layers of plants to eliminate fuel "ladders" to the home itself.
3. Do not plant ornamental grasses below windows that could shatter with heat.

Beyond the 30 feet to the lot edges adjacent to common open space areas:

1. Homeowners shall use recommended plant lists approved by Washoe County.
2. Rock mulches shall be used in planter areas. No wood mulches are allowed.
3. As regular maintenance, remove all dead or flammable vegetation and weeds. Eliminate fallen leaves and prune dried ornamental grasses.
4. Emphasize the use of deciduous shrubs and trees rather than evergreen types.
5. Remove the lower branches of trees up to 8 feet above the ground as the trees matures.
6. Keep vegetation clear of raised decks.

COMMON OPEN SPACE AREAS

1. Areas outside of lots shall be the responsibility of the HOA. Fuel breaks will be created and maintained by the HOA.
2. Within fuel breaks, all dead plants shall be removed, along with any dead branches. Highly flammable vegetation will be removed, including annual weeds. Native vegetation will be thinned. In areas with bare soil from grading operations, fire resistant crested wheat grasses will be seeded.
3. Remove lower branch trees up to a height of 10 feet above the ground.



Sincerely,

Angela Fuss

Angela Fuss, AICP
Director of Planning

Attention to Ascente's Proposal from the Current Residents

1. It is important to note that Ascente' had open meetings with the current residents (June 25 and Aug. 25) to field their objections and concerns. Highlighted here are the things we asked about and to date their responses.
 - a. Ascente' did respond to some concerns about placing a building height restriction on the homes that border existing property owners, as well as the landscaping buffering proposed in the Tentative Map", which does not meet the standards of the Forest Plan.
 - b. Water was central to many and the answers all came from TMWA telling us that they (TWMA had a plan) but remember that these same residents were told that the Montreux Golf course and development would not adversely affect our wells. **We all know how that ended up. Tax values for all of us were impacted by the abandoned homes. Todd's presentation on water and the handling of waste water really points out the risks our neighbors face and what happens to the runoff into Galena Creek is very troubling to us all.**
 - c. Density was mentioned by the residents and they asked why the rule of one acre to each residence was not going to be followed? Ascente's response has been "we got the zoning and we will use it". **Current residents view the proposed "Villages" as nothing more than subdivisions, which do impact our home values and way of life.**
 - d. Parks and open spaces were expressed as a concern. Ascente's proposal is that there are no parks planned. The Forest Plan (F.10.7) States there is to be 7acres of Neighborhood/Community Park per 1,000 Residents. The open spaces they talk of are the places they cannot build on, due to the steepness of the slopes. (a quote from the proposal "Development is based on the sites topographic constraints and preserves areas with steep slopes as open spaces") **Why are there no parks planned? Where will the new residents recreate, walk, jog, and bike?**
 - e. Trails were mentioned. Ascente's response was to keep some of the exiting trails, but closing others. Their plan for the three proposed trails is: once you are entering their property those trails immediately ascend the 30 degree plus slopes, and once on the ridge lines (600 plus feet in elevation change) you can walk or ride around the property from those same ridges. All three of the planned trails are like this, and none of the trails are connected to any trail leaving the property. There is no connection or access allowed to the current

trail system along Galena Creek. Access to properties to the north, east and south is not connected by the current proposed trails. **So the answer to the trails issue is that unless you want a strenuous hike, go somewhere else and none of the trails lead off the property. Additionally there is no parking spelled out for the proposed use of these same trails. Forest Plan F.10.4 says there will be parking at trail heads! Refer to Ascente Village Plan and Trails maps.**

- f. Fire Safety was high on many people's list. Ascente has shown no plans to mitigate lands around their development (they do have plans for the home sites to mitigate fire potential in the developed areas) and has not acquired any additional fire exits. The "wild Lands" portion of the proposal, still remains as typical fire avenues. When the next fire does threaten the neighborhoods (including current residents, the 281 homes now proposed and the other 340 homes in phase 2) and they all try to get out the 2 avenues of escape (PLUS THE LOCKED GATE AT Brushwood), as proposed, **the traffic jams and resulting loss of property and life, could be catastrophic for all of us. There must be additional exits to allow for orderly evacuation.**
- g. Traffic through existing neighborhoods was high on the list of most residents. Ascente' did change some flow charts to move more traffic out through Fawn Lane rather than having a majority exit through Shawna Lane, this is no response for the residents of Fawn, it was simply shuffling traffic from one area to another this way they could avoid taking Shawna Lane from a neighborhood street to a "Collector Road" which would mean paying for improvements. **The residents had asked that Ascente' acquire additional access to the development from the Mt. Rose Highway and Thomas Creek intersection. Thus supplying a major way into and out of, both phases of their project. This would allow the proposed project to make both Shawna Lane and Fawn Lane emergency only exits. To date the project only shows this action as a dotted line for the future.**
- h. Schools are an issue to us all. **Ascente' has no answers, just new students; this is not really a fault of the planners, but a result of the development.**
- i. Equestrian traffic and trails were raised as an issue. Ascente's answer is that they can use the same trails as they have designated for the people but, again, these trails are very steep and only the best riders and experienced mountain horses could use them. No trail, as proposed, connects to a trail off the property. **Our equestrian way of life in Callahan/Fawn Ln. will change! They will find only our roads to ride on. This will raise the potential for accidents with horses, riders, and the 65% increase in car traffic.**

- j. The Wildlife currently using the property is on the minds of many. The development, as planned, will make it very difficult for the deer, and coyotes to remain in the area due to the density of the human traffic. **The planned homes will cut off current access routes to the springs and river bottoms of Galena Creek and will force all current wildlife to move across the creek to the south of this project. Forest Area Plan (F.14.1) requires contact with the Nevada Dept. of Wildlife for their input.**

These were our concerns and you can see what if anything the developers did to address them. The response of the developers sets the residents on edge when they are asked to believe what will happen in the future.

2. If the current residents of Callahan/Fawn Lane area take a walk, go for a run, walk the dog, our children ride their bikes, or we even go to the mail box we are in the road because of the lack of sidewalks. So we are very concerned about the increased travel trips that Ascente' will bring to our area, and how our current use of these roads will change. **NDOT's plan for the area states "Limiting the average daily trips or peak traffic movements may be necessary to maintain or improve the highway safety in areas of multiple adjoining small parcels. If traffic is not addressed it will definitely change the nature of our neighborhoods, and not for the good".**
3. Callahan children wait for their school buses in these same streets (again no sidewalks and deep ditches on both sides of the roads). With the doubling, if not tripling, of the traffic our parents' concerns similarly double and triple. In addition, due to some schools going to double sessions our kids will be waiting for, and getting off, their busses in the dark and walking home on roads with no street lights. **The everyday lives of the Residents, and that of their children, will change due to this developments installation, and not for the better.**
4. Proposed roads are being cut into existing hill sides, thus leaving the maximum space for homes, and these hill sides cuts will be fully "in view" from anywhere in the Callahan, Galena, Mt. Rose area. In fact if you look at the Ascente proposal you will notice that they are proud of their home site views (if they can see out we can see in). **This means that a large portion of the homes and their roads will change the look of the Steam Boat Hills. The Forest Plan (F.7.4) requires landscaping to be in place to mitigate the visual impact and a maintenance plan in place to sustain that mitigation. Tioga Village, as proposed, will drape over the hill side, in full view of all current residents and Mt. Rose Highway. No amount of landscaping will hide the subdivision from view. Current residents believe this to be at odds with the Forest Plan and Mt. Rose Scenic Highway Plan. We wonder why have the residents of Washoe Co. spent the money and time to create these plans if no one will enforce them.**

5. The shape of the hills that surround Kaweah and Sierra Villages create an amphitheater effect that sends sound back into the nearby residential area. You can hear the traffic headed to the water tower as clearly as if you were standing right there. **How will the sound of extensive application of very large equipment, (which is called for by their own geo engineer), over a very long time, be mitigated for the current residents? The plans own Engineer stated that blasting will be needed. We wonder just how this kind of noise impact can be mitigated for the residents and their livestock.**
6. If Ascente' Project finds the geology to difficult to deal with, that they may simply walk away leaving a permanent scare on the land. The entirety of the proposal (roads, landscaping, home sites, utilities, and upgrades to current area roads) could be left unfinished. Will post build out find the area roads insufficient? Will there be flooding to current residents. Will the developer not provide access through to Mt. Rose and Thomas Creek? Will residents suffer damage from all the blasting? **Will the county demand a 'Bond" to be posted to avoid such potential damage? And will that bond be sufficient to cover the cost of repair? And now the developers have divided the project into 5 separate entities (5 separate LLC's) will the county require a separate BOND for each project? We the residents are asking the county to demand a \$10,000,000 bond, which life is 3years beyond build out, to both protect the county and ensure the developers are there to fix any of the issues raised. (That amount of money could not pay for the loss of 131 private wells in the area alone). The dangers raised during this project are just too large to allow the developer to WALK!!**
7. The need to blast in some areas of this project opens a whole new avenue of concerns. The plans own Engineer stated that "Substantial Blasting" will be needed to deal with the geology found at the site. **The Rule of Thumb is to have a ½ mile of vibration monitoring for each and every blast. There should be a survey of the homes prior to and after the project, to assess the damage, this must be required. Blasting can change the geology of the underground water tables. Is the developer willing to follow all of the rules to protect the neighborhood? Blasting in solid rock formations transmit the shock ways for great distances, ½ mile or more. There is also the issue of" Fly Rock" that could travel as much as 600 yards from the blast site. There are more than 60 homes within that area. Should their work cause changes to the underground geology? And how will they mitigate the noise. We all know the consequences that the sound of fireworks has on Dogs and Horses?**
8. In the proposal of Ascente they state that they will need to move more than 1,600,000 cubic yards of material to complete the projects goals. Of that number there will be more than 1,000,000 cubic yards of rock that must be crushed to create the smaller material size to allow compaction of the home sites and to back fill their utility


trenches. In the proposal of Ascente they state " THAT NO MATERIAL WILL BE IMPORTED OR EXPORTED" which means that all rock crushing is scheduled for "ONSITE" THAT MEANS THAT CURRENT RESIDENTS WILL BE SUJECTED TO 2 ½ YEARS OF BLASTING, ROCK CRUSHING, GRADING WITH LARGE CATIPILERS, AND POTENTIAL FLY ROCK ALL WITHIN LESS THAN 200 YARDS OF CURRENT HOMES!!

9. This project is located within the "Forest Area Plan" and as stated there the "County's desire to balance its commitment to existing community character" is very important to all the residents of Callahan and Fawn Lane and we expect the County to uphold this commitment. The Forest Area plan F2.18.E states "Primary structures shall be buffered from the adjacent resident areas outside MRMUOD in a manner that preserves the suburban/rural character of the existing development. Buffering can include but is not limited to: areas of open space, clustering or otherwise locating behind ridges or outcroppings and significant landscaping" Why are the proposed plans for Sierra and Kaweah Villages not held to these standards? THESE STANDARDS ARE THERE TO MAINTAIN THE WAY OF LIFE IN THE FAWN LN AND CALLAHAN AREAS. Why is there a Forest Plan if we are not going to enforce it?
10. There are several proposed lot sizes that do not meet the current development code, which states, that the minimum lot size for MDS is 12,000 sq ft. There are several lots that are smaller than this. Proposed plans must reflect the needed adjustments, otherwise these subdivisions will violate both the spirit and letter if the Zonings Laws
11. In the Forest Area Plan it states "Throughout much of the Forest planning area the transition of large ranches and open space in the Forest planning area to residential development has resulted in a suburban development pattern with a rural texture. In the suburban character areas the remaining undeveloped land in the planning area could make be a significant contribution to the implementation of the county's Master Plan, particularly the Land Use and Transportation Element. Unfortunately, some past development practices have not been entirely supportive of the character described here. Therefore, this plan will make extra efforts to ensure that future development plans be conducted and implemented in a manner that supports and enhances the community's character".
12. The Scenic BY Way in chapter 1, page 5 speaks to the challenges facing the corridor "Mass grading, rock cuts and the stabilization of rock cuts from development and road construction can impact views". And "Water tanks from neighboring developments can impact views". Continuing on chapter 2 page 26 "As visitors reach the end of the scenic corridor, the Steamboat Hills to the south offer beautiful rolling hills that are rich in geothermal activity and host unique plant life like the Steamboat Buckwheat".

13. Forest Area Plan (F.2.17.f.) DEVELOPEMNT WILL BE COMPATABLE WITH AND ENHANCE THE SCENIC QUALITY OF THE MT. ROSE CORIDOR.

In closing who will hold the developer accountable for what the current resident see as major issues to this development's plans. We, the residents, expect answers to each of the points raised about Schools, Traffic, Zoning, Geology, Water, Blasting, Rock Crushing, Bonding, Water Runoff, Noise, Fire/Emergency Exits, Home Values, View of the Steamboat Hills, Trails/Parks, Wildlife, and the health and safety of our Communities and their Children!! This plan will change the neighborhood, and its residents, in ways that are opposed to the reasons we moved to the Callahan and Fawn Lane areas to begin with!

We expect t Washoe County to impose the intent of the Washoe Development Plan, the Authority of the Forest Plan, and the View of Mt Rose Scenic Highway Plan, before we allow this Development to proceed to next step of approval.

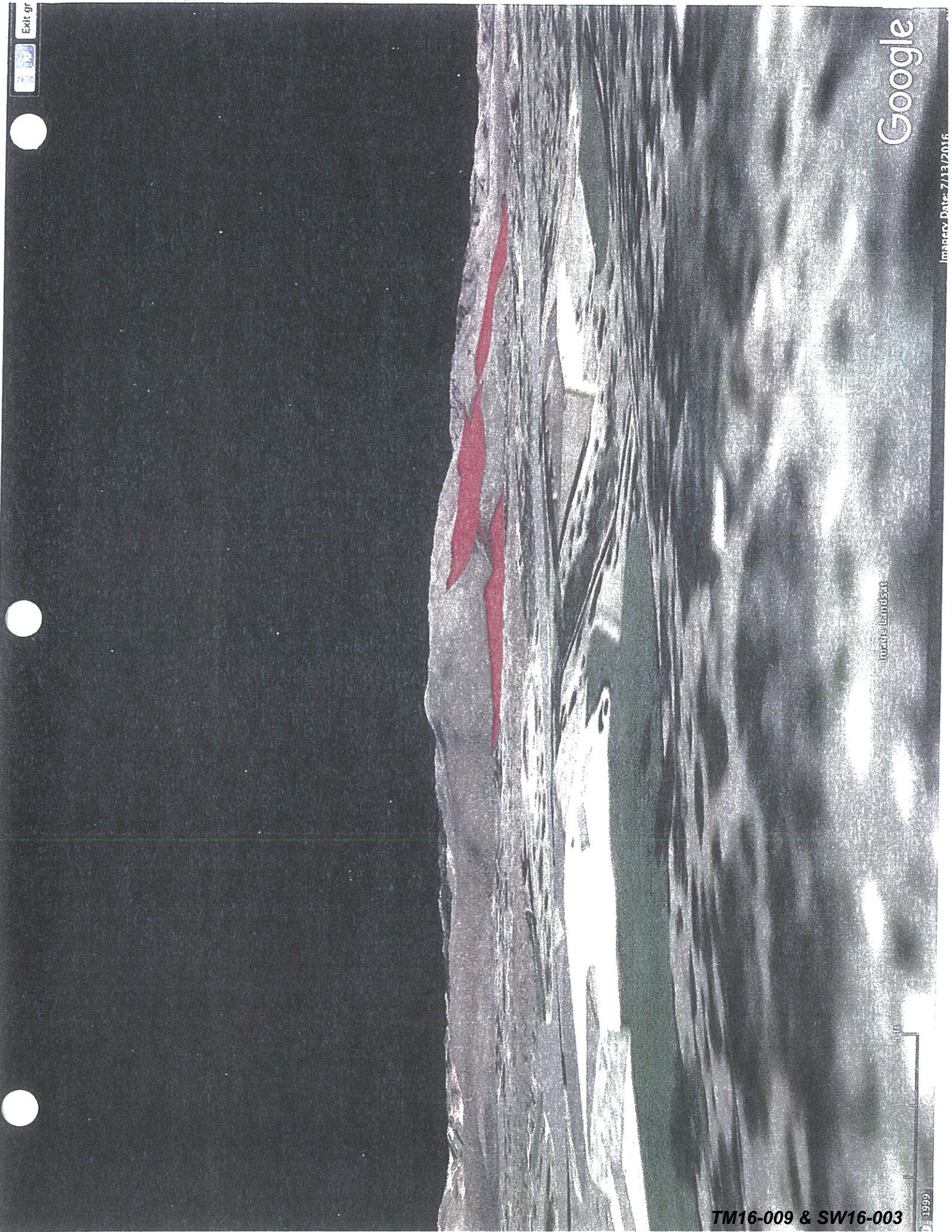

KEN ALLEN
775-848-8478

Attached are two Google Earth Views of the Ascente Proposed Subdivisions and their placement on the Steam Boat Hills

The first view is from Highway 431 and the current Forest Service Fire Station. This would be the view all travelers would see from the Mt. Rose Highway.

The second view is from Goldenrod and Callahan Ranch Road. This view shows how much of the Steam Boat Hills will be covered by the Proposed Ascente Project.

60 foot road cuts that are proposed to link the 4 separated subdivisions are not shown on either view.



Exit gr

Google

Imagery Date: 7/13/2016

Image Landsat



TM16-009 & SW16-003
EXHIBIT H

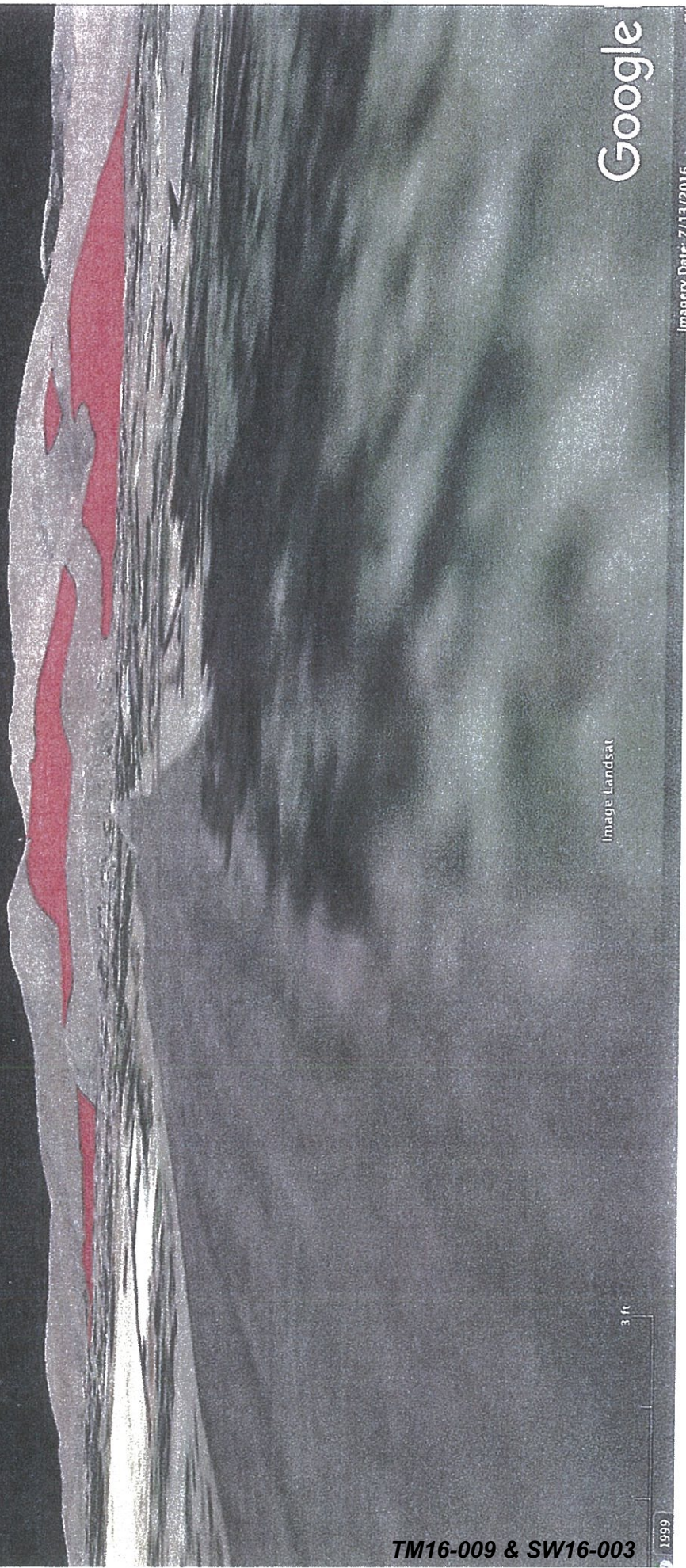


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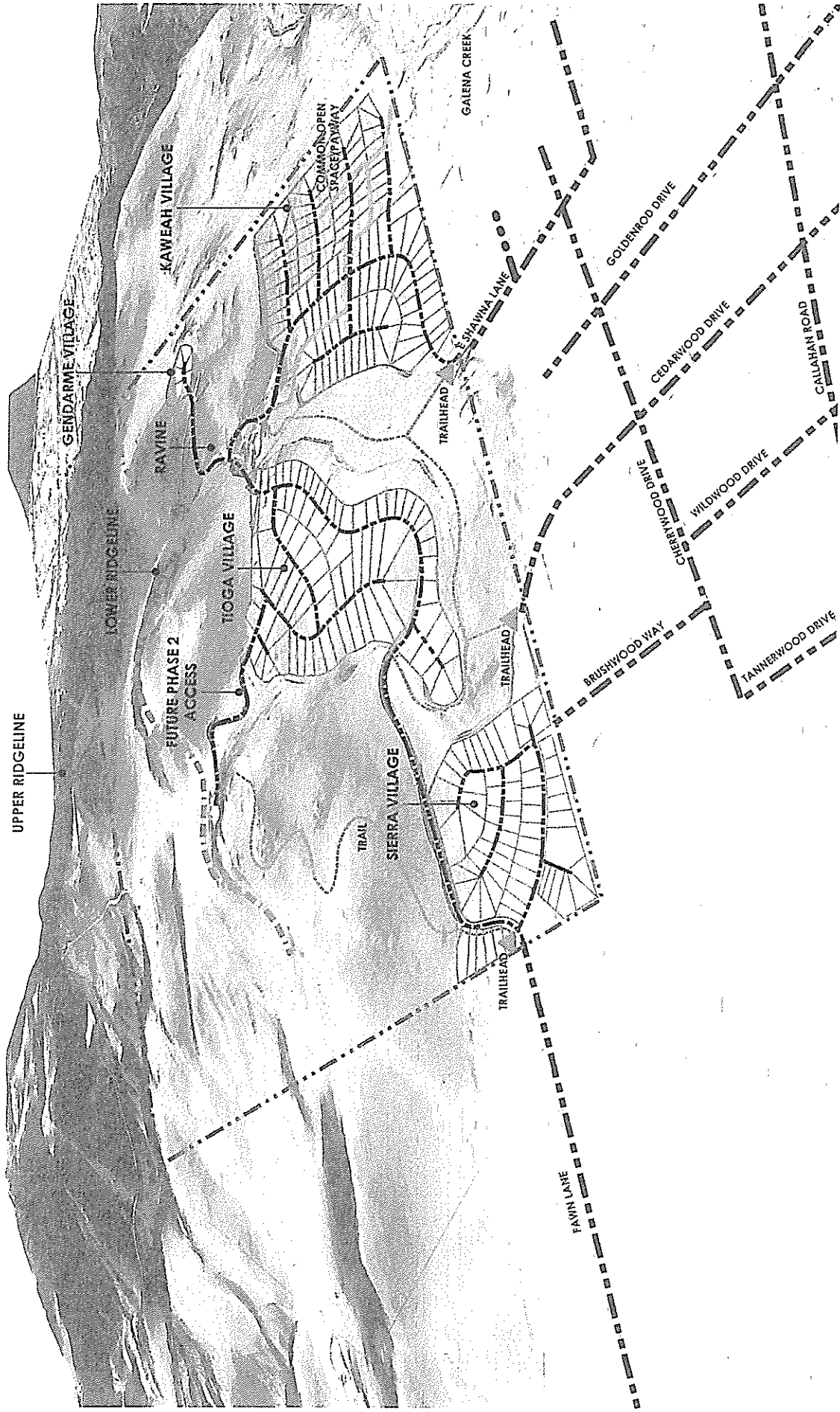
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TM16-009 & SW16-003
EXHIBIT H

ASCENTÉ VILLAGE PLAN



Attached is a Google Earth Photo of a portion of the Current Callahan/Fawn Lane road system. You can note the width of each road and where there are current bus stops.

Please note that bus stops and children boarding those buses are in the roadway and some times, during the year, do this in the dark.

Doubling of traffic on Callahan Rd. (300 plus homes already approved to the South) and the Tripling of traffic on Cherrywood will create traffic backups and safety issues.



Bryan Raydon – Owner, Tannerwood Road, Callahan Ranch

There are few places in this country where you can enjoy beautiful views, starry nights, wildlife and solitude and still have easy access to City amenities. Callahan is such a place yet is now faced with a threat though to that quality of life in the form of a massive development that:

- Is not consistent with the governing document of development in this area, the Washoe County Forest Area Plan.
- Adds at least 2,675 additional vehicle trips to our rural roads yet **claims that “there are no significant impacts” and offers no improvements to these roads.**
- Will damage existing roads during construction and has stated that they have no obligation to repair them.
- Has another 300+ homes planned for Phase II but no concrete plans for access nor a prohibition onto Callahan Ranch and Fawn Lane roads.

Washoe County – Forest Area Plan

- The primary vision of the Forest Plan:
 - **maintain, preserve, and facilitate the planning area’s desired character**
- Critical to this mission is to
 - 1) maintain the “prevalent feeling of openness”
 - 2) blend with existing development and to support and enhance the community character.
 - **Ascente as planned fails on both of these ideals.**
- **Openness** – the opposite of Openness is Dense. Clustering a development and **buffering** more-intensive uses from less-intensive uses is how the Forest Plan seeks balance between these two concepts. **However, Ascente has ignored the required buffering as well as the County’s Development standards on both width and minimum size of its lots.**

Buffering - As mentioned, a key tenet of the Forest Plan is **Buffering**.

- **The Plan says: “Primary structures shall be buffered from the adjacent resident areas in a manner that preserves the suburban/rural character of the existing development.”**
- The Washoe County Development Plan establishes “Lot Adjacency Standards” that state that “Parcel Size Matching” is required of new developments. **Accordingly, the adjoining lot size in the new development must match the lots size they adjoin to. If that is not possible then there must be a setback of 200ft.**

- **Contrary to the Plan, Ascente has totally disregarded buffering at its Sierra and Kaweah Villages. At Sierra Village, over 20 lots, all MDS or denser, are within 20' of existing LDS lots at Fawn Lane and Callahan Ranch. Similarly, at Kaweah, 11 lots abut LDS and larger lots in Callahan. These lots should be combined to match the density of the adjacent development or be deleted or moved.**

Width and Minimum Lot Size

- Washoe County Development Standards set **minimum sizes and widths** for lots.
 - **MDS, the minimum size is 12,000 sf and the minimum width is 80'.**
 - **Contrary to the Plan, Ascente has disregarded these minimum size requirements at nearly half of Sierra Village.**
 - **At Sierra Village, nearly half of the lots are below the 12,000 minimum size.**
 - **Similarly, at least 10 lots do not meet the minimum width.**

- **The bottom line is that while Ascente has zoning entitlements for 281 homes, they don't have the room. Consequently, they have ignored zoning regulations and crammed as many homes as possible into the two villages that impact their neighbors the most.**
- **If the Developer is held to the County's development standards, approximately 50 of the lots planned in Sierra and Kiaweh Villages would be pulled from the proposal.**

Traffic

- **Based on their traffic study, Ascente Phase I will increase traffic on adjacent roads by 2,675 trips per day, or at least 65% more than there is today. However, their report claims that no mitigation is required since "acceptable traffic operations are maintained with the project traffic."**
- **While the Institute of Traffic Engineers, ("ITE"), uses 9.52/trips/detached single family home, studies reveal wide variations in the actual number of trips.**
- **Homes in senior citizen housing developments can average as low as 3 trips per day, while residences in active family neighborhoods can generate as many as 20 trips per day. Ascente falls into the latter category, meaning that the traffic estimates in their report could be half of what is actually created.**
- **The project will contribute approximately \$1,205,765 in Regional Road Impact Fees for the offset of minor traffic impacts throughout the regional roadway network. However, there is no guarantee that this money will be spent on the roads most affected by this**

development.

- Fawn Lane and Callahan Road are noted in the report as being designed to “Collector” road specifications **and that no additional improvements would be required.** This statement is preposterous.
- Fawn Lane may be as wide as a Collector, but it has no striping nor appropriate drainage. Compare this to the northern portion of Callahan Ranch road as it travels through The Estates... bridal path on one side, paved bike path on the other. Like Fawn Lane, Callahan Ranch Road will receive massive amounts of new traffic and is similarly ill-equipped on the stretch south of The Estates. **Despite the obvious impacts to these road, the Developer offers nothing in terms of pedestrian safety or traffic calming.**
- Ascente attempts to point out that traffic levels will be at “acceptable” on the currently quiet local roads – Tannerwood, Goldenrod, Shawna and Cedarwood. However, the new traffic counts will be double or triple current rates that will significantly alter the quality of life for existing residents. **Where are residents going to walk their dogs, ride their horses or have a safe place to play with no shoulders, no pedestrian paths but double or triple the cars on their streets?**
- **The traffic report is deliberately incomplete.** There is no mention of current traffic counts on Cherrywood, a street that connects Shawna to Tannerwood. According to the traffic engineers, the Ascente development will dump an additional 816 trips onto Callahan streets. The current trips on Cherrywood are already in excess of this number. **This pushes Cherrywood from a “local” road to a “collector” road with the requisite improvements which is likely why Cherrywood was not mentioned in the traffic study.**
- **The traffic report is deceptive.** Using the Traffic Engineer’s data, Tannerwood Road currently has 514 trips per day. Kaweah and Gendarme Villages have 125 new lots. According to the traffic engineer’s methodology, this would equate to $125 \times 9.52 = 1,200$ trips. However, despite the obviously shortcut through Callahan Ranch for these homes, the Engineer is claiming that only 70% of these would use Callahan Ranch to exit. Why would the traffic engineer deliberately undercount the impact on Tannerwood? **To avoid changing the classification of the street necessitating the improvement of same.** If only 16 of the lots use Callahan Ranch, it pushes Tannerwood into Collector status.
- **Finally, the Forest Plan state that the “Issuance of an approval should not detrimental” to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area; With zero improvements proposed to the offsite roads, this standard is not met.**

Trojan Horse

- Finally, as shown on their maps but not included in this Tentative Map application, Ascente has another 300+ homes planned for Phase II. A dashed yellow line supposedly shows access for this development from Thomas Creek Road. This line crosses Forest Service and private line but as far as we know, there is no certainty that this road will ever be built. **Based on the flawed analysis that the Phase I traffic will be of little**

consequence, we would expect that the Phase II proposal is hidden in plain site, like a Trojan Horse, awaiting Phase I's approval before springing its traffic onto Callahan Ranch and Fawn Lane roads. Any Tentative Map approvals should include a clear prohibition on using Callahan and Fawn as anything more than emergency access.

- There already is an access, with presumably the needed easements, to access the forest land from Highway 431. Mr. Hugh Hempel, in his presentations to the County for approval of Matera Ridge, stressed his preference to accessing the property via Forest Service land, yet the Ascente group has discarded this approach, which presumably, was a key consideration in the approval of the project. Using this access point, rather than intruding on the Fawn Lane and Callahan Ranch neighborhoods would be a logical choice. **Why is this option not being explored?**
- **The bottom line is that Ascente as currently planned brings between 2,675 to 5,350 new trips to existing roads but has no funds directed to improve them. The property is 10-25% too dense if the letter of the law is followed on minimum lot sizes and buffering. This density translates to a 10-25% reduction in the quality of life of current residents in terms of traffic.**

Review and Evaluation of Ascente Application Appendix L -Geotechnical Research Report for Ascente Tentative Map, Lumos and Assoc. June 2106

Conducted and prepared by Kris Hemlein – October 1, 2016

Geotechnical and Seismic Evaluation Data Gaps:

- 1) Ascente's geotechnical engineer summarizes several facts of geotechnical and seismic concern including: blasting, grading and heavy equipment will be needed to prepare the site due to very shallow depth to bedrock (volcanic andesite) and an average grade of 15-50%. It would appear that there is a reason that this "Geotechnical Research Report" is placed at the back of this 492 page "application". It is incomplete – as the author admits several times. On the cover page, the author, Mitch Burns, states "A field exploration sampling and testing program should be completed to verify these mapped conditions"
- 2) On Page L-4 the author states "The current scope of work did not include soil sampling, a fault study, or any soil and/or groundwater contamination at the site. A Phase 1 Environmental Assessment has been provided in a separate report". THIS PHASE 1 Report is NOT included in the submittal. We would like to see this document. This Phase 1 EA is also NOT included in this report's references.
- 3) On Page L-7, the author states that "We reviewed the Preliminary Revised Geological Maps of the Reno Urban Areas (2011) which shows a north/south trending possible concealed fault between the TSD and QoI2 lithologies. The glacial till (fill) masks the actual fault location and it is likely located some distance westerly of the TSD and QoI2 surface interface. WE RECOMMEND A SITE INVESTIGATION BY TRENCHING BE CONDUCTED TO PROVE OR DISPROVE THE POSSIBLE CONCEALED FAULT LOCATION IN THE PROJECT AREA. THE INVESTIGATION SHOULD OCCUR PRIOR TO THE FINAL MAP."
- 4) Also on page L-7: "At this time, the soil conditions are not known in sufficient detail to a depth of 100 feet, thus, a Site Class D may be assumed per the IBC.... And on Page L-8: in conclusion, seismic concerns for this site are not unlike other sites in the Reno area. HOWEVER, DUE TO THE PROXIMITY OF THE SITE TO A NUMBER OF FAULTS THAT ARE CONSIDERED ACTIVE, AS NOTED ABOVE, STRONG SEISMIC SHAKING SHOULD BE ANTICIPATED DURING THE LIFE OF ANY STRUCTURES. This is interesting considering that in the first section of the Application, Ascente states that there are no faults within a mile of the proposed development, HOWEVER two faults are shown on their Plate 7, both within one mile of the property. The concealed fault trace runs right through the north center of the proposed "Sierra Village" site! Both proposed access roads are located across this fault. Identifying and characterizing faults on and adjacent to the Ascente site are is IMPERATIVE in order to correctly identify IBC design ratings for the site structures and Infrastructure, including access roads, sewer and water supply lines.
- 5) On Page L-9, the Section SLOPE STABILITY and EROSION CONTROL states that "areas in which slopes were excavated by mechanical means, may need to be stabilized against

erosion. Further testing and/or observation would be needed to make a determination of slope stability on an individual basis. Approximately 80% of this site has slope inclinations between 15-50%!

- 6) Ascente's engineer states that the potential geologic hazards/conditions encountered on site can be mitigated, but there is NO elaboration of this in the Application itself. **We need to see documentation of HOW Ascente plans to mitigate these geologic hazards.**
- 7) The Geotechnical Report references a Phase 1 Site Assessment. This is NOT included in the Application. We want to see evidence that Ascente has conducted an environmental site assessment that includes a real evaluation of site soils, surface water, meteorological conditions, wildlife, vegetation, detailed map of site geology (including faults) and impacts on EXISTING community.
- 8) Ascente's geotechnical report scope of work did NOT include soil sampling, fault study, groundwater or other subsurface field investigations. The Engineer states that "it is possible that subsurface discontinuities are concealed" (this is the nature of geology!) and does NOT guarantee the consistency of the site geologic interpretations in his document. The Siesmic Considerations section states that the nearest fault is over one mile away from the west border. The NV Bureau of Mines and Geology – Preliminary Revised Maps of the Reno Urban Area – Washoe City Quadrangle, 2011 Open File Report 11-7 shows inferred and approximate faulting along the west side of the Steamboat Hills and an inferred fault in the north central part of the project area. The Ascente geotechnical report Plate 5, Fault Map, does NOT show the entirety of the concealed fault line along the west side of Steamboat Hills, only the northernmost portion between Fawn Lane and the rise of the west slope of Steamboat Hills. Why has Ascente not shown the whole length of this concealed fault on this Plate? Plate 5 also needs a legend. Plate 7 DOES show this fault, but this Plate is labeled "Preliminary Revised Geologic Map". I have included a section of the NV Preliminary Revised Map referenced above, that shows the faults in question, without interference. The legend from this map includes this description of the Faults shown: "*Fault – Solid where certain and location accurate, long-dashed where approximate, short-dashed where inferred, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side.*"

From the **EARTHQUAKE AND FAULT PROTECTION MEASURES - Washoe County Development Code:**

Section 110.434.35 Earthquake Fault Areas. Development in earthquake fault areas is to be discouraged. No habitable structure, or a structure whose integrity is critical to maintaining the public health and safety, shall be located on a fault that has been active during the Holocene Epoch of geologic time or as determined by a site specific geotechnical study.



Again, a robust fault characterization needs to be conducted prior to approving this project. The Engineer has NOT enquired of UNR and USGS geologists as to recent work conducted in this area. **Ascente needs to conduct a field investigation to characterize actual site geotechnical conditions. Actual site geology and geotechnical conditions are likely to impact Ascente's current development plan.**

- 9) Most of the Steamboat Hills surface lithology consists of andesite, which is a very strong volcanic rock. The author indicates rightly that this rock will require much blasting and heavy earthmoving equipment to create building surfaces. **We need to require Ascente to provide an accurate assessment of the amount of blasting/earthmoving needed as this will be a significant negative impact on quality of life and a potential safety hazard to the local residents.**
- 10) The site has LOW to moderate permeability – meaning that there is little infiltration of surface water/stormwater into the subsurface. Most stormwater will leave the site as runoff. **Ascente proposal includes a minimal stormwater management scenario that doesn't address the likely potential to impact current residents downgradient of the site.**
- 11) The Geologic setting needs to include a section on the formation of Steamboat Hills. The Steamboat Hills were most likely created as part of the "Basin and Range" system comprising most of Nevada. These are created by uplifted and down-dropped blocks along a series of North-South trending faults. The USGS Report on the Little Valley Fault System (not included in this report) suggests that the Callahan Ranch area rests on the down-dropped portion of a block and that a fault may exist along the western edge of the Steamboat Hills. **The County needs to require additional field work to determine**

WHERE faults exist in the project area and to characterize them with respect to seismic hazard and the current project proposal.

- 12) The surface geology of the site is discussed using the Tabor and Ellen report (1975), however the Engineer references the lithologies as “soils” and they are NOT soils. The Tabor report discusses site lithologies, there is very little SOIL cover on the site. Currently there is nowhere near enough soil on the property to support the vegetative amenities that Ascente proposes. This report should include a map to show the lithologies (soils) discussed on page L-5. **The Fault Map (Plate 5) shows regional lithologies but does NOT have a legend. The county needs to request that Ascente do a SOIL study on the site and provide detailed information on how much soil will need to be imported to support residential landscaping in the three villages proposed.**
- 13) The Engineer states that the “soils” (actually unconsolidated weathered rock) have moderate to high risk of corrosion to uncoated steel and low to moderate risk of corrosion toward concrete. **Ascente needs to provide information on how they will mitigate these corrosive properties.**
- 14) The Engineer includes a discussion of IBC design and earthquake accelerations spectral response but the discussion is confusing and does not include potential hazards to be considered in evaluation the safety of this proposed development. **How would this assessment change if one or more Holocene Faults are mapped across the site?**
- 15) The engineer suggests that the site WILL be subject to strong seismic shaking in the event of an earthquake. **Does Ascente’s development plan for access roads include adequate construction protection for these roads, particularly if they cross fault structures?**
- 16) The Engineer states that approximately 80% of the site has slope inclinations of between 15-50%. This is apparently why they have designed the original 300+ homes to be placed on small lots (medium to high density housing). **How much blasting and earthworks needs to be accomplished to build the access roads and building sites? Will these excavations create slopes that will need additional stabilization using retaining walls? The Engineer recommends further testing on “an individual basis”.**
- 17) The list of references does NOT include more recent work conducted in the Mt. Rose/Callahan Ranch area. **A regional geologic expert should be retained to provide geological/geotechnical understanding in the Callahan Ranch/Steamboat Hills area.**

Comments on Conceptual Drainage Report

The Conceptual Drainage Report for the Ascente development was produced by Lumos & Associates for NNV1 Partners, LLC and is part of the application for the tentative subdivision. While there are many requirements of a Conceptual Drainage Report (CDR) One purpose of the CDR is to show a tentative storm water drainage system with detention basins that are utilized to maintain storm water out flow to pre-development levels. The following is a quote from the Truckee Meadows Regional Drainage Manual (TMRDM) Section 303.7 Storm Runoff Detention.

THE POLICY OF THE JURISDICTIONAL ENTITIES SHALL BE TO REQUIRE LOCAL DETENTION STORAGE FOR NEW DEVELOPMENTS TO LIMIT PEAK FLOWS FROM BOTH A 5-YEAR STORM (Q_5) AND A 100-YEAR STORM (Q_{100}) TO THEIR PRE-DEVELOPMENT CONDITIONS. THE CAPACITY OF DOWNSTREAM CONVEYANCE SYSTEMS SHALL BE ANALYZED IN ACCORDANCE WITH THIS MANUAL AND SHALL BE BASED ON RUNOFF FROM THE DEVELOPMENT AS FULLY IMPROVED. LOCAL DETENTION IS ALSO REQUIRED WHEN DESIGNATED IN MASTER PLANS TO REDUCE THE PEAK RUNOFF RATE IN REGIONAL FACILITIES.

The consultant (Lumos & Associates) used HEC-HMS to determine pre and post construction storm water runoff for the project area. HEC-HMS is a computer model which is a mathematical representation of the physical world. The ability of that model to accurately represent the real world depends on the way the model is set up and the parameters used in the model. While it is beyond my scope and ability to point out obvious problems with this model, such as composite curve numbers used, declaration of impervious area, and modeled detention basins, what I would like to show is the pre-construction model greatly underestimates the discharge to the existing community. Furthermore in a following white paper I will describe that the discharge from North Detention Basin 3 onto Cedarwood Drive is not conveyed to an existing drainage system and the increased discharge from this development will cause flooding and extensive property damage.

In the early 1990's there was little storm water runoff generated in the flat area to the south of Fawn Lane. In addition storm water runoff from Callahan ranch subdivision headed to the base of the Steamboat hills was intercepted by drainage ditches on Cherrywood Drive directing it to the south to Galena Creek. There was very little channelization of storm water at the base of the Steamboat hills. The following Goggle Earth image shows the proposed area of Sierra Village at the south end of Fawn Lane. Note the small area of cleared vegetation. The red line denotes the current path for storm water runoff.



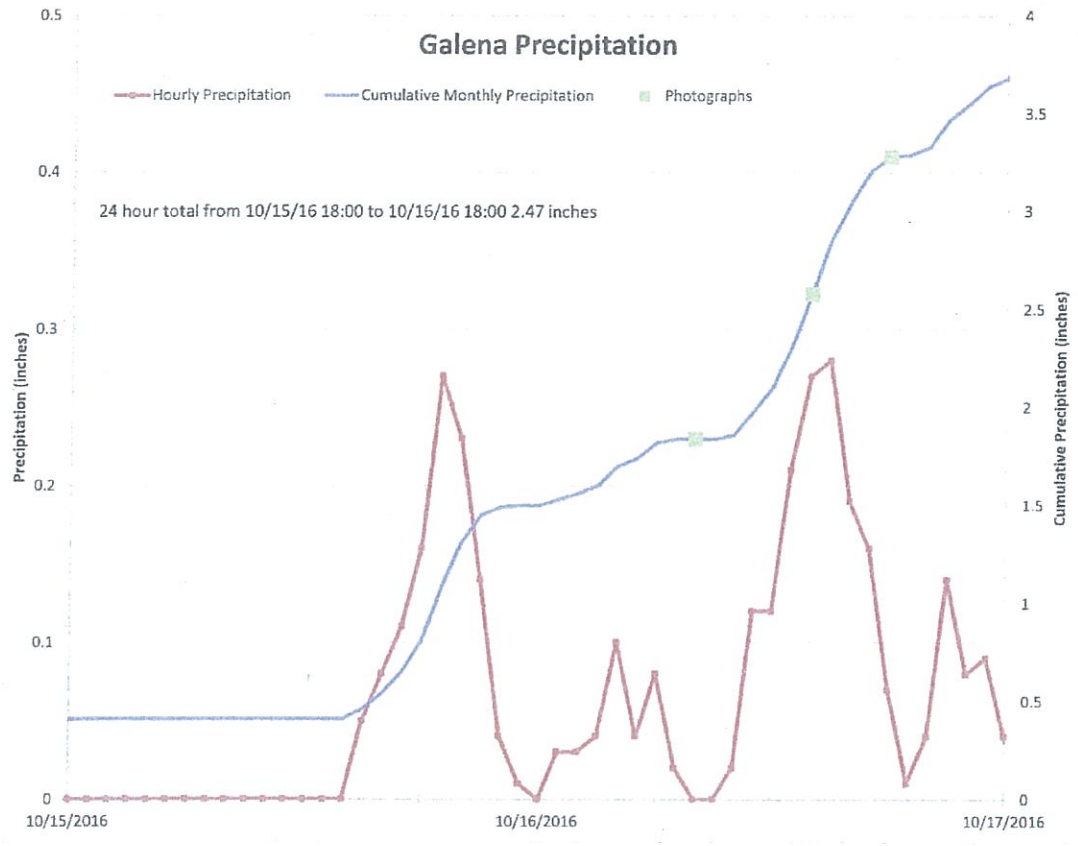
Goggle Earth Image 1990. Drainage ditches on Cherrywood Dr. direct storm water from the west to Galena Creek. At this time very little storm water runoff was generated from the flat area south of Fawn Lane. The Red line indicates the current path of storm water runoff.

By 2006 several events occurred that increased drainage along the Steamboat Hills. Heavy equipment was brought into the area of the proposed Sierra Village to remove vegetation which subsequently resulted in soil compaction and increased storm water runoff. There was increased usage of the 4x4 roads to the upper Steamboat Hills that channelized water from the upper Steamboat Hills to the flat area south of Fawn Land then to Cedarwood Drive. That year the newly constructed detention basins in the Estates of Mount Rose filled and overflowed due to insufficient percolation. Considerable property damage occurred that year due to the failure of two of these detention basins. Washoe county had to install a drainage network along Callahan Road to move storm water from the western detention basin to the Jones Creek Drainage. They also made some improvements to storm water drainage near the base of the Steam Boat Hills, however much of that area is private property where homeowners had to make their own improvements. The following Goggle Earth Image shows the Sierra Village area in November of 2006. Note that the detention basin in the Estates at Mount Rose with standing water. Detention basins are required to percolate its contained water in 3 days. However because of poor design the home owners association had to retrofit the detention basins with infiltration galleries. By this point the developer was no longer around.



Goggle Earth image November 2006. Note the cleared vegetation and compaction in the flats south of Fawn Lane. Also the Detention basin in the Estates is nearly full of storm water.

One important goal of the Conceptual Drainage report is to properly size the detention basins so that storm water runoff from the developed property is no more than it is in the natural state. According to the Lumos model the pre-developed storm water runoff for a storm with a 5 year recurrence interval for the area south of Fawn Lane is 21.3 cubic feet per second(CFS). From the Lumos report a storm with a 5 year recurrence interval for this area is 2.26 inches over a 24 hour period. In mid October 2016 we had such an event. The following chart shows precipitation from the Western regional Climate Centers monitoring station in Galena for October of 2016. As shown on the chart the area received 2.47 inches of precipitation in a 24 hour period. Although no measurements of runoff were made I was able to take photographs of runoff from this event. The green squares on the cumulative precipitation line denote times for the photographs taken of runoff. The first 3 photographs are taken on Cedarwood drive where storm water runoff leaves the property where Sierra Village is proposed to be built. This area is where all the runoff from this property occurs.



Plot of precipitation at the Galena station from October 15 to October 17, 2016. The green squares on the cumulative precipitation trace indicate times when photographs were taken. These photographs are presented on the following pages.



Storm water runoff from area of Sierra Village onto Cedarwood Drive October 16, 2016 8:27 AM.



Storm water runoff from area of Sierra Village onto Cedarwood Drive October 16, 2016 2:07 PM.



Storm water runoff from area of Sierra Village onto Cedarwood Drive October 16, 2016 5:39 PM.

To further illustrate discharge during this event I present a couple more photographs of runoff from the area of Sierra Village. The next photographs were taken on Shawna Lane where storm water is channelized through a 12" culvert. Discharge in the second photograph was the maximum observed during this event. Minor flooding occurred just upstream from where this photograph was taken where storm water overflowed a drainage ditch in the property owner's side yard. Although discharge measurements were not made during this event these photographs illustrate that maximum discharge during this event is closer to 2 cfs as opposed to the pre-development model prediction of 21.3 cfs, an order of magnitude less!

I recommend that Washoe County Planning considers the following;

- 1) Use the information presented to calibrate the pre-development model. to more accurately represent the pre-construction storm water runoff.
- 2) Considering there are close to 15 acres of interconnected impervious surfaces in just the roads and sidewalks in the developments that will drain into the detention basins in Sierra Village, these detention basins should be enlarged.
- 3) Because the detention basin in the south east corner of the Estates at Mount Rose failed due to lack of percolation, the new detention basins (less than 300 yards due south of the failed basins) should have infiltration galleries in the design plans.

- 4) The developer plans on dumping their storm water discharge onto Cedarwood Drive into the existing drainage system. There is no drainage system capable of taking storm water from this development. The developer should be required to upgrade the drainage system to handle storm water discharge from this development as the Truckee Meadows Drainage Manual states. They need to consider the so called Powers Law about flooding downstream property owners. At a minimum they should be required to post a bond large enough make these necessary upgrades. That way when the infrastructure is installed and the first large storm causes property damage, there will be funds available to install this need drainage system upgrade.



Storm water discharge through a 12" culvert on Shawna Lane. Photograph taken October 16th 2016 at 2:02 PM.



Photograph taken on October 16th, 2016 at 5:26 PM of 12" culvert on Shawana Lane. Note that discharge is at capacity for this storm water system.



Minor flooding on private property on Shawana Lane just upstream of previous photograph. Photograph taken on October 16th 2016 at 5:28 PM.

Surface water Drainage Ascenté

In the early 1990's there was little storm water runoff generated in the flat area to the south of Fawn Lane. In addition storm water runoff from the Callahan ranch subdivision headed to the base of the Steamboat hills was intercepted by drainage ditches on Cherrywood Drive, directing it to the south to Galena Creek. There was very little channelization of storm water at the base of the Steamboat hills. The following Goggle Earth image shows the proposed area of Sierra Village at the south end of Fawn Lane. Note the small area of cleared vegetation. The red line denotes the current path for storm water runoff.



Image 1. Goggle Earth Image 1990. Drainage ditches on Cherrywood Dr. direct storm water from the west to Galena Creek. At this time very little storm water runoff was generated from the flat area south of Fawn Lane. The Red line indicates the current path of storm water runoff.

By 2006 several events occurred that increased drainage along the Steamboat Hills. Heavy equipment was brought into the area of the proposed Sierra Village to remove vegetation which subsequently resulted in soil compaction and increased storm water runoff. There was increased usage of the 4x4 roads to the upper Steamboat Hills that channelized water from the upper Steamboat Hills to the flat area south of Fawn Lane then to Cedarwood Drive. That year the newly constructed detention basins in the Estates of Mount Rose filled and overflowed due to insufficient percolation. Considerable property damage occurred that year due to the failure of two of these detention basins. Washoe County had to

install a drainage network along Callahan Road to move storm water from the western detention basin of the Estates at Mt. Rose to the Jones Creek Drainage. They also made some improvements to storm water drainage near the base of the Steamboat Hills; however much of that area is private property where homeowners had to make their own improvements. The following Goggle Earth Image shows the Sierra Village area in November of 2006. Note that the detention basin in the Estates at Mt. Rose with standing water. Detention basins are required to percolate its contained water in 3 days. However because of poor design the home owners association had to retrofit the detention basins with infiltration galleries. By this point the developer was no longer around.



Image 2. Goggle Earth image November 2006. Note the cleared vegetation and compaction in the flats south of Fawn Lane. Also the Detention basin in the Estates is nearly full of storm water.

Ascenté claims that they will dump storm water from Sierra and Tioga village into the existing storm water drainage system on Cedarwood Drive. That “drainage system” consists of a poorly constructed drainage path that has the capacity to handle no more than 2 cubic feet per second (cfs) discharge. Ascenté claims that during a storm with a 5 year recurrence interval they will discharge over 16.4 cfs onto Cedarwood dr. The following Goggle Earth image shows the path that storm water takes from Cedarwood Dr. to Galena Creek.



Image3. Goggle Earth image of the flow route that storm water takes from Cedarwood Dr. to Galena Creek. Numbers indicate where photographs are taken.

To demonstrate the lack of the infrastructure to move the additional storm water created by Ascenté to Galena Creek I present the following images.



P1. Storm water in the area of proposed Sierra Village.



P2. Storm water draining onto Cedarwood Dr.



P3. Storm water from the proposed Sierra Village moving through private property.



P4. Storm water path under private property, pipe size 9".



P5. Overflow path 1 in poorly defined ditch on private property.



P6 Additional plumbing for storm water on private property.



P7. Storm water drainage from the proposed Sierra Village onto Shawna Lane.



P8. Storm water Flow from the proposed Sierra Village on Shawna Lane. Note that this system is already at capacity. Discharge less than 2 cfs.



P9. Storm water flow through private property in Cross creek subdivision.



P10. Storm water path through a private Fish pond in Cross Creek subdivision.

The path for storm water from the South detention basin is a short path to Galena Creek. There are a few problems with this path and the detention basin. The detention basin and outflow path are both proposed on the AT&T right-a-way. This right-a-way is the path of the very important fiber optic cable. They need to address this problem. Also the path of the discharge is directed over a spring which is utilized by mule deer that live in this area during winter months. If Ascenté is built as proposed in the tentative subdivision map they will create extensive flooding damage on county and private properties. This will be a very big problem that needs to be addressed.

Groundwater

Pleasant Valley Ground water Basin, Basin 88, was designated in 1978. This occurred prior to the establishment of Montroux, Cross Creek, St. James Village and The Estates. The only development that existed South of the Mt Rose highway was Callahan Ranch, Fawn Lane, and a few homes in Galena Forest Estates. Currently in the Galena Fan area, a subset of Basin 88, there are 10 production wells and over 500 domestic wells. Most of these domestic wells are located in the Callahan Ranch and Fawn Lane Subdivisions. Due to declining water levels many of the domestic wells were deepened or abandoned where the homeowner could connect to the municipal water system. In the Fawn lane area no water lines are available to connect to.

Currently there are over 1300 approved housing units that will receive water from this aquifer. These developments are;

- 1) Sierra Reflections 938 units
- 2) Terrasante (Callamont) 210 units
- 3) Mt Rose Estates 23 Units
- 4) Build out at Saint James Village 239 units

In 2015 TMWA took over the county water system on the Galena Fan area. They immediately recognized the problems in our area and made steps to mitigate them. They realized that there are more water rights associated with the Galena Fan than there is physical water!

The Conjunctive use plan was initiated which brings surface water into the water system to augment ground water for domestic consumption. Since May of this year (2016) TMWA has been supplementing groundwater with Truckee River water, however there is a limited capacity to bring Truckee River water this far not to mention the cost to pump that water over 20 miles and up over 1000 feet.

TMWA Statement;

TMWA is a water purveyor required to respond to development approved by local governments, we do not set growth policy!

ASCENTÉ will provide only 181.18 af. of ground water rights for 281 dwelling units because of rule 7! A single family resident in our area normally would need to dedicate 1.12 Af of water right to connect to the water system, however Rule 7 allows this developer to dedicate less than the 1.12 af water right because of the smaller lot size. This water right dedication is equivalent to 0.65 AF/dwelling unit. However long after the subdivision is built, TMWA will have to prove to the state engineer that the amount of water right supplied by the developer is the amount used by the current residents. If they are using more then the amount dedicated by the developer, TMWA or the residents will be responsible to provide the difference. This issue is occurring at the present time in Arrowcreek where residents are be asked to make up the difference in water rights.

These water rights dedicated by Ascente are long existing water rights and are part of the over allocation that occurred in the 1970's. These water rights do not represent new water being brought into the basin. They are legal rights but their use is going to compound water level decline on the Mt. Rose Fan.

Because of the over allocation of water rights and declining water levels on the Mt. Rose fan, TMWA now requires developers to purchase surface water rights on Whites and Thomas Creeks. This treated surface water will be used in the aquifer storage and recovery program

Groundwater

(ASR) where surface water will augment groundwater during the summer months and will be injected into the aquifer during the winter months.

By supplementing groundwater resources with surface waters from both the Truckee River and Thomas and Whites creeks, TMWA's goal is to pump less groundwater from the Mt. Rose fan aquifer than we do today, even with additional development. This is a good plan, however the question remains is it going to be enough to reverse the trends of declining water levels that have been occurring over the years? What will happen when app of the approved development goes on line? Is there enough water rights on Thomas and Whites creeks to compensate for the already approved development?

The trend for new developments, especially smaller lot size is to landscape the entire yard. In Callahan and Fawn Lane most of the residents use a combination of natural landscape with a small amount of manicured landscape adjacent to their house. In contrast yards in any of the newer developments have considerably more landscaping.

For the Ascente project Washoe County should put landscape restrictions on the development to keep the usage to 0.65 AF/unit. Make sure the developer keeps much of the natural vegetation in place, sagebrush and bitter brush. Currently their plan calls for grading the majority of the land within the villages in order to get the maximum number of homes. This will also necessitate landscaping entire lots. The forest area plan, section F.2.1 A to e. states

- a. Minimize disruption to natural topography.
- b. Utilize natural contours and slopes as specified in Article 424 of the Washoe County Development Code.
- c. Complement the natural characteristics of the landscape.
- d. Preserve existing vegetation and ground coverage to minimize erosion.
- e. Minimize cuts and fills. Cut and fill slopes greater than eight (8) feet in height are prohibited. Grade changes greater than eight (8) feet in height shall be stabilized using one or more engineered retaining wall(s). Wall colors shall blend with the adjacent undisturbed hillside.

This will help this development blend in with the natural landscape and the existing neighborhood. Alternatively Washoe County could hold the balance of 0.47 AF/unit in bond (1.12AF-0.65AF) until the real water use is determined. Don't make the future residents suffer the fate that the residents of Arrowcreek are now going through.

Submitted By Todd Mihevc
todd@dri.edu

RE New Ascente development Proposal Please forward as appropriate.txt
From: Retired Renocop@earthlink.net <renocop@earthlink.net>
Sent: Tuesday, May 02, 2017 7:13 PM
To: Rebecca Kapuler
Cc: Lloyd, Trevor; Ascente Opposed Ken allen; Mullin, Kelly; Daniel Doenges; Ascente Opposed
Subject: RE: New Ascente development Proposal/ Please forward as appropriate

Follow Up Flag: Follow up
Flag Status: Flagged

As this is a "new" plan I hope RTC takes another look- at Washoe's request if needed.
Still unanswered are the various questions about whether Fawn, as currently configured, is a connector.
Also RTC's position on use of CR49 to access Ascente and as proposed in the Master: Forest Area Plan, a connector from Thomas Creek to Ascente.
So many unanswered questions.

Sincerely,

Jeff Church
www.RenoTaxRevolt.com
800 554 9519

-----Original Message-----

From: Rebecca Kapuler
Sent: May 2, 2017 3:20 PM
To: "Retired Renocop@earthlink.net"
Cc: Info , Washoe County Planner Trevor Lloyd , Ascente Opposed Ken allen , "Mullin, Kelly" , Daniel Doenges
Subject: RE: New Ascente development Proposal/ Please forward as appropriate

Good afternoon Mr. Church,

Thank you for contacting me about the Ascente development project which is located south of Fawn Lane and east of Shawna Lane.

Trevor Lloyd and Kelly Mullin are the Washoe County Community Services Department Planning and Development Division staff working on this project and I have copied them both on this email. This project is under the jurisdiction of the Washoe County; therefore, any conditions required for this or other development cases within the County's jurisdiction fall under their codes and process.

RTC commented on TM16-009 (Ascente) and SW16-003 (Ascente) projects and letters were submitted

to Mr. Lloyd and Ms. Mullin stating the following:

"The RTP, the 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. Also, 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."

Page 1

RE New Ascente development Proposal Please forward as appropriate.txt

Please feel free to contact me if you have additional comments or questions. Safety is a priority to the RTC and we appreciate your comments on this matter.

Respectfully,
Rebecca

Rebecca Kapuler

Planner
Regional Transportation Commission, Washoe County
PO Box 30002/89520
1105 Terminal way, Suite 211
Reno, NV 89502
Tel-775.332.0174 Fax-775.348.0450
rkapuler@rtcwashoe.com

From: Retired Renocop@earthlink.net [mailto:renocop@earthlink.net]
Sent: Tuesday, April 25, 2017 8:44 AM
To: Rebecca Kapuler <rkapuler@rtcwashoe.com>
Cc: Info <Info@rtcwashoe.com>; Washoe County Planner Trevor Lloyd <TLloyd@washoecounty.us>;
Ascente Opposed Ken allen <desbyvirginia@gmail.com>
Subject: New Ascente development Proposal/ Please forward as appropriate

Please see attached letter. RTC input is sought. Please make this letter and attachments part of any file at RTC and Washoe County.

Jeff Church
775 544 7366

-----Forwarded Message-----

From: "Lloyd, Trevor"
Sent: Apr 24, 2017 10:29 AM
To: "Retired Renocop@earthlink.net"
Subject: RE: Ascente

See the following link:

https://www.washoecounty.us/csd/planning_and_development/applications/files-planning_development/comm_dist_two/2017/files/TM16-009_ap_April%2017.pdf

Trevor Lloyd
Senior Planner | Washoe County Community Services Department | Planning & Development Division
tlloyd@washoecounty.us | (775) 328-3620 | F(775) 328-6133 | 1001 E. Ninth St., Bldg. A, Reno, NV 89512

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

From: Retired Renocop@earthlink.net [mailto:renocop@earthlink.net]
Sent: Monday, April 24, 2017 8:54 AM
To: Lloyd, Trevor
Subject: Ascente

Rumor is Ascente resubmitted a proposal. May we see it if true?

Jeff RE New Ascente development Proposal Please forward as appropriate.txt

From: Kristin Hemlein
To: [Mullin, Kelly](#); [Tone, Sarah](#); [Lloyd, Trevor](#)
Subject: Ascente Submission - Critique of Appendix L - Geotech Desktop Study
Date: Friday, May 12, 2017 1:05:23 PM
Attachments: [Geotechnical and Seismic Site Data Gaps - K. Hemlein October 20, 2016.pdf](#)

All:

Thank you for your attendance at the CAB meeting last night, and particularly for listening intently to the many technical issues and questions the residents of Callahan and Fawn Lane put forth. It is quite obvious that this project needs much more work, beginning with a geotechnical data collection program that will give this project the REAL information it needs to design subdivisions that are in keeping with State and County regulations.

I have attached my critique of the very poorly written Appendix L which I was surprised and dismayed to see remained TOTALLY UNCHANGED from the previous submission! Not only that, but the document itself does not use the latest geologic maps available for the Steamboat Hills area and does not include legends for the maps they do include, leading the reader to a deceptive conclusion that the area is geotechnically and seismically inert! Our neighborhood didn't fall for that, and neither should the Washoe County Planners and Engineers! But apparently you have, as they were not asked to do any field work before re-submitting their Plan.

The safety and home values of literally thousands of families is at stake here. I ask you to PLEASE make them do a robust geotechnical field program, and attend to all the other gaps in information, along with blatant disregard for regulations that our group pointed out in the meeting last evening.

Thank you,

Kris Hemlein
Environmental Engineer and Geochemist, Asian Development Bank consultant

Review and Evaluation of Ascente Application Appendix L -Geotechnical Research Report for Ascente Tentative Map, Lumos and Assoc. June 2106

Conducted and prepared by Kris Hemlein – October 1, 2016

Geotechnical and Seismic Evaluation Data Gaps:

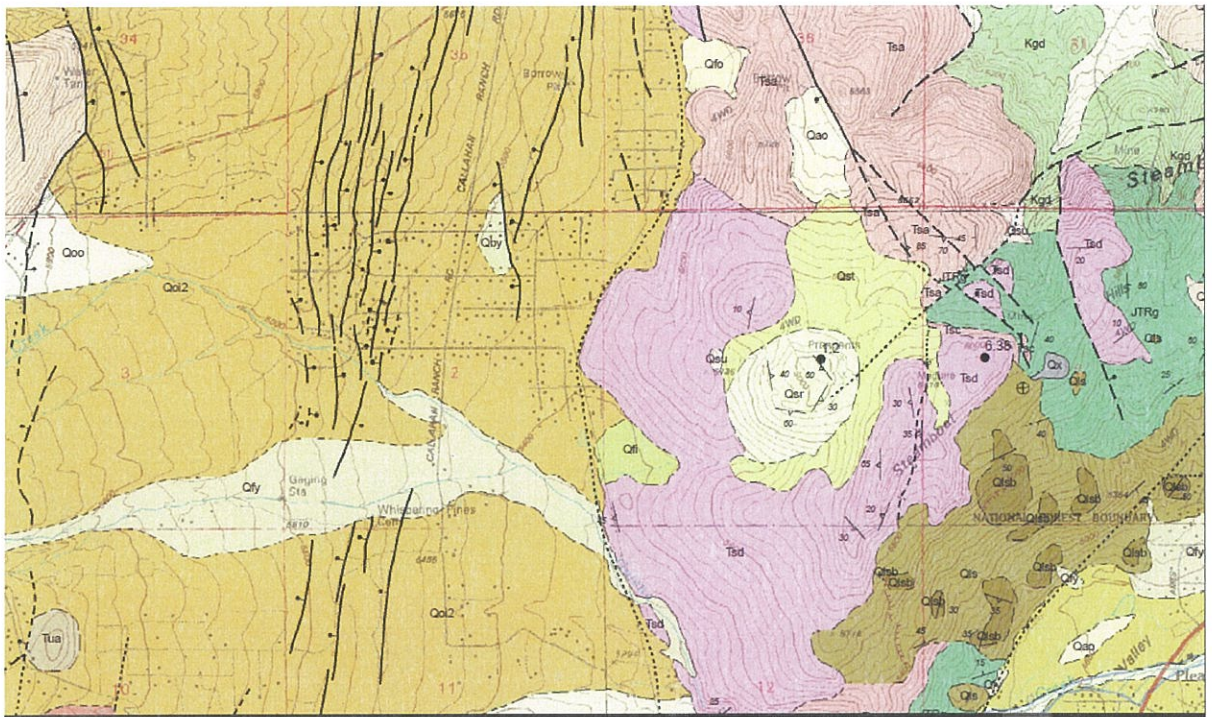
- 1) Ascente's geotechnical engineer summarizes several facts of geotechnical and seismic concern including: blasting, grading and heavy equipment will be needed to prepare the site due to very shallow depth to bedrock (volcanic andesite) and an average grade of 15-50%. It would appear that there is a reason that this "Geotechnical Research Report" is placed at the back of this 492 page "application". It is incomplete – as the author admits several times. On the cover page, the author, Mitch Burns, states "A field exploration sampling and testing program should be completed to verify these mapped conditions"
- 2) On Page L-4 the author states "The current scope of work did not include soil sampling, a fault study, or any soil and/or groundwater contamination at the site. A Phase 1 Environmental Assessment has been provided in a separate report". THIS PHASE 1 Report is NOT included in the submittal. We would like to see this document. This Phase 1 EA is also NOT included in this report's references.
- 3) On Page L-7, the author states that "We reviewed the Preliminary Revised Geological Maps of the Reno Urban Areas (2011) which shows a north/south trending possible concealed fault between the TSD and QoI2 lithologies. The glacial till (fill) masks the actual fault location and it is likely located some distance westerly of the TSD and QoI2 surface interface. WE RECOMMEND A SITE INVESTIGATION BY TRENCHING BE CONDUCTED TO PROVE OR DISPROVE THE POSSIBLE CONCEALED FAULT LOCATION IN THE PROJECT AREA. THE INVESTIGATION SHOULD OCCUR PRIOR TO THE FINAL MAP."
- 4) Also on page L-7: "At this time, the soil conditions are not known in sufficient detail to a depth of 100 feet, thus, a Site Class D may be assumed per the IBC.... And on Page L-8: in conclusion, seismic concerns for this site are not unlike other sites in the Reno area. HOWEVER, DUE TO THE PROXIMITY OF THE SITE TO A NUMBER OF FAULTS THAT ARE CONSIDERED ACTIVE, AS NOTED ABOVE, STRONG SEISMIC SHAKING SHOULD BE ANTICIPATED DURING THE LIFE OF ANY STRUCTURES. This is interesting considering that in the first section of the Application, Ascente states that there are no faults within a mile of the proposed development, HOWEVER two faults are shown on their Plate 7, both within one mile of the property. The concealed fault trace runs right through the north center of the proposed "Sierra Village" site! Both proposed access roads are located across this fault. Identifying and characterizing faults on and adjacent to the Ascente site are IMPERATIVE in order to correctly identify IBC design ratings for the site structures and Infrastructure, including access roads, sewer and water supply lines.
- 5) On Page L-9, the Section SLOPE STABILITY and EROSION CONTROL states that "areas in which slopes were excavated by mechanical means, may need to be stabilized against erosion. **Further testing and/or observation would be needed to make a determination**

of slope stability on an individual basis. Approximately 80% of this site has slope inclinations between 15-50%!

- 6) Ascente's engineer states that the potential geologic hazards/conditions encountered on site can be mitigated, but there is NO elaboration of this in the Application itself. **We need to see documentation of HOW Ascente plans to mitigate these geologic hazards.**
- 7) The Geotechnical Report references a Phase 1 Site Assessment. This is NOT included in the Application. We want to see evidence that Ascente has conducted an environmental site assessment that includes a real evaluation of site soils, surface water, meteorological conditions, wildlife, vegetation, detailed map of site geology (including faults) and impacts on EXISTING community.
- 8) Ascente's geotechnical report scope of work did NOT include soil sampling, fault study, groundwater or other subsurface field investigations. The Engineer states that "it is possible that subsurface discontinuities are concealed" (this is the nature of geology!) and does NOT guarantee the consistency of the site geologic interpretations in his document. The Seismic Considerations section states that the nearest fault is over one mile away from the west border. **The NV Bureau of Mines and Geology – Preliminary Revised Maps of the Reno Urban Area – Washoe City Quadrangle, 2011 Open File Report 11-7** shows inferred and approximate faulting along the west side of the Steamboat Hills and an inferred fault in the north central part of the project area. The Ascente geotechnical report Plate 5, Fault Map, does NOT show the entirety of the concealed fault line along the west side of Steamboat Hills, only the northernmost portion between Fawn Lane and the rise of the west slope of Steamboat Hills. Why has Ascente not shown the whole length of this concealed fault on this Plate? Plate 5 also needs a legend. Plate 7 DOES show this fault, but this Plate is labeled "Preliminary Revised Geologic Map". I have included a section of the NV Preliminary Revised Map referenced above, that shows the faults in question, without interference. The legend from this map includes this description of the Faults shown: "*Fault – Solid where certain and location accurate, long-dashed where approximate, short-dashed where inferred, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side.*"

From the **EARTHQUAKE AND FAULT PROTECTION MEASURES - Washoe County Development Code:**

Section 110.434.35 Earthquake Fault Areas. Development in earthquake fault areas is to be discouraged. No habitable structure, or a structure whose integrity is critical to maintaining the public health and safety, shall be located on a fault that has been active during the Holocene Epoch of geologic time or as determined by a site specific geotechnical study.



Again, a robust fault characterization needs to be conducted prior to approving this project. The Engineer has NOT enquired of UNR and USGS geologists as to recent work conducted in this area. **Ascente needs to conduct a field investigation to characterize actual site geotechnical conditions. Actual site geology and geotechnical conditions are likely to impact Ascente’s current development plan.**

- 9) Most of the Steamboat Hills surface lithology consists of andesite, which is a very strong volcanic rock. The author indicates rightly that this rock will require much blasting and heavy earthmoving equipment to create building surfaces. **We need to require Ascente to provide an accurate assessment of the amount of blasting/earthmoving needed as this will be a significant negative impact on quality of life and a potential safety hazard to the local residents.**
- 10) The site has LOW to moderate permeability – meaning that there is little infiltration of surface water/stormwater into the subsurface. Most stormwater will leave the site as runoff. **Ascente proposal includes a minimal stormwater management scenario that doesn’t address the likely potential to impact current residents downgradient of the site.**
- 11) The Geologic setting needs to include a section on the formation of Steamboat Hills. The Steamboat Hills were most likely created as part of the “Basin and Range” system comprising most of Nevada. These are created by uplifted and down-dropped blocks along a series of North-South trending faults. The USGS Report on the Little Valley Fault System (not included in this report) suggests that the Callahan Ranch area rests on the down-dropped portion of a block and that a fault may exist along the western edge of the Steamboat Hills. **The County needs to require additional field work to determine**

WHERE faults exist in the project area and to characterize them with respect to seismic hazard and the current project proposal.

- 12) The surface geology of the site is discussed using the Tabor and Ellen report (1975), however the Engineer references the lithologies as “soils” and they are NOT soils. The Tabor report discusses site lithologies, there is very little SOIL cover on the site. Currently there is nowhere near enough soil on the property to support the vegetative amenities that Ascente proposes. This report should include a map to show the lithologies (soils) discussed on page L-5. **The Fault Map (Plate 5) shows regional lithologies but does NOT have a legend. The county needs to request that Ascente do a SOIL study on the site and provide detailed information on how much soil will need to be imported to support residential landscaping in the three villages proposed.**
- 13) The Engineer states that the “soils” (actually unconsolidated weathered rock) have moderate to high risk of corrosion to uncoated steel and low to moderate risk of corrosion toward concrete. **Ascente needs to provide information on how they will mitigate these corrosive properties.**
- 14) The Engineer includes a discussion of IBC design and earthquake accelerations spectral response but the discussion is confusing and does not include potential hazards to be considered in evaluation the safety of this proposed development. **How would this assessment change if one or more Holocene Faults are mapped across the site?**
- 15) The engineer suggests that the site WILL be subject to strong seismic shaking in the event of an earthquake. **Does Ascente’s development plan for access roads include adequate construction protection for these roads, particularly if they cross fault structures?**
- 16) The Engineer states that approximately 80% of the site has slope inclinations of between 15-50%. This is apparently why they have designed the original 300+ homes to be placed on small lots (medium to high density housing). **How much blasting and earthworks needs to be accomplished to build the access roads and building sites? Will these excavations create slopes that will need additional stabilization using retaining walls? The Engineer recommends further testing on “an individual basis”.**
- 17) The list of references does NOT include more recent work conducted in the Mt. Rose/Callahan Ranch area. **A regional geologic expert should be retained to provide geological/geotechnical understanding in the Callahan Ranch/Steamboat Hills area.**

Galena Community Action Group against Ascente.txt

From: ryan loetscher <ryanftd@yahoo.com>
Sent: Wednesday, May 10, 2017 9:48 AM
To: Tone, Sarah; Lloyd, Trevor; Mullin, Kelly
Subject: Galena Community Action Group against Ascente

Hello Sarah, Trevor and Kelly. Sarah asked me to email the three of you to put on record how our group formed and how we have proceeded. So here we go.

Obviously, when the Ascente plans started circulating, people in our area were upset... because people are always upset when there is new development in a more rural area like ours where people moved to get away from the city and people, have space, have horses, get away from HOA's and regulations and so forth. For the most part these are people with pioneer spirit and old school Nevada mentality. Many of these people were living out here back when Reno itself was a small cow town and there was zero development out there. So more than upset, they felt threatened given the history of developments in that area in the past that left their wells dried up and left them feeling like they were lied to. One day I discovered a conversation about water on Nextdoor, a community driven social media. After engaging and then discussing concerns with our local TMWA representative, I realized there were many misconceptions. That's when I started reaching out. This was a big development and I wanted to honestly figure out what it meant for us here, dispel myths, and uncover real concerns.

I researched the issues that I saw people bringing up online and found answers as best I could from the city, TMWA and the school district. I scheduled a community meeting at Hunsberger and posted it online and put up signs. I had representatives from the school district and TMWA come to the meeting to speak. We had a large turnout and a lot of good questions were raised... and of course a few angry people came just to be angry. After the meeting I had several residents come to me to thank me for my work and offered to join up to help, most importantly the now true leaders of the group, Ken Allen and Todd Michevc. And thus our group was formed.

Myself and the rest of the group decided that our role as volunteer concerned citizens, and not appointed officials, was to seek out facts and answer community questions. Nothing more. So we developed the website galenacommunities.wordpress.com and created a mailer so that we could give updates, and receive feedback, questions and concerns from the community (I should note that the website is wildly out of date as we have been predominantly using it for the email list feature, but I will rectify that after the CAB). Over time we gathered many many experts in various fields and we uncovered more and more concerns. This didn't start as a "not in my backyard" or "anti-development" group, but all cards on the table, the more we discovered, the more it turned into an anti-Ascente group. As you know we feel this development is completely inappropriate and should not be approved... but that's another topic.

Galena Community Action Group against Ascente.txt

By the time the CAB and planning commission meetings came up, we made the decision that we would present all of the information we had gathered on the development. There is obviously an "anti-ascente" tone to it, but, in light of our decision that we are simply a volunteer group that don't any sort of authority on decisions, our plan has always been to present the unanswered issues raised by input from our community at large. That is what we plan to do tomorrow, is point out concerns that have not been addressed by the changes Ascente has made.

Thank you for taking the time to hear our concerns and I hope the process prevails.

P.S. On a personal note, I am sorry to hear that people felt threatened at the last CAB meeting and I deeply condemn and such actions by members of our community. I understand the anger and frustration. I am angry and frustrated myself. Violence is the voice of the unheard. That is why the system and the process are so vitally important and why I support it so. I hope we can all be heard in this process and make the right decisions.

May 10, 2017

John Beach
14985 La Briana Avenue
Reno, Nevada 89511

Washoe County Planning Commission
c/o Trevor Lloyd via e-mail (tlloyd@washoecounty.us)
1001 East Ninth Street
Reno, Nevada

Subject: Addendum to my letter of December 30, 2016 regarding lead contamination in soils at the proposed Ascente subdivision

Ladies and Gentlemen:

This letter serves as an addendum to my letter to the Washoe County Planning Commission dated December 30, 2016 regarding lead contamination in soils at the proposed Ascente subdivision (attached). In that letter, I stated that "The selection of criteria concentrations for evaluating potential health risks and the comparisons with soil concentrations measured at the site as presented in the report are not problematic." I have since learned that the criteria concentration used in the report for evaluating potential health risks is indeed problematic.

The McGinley and Associates report used a "Regional Screening Level" (RSL) published by the United States Environmental Protection Agency (US EPA). The RSL of 400 mg/kg for residential soil used is outdated and a downward revision is currently being actively considered. My recent personal communication with Dr. Patrick Wilson, a Senior Regional Toxicologist at US EPA Region 9, indicated that for the past 3 years, the regional toxicologists have been regularly using 80 mg/kg as the cleanup level for lead at contaminated sites with possible residential use that are being cleaned-up under US EPA's authority. This change reflects more recent information about the toxicity of lead and how exposure occurs.

The fact that the proposed Ascente subdivision is for residential development emphasizes the facts that lead is particularly toxic to children, including unborn children and that no "safe" level of exposure has ever been identified. In studies measuring the effects of lead toxicity on people, some level of toxicity has consistently been measured in the lowest exposure levels used in the study. Over time, better measurement techniques have consistently found detrimental effects in children at lower and lower lead exposure levels. Accordingly, it is reasonable to expect this trend to continue and that, someday, even the soil lead concentrations of 80 mg/kg will no longer be considered protective.

As I noted in my December 30 letter, soil lead concentrations of 80 mg/kg could have easily been present in the samples collected and analyzed by McGinley and Associates but not measured as such because of the composite sampling technique used. In my letter I also noted that concentrations considerably higher than 80 mg/kg could easily be present at the Ascente location but missed because they did not collect enough samples to begin with and they failed to follow up with higher-density

Page 2

John Beach: Addendum to my letter of December 30, 2016 regarding lead contamination in soils at the proposed Ascente subdivision

sampling using discrete (not composite) samples throughout the proposed development site and step-out sampling around the locations where contamination was found.

This new information emphasizes my earlier conclusions that the McGinley and Associates study failed to show that the location of the proposed Ascente subdivision was safe for residential development and it further emphasizes the need for significant amounts of additional sampling before development is approved.

Sincerely

John Beach

Attachment: John Beach letter to Washoe County Planning Commission, dated December 30, 2016

December 30, 2016

John Beach
14985 La Briana Avenue
Reno, Nevada 89511

Washoe County Planning Commission
c/o Trevor Lloyd via e-mail (tlloyd@washoecounty.us)
1001 East Ninth Street
Reno, Nevada

Subject: Lead contamination in soils at the proposed Ascente subdivision

Ladies and Gentlemen

My name is John Beach and I live at 14985 La Briana Ave, Reno, NV. I have reviewed a report entitled "Review of Soil Sampling and Analytical Testing Summary Report Ascente Phase 1 Residential Development, Reno, Nevada, October 3, 2016" (the report), prepared by McGinley & Associates, Reno, NV. I consider myself to be an expert in sampling design and data analysis for the type of investigation presented in the report and this letter presents a summary of my key findings, my more detailed comments and the conclusions of my review.

From 2002 until 2016, I was employed by the United States Environmental Protection Agency (EPA) as an environmental scientist in the Region 9 office in San Francisco. My primary duties included oversight of the characterization and cleanup of hazardous waste sites and technical support to others doing the same and similar tasks. From 1988 until 2002, I worked for environmental consulting firms performing human health and ecological risk assessments, designing sampling programs, and analyzing environmental chemistry data sets. From 1984 until 1988, I was the director of WESCO Laboratories, a certified hazardous waste analysis laboratory. In summary, my profession for 32 years was performing, writing and reviewing this type of work.

My review addressed the text, tables and figures presented in the report. I did not perform formal data validation or cross-check laboratory reports with the text, tables and figures. My review was technical and did not address editorial issues such as report organization and grammar.

KEY FINDINGS

- 1) The design of the sampling program was inadequate, notably:
 - The sampling program was not designed to provide the data needed to evaluate whether soil lead levels at the location of the Ascente subdivision are safe for residential use.
 - Not all potential sources of contamination were addressed.
 - Not enough samples were collected for the area being addressed.
 - Composite samples were used, exacerbating the shortcomings of having too few samples and compromising the utility of the measurements.

- 2) The data analysis used inappropriate methods and failed to identify the presence of an area of elevated soil lead concentration:

- An inappropriate background data set was used.
- The background data were used inappropriately.
- The potential for the presence of contamination was not addressed.
- Obvious indications of contamination were overlooked.

3) As a result, substantially more information and expert analysis is needed before Washoe County can conclude that soil lead levels at the location of the proposed Ascente subdivision are safe for residential use.

COMMENTS

I first wish to commend Symbio Development, LLC for responding to questions about potential lead contamination in soils at the location of the proposed Ascente subdivision and any attendant threat to public health. Their contractor, McGinley & Associates, appears to have competently collected samples, had them analyzed for lead by a competent certified laboratory using appropriate methods and presented the findings of that sampling and those analyses. The exceptions to those observations are that no duplicate samples and analyses were reported and the sample extraction method was not specified. Although the lack of duplicate samples does not mean that the results presented were necessarily wrong, it significantly diminishes our ability to interpret the results and reflects on the quality of the work performed. The omission of reporting the sample extraction method should not compromise the results, provided it was an EPA acid-digestion method for "total" metals such as 3050B; the use of other methods could render the work unsuitable to address the issues at hand. This question about the sample extraction method should be resolved before accepting the results of the report.

Of much greater consequence is that the sampling design and the analysis of the measured chemical concentrations (data analysis) may not be adequate to support the decisions facing the county agencies regarding approval of the proposed Ascente subdivision and raises significant questions about lead contamination at the subject property. If the sampling was intended to support a decision that concentrations of lead in soil in the area of the Ascente subdivisions are safe for residential properties, the report fails to do so. That failure is the result of major flaws in sampling design and data interpretation.

Sampling Design:

Sampling programs such as the subject of the report should be designed to provide information needed to support such decisions. Such programs should address:

- identification of the decision(s) to be made
- identification of the decision process, including decision criteria
- identification of the information needed to inform the decision(s)
- the spatial coverage and resolution necessary to inform the decision(s)
- the level of confidence or certainty needed to support the decision(s)

Characterization of the presence or absence of chemical contamination, the inferred purpose of the subject report should also address the potential source or sources, including:

- the potential source or sources of contamination
- the medium, chemical species and concentration of the source/release
- the potential for migration and inter-media transfer of the contamination
- the potential for exposure to potentially contaminated media
- how contaminant concentrations relate to decision criteria

The above bullets comprise much of a process that the EPA calls "Data Quality Objectives" (EPA 2016a). Part of that process is the development of a conceptual site model that integrates that information and is used as the basis for designing a sampling program.

Unless all of the above bullets are addressed, no sampling program is likely to provide data adequate to support the decisions they are intended to support. The report did not systematically or rigorously address any of the above bullets. As a result, the report raises more questions than it answers and is wholly inadequate to conclude that lead contamination at the site would not endanger potential future residents there.

The report identified a smelter historically located near Galena Creek as a potential source of lead contamination at location of the Ascente subdivision (the site). While the smelter should not be dismissed as a source, the presence of other sources, such as the Galena Hill Mine at the top of Steamboat Hills at the eastern border of the next phase of the Ascente Project, other exploratory excavations in the area, and another mine to the south, should have been considered as potential sources of lead and included in a conceptual site model to guide sampling design. The discovery of multiple and/or unexpected alternate sources of contamination is common in this type of investigation. Additionally, the project analyzed soil only for lead but other toxic metals, notably cadmium, are also associated ore bodies, are often found at elevated concentrations at mining sites, and should have been addressed in the sampling and analysis. The report is silent on these issues.

The sampling design used composite samples for all samples. This technique combines several discrete samples (called increments) to make a single (composite) sample for analysis. Composite samples are typically used to achieve denser areal coverage than can be achieved for the same laboratory cost with discrete samples. With composites, it is only necessary to perform one analysis instead of five. Composite samples are effective providing a basis for characterizing the average concentration in a large area. However, if as in this case, spatial distribution of concentrations is potentially important, the results of analyses performed on composite samples are difficult to interpret, and accordingly less useful.

Eight-eight composite samples were collected to characterize 281 acres. Samples were collected from three areas of the proposed subdivision and large areas were not sampled. One composite sample comprising 5 increments was collected at each of the 88 2-acre grids. One increment was collected near the center of each grid and one soil sample was collected from each of the four quadrants of the grid at a random location. This method can result in areas of up to 1 acre where no increment is collected within a single grid and 4 acres at the intersection of 4 grids. Decisions about risks associated with contamination in residential areas generally requires spatial resolution of the contamination that would identify contaminated areas the size of a play area in a residential back yard, far smaller than the 2-acre grids presented in the report. The report is silent on this issue.

As noted above, the measured concentration represents an average for each grid with no information about which increment within that grid contributed how much to that average. Because composite

samples represent an average concentration among the increments, if only one of the increments is contaminated, that contamination can be masked by the lower contribution from the other 4 increments, thereby "hiding" the contamination. For example, sample increments containing 75, 4, 4, 4, and 4 mg/kg, respectively, can be expected to produce a composite concentration of 18.2 mg/kg, a concentrations that may well be considered to be consistent with "background" concentrations, but the location of one of those 5 increments is clearly contaminated. (The value of 4 mg/kg was selected for this example because it approximates the low end of the concentration range reported at the site and that value could be substantially lower for the same "averaging" reason.) Compositing also "smooths" the overall data set because the concentrations appear more homogeneous (less variable) than what occurs in the environment. This "smoothing" significantly complicates and compromises any spatial analysis or comparisons with "background" conditions or criteria concentrations. The report is silent on these issues.

All samples were collected from surface soils. Contamination at the surface can be washed downward in the soil column by rainwater and can be covered up by other material such as blowing dust, resulting in higher concentrations in subsurface soils. The report was silent on this issue.

Data Analysis:

The analysis of the measured concentration was brief and comprised comparisons with: (1) concentrations represented as "background" and (2) criteria concentrations used by EPA and the Nevada Department of Environmental Protection (NDEP) for evaluating cleanup of contaminated sites.

Lead occurs naturally in soil and evaluating the contribution of naturally-occurring (background) levels is necessary to interpret the soil lead measurements presented in the report. Background soil lead concentrations vary widely by location, so site-specific measurements are necessary to support evaluations involving background concentrations. No background sampling was performed to support interpretation of the subject sampling results.

The concept of "background" soil concentrations of lead or other constituents is very complex and the comparisons presented in the report are simplified to the point that they have very little meaning. Background soil lead concentrations are not individual concentrations as presented in the report. Background is generally characterized as a distribution of concentrations measured at the site and comparisons need to be made to that distribution

The "conclusions" section of the report selected generic point-estimate soil lead concentrations and presented them so as to infer that those were consensus values when, in fact, they are not. The utility of the national and even state results in the cited source (EPA 2016b) in the context of site characterization (such as this) is extremely limited for numerous reasons, including that the spatial scales are so vastly different and there is no accounting for many variables known to affect soil lead concentrations. Additionally, the data for all states were treated identically to yield the state numbers and is obviously inappropriate for the data for Nevada.

The report substantially misrepresents the concept of "background" soil lead concentrations. The website presenting the document (EPA 2016b) cited as the source of the soil lead concentrations represented as "background" states:

"The values in this database primarily represent geogenic background soil lead concentrations with some impact from widespread anthropogenic sources. This database is not intended for human health risk assessments, to represent populated areas or replace characterizing site-specific background concentrations for Superfund Sites."

When I was a regulator at EPA reviewing this type of data and analysis, I routinely and consistently rejected background comparisons that were based on the EPA document cited (EPA 2016b) and its antecedent publications, as did all of the many other EPA managers of contaminated sites with whom I discussed this issue.

I recommend that the analysis pertaining to "background" presented in the report be rejected.

That said, the graphical method used in the cited EPA (2016b) document can be, and often is, appropriately used on a site data set to evaluate whether or not some of the sample concentrations are different from and higher than most of the samples, inferring contamination. Applying that method to the subject data set, the presence of contamination is readily apparent. Seven of the 88 samples are clearly different from and elevated relative to the other 81, clearly inferring the presence of contamination, even though the "smoothing" effects of composite sampling makes it more difficult to do so. The seven samples representing apparent contamination are in the green oval in the attached Figure 1. The samples in the blue oval form a line that represents what statisticians call a "population" of numbers that take the general shape of the blue line. The upward inflection at higher concentrations and the green line representing the samples in the green oval indicate that those seven samples represent a different population (of elevated concentrations) than the background (blue) population. That green population should be considered to be from a contaminated area or areas. This apparent contamination is evident despite the smoothing and averaging effects of the composite sampling technique used. The report missed this obvious indication of contamination.

Another tool typically applied in analyzing this type of data is spatial analysis. Spatial analysis of this data set shows that 6 of the 7 samples of apparent contamination were located together. Those 7 locations of elevated concentrations in composite samples are circled in red on the attached map. The grouping of these samples is further evidence that the elevated concentrations represent contamination. Further, no samples were collected in the area adjacent to those seven sample locations, raising questions about the possibility of higher concentrations in adjacent areas. The report presented no spatial analysis and missed this entirely.

The selection of criteria concentrations for evaluating potential health risks and the comparisons with soil concentrations measured at the site as presented in the report are not problematic, as far as they went. However, that analysis was premature and misleading because the site is inadequately characterized.

CONCLUSIONS:

The sampling design is not discussed in terms of how it addresses the objectives of the sampling and analyses and those objectives are presented only in the vaguest, most general terms. Accordingly, the resultant data are of limited utility and do not provide the county with the information needed to approve the proposed development plan.

The results of the sampling and analysis do not show the presence of high concentrations of lead spread relatively evenly over wide areas in soil. The measured concentrations were clearly lower than EPA health-based benchmarks. However, the report clearly demonstrated the presence of areas with elevated soil lead concentrations and the use of only composite samples can, by design, misrepresent locations with higher concentrations as having lower concentrations. Additionally, the spatial distribution and variability of soil lead concentrations at the site is poorly characterized due to low sampling density and the use of composite sampling. The spacing of the sample collection locations can result in missing contaminated areas of up to four acres, much larger than the size of the proposed residential lots.

Accordingly, the sampling program fails to provide assurance that: (1) the site is not contaminated, (2) concentrations 4-5 times higher than those reported are not present in the samples collected, (3) much higher concentrations are unlikely to be present, (4) there are no "hot spots", (5) other toxic metals associated with lead and zinc mines are not present, or (6) the site is safe for residential development.

Substantially more information and expert analysis is needed before Washoe County can conclude that soil lead levels at the location of the proposed Ascente subdivision are safe for residential use.

Citations:

EPA 2016a. Guidance on Systematic Planning Using the Data Quality Objectives Process. EPA QA/G-4 EPA/240/B-06/001

EPA 2016b USGS Background Soil-Lead Survey: State Data. National Interactive Map (Choose our State to Begin)<https://www.epa.gov/superfund/usgs-background-soil-lead-survey-state-data>

In closing, I recommend that the Planning Commission require additional and more thorough, well designed investigation of the lead contamination at the site of the proposed Ascente subdivision to inform any decision approving that development.

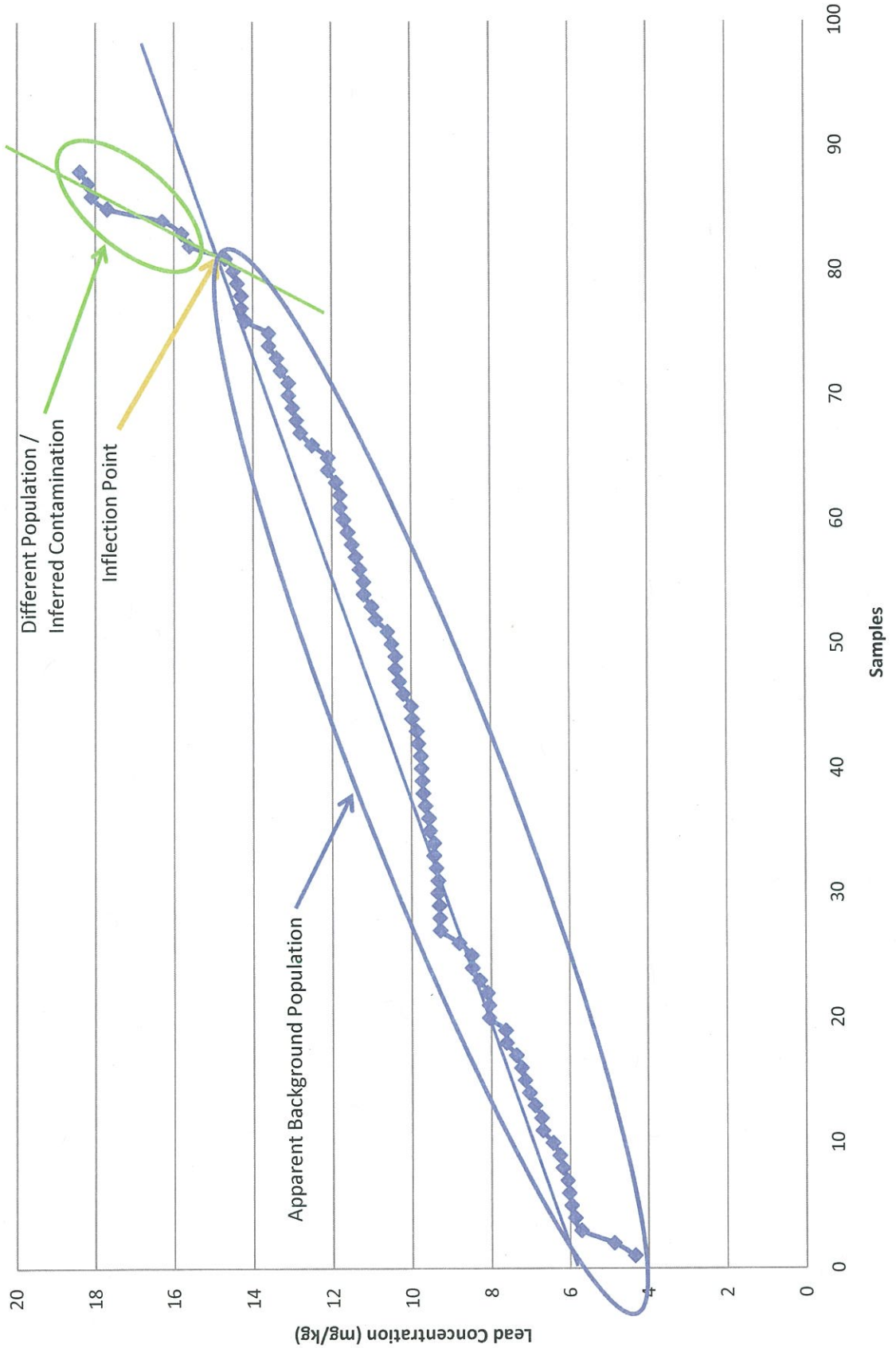
Thank you for your consideration.



John Beach

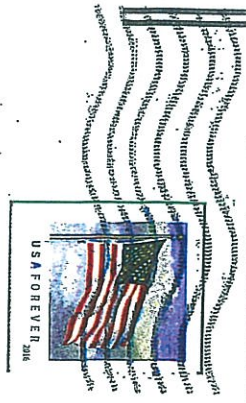
Figure 1: Lead Concentrations in 88 Soil Samples for Ascente Phase 1

cumulative probability distribution plot



Attn Washoe County Planning Commissioners

RENO, NV 89512
MAY 2017 PM 3:11



Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



Commissioners,

We have lived in Galena Terrace (Callahan Rd. area) for nearly 35 years. We chose the area to get out of dense population, and have paid the price of a 15 mile commute ever since. I'm 73 and still work full time in town town Reno.

Allowing a developer to build 600 unit subdivision in the hills E. of Callahan Rd. would threaten our roads, water, emergency services and general way of life here and that developer would walk away, when finished, with his profit and leave us with the problems it creates. So/ If you represent the people in the county (not the developer) it seems to me you should protect our area from over-development!

Thank You, B. Wick

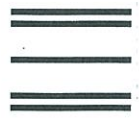


- perform the required earthquake studies and mapping of fault lines within the boundaries of the area they will be creating. That omission alone should cause you to stop this development until the earthquake dangers are fully known and addressed in the plans, for everyone's safety.
2. The amount of blasting so close to our neighborhood is a major concern. As I understand it, it will go on for years, with obvious noise impact, plus risks inherent in major blasting in an area with many earthquake fault lines. I am home most days, so I am painfully aware of the distress suffered by pets, horses, etc, just from occasional blasting in winter up on mt. Rose. This Ascente blasting would be far more extensive and much closer. Animals would be petrified.
 3. The damage to roads, and potentially to Fawn Ln, water sources will be overwhelming. Trucking out huge quantities of rock is unacceptable on our older roads - it is ridiculous to claim the pavement can handle that. If a break in the aquifer would cost all Fawn Ln. residents their homes, it too is an unacceptable risk.
 4. I appreciate that the developers increased open space and somewhat reduced the number of homes in response to prior comments. However, they seem blasé about many other issues and have ignored some legal requirements. Please do not approve this development as it stands now. Listen to the experts, and demand more studies, work and acceptance of responsibility. Enforce a large cash bond.
- Harrlette Treloar, 6000 Goldenrod 89511

Attn Washoe County Planning Commissioners

Dear Commissioners,
I have lived in Callahan Ranch for over a decade.

Last week I attended the meeting about the Ascente proposed development, my first on this issue. I did not ask to speak; I wanted to absorb information. Most of the speakers to the CAB members reflect my views, but I am submitting my comments here to emphasize a few points that I consider particularly important. (over)



PLACE
STAMP
HERE

Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



I am a homeowner in the Callahan Ranch Community. We bought our home here for the large lots and country feel of the area. I am strongly opposed to adding 600+ high density homes to this area! Our schools are already over crowded and our wells are drying up. We do not need the increased traffic and our safety lowered due to decreased resources such as fire protection when so many more homes are added. Any homes added to this area should be the minimum 1 acre lot per household. Build your high density division somewhere else!

Sirs:

I'm a senior citizen living in old Callahan Ranch for 10 years. I'm opposed to the Ascente development in the Steamboat Hills east of me.

This will be a disaster to us living here. I pray that you DO NOT approve this venture. Thank you.

Mr. David Yakich

Reno NV 89511



Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



Dear Planning Commissioners, We live on Redmond Loop and are strongly opposed to the Ascente development. It would be very close to our house which would have a negative impact on our quality of life. Our biggest concerns are the prolonged construction including massive excavation and blasting, overcrowding schools, services, water, flood emergency evacuation, and a GIANT increase to traffic on our small, rural roads. We strongly implore you to reject this development. If, in the end, you feel compelled to accept this terribly planned subdivision, PLEASE, at the very least, require Ascente to start with phase 2 and Build their own ROAD! And stick with a minimum of 1 ACRE LOTS like the rest of Callahan Ranch. Thank you for your consideration.

TM16-009 & SW16-003

Phil Henke and Elizabeth Allen

EXHIBIT H

Attn Washoe County Planning Commissioners

15325 CALLAHAN RD.
RENO NV 89511



RE: PROPOSED ASCENTIE DEVELOPMENT.

ROUTE ITALIAN NAME. APPROPRIATE FOR HILLS OF ROCK. NOT APPROPRIATE FOR HOUSING, STREETS, BURIED UTILITIES, ETC.

PLEASE REMEMBER POSSIBLE ACCESS VIA THOMAS CREEK EXTENSION.

ISSUES: ACCESS THRU RESIDENTIAL STREETS INCLUDING ROCK MUCKS, EXPLOSIVES, CONSTRUCTION EQUIP. + MEN.

REQUIRE PERFORMANCE + COMPLETION BONDS PAYABLE TO COUNTY FOR CLEAN-UP + RESTORATION (DEFUND) WHEN PROJECT FAILS - REMEMBER USA OWNERS + ATTEMPTS TO DEVELOP - ALL FAILS) INCLUDING CAR DENIAL.

DAD PROJECT - COUNTY PAYS - REMOVE "ESTATES"

Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



Attn Washoe County Planning Commissioners

HEALEIN
5430 TANNERWOOD
RENO NV.
89511



MAKE ASCENTIE DO A FIELD GEOTECHNICAL STUDY PRIOR TO JUST GIVING THEM APPROVAL - ITS THE LAW! HOLOCENE FAULTS HAVE BEEN MAPPED WITHIN THE PROJECT AREA BY STATE GEOLOGISTS. SET-BACKS WILL BE NEEDED!

Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



Attn Washoe County Planning Commissioners

not much on East side
Wild life will leave -
We have been here for 41 years -
PLEASE - we don't want to move, because someone wants to become richer!

No more please!



Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512



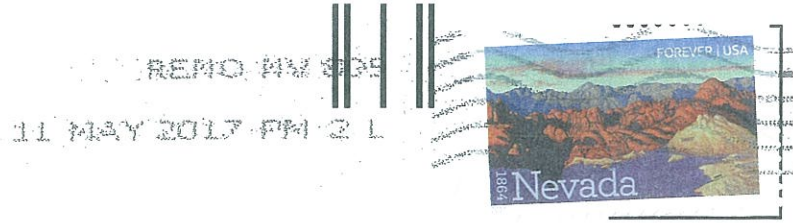
TM16-009 & SW16-003

EXHIBIT H

Attn Washoe County Planning Commissioners

Please use common sense and ethical standards and vote no on the

Ascente subdivision as it stands now. I have lived in my home for 27 years - I love our neighborhood in Callahan Ranch the way it is - Rural! There is not one resident I know that wants his subdivision and you represent the population @ large! Sincerely, Beth Teitelbaum



Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512

5445 Wintergreen 89571

Attn Washoe County Planning Commissioners

Regarding the Ascente subdivision —

I think a plan of this size is way beyond the capacity of this area to sustain & maintain the overall semi-rural lifestyle.

Thank you,
Jane Collins
Callahan Ranch
resident.



Washoe County Managers Office
1001 E. Ninth St
Reno, NV 89512

I WOULD LIKE TO OPPOSE THE ASCENTE DEVELOPMENT FOR THE FOLLOWING REASONS.

- I HAVE A PRIVATE WELL, AND IF 600 NEW HOMES ARE ADDED TO THE WATER SYSTEM, MY WELL WILL GO DRY. THE AQUIFER CAN NOT ACCOMMODATE OR SUPPORT THE INCREASED USAGE WITHOUT CAUSING PRIVATE DOMESTIC WELLS TO GO DRY. A QUOTE FROM A CONTRACTOR TO DIG TRENCH AND CONNECT TO COUNTY WATER WAS \$10,000.00, IS ASCENTE OR THE COUNTY GOING TO REIMBURSE ME FOR THOSE COSTS?
- EDUCATION SYSTEM IS A MESS AND THE SCHOOLS CAN NOT ACCOMMODATE MORE CHILDREN. A BUILDER IMPACT FEE NEEDS TO BE ASSESSED. I AM AWARE THAT TAKES LEGISLATIVE ACTION IN CARSON. AT LEAST POSTPONE DEVELOPMENT UNTIL BUILDER IMPACT FEES CAN BE ASSESSED.
- CALLAHAN ROAD IS NOT LARGE ENOUGH TO ACCOMMODATE WITHOUT NEGATIVELY IMPACTING CURRENT RESIDENTS.

TM16-009 & SW16-003
EXHIBIT H

Ascente means:

2.5 years of blasting!

Overcrowding of already crowded schools.

Increased risk of flooding!

Dramatic Traffic Increase!

Stress on already mapped out infrastructure; roads,

water police, fire protection, etc!

Our worst fear is that the work will begin, the

Ascente group will run out of \$ & leave a huge ecological
scar on the hill. 80 acres isn't enough "prospec" to accommodate
the Mule Deer herd that lives & thrives on the proposed subdivision.

Has there been a thorough
archeological study completed?

Obsidian shards have
been found close to the
water tower.

Please think long & hard before considering approval of the Ascente
project. After listening to the issues discussed @ the recent CAB
meeting I am relieved to hear that the CAB isn't recommending
Ascente's approval. As a healthcare provider, I have concerns
about air quality and asthma, noise pollution & hearing loss associated
with machinery noise, and lead contamination. As a homeowner who
has lived in this neighborhood for 24 years, I am sorry that little
consideration has been given to our quality of life & how it will be
affected by building Audia Drive neighborhood nearby. My husband is a
forester & is particularly concerned with the limited emergency egress in the face
of an emergency evacuation. Sincerely, John & Kathleen Christopherson

Kenneth R. Genz Sr.
PO Box 18444
Reno, Nevada 89511

Tel: 775-849-1013
E-mail: kgenzsr@gmail.com
April 25, 2017

Commissioner James I. Barnes, Chair
Washoe County Planning Commission
Washoe County Manager's Office
1001 E. Ninth Street
Reno, Nevada 89512

Subject: Ascenté (Matera Ridge, Mixed-Use, Overlay District) Application

Dear Commissioner Barnes:

Please accept this review of the Ascenté application for a luxury home development in Mater Ridge, Mixed-Use, Overlay District which is described in the *Forest Area Plan*. My review could not have occurred without the willing help of people in the various Washoe County Departments, Nevada Division of Water Resources, Truckee Meadows Water Authority, and the people of the *Forest Area Plan*. Also, on-line research and e-mail allowed me to obtain information that would have been out of reach, otherwise.

Since 1977, Sherry, my wife, and I have resided at 15870 Fawn Lane which is immediately adjacent to the proposed Sierra Village. My review is based on my long time experience of living in the area and my professional knowledge of the wildland ecology of the Great Basin and Eastern slope of the Sierra Nevada. My review is both subjective and objective. In addition, you have heard or will hear from other professional people of the area whose knowledge will be very helpful to you in making your decision to accept, modify, or reject the Adcenté application. You will also hear from people in the area who will express why they choose to live here and how they feel about the changes the Adcenté proposal will bring to the area. A trustworthy relationship with Washoe County and State governing authorities is very important to us.

Todate, I see Washoe County having the dilemma of balancing economic growth and community growth while reacting to political influences. Washoe County has made good progress towards managing growth and achieving sustainable development through master and area planning. In doing so, Washoe County has sought a balance between socio-economic and environmental objectives. This balance was sought in the *Forest Area Plan*, with the objective of managing the area based on the principle of compatible neighborhoods and the replenishment of neighborhoods by attracting people of a modest income who desire to live in a semi-rural community. I saw this principle of compatible neighborhoods in the Washoe County zoning code and in the series of land use plans that are a part of the Washoe County Master Plan.

It is my view that when Washoe County adopted the *Forest Area Plan* to include the Reynen and Bardia Specific Plan and the Matera Ridge, Mixed-Use, Overlay District, the principle of maintaining a traditional neighborhood was over-ruled despite the objections of the people. The people's trust of governing authorities soured, which continues. I question whether these inclusions were in conformance with NRS 278.220(4). The developers declared bankruptcy. Wise planning turned out to

Kenneth R. Genz Sr.
PO Box 18444
Reno, Nevada 89511

Tel: 775-849-1013
E-mail: kgenzsr@gmail.com
May 8, 2017

Commissioner James I. Barnes, Chair
Washoe County Planning Commission
Washoe County Manager's Office
1001 E. Ninth Street
Reno, Nevada 89512

Subject: Ascenté (Matera Ridge, Mixed-Use, Overlay District) Revised Application

Dear Commissioner Barnes:

I recently received an electronic copy of the revised Ascenté development. Even-though the developer, Symbio Development LLC, made some positive adjustments, many of my concerns regarding the original application remain. I unenthusiastically find the developer to not being forthright by not presenting a proposal that meets *Washoe County Development Code*. I have two important concerns: buffering and zoning.

On buffering, the proposal added a 40 foot wide buffer adjacent to existing homes (See page 4 of revised Ascenté Tentative Map and Special Use Permit). This proposal fails to meet Washoe County Development Code Section 110.434.25 (b) (1) (2).

I will only address the north property line of Parcel 1 (Sierra Village) and the three (3) residences adjacent to it: Wells, Genz, and Eisenbarth. Each resident has a perpendicular lot depth of 208 feet (See Land Map 245A, FBO C.W.H. 2011 REVOCABLE TRUST, Sheet 2 of 2, April 19, 2016). Therefore, a 40 foot buffer does not meet the parcel matching and buffering code. I also noted that drainage basins are proposed adjacent to resident property. The code on buffering does not mention drainage. However, it implies no above ground facilities.

The above buffer zone along the north property line calculates to be 6.29 acres [(208 ft. x 1317.92 ft.)/43560 sq. ft.] (See Land Map 245A) It is important to note that this zone continues along the west property line of Parcel 1 & 2. The code serves

BUFFERING, EASEMENT, & ACCESS

BUFFER ING, EASEMENT, AND ACCESS

Buffering. Sherry and I reside at 15870 Fawn Lane which is adjacent to the proposed Sierra Village. Parcel buffering is a major concern of ours. We feel that the Ascenté applicant failed to meet the common development standard on buffering in the *Forest Area Plan* (Ref. Goal 2, F.2.10, p. 7) and in Washoe County Development Code (Ref. Section 110.434.25 (b) (1) & (2), p. 434–3&4, May 11, 2004).

To meet parcel matching along the north boundary a 320 foot wide parcel matching size is required. To our knowledge, there has been no community consultation regarding open space buffering or parcel matching.

Easement. The application covers easement in *Project Request* (Item g. Easements, p. 25). Item g falls short of describing the current status of easements that are shown on Land Map 245 (See Sheet 1 of 2, April, 2016 acceptance of easements by Utility Companies and Washoe County) and Land Map 245A (Sheet 2 of 2, February 11, 2016). Of concern is how the *Notes* on Land Map 245A will be mitigated within Parcel 1 & 2 and along the property line. In reference to Note No 7, the application will have a negative effect on natural drainage rather than a positive effect.

Access. A concern is how easement access will be provided. Another concern is how Emergency Vehicle Access (EVA) will be provided from Brushwood Way and across the proposed trailhead facility and detention basin.

Section 110.434.20 Density. To the extent that land in such areas affected by this standard would be buildable under federal, state or local regulations, the full eligible density may be utilized on other locations on the site. However, the codes of all entities must provide that:

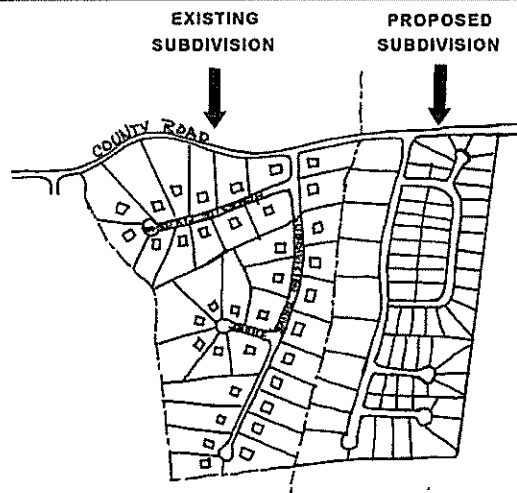
- (a) No density transfers may be allowed from lands that are otherwise undevelopable.
- (b) Any land from which density is transferred in a subdivision map must be deed-restricted for open space, parks or recreational use with Washoe County and the applicable City as parties to the recorded restriction.

[Added by Ord. 1191, provisions eff. 3/21/03.]

Section 110.434.25 Lot Adjacency Standards. Lots proposed within a new subdivision that share a common property line with an established subdivision shall not contain structures that exceed the maximum height of the adjacent equivalent zoning district or land use district.

- (a) Large Lot Single Family Residential to Large Lot Single Family Residential. To provide adequate transition between varying sizes of single-family residential parcels designated one (1) dwelling unit per five (5) acres to one (1) dwelling unit per acre, the minimum adjacent lot size shall be one (1) acre. In no instance will the depth of any proposed lot (the extent of that lot perpendicular to the boundary line) be less than two hundred (200) feet.
- (b) Single Family Residential to Single Family Residential. To provide adequate transition between varying sizes of single-family residential parcels designated as one (1) unit per acre or greater density, one of the following methods shall be utilized:
 - (1) Parcel Size Matching. The minimum lot sizes identified in the land use designation of the immediately adjacent developed subdivision shall be maintained at the edge of the proposed subdivision as depicted in Figure 110.434.25.1. In no instance will the depth of any proposed lot (the extent of that lot perpendicular to the boundary line) be less than that of any existing lot to which it is adjacent.

Figure 110.434.25.1
PARCEL SIZE MATCHING



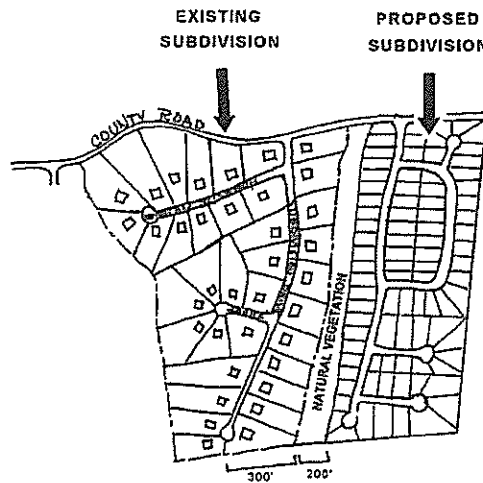
Source: Washoe County Department of Community Development.

Or

- (2) **Buffering.** A "buffer zone" shall be established. When the buffer remains natural vegetation, the buffer zone shall be equivalent to two hundred (200) feet or the average minimum lot depth of the adjoining developed property, whichever is greater (see Figure 110.434.25.2). The buffer zone may be common open space for the proposed subdivision. This common open space may not contain above ground utility lines but may include paths, equestrian trails, trees or benches. The buffer area and amenities must be maintained by the homeowners association or a lighting and landscaping district established pursuant to NRS 278.478.

Figure 110.434.25.2

BUFFERING



Source: Washoe County Department of Community Development.

- (c) **Multi-Family Residential to Single Family Residential.** To provide adequate transition between multi-family and single-family residential parcels, the development code standards of the closest cooperative planning agency (City of Reno or City of Sparks) shall apply in those respective jurisdictions as those development code standards existed on October 17, 2002, except where a common code applies to all cooperative planning areas in accordance with standards provided for in the settlement agreement and in Exhibit 3, Initial Criteria for Areas within Extended SOIs of the Regional Plan Settlement Agreement Case No. CV02-03469.
- (d) **Single Family Residential and Multi-Family Residential to Non-Residential.** To provide adequate transition between non-residential parcels and multi-family residential parcels, and between non-residential parcels and single family residential parcels, the development code standards of the closest cooperative planning agency (City of Reno or City of Sparks) shall apply in those respective jurisdictions as those development code standards existed on October 17, 2002, except where a common code applies to all cooperative planning areas in accordance with Exhibit 3, Initial Criteria for Areas within Extended SOIs of the Regional Plan Settlement Agreement Case No. CV02-03469.

HILLSIDE & RIDGELINE DEVELOPMENT

HILLSIDE AND RIDGELINE DEVELOPMENT

My remarks come from reading “Ridgelines and rock outcroppings will be left undisturbed,” and, the illustrations titled *Ascenté Village Plan* and *Section A – Mt Rose*. Ref. p. A-10, D-1, & D-3. In reference to Article 424, Hillside Development, this statement of Ascenté explains how they plan to conform to the regulations. This statement is disproven easily.

On rock outcrop, a comparison of Ascenté map designs to the terrain shows road and trail crossing rock outcrop.

Turning to ridgeline, in Ascenté’s application I did not see conformity with Section 110-434-30 (b) & (c) of Washoe County Development Code, Regional Development Standards within Cooperative Planning Areas and all of Washoe County, May 11, 2004, p. 434-5.

As to ridgeline, Ascenté places ridgelines at the upper-most elevations of Steamboat Hills. Seeing that Steamboat Hills is hilly, one can expect a variety of ridges at different elevations. When viewed from above, Sierra Village is on a nearly flat slope. However Tioga Village sits mostly on a broadly rounded hill with a promontory-likeness and on hillsides that slope into a narrow draw. Gendarme Village is on a rounded ridgeline of a promontory-likeness. Kaweah Village sits on a gently sloping to nearly flat alluvium and on hillsides. A ridgeline can be seen on the landforms that will be occupied by Tioga Village, Kaweah Village, and Gendarme Village.

In their application, Ascenté’s interpretation of the code appears to be only the ridgelines at the upper elevations of Steamboat Hills apply. And, the ridgelines at the middle and lower elevations do not apply.

This interpretation comes to no surprise. Offering a view of the Carson Range is the cornerstone of Ascenté’s marketing strategy. To sell homes, they designed each village to maximize view which necessitated use of hill crests

HILLSIDE AND RIDGELINE DEVELOPMENT

and hill sides. This might have been all right to do. But, in this case, the villages will stand out in stark contrast against the Steamboat Hills when seen from the west, e.g. Mt. Rose Hwy traffic and residents of the Galena–Mt. Rose fan. The result is not only loss of scenic value within the Forest Area Plan; but also, villages that stand out contrary to the community character within the Forest Area Plan.

Since the landforms of the Steamboat Hills vary in size, shape, slope, soil, and geology, an on-the-ground survey is called for. I did not see any survey in the application. On zoning and developable area, the Forest Master Plan Map and the Forest Development Suitability Map are too broad to be applied to the Steamboat Hill sites. To be useful, on-the-ground mapping of zones, especially open space, and the developable and undevelopable areas are necessary. Keep in mind, Steamboat Hills is of volcanic formation with a very thin mantle of coarse gravelly soil interspersed with rock outcrops, talus, and boulder. Thus, a site specific survey is needed.

In summary, for the above reasons, I feel Ascenté failed to meet the rules and spirit of hillside and ridgeline development. In the contents and appendices of the application, I did not see the required site analysis report and its slope analysis and a developable area analysis with map; nor, I did not see a detailed constraint and mitigation analysis. I might have overlooked these documents; but, there nature makes them seen easily.

Note: My remarks have focused on the effect of development on hillsides and ridgelines. However, the roads between the villages will also stand out in sharp contrast on the land.

- (e) **Non-Residential to Non-Residential.** To provide adequate transition between varying uses on parcels designated non-residential, the side and rear setbacks shall be as required by the Washoe County Development Code on October 17, 2002, except where a common code applies to all cooperative planning areas in accordance with Exhibit 3, Initial Criteria for Areas within Extended SOIs of the Regional Plan Settlement Agreement Case No. CV02-03469.

[Added by Ord. 1191, provisions eff. 3/21/03.]

Section 110.434.30 Ridgelines.

- (a) For visually important ridgeline (VIR) areas, the development standards of the applicable VIR area will apply, as developed in accordance with Article 822, Section 110.822.25(j).
- (b) Where at buildout there will be a row of structures along a ridgeline, the setbacks must be staggered with a variation of at least twenty (20) feet in an irregular pattern to avoid creating a visual "wall." Uniformity in structures arrayed along ridgelines is to be discouraged and variation is to be encouraged.
- (c) All other ridgeline design and development standards shall apply for Sparks, Reno and Washoe County as they were respectively in effect on October 17, 2002, except where a common code applies to all cooperative planning areas in accordance with Exhibit 3, Initial Criteria for Areas within Extended SOIs of the Regional Plan Settlement Agreement Case No. CV02-03469.

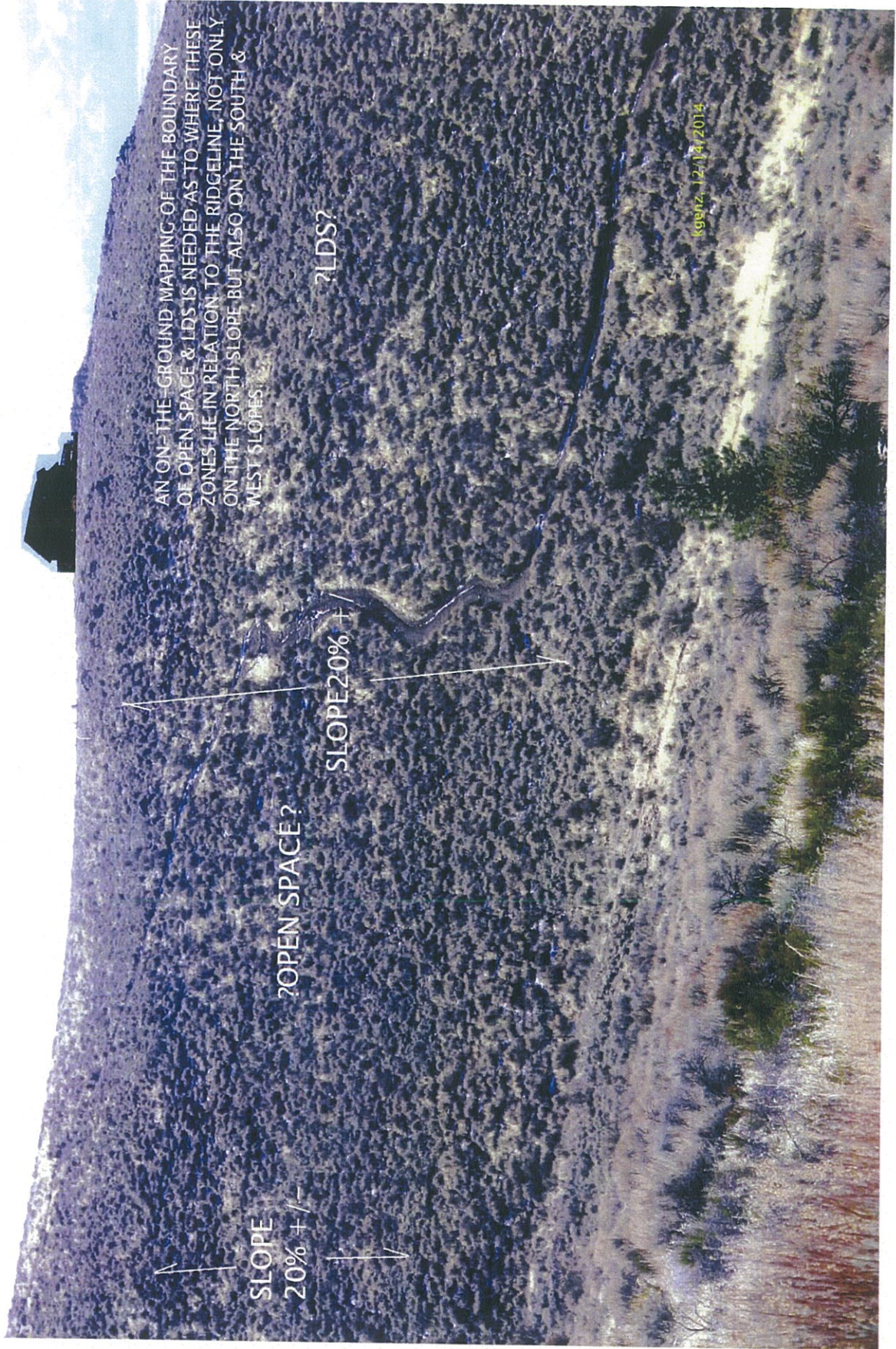
[Added by Ord. 1191, provisions eff. 3/21/03.]

Section 110.434.35 Earthquake Fault Areas. Development in earthquake fault areas is to be discouraged. No habitable structure, or a structure whose integrity is critical to maintaining the public health and safety, shall be located on a fault that has been active during the Holocene Epoch of geologic time or as determined by a site specific geotechnical study.

[Added by Ord. 1191, provisions eff. 3/21/03.]

[Section 110.434.30 entitled "Grading" added by Ord. 1191, provisions eff. 3/21/03 and repealed by Ord. 1236, provisions eff. 5/21/04.]

GENDARME VILLAGE SITE



Article 424, HILLSIDE DEVELOPMENT

ASCENTE DEVELOPMENT - PHASE 1
 East side portion of Proposed Tioga Village
 SE 1/4 of NW 1/4 Sec. 1 T17N R19E MDM
 kgenz, 11/14/2016



22% Slope

Open Space

Atypical Plant Community - Shallow soil of coarse gravel sandy loam, subsoil sandy clay loam, andesite bedrock <2ft., frequent stone & boulder. Plant cover mostly mat-like tufted phlox* & needlegrass, (*to be verified), frequent cheatgrass. Infrequent shrub cover of bitterbrush & wyoming sagebrush.

1.4% Slope
 Rise 172 ft.
 Length 1241 ft.

62 deg. ENE

MDS zone follows drainage southerly almost to Mt. Rose 2 Tank.

On drainage bottom, looking at brown sandy clay loam

16% Slope

Trail

Open Space ?

Soil of slope is shallow over bedrock. It is dominated by a mix of gravel, stone, and boulder. Surface soil is coarse gravel, sandy loam. Subsoil is a brown sandy, clay loam. Erodibility following mechanical disturbance is high. Undisturbed, good plant cover, holds moisture fairly well. Bedrock mostly within 2 ft. of surface.

Wide, concave draw zoned MDS
 Side slope zoned Open Space

East side of the proposed Tioga Village - The village extends west over the round hill behind the photo. The village extends east, across the photo, like about 1/2 the way up the draw. The water tank sits, on the left, just over the saddle like crest. A proposed road switchbacks up the upper 1/2 of the draw to a proposed water tank. Cutting into bedrock is a given for homes as well as the road. The upper 2/3rds of the draw and side slopes are easily seen from the west. (See p. C-20 X, D-1 of application)



ASCENTE DEVELOPMENT, Parcel 1
Looking W by SW (250 deg.) towards Tioga Village Site on
Broad, Convex Ridgeline. Galena-Callahan Ranch and
Carson Range in background.
kganz 11/5/2016



ASCENTIE DEVELOPMENT, Parcel I
Sierra Village Site
Agrens 11/4/2016



Westside slope Steamboat Hills
Talus & Rock Outcrop
Soil very shallow to shallow, coarse, gravelly sandy loam.
Soil surface rocks, stone, and boulder
Bedrock within 1 ft.
Vegetation removal - accelerated erosion

Slope AB +/- 17% slope is 1800 ft. Rise is 308 ft.
Potential outlet between Sierra Village & Town Village.

NATURAL FEATURES

NATURAL FEATURES

Kgenz, 3/2/2017

The following remarks are based on personal knowledge of the natural features of the Steamboat Hills, the adjoining Mt. Rose fan¹ of Quaternary alluvium and a review of literature of its geology and soil. (Geologists call the fan a pediment.)

The geology of the Steamboat Hills and adjoining Mt. Rose alluvial fan raises this question. Is a housing development the best use of the land?

The proposed development is to be in the western part of the Steamboat Hills and on the Mt. Rose alluvial fan (pediment) that adjoins the Hills.

Geologists tell us that the Steamboat Hills were formed by a warping and tilting of fault blocks during the Pliocene and early Pleistocene. They have mapped several faults in the western part of the Hills. And, they indicate that the fault along the western boundary was active in the late Pleistocene period. Of note, this fault trace is bounded by the Mt. Rose alluvial fan. It is exemplified by the hillside on the left at the end of Fawn Lane.

In addition to faulting, the Steamboat Hills show volcanism represented by the Alta-Kate Peak volcanism of the Miocene. In a sequence of events, faulting preceded and followed the Alta-Kate Peak volcanism. In the Pleistocene, four (4) pumiceous rhyolitic domes appeared in the Steamboat Hills and Truckee Meadows. In the Steamboat Hills, the western most dome is easily seen next to Mt. Rose Tank 2. It rose up about 1.1 to 1.2 million years ago.

A variety of landforms are to be found. Hill and Hillock prevail along with fault ridge, rock outcrop, cliff, dome, draw, gully, and pediment. A small percentage of the slopes are less than 15% (a minor part of this is less than 5%). Slopes greater than 15% are well represented of which a majority are in the range of 20%–50%.

The Mt. Rose fan has a great number of faults in close proximity of the development. One fault is at the end of Fawn Lane.

On earthquakes, much information is available about their occurrence in Washoe County, currently and historically. Geologists at University of Nevada, Reno inform us that the earthquake risk is high. Of note, there are two significant earthquake events in south Washoe County. On May 9, 1952, an earthquake of 5.1 magnitude occurred near Steamboat Springs. On December 23, 2015, an earthquake of 4.4 magnitude occurred in the vicinity of Thomas Creek Road and Foothill Road. My wife and I have experienced seismic activity on our Fawn Lane property.

The alluvial fan, as we know it, developed during the Pliocene and Pleistocene. It overlays hard rock. It is a mix of small to large boulders and coarse gravels mainly of granodiorite, andesite, rhyolite, and metamorphic rock.

The soil of the Steamboat Hills is very shallow. It varies between 3 inches to 20 inches in depth on the slopes with the deeper soils occurring at the base. The soil varies as to type, i.e. the mix of sand, silt, and clay. Colluvial deposits from the slope tend to be clayey. The soil has a high content of boulder, stone, rock, and coarse gravel. It is interrupted by rock outcrop and talus. On the Dome, rock forms an almost complete cover on the south and southwest slopes. Accelerated erosion occurs with removal of vegetative cover. Shrink and swell is common in the more clayey soils. In the valley bottom, vertisol was seen, as well as standing (perched) water.

The soil of the alluvial fan is very deep (5-feet or more). The surface soil (about 1-foot) is mostly a sandy loam high in boulder, stone, or gravel or all three. The underneath soil (subsoil) is mostly a gravelly sandy clay loam. Although, a pocket of gravelly sandy loam may be present.

The alluvial soils are well drained and of moderately slow permeability. Upon drying, the subsoil becomes an impermeable layer. Standing (perched) water for a week or more is common following rain and snow melt. The shrink-swell and frost-heave potential is high. These soils are also subject to flooding as evidenced by past rain-storms and the recent rain-storms. They have a low load-bearing strength and high clay content which limits their use.

The current cover of bitterbrush and big sagebrush keeps soil erosion to a minimum. Removal of the shrub cover results in accelerated water and wind erosion, of which both are a current problem.

The Steamboat Hills serve as a precipitation collector within the Pleasant Valley watershed (i.e. Pleasant Valley Hydrographic Area No. 088). Rain and snow run-off and infiltration enter the aquifer and adjacent streams. The natural processes are intact, relatively. Any housing development will significantly alter these processes resulting in a loss of water into the aquifer and streams.

Conclusion: The natural features of the western portion of Steamboat Hills and the adjoining alluvial fan limit use of the land for dwellings. The presence of faults, hard and fractured andesite and rhyolite bedrock at or near the surface, steep slopes, and the soil make for a very daunting construction project, not to mention the cost. Design of drainage and landscaping needs to eliminate or minimize the negative effect on recharge of the water system within the Pleasant Valley watershed.

To insure that an informed decision may be made on use of the land, a site specific survey of the soil type and geology is warranted. In addition to describing and mapping the soil types, a Geotechnical investigation is warranted to make site specific interpretation of suitability and limitations for dwellings, roads, and facilities. Also, an important set of data is the classification of soil and rock for excavations. This data is needed to determine proper sloping and support. It is collected in accordance with OSHA 29 CFR 1926, subpart P, Excavation. Another important set of data is preparation of a water budget to mitigate negative effect on recharge.

Figure & Photograph:

1. Fig. showing faulting & geology of Steamboat Springs area.
2. Fig. showing fault barbs & geology of Steamboat Hills.
3. Photo of Mt. Rose fan meeting Steamboat Hills.
4. Photo of Steamboat Hills west slope at end of Fawn Lane.
5. Photo of eastside of Tioga Village site.
6. Photo of Kaweah Village site.

7. Photo of Gendarme Village site.
8. Photo of accelerated erosion on road & trail.
9. Photo of perched water on Sierra Village site.

References:

Johnson, S.D. & J.B. Hulen. 2005. Geologic Observations Bearing on Low Angle Fractures and Gravity-Slide Blocks in the Steamboat Hills and Steamboat Geothermal System, Washoe County, Nevada. Geothermal Resources Council Transactions, vol. 29. p. 381-388.

Johnson, S.D. & J.B. Hulen. 2006. A Dual Hypothesis for Thermal-Fluid Advection in the Northern Steamboat Geothermal Field, Nevada-Upflow in Ancient Breccia Pipes; Distributed Outflow in a Low-Angle Extensional Fault Zone. Geothermal Resources Council Transactions, vol. 30. p. 87-96.

Siberman, M.L., D.E. White, T.E. Keith, & R.D. Docktor. 1979. Duration of Hydrothermal Activity at Steamboat Hills, Nevada From Ages of Spatially Associated Volcanic Rock. United States Department of Interior. Geological Survey Professional Paper 458-D. US Government Printing Office, Washington. p.D14.

Thompson, G.A. & D.E. White. 1964. Regional Geology of the Steamboat Springs Area, Washoe County, Nevada. United States Department of Interior. Geological Survey Professional Paper 458-A. US Government Printing Office, Washington. p. A52.

White, D.A., G.A. Thompson, & C.H. Sandberg. 1964. Rocks, Structure, and Geologic History of Steamboat Springs Thermal Area, Washoe County, Nevada. United States Department of Interior. Geological Survey Professional Paper 458-B. US Government Printing Office, Washington. p. B63.

USDA. 1980. Soil Survey of Washoe County, Nevada, South Part. US Department of Agriculture. Soil Conservation Service.

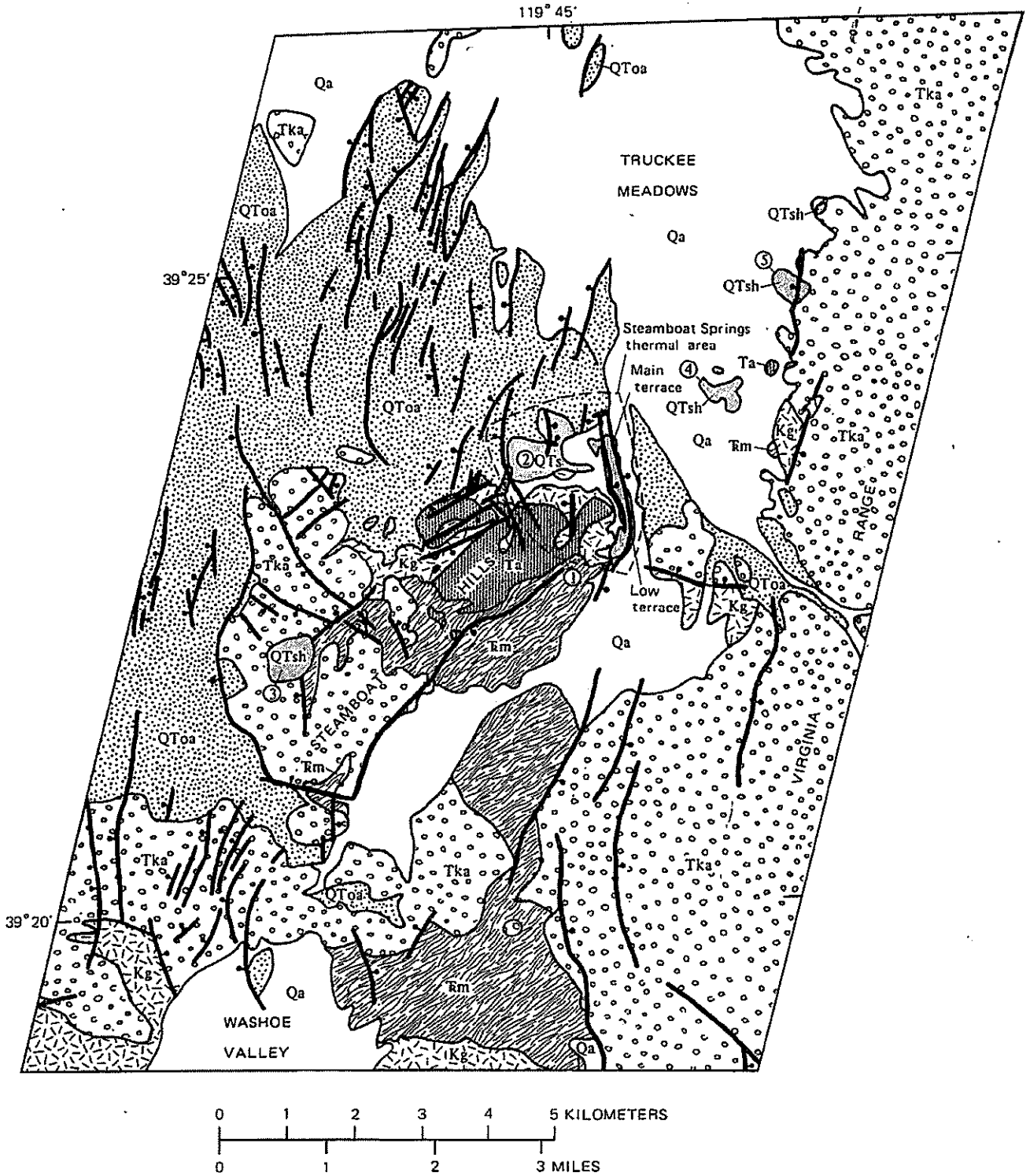


FIGURE 2.—Generalized geologic map of the region near Steamboat Springs, Nevada. Geology modified from Thompson and White (1964).

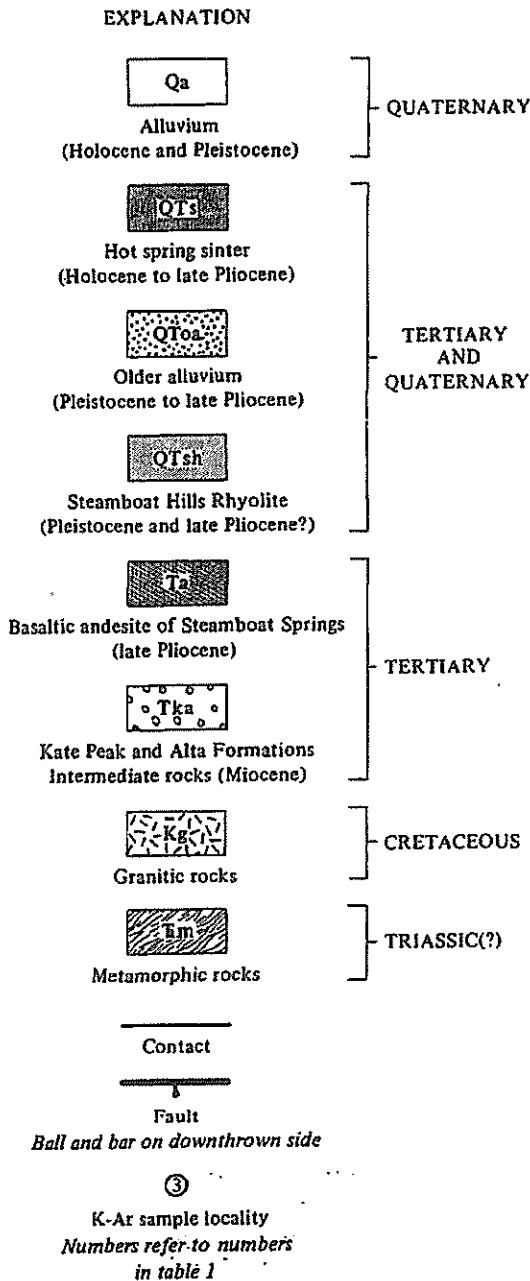


FIGURE 2.—Continued.

this hill (White and others, 1964, pl. 2). The line of rhyolite domes also parallels a major set of faults in the Steamboat Hills (not shown on fig. 2; see White and others, 1964, pl. 1). The hills have a northeast-trending anticlinal form produced by a combination of warping and tilting of fault blocks (Thompson and

White, 1964). The alignment of domes and the trend of the hills probably have a common origin as parts of a major structural zone of weakness.

ALTERATION AND ORE MINERALS

Hydrothermal alteration has affected most of the igneous rocks and sediments in the thermal area. The characteristics of hydrothermal alteration of the Steamboat Springs system and the extent of near-surface leaching are summarized by White, Thompson, and Sandberg (1964) and Schoen, White, and Hemley (1974). Acid sulfate alteration is generally dominant near the surface and above the water table where hydrogen sulfide rises and oxidizes to sulfuric acid, chemically attacking the rocks (Schoen and others, 1974). Where generation of acid has been abundant, the end result is replacement of the silicate minerals by opal or cristobalite, except for relict original quartz. Below the water table of an acid-leached area, the silicate minerals are generally replaced by alunite and kaolinite (Sigvaldason and White, 1962). Drill cores show that this advanced argillic alteration dies out with depth. In one drill hole in the Thermal area, kaolinite extends to -83 m. At greater depths in this hole and in other drill holes at shallower depths, albite and the clay minerals montmorillonite, illite, and chlorite dominate most alteration assemblages. Pyrite is usually disseminated in the altered rocks. Calcite and rarely manganese calcite occur as veins. Hydrothermal monoclinic potassium feldspar (adularia) is an abundant replacement of plagioclase in several drill holes but does not occur in veins. Adularized rocks change at greater depth to a more complex assemblages of illite, other clay minerals, adularia, calcite, chlorite, and pyrite. A sample of basaltic andesite that was almost completely replaced by adularia, quartz, and minor celadonite was dated in this study.

ORE MINERALS, TRACE-METALS, AND ISOTOPIC COMPOSITIONS

Sinter at Steamboat Springs generally contains detectable quantities of gold and silver, and as much as 10 ppm of gold and nearly 40 ppm of silver have been reported in siliceous muds deposited from the springs (Brannock and others, 1948). These muds also contain up to 0.02 percent mercury and 3.9 percent antimony. Fine-grained cinnabar is disseminated in old chalcidonic sinter of Sinter Hill, and elemental mercury has been identified in vapors from several drill holes and hot-spring vents. Stibnite has been deposited as needlelike crystals in hot-spring pools, and in veinlets

ing, high-angle, left-lateral strike-slip and oblique-slip faults believed to facilitate displacement transfer between the steep oblique-slip fault zone at the eastern margin of the Sierra block and the NW-trending strike-slip faults that are the signature features of the Walker Lane.

The oldest rocks exposed within the Carson Segment are Late Triassic to Jurassic metasedimentary and metavolcanic rocks (Stewart, 1999), intruded extensively by Jurassic to Cretaceous stocks, dykes, and dikes ranging in composition from diorite to granite, and emplaced as satellite plutons flanking the great composite Sierra Nevada batholith. These older rocks are overlain unconformably by the medial to distal portions of regional, Oligocene to early Miocene, felsic ignimbritic sheets erupted from caldera sources farther to the east and southeast. Overlying the erosionally dissected ash-flow vaults are andesite to dacite flows and flow breccias and minor lacustrine sedimentary rocks of the 18-15 Ma Alta Formation (Caster et al., 2002). Intrusive equivalents of the Alta flows, including the Davidson diorite in the nearby Constock mining district, are locally preserved and exposed. The Alta is overlain by a second, similar, major intertrappean-composition volcanic sequence, the 15-12 Ma Kaia Peak Formation, that is somewhat more felsic overall, ranging to rhyodacite (Vijver et al., 1988; Caster et al., 2002). Younger volcanic units throughout the Carson Segment are much more local in distribution and only marginally germane here; those found in and around the SBH will be noted later in this report.

Geology and Thermohydrology of the Steamboat Hills and Vicinity

The geology of the Steamboat Hills (Figure 1 and Figure 2) has been described in some detail in White et al. (1964) and White (1965), classic documents that provide the groundwork for the following synopsis and discussion. Mesozoic (probably Triassic) siliclastic to calcareous metasedimentary rocks and minor intertrappean-composition metavolcanic rocks throughout the area are intruded by a composite stock consisting perhaps of at least three phases of hornblende- and/or biotite-bearing "Sierran" granodiorite to granite of late Cretaceous age (see also Flynn et al., 1993). These rocks are overlain locally in the study area by andesite flows, flow breccias, and lahars assigned both to the Alta and Kaia Peak Formations (Figure 1). The 2.5 Ma Loupstone Basaltic Andesite unconformably overlies the Alta and Kaia Peak, and includes olivine basalt flows as well as pyroxene andesite. Cinder cones assigned to the Loupstone mark vent locations at the crest of the SBH. The SBH are co-spatial with a series of 1.15-1.52 Ma rhyolite volcanic centers (Silbermann et al., 1979) extending from the SW crest of the hills (Figure 1) to a point about 15 km ENE. The pumiceous, 1.15 Ma rhyolite dome in the SBH is believed to be too old to be associated with a felsic magma character

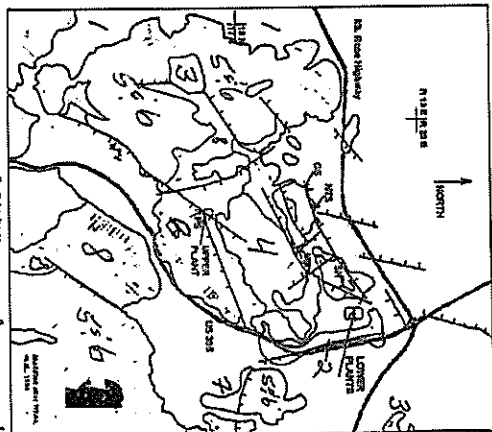


Figure 1. Generalized geologic map for the Steamboat Hills. Locations discussed in text are noted: S1 (Sierran Hill), C3 (Cabela Slide), N15 (Nevada Thermal Slide), M5 (Mercury Slide), P3 (Plain Slide), PV (Pheasant Valley Slide). See Figure 2 for lithologic descriptions.

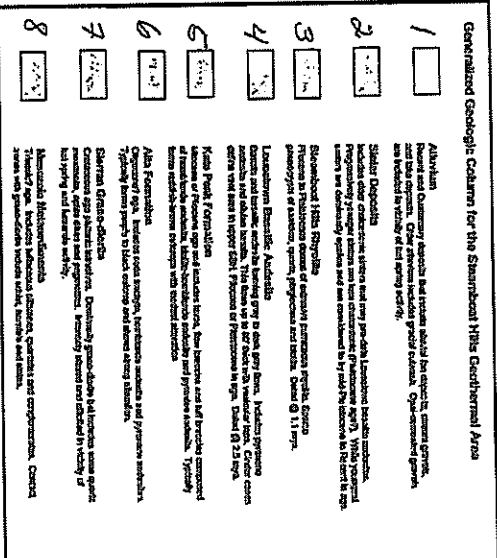


Figure 2. Generalized geologic column for the Steamboat Hills mapped units shown in Figure 1.

MT. ROSE FAN MEETING STEAMBOAT HILLS
Fawn Lane, Sierra Village Site, Callahan Ranch,
Mt. Rose Estates
kgenz 12/16/2016



STEAMBOAT HILLS HILLSIDE

West aspect
52-ft. roadway to cross slope from
proposed Sierra Village to Tioga Village

OPEN SPACE

**ROCK OVER
BEDROCK**

+/- 34% SLOPE
(AB = +/- 947 ft.; RISE = +/- 303 ft.)

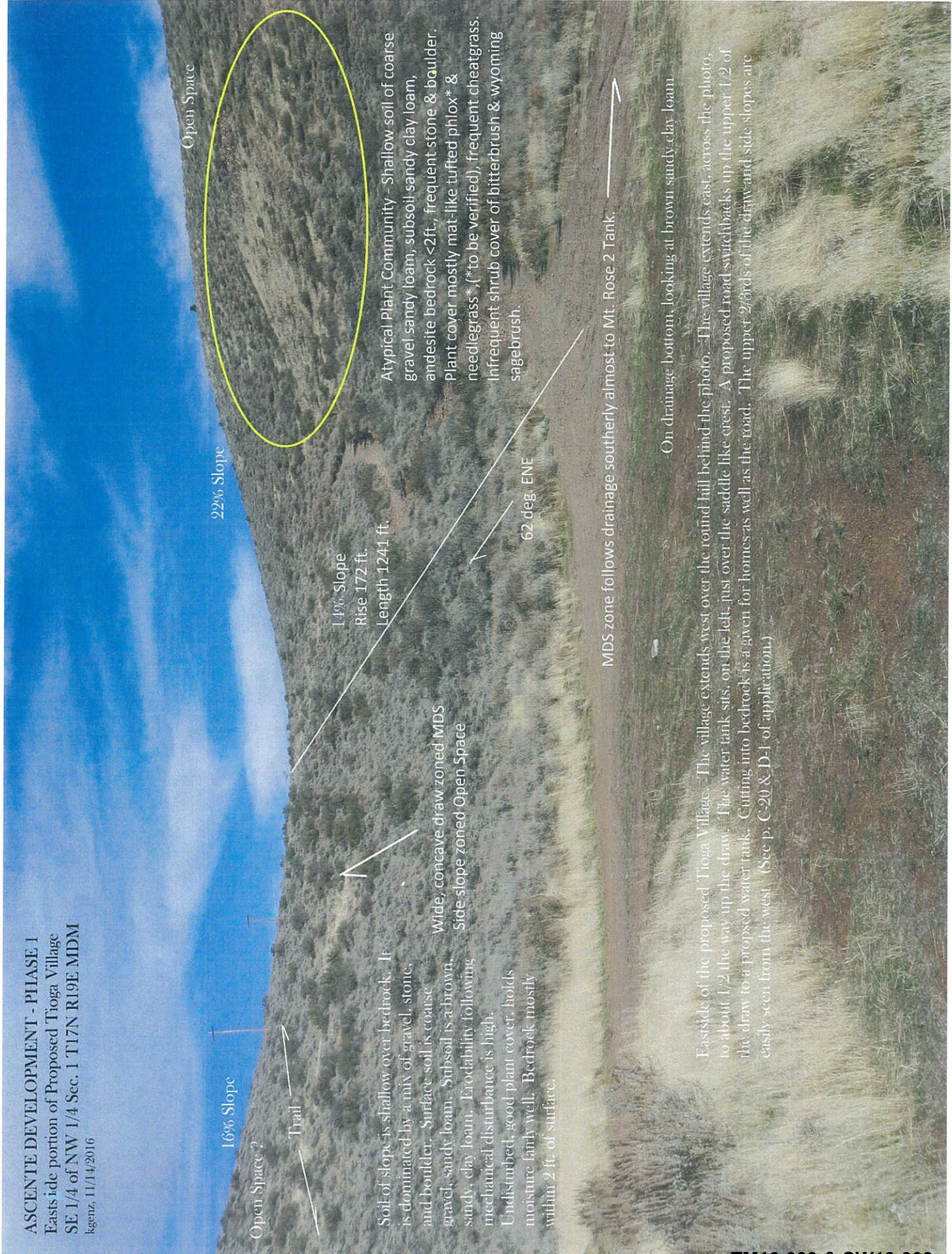
OPEN SPACE

Sage-Bitterbrush on very shallow, coarse,
gravelly sandy loam over volcanic bedrock

kgenz, 12/29/2016

TOE OF SLOPE

ASCENTE DEVELOPMENT - PHASE 1
 East side portion of Proposed Tioga Village
 SE 1/4 of NW 1/4 Sec. 1 T17N R19E MDM
 kgenz, 11/14/2016



Open Space

22% Slope

14% Slope
 Rise 172 ft.
 Length 1241 ft.

62 deg. ENE

MDS zone follows drainage southerly almost to Mt. Rose 2 Tank.

On drainage bottom, looking at brown sandy clay loam

Open Space?

Trail

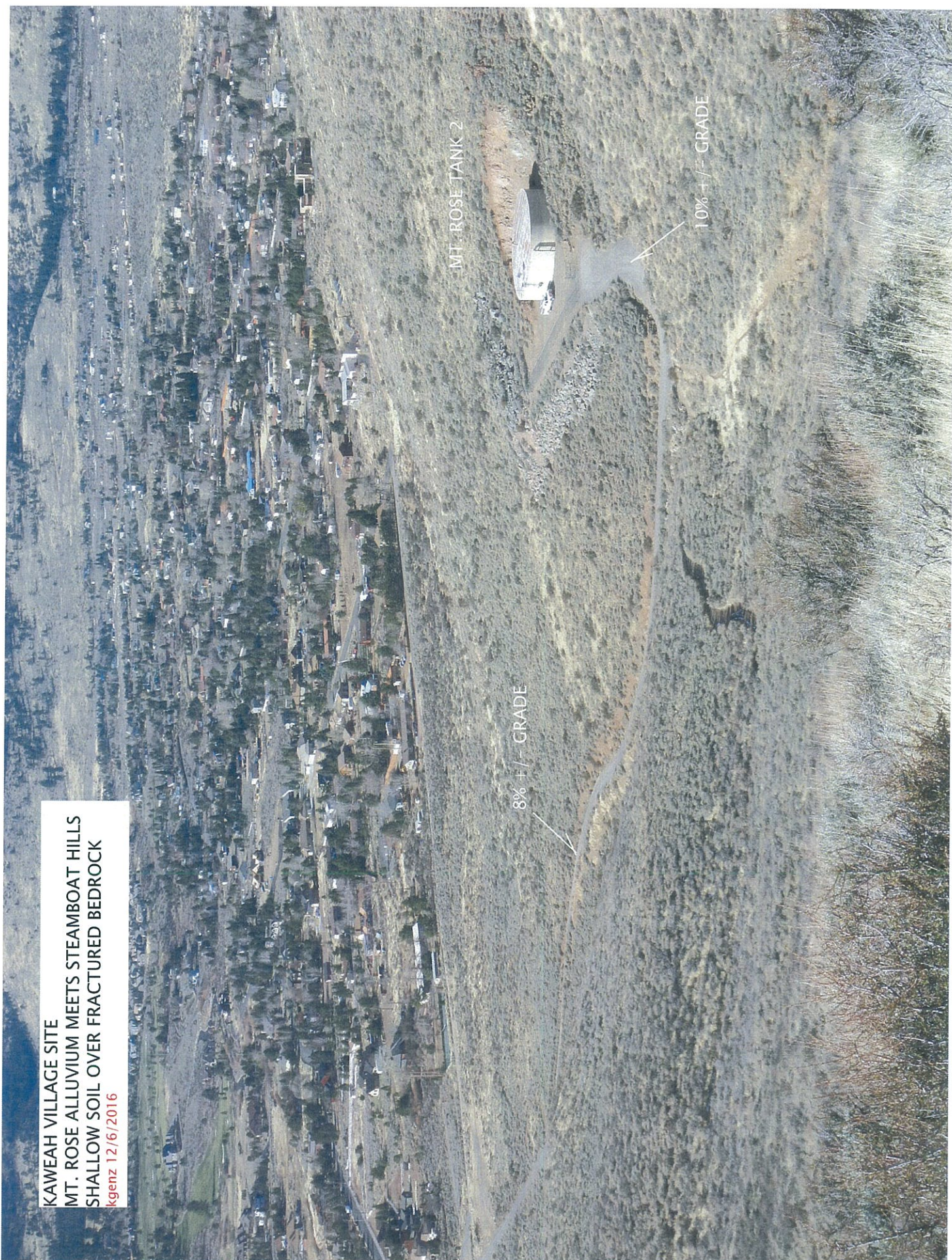
Soil of slope is shallow over bedrock. It is dominated by a mix of gravel, stone, and boulder. Surface soil is coarse gravel, sandy loam. Subsoil is a brown, sandy, clay loam. Erodability following mechanical disturbance is high. Undisturbed, good plant cover, holds moisture fairly well. Bedrock mostly within 2 ft. of surface.

Wide, concave draw zoned MDS
 Side slope zoned Open Space

Atypical Plant Community - Shallow soil of coarse gravel sandy loam, subsoil sandy clay loam, andesite bedrock <2ft., frequent stone & boulder. Plant cover mostly mat-like tufted phlox* & needlegrass*, (*to be verified), frequent cheatgrass. Infrequent shrub cover of bitterbrush & wyoming sagebrush.

East side of the proposed Tioga Village. The village extends west over the round hill behind the photo. The village extends east, across the photo, to about 1/2 the way up the draw. The water tank sits, on the left, just over the saddle like crest. A proposed road switchbacks up the upper 1/2 of the draw to a proposed water tank. Cutting into bedrock is a given for homes as well as the road. The upper 2/3rds of the draw and side slopes are easily seen from the west. (See p. C-20 & D-1 of application.)

KAWEAH VILLAGE SITE
MT. ROSE ALLUVIUM MEETS STEAMBOAT HILLS
SHALLOW SOIL OVER FRACTURED BEDROCK
kgenz 12/6/2016



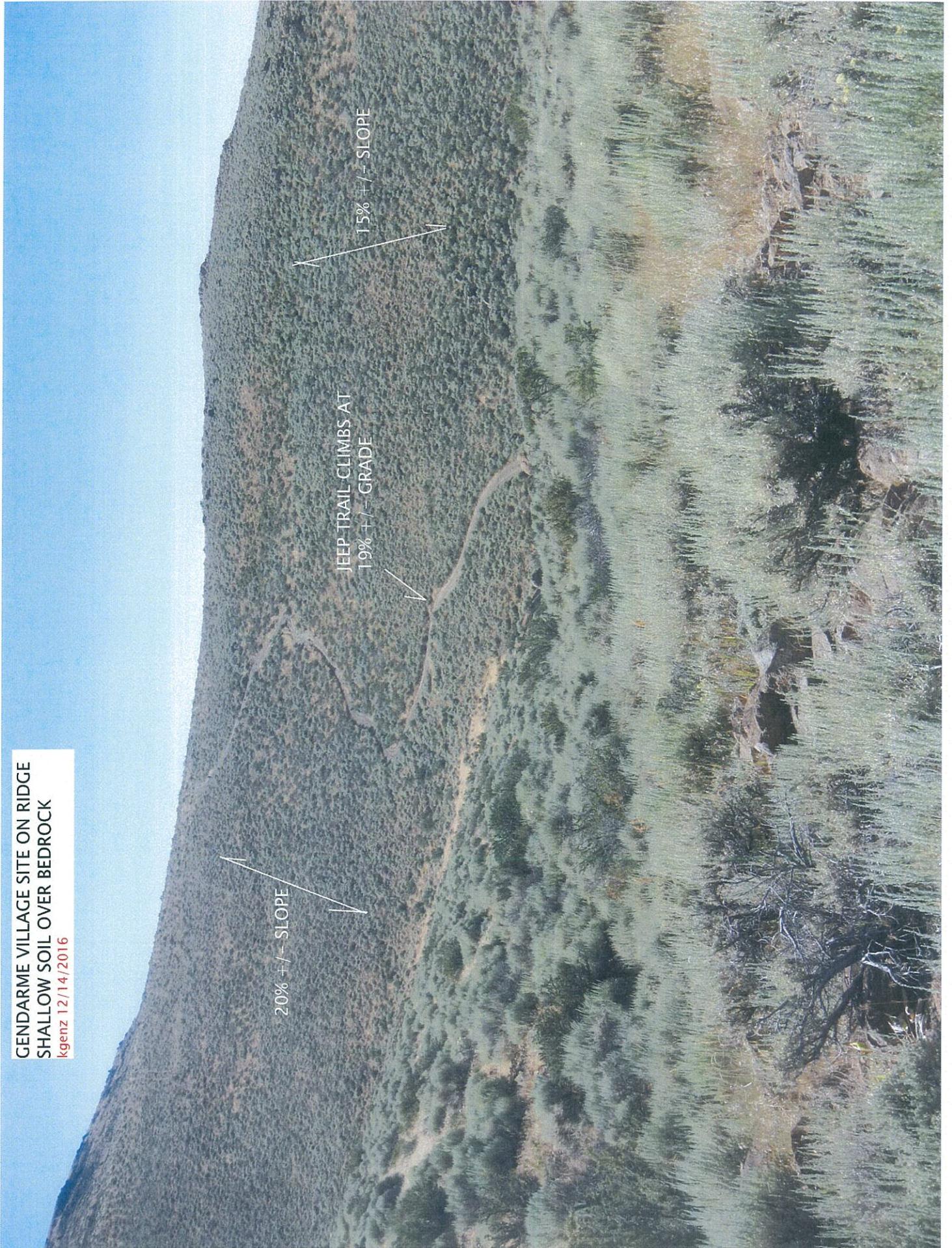
GENDARME VILLAGE SITE ON RIDGE
SHALLOW SOIL OVER BEDROCK

kgenz 12/14/2016

20% +/- SLOPE

JEEP TRAIL - CLIMBS AT
1.9% +/- GRADE

15% +/- SLOPE



Steamboat Hills
Soil Erosion on
Road & Trail
Note Rock & Coarse
Gravel



Accelerated Trail Erosion
Trail was built to install utility line.



ASCENTE DEVELOPMENT, Parcel 2
Kgenz, 11/9/2016

Accelerated Road Erosion
Up until 1990 (est.) road was passable with high clearance, 2-wheel drive vehicle.

Perched Water on Alluvium - Sierra Village Site

ASCNITE DEVELOPMENT, Parcel 1
Agent: 10-18-16 & 10-24-16
RAWS, Galena Station

October 18, 2016
2 days after rain

October 14-16: 3.5" rain
46-78 mph SW wind

October 24, 2016
8 days after rain

ROCK BLASTING

ROCK BLASTING

kgenz 3/9/2017

A "Summary" is on page 11-14

SITUATION

An ubiquitous physical feature of western part of the Steamboat Hills is a shallow, gravelly soil of 3 to 20 inches over hard and fractured bedrock. (See USDA.1980. Washoe County Soil Survey, South Part; Similar soil features were seen on hill hikes.) It can be said that rock blasting to grade roads, buildings, and utility lines is inevitable for any housing development in Matera Ridge, Mixed-use, Overlay District. In the Geotechnical Research Report for Ascenté, blasting is mentioned as a possibility. (See p. L-2)

RULES

In the event of blasting, what are the rules? Locally, the Forest Plan has none. Washoe County Building & Development has none. NRS 476 defines the distribution, possession, and sale of explosives. Other than this statute, searches and inquiries did not turn up blasting rules for the State of Nevada.

Three local rules were found:

1. City of Henderson has ordinance number 3048, Para 2, 8-6-2013 in Henderson, Nevada - Code of Ordinances, Title 15 Buildings & Construction, Chap. 15.33 - Blasting Regulations. It is detailed. It appears to have been patterned after federal regulations.
2. City of Winnemucca has ordinance Title 8, Health and Safety, Chapter 8.20, Explosives and Flammables. It is a basic regulation on transportation, possession, and use of explosives within the city.
3. Washoe County Truckee Meadows Fire Protection District guideline on explosives is the 2012 International Fire Code Commentary, Section 5607 Blasting, p. 56-29 to 56-31.

Since blasting projects in the state usually involve federal land, federal regulations come into play.

Federal rules for rock blasting are mostly embodied in four different CFRs (Code of Federal Regulations): 1. 27 CFR–Alcohol, Tobacco Products, Firearms, and explosives (ATF), Department of Justice, 2. 29 CFR–Occupational Safety and Health Administration (OSHA), Department of Labor, 3. 30 CFR–Mineral Resources, Department of Interior, and 4. 49 CFR Transportation.

Excavations by rock blasting involve use of an explosive such as ammonium nitrate–fuel oil mix blasting agent (ANFO). ANFO is classified as a Division 1.1 (Class A) hazardous material. Specific procedures have been developed related to their safe transportation, storage, handling, communication, loading, and detonation. At the federal level, the applicable CFR parts include:

1. 27 CFR 555–Commerce in Explosives. Manufacturing, importing, buying, selling, transporting, and storing explosive material. (ATF)
2. 29 CFR 1910.109–Occupational Safety & Health Administration. Explosives & Blasting Agents in the Workplace. (OSHA)
3. 29 CFR 1926.900–Occupational Safety & Health Administration. Blasting & Use of Explosives. (OSHA)
4. 30 CFR 780–Office of Surface Mining Reclamation and Enforcement. Surface Mining Permit Applications – Minimum Requirements for Reclamation and Operation Plan. (DOI)
5. 30 CFR 816–Office of Surface Mining Reclamation and Enforcement. Permanent Program Performance Standards – Surface Mining Activities. (DOI)
6. 49 CFR 177–Carriage by Public Highway. Transportation of Hazardous Materials by Private, Common, or Contract Carrier by Motor Vehicle. (DOT)

Explosives and detonators are a hazardous material governed by state and federal regulations. Permits are issued for specific purposes. The blasting industry is experienced as to what, where, when, and from whom permits are needed.

Excavation blasting in the Steamboat Hills will require compliance with Title 27, 29, and 49 CFR and the International Fire Code Commentary. The rules for a blasting plan and safe performance are in Title 30 CFR.

COST ANALYSIS

Once a geotechnical investigation calls for blasting, a cost analysis (\$/cubic yard) is needed.

The cost-analysis contains the following: volume of rock to be excavated by blasting (ton/cubic yard); rock type and hardness [andesite(7), rhyolite(6-7), and granodiorite(6-7)]; site conditions; fragment size; access; method of rock removal (left, reused, hauled); fly rock (blasting mats); vibration, air blast, noise, noxious fumes and dust issues; well and aquifer issues; monitoring instruments (e.g. seismograph); pre- and post-surveys and permits. Calculated cost per cubic yard is usually the contractor base rate for drill and blast plus added costs germane to the project. Bids from reliable contractors are received. Bids are subject to review by the regulating authority (e.g. Washoe County) to insure they comply with state and federal rules.

BLASTING OPERATION & CONTROLS

On project go, the contractor's Blaster-in-Charge prepares a preliminary blasting plan that outlines who, what, when, where, and how the project will be done. On approval, a test blast is performed. Blast design is tweaked and re-tweaked until the project is completed. The Blaster-in-Charge uses blasting criteria tailored by knowledge gained by many years of experience. Excavation blasting is hazardous. The Blaster-in-Charge emphasizes safety concerns over excavation concerns. Before blasting, hazards and environmental impacts are identified. Procedures are incorporated into the operation to insure protection of personnel, nearby residents (including pets and livestock), public, property (dwellings, water, utilities, etc.), and environment.

Blasting concerns fall into two (2) classes: Un-controllable and controllable. Un-controllable concerns include 1. Distance and direction of property in relation to the blast site, 2. Soil and 3. Geology (rock type, fracturing, faults). Controllable concerns include: 1. Vibration, 2. Air blast, 3. Fly rock, 4. Noise, 5. Noxious fumes and 6. Dust. The Blaster-in-Charge eliminates or minimizes adverse effect by proper blast design and by insuring that the blast zone is safe and secure.

Vibration: Vibration is seismic waves generated by the blast. The blast produces body waves in rock and surface waves that travel over the ground. Ground vibrations produce the greatest displacement; whereas, below ground displacement (below 20 feet) tends to be minor. Evidently, high frequency vibrations do not produce shaking of structures, but low frequency vibrations do, causing concern. Ground vibration is highly variable, requiring frequent monitoring. A principal concern is home damage. Another concern is people sensitivity to vibration resulting in anxiety, damage complaints, and tense relations.

The safe vibration level for a home is the criteria in RI 8507, Siskind, et.al. Statistically, the criteria have a 5% probability of damage. One alternative is frequency criteria, as in the following table.

Home Type	f < 40 Hz	f > 40 Hz
Drywall Interior	0.75 in/s	2 in/s
Plaster on wood lath interior wall	0.50 in/s	2 in/s

A second alternative is a seismograph measurement of peak particle velocity (PPV) of ground vibrations in inches per second. The following graph shows the area of safe vibration.

APPENDIX B.—ALTERNATIVE BLASTING LEVEL CRITERIA

Safe blasting vibration criteria were developed for residential structures, having two frequency ranges and a sharp discontinuity at 40 Hz (table 13). There are blasts that represent an intermediate frequency case, being higher than the structure resonances (4 to 12 Hz) and lower than 40 Hz. The criteria of table 13 apply equally to a 35-Hz and a 10-Hz ground vibration, although

the responses and damage potentials are very much different.

Using both the measured structure amplifications (fig. 39) and damage summaries (figs. 52 and 54), a smoother set of criteria was developed. These criteria have more severe measuring requirements, involving both displacement and velocity (fig. B-1).

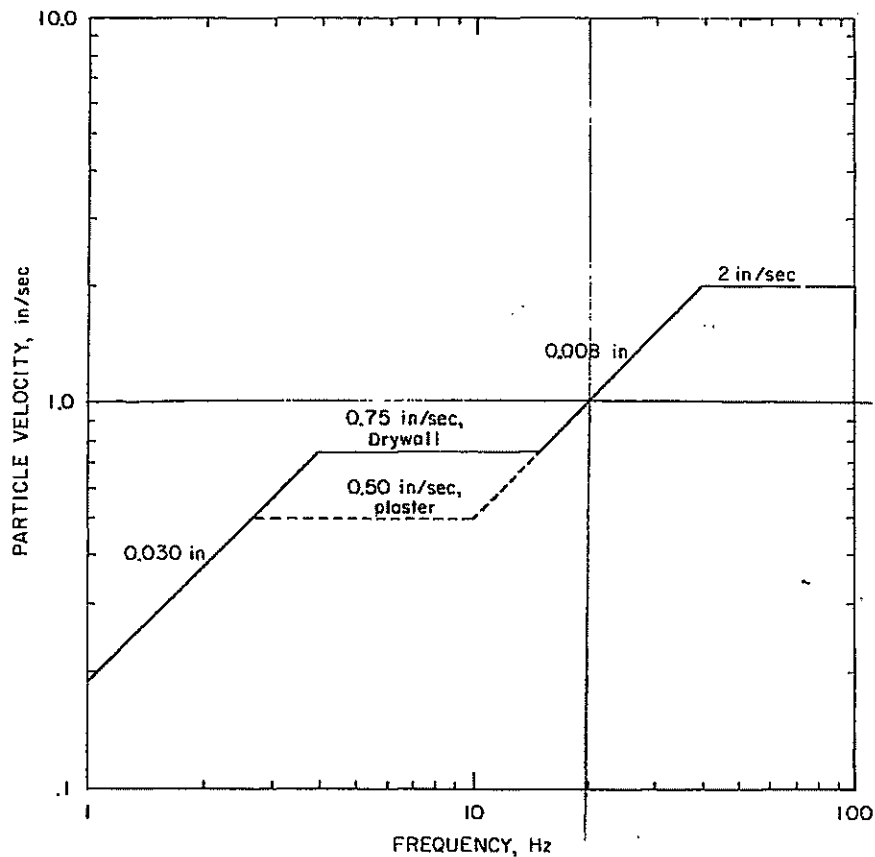


Figure B-1.—Safe levels of blasting vibration for houses using a combination of velocity and displacement.

The blasting operation states the maximum allowable PPV, as shown in the following table. The Blaster-in-Charge has the option of designating a more restrictive PPV.

Distance from blast site in feet	Maximum Allowable PPV in/s
0-300	1.25
301-5,000	1.00
5001 and beyond	0.75

A third alternative is to use a scaled distance factor which does not require seismic measurements.

Scaled distance is calculated as: $D_s = D$ divided by square root of W
 Where D is the distance in feet from the blast site to the nearest structure outside of the blast site. W is the maximum charge weight of explosives in pounds detonated within any 8-millisecond delay interval.

Distance from blast site in feet	Scaled-distance Factors D_s
0-300	50
301-5,000	55
5001 and beyond	65

Air Blast/Air Blast Overpressure: Air blast is an audible or in-audible pressure wave. Air blast radiates outward in all directions from the blast site. Air blast travels slower than ground vibrations but differences cannot be detected by humans. It can reach a level that results in structure damage; however, damage is infrequent. Damage is usually limited to cracked glass and rattling of walls. Noise is generated inside the residence. Since human response to vibration and noise is subjective, a compliant may or may not be valid. Air blast is affected by topography, blast design, and atmosphere. Inversions, wind, and rain may cause rescheduling.

A seismograph is used to measure air blast in decibel (dB). Criteria for air blast limits are in 30 CFR 816.67, as shown in the following table.

Lower Frequency Limit of Measuring System in Hz	Maximum Level in ± 3 dB
≤ 0.1 Hz	134 Peak
≤ 2.0 Hz	133 Peak
≤ 6.0 Hz	128 Peak
C-weighted	105 dBC

FlyRock: Fly rock is fragments thrown and scattered during blasting. The fragments might be thrown a few feet or over a mile. Fly rock can cause serious injury, fatality, or damage. Procedures are activated to insure the safety of operation personnel, residents, pets, and livestock; and, that damage to property and environment is zero or minimized. To control fly rock, blasting mat and/or soil cover is used.

Criteria for fly rock limits are in 30 CFR 816.67. The CFR reads; "Fly rock travelling in the air or along the ground shall not be cast from the blasting site—

- (1) More than one-half the distance to the nearest dwelling or other occupied structure¹;
- (2) Beyond the area of control required under §816.66(c)²; or,
- (3) Beyond the permit boundary³."

Fly rock limit is the most restrictive (i.e. shortest distance) of the three (3) criteria.

For example:

¹At the end of Fawn Lane, potential blast site to nearest dwelling is 400 feet.

²Refers to access control of blasting area/zone.

³The permit boundary is Matera Ridge, Mixed-Use, Overlay District. Potential blast site to the north permit boundary is 350 feet.

Thus, the permit boundary is the most restrictive.

Bedrock Displacement: Trench and ditch blasting has the potential to displace bedrock. Below ground utilities (e.g. power, natural gas, & communication) and water lines may be damaged.

Noxious Fumes: Blasting generates carbon monoxide and other fumes. The fumes can collect and migrate into a variety of places (e.g. excavations, open & buried trenches, structures, etc.). Monitoring of noxious fumes is to be done to insure the health and safety of people on-site and off-site.

Dust: Rock blasting creates fugitive dust. Uncontrolled dust can not only be a nuisance (visibility) but also effect health of people on-site and off-site. About half the large dust particles (>10 microns) settle out in the blasting area. About half the small dust particles (≤ 10 microns) remain airborne for a long time endangering the people in the community near the blasting area. When inhaled, the small dust particles enter the lungs and there remain causing respiratory illness. Fugitive dust dispersal can be minimized by careful attention of atmospheric conditions (e.g. wind, inversions) and watering following blasting.

BLASTING PLAN

Blasting Plan: An operational blasting plan is prepared for the applicant outlining who, what, where, when, and how. Many versions exist. Direction on preparing the plan may be found in 30 CFR 780.13. 1. The plan is to comply with 30 CFR §§816.61–68. It is to include ground vibration and air blast limits and control methods. 2. Also, it includes a description of the monitoring system to check compliance with 30 CFR 816.67 (Control of Adverse Effects). The plan is subject to review by the regulatory authority and the public may comment.

BLASTING PLAN CONTENTS

General: Comply with appropriate local, state and federal laws. Certified blasters. A blaster and one other at blast site. Duties of Blaster-in-Charge. Blast design prepared and certified by the Blaster-in-Charge.

Pre-blasting Survey: At a minimum of 30 days before blasting commences, Blasting Operations is to offer, in writing, all residents and owners of dwellings and other structures within ½-mile of the permit boundary (e.g. Ridge, Mixed-Use, Overlay District) the opportunity to request a pre-blasting survey. The request is made, in writing, to the officer in charge of operations (e.g. Blaster-in-Charge) or regulatory authority (e.g. Washoe County). Regarding Ascenté, the offer is extended to on-site as well as off-site owners of utilities, communication lines, and water systems.

A surveyor employed by the Blasting Operations determines the condition of dwellings and structures and other ground improvements (e.g. wells, transmission lines, cables, water systems, etc.). A signed copy of the survey is given to the regulatory authority and person requesting the survey. Any disagreements are to be given, in writing, to the regulatory authority and Blasting Operations. Before blasting can begin, surveys are to be completed more than 10 days before the scheduled blasting.

Blasting Schedule: The blasting schedule shows blast operation for the day unless conditions warrant change. The regulatory authority approves blasting times that are shown in the schedule. Blasting is done between sunrise and sunset unless otherwise restricted.

At least 10 days but not more than 30 days before blasting begins, the schedule is published in anearby local newspaper.

The schedule is distributed to local governments, public utilities and communication and to each resident within ½-mile of the blast site described in the schedule.

The schedule has a detailed description of whom, when, and where blasting is to occur, including security, warning and audible signals that will be used before and after blasting.

Blasting Signs, Warning and Access Control: Blasting signs reading “Blasting Area” are conspicuously placed along the edge of the blasting area that comes within 100 feet of any public road right-of-way and at any other point where any other road provides access to the blasting area.

Blasting signs reading “Warning! Explosives in Use” are conspicuously placed at all entrances from public roads, highways and trails. The signs are to clearly list and describe the audible blast warning and all-clear signals.

Access Control: Access within the blasting area shall be controlled to prevent the presence of livestock or unauthorized persons during blasting. Access control continues until the Blaster-in-Charge determines that no unusual hazards exist and access can be safely resumed.

Control of Adverse Effects: Blasting is to be conducted to prevent injury to or damage of property on-site and off-site, including surface or ground water.

Factors under control of the Blaster-in-Charge consist of ground vibration, air blast, fly rock, noxious fumes and dust. Performance limits are incorporated into the Blasting Plan.

Records of Blasting Operations: Records of all blasts are to be retained for three (3) years. They shall be made available to the regulatory authority and public.

The record is to contain:

1. Blast Operator, 2. Location, date, and time of blast, 3. Name, signature, and certification of Blaster, 4. Identification, direction, and distance in feet to the nearest structure outside the permit area, 5. Atmosphere conditions, 6. Type of material blasted, 7. Blast design used, 8. Mat or soil protection used and 9. Monitoring method- equipment, location, placement, reader, and readings.

TERMS

Blaster-in-Charge – Operation blaster in charge of a specific blast. In the absence of an Operation Supervisor (Blasting Superintendent), responsibility may include all aspects of the blasting operation.

Blast Area/Zone– An area near any blasting operation in which concussion, flying material or debris, or gases resulting from detonation of explosives can reasonably be expected to cause injury or property damage.

Blasting Mat – A mat of woven steel wire, scrap tires, or other suitable material to cover blast holes for the purpose of preventing fly rock.

Blasting Site – The specific place defined by the Blaster-in-Charge where explosives are used in blasting operations. A blast site is part of the blast area.

Fly rock – Fragments of rock thrown and scattered during blasting. (E.g. excavation, mine, quarry, etc.)

Fugitive Dust – Fugitive dust is particle matter suspended in the air by wind action and human activities.

Peak Particle Velocity - Peak particle velocity (PPV) is the speed at which a particle of soil or rock moves.

Permit Area – An area of land in which a blasting operation is scheduled. All or a portion of the applicant land to be affected by the blasting operation is shown on a map.

SUMMARY

The geology, soil, and topography of western Steamboat Hills indicate excavation by blasting will have to be carried out on a greater part of the permit area.

State of Nevada and Washoe County lack blasting guidelines, making it necessary to invoke federal regulations.

A variety of government sources relative to blasting operations were consulted regarding guidelines at the state, county, and town level. Most guidelines are directed to mining operations and highway construction. OSHA is a big player.

Blasting criteria comes from observations, research and monitoring conducted for mining and highway projects.

The explosive charge creates vibrations which are seismic waves. The waves are classed as body waves that travel through rock and surface (ground) waves that travel over the surface without penetrating rock. Body waves are not likely to cause damage below 20 feet.

Controllable blasting concerns include ground vibration, air blast, fly rock, noxious fumes, and dust. People are sensitive to ground vibration and noise. It causes complaints and strained relations. Noxious fumes and dust effect health.

Ground vibration, which is measured by seismograph and/or formula, is a function of vibration level, distance, and charge weight.

Ground vibration measurement by seismograph is inches per second of peak particle velocity (PPV). Maximum limits are A. 0–300 ft. 1.25 in/s, B. 301–5,000 ft. 1.00 in/s, and C. 5,000 ft. or more 0.75 in/s.

Ground vibration may also be measured using the scaled–distance equation of $W = (D/D_s)^2$, where W=weight of explosives, D=distance from the blast site to the nearest protected structure, and D_s =scaled–distance factor. Maximum factor for A. 0 to 300 ft. is 50, B. 301 to 5,000 ft. is 55 and C. 5,001 ft. and beyond is 65.

Air blast (i.e. Air blast Overpressure) level is measured in Hertz (Hz) and decibels (dB) using a seismograph. Maximum limits are A. ≤ 0.1 Hz 134 peak dB, B. ≤ 2 Hz 133 peak dB, C. ≤ 6 Hz 128 peak dB and D. C–weighted frequency 105 dBC.

Fly rock is measured in distance from the blast site. Fly rock limit is A. One-half the distance to the nearest dwelling or occupied structure, or B. Blasting area boundary, or C. Permit area boundary. The regulatory limit of fly rock is the shortest distance of A, B, or C.

Bedrock displacement might occur by trench or ditch blasting.

Blasting produces carbon monoxide and dust, requiring monitoring.

At least 30 days before blasting, Blasting Operations offers a pre-blast survey to residents and owners within ½-mile of the permit boundary.

On receiving a written request for a survey, a pre-blasting survey of the resident or owner property is conducted. The survey is conducted at least ten (10) days before the scheduled blast. A written report is given to the requester and regulatory authority.

A blast plan is prepared that outlines the steps to eliminate or minimize safety concerns and operational concerns. The plan is on record for three (3) years and it is available to the regulatory authority and public.

The blast is designed to A. ensure the safety of everyone first, and B. optimize blast performance second.

To ensure the blast is within performance limits, tests are performed to confirm or modify the blast design.

The blasting schedule gives the date and time blasting is to occur. It is published in the local newspaper and given to local governments, utilities and each residence within ½-mile of the blasting site as described in the schedule.

To ensure the safety of people, security is obtained by signing with warnings and preventing the presence of livestock and unauthorized persons.

To eliminate the adverse effects of blasting, significant advances have been made to ensure the safety of blasting personnel, residents and owners and the public. Nevertheless, the success of a blast depends on personnel conducting the blast in a skillful manner.

If controlled blasting or ripping is not practical, another option is non-explosive rock breaking. For example, solid rock next to or very close to a sensitive structure may prevent blasting.

Adverse effect of noxious fumes and fugitive dust is minimized by delaying blasting when unfavorable atmospheric conditions exist.

Advancements in blasting technology have resulted in improved explosives and detonators. Computer programs have evolved permitting multiple iterations of blasting operations, analysis of data, and record keeping. Still, on-site data is needed to tailor the blasting operation to performance limits.

A reputable blasting firm may be needed to determine of scope of blasting.

REFERENCES

1. Geotechnical Engineering Bureau. 2015. State of New York. Department of Transportation. Office of Technical Services. Geotechnical Engineering Manual, GEM-22, Revision #4. Procedures for Blasting. p. 17. Appendix A-F
2. Konya, C.J. and E.J. Walter. 1991. Rock Blasting and Over Break Control. Federal Highway Administration. U.S. Department of Transportation. Publ. No. FHWA-HI-92-001. p. 430.
3. Siskind, D.E., M.S. Stagg, J.W. Kopp, & C.H. Dowding. 1980. Structure Response and Damage produced by Ground Vibration From Surface Mine Blasting. Office of Surface Mining, Reclamation and Enforcement. US Department of Interior. Investigation 8507.

TRAFFIC IMPACT STUDY

TRAFFIC IMPACT STUDY

My understanding of the *Traffic Impact Study (TIS)* is limited. Because of the technical nature of the Study and Report, I see a need for a peer review. Perhaps this is being done and a finding report will be made available to the public.

The sampling method of the *TIS* appears to be subjective and easily biased as follows:

1. The *TIS* was developed by correspondence between Traffic Works and Washoe County rather than by meeting. Did either party do a reconnaissance of the study area? All the streets in the study area are similar, i.e. paved, two-lane, bordered by a drainage ditch. Callahan Road north of Goldenrod St. is an exception, having incongruous paths. Each street has a mix of non-motorized uses- primarily equestrian, walking, jogging, and bicycling. Each street reflects a rural quality of life. Should not the impact of development on these uses and values been part of the *TIS*?
2. Were all access points considered? E.g. Fawn Lane, Callahan Road, Tannerwood Drive, Goldenrod Street, and Wildwood Drive and Cedarwood Drive as well.
3. Brushwood Way is a through route to Fawn Lane. Why was this route not selected for study?
4. Traffic Works looked only at one scenario. I show Traffic Works' scenario plus two more. Each scenario is based on the assumption that a road system interconnects each village and the Brushwood Way through street will be gated.
 - a. Bias is clear in assuming 70% traffic flow to Fawn Lane away from Shawna Lane. I think this assumption is based on the driver selecting the most direct route. It presumes that 197 households will be using Fawn Lane (70%) and 84 households will be using Shawna Lane (30%). This assumption results in a ratio of 2.4 Fawn Lane trips/1 Shawna Lane trip. The

TRAFFIC IMPACT STUDY

preciseness of the 70%/30% split suggests that it is a useful estimate of potential estimate. A ratio estimate of 2/1 would have been just as useful, although not as precise.

- b. Using terrain to estimate traffic flow, traffic flow onto Fawn Lane is from the 155 households of Sierra Village and Tioga Village); and, flow onto Shawna Lane now is from the 126 households of Kaweah Village and Gendarme Village. This scenario results in a 55%/45% traffic split. The ratio now is 1.2/1
- c. In this scenario, the road is closed between Sierra Village and Tioga Village. The traffic flow onto Fawn Lane is only from the 70 households of Sierra Village. The traffic flow onto Shawna Lane is from the 211 households of Tioga Village, Kaweah Village, and Gendarme Village. This gives us a 25%/75% split. The split is nearly a complete reversal of Traffic Works scenario. The ratio is 1/3.

The table below depicts the household daily trips of each scenario.

Scenario	Current Trips*	Fawn Lane Predicted Trips	Shawna Lane Predicted Trips	Percent Change
A	B	C	D	E
#1 Fawn Lane 70%	788	2,660		238%
#1 Shawna Lane 30%	3787		4585	21%
#2 Fawn Lane 55%	788	2260		187%
#2 Shawna Lane 45%	3787		4984	32%
#3 Fawn Lane 25%	788	1453		84%
#3 Shawna Lane 75%	3787		5791	53%

*Assumption made is that current & predicted trips are measured at the junction of Mt. Rose Hwy and Callahan Road & Fawn Lane. Predicted trips is number of village households times 9.5 plus current number of trips. Percent change is $(C \text{ or } D - B/B) * 100$.

FINDING

TRAFFIC IMPACT STUDY

Based on a LOS of 6,900 trips per day, each scenario is within the LOS threshold. Thus, no lane mitigation is needed. This finding is in agreement with Traffic Works finding. As to lane mitigation, the types of mitigation Traffic Works refers to are signal lights and roundabouts. They could have also mentioned center lane narrowing, neck-downs, medium barriers, and traffic calming measures. All of these measures have the objective of controlling traffic volume and speed.

Percent increase in daily trips seems to be significant on Fawn Lane in all three scenarios. Percent increase in daily trips seems to be of a lesser significance from Shawna Lane to Mt. Rose Hwy in scenario #1 & #2 and significant in scenario #3. Nevertheless, the roads leading out of Fawn Lane and Shawna Lane are of mixed-use and safety measures need to be adopted that address the four principal uses (bridle, bicycle, jogging, and walking).

In my opinion, this may be accomplished through enforcement, education, and appropriate calming measures. This is in line with the *Master Plan, Land Use and Transportation Element*, page 74, 9/22/2011. I read no discussion in Traffic Works on whether an increase in traffic would affect any or all of the non-motorized uses.

Fawn Lane is approximately 0.94 miles in length; whereas, Shawna Lane route to the Mt. Rose Hwy is approximately 1.75 miles in length. With Brushwood Way to be closed to through traffic, a driver leaving from the Shawna Lane exit has four (4) route options to choose from. E.g. Callahan Road onto Mt. Rose Hwy may be reached from Goldenrod St., 1.75 mi.; Cedarwood Dr., 1.72 mi.; Wildwood Dr., 1.73 mi.; & Tannerwood Dr., 1.68 mi. By not evaluating mile length and choice of route, bias was introduced

TRAFFIC IMPACT STUDY

into the *7/5*. Would an evaluation of these indicators made a difference? I do not know. To get route miles, I used Google Map Distance.

The *7/5* did not look into the effect of increased traffic flow on households, during construction and after construction. The volume of construction traffic and associated speeding will create a safety problem of considerable size. The residences of each route into Ascenté will be significantly affected in many ways.

During construction and post construction, Ascenté's impact on school busing has the potential of affecting children's education. Fawn Lane, Callahan Road, and Cherrywood Drive each have school bus pick-up points for Hansberger, Pine, and Galena.

Some parents drop-off and pick-up their children. Some children walk to and from the pick-up point. It is important that traffic generated by Ascenté does not interrupt school busing schedules. It is of paramount importance that all children get to school and back without being endangered by traffic generated by Ascenté.

The greatest effect of construction activity on families will be commuting to and from work, shopping, busing school children, and attending school and non-school activities. Also, any other uses such as bridle, bicycling, walking, and jogging will not be possible.

Since construction will be intermittent over several years, the result is a long-term effect. There are working families, retired families, and families with children. There are busy families with

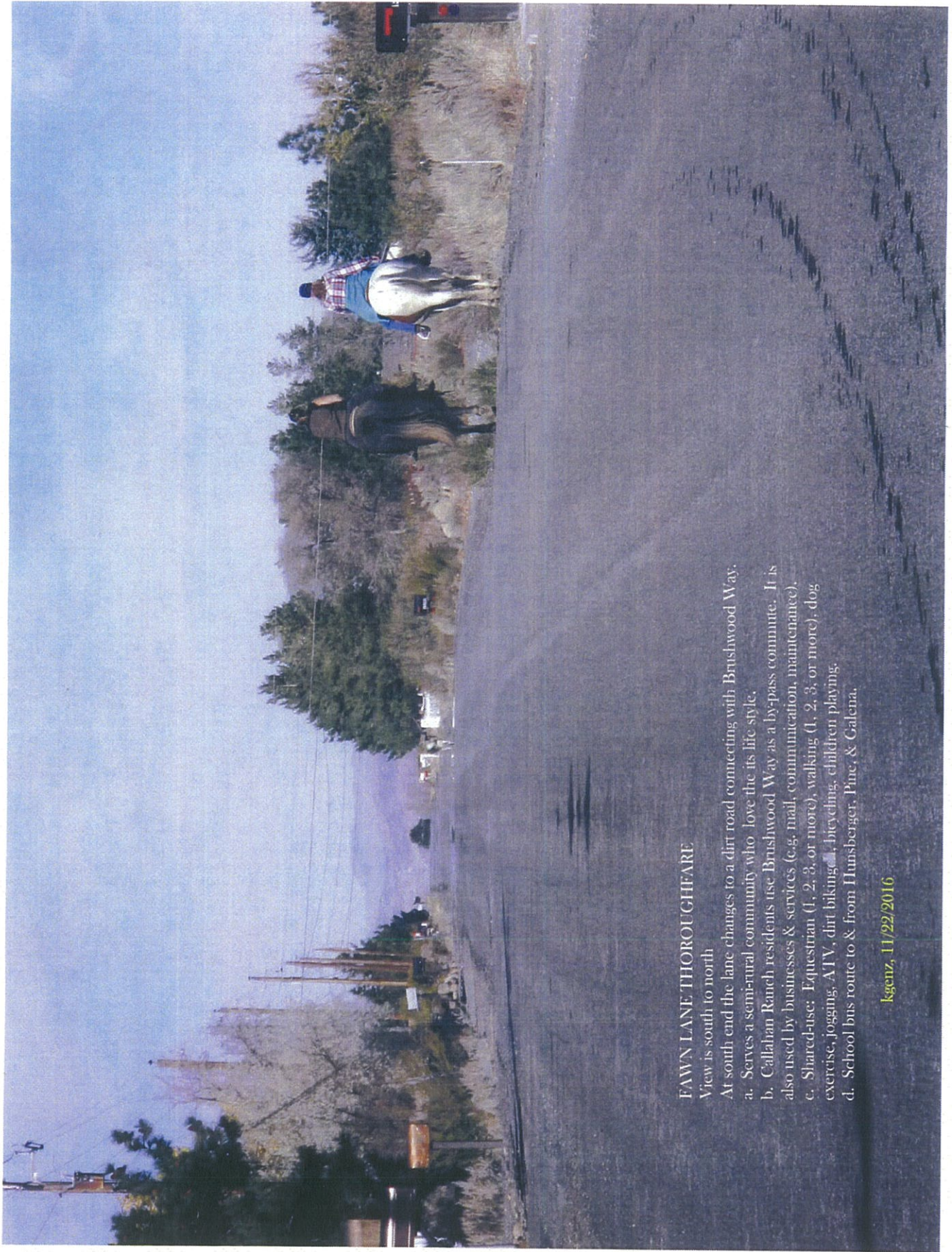
TRAFFIC IMPACT STUDY

complex schedules. Construction and post construction traffic resulting from Ascenté will result in a diminished quality of life within the community.

I know that traffic daily flows between Fawn Lane and Callahan Ranch via Brushwood Way. However, this flow has not been measured. I know that the Fawn Lane turn-around is used daily and that it is also used for parking. I can only surmise that most, if not all of this use, originates outside of Fawn Lane. And, that this use affects traffic data.

A statement of Traffic Works that warrants attention is a paragraph on page 22 of 26, J-23. It begins and ends with "Washoe County's standard details...pedestrian friendly scale rather than auto-centric." Within the paragraph, they say "Extra wide streets, which the standard details create, promote higher travel speeds and diminish the walking, cycling, and livable neighborhood characteristics that have become increasingly valued in the last decade."

Traffic Works did no more or less than what they were asked to do; but, in this instance, the *TIS* could have had more depth put into it.



FAWN LANE THOROUGHFARE

View is south to north

At south end the lane changes to a dirt road connecting with Brushwood Way.

a. Serves a semi-rural community who love the life style.

b. Callahan Ranch residents use Brushwood Way as a by-pass commute. It is also used by businesses & services (e.g. mail, communication, maintenance).

c. Shared-use: Equestrian (1, 2, 3, or more), walking (1, 2, 3, or more), dog exercise, jogging, ATV, dirt biking, bicycling, children playing.

d. School bus route to & from Hunsberger, Pine, & Galena.

kgenz, 11/22/2016



CALLAHAN ROAD THOROUGHFARE

View is south to north.

Goldenrod Drive runs east & west at stop sign.

Paved path on left ends at rectangular sign.

Non-vehicle lanes: Starting at Mt. Rose Hwy & travelling south, Callahan Road is bordered on the right by a concrete sidewalk, and on the left by a gravel path; lanes change to a single paved path on the right; this path drops out & the road becomes two-lane pavement bordered by a drainage ditch; this kind of road continues south to its terminus at Callahan Ranch Trails, which runs east.

a. Serves, primarily, a semi-rural community whose residents put a high value on this character, over suburban & urban environment. Residents are on 1 acre or greater; homes vary from affordable to luxury.

b. Serves as a route to Mt. Rose Hwy.

c. Serves as a school bus route to & from Humburger, Pine, & Galepa.

d. Shared-use road: Equestrian (1, 2, 3, or more), walking (1, 2, 3, or more), jogging, bicycling, dog exercise.

kgenz, 11/29/2016



CHERRYWOOD DRIVE THOROUGHFARE

Callahan Ranch

View is north to south

- a. Serves semi-rural community life style whose residents put a high value on this character, over suburban & urban environment.
- b. Serves as a route to Mt. Rose Hwy via Callahan Road or Fawn Lane.
- c. Serves as a school bus route to & from Hunsberger, Pine, & Galena.
- d. Shared-use road: Equestrian (1, 2, 3, or more), walking (1, 2, 3, or more), dog exercise, jogging, av, bicycling, dirt biking route, children playing.

kganz, 11/22/2016



GOLDENROD DRIVE THOROUGHFARE
Callahan Ranch

View is west to east.

- a. Serves semi-rural community life style whose residents put a high value on this character, over suburban & urban environment.
- b. Serves as a route to Mt. Rose Hwy.
- c. Shared-use: Equestrian (1, 2, 3, or more), walking (1, 2, 3, or more), jogging, bicycling, dog exercise, children playing.
- d. School bus pick-up either at Cherrywood Drive or Callahan Road.

kgenz, 11/23/2016

WATER RESOURCE IMPACT

WATER RESOURCE IMPACT – Galena Creek Sub–Basin

Kgenz 4/24/2017

FLOOD ‘N’ DROUGHT– A Revolving Door

SUMMARY

A. Aquifer Drawdown

1. In Galena Creek Sub–basin, long term groundwater drawdown is expected to continue until a “safe use” is achieved among all uses.
2. The western Steamboat Hills watersheds are an important source of primary groundwater recharge.
3. Development in the western Steamboat Hills will have a negative effect on the water cycle, restricting infiltration (percolation) flow through the soil and a fractured network of consolidated and unconsolidated rock.
4. Negative effect of development on infiltration should be mitigated.

B. Water Resource

1. For the Pleasant Valley Hydrographic Basin, in 1984, the Nevada State Engineer set “perennial yield” of groundwater at 3,000 AFY (safe use) and surface water at 8,000 AFY for a system yield of 11,000 AFY. An update is warranted, using the independent professionalism of the US Geological Survey.
2. In the Galena Creek Sub–basin, cumulative groundwater use (adjudicated + domestic) has exceeded perennial yield for 3+ decades resulting in loss of groundwater storage.
3. Over–draft of groundwater in the Galena Creek Sub–basin is mainly a result of over–adjudication and an increase in domestic wells.
4. Since 2000, many domestic wells in the sub–basin have been deepened. For example, Fawn Lane well logs indicate 45 of 60 domestic wells have been deepened.
5. New groundwater use will increase over–draft.

C. Domestic Well Protection

1. Development in the western Steamboat Hills and on the connecting fan will have a negative effect on the domestic wells that are adjacent to it or nearby.
2. Sub-basin domestic wells need the protection as prescribed in NRS 534.024.
3. Critical areas having 100% dependence on domestic wells are Fawn Lane and upper Mt. Rose fan.
4. October 2016, TMWA started to monitor domestic wells along Fawn Lane which is in conformance with NRS 534.250, Monitoring Requirements.

D. Water Rights

1. "Paper" water rights may be in the basin's adjudicated water rights. They should be identified to better understand water use.
2. A "paper" water right does not meet Nevada Water Law of prior appropriation and beneficial use; whereas, a "wet" water right does.
3. TMWA's policy does not allow acceptance of a "paper" water right; however, TMWA may have inherited some in the merger.
4. Any new water application for municipal use must meet TMWA's Rule 7, of which Ascenté has banked 196.90 AFY.
5. NSE shows Ascenté banked water rights as TMWA owner of record with a priority of June 13, 1974.
6. For the basin, TMWA also requires Ascenté to dedicate secondary (supplemental) water rights to use Whites Creek, Thomas, Creek and/or Truckee River as needed. This remains to be done.
7. Use of secondary water depends on the Mt. Rose Water Treatment Plant being operational.
8. Use of primary and secondary water depends on availability. In times of drought, priority (water right seniority) factors in.
9. In TMWA's plan for sustainable use on the Mt. Rose fan, secondary water from the Mt. Rose Water Treatment Plant is scheduled to go to the upper fan area. Who will be first in line to get secondary water?

DISCUSSION

Recent planned residential development has renewed a concern of its potential negative effect on groundwater in the Galena Creek Sub-basin of the Pleasant Valley Hydrographic Basin.

Aquifer Drawdown: Historically and currently, the groundwater resource has been and continues to be drawn-down, dropping groundwater, requiring domestic wells to be deepened*. This is a concern of residents and State and County government. The long term weather has been more dry periods (decreased recharge) than wet ones (increased recharge)**. While dry periods (drought) is a factor, much of the loss has been due to basin over-adjudication of water and domestic well installations. In Truckee Meadows Water Authority (TMWA) 2016–2035 Water Resource Plan, p. 37 of Pleasant Valley Basin 88, domestic wells increased from 70 (pre-1960) to 509 (pre-2016), an increase of 627%. In TMWA's Staff Report of 27 May 2015, p. 5 of 12, domestic wells increased from 108(1900–1960) to 817 (2015), an increase of 656%. How TMWA has reported domestic well increase is irrelevant. The point is there has been a significant increase.

In TMWA Water Resource Plan, p. 40–41, the hydrograph of three (3) production wells show a downward trend from Apr-01 to Dec-15. It is noted that "Water levels are steadily declining in this region." On Fawn Lane, the Genz domestic well static water level has dropped from 80 feet in 1974 to 146 feet in Oct 2016, an 82% drop. The Taylor domestic well on Fawn Lane had a static water level drop from 106 feet in Apr 1991 to 172 feet in Dec 2016, a 62% drop. There has been a rise in static water level, periodically, but, over time, the rise has not overcome the drop. However, the current rise in static water level is encouraging.

*Chart No. 1 – Sample of Average Drop in Water Level of Nine (9) Wells Along Fawn Lane

**Chart Nos. 2 & 3 – Comparison of Galena Precipitation & Truckee River Basin Snowpack; Truckee River Snowpack Data as of April 1 – 1980–2016

Since 2000 a number of domestic wells have been deepened. On Fawn Lane, which is 100% dependent on domestic well water, well logs indicate 45 of 60 wells have been deepened, including the Genz and Taylor wells. Washoe County mitigated the cost of deepening the Genz well and others. Still, the problem of groundwater over-draft persists, indicating water use continues to be in excess of perennial yield.

The Mt. Rose–Galena groundwater receives most of its water from the Carson Range and some water from the Steamboat Hills watershed and adjacent fan, mainly by precipitation–infiltration (percolation). Infiltration is more evident at the south end of Fawn Lane. The static water level in the Genz well rose 4.98 feet from Oct 2016 to Apr 2017 (3.52% rise)*. Whereas, the Taylor well rose 3.45 feet from Nov 2016 to Apr 2017 (2.04% rise). The significant rise of static water level in the Genz well can be attributed to its nearness to Steamboat Hills as well as infiltration on the alluvial fan adjacent to and near the well. On which the Sierra Village is proposed.

Any development on the fan and adjacent hillside between Fawn Lane and Brushwood Way (i.e. Sierra Village) will significantly decrease infiltration, resulting in a negative effect on adjacent and nearby domestic wells. Mitigation will be required to protect these wells (See NRS 533.024 & NRS 534.110, 5 (b)). Four nearby wells (Genz, Wells, Pritchard, and Eisenbarth) are exempt from a municipal or water district connection (See NRS 534.185). There are several other wells along Fawn Lane that are also exempt. In fact, if the Ascent development is implemented, each village will have a negative effect on water infiltration (percolation) into the aquifer. A similar effect will occur on wells in the Shawna Lane area.

The proposed development will be on watersheds of the Steamboat Hills that are within the Galena Creek Sub–basin. It has been estimated that these watersheds provide 60 acre feet per year (AFY), about 3.4% of the annual precipitation on the Galena Creek basin. (See Katzer, et. al., 1984, p. 7 & 45)

*Chart No. 4 – Static Water Level of Genz We

**Figure 1 – Photographs of Western Steamboat Hills Watersheds

Truckee Meadows Water Authority (TMWA) also recognizes that these watersheds provide groundwater; but, no estimate of the amount is given. (See TMWA 2016 Basin Summary, Pleasant Valley Basin 88, p. 38 of 70)

Infiltration (percolation) was not discussed in the Ascenté application. Mitigation, that is, hydrologic reclamation needs to be addressed. The proposed drainage system should allow for return of run-off into the groundwater. An option is to provide infiltration basins. Other options may exist. The best approach to mitigation is a hydrologic report outlining the best practice.

Water Resource: In review, water is a renewable resource in that it has a precipitation cycle (rain and snow); and, it can be used over and over again. For example, in the Galena Creek Basin precipitation collects in the stream and ground-water that flows out into Steamboat Creek. In a natural state, it is renewable. In an un-natural state, it is non-renewable (finite resource). For example, an aquifer out-flow that is in balance with in-flow (pristine land cover) verses an aquifer out-flow (overdraft) that exceeds inflow (artificial land cover).

Records of water use on the Mt. Rose/Galena fan clearly show that over-draft of the groundwater has been occurring for several decades. Nevada water law provides for "safe use" of the groundwater but this has yet to be achieved.

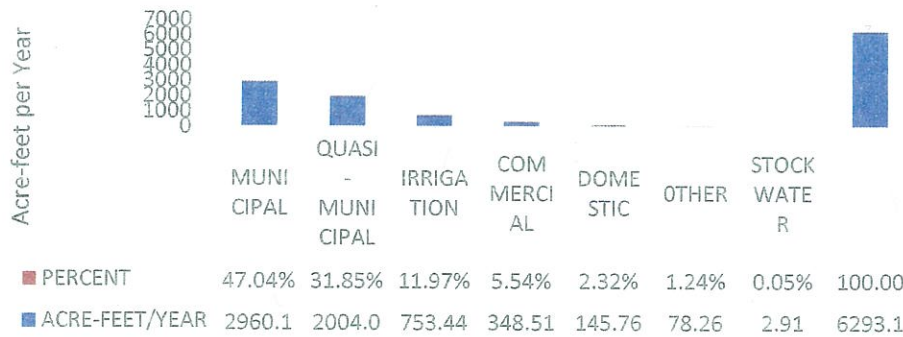
Nevada water law applies the concept of "perennial yield." Perennial yield is defined as the maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater reservoir. (See Nevada Law 101)

Nevada State Engineer (NSE) has set perennial yield at 3,000 AFY and system yield (groundwater + surface water) at 11,000 AFY. (See NSE ruling 2968, May 23, 1984 & ruling 4757, July 29, 1999)TMWA recognizes this perennial yield.

(See 2016–2035 Water Resource Plan, Volume II, Chapter 2, Public Comment, 2/17/2016, page 4 of 8) However, TMWA has stated that the Pleasant Valley Basin has a perennial yield of 12,000 to 14,000 acre–feet per year based on modeling. (See May 21, 2015 TMWA Board Minutes, page 7 Of 11) Currently, the NSE shows perennial yield at 3,000 AFY in the Pleasant Valley Hydrographic Area Summary.

The TMWA perennial yield is a 300% to 367% deviation from the NSE’s perennial yield. This becomes problematic in the management of the water resource since the State Engineer in his 5546 ruling of January 19, 2006 stated that committed groundwater in the form of permits and certificates is at 3,554 AFY; and, when combined with domestic well use, the potential for pumping groundwater in the Galena Creek Basin is 4,174 AFY. (3,554+620) Notwithstanding the difference, Nevada Division of Water Resources (NDWR) and TMWA are cooperatively working towards resolution of over–draft. The US Geological Service should be the one to update the basin water budget as the Service represents independent professionalism.

The following chart shows the distribution of committed use for all of the Pleasant Valley basin.



Source: Nv Div Water Res.
Pleasant Valley 088
Hydrographic Area Summary

Committed Use
■ ACRE-FEET/YEAR ■ PERCENT

On the problem of over–draft, it is recognized that all users have contributed to it. Periods of drought have only heightened over–draft. Even–though there

have been short periods of groundwater increase, the increase has been insufficient to offset pumpage. Thus, the trend continues to be downward.

Municipal well production for the years 2011–2015 show an average of 163 AFY (96%) in the Galena Creek Basin and 62 AFY (4%) in the Steamboat Creek Basin. Municipal and Quasi-municipal is the big water user. To TMWA's credit, municipal well out-flow has been an estimated 42% below committed use $[(2960-1693)/2960*100]$. Their projected municipal water use for the basin is an average of 1100 AFY for the period 2017–2021 bringing water use to 63% below committed AFY $[(2960-1100)/2960*100]$.

The above chart shows groundwater adjudication– that is, vested, permitted, and certified water rights. The chart does not show non-adjudicated domestic well use that is calculated as follows: Domestic well property right is 2 AFY. The calculated domestic well water use for the Pleasant Valley Basin is 1,634 AFY $(2*817)$. The estimated total well use for the basin is 3,327 AFY $(1631+62+1634)$.

Well with-draw is about 50% adjudicated and 50% domestic. Any new water use, adjudicated and/or domestic, has the potential of increasing over-draft unless the new use is compensated for in the water budget.

Domestic Well Protection: Background– Historically and currently, Steamboat Hills, in general, and the western part of the Steamboat Hills, specifically, has contributed groundwater inflow by precipitation–infiltration. For the Galena Creek Basin, western Steamboat Hills watersheds contributed an estimated 90 AFY (See Katzer, et. al., 1984, p. 7 & 45).

Domestic wells at the south end of Fawn Lane have benefitted from the inflow along within flow originating on the alluvial fan next to the hill. Galena Creek has also benefitted.

The negative effect of development on infiltration is well documented. The hydrology of the Steamboat Hills and US Geological Survey data do not support no-effect on the groundwater within and adjacent to the development area.

Even though the adverse effect of a development on a nearby domestic well is difficult to measure, the effect can be shown, empirically. TMWA's well monitoring on Fawn Lane is an example.

Domestic wells do not have the same protection as a vested, permitted or certified water right. However, some protection is afforded under NRS 533.024, 1. (b). It reads "To recognize the importance of domestic wells as appurtenances to private homes, to create a protectable interest in such wells and to protect their supply of water from unreasonable adverse effects which are caused by municipal, quasi-municipal or industrial uses and which cannot reasonably be mitigated.

Therefore, a development proposal within the Matera Ridge, Mixed-use, Overlay District, such as Ascenté, should be required to show how it intends to mitigate the loss of infiltration and the resulting decrease in groundwater inflow. Mitigation by landscape irrigation will provide some secondary recharge, but, albeit minor. Significant mitigation will most likely have to be from capturing run-off. Another mitigation measure may be supplemental water. Mitigation is best left to those versed in hydrologic reclamation.

Troublesome is TMWA has just recently started to address the domestic well situation on Fawn Lane. This is evidenced by three documents: 1. Letter of 21 June 1916 to Symbio Development, LLC, limiting mitigation to meeting Rule 7, 2. TMWA 2016-2035 Water Resource Plan, Future Water Resource, Groundwater Sustainability on the Mt. Rose Fan, p. 139 of 149, only allocating supplemental water to domestic wells on the upper portions of the Mt. Rose-Galena Fan and not recognizing that Fawn Lane is 100% reliant on domestic wells, and 3. The TMWA 2016-2035 Water Resource Plan is silent on Fawn Lane in that no language was read that indicates how and when management and protection of domestic wells would be accomplished as indicated in Rule 10.

On the positive, TMWA in October 2016 started a well monitoring program on Fawn Lane of which Genz participates in. This program is in line with NRS 534.250, Monitoring Requirements.

Water Right: Since the Pleasant Valley Basin is over-adjudicated, a concern is which water rights are physically tied to available water (i.e. wet) and which are not (i.e. dry or paper). Because Nevada Water Law is based on prior appropriation and beneficial use, a water right is to have sufficient priority to be wet and the water is physically available when in priority. Otherwise, the water right is “dry or paper.”

In addition to meeting prior appropriation, the water right must meet the due diligence period of beneficial use unless it is exempt under NRS 533.060 amendment for surface water and given an extension under NRS 534.090 for groundwater. The use it or lose rule becomes moot on dedication of the water right to a public purveyor for municipal use.

A water right may be fine on priority but short on water. The NSE may approve a secondary (supplemental) water right to make up the shortage in the primary water right.

Priority becomes important in times of drought. Vested water rights (before March 1939) are served first according to seniority. Permitted and certified water rights are next in line according to seniority.

Under TMWA’s Rule 7, any applicant for a new water service must dedicate adequate water rights to meet the development demand. Criteria for accepting a water right is by deed recorded with Washoe County Recorder. Hopefully, TMWA also looks at its suitability for use (quantity and quality) and priority.

The applicant for new water service in the Pleasant Valley Basin must also dedicate supplemental water rights for TMWA to use Whites Creek, Thomas Creek, and/or Truckee River waters. TMWA has informed the Ascenté applicant by letters of June 21, 2016 (To Symbio Development, LLC) and September 8, 2016 (To Gary Nelson and Jeanne Janning, Trustees) that water service is conditional based on the Mt. Rose Water Treatment Plant being operational and water availability. Currently, the applicant has dedicated 196.90 AFY of permitted water rights that have a priority date of June 13, 1974 (See NSE data

base of water rights) This priority is a high seniority date. TMWA is owner of record.

It is important to note that TMWA is a water purveyor that reacts to developments approved by Washoe County and that TMWA's resources focus on meeting current and future customer demands. In doing this, TMWA is responsible for the recharge, storage, and recovery of groundwater within the basin. However, it appears Washoe County Commission is responsible for seeing that a development's negative effect on groundwater is mitigated.

TMWA has an aggressive plan for achieving sustainable water use in the Pleasant Valley Basin which is made up of the Galena Creek Sub-basin and Steamboat Creek Sub-basin. Part of the plan is in place while part is scheduled.

It will take several years before the plan is fully operational and the goal of sustained groundwater use is met. Until over-draft is eliminated, the wise course is to weed out "paper" water rights and domestic wells not being beneficially used; and, to give new water applicant a rain check. Determination of "wet" verses "paper" water rights appears to be with the NSE. However, it's a big job. NSE will have to have a good reason to do so.

REFERENCE

Katzer, Terry, Timothy J. Durbin, and Douglas K. Maurer. 1984. Water-Resources Appraisal of the Galena Creek Basin, Washoe County, Nevada. US Dept. of the Interior Geological Survey in Cooperation with the Nevada Division of Water Resources. Open-File Report 84-433. P. 59

FIGURE & CHARTS

Figure 1. Western Steamboat Hills Watersheds

Chart 1. Sample of Average Drop in Water Level of Nine (9) Wells Along Fawn Lane

Chart 2. Comparison of Galena Precipitation & Truckee River Basin Snowpack

Chart 3. Truckee River Snowpack Data as of April 1 - 1980-2016

Chart 4. Static Water Level Genz Well



WATERSHEDS - WEST SLOPE OF STEAMBOAT HILLS

MT. ROSE TANK 2 AREA



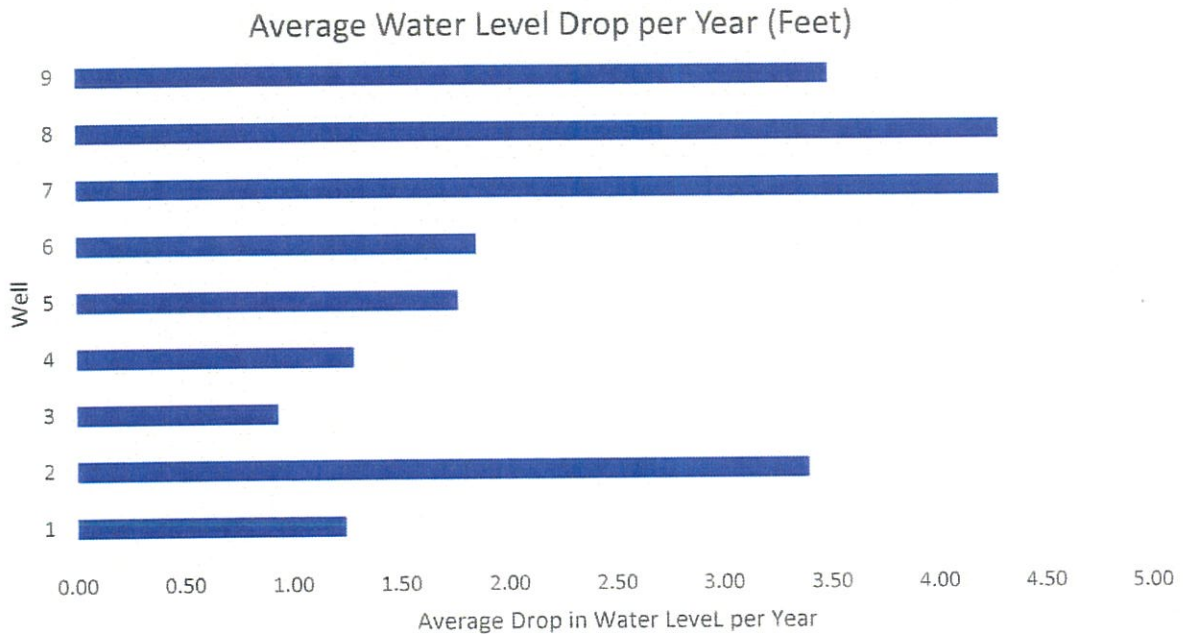
SOUTH END OF FAWN LANE AREA

SAMPLE OF AVERAGE DROP IN WATER LEVEL OF NINE (9) WELLS ALONG FAWN LANE

Well	Year New Well	Year Deepened	Water Level New Well (Feet)	Water Level Deepened Well (Feet)	Water Level Drop (Feet)	Years	Average Drop per Year (Feet)
1	1974	2006	80	120	40	32	1.25
2	1978	2008	60	162	102	30	3.40
3	1978	2010	105	135	30	32	0.94
4	1979	2010	92	132	40	31	1.29
5	1986	2008	85	124	39	22	1.77
6	1987	2008	85	124	39	21	1.86
7	1988	2005	45	118	73	17	4.29
8	1988	2005	45	118	73	17	4.29
9	1990	2004	83	132	49	14	3.50

Average water level drop of wells 1-9 2.25
 Average water level drop of wells 1-4 1.70
 Average water level drop of wells 5-9 3.00

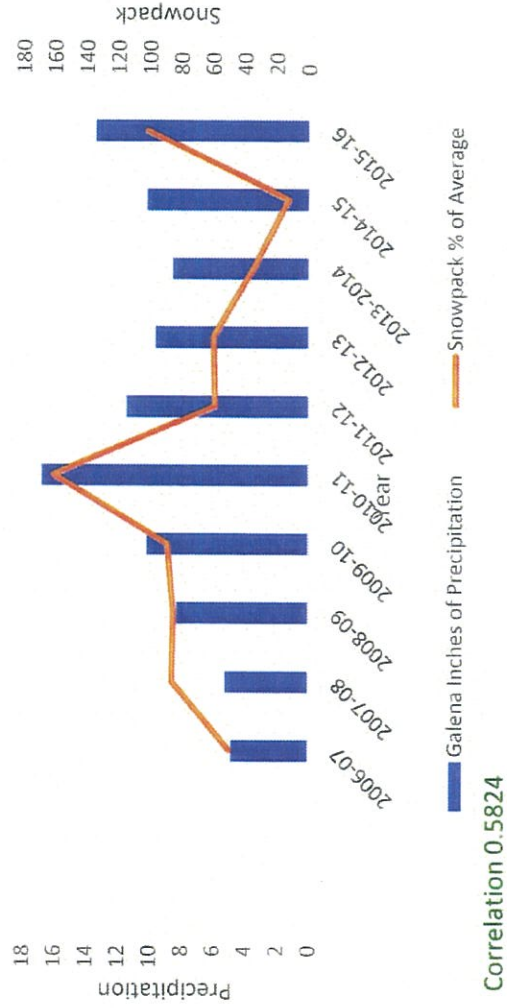
Source: Well Log



kgenz 3/14/2017

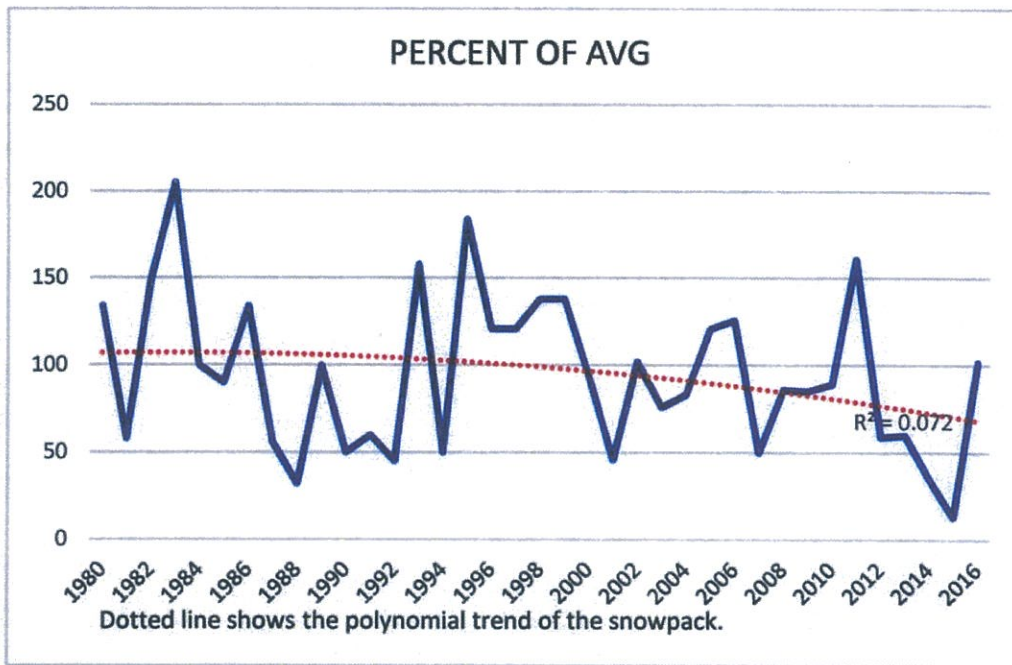
Year	Galena Inches of Precipitation	Snowpack % of Average
2006-07	4.84	50
2007-08	5.24	86
2008-09	8.28	85
2009-10	10.17	89
2010-11	16.83	161
2011-12	11.46	59
2012-13	9.65	60
2013-2014	8.55	35
2014-15	10.21	13
2015-16	13.44	102

Comparison of Galena Precipitation & Truckee River Basin Snowpack



kgenz 2/4/2017

YEAR	PERCENT OF AVG
1980	134
1981	58
1982	149
1983	205
1984	100
1985	90
1986	134
1987	56
1988	32
1989	100
1990	50
1991	60
1992	45
1993	158
1994	50
1995	184
1996	121
1997	121
1998	138
1999	138
2000	94
2001	46
2002	102
2003	76
2004	83
2005	121
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2007	50
2008	86
2009	85
2010	89
2011	161
2012	59
2013	60
2014	35
2015	13
2016	102

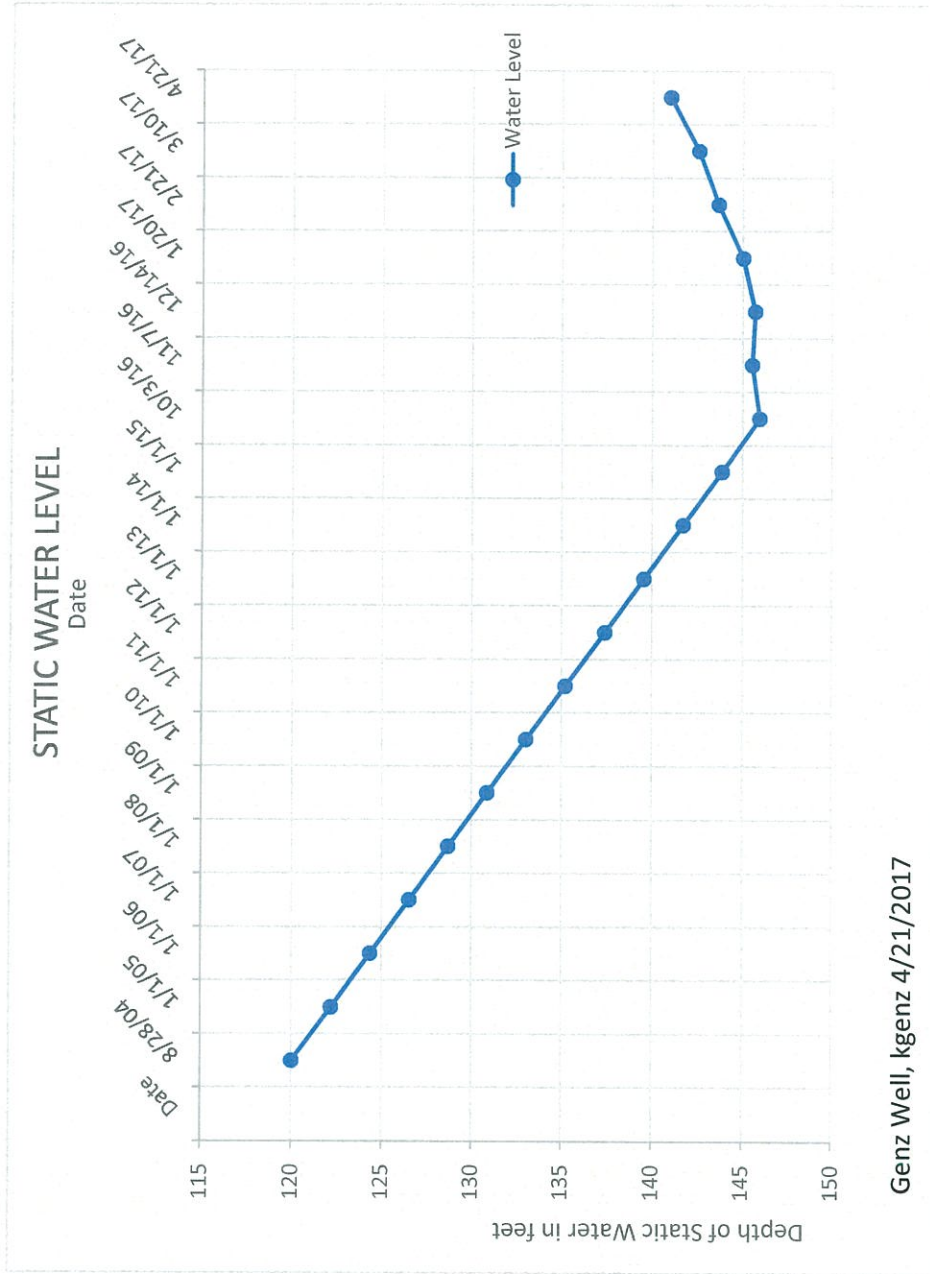


PERCENT SUMMARY	
% SUM	3511.00
AVG %	94.89
MEDIAN %	90.00
MODE %	50.00
MAX % 1983	205.00
MIN % 2015	13.00
STDEV.P %	44.66
% DRY YRS	54.05
% WET YRS	35.14
% NORMAL*	10.81

*Includes years 2% of normal.

kgenz 2/16/2017

Column1	Water Level
Date	
8/28/04	120
1/1/05	122.17
1/1/06	124.34
1/1/07	126.51
1/1/08	128.68
1/1/09	130.85
1/1/10	133.02
1/1/11	135.19
1/1/12	137.36
1/1/13	139.53
1/1/14	141.7
1/1/15	143.87
10/3/16	145.96
11/7/16	145.55
12/14/16	145.71
1/20/17	145.02
2/21/17	143.65
3/10/17	142.57
4/21/17	140.98



Genz Well, kgenz 4/21/2017

WILDFIRE

WILDFIRE

In my letter of 11/7/16 to Commissioner Barnes I expressed my concerns regarding wildfire– its risk and responding to it. These remarks are a summation with a slightly different look.

Steamboat Hills and adjacent Galena–Mt. Rose fan are not an asbestos forest and shrub land. Evidence of past and recent wildfire is easily seen. Wildfire has caused closure of the Mt. Rose Hwy at least three times. Homes have been lost. The Zolezzi wildfire reached Fawn Lane, causing an evacuation. The Washoe Valley wildfire reached Galena, causing an evacuation. The recent Little Valley wildfire caused an evacuation for some while others were asked to be ready to evacuate.

In the Ascené Development, Sierra Village sits in an amphitheater formed by the hills west and south of it. Wildfire downdraft has engulfed it and threatened my home and my neighbor's homes. Wildfire has also spread across the village sites of Tioga, Kaweah, and Gendarme. Evidence of wildfire occurrence over the last 50 or so years can be seen on Steamboat Hills Summit Ridge and on the hillsides, hill crests, and basins west of the ridge onto the Galena–Mt. Rose fan. Wildfire from any direction moves rapidly across the landscape despite the rocky conditions. Both big sagebrush and cheatgrass are fire intolerant. It does not take much of a wind for a fire to start, either by lightning or man. Strong winds are common to the hills and fan. Wind, landscape, and fuel make an excellent recipe for a wildfire to spread into and across homes in its way.

That wildfire is fast spreading was demonstrated by the Washoe Valley and Little Valley fires. Timely response is a problem, even under the best of conditions. Response from the Sierra Front Interagency Dispatch Center will be needed as well as the Washoe County Fire Department.

The configuration of streets and roads inside and outside of the Ascené Development make it difficult for fire teams to respond and residents to

WILDFIRE

evacuate. This is because the way in and the way out is the same. A piecemeal closure of roads and allowing no outlet streets as a part of housing development has reduced exit routes to a minimum. Today, no open inter- and intra- connectivity of streets and roads exists. Traffic congestion can easily occur on Callahan Road and Fawn Lane. Callahan Road becomes a bottle-neck as the Mt. Rose Hwy is approached.

In the Master Plan Conservation Element, p. 33, western Nevada is rated a high fire hazard environment. Wildfire in the Truckee Meadows has occurred in all seasons. Man-caused fires have out distanced lightning-caused fires. Ascen 's housing design may have appeal for marketing but it puts its residents in harm's way in the event of a wildfire, regardless of the direction it may come from.

Kenneth R. Genz Sr.
PO Box 18444
Reno, Nevada 89511

Tel: 775-849-1013
E-mail: kgenzsr@gmail.com
November 7, 2016

Commissioner James I. Barnes, Chair
Washoe County Planning Commission
Washoe County Manager's Office
1001 E. Ninth Street
Reno, Nevada 89512

Subject: Wildfire, Ascenté (Matera Ridge, Mixed-Use, Overlay District)

Dear Commissioner Barnes:

Sherry, my wife, and I have resided at 15870 Fawn Lane for 39 years. Prior to moving to Fawn Lane, I was part of a Forest Service fire team that responded to a wildfire on the Mt. Rose Fan. I do not remember the year other than 1970's. I contacted the Nevada Division of Forestry, asking if they had any information on the fire. Nope. Callahan Ranch was still a ranch. The fire, I remember, was on the Mt. Rose fan east of Fawn Lane, it extended across the fan and along the Mt. Rose Hwy. Wind pushed the fire, rapidly, from east to west, toward Mt. Rose. A Forest Service transport hauling a cat was on the highway about where the Great Basin Institute is at. The fire entered the forest. The driver managed to unload the cat and find a safe spot but the transport was burned up. It completely burned a few homes. Afterwards, a chimney stood for several years as a reminder of the fire. The fire entered the forest area and jumped the highway, and continued westward into the foothill. I think it was a lightning fire but I could be mistaken.

The second major fire I experienced was the Zolezzi Wildfire. It occurred in the early 1980's, I think 1981. Wind pushed the fire, rapidly, from Zolezzi in a Southwest direction, jumped the Mt. Rose Hwy, entered the Steamboat Hills, passed the borrow pits, and came over the ridge, threatening Fawn Lane properties. It continued southwest along the hill slope, dropped onto the flat along our property, crossed the flat onto Brushwood. An excavation order was issued. Sherry and I were fortunate, in that only a small portion of our property was burnt. Our horses were not hurt, nor did we lose or have any of our buildings damaged. At the same time the Lake Valley Wildfire occurred. Thus, firefighting resources were thin. I think lightning caused these fires; again, I could be mistaken.

We have a prevailing west wind, mainly from the southwest. Our major rain and snow storms are westerly. But, the Mt. Rose fan wildfire travelled east to west and the Zolezzi Wildfire travelled mainly [(north by northeast) should read west by southwest]. On January 19, 2012, the man caused Washoe Wildfire made a northerly run along the eastside of the Steamboat Hills, dropping into Galena-Rolling Hills. Also, it made a short run up the Westside of the Steamboat Hills. The recent Little Valley Fire, that started October 14th, threatened those of us on the fan, requiring some to evacuate, mostly due to spot fires. Also, we had the Rolling Hills Fire (Galena), October 14th, a couple of miles east of Fawn Lane. It had the potential of being another Zolezzi fire.

In my treks of Steamboat Hills, often off-trail, I see moisture stressed shrubs, predominately sagebrush and bitterbrush. The grasses and forbs are maturing earlier than normal. We have the ever-present downy brome (cheatgrass) at all elevations. At the upper elevations, tobacco brush has been dying out. The physical terrain of the Steamboat Hills, that trend east-west, is mainly of 15-50% slopes that face at least eight (8) compass points. Sagebrush is high in volatile oils. It is present nearly everywhere. Put cheatgrass, drought, and wind into this land and plant mix, and the result is a high fire hazard. On the Washoe County Fire Hazard Map for New Construction the following is shown as having a high fire risk rating: Fawn Lane, Matera Ridge, Mixed-Use, Overlay District, and Galena-Callahan Ranch (except Mt. Rose Estates). I would say that a moderate to high probability exists of a wildfire starting in or threatening any of these areas. The threat could come from any direction.

In Ascenté Tentative Map and Special Use Permit, the Ascenté Village Plan, p. D-1, illustrates how each village (Sierra Village, Tioga Village, Kaweah Village, and Gendarme Village) lays in the path of a wildfire. On the Village Plan and the other Ascenté design plans, the lack of fire prevention measures is evident. In the event of a wildfire, lightning or man-caused, each village is in harm's way. Because wildfire often makes its own weather, and the position of Sierra Village, Tioga Village, and Kaweah Village on the land, a wildfire could spread into each village and easily spread onto Fawn Lane and Callahan Ranch. For example, look at the location of Sierra Village which sits at the toe of 15%-50% slopes and abuts against Fawn Lane and Callahan Ranch properties. A wildfire could have devastating effects not only to the village but also to adjacent properties.

In the event of wildfire or structural fire, the Ascenté Village Plan shows only two exit routes: Fawn Lane and East Shawna Lane. In Ascenté FAQ, 8/8/2016, 3.5.3, p.6 of 8, Brushwood Way was changed from full access to blocked off for emergency use only; and, Cedarwood Drive was changed from full access to blocked off permanently. In Ascenté Tentative Map and Special Use Permit, I did not come across any mention of Cedarwood Drive being blocked or gated. In the application I read "Brushwood will have a gated access and only be used for Emergency Vehicle Access (EVA), such as fire responders." (See Tentative Map Considerations, h. Access, p.26) A proposal that is not very wise. And, I also read "Truckee Meadows Fire Protection District Station #36 is located approximately 2.7 miles to the north and will provide fire service."

The previous statement pertains to leaving Station #36 at 13500 Thomas Creek Rd and travelling to the south end of Fawn Lane. (MapQuest shows 6 min., 2.7 mi. in light traffic) Since Fawn Lane will be the primary route into and out of the villages, in the event of a fire, the response team will probably be met at the Mt. Rose turnoff with heavy traffic blocking the road. The other route to the Sierra Village Brushwood Way gate is via Callahan Ranch. (MapQuest shows 7 min. 3.7 mi. in light traffic.) Here, the responders will probably encounter a blocked road. Responders from Station #36 to East Shawna Lane-Patti Lane will likely be met with heavy traffic. (MapQuest shows 9 min., 4.1 mi. in light traffic)

The only statements that I read within Ascenté Tentative Map and Special Use Permit that related to wildfire were a. "...the Final Map plans will conform to Washoe County's Defensible Space Standards..." and, b. "A defensible space and wildland interface program for both the common open space and individual lots will be established by the Administrator, as a part of the CC&R's and reviewed/enforced by the homeowners association (HOA)." (See Site Design and Community Character, Defensive Space and Standards, p. C-11) Whatever the reason, Symbio Development, LLC has passed the responsibility of fire prevention onto the HOA.

To conclude, Symbio Development, LLC has presented a fire plan that takes us back 100+ years to when only a multi-story building had a staircase for ingress and egress. To meet the intent of the Forest Area Plan (Goal 2, F.2.10 & Goal 13, F.13.3), and the Conservation Element (See Fire Hazards, p. 33); and, to provide for the safety of residents within and adjacent to the development, appropriate Federal, State, and County officials need to be involved, if not already, to insure the best management practices for fire prevention and suppression are put in place. On buffering, for the north and west boundary of Sierra Village to be compatible with adjacent parcels, a 320 ft. wide zone is needed. A similar zone is needed for the west and south boundary of Kaweah Village, and for the south boundary of Gendarme Village. Within the buffer zones, a fire access easement of 66 feet is needed. Full access into the development via Brushwood Way is needed. Thank you.

Sincerely,



Kenneth R. Genz, Sr.

Cc: Commissioner Bob Lucey, Vice-Chair
Director Bill Whitney, Planning & Development Division

Enclosures (4)

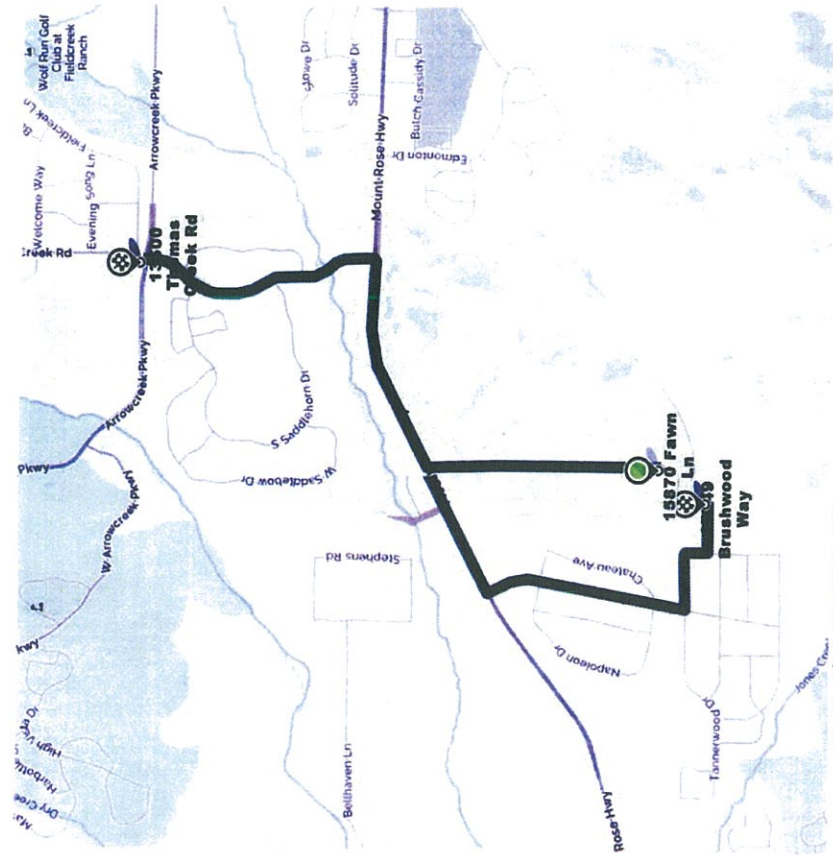
1. Ascenté Village Plan
2. Washoe County Fire Hazard Map for New Construction
3. MapQuest routes (3), Fire Station #36 to Development
4. Photograph of plant recovery after Zolezzi fire & burnt Bitterbrush



The photographs are a cross-section of wildfire that has occurred within the last 50 years on the western part of Steamboat Hills and the Galena-Mt. Rose fan. In spite of the rocky nature of the landscape, thick, intolerant fire fuels fanned by wind easily spreads at a fast pace. When the landscape is left undisturbed, the sage and bitterbrush recover the landscape within a 20-year period. For example, the sage and bitterbrush dominated the gently, sloping drainage at the south end of Fawn Lane by the year 2000 following the Zolezzi wildfire of 1981. Following an attempt to clear and level this site in 2006 (est.), the severely disturbed portions are dominated by the annuals cheatgrass and tansy-mustard. The sage and bitterbrush has yet to gain a foothold on these sites, while becoming established where disturbance was minor.

kgenz, 12/18/2016

mapquest

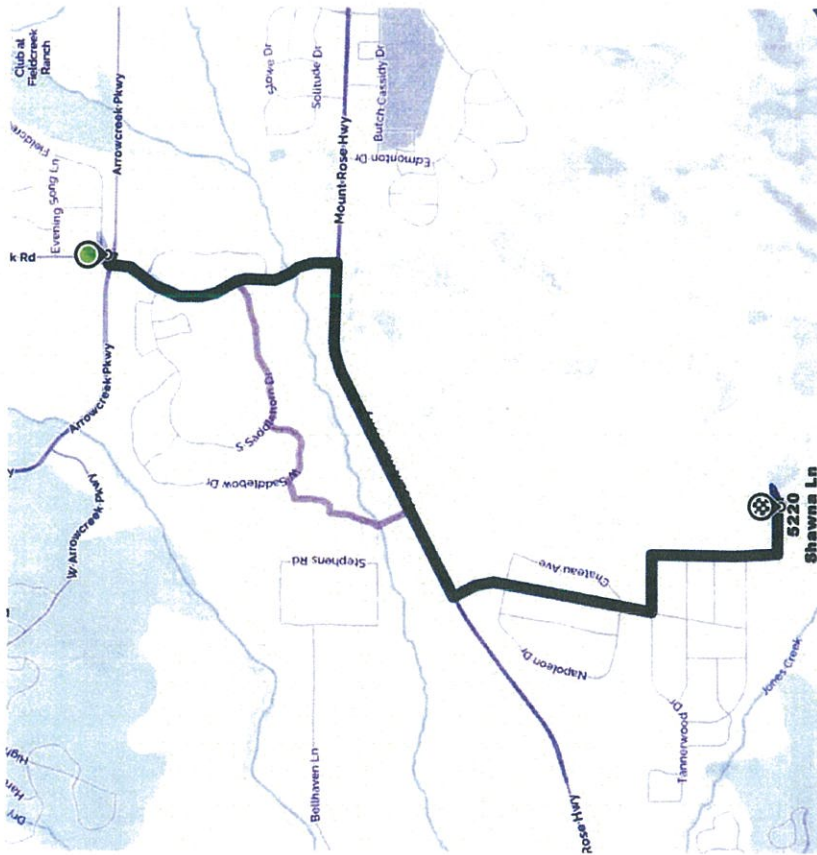


From: Fire Station #36
 13500 Thomas Creek Rd
 Reno, NV 89511

To: Fawn Lane
 6 min., 2.7 mi. in light traffic
 Brushwood Way
 7 min., 3.7 mi. in light traffic

Kjeng 11/6/16

mapquest



From: Fire Station #36
 13500 Thomas Creek Rd
 Reno, NV 89511

To: East Shawna Lane/Patti Lane
 9 min., 4.1 mi. in light traffic

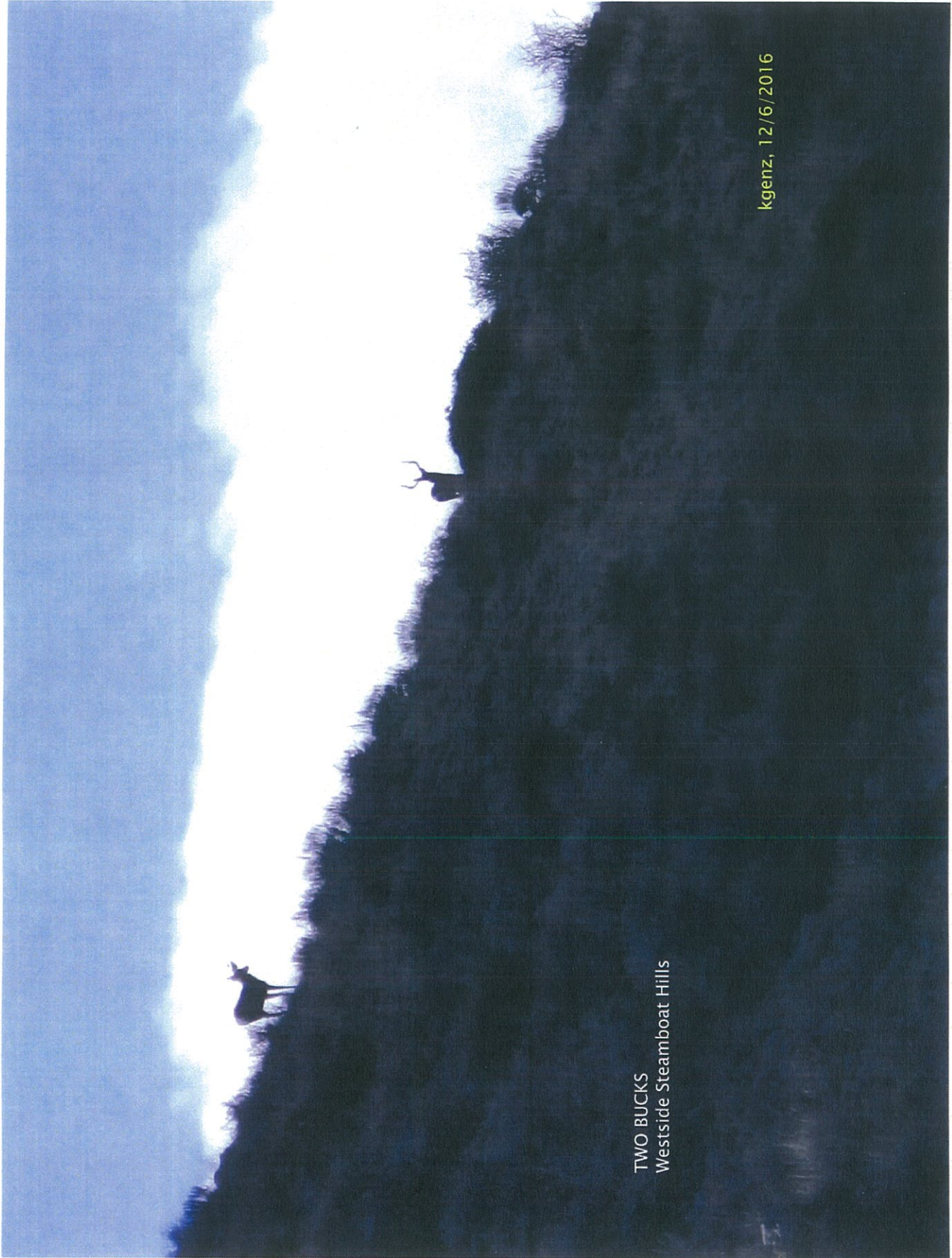
11/6/06
 K. [Signature]

WILDLIFE

WILDLIFE

A variety of wildlife live in the Steamboat Hills and adjacent Galena–Mt. Rose fan. Much could be written about the wildlife, but I will focus on the more obvious and the effect of Ascen  Development on them:

1. Coyote and Mule Deer. Coyote is common to the area, keeping mostly to the hills. They are fairly adaptive to development. How they fair remains to be seen. It is a foregone conclusion that the Mule Deer will be adversely affected. There is a small year-around herd. When water is available, they keep mostly to the hills; but, when water is short or unavailable, they come into the community. Many of us have on our property the water and food they seek. There is also a migratory winter herd that moves to the hills. All four villages (Sierra, Tioga, Kaweah, & Gendarme) will cause loss of habitat. My observations indicate that the Tioga Village will cause the most loss of habitat. While Kaweah Village stands to effect migration. Ascen 's statement on page A-12 shows little or no know knowledge of a. the area's deer herd, and b. deer habitat and deer behavior.
2. California quail. Because of the shrubby habitat of the area and their ability to adapt to the rural character of the area, quail are common to abundant. Currently, they inhabit the proposed village sites. Village development will result in loss of habitat. Because Ascen 's landscape plan does not address wildlife habitat, the loss of quail habitat may be long-lasting.
3. Rabbits. Cottontail and Black-tailed jackrabbit are common in the area. Village development will certainly result in a loss of habitat.
4. Snakes. King snakes and western rattlesnakes are common. They will find village development to be a good place to visit.
5. Miscellaneous mammals. Raccoon, skunk, ground squirrel, & wood rat are present. They easily adapt to their surroundings.



TWO BUCKS
Westside Steamboat Hills

kgenz, 12/6/2016



MULE DEER HABITAT & BROWSE
Below Summit Ridge, Steamboat Hills
Kgenz 12/6/2016

ADSCENTE DEVELOPMENT, Deer Browse
Agrenz, 11/9/2016



NOT BROWSED

Antelope Bitterbrush (*Purshia tridentata*) - Tall Form
Bitterbrush is an important browse for deer and other grazing wildlife & livestock. It is tolerant to browsing. It becomes hedged with moderate to heavy use. Following fire, it re-establishes itself in a relatively short time period. I have a fenced garden plot that I stopped using. Bitterbrush voluntarily established itself and is now over 6 ft. high. Yet, artificial planting of seed has not been very successful. The bitterbrush in each photo show moisture stress.

Steamboat Hills have a small, year-around deer herd which increases in the winter due to deer migrating from the Carson Range. Although, Steamboat Hills have not been classified as having key habitat, the habitat is nevertheless important to sustaining the herd. At night, the deer come down into the Fawn Lane area, especially on the proposed Sierra Village site. Ascente Development will put an end to deer in the Steamboat Hills due to loss of habitat and stress.



BROWSED - NOTE HEDGING

Left photo was taken at end of Fawn Lane; right photo was taken on hilltop, site of proposed Tioga Village.
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ZONING

ZONING

The proposed Ascenté Development has brought to life the issues raised for including the *Matera Ridge, Mixed-Use, Overlay District* in the amended Forest Area Plan of September 9, 2010. An important issue was zoning and it remains important today. The issue being “down zoning from LDS to MDS in the *Matera Ridge, Mixed-Use, Overlay District* is not only in non-compliance with the goals and policies of Forest Area Plan and Land Use and Transportation Element but also the Washoe County Development Code, Master Plan Categories and Regulatory Zones.”

During the pre-Forest Area Plan amendment phase, the will of the citizens of Galena-Mt. Rose fan to preserve the character of the community, now and for future generations, was not only prefaced in the Forest Area Plan but also included throughout the Plan in the form of goals and policies. When the dust cleared and all was said, the will of the people came up short. The Forest Area Plan was approved with these two developments in it: a. *Reynen and Bardis Specific Plan (Callamont)*, and b. *Matera Ridge, Mixed-Use, Overlay District (Hempel)*. According to the Washoe Quick Map, *Reynen and Bardis...* is zoned LDS; *Matera Ridge...* is zoned Multi (OS, MDS, & LDS). Both Developers filed bankruptcy. The *Reynen and Bardis...* land is currently owned by Gateway Co., L.C., that is a California based Development firm.

The Forest Master Plan Map, that represents zoning and is certified correct as of 2/4/16, shows suburban residential for *Reynen and Bardis...*; and, the Map shows suburban residential and open space for the *Matera Ridge...* However, my original understanding, regarding zoning, is that this is OK. It turned out that what this map told me was a half-truth discovered at a couple of visits to Washoe County’s Planning and Development Division. My first trip was to get an enlargement of the zones in *Matera Ridge...* The enlargement I received showed suburban residential as what appeared to me as Medium Density Suburban 4.

I made another visit to the County’s Planning and Development Division. I had mistakenly misread the color key and was told that *Matera Ridge...* was zoned Medium Density Suburban. I was given a copy of the Forest Regulatory Zone Map, which is also certified correct as of 2/4/16. I obtained a copy of the written description of the zones in question. I am now on the same page as Washoe County. Not so. I brought up a question of zoning shown on Parcel descriptions. I was told the Washoe County Assessor’s office has their zoning, we have ours. Like me, maybe the Regional Planning Governing Board thought the community was on a different page. The lesson I learned is what appears as fact might not be fact. I had forgotten that when writing a technical paper, get peer review from several sources. And, I had forgotten that zoning is not universally applied.

ZONING

What I see in placing the MDS zone into *Matera Ridge...* is an example of “spot zoning.” Spot zoning is OK when it serves a useful purpose to the neighborhood, e.g. a park. On-the-other-hand, when spot zoning is not compatible with existing LDS zoning that is evident all over the Forest Master Plan Map and the Forest Regulatory Zone Map, it shines of favoritism and might be illegal. By keeping *Matera Ridge...* and Reynen and Bardis... in the Forest Area Plan and not separate from it, we now have to deal with *Ascenté...* who managed to open a “can of worms.”

The ramification of the *Matera Ridge...* MDS zoning includes, but it is not limited to traffic, schooling, life style, recreation (Equestrian, jogging, walking, exercising, biking, dirt biking, etc.), pedestrian safety, children safety, and a host of resource issues (scenic, wildlife and their habitat, wildfire hazards, geologic hazards, surface and ground water, storm water, soil erosion). Some of the tangible and intangible issues are irreversible or non-retrievable, e.g. road cuts into bedrock, and change of life style. The Board of County Commissioner’s decision to include a radical change in zoning in the Forest Area Plan is, to me, the result of undervaluing why people move into the area and undervaluing the importance of having Steamboat Hills in your backyard and its amenities.

I understand that Washoe County has expressed a need for more housing. And that *Ascenté Development* feels they are meeting this need based on what I heard the *Ascenté* spoke-person say at the November 10, 2016 South Truckee Meadows/Washoe Valley Citizen Advisory Board meeting. Washoe County has in place sufficient land use goals, policies, and codes to insure its citizens that development will be carried out properly.

I asked the Galena Community Committee to inquire about returning the MDS zone to LDS zone. My understanding is that Washoe County has no precedent for reducing density. I question this. I feel that once I research this, I will find that zoning density has been reduced. I see a need to remove *Ascenté...* out of the Forest Area Plan, not only because of zoning but also because of the impacts on the land. I believe this would require an amendment to the Plan. I would get little support.

An alternative is re-zoning *Ascenté...* to reflect LDS and Open Space. In my trekking of Steamboat Hills, I have tried to match the zone map with the terrain. I came up with trying to put a pony shoe on a Clydesdale.

This has been a very stressful period for Sherry and I since the *Ascenté Development* proposal is immediately adjacent to us. I have tried to present an objective opinion as to why the decision by the Regional Planning Governing Board is turning out to be ill-advised. I know how hard it is to be humble, but I have found being humble is rewarding. One gains respect and trust by being humble. This is especially true for those in the political arena.



sherry genz <kgenzsr5@gmail.com>

Tentative Map (TM16-009) and Special Use Permit (SW16-003) [Ascente]

1 message

sherry genz <kgenzsr5@gmail.com>
To: planning@washoecounty.us
Cc: Kenneth Genz <kgenzsr@gmail.com>

Mon, Oct 17, 2016 at 2:34 AM

Director Bob Whitney:

Sherry, my wife, and I recently went to the South Truckee Meadows/Washoe Valley Citizen Advisory Board Meeting, 10/13/16. Unfortunately, it was cancelled. We live at 15870 Fawn Lane, adjacent to the housing development in Parcel 1. Director Smith briefed us on proposed changes to Fawn Lane. We have concerns but we will wait until we can see the proposed road design.

For now, I can see two problems in Parcel 1 & 2 with lot design. I see no open space buffering or parcel matching along the north and west boundaries. (Ref: Forest Area Plan, Goal 2, F.2.10, page 7). On 8/14/16, the owners of Symbio met with Sherry and I. Buffering was discussed and they left us with an impression that it shouldn't be a problem. The next problem of zoning was also discussed, but they were not receptive to making any changes.

The second problem, is the 10,200 square foot lots (0.23 acres) do not meet the Medium Density Suburban (MDS) and Low Density Suburban (LDS) regulations.. In Agenda Item 7.A. is the statement "Lots will range in size from 10,200 square feet (.23 acres) to 80,900 square feet (1.85 acres) with lot sizes averaging approximately 21,300 square feet. Symbio would like me to believe that they are in compliance with zoning code. The Forest Regulatory Zone Map clearly shows the cluster of lots (I counted 70) in Parcel 1 is in MDS zone. Washoe County Development Code for MDS, page 106-7, reads "The maximum number of dwelling units that may be located in this regulatory zone is three (3) units per (1) acre. The minimum lot area in this regulatory zone is twelve thousand (12,000) square feet." Square footage of 12,000 is equivalent to 0.28 acres. From the Tentative Map I cannot point out which lots in Parcel 1 are too small. Many of the lots in the southwest part of Parcel 2 also appear to be too small. The Zone Map shows this part of Parcel 2 to be in the Low Density Suburban (LDS) regulation. The LDS zone has a maximum of one (1) unit per one (1) acre and a minimum lot size of 35,000 square feet (0.80 acres).

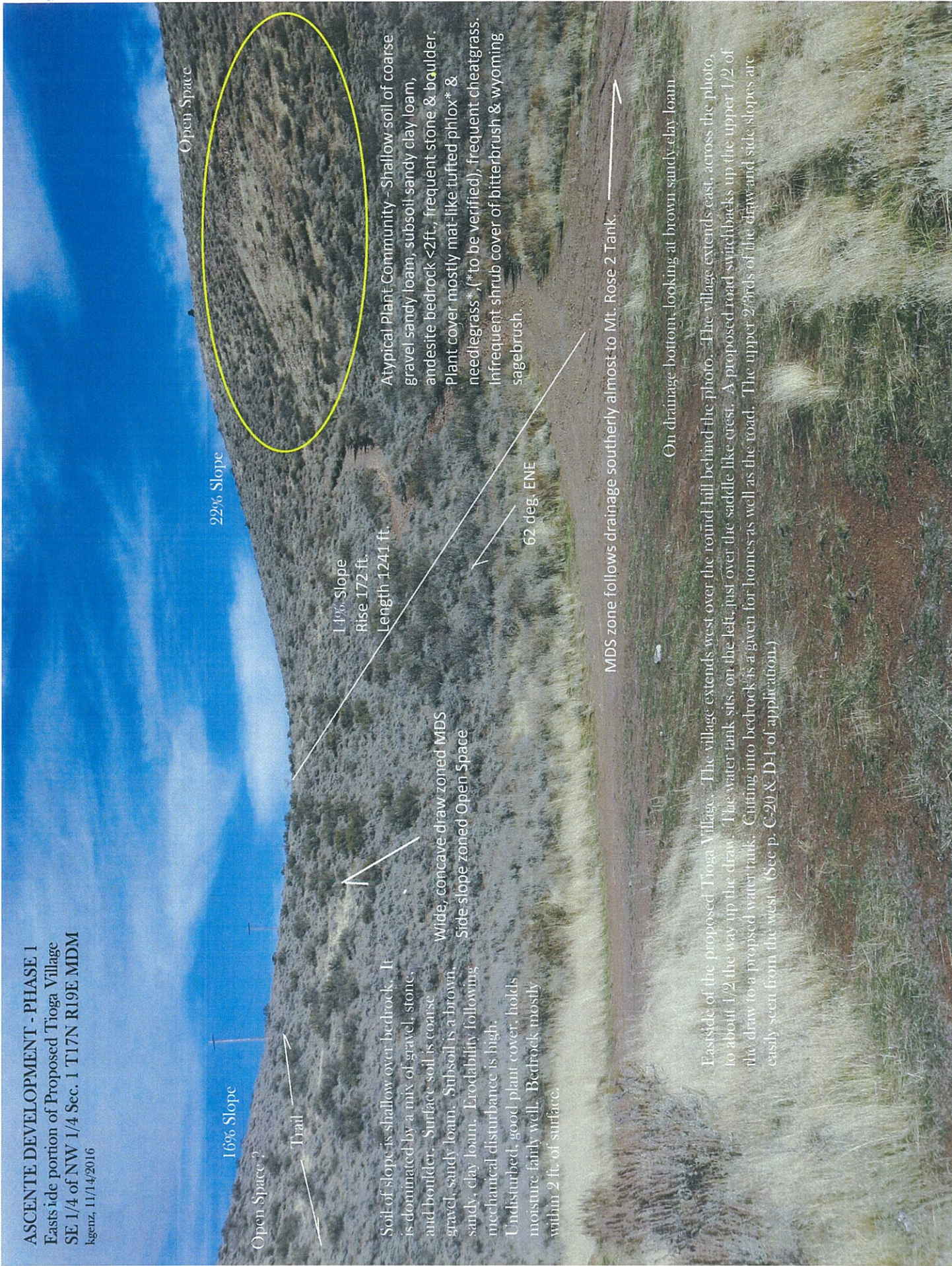
I feel Symbio should bring their lots into compliance with the Forest Area Plan, Zone Map, and Zone Code.

You may already be aware of these problems. Since the meeting was cancelled, will another one be scheduled?

Thank you,

s/Kenneth Genz

ASCENTE DEVELOPMENT - PHASE 1
 Eastside portion of Proposed Tioga Village
 SE 1/4 of NW 1/4 Sec. 1 T17N R19E MDM
 kgenz, 11/14/2016



Open Space

22% Slope

16% Slope

Open Space?

Trail

14% Slope

Rise 172 ft.

Length 1241 ft.

Wide, concave draw zoned MDS
 Side slope zoned Open Space

62 deg. ENE

MDS zone follows drainage southerly almost to Mt. Rose 2 Tank

On drainage bottom, looking at brown sandy clay loam

Atypical Plant Community - Shallow soil of coarse gravel sandy loam, subsoil sandy clay loam, andesite bedrock <2ft., frequent stone & boulder. Plant cover mostly mat-like tufted phlox* & needlegrass*, (*to be verified), frequent cheatgrass. Infrequent shrub cover of bitterbrush & wyoming sagebrush.

Eastside of the proposed Tioga Village. The village extends west over the round hill behind the photo. The village extends east, across the photo, to about 1/2 the way up the draw. The water tank sits on the left just over the saddle like crest. A proposed road switchbacks up the upper 1/2 of the draw to a proposed water tank. Cutting into bedrock is a given for homes as well as the road. The upper 2/3rds of the draw and side slopes are easily seen from the west. (See p. C-20 & D-1 of application.)

GENDARME VILLAGE SITE



From: ryan loetscher
To: Tone, Sarah; Lloyd, Trevor; Mullin, Kelly
Subject: Galena Community Action Group against Ascente
Date: Wednesday, May 10, 2017 9:48:31 AM

Hello Sarah, Trevor and Kelly. Sarah asked me to email the three of you to put on record how our group formed and how we have proceeded. So here we go.

Obviously, when the Ascente plans started circulating, people in our area were upset... because people are always upset when there is new development in a more rural area like ours where people moved to get away from the city and people, have space, have horses, get away from HOA's and regulations and so forth. For the most part these are people with pioneer spirit and old school Nevada mentality. Many of these people were living out here back when Reno itself was a small cow town and there was zero development out there. So more than upset, they felt threatened given the history of developments in that area in the past that left their wells dried up and left them feeling like they were lied to. One day I discovered a conversation about water on Nextdoor, a community driven social media. After engaging and then discussing concerns with our local TMWA representative, I realized there were many misconceptions. That's when I started reaching out. This was a big development and I wanted to honestly figure out what it meant for us here, dispel myths, and uncover real concerns.

I researched the issues that I saw people bringing up online and found answers as best I could from the city, TMWA and the school district. I scheduled a community meeting at Hunsberger and posted it online and put up signs. I had representatives from the school district and TMWA come to the meeting to speak. We had a large turnout and a lot of good questions were raised... and of course a few angry people came just to be angry. After the meeting I had several residents come to me to thank me for my work and offered to join up to help, most importantly the now true leaders of the group, Ken Allen and Todd Michevc. And thus our group was formed.

Myself and the rest of the group decided that our role as volunteer concerned citizens, and not appointed officials, was to seek out facts and answer community questions. Nothing more. So we developed the website galenacommunities.wordpress.com and created a mailer so that we could give updates, and receive feedback, questions and concerns from the community (I should note that the website is wildly out of date as we have been predominantly using it for the email list feature, but I will rectify that after the CAB). Over time we gathered many many experts in various fields and we uncovered more and more concerns. This didn't start as a "not in my backyard" or "anti-development" group, but all cards on the table, the more we discovered, the more it turned into an anti-Ascente group. As you know we feel this development is completely inappropriate and should not be approved... but that's another topic.

By the time the CAB and planning commission meetings came up, we made the decision that we would present all of the information we had gathered on the development. There is obviously an "anti-ascente" tone to it, but, in light of our decision that we are simply a volunteer group that don't any sort of authority on decisions, our plan has always been to present the unanswered issues raised by input from our community at large. That is what we plan to do tomorrow, is point out concerns that have not been addressed by the changes Ascente has made.

Thank you for taking the time to hear our concerns and I hope the process prevails.

P.S. On a personal note, I am sorry to hear that people felt threatened at the last CAB meeting and I deeply condemn and such actions by members of our community. I understand the anger and frustration. I am angry and frustrated myself. Violence is the voice of the unheard. That is why the system and the process are so vitally important and why I support it so. I hope we can all be heard in this process and make the right decisions.

**Washoe County Citizens Advisory Board
November 10, 2016
Public Testimony by Chuck Price**

**Chuck Price
5595 Goldenrod Drive
Reno, NV 89511
775-815-1245
Cprice1003@gmail.com**

For the record, Chuck Price, 5595 Goldenrod Drive, Reno.

I have been a resident of the Callahan community for the past 22 years. Every other day, I hike up the hills where Ascente wants to build 632 homes. That's more than 150 days per year that I hike enjoying the open country that our community treasures. I'm not alone, there are many people who enjoy the beauty of this open area.

But, I'm not here to talk about that today; I'm here to talk about the severe impact that the Ascente project will have on the Washoe County School District, particularly Hunsberger Elementary School, Pine Middle School and Galena High School.

My three children attended each of these schools and received an excellent education. I was very active as the PTA chairperson at Hunsberger, as an active parent booster at Pine and a booster leader at Galena. I had the privilege to work with the principals and teachers at each of these schools. I admire their passion for excellence.

My fear is that the outstanding education that my children received will not be possible for today's students due to overcrowding with a project the size of Ascente.

The School District has made clear that the schools already are "overcrowded and have critical repair needs NOW; ...growth will only make the problem worse."

Ascente is not in a vacuum, there will be large impacts on our schools. The School District has forecasted the impact of the 632 Ascente units on Hunsberger, Pine and Galena. In the interest of time, I'll focus on Hunsberger. Hunsberger is currently over the 750 student capacity with 771 students last year. It is already overcrowded and The Ascente impact will be 94 new elementary school students. The Ascente project will push Hunsberger over the multi-track threshold.

The School Districts, independent consultants and the community have explored many options for relieving overcrowding. From their analysis, it's clear that Washoe County needs additional funds to build new schools for the current system, let alone the incredible growth by the Ascente copious housing proposal. The passage of WC-1 earlier this week will start to alieve the overcrowding in the School District, but these funds will not address the additional impact of the Ascente massive development.

Hunsberger may be forced to go on multi-track / Year Round calendarplus our Middle Schools and High Schools will be headed for double sessions in the near future if Ascente is approved.

The Ascente development will severely impact the students attending Hunsberger. The deterioration of their education will follow them as they attend Pine and Galena, which will also experience increased overcrowding as a result of Ascente.

Poorly educated youth will eventually struggle as they join our work force; this failure will be a deterrent to current and potential businesses which will have a negative effect on home values.

I urge our Community Advisory Board to recommend the denial of Ascente project. It is not right for our children and not right for our community.

Thank you.

From: Amanda Safford
To: Mullin, Kelly; Tone, Sarah
Subject: Public Comment on Proposed Ascente Development
Date: Thursday, May 11, 2017 9:30:42 PM

Hello Kelly and Sarah,

Due to the number of concerned residents at the CAB meeting this evening, I was unable to get into the room and was unable to share my concerns.

Can you please make sure that my comments are included and considered? They are below.

Thank you very much for your time.

Kind regards,
Amanda Safford

This board is tasked with the incredible responsibility of determining which developments are in the long term best interests of Washoe County and its residents. This development does not meet that standard. It has been designed in a very short sighted manor, focused solely on short range benefits for the developers, while destroying the unique character of the adjacent neighborhoods - forever.

In direct conflict with the Forest Area Plan, this development is not designed to integrate with and enhance the character of the community. In fact, it is designed to take advantage of as many resources as possible without contributing anything to the infrastructure, community or schools in the area. This is particularly evident in the proposal to use existing, 70's era county roads for all construction traffic and resident access. I do not believe that there is another development of this size in the area that solely utilizes small, existing neighborhood roads – and it is simply not appropriate for a housing development of this large size and scale.

Under this proposal, Fawn Lane, Tannerwood, Cherrywood, Goldenrod and Shawna Lanes will be inundated with all construction traffic and future traffic to the proposed houses – forever. Right now, these roads have substantial use every day by people in our neighborhood – walking, running, biking, and riding horses. And our kids – riding their bikes, walking to friends' houses and waiting for school buses in the morning, often in the dark. This shared use of our roads is a key element of the character of our neighborhood.

These roads were not designed to carry the proposed type or magnitude of traffic – they are narrow and there are no sidewalks or even shoulders. For a significant part of this winter, and many other winters in this area, all of these roads were one lane due to snow and were treacherous for all drivers and especially school buses. Yet this development will place hundreds more cars on these roads daily. The minimal traffic calming measures proposed for by the developers are inadequate to address the increases in traffic.

The increased traffic, noise and dust, will affect our ability to go for walks and let our kids ride their bikes on the streets safely. I have already experienced two close calls with my kids nearly getting hit by trucks from firms

employed by the developers, speeding on Cherrywood Drive. I can't imagine how dangerous it would be with a constant stream of construction vehicles, then hundreds of new residents. How can this be development possibly be considered as something that will enhance or contribute to the character of the community?

The developer is proposing to build a road to Mt. Rose Hwy connecting at Thomas Creek in Phase 2 of the development. I would suggest that the developer should be required to either build a road to Mt. Rose Hwy prior to starting Phase 1, or switch the order of the Phases and start with Phase 2 first. A direct road to Mt. Rose Hwy would alleviate a great deal of the traffic on our small neighborhood roads, and is appropriate for a housing development of this large size.

Overall, this proposal seems designed to ensure that the developer contributes as little as possible to the infrastructure of the area, regardless of the impacts on the community. Please -- consider the detrimental effects of this development on the character of this special area, and the safety of the kids in our neighborhood.

From: K taylor
To: Lloyd, Trevor; Mullin, Kelly
Subject: Ascente traffic study
Date: Thursday, November 10, 2016 11:49:41 AM
Attachments: Comments on Ascente Traffic Impact study of Sept 12.docx

Dear Mr. Lloyd,

I have reviewed the traffic study submitted with the Ascente application. My concerns are listed below and in the attached document.

Sincerely,

Ken Taylor

The anticipated five fold increase in traffic on Fawn Lane will preclude use by pedestrians. This will prevent people from leaving their homes unless they are driving because Fawn Lane has a small irregular shoulder bounded by drainage ditches. Approval of the plan should be contingent on construction of a pedestrian path along Fawn Lane prior to starting construction of the project.

The road plan includes a gate to prevent traffic from using Brushwood Way between the new and existing neighborhoods. This means that to drive between houses that are 300 feet apart will require driving 3 miles, including travel on the five lane Mount Rose highway. This unnecessary segregates neighborhoods and adversely influences the natural flow of traffic. The gate across Brushwood Way should be prohibited.

Fawn Lane has the same design as Tannerwood Drive and Goldenrod Drives, which are designated by the county as "local" streets. Fawn Lane is designated as a "collector", the same as Callahan Road, but it does not have pedestrian paths like Callahan Road. Fawn Lane should be upgraded to be consistent with "collector" design standards.

The application leaves open the possibility that traffic from phase 2 will use the same access points as phase 1. Approval of the plan should be contingent on a requirement that development of phase 2 can only proceed if Phase 2 has direct access to the Mt Rose highway.

The traffic impacts on Fawn Lane will likely be 1.5 times greater than stated in the traffic impact study. The number of houses accessed via Fawn Lane will increase by a factor of 5. The traffic study calculates the traffic on Fawn Lane will increase by a factor of 3.3. There is no explanation of how a ~5 times increases in houses will only increase traffic by ~3 times. Details of these calculations are in the attachment.

Comments on Ascente Traffic Impact study of Sept 12, 2016

The anticipated five fold increase in traffic on Fawn Lane will preclude use by pedestrians. This will prevent people from leaving their homes unless they are driving because Fawn Lane has a small irregular shoulder bounded by drainage ditches. Approval of the plan should be contingent on construction of a pedestrian path along Fawn Lane prior to starting construction of the project.

The road plan includes a gate to prevent traffic from using Brushwood Way between the new and existing neighborhoods. This means that to drive between houses that are 200 feet apart will require driving 3 miles, including travel on the five lane Mount Rose highway. This unnecessary segregates the neighborhoods and adversely influences the natural flow of traffic. The gate across Brushwood Way should be prohibited.

Fawn Lane has the same design as Tannerwood Drive and Goldenrod Drives, which are designated by the county as "local" streets. Fawn Lane is designated as a "collector", the same as Callahan Road, but it does not have pedestrian paths like Callahan Road. Fawn Lane should be upgraded to be consistent with "collector" design standards.

The application leaves open the possibility that traffic from phase 2 will use the same access points as phase 1. Approval of the plan should be contingent on a requirement that development of phase 2 can only proceed if Phase 2 has direct access to the Mt Rose highway.

The traffic impacts on Fawn Lane will likely be 1.5 times greater than stated in the traffic impact study. The number of houses accessed via Fawn Lane will increase by a factor of 5. The traffic study calculates the traffic on Fawn Lane will increase by a factor of 3.3. There is no explanation of how a ~5 times increases in houses will only increase traffic by ~3 times. Details of these calculations are below.

Number of houses currently using Fawn Lane: 50
Determined by counting mail boxes.

Number of new houses that will use Fawn Lane after project completion: 198
North Village: 70 (See page J-15)
Upper Village: 85 (See page J-15)
South Village: 37 (See page J-16)
View lots: 6 (See page J-15)
Total new homes using Fawn Lane: 198

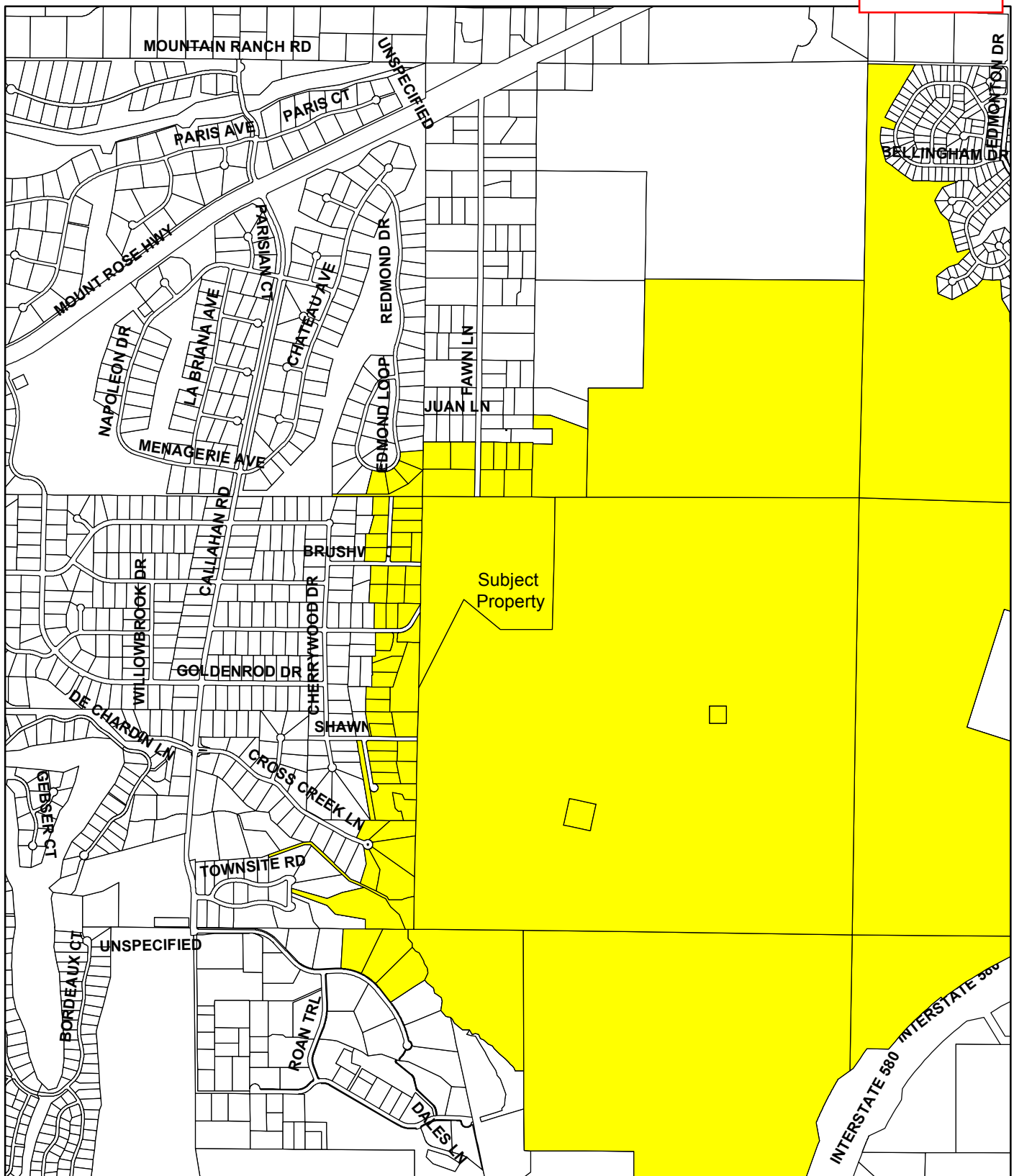
Number of homes that will use Fawn Lane after completion: 248
50 existing homes +198 new homes= 248 homes

Percent increase in traffic on Fawn Lane: 496%
 $248 \text{ homes} / 50 \text{ homes} = 4.96$

The traffic impact study says the traffic will increase by 336%.
On page J-2 the table for Fawn Lane shows existing daily volume of 788 and a post project volume of 2,646.

Thus, the traffic study says the traffic on Fawn Lane will increase by 336% even though the number of houses will increase by 496%. The traffic study does not explain this discrepancy. It is likely there will be 1.5 times more traffic on Fawn Lane than projected by the study.

This document was been submitted by:
Ken Taylor, 15435 Fawn Lane, Reno, NV.
Email: Kendrickctaylor@gmail.com
Phone: 775 219 7493



VICINITY MAP

TM16-009
Ascente



Department of
Community
Services
**WASHOE COUNTY
NEVADA**

Source: Current Planning Program

Date: April 2017

Post Office Box 11130
Reno, Nevada 89520
(775) 328-3600



**ENGINEERS ■ LAND SURVEYORS
PLANNERS ■ LANDSCAPE ARCHITECTS**

EXHIBIT J

May 15, 2017

Trevor Lloyd, Senior Planner
Washoe County Community Development
1001 E. 9th Street
Reno, NV 89512

RE: ASCENTÉ – HILLSIDE DEVELOPMENT AND DETERMINATION OF DEVELOPABLE AREA RESPONSE

Dear Trevor,

This letter has been prepared to provide Washoe County Planning staff with a compiled analysis in accordance with Washoe County Development Code Sections 110.424.15 – Application requirements and Procedures and 110.424.20 - Determination of Developable Area.

Section 110.424.15 Application Requirements and Procedures. Supplemental to all other application requirements found in the Washoe County Development Code, the following submittals shall be required for all hillside development:

- a) Site Analysis. A site analysis, prepared by a qualified engineer, planner, landscape architect or architect shall be submitted. This analysis shall provide the basis for assessing the opportunities and constraints of the site for development and shall be in the form of a design standards handbook incorporating both textual and graphical representations of the requested action.

A compilation of maps is provided to illustrate the site analysis in a graphic format. The attached information has been prepared as a supplement to the Ascenté tentative map application package.

At a minimum, a site analysis shall indicate:

- 1) Major topographic conditions including ridgelines, ravines, canyons and knolls;
The project area has topographic features, but none that are consistent within the tentative map area with the description of a ridgeline, ravine, canyon or knoll. A ridgeline exists outside of the Ascenté project boundaries.
- 2) Preliminary geological conditions including major rock outcroppings, slide areas and areas underlain with faults that have been active during the Holocene epoch of geological time;
A map has been prepared that shows the site's major rock outcroppings and Holocene fault lines. No Holocene fault lines have been identified within the Ascenté project boundary.
- 3) Preliminary soil conditions including soil type, expansiveness, slumping, erodibility and permeability;

**TM16-009 & SW16-003
EXHIBIT J**

- A preliminary soil conditions map has been prepared that identifies the project areas soil types. Generally, the soil conditions over a majority of the site consist of clayey sands and gravels with a shallow depth to bedrock (sometimes 18 inches or less). The shallow depth to bedrock can mean that conventional heavy equipment will be needed to grade the site. Based on the preliminary geotechnical report, some of the site soils are potentially expansive and are potentially susceptible to frost heave and/or shrinkage and swell. These conditions are not uncommon in northwestern Nevada and are mitigated using conventional earthmoving equipment.**
- 4) Significant surface hydrological conditions including natural drainage courses, perennial streams, floodplains, wetlands and ponding areas;
A significant hydrological conditions map has been prepared and shows the major drainageways, defined as areas draining more than 100 acres, and flood zones. There are two identified major drainageways that cross the site. The flood zones are located outside of the project boundaries.
 - 5) The location and types of significant vegetation including known rare and endangered plant species and general plant communities;
A map detailing the different vegetation types has been prepared. The data came from the Nevada Department of Conservation and Natural Resources, Nevada Natural Heritage Program, A Synthesis of Vegetation Maps for Nevada. There are no known endangered plant species identified on the site.
 - 6) Habitat areas for rare or endangered animal species;
No rare or endangered animal species have been identified on the site.
 - 7) Preliminary view shed analysis including cross sections of views to and from the development site from all major roadways within one (1) mile of the project site, and from major focal points on the project site;
The view shed analysis was provided in appendix D of the tentative map submittal package. The same information is attached with this packet.
 - 8) How the development responds to the unique conditions of the hillside;
A slope map overlaid with the proposed lot lines and site grading has been provided. The site plan was designed to incorporate slopes greater than 30 percent within some of the lot lines, but no grading is permitted within those areas. This allows for larger lot sizes and also protects the hillsides. The majority of the slopes identified as 30 percent or greater are retained as open space.

9) A slope analysis, submitted on a topographic map with contour intervals of at least five (5) feet for planning purposes. This analysis shall indicate the location and amount of land included within the following slope categories, tabulated in acres:

- i. 0 - 15 percent;
- ii. 15 - 20 percent;
- iii. 20 - 25 percent;
- iv. 25 - 30 percent; and
- v. Greater than 30 percent.

The slope categories are broken down into the following acreages:

0 - 15 percent – 92.56 acres

15 - 20 percent – 38.21 acres

20 - 25 percent – 35.88 acres

25 - 30 percent – 32.6 acres

Greater than 30 percent – 25.75 acres

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

A series of maps is attached that details the developable area as defined in Section 110.424.20(b), as slopes greater than 30 percent, areas with landslides (none exist), Holocene faults (none exist), habitat areas of known rare or endangered plant or animal species (none exist) and significant streams, ravines and drainageways.

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

Two existing drainageways traverse the site. The project drainage is described in the conceptual drainage report of the tentative map application submittal. Drainage improvements to the site shall convey anticipated flows throughout the community via a network of drainage swales, drop structures, culverts and detention basins. The plan will provide drainage and storage system for the 5-year and 100-year storm events exceeding the minimum required by County Code to ensure the safety and well-being of current and future surrounding residents. Adverse effects to the drainage system due to increased storm runoff with the construction of this proposed development have been addressed with the implementation of over-sized detention basins. The design significantly reduces peak flows entering the adjacent community and ultimately reduces the peak flow entering Galena Creek. Groundwater recharge areas will be incorporated into the site planning and enhanced, whenever possible. Low Impact Development (LID) standards are also incorporated to enhance groundwater recharge and manage stormwater runoff, whose improvements will only further increase the detention basin storage.

d) Detailed Contour Analysis. As determined through a pre-application meeting between the applicant and the Department of Community Development, a topographic map with more or less detailed contour intervals may be required by the Director of Community Development for design purposes.

Prior to submittal of the Ascenté tentative map application, a pre-application meeting was held with County staff and the applicant.

Section 110.424.20 Determination of Developable Area. To determine the location and amount of land suitable to support development, a developable area analysis is required on a hillside property.

- a) Purpose. The purpose of identifying the developable area of a hillside is to designate those areas suited for development and construction as evidenced by soils, geotechnical, biological and hydrological investigations and studies. A developable area analysis is required to ensure that the proposed project complies with the intent, standards and requirements of this article.
Attached are the developable area maps that detail the location or lack of, the soil types, geotechnical elements, biological and hydrological areas of interest.
- b) Developable Area Map. The developable area analysis shall be in the form of a developable area map; shall be drawn at a scale appropriate to the project; shall identify the location and amount of total land area suitable for development pursuant to Section 110.424.20(c); and shall be prepared by a qualified engineer, planner, landscape architect or architect.
The required information is attached.
- c) Determination of Developable Area. Areas considered less suitable for development include:
 - 1) Slopes greater than thirty (30) percent, based on a slope analysis pursuant to Section 110.424.15(a);
A slope map has been prepared and shows areas with slopes greater than 30 percent.
 - 2) Areas of landslides or landslide potential;
No landslides or potential landslide areas have been identified within the project boundary.
 - 3) Areas underlain with faults that have been active during the Holocene epoch of geological time;
A map has been prepared that shows the site's major rock outcroppings and Holocene fault lines. No Holocene fault lines have been identified with the Ascenté project boundary.
 - 4) Habitat areas of known rare or endangered plant or animal species; and
No rare or endangered animal species have been identified on the site.
 - 5) Significant streams, ravines and drainageways.
A significant hydrological conditions map has been prepared and shows the major drainageways, defined as areas draining more than 100 acres, and flood zones. There are two identified major drainageways that cross the site. The site has no identified streams or ravines located within the project boundary.

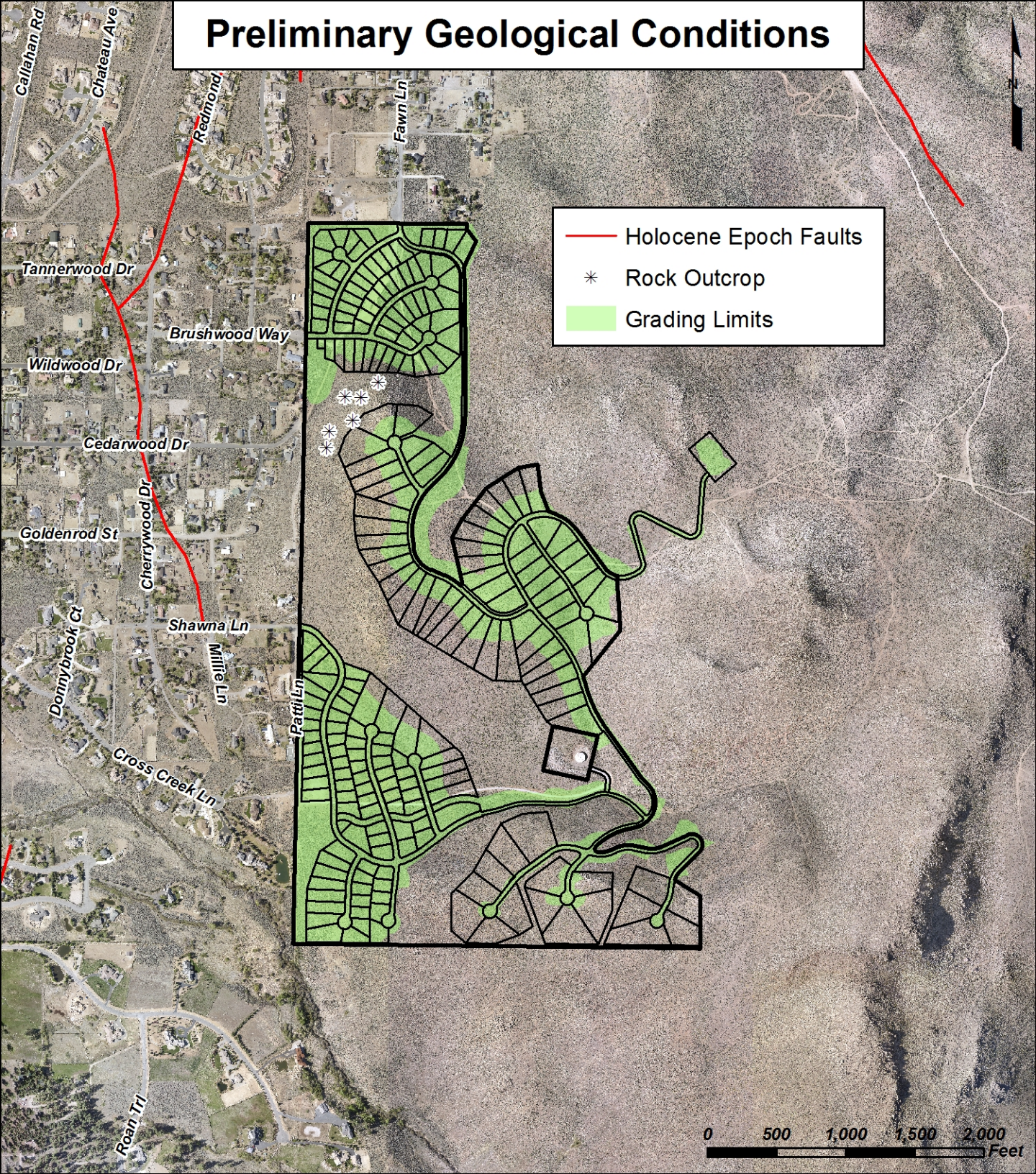
- d) Exceptions. Development shall be permitted within areas of a hillside property considered less suitable for development by the Director of Community Development due to extenuating circumstances, provided the applicant can demonstrate that:
- 1) The purposes of this article will not be compromised;
The site plan has been designed with strict adherence to the hillside development code. This includes keeping steep slopes within open space areas and within undeveloped portions of lots.
 - 2) Unstable slopes proposed for development will be sufficiently stabilized;
No unstable slopes have been identified by the preliminary geotechnical report. If, during the geotechnical field investigation performed before the final map, a slope is determined to be unstable, then a licensed geotechnical engineer will provide the mitigation plan to stabilize the slope.
 - 3) Areas of landslide or landslide potential proposed for development will be stabilized;
No landslide or potential landslide areas have been identified within the project boundaries.
 - 4) Earthquake resistant structures will be constructed on development sites proposed on potential earthquake areas;
A map has been prepared that shows the site's major rock outcroppings and Holocene fault lines. No Holocene fault lines have been identified within the Ascenté project boundary.
 - 5) Areas of rare and endangered animal or plant habitat proposed for development will be relocated and mitigation measures adhered to; and
No rare or endangered animal species have been identified on the site.
 - 6) Significant ridgelines, rock outcroppings, canyons and landforms will be protected to the greatest extent possible.
The significant rock outcroppings have been identified and kept in the common open space.

Sincerely,



Angela Fuss, AICP
Director of Planning

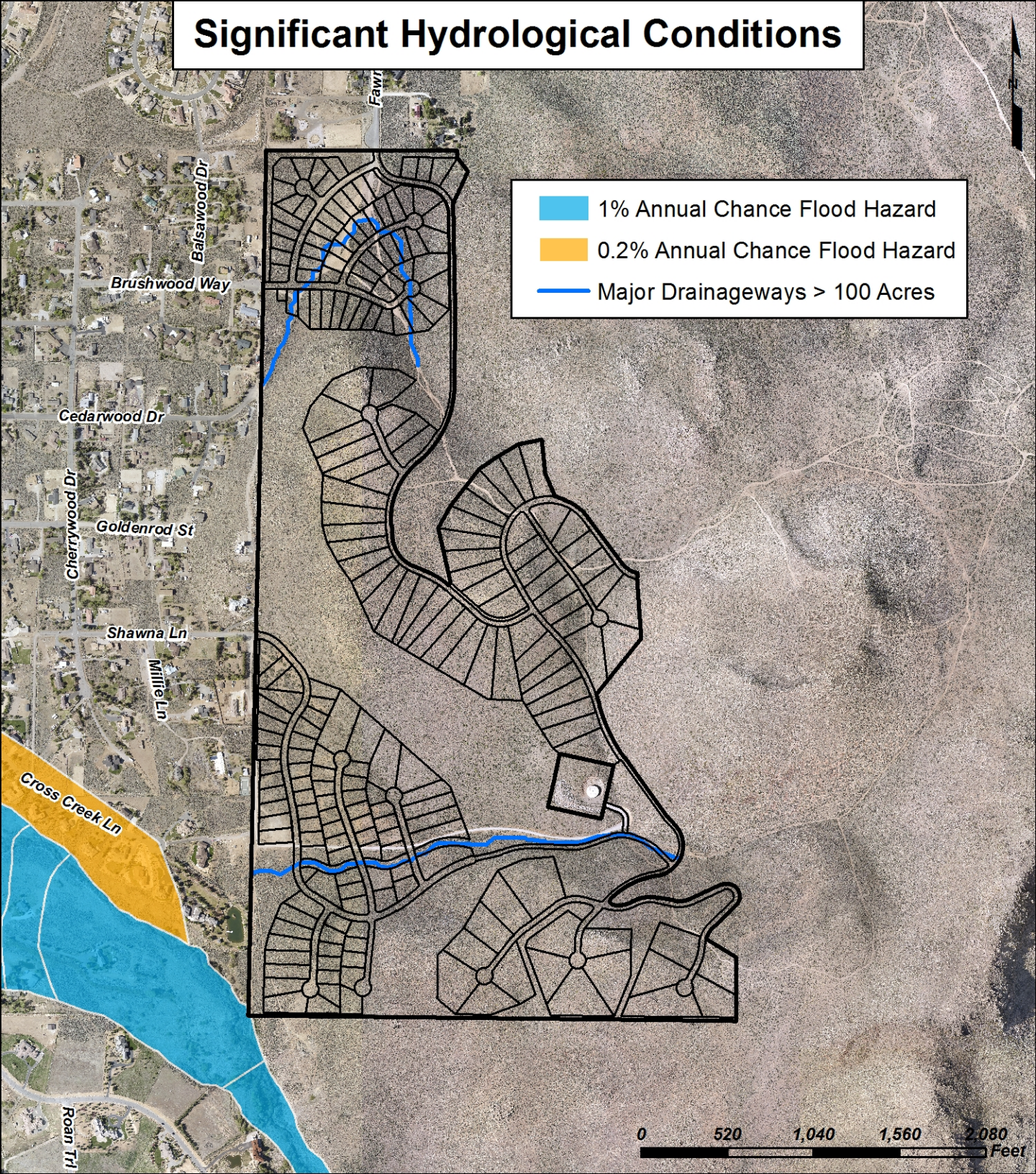
Preliminary Geological Conditions



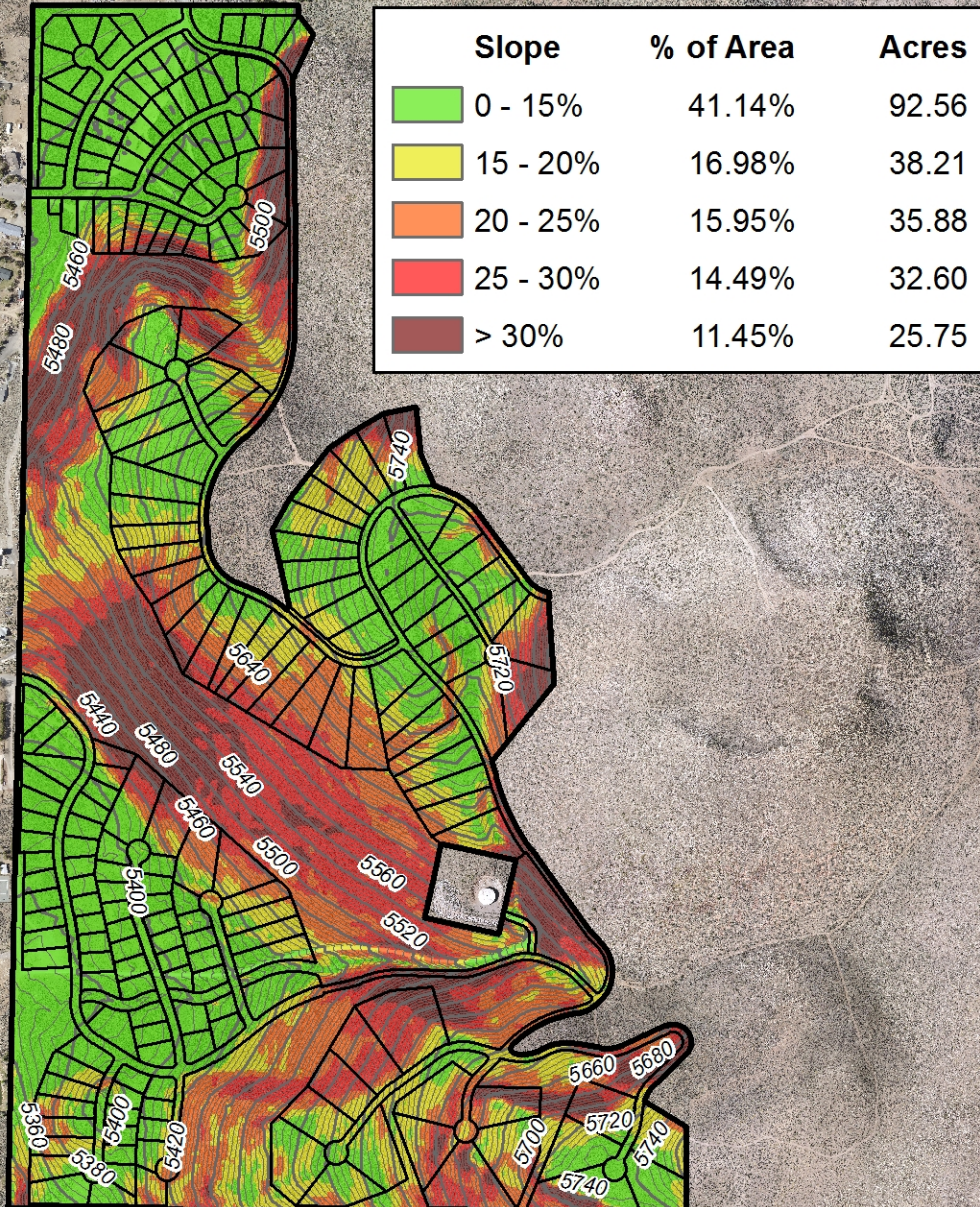
- Holocene Epoch Faults
- * Rock Outcrop
- Grading Limits

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

Significant Hydrological Conditions

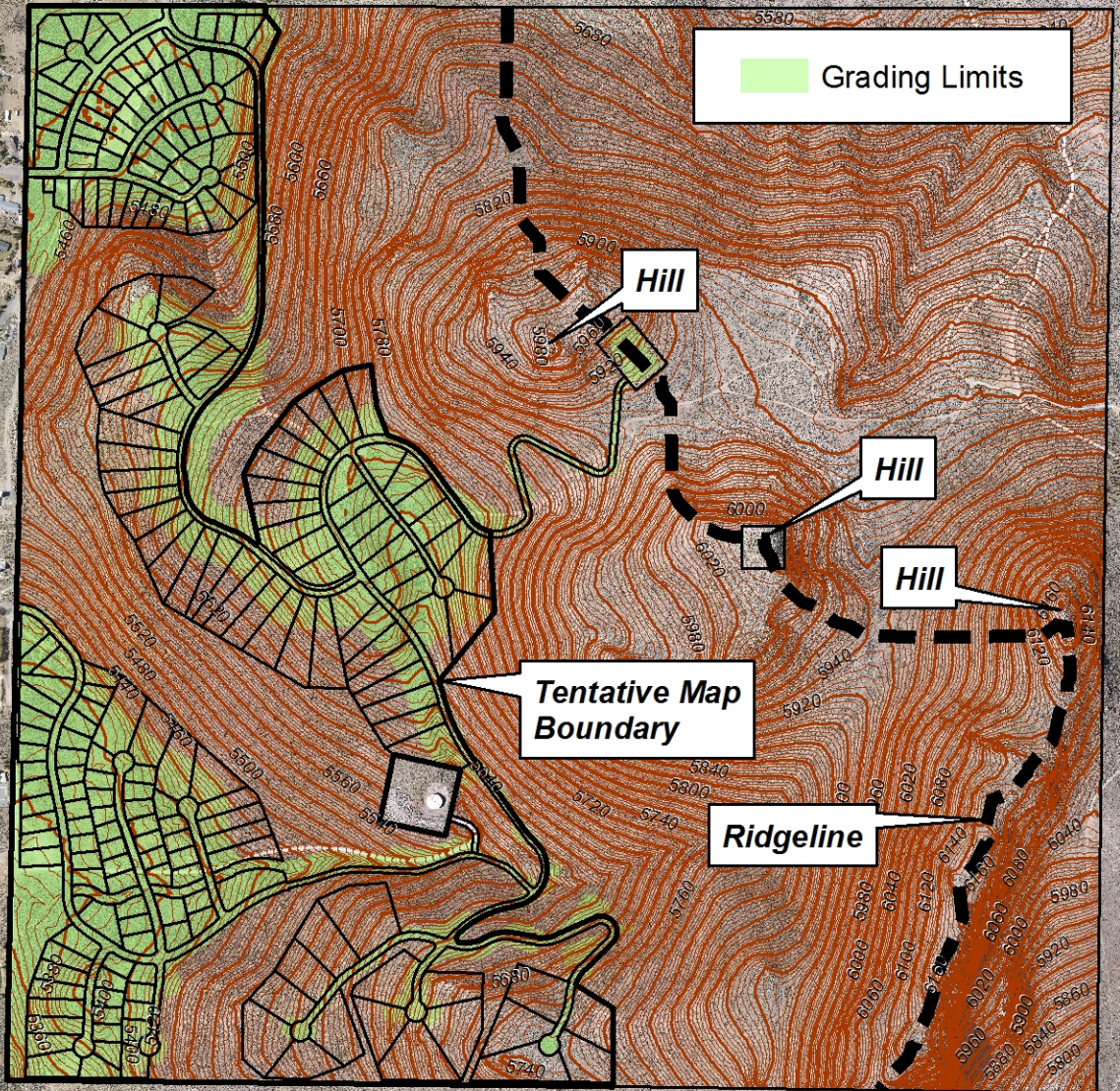


Slope Analysis



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

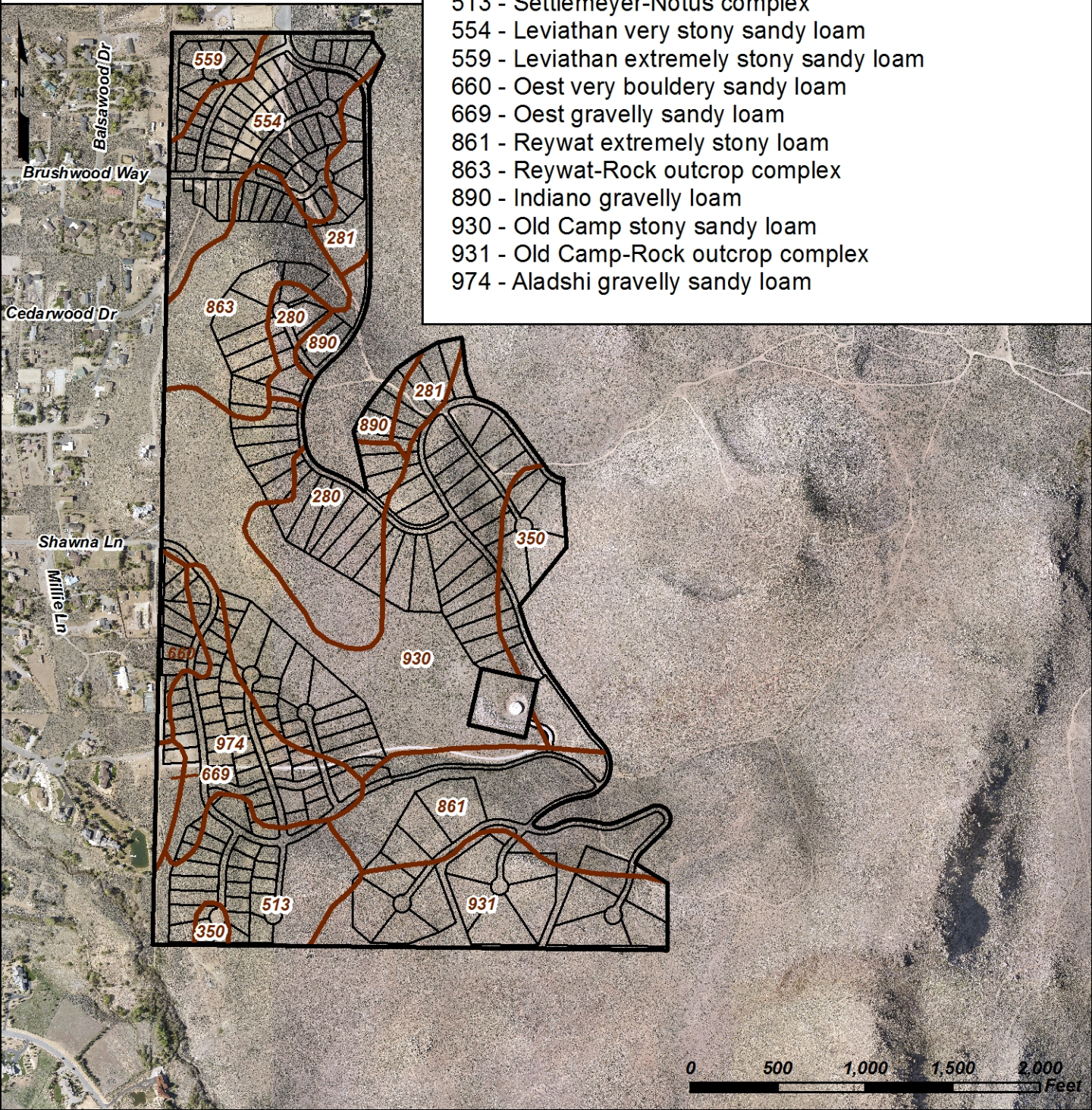
Major Topographic Conditions



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

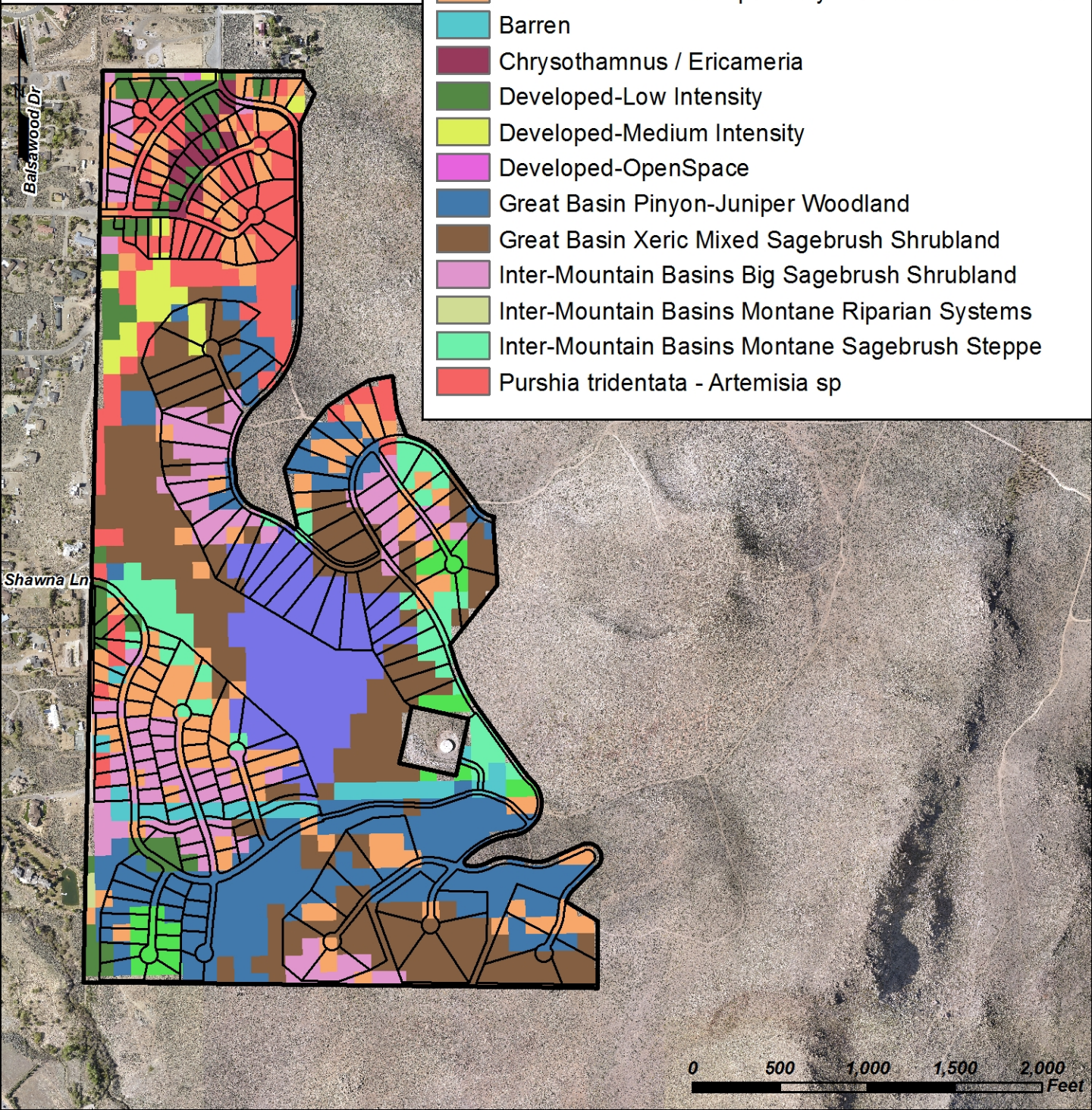
Preliminary Soil Conditions

- 280 - Wedekind gravelly loam (8-15% slope)
- 281 - Wedekind gravelly loam (15-30% slope)
- 350 - Mizel very gravelly coarse sandy loam
- 513 - Settlemyer-Notus complex
- 554 - Leviathan very stony sandy loam
- 559 - Leviathan extremely stony sandy loam
- 660 - Oest very bouldery sandy loam
- 669 - Oest gravelly sandy loam
- 861 - Reywat extremely stony loam
- 863 - Reywat-Rock outcrop complex
- 890 - Indiano gravelly loam
- 930 - Old Camp stony sandy loam
- 931 - Old Camp-Rock outcrop complex
- 974 - Aladshi gravelly sandy loam

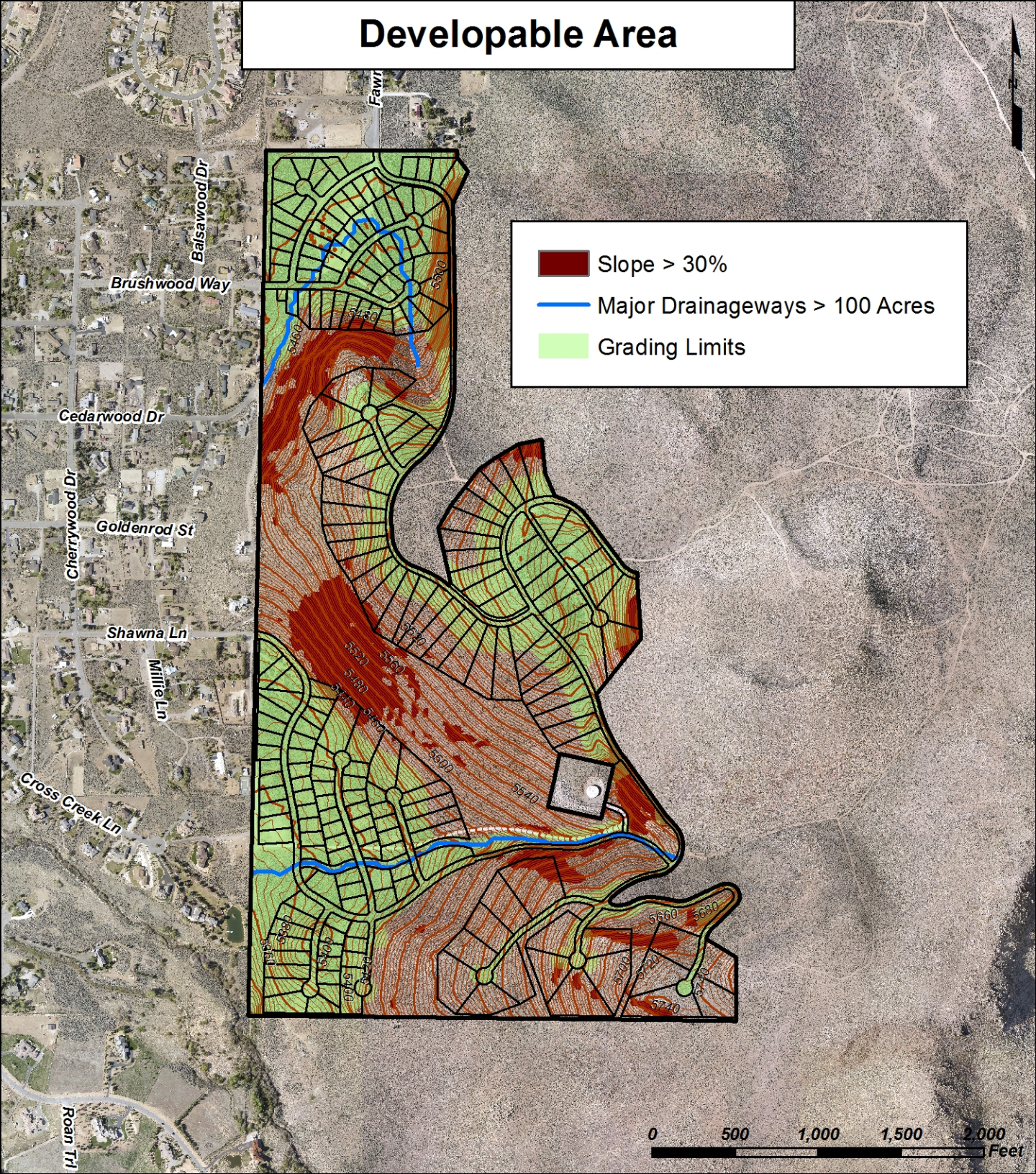


Significant Vegetation

- Annual Grass / Forbs
- Artemisia tridentata ssp. (tridentata, wyomingensis)
- Artemisia tridentata ssp. vaseyana Shrubland Alliance
- Barren
- Chrysothamnus / Ericameria
- Developed-Low Intensity
- Developed-Medium Intensity
- Developed-OpenSpace
- Great Basin Pinyon-Juniper Woodland
- Great Basin Xeric Mixed Sagebrush Shrubland
- Inter-Mountain Basins Big Sagebrush Shrubland
- Inter-Mountain Basins Montane Riparian Systems
- Inter-Mountain Basins Montane Sagebrush Steppe
- Purshia tridentata - Artemisia sp

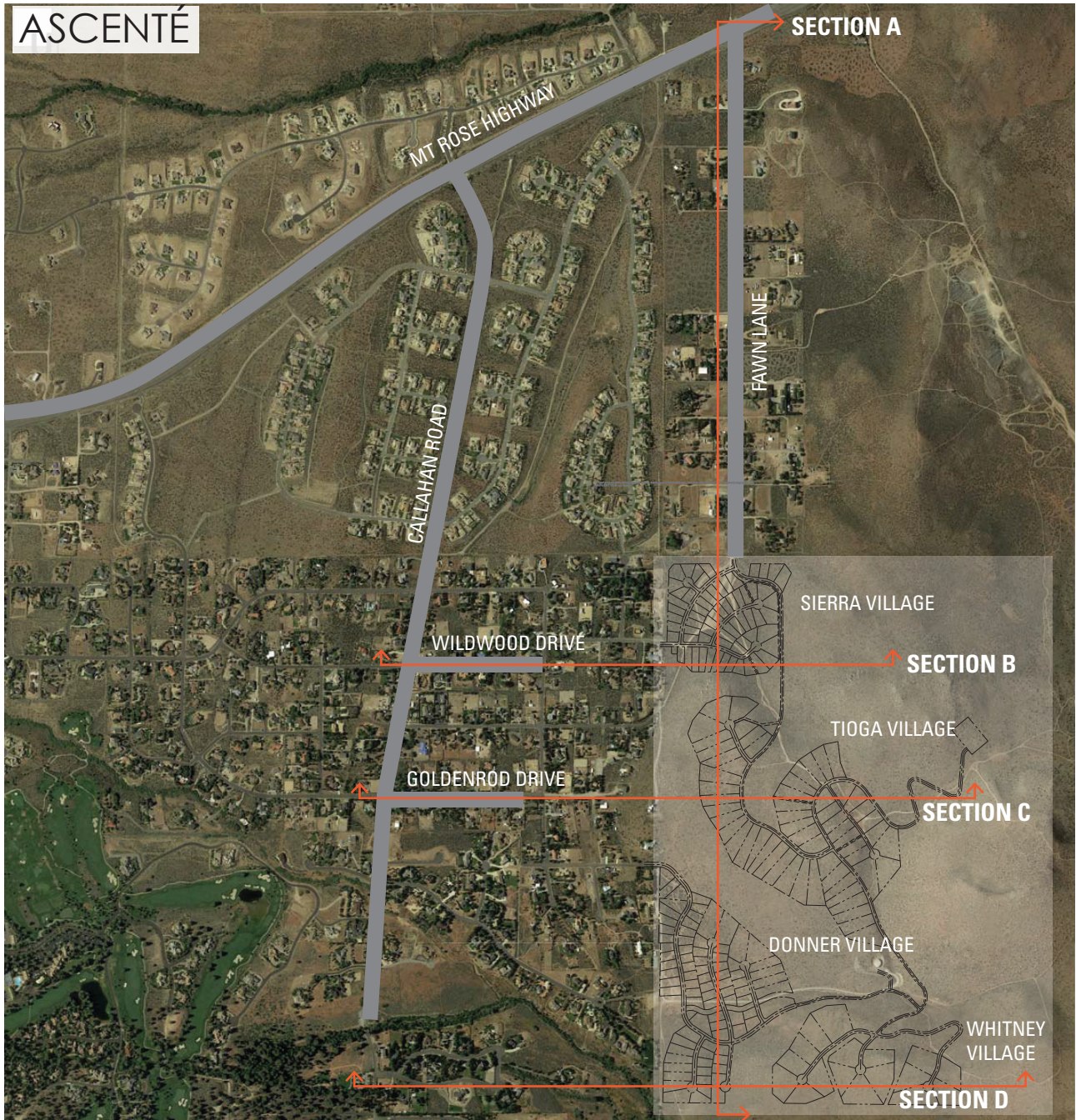


Developable Area



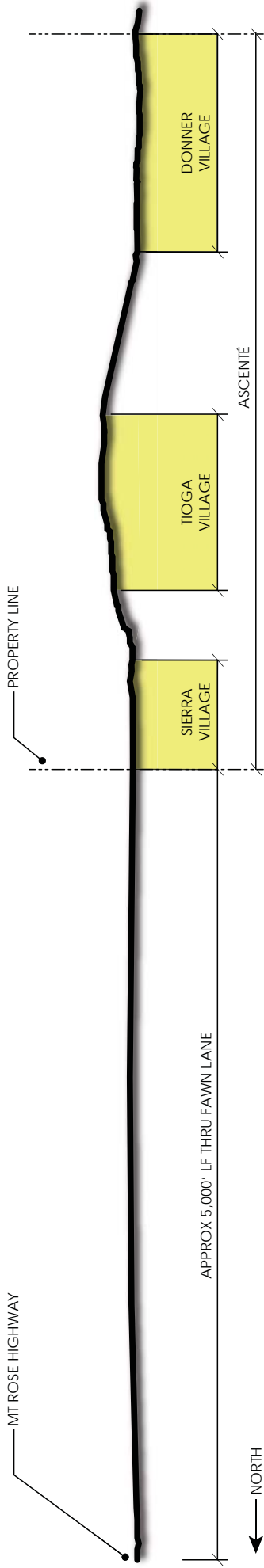
ASCENTÉ REFERENCE MAP

This map provides reference to the locations of the section lines through the proposed villages, along with lot lines, street names and surrounding areas.



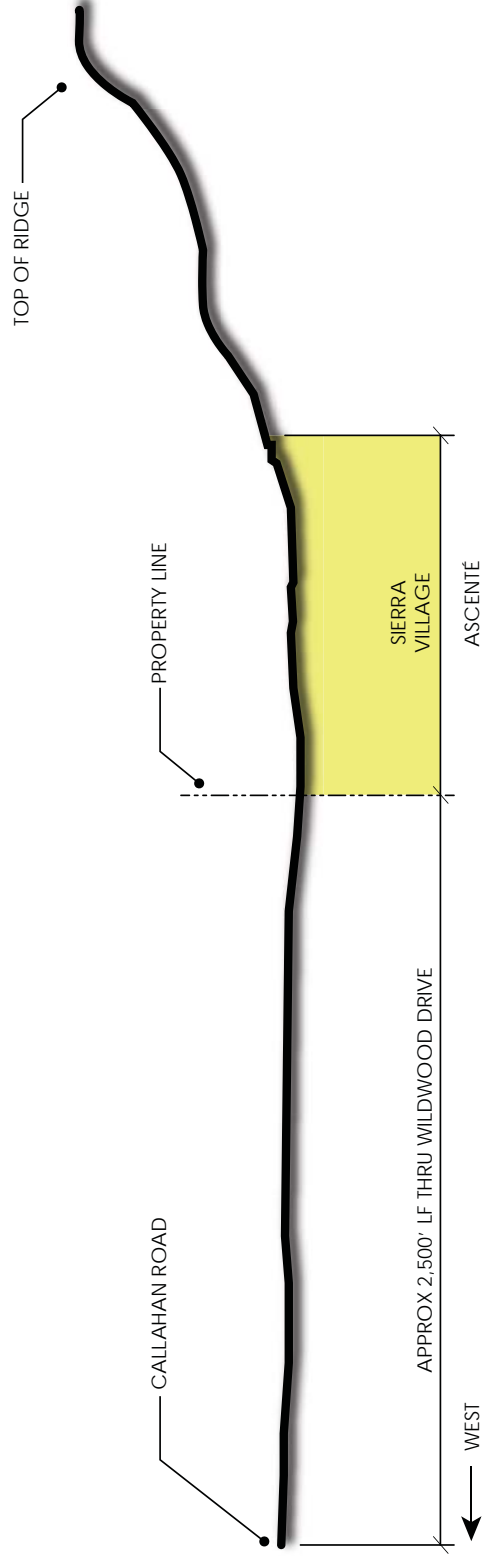
SECTION A - MT ROSE

Section from Mt Rose Highway through Fawn Lane, continuing through the proposed villages on site.



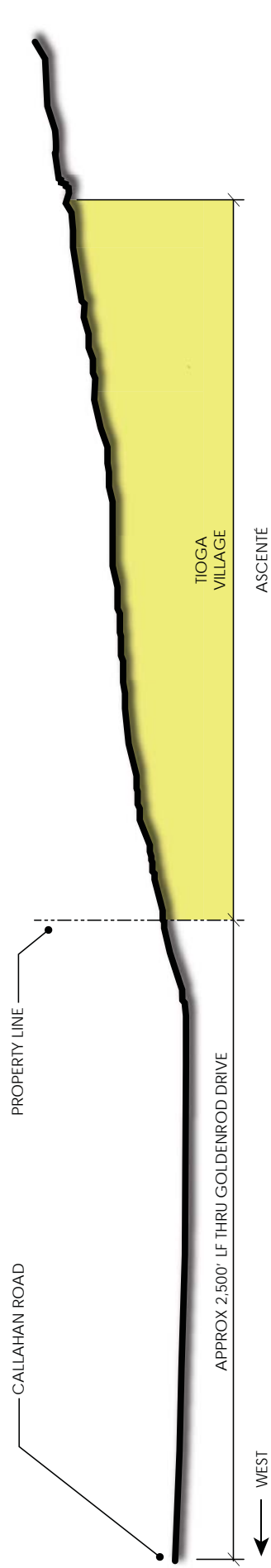
SECTION B - SIERRA VILLAGE

Section from Callahan Drive through Wildwood Drive, continuing through Sierra Village and to the top of ridge.



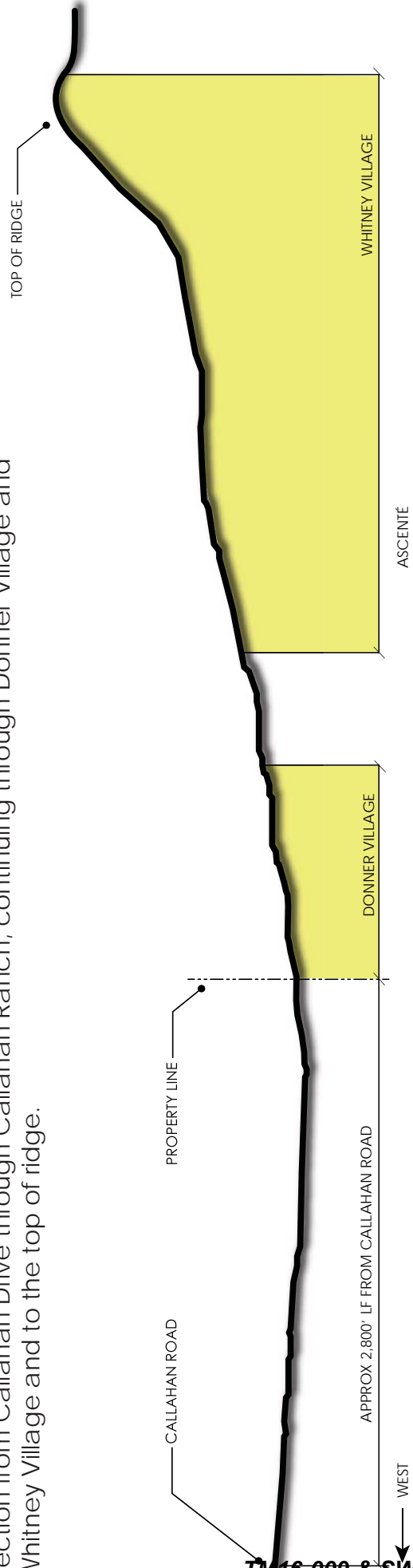
SECTION C - TIOGA VILLAGE

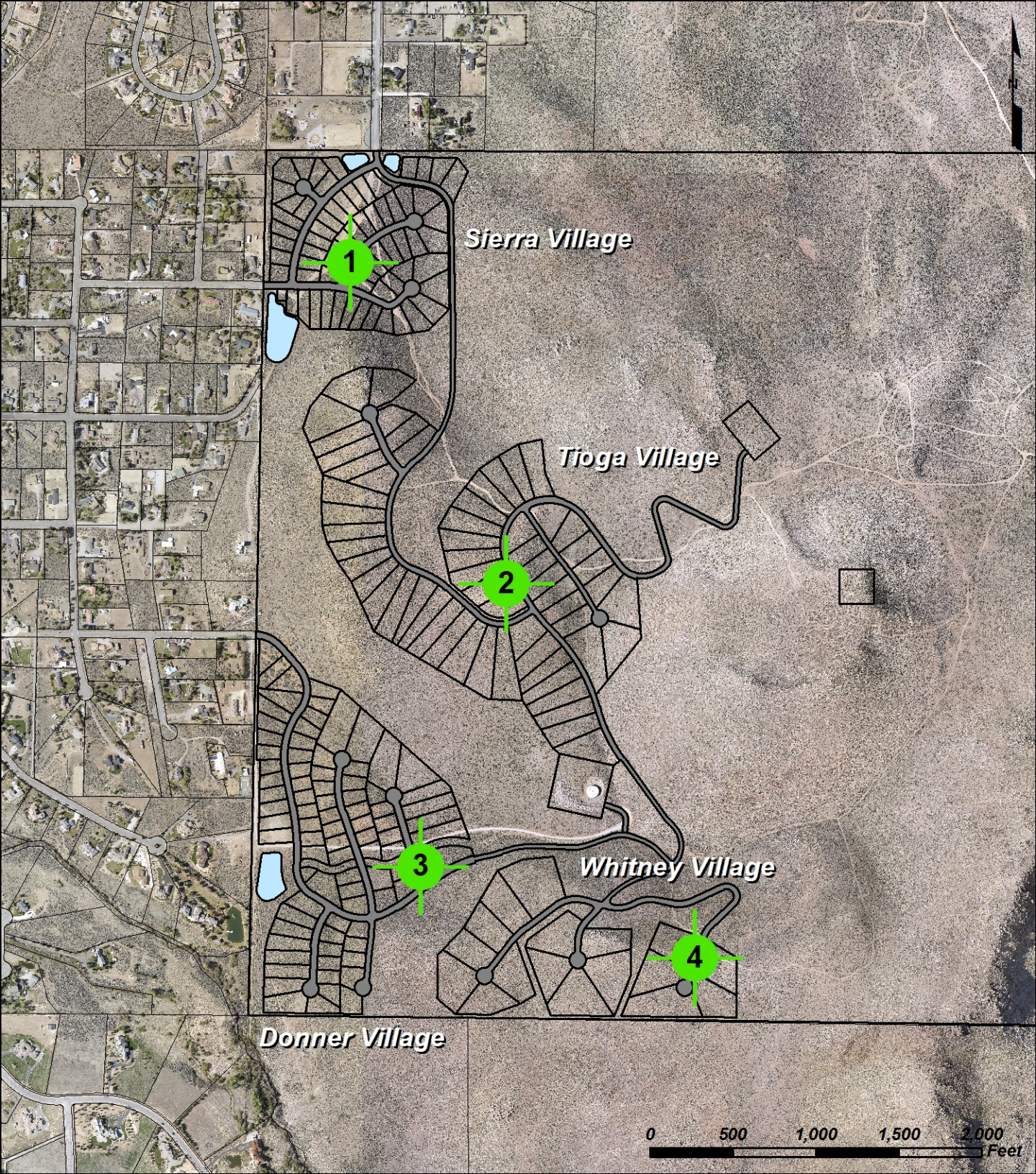
Section from Callahan Drive through Goldenrod Drive, continuing through Tioga Village.



SECTION D - DONNER VILLAGE AND WHITNEY VILLAGE

Section from Callahan Drive through Callahan Ranch, continuing through Donner Village and Whitney Village and to the top of ridge.





Sierra Village

Tioga Village

Whitney Village

Donner Village

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

1 REFERENCE IMAGES FROM SIERRA VILLAGE

NORTH VIEW



SOUTH VIEW



EAST VIEW



WEST VIEW



2 REFERENCE IMAGES FROM TIOGA VILLAGE

NORTH VIEW



SOUTH VIEW



EAST VIEW



WEST VIEW



3 REFERENCE IMAGES FROM DONNER VILLAGE

NORTH VIEW



SOUTH VIEW



EAST VIEW



WEST VIEW



4 REFERENCE IMAGES FROM WHITNEY VILLAGE

NORTH VIEW



SOUTH VIEW



EAST VIEW



WEST VIEW





Reno
815 Maestro Drive
Reno, Nevada 89511
Ph: 775.829.2245

Las Vegas
1915 N. Green Valley Parkway
Suite 200
Henderson, Nevada 89074
Ph: 702.260.4961

San Antonio
227 North Loop 1604 East
Suite 150
San Antonio, Texas 78232
Ph: 210.446.8243

www.mcgin.com

SOIL SAMPLING AND ANALYTICAL TESTING SUMMARY REPORT

Ascenté, Phase 1 Residential Development Reno, Nevada

Prepared for:

*NNVI Partners, LLC
Attn: Michael Barnes
6151 Lakeside Drive, Suite 1000
Reno, NV 89511*

- | Site Remediation
- | Soil & Groundwater Investigations
- | Closure Optimization
- | Air Quality Permitting & Modeling
- | Brownfields Redevelopment
- | Permitting & Compliance
- | Phase I Assessments
- | Storm Water & Spill Plans
- | Underground Tank Services
- | Toxic Release Inventory
- | Geographic Information Systems
- | Groundwater Modeling
- | Litigation Support & Expert Witness

October 3, 2016

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6.	ANALYTICAL RESULTS	2
7.	CONCLUSIONS	2
8.	LIMITATIONS	3
9.	CLOSING	4

FIGURES

- Figure 1 Project Location Map
- Figure 2 Site Map Showing Composite Soil Sample Grid and Proposed Residential Development

TABLES

- Table 1 Summary of Soil Sample Analytical Results

APPENDICES

- Appendix A August 15, 2016 Reno Gazette Journal Article by Robert Parker
- Appendix B Chain-of Custody Records and Analytical Reports for Soil Samples

1. INTRODUCTION AND OBJECTIVE

McGinley and Associates, Inc. (MGA) has prepared this report describing the soil sampling activities conducted at the Ascenté Project located in Reno, Nevada. The location of the site is indicated in Figure 1. The objective of these activities was to assess a claim made by Robert Parker printed in the Reno Gazette Journal on August 15, 2016 (article included as Appendix A) that lead dust from historical 100+ years old mill operations contaminated the property of a proposed residential development. The owners contracted MGA to assess the lead concentration in the surface soils at the subject site in the areas of the project boundary that are proposed to be disturbed by the construction of the development.

2. SCOPE OF SERVICES

The soil sampling activities included the following:

- Dividing the sample area into grids approximately 2-acres in size;
- collecting one five-point composite sample from each grid from ground surface to four inches of soil;
- analytical testing of the collected soil samples for total lead; and,
- preparing this report.

3. SAMPLE AREA

The boundaries of the proposed residential development (i.e. sample area) and the 88 grids that were sampled are provided in Figure 2.

4. SOIL SAMPLE COLLECTION

Soil samples were collected using the following procedure:

- five discrete sub-samples were collected from each grid from a depth of 0 to 4 inches below ground surface
- one soil sample was collected near the center of each grid and one soil sample was collected from each of the four quadrants of the grid at a random location
 - all sub-sample locations were recorded using a hand-held mapping grade GPS unit
- prior to sample collection, any non-representative debris (e.g., vegetation, pebbles, etc.) were removed from the land surface
- the soil samples were collected using a decontaminated hand trowel
 - the hand trowels were decontaminated with an Alconox solution followed by two deionized water rinses prior to use at each sample grid
- the volume of soil sample collected from each sub-sample location was measured in a new laboratory-provided 8-oz glass jar to ensure the sample volume from each location was the same
 - the same glass jar was used for all five-sub samples
- following collection, each sub-sample was placed in the same new zip-lock bag to form a composite sample

- after all five sub-samples were placed in the zip-lock bag, the soil was thoroughly mixed to homogenize the composite sample
- following homogenization, an aliquot of the homogenized sample was placed in a new laboratory provided 4-oz glass sample jar, which was sealed, labeled, and properly stored pending delivery to the laboratory

5. ANALYTICAL TESTING

Soil samples were delivered under chain-of-custody protocol to ESC Lab Sciences for analytical testing. The soil samples were analyzed for total solids by Method 2540-G2011¹ and lead by EPA Method 6010B. Copies of the chain of custody records and analytical laboratory reports for the soil samples are included as Appendix B.

6. ANALYTICAL RESULTS

Analytical results are provided in Table 1. Lead concentrations in the collected samples ranged from 4.34 milligrams per kilogram (mg/kg) to 18.4 mg/kg with the average concentrations of all samples being 10.5 mg/kg. All concentrations are reported on a dry-weight basis.

7. CONCLUSIONS

Based on the analytical testing conducted on the soil samples collected, it appears that the lead concentrations in the surface soils (top 0 to 4 inches) within the proposed residential development are consistent with background conditions. A study conducted by the United States Geological Survey (USGS) from 2007 through 2010 determined that the average lead concentration in to the top 0 to 5 centimeters (approximately 2 inches) of soil in the conterminous United States was 25.8 mg/kg². The USGS study included 4,857 soil samples collected throughout the conterminous United States. The background lead concentration in soils specific to Nevada is 21.1 mg/kg as provided by United States Environment Protection Agency (USEPA) on their “USGS Background Soil – Lead Survey: State Data” webpage³ which included data from 171 soil samples. As indicated in Section 6, lead concentrations in all collected soil samples were below both the nationwide and Nevada background levels for lead in soils. The observed lead concentrations are also well below the Nevada Division of Environmental Protection’s reportable concentration⁴ and the USEPAs screening level for residential soils⁵, both of which are 400 mg/kg.

¹Total Solids were analyzed for the determination of lead concentration on a dry-weight basis

²Smith, D.B., Cannon, W.F., Woodruff, L.G., Solano, Federico, Kilburn, J.E., and Fey, D.L., 2013, *Geochemical and mineralogical data for soils of the conterminous United States: U.S. Geological Survey Data Series 801*, 19 p., <http://pubs.usgs.gov/ds/801/>

³<https://www.epa.gov/superfund/usgs-background-soil-lead-survey-state-data>

⁴NDEP Draft Guidelines for Discovery Events (Soil RCs), Appendix A1—Reportable Concentrations for common soil contaminants

⁵U.S. Environmental Protection Agency Regional Screening Levels, dated May 2016 (Table 1)

8. LIMITATIONS

The conclusions presented herein are based on analytical data, field measurements and observations, and well survey data. MGA makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. The results reported herein are applicable to the time the sampling occurred. Changes in site conditions may occur as a result of rainfall, snowmelt, water usage, or other factors.

It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact science. Judgments and opinions leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. Additional information not found or unavailable to MGA at the time of writing this report may result in a modification to the conclusions and recommendations contained herein.

The presentation of data in plots of contours presented herein is intended for the purpose of the visualization of environmental conditions. A greater degree of spatial and temporal data density may result in a more accurate representation of environmental conditions. Although such data visualization techniques may aid in providing a conceptual understanding of environmental conditions, such presentations are not intended to completely depict environmental conditions.

This report is not a legal opinion. The services performed by MGA have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

9. CLOSING

MGA appreciates the opportunity to be of services on this project. Should you have any questions regarding this report please contact the undersigned at (775) 829-2245.

Respectfully submitted,

McGinley and Associates, Inc.

I, Anthony Dimpel, hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations, and ordinances.



Anthony Dimpel, P.E., C.E.M # 2353, Exp. 3/20/17
Project Manager

Reviewed by:



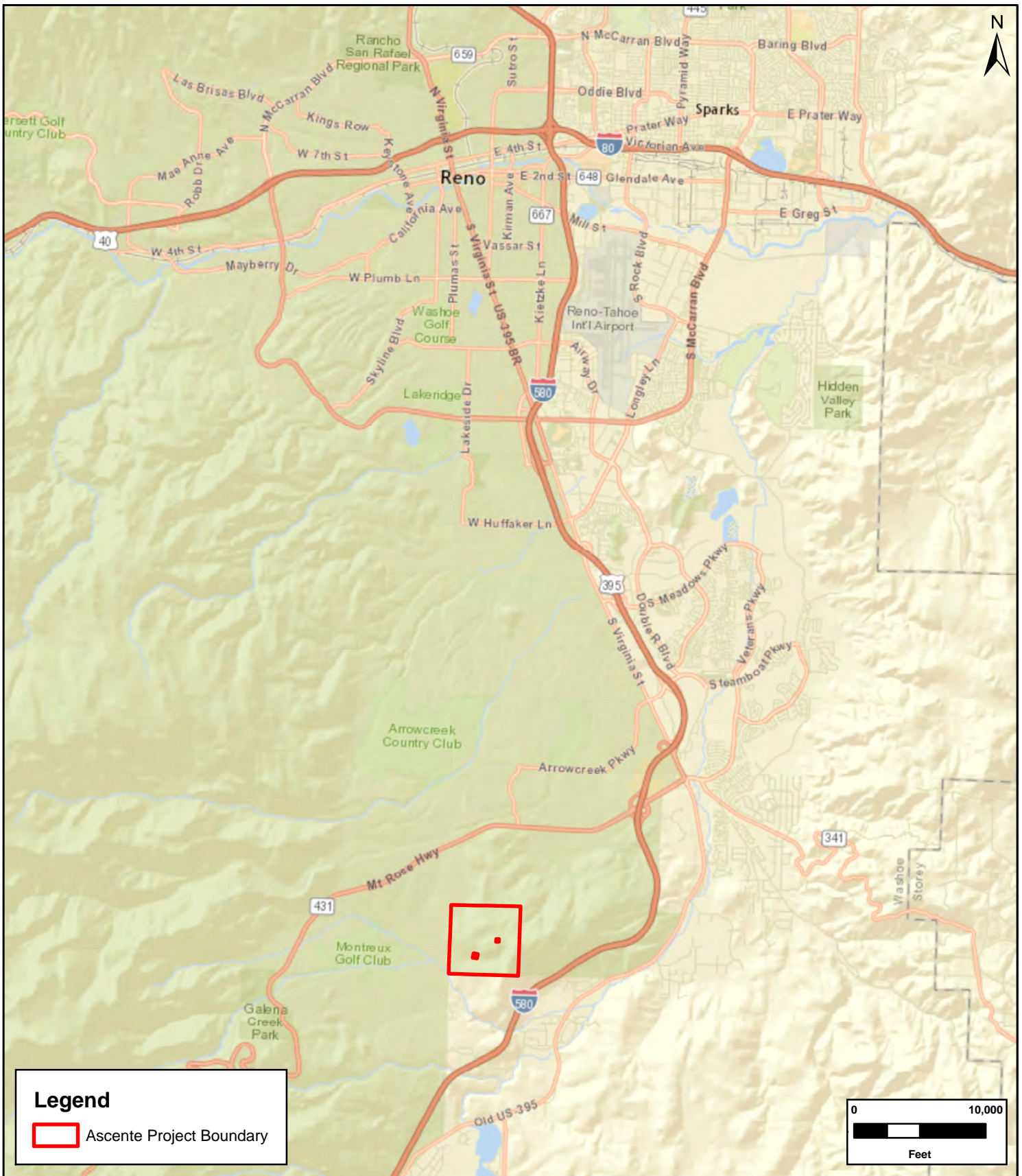
Joseph M. McGinley, P.E., P.G., C.E.M.
Principal

Table 1. Summary of Soil Sample Analytical Results				
Sample ID	Sample Collection Date	Grid ID	Sample Depth (inches bgs)	Lead Concentrations (mg/kg-dry)
DBL001-G001-160831	8/31/2016	G001	0 to 4	9.37
DBL001-G002-160831	8/31/2016	G002	0 to 4	7.23
DBL001-G003-160831	8/31/2016	G003	0 to 4	8.05
DBL001-G004-160831	8/31/2016	G004	0 to 4	9.43
DBL001-G005-160831	8/31/2016	G005	0 to 4	9.54
DBL001-G006-160831	8/31/2016	G006	0 to 4	9.43
DBL001-G007-160902	9/2/2016	G007	0 to 4	11.5
DBL001-G008-160902	9/2/2016	G008	0 to 4	13.0
DBL001-G009-160831	8/31/2016	G009	0 to 4	10.4
DBL001-G011-160831	8/31/2016	G010	0 to 4	8.47
DBL001-G010-160831	8/31/2016	G010	0 to 4	10.3
DBL001-G012-160831	8/31/2016	G012	0 to 4	9.33
DBL001-G013-160902	9/2/2016	G013	0 to 4	11.4
DBL001-G014-160902	9/2/2016	G014	0 to 4	18.2
DBL001-G015-160831	8/31/2016	G015	0 to 4	13.4
DBL001-G016-160831	8/31/2016	G016	0 to 4	9.98
DBL001-G017-160831	8/31/2016	G017	0 to 4	11.8
DBL001-G018-160831	8/31/2016	G018	0 to 4	9.72
DBL001-G019-160831	8/31/2016	G019	0 to 4	13.3
DBL001-G020-160831	8/31/2016	G020	0 to 4	14.5
DBL001-G021-160831	8/31/2016	G021	0 to 4	9.28
DBL001-G022-160831	8/31/2016	G022	0 to 4	10.5
DBL001-G023-160831	8/31/2016	G023	0 to 4	9.74
DBL001-G024-160831	8/31/2016	G024	0 to 4	9.82
DBL001-G025-160831	8/31/2016	G025	0 to 4	9.86
DBL001-G026-160831	8/31/2016	G026	0 to 4	10.6
DBL001-G027-160831	8/31/2016	G027	0 to 4	7.03
DBL001-G028-160831	8/31/2016	G028	0 to 4	8.05
DBL001-G029-160831	8/31/2016	G029	0 to 4	8.09
DBL001-G030-160831	8/31/2016	G030	0 to 4	6.89
DBL001-G031-160831	8/31/2016	G031	0 to 4	7.63
DBL001-G032-160831	8/31/2016	G032	0 to 4	6.06
DBL001-G033-160831	8/31/2016	G033	0 to 4	7.36
DBL001-G034-160831	8/31/2016	G034	0 to 4	11.0
DBL001-G035-160831	8/31/2016	G035	0 to 4	7.14
DBL001-G036-160901	9/1/2016	G036	0 to 4	10.0
DBL001-G037-160902	9/2/2016	G037	0 to 4	11.7

Table 1. Summary of Soil Sample Analytical Results				
Sample ID	Sample Collection Date	Grid ID	Sample Depth (inches bgs)	Lead Concentrations (mg/kg-dry)
DBL001-G038-160831	8/31/2016	G038	0 to 4	5.87
DBL001-G039-160831	8/31/2016	G039	0 to 4	4.87
DBL001-G040-160902	9/2/2016	G040	0 to 4	14.7
DBL001-G041-160831	8/31/2016	G041	0 to 4	4.34
DBL001-G042-160831	8/31/2016	G042	0 to 4	8.29
DBL001-G043-160901	9/1/2016	G043	0 to 4	9.29
DBL001-G044-160902	9/2/2016	G044	0 to 4	9.70
DBL001-G045-160902	9/2/2016	G045	0 to 4	12.1
DBL001-G046-160901	9/1/2016	G046	0 to 4	9.56
DBL001-G047-160901	9/1/2016	G047	0 to 4	11.2
DBL001-G048-160901	9/1/2016	G048	0 to 4	10.4
DBL001-G049-160902	9/1/2016	G049	0 to 4	12.9
DBL001-G050-160902	9/1/2016	G050	0 to 4	14.3
DBL001-G051-160901	9/1/2016	G051	0 to 4	18.4
DBL001-G052-160830	8/30/2016	G052	0 to 4	9.30
DBL001-G053-160901	9/1/2016	G053	0 to 4	11.2
DBL001-G054-160901	9/1/2016	G054	0 to 4	12.1
DBL001-G055-160901	9/1/2016	G055	0 to 4	13.6
DBL001-G056-160901	9/1/2016	G056	0 to 4	14.4
DBL001-G057-160901	9/1/2016	G057	0 to 4	13.6
DBL001-G058-160901	9/1/2016	G058	0 to 4	17.7
DBL001-G059-160901	9/1/2016	G059	0 to 4	11.6
DBL001-G060-160901	9/1/2016	G060	0 to 4	16.3
DBL001-G061-160901	9/1/2016	G061	0 to 4	14.3
DBL001-G062-160901	9/1/2016	G062	0 to 4	15.8
DBL001-G063-160901	9/1/2016	G063	0 to 4	15.6
DBL001-G064-160901	9/1/2016	G064	0 to 4	18.1
DBL001-G065-160830	8/30/2016	G065	0 to 4	11.3
DBL001-G066-160901	9/1/2016	G066	0 to 4	11.9
DBL001-G067-160901	9/1/2016	G067	0 to 4	12.8
DBL001-G068-160901	9/1/2016	G068	0 to 4	13.1
DBL001-G069-160901	9/1/2016	G069	0 to 4	14.2
DBL001-G070-160830	8/30/2016	G070	0 to 4	9.76
DBL001-G071-160830	8/30/2016	G071	0 to 4	9.65
DBL001-G072-160830	8/30/2016	G072	0 to 4	13.1
DBL001-G073-160830	8/30/2016	G073	0 to 4	10.9
DBL001-G074-160830	8/30/2016	G074	0 to 4	6.69

Table 1. Summary of Soil Sample Analytical Results				
Sample ID	Sample Collection Date	Grid ID	Sample Depth (inches bgs)	Lead Concentrations (mg/kg-dry)
DBL001-G075-160830	8/30/2016	G075	0 to 4	8.80
DBL001-G076-160830	8/30/2016	G076	0 to 4	12.5
DBL001-G077-160830	8/30/2016	G077	0 to 4	11.8
DBL001-G078-160830	8/30/2016	G078	0 to 4	6.72
DBL001-G079-160830	8/30/2016	G079	0 to 4	7.61
DBL001-G080-160830	8/30/2016	G080	0 to 4	9.33
DBL001-G081-160830	8/30/2016	G081	0 to 4	6.43
DBL001-G082-160830	8/30/2016	G082	0 to 4	6.02
DBL001-G083-160830	8/30/2016	G083	0 to 4	5.71
DBL001-G084-160830	8/30/2016	G084	0 to 4	8.49
DBL001-G085-160830	8/30/2016	G085	0 to 4	10.2
DBL001-G086-160830	8/30/2016	G086	0 to 4	6.18
DBL001-G087-160830	8/30/2016	G087	0 to 4	5.96
DBL001-G088-160830	8/30/2016	G088	0 to 4	6.26

bgs below ground surface
 mg/kg milligrams per kilogram



REVISIONS	NO.	BY	DATE
A	DESIGNED	BP	
	DRAWN	BP	
	CHECKED	TD	
	APPROVED	TD	
JOB NO.:	DBL001		

FIGURE 1

PROJECT LOCATION MAP
-SHOWING-
ASCENTE PROJECT
WASHOE COUNTY, NEVADA



McGinley & Associates
Environmental Engineering and Science
RENO | LAS VEGAS | www.mcglin.com

COORDINATE SYSTEM:
NAD 1983 UTM Zone 11N

Figure 1 - Project Location
8/26/2016

APPENDIX A

August 15, 2016 Reno Gazette Journal Article by Robert Parker

One View: South Reno development may disturb toxic materials

Robert Parker 4:48 p.m. PDT August 15, 2016

(Photo: Provided to the RGJ)



In the Steamboat Hills there are two abandoned lead mines, and lead ore was also processed in mills at the historic town of Galena. This activity all occurred before 1960. When the mine locations were tested by the Nevada Bureau of Mines, a substantial amount of lead was found in the debris at the mines. Now development is proposed near each abandoned mine, and roads are proposed for the hillsides above Galena. Is this safe?

The two mines of interest are the Galena Hill Mine, on the top of the Steamboat Hills, and the Union Mine on the southwestern edge of Pleasant Valley. The Galena Hill Mine was worked in the 1920s, and reports show that 60 tons of ore was taken out. Ascente (also called Matera Ridge, with 600-plus planned homes) would be nearby. The Union Mine was located in 1860 and worked up through about 1956. During the Second World War 140,000 tons of ore were mined and shipped via the V&T Railroad. This mine was bigger and more complex than the Galena Hill Mine and had mills on site to grind the ore. Sierra Reflections (900-plus homes) would be immediately adjacent.

The ore found in the mines and on the property surrounding the mines as tailings are lead-containing compounds, primarily lead carbonate and lead sulfide. This material is hazardous if inhaled or ingested. Aerial photographs indicate ATVs have been ridden on the mine properties. At the Union Mine, some of the property was disturbed by the construction of the Galena Creek Bridge.

The historic town of Galena was located at the southern end of Callahan Road along Galena Creek. It took its name from the lead mineral that was found mixed with the silver ore that was mined from the west flank of the Steamboat Hills. It had mills to process that ore. Because of the prevailing winds, it is likely that dust from those mills accumulated on the west slope of the Steamboat Hills, where it would be uncovered by excavations for roads and pads for homes.

The concern is straightforward: Development in areas that were contaminated by heavy metals like lead poses a hazard to people who might visit or buy property in the area, or whose children play in the area. The usual solution is to mitigate the contamination by testing to locate problems, removing contaminated soils, and controlling excavations in areas thought to be contaminated. This is the approach that was taken in Leadville, Colorado, at a site that was subsequently an EPA Superfund Site.

Development should not be allowed until and unless the areas have been tested, remediated, and declared safe. Both the county and the state should attack this problem and ensure the health of our citizens.

Dr. Robert Parker is a retired aerospace engineer who lives in Galena Forest Estates.

APPENDIX B

Chain-of-Custody Records and Analytical Reports for Soil Samples

McGinley & Assoc. - Reno, NV

Sample Delivery Group: L857397
Samples Received: 09/02/2016
Project Number: DBL001
Description: ASCENTE Project
Site: DBL001
Report To: Tony Dimpel
815 Maestro Drive
Reno, NV 89511

Entire Report Reviewed By:



Shane Gambill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	4
⁴Cn: Case Narrative	12
⁵Sr: Sample Results	13
DBL001-G87-160830 L857397-01	13
DBL001-G088-160830 L857397-02	14
DBL001-G085-160830 L857397-03	15
DBL001-G084-160830 L857397-04	16
DBL001-G083-160830 L857397-05	17
DBL001-G086-160830 L857397-06	18
DBL001-G081-160830 L857397-07	19
DBL001-G082-160830 L857397-08	20
DBL001-G078-160830 L857397-09	21
DBL001-G074-160830 L857397-10	22
DBL001-G075-160830 L857397-11	23
DBL001-G076-160830 L857397-12	24
DBL001-G079-160830 L857397-13	25
DBL001-G080-160830 L857397-14	26
DBL001-G077-160830 L857397-15	27
DBL001-G072-160830 L857397-16	28
DBL001-G071-160830 L857397-17	29
DBL001-G070-160830 L857397-18	30
DBL001-G073-160830 L857397-19	31
DBL001-G065-160830 L857397-20	32
DBL001-G052-160830 L857397-21	33
DBL001-G041-160831 L857397-22	34
DBL001-G042-160831 L857397-23	35
DBL001-G039-160831 L857397-24	36
DBL001-G034-160831 L857397-25	37
DBL001-G035-160831 L857397-26	38
DBL001-G031-160831 L857397-27	39
DBL001-G026-160831 L857397-28	40
DBL001-G025-160831 L857397-29	41
DBL001-G020-160831 L857397-30	42
DBL001-G006-160831 L857397-31	43
DBL001-G005-160831 L857397-32	44
DBL001-G004-160831 L857397-33	45
DBL001-G011-160831 L857397-34	46





			<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 1 Cp </div>
	DBL001-G012-160831 L857397-35	47	
	DBL001-G019-160831 L857397-36	48	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 2 Tc </div>
	DBL001-G030-160831 L857397-37	49	
	DBL001-G024-160831 L857397-38	50	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 3 Ss </div>
	DBL001-G018-160831 L857397-39	51	
	DBL001-G003-160831 L857397-40	52	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 4 Cn </div>
	DBL001-G002-160831 L857397-41	53	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 5 Sr </div>
	DBL001-G009-160831 L857397-42	54	
	DBL001-G010-160831 L857397-43	55	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 6 Qc </div>
	DBL001-G017-160831 L857397-44	56	
	DBL001-G023-160831 L857397-45	57	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 7 Gl </div>
	DBL001-G029-160831 L857397-46	58	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 8 Al </div>
	DBL001-G001-160831 L857397-47	59	
	DBL001-G016-160831 L857397-48	60	<div style="border: 1px solid black; padding: 2px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 9 Sc </div>
	DBL001-G015-160831 L857397-49	61	
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	8Al: Accreditations & Locations	80	
	9Sc: Chain of Custody	81	

SAMPLE SUMMARY



DBL001-G87-160830 L857397-01 Solid

Collected by
George Hagan III Collected date/time
08/30/16 09:13 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 00:44	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc

DBL001-G088-160830 L857397-02 Solid

Collected by
George Hagan III Collected date/time
08/30/16 09:40 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 00:58	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G085-160830 L857397-03 Solid

Collected by
George Hagan III Collected date/time
08/30/16 09:56 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:01	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G084-160830 L857397-04 Solid

Collected by
George Hagan III Collected date/time
08/30/16 10:10 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:09	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G083-160830 L857397-05 Solid

Collected by
George Hagan III Collected date/time
08/30/16 10:22 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:12	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G086-160830 L857397-06 Solid

Collected by
George Hagan III Collected date/time
08/30/16 10:58 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:15	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G081-160830 L857397-07 Solid

Collected by
George Hagan III Collected date/time
08/30/16 11:12 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:17	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

SAMPLE SUMMARY



DBL001-G082-160830 L857397-08 Solid

Collected by
George Hagan III Collected date/time
08/30/16 11:24 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:20	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

DBL001-G078-160830 L857397-09 Solid

Collected by
George Hagan III Collected date/time
08/30/16 11:39 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:23	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G074-160830 L857397-10 Solid

Collected by
George Hagan III Collected date/time
08/30/16 11:54 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:26	CCE
Total Solids by Method 2540 G-2011	WG905258	1	09/06/16 09:15	09/06/16 09:24	MEL

DBL001-G075-160830 L857397-11 Solid

Collected by
George Hagan III Collected date/time
08/30/16 12:09 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:29	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G076-160830 L857397-12 Solid

Collected by
George Hagan III Collected date/time
08/30/16 12:48 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:32	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G079-160830 L857397-13 Solid

Collected by
George Hagan III Collected date/time
08/30/16 13:02 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:35	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G080-160830 L857397-14 Solid

Collected by
George Hagan III Collected date/time
08/30/16 13:19 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:43	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

SAMPLE SUMMARY



DBL001-G077-160830 L857397-15 Solid

Collected by
George Hagan III Collected date/time
08/30/16 13:33 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:46	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc

DBL001-G072-160830 L857397-16 Solid

Collected by
George Hagan III Collected date/time
08/30/16 14:28 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:49	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G071-160830 L857397-17 Solid

Collected by
George Hagan III Collected date/time
08/30/16 14:42 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:52	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G070-160830 L857397-18 Solid

Collected by
George Hagan III Collected date/time
08/30/16 14:55 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:55	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G073-160830 L857397-19 Solid

Collected by
George Hagan III Collected date/time
08/30/16 15:06 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 01:58	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G065-160830 L857397-20 Solid

Collected by
George Hagan III Collected date/time
08/30/16 15:27 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905577	1	09/07/16 12:12	09/08/16 02:00	CCE
Total Solids by Method 2540 G-2011	WG905261	1	09/06/16 10:32	09/06/16 10:39	MEL

DBL001-G052-160830 L857397-21 Solid

Collected by
George Hagan III Collected date/time
08/30/16 15:40 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 19:52	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

SAMPLE SUMMARY



DBL001-G041-160831 L857397-22 Solid

Collected by
George Hagan III Collected date/time
08/31/16 07:14 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:05	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

DBL001-G042-160831 L857397-23 Solid

Collected by
George Hagan III Collected date/time
08/31/16 07:27 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:07	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G039-160831 L857397-24 Solid

Collected by
George Hagan III Collected date/time
08/31/16 07:39 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:15	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G034-160831 L857397-25 Solid

Collected by
George Hagan III Collected date/time
08/31/16 07:54 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:18	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G035-160831 L857397-26 Solid

Collected by
George Hagan III Collected date/time
08/31/16 08:08 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:21	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G031-160831 L857397-27 Solid

Collected by
George Hagan III Collected date/time
08/31/16 09:41 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:24	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G026-160831 L857397-28 Solid

Collected by
George Hagan III Collected date/time
08/31/16 09:53 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:26	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

SAMPLE SUMMARY

DBL001-G025-160831 L857397-29 Solid

Collected by
George Hagan III Collected date/time
08/31/16 10:07 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:29	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc

DBL001-G020-160831 L857397-30 Solid

Collected by
George Hagan III Collected date/time
08/31/16 10:21 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:32	CCE
Total Solids by Method 2540 G-2011	WG905262	1	09/06/16 10:19	09/06/16 10:30	MEL

DBL001-G006-160831 L857397-31 Solid

Collected by
George Hagan III Collected date/time
08/31/16 10:33 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG906418	1	09/09/16 11:59	09/09/16 13:25	LTB
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G005-160831 L857397-32 Solid

Collected by
George Hagan III Collected date/time
08/31/16 10:46 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:35	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G004-160831 L857397-33 Solid

Collected by
George Hagan III Collected date/time
08/31/16 10:58 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:37	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G011-160831 L857397-34 Solid

Collected by
George Hagan III Collected date/time
08/31/16 11:10 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:40	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G012-160831 L857397-35 Solid

Collected by
George Hagan III Collected date/time
08/31/16 11:22 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:48	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

SAMPLE SUMMARY



DBL001-G019-160831 L857397-36 Solid

Collected by George Hagan III Collected date/time 08/31/16 11:34 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:51	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

1 Cp

2 Tc

3 Ss

DBL001-G030-160831 L857397-37 Solid

Collected by George Hagan III Collected date/time 08/31/16 12:38 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:54	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

4 Cn

5 Sr

6 Qc

DBL001-G024-160831 L857397-38 Solid

Collected by George Hagan III Collected date/time 08/31/16 12:48 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:57	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

7 Gl

8 Al

9 Sc

DBL001-G018-160831 L857397-39 Solid

Collected by George Hagan III Collected date/time 08/31/16 12:59 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 20:59	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G003-160831 L857397-40 Solid

Collected by George Hagan III Collected date/time 08/31/16 13:15 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 21:02	CCE
Total Solids by Method 2540 G-2011	WG905265	1	09/06/16 10:07	09/06/16 10:15	MEL

DBL001-G002-160831 L857397-41 Solid

Collected by George Hagan III Collected date/time 08/31/16 13:27 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905579	1	09/07/16 13:44	09/07/16 21:05	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G009-160831 L857397-42 Solid

Collected by George Hagan III Collected date/time 08/31/16 13:41 Received date/time 09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:13	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

SAMPLE SUMMARY



DBL001-G010-160831 L857397-43 Solid

Collected by
George Hagan III Collected date/time
08/31/16 13:54 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:46	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

DBL001-G017-160831 L857397-44 Solid

Collected by
George Hagan III Collected date/time
08/31/16 14:07 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:49	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G023-160831 L857397-45 Solid

Collected by
George Hagan III Collected date/time
08/31/16 14:19 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:52	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G029-160831 L857397-46 Solid

Collected by
George Hagan III Collected date/time
08/31/16 14:31 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:54	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G001-160831 L857397-47 Solid

Collected by
George Hagan III Collected date/time
08/31/16 15:12 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/07/16 23:57	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G016-160831 L857397-48 Solid

Collected by
George Hagan III Collected date/time
08/31/16 15:31 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:00	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

DBL001-G015-160831 L857397-49 Solid

Collected by
George Hagan III Collected date/time
08/31/16 15:43 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:03	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

SAMPLE SUMMARY



DBL001-G021-160831 L857397-50 Solid

Collected by
George Hagan III Collected date/time
08/31/16 15:59 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:11	CCE
Total Solids by Method 2540 G-2011	WG905269	1	09/06/16 09:54	09/06/16 10:02	MEL

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

DBL001-G022-160831 L857397-51 Solid

Collected by
George Hagan III Collected date/time
08/31/16 16:10 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:14	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL

DBL001-G028-160831 L857397-52 Solid

Collected by
George Hagan III Collected date/time
08/31/16 16:22 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:17	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL

DBL001-G027-160831 L857397-53 Solid

Collected by
George Hagan III Collected date/time
08/31/16 16:34 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:20	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL

DBL001-G033-160831 L857397-54 Solid

Collected by
George Hagan III Collected date/time
08/31/16 16:47 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:23	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL

DBL001-G032-160831 L857397-55 Solid

Collected by
George Hagan III Collected date/time
08/31/16 17:03 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:25	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL

DBL001-G038-160831 L857397-56 Solid

Collected by
George Hagan III Collected date/time
08/31/16 17:15 Received date/time
09/02/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905580	1	09/07/16 14:35	09/08/16 00:28	CCE
Total Solids by Method 2540 G-2011	WG905272	1	09/06/16 11:08	09/06/16 11:16	MEL



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.5		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	5.96		0.191	0.503	1	09/08/2016 00:44	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.3		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.26		0.191	0.503	1	09/08/2016 00:58	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.2		0.193	0.507	1	09/08/2016 01:01	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.4		1	09/06/2016 09:24	WG905258

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.49		0.191	0.503	1	09/08/2016 01:09	WG905577

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.5		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	5.71		0.191	0.503	1	09/08/2016 01:12	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.5		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.18		0.191	0.503	1	09/08/2016 01:15	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.4		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.43		0.191	0.503	1	09/08/2016 01:17	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.4		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.02		0.191	0.503	1	09/08/2016 01:20	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.3		1	09/06/2016 09:24	WG905258

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.72		0.191	0.504	1	09/08/2016 01:23	WG905577

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.3		1	09/06/2016 09:24	WG905258

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.69		0.191	0.503	1	09/08/2016 01:26	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	09/06/2016 10:39	WG905261

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.80		0.192	0.506	1	09/08/2016 01:29	WG905577

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.3		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.5		0.193	0.509	1	09/08/2016 01:32	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 10:39	WG905261

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.61		0.192	0.504	1	09/08/2016 01:35	WG905577

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.33		0.193	0.507	1	09/08/2016 01:43	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.8		0.193	0.507	1	09/08/2016 01:46	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.1		0.192	0.506	1	09/08/2016 01:49	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.65		0.192	0.505	1	09/08/2016 01:52	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.76		0.193	0.507	1	09/08/2016 01:55	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	09/06/2016 10:39	WG905261

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.9		0.193	0.509	1	09/08/2016 01:58	WG905577

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	09/06/2016 10:39	WG905261

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.3		0.192	0.505	1	09/08/2016 02:00	WG905577

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.30		0.191	0.504	1	09/07/2016 19:52	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.6		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	4.34		0.191	0.502	1	09/07/2016 20:05	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.6		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.29		0.191	0.502	1	09/07/2016 20:07	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.6		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	4.87		0.191	0.502	1	09/07/2016 20:15	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.0		0.192	0.504	1	09/07/2016 20:18	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 10:30	WG905262

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.14		0.192	0.506	1	09/07/2016 20:21	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 10:30	WG905262

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.63		0.192	0.505	1	09/07/2016 20:24	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.6		0.192	0.506	1	09/07/2016 20:26	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.3		1	09/06/2016 10:30	WG905262

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.86		0.193	0.509	1	09/07/2016 20:29	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 10:30	WG905262

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.5		0.192	0.506	1	09/07/2016 20:32	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.4		1	09/06/2016 10:15	WG905265

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.43		0.193	0.508	1	09/09/2016 13:25	WG906418

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.5		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.54		0.193	0.508	1	09/07/2016 20:35	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.43		0.193	0.507	1	09/07/2016 20:37	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.47		0.194	0.510	1	09/07/2016 20:40	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.33		0.194	0.509	1	09/07/2016 20:48	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.8		1	09/06/2016 10:15	WG905265

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.3		0.194	0.511	1	09/07/2016 20:51	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.89		0.191	0.504	1	09/07/2016 20:54	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 10:15	WG905265

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.82		0.192	0.505	1	09/07/2016 20:57	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.5		1	09/06/2016 10:15	WG905265

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.72		0.195	0.513	1	09/07/2016 20:59	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	09/06/2016 10:15	WG905265

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.05		0.193	0.509	1	09/07/2016 21:02	WG905579

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.23		0.192	0.505	1	09/07/2016 21:05	WG905579

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 10:02	WG905269

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.4	<u>O1</u>	0.193	0.507	1	09/07/2016 23:13	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.3		0.193	0.507	1	09/07/2016 23:46	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.8		0.194	0.510	1	09/07/2016 23:49	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 10:02	WG905269

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.74		0.192	0.505	1	09/07/2016 23:52	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.09		0.192	0.506	1	09/07/2016 23:54	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.37		0.193	0.507	1	09/07/2016 23:57	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.98		0.194	0.510	1	09/08/2016 00:00	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.4		0.194	0.510	1	09/08/2016 00:03	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 10:02	WG905269

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.28		0.192	0.505	1	09/08/2016 00:11	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	09/06/2016 11:16	WG905272

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.5		0.192	0.505	1	09/08/2016 00:14	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 11:16	WG905272

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.05		0.191	0.504	1	09/08/2016 00:17	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 11:16	WG905272

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.03		0.192	0.504	1	09/08/2016 00:20	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 11:16	WG905272

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	7.36		0.193	0.507	1	09/08/2016 00:23	WG905580

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.3		1	09/06/2016 11:16	WG905272

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	6.06		0.191	0.503	1	09/08/2016 00:25	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.4		1	09/06/2016 11:16	WG905272

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	5.87		0.191	0.503	1	09/08/2016 00:28	WG905580

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3161731-1 09/06/16 09:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000800			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L857397-03 Original Sample (OS) • Duplicate (DUP)

(OS) L857397-03 09/06/16 09:24 • (DUP) R3161731-3 09/06/16 09:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.7	98.7	1	0.00638		5

Laboratory Control Sample (LCS)

(LCS) R3161731-2 09/06/16 09:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	



Method Blank (MB)

(MB) R3161737-1 09/06/16 10:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000900			

¹ Cp

² Tc

³ Ss

L857397-12 Original Sample (OS) • Duplicate (DUP)

(OS) L857397-12 09/06/16 10:39 • (DUP) R3161737-3 09/06/16 10:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.3	98.3	1	0.0252		5

⁴ Cn

⁵ Sr

Laboratory Control Sample (LCS)

(LCS) R3161737-2 09/06/16 10:39

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3161736-1 09/06/16 10:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

L857397-22 Original Sample (OS) • Duplicate (DUP)

(OS) L857397-22 09/06/16 10:30 • (DUP) R3161736-3 09/06/16 10:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	99.6	99.6	1	0.0205		5

⁶ Qc

Laboratory Control Sample (LCS)

(LCS) R3161736-2 09/06/16 10:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3161735-1 09/06/16 10:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00120			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L857397-31 Original Sample (OS) • Duplicate (DUP)

(OS) L857397-31 09/06/16 10:15 • (DUP) R3161735-3 09/06/16 10:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.4	98.3	1	0.0512		5

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3161735-2 09/06/16 10:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	



Method Blank (MB)

(MB) R3161734-1 09/06/16 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000900			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L857397-41 Original Sample (OS) • Duplicate (DUP)

(OS) L857397-41 09/06/16 10:02 • (DUP) R3161734-3 09/06/16 10:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	99.0	99.0	1	0.0198		5

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3161734-2 09/06/16 10:02

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	



Method Blank (MB)

(MB) R3161739-1 09/06/16 11:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L857393-01 Original Sample (OS) • Duplicate (DUP)

(OS) L857393-01 09/06/16 11:16 • (DUP) R3161739-3 09/06/16 11:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	80.6	80.3	1	0.379		5

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3161739-2 09/06/16 11:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	



Method Blank (MB)

(MB) R3162026-1 09/08/16 00:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Lead	U		0.19	0.500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3162026-2 09/08/16 00:39 • (LCSD) R3162026-3 09/08/16 00:41

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Lead	100	97.6	94.3	98	94	80-120			3	20

L857397-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857397-01 09/08/16 00:44 • (MS) R3162026-6 09/08/16 00:52 • (MSD) R3162026-7 09/08/16 00:55

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	101	5.96	104	96.9	98	90	1	75-125			7	20

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3162017-1 09/07/16 19:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Lead	U		0.19	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3162017-2 09/07/16 19:46 • (LCSD) R3162017-3 09/07/16 19:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Lead	100	94.9	102	95	102	80-120			7	20

L857397-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857397-21 09/07/16 19:52 • (MS) R3162017-6 09/07/16 19:59 • (MSD) R3162017-7 09/07/16 20:02

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Lead	101	9.30	109	109	99	99	1	75-125			1	20



Method Blank (MB)

(MB) R3162025-1 09/07/16 23:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Lead	U		0.19	0.500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3162025-2 09/07/16 23:07 • (LCSD) R3162025-3 09/07/16 23:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Lead	100	92.3	97.0	92	97	80-120			5	20

L857397-42 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857397-42 09/07/16 23:13 • (MS) R3162025-6 09/07/16 23:21 • (MSD) R3162025-7 09/07/16 23:23

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	101	10.4	110	109	98	97	1	75-125			1	20

⁷ Gl

⁸ Al

⁹ Sc



[L857397-31](#)

Method Blank (MB)

(MB) R3162456-1 09/09/16 13:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Lead	U		0.19	0.500

¹ Cp

² Tc

³ Ss

⁴ Cn

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3162456-2 09/09/16 13:20 • (LCSD) R3162456-3 09/09/16 13:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Lead	100	98.3	99.5	98	99	80-120			1	20

⁵ Sr

⁶ Qc

L857397-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857397-31 09/09/16 13:25 • (MS) R3162456-6 09/09/16 13:33 • (MSD) R3162456-7 09/09/16 13:35

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	102	9.43	109	103	98	92	1	75-125			5	20

⁷ Gl

⁸ Al

⁹ Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.



State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

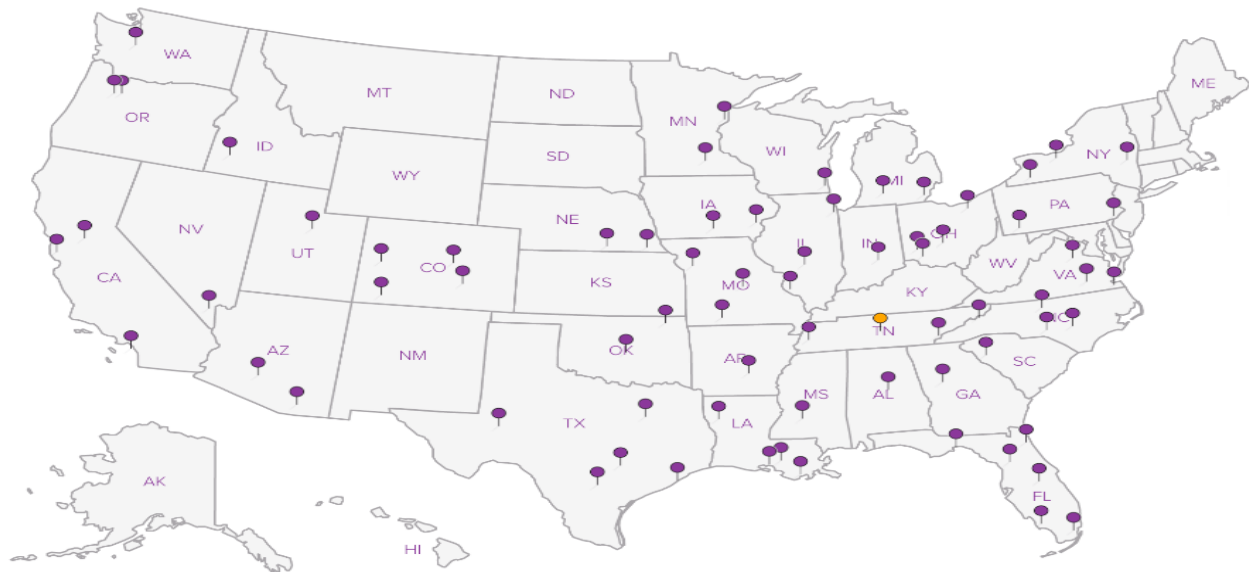
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:
McGinley and Associates
 815 Maestro Drive
 Reno, NV 89511

Billing Information:
Same

Analysis / Container / Preservative

Chain of Custody Page 1 of 6



YOUR LAB OF CHOICE

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Report to:
 Tony Dimpel

Email To:
 tdimpel@mcgin.com

Project Description:
 Ascente Project

City/State Collected:
Reno, NV

Phone: **775-829-2245**
 Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):
George Hagan III
 Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
 Same Day200%
 Next Day100%
 Two Day50%
 Three Day25%

Date Results Needed
 Email? No Yes
 FAX? No Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS
DBL001-G087-160830	Comp	SS		8/30/2016	0913	1	X	X
DBL001-G088-160830	Comp	SS		8/30/2016	0940	1	X	X
DBL001-G085-160830	Comp	SS		8/30/2016	0956	1	X	X
DBL001-G084-160830	Comp	SS		8/30/2016	1010	1	X	X
DBL001-G083-160830	Comp	SS		8/30/2016	1022	1	X	X
DBL001-G086-160830	Comp	SS		8/30/2016	1058	1	X	X
DBL001-G081-160830	Comp	SS		8/30/2016	1112	1	X	X
DBL001-G082-160830	Comp	SS		8/30/2016	1124	1	X	X
DBL001-G078-160830	Comp	SS		8/30/2016	1139	1	X	X
DBL001-G074-160830	Comp	SS		8/30/2016	1154	1	X	X

L# **897397**
H068
 Acctnum: **MCGINRNV**
 Template:
 Prelogin:
 TSR:
 Cooler:
 Shipped Via: **Fedex**

Rem./Contaminant	Sample # (lab only)
	01
	02
	03
	04
	05
	06
	07
	08
	09
	10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

8101 0556 2710

Remarks: **Report all concentrations on a wet & dry-weight basis**

6711 0133 3178

Flow _____ Other _____

Hold #

Relinquished by: (Signature)
George Hagan III

Date: 9/1/16
 Time: 1040

Received by: (Signature)
Ally Fuentes

Received by: (Signature)
Ally Fuentes

Samples returned via: UPS
 FedEx Courier _____

Condition: (lab use only)
 NCF

Relinquished by: (Signature)
Ally Fuentes

Date: 9/1/16
 Time: 1050

Received for lab by: (Signature)
Ally Fuentes

Received for lab by: (Signature)
Ally Fuentes

Temp: _____ °C Bottles Received:
 Amp 56-402

COC Seal Intact: Y N NA

Relinquished by: (Signature)
Ally Fuentes

Date: 9/2/16
 Time: 900

Received for lab by: (Signature)
Ally Fuentes

Received for lab by: (Signature)
Ally Fuentes

Date: 9/2/16
 Time: 900

pH Checked: _____ NCF: _____

Company Name/Address:

McGinley and Associates

815 Maestro Drive
Reno, NV 89511

Billing Information:

Same

Analysis / Container / Preservative

Chain of Custody Page 2 of 6



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Report to:

Tony Dimpel

Email To:

tdimpel@mcgin.com

Project Description: Ascente Project

City/State Collected: **Reno, NV**

Phone: **775-829-2245**
Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):

[Signature]

Rush? (Lab MUST Be Notified)

___ Same Day200%
___ Next Day100%
___ Two Day50%
___ Three Day25%

Date Results Needed

Email? ___ No Yes

FAX? ___ No ___ Yes

No. of Cntrs

Immediately Packed on Ice N Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	Lead	TS										
DBL001-G075-160830	Comp	SS		8/30/2016	1209	1	X	X										
DBL001-G076-160830	Comp	SS		8/30/2016	1248	1	X	X										11
DBL001-G079-160830	Comp	SS		8/30/2016	1302	1	X	X										12
DBL001-G080-160830	Comp	SS		8/30/2016	1319	1	X	X										13
DBL001-G077-160830	Comp	SS		8/30/2016	1333	1	X	X										14
DBL001-G072-160830	Comp	SS		8/30/2016	1428	1	X	X										15
DBL001-G071-160830	Comp	SS		8/30/2016	1442	1	X	X										16
DBL001-G070-160830	Comp	SS		8/30/2016	1455	1	X	X										17
DBL001-G073-160830	Comp	SS		8/30/2016	1506	1	X	X										18
DBL001-G065-160830	Comp	SS		8/30/2016	1527	1	X	X										19
																		20

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: **Report all concentrations on a wet & dry-weight basis**

6711 0133 3178
8101 0556 2710

pH _____ Temp _____

Flow _____ Other _____

Relinquished by: (Signature)

[Signature]

Date:

9/1/16

Time:

1640

Received by: (Signature)

[Signature]

Samples returned via: UPS

FedEx Courier _____

Hold #

Condition: (lab use only)

Relinquished by: (Signature)

[Signature]

Date:

9/1/16

Time:

1650

Received by: (Signature)

Temp: _____ °C Bottles Received:

AMB 56-402

COC Seal Intact: ___ Y ___ N ___ NA

Relinquished by: (Signature)

[Signature]

Date:

Time:

Received for lab by: (Signature)

[Signature]

Date:

9/2/16

Time:

9W

pH Checked:

NCF:

Company Name/Address:

McGinley and Associates

815 Maestro Drive
Reno, NV 89511

Billing Information:

Same

Analysis / Container / Preservative

Chain of Custody Page 3 of 6



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Report to:
Tony Dimpel

Email To:
tdimpel@mcgin.com

Project Description:
Ascente Project

City/State Collected:
Reno, NV

Phone: 775-829-2245
Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):

George Hagan III

Rush? (Lab MUST Be Notified)

___ Same Day200%
___ Next Day100%
___ Two Day50%
___ Three Day25%

Date Results Needed

Email? ___ No Yes

FAX? ___ No ___ Yes

No. of Cntrs

Immediately Packed on Ice N Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS											
DBL001-G052-160830	Comp	SS		8/30/2016	1540	1	X	X											
DBL001-G041-160831	Comp	SS		8/31/2016	0714	1	X	X											21
DBL001-G042-160831	Comp	SS		8/31/2016	0727	1	X	X											22
DBL001-G039-160831	Comp	SS		8/31/2016	0739	1	X	X											23
DBL001-G034-160831	Comp	SS		8/31/2016	0754	1	X	X											24
DBL001-G035-160831	Comp	SS		8/31/2016	0808	1	X	X											25
DBL001-G031-160831	Comp	SS		8/31/2016	0941	1	X	X											26
DBL001-G026-160831	Comp	SS		8/31/2016	0953	1	X	X											27
DBL001-G025-160831	Comp	SS		8/31/2016	1007	1	X	X											28
DBL001-G020-160831	Comp	SS		8/31/2016	1021	1	X	X											29
																			30

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: Report all concentrations on a wet & dry-weight basis

671 0133 3178
8101 0556 2710

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)
George Hagan III

Relinquished by: (Signature)
Ally Fuentes

Relinquished by: (Signature)

Date: 9/1/16
Time: 1640

Date: 9/1/16
Time: 1650

Date:

Received by: (Signature)
Ally Fuentes

Received by: (Signature)

Received for lab by: (Signature)
Ally Fuentes

Samples returned via: UPS
 FedEx Courier _____

Temp: Amb °C Bottles Received: 56-402

Date: 9/2/16 Time: 900

Hold #

Condition: (lab use only) *a*

COC Seal Intact: ___ Y ___ N ___ NA

pH Checked: NCF:

Company Name/Address:

McGinley and Associates

815 Maestro Drive
Reno, NV 89511

Billing Information:

Same

Report to:
Tony Dimpel

Email To:
tdimpel@mcgin.com

Project Description:
Ascente Project

City/State Collected:
Reno, NV

Phone: 775-829-2245
Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):
George Hagan III

Rush? (Lab MUST Be Notified)
 Same Day200%
 Next Day100%
 Two Day50%
 Three Day25%

Date Results Needed

Email? No Yes
 FAX? No Yes

No. of Cntrs

Analysis / Container / Preservative

Chain of Custody Page 4 of 5



YOUR LAB OF CHOICE
 12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



L # 857391

Table #

Acctnum: MCGINRNV

Template:

Prelogin:

TSR:

Cooler:

Shipped Via: Fedex

Rem./Contaminant Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS										
DBL001-G006-160831	Comp	SS		8/31/2016	1033	1	X	X										
DBL001-G005-160831	Comp	SS		8/31/2016	1046	1	X	X										31
DBL001-G004-160831	Comp	SS		8/31/2016	1058	1	X	X										32
DBL001-G011-160831	Comp	SS		8/31/2016	1110	1	X	X										33
DBL001-G012-160831	Comp	SS		8/31/2016	1122	1	X	X										34
DBL001-G019-160831	Comp	SS		8/31/2016	1134	1	X	X										35
DBL001-G030-160831	Comp	SS		8/31/2016	1238	1	X	X										36
DBL001-G024-160831	Comp	SS		8/31/2016	1248	1	X	X										37
DBL001-G018-160831	Comp	SS		8/31/2016	1259	1	X	X										38
DBL001-G003-160831	Comp	SS		8/31/2016	1315	1	X	X										39
																		40

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: Report all concentrations on a wet & dry-weight basis

6711 0133 3178
8101 0556 2710

pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: (Signature)
George Hagan III

Date: 9/1/16
 Time: 1640

Received by: (Signature)
Ally Kmetz

Samples returned via: UPS
 FedEx Courier _____

Hold #
 Condition: (lab use only)

Relinquished by: (Signature)
Ally Kmetz

Date: 9/1/16
 Time: 1650

Received by: (Signature)
Ally Kmetz

Temp: °C
 Bottles Received: 56-402

COC Seal Intact: Y N NA

Relinquished by: (Signature)

Date: _____
 Time: _____

Received for lab by: (Signature)
Ally Kmetz

Date: 9/2/16
 Time: 900

pH Checked: _____
 NCF: _____

Company Name/Address:

McGinley and Associates

815-Maestro Drive
Reno, NV 89511

Billing Information:

Same

Analysis / Container / Preservative

Chain of Custody Page 5 of 6



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Report to:
Tony Dimpel

Email To:
tdimpel@mcgin.com

Project Description:
Ascente Project

City/State Collected:
Reno, NV

Phone: 775-829-2245
Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):

George Hagan III

Rush? (Lab MUST Be Notified)

___ Same Day200%
___ Next Day100%
___ Two Day50%
___ Three Day25%

Date Results Needed

Email? ___ No Yes
FAX? ___ No ___ Yes

No. of Cntrs

Immediately Packed on Ice N Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS
DBL001-G002-160831	Comp	SS		8/31/2016	1327	1	X	X
DBL001-G009-160831	Comp	SS		8/31/2016	1341	1	X	X
DBL001-G010-160831	Comp	SS		8/31/2016	1354	1	X	X
DBL001-G017-160831	Comp	SS		8/31/2016	1407	1	X	X
DBL001-G023-160831	Comp	SS		8/31/2016	1419	1	X	X
DBL001-G029-160831	Comp	SS		8/31/2016	1431	1	X	X
DBL001-G001-160831	Comp	SS		8/31/2016	1512	1	X	X
DBL001-G016-160831	Comp	SS		8/31/2016	1531	1	X	X
DBL001-G015-160831	Comp	SS		8/31/2016	1543	1	X	X
DBL001-G021-160831	Comp	SS		8/31/2016	1559	1	X	X

L # *8Y7397*

Table #

Acctnum: **MCGINRNV**

Template:

Prelogin:

TSR:

Cooler:

Shipped Via: **Fedex**

Rem./Contaminant Sample # (lab only)

41
42
43
44
45
46
47
48
49
50

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks: **Report all concentrations on a wet & dry-weight basis**

6711 6133 3178
8101 0556 2710

Relinquished by: (Signature)

George Hagan III

Date:

9/1/16

Time:

1640

Received by: (Signature)

ally mites

Samples returned via: UPS

FedEx Courier _____

Hold #

Condition: (lab use only)

Relinquished by: (Signature)

ally mites

Date:

9/1/16

Time:

1650

Received by: (Signature)

Temp: °C Bottles Received:

Amb *56-402*

COC Seal Intact: ___ Y ___ N ___ NA

Relinquished by: (Signature)

ally mites

Date:

9/2/16

Time:

9W

Received for lab by: (Signature)

Date: _____ Time: _____

pH Checked:

NCF:

Company Name/Address:
McGinley and Associates
 815 Maestro Drive
 Reno, NV 89511

Billing Information:
Same

Analysis / Container / Preservative



YOUR LAB OF CHOICE

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Report to:
Tony Dimpel

Email To:
tdimpel@mcgin.com

Project Description:
Ascente Project

City/State Collected:
Reno, NV

Phone: **775-829-2245**
 Fax:


Client Project #
DBL001

Lab Project #

Collected by (print):
George Hagan III

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):

 Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
 Same Day200%
 Next Day100%
 Two Day50%
 Three Day25%

Date Results Needed
 Email? No Yes
 FAX? No Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS										
DBL001-G022-160831	Comp	SS		08/31/16	1610	1	X	X										51
DBL001-G028-160831	Comp	SS		08/31/16	1622	1	X	X										52
DBL001-G027-160831	Comp	SS		08/31/16	1634	1	X	X										53
DBL001-G033-160831	Comp	SS		08/31/16	1647	1	X	X										54
DBL001-G032-160831	Comp	SS		08/31/16	1703	1	X	X										55
DBL001-G038-160831	Comp	SS		08/31/16	1715	1	X	X										56
	Comp	SS				1	X	X										57
	Comp	SS				1	X	X										58
	Comp	SS				1	X	X										59
	Comp	SS				1	X	X										60

L# **95734**

Table #

Acctnum: **MCGINRNV**

Template:

Prelogin:

TSR:

Cooler:

Shipped Via: **Fedex**

Rem./Contaminant Sample # (lab only)

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

6711 0133 3178
 8101 0552 2710

pH _____ Temp _____
 Flow _____ Other _____


Remarks: **Report all concentrations on a wet & dry-weight basis**

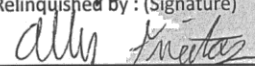
Hold #

Condition: (lab use only)

COC Seal Intact: Y N NA

pH Checked: NCF:

Relinquished by: (Signature)



Relinquished by: (Signature)


Relinquished by: (Signature)

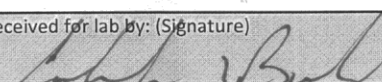
Date: 9/1/16 Time: 1640

Date: 9/1/16 Time: 1650

Date: Time:

Received by: (Signature)


Received by: (Signature)

Received for lab by: (Signature)


Samples returned via: UPS
 FedEx Courier _____

Temp: _____ °C Bottles Received: **56-402**

Date: 9/2/16 Time: 9:00



L · A · B · S · C · I · E · N · C · E · S

YOUR LAB OF CHOICE

Cooler Receipt Form

Client:	McGIRW	SDG#	957397
Cooler Received/Opened On:	9/2/16	Temperature Upon Receipt:	Amb °c
Received By:	Caleb Busby		
Signature:	Caleb Busby		
Receipt Check List			
	Yes	No	N/A
Were custody seals on outside of cooler and intact?			X
Were custody papers properly filled out?	X		
Did all bottles arrive in good condition?	X		
Were correct bottles used for the analyses requested?	X		
Was sufficient amount of sample sent in each bottle?	X		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			X
If applicable, was an observable VOA headspace present?			X
Non Conformance Generated. (If yes see attached NCF)			

McGinley & Assoc. - Reno, NV

Sample Delivery Group: L857573
Samples Received: 09/03/2016
Project Number: DBL001
Description: Ascente Project
Site: DBL001
Report To: Tony Dimpel
815 Maestro Drive
Reno, NV 89511

Entire Report Reviewed By:



Shane Gambill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	4
⁴Cn: Case Narrative	9
⁵Sr: Sample Results	10
DBL001-G066-160901 L857573-01	10
DBL001-G059-160901 L857573-02	11
DBL001-G046-160901 L857573-03	12
DBL001-G047-160901 L857573-04	13
DBL001-G053-160901 L857573-05	14
DBL001-G060-160901 L857573-06	15
DBL001-G067-160901 L857573-07	16
DBL001-G068-160901 L857573-08	17
DBL001-G069-160901 L857573-09	18
DBL001-G061-160901 L857573-10	19
DBL001-G062-160901 L857573-11	20
DBL001-G063-160901 L857573-12	21
DBL001-G064-160901 L857573-13	22
DBL001-G058-160901 L857573-14	23
DBL001-G057-160901 L857573-15	24
DBL001-G051-160901 L857573-16	25
DBL001-G056-160901 L857573-17	26
DBL001-G055-160901 L857573-18	27
DBL001-G054-160901 L857573-19	28
DBL001-G048-160901 L857573-20	29
DBL001-G043-160901 L857573-21	30
DBL001-G036-160901 L857573-22	31
DBL001-G050-160902 L857573-23	32
DBL001-G049-160902 L857573-24	33
DBL001-G044-160902 L857573-25	34
DBL001-G045-160902 L857573-26	35
DBL001-G040-160902 L857573-27	36
DBL001-G037-160902 L857573-28	37
DBL001-G013-160902 L857573-29	38
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⁶Qc: Quality Control Summary	42
Total Solids by Method 2540 G-2011	42





Metals (ICP) by Method 6010B	46
⁷ Gl: Glossary of Terms	48
⁸ Al: Accreditations & Locations	49
⁹ Sc: Chain of Custody	50



SAMPLE SUMMARY



DBL001-G066-160901 L857573-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:28	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 10:25

Received date/time
09/03/16 09:00

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

DBL001-G059-160901 L857573-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:41	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 10:40

Received date/time
09/03/16 09:00

DBL001-G046-160901 L857573-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:44	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 10:57

Received date/time
09/03/16 09:00

DBL001-G047-160901 L857573-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:52	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 11:13

Received date/time
09/03/16 09:00

DBL001-G053-160901 L857573-05 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:55	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 11:28

Received date/time
09/03/16 09:00

DBL001-G060-160901 L857573-06 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 15:58	ST
Total Solids by Method 2540 G-2011	WG905424	1	09/06/16 15:28	09/06/16 15:36	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 11:44

Received date/time
09/03/16 09:00

DBL001-G067-160901 L857573-07 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:00	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by
Kyle Dimpel

Collected date/time
09/01/16 11:59

Received date/time
09/03/16 09:00

SAMPLE SUMMARY



DBL001-G068-160901 L857573-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:03	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 12:16
 Received date/time 09/03/16 09:00

1 Cp

2 Tc

3 Ss

DBL001-G069-160901 L857573-09 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:06	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 12:35
 Received date/time 09/03/16 09:00

4 Cn

5 Sr

6 Qc

DBL001-G061-160901 L857573-10 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:09	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 13:33
 Received date/time 09/03/16 09:00

7 Gl

8 Al

9 Sc

DBL001-G062-160901 L857573-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:11	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 13:48
 Received date/time 09/03/16 09:00

DBL001-G063-160901 L857573-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:14	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 14:04
 Received date/time 09/03/16 09:00

DBL001-G064-160901 L857573-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:17	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 14:17
 Received date/time 09/03/16 09:00

DBL001-G058-160901 L857573-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:25	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 14:34
 Received date/time 09/03/16 09:00

SAMPLE SUMMARY



DBL001-G057-160901 L857573-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:28	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 14:48
 Received date/time 09/03/16 09:00

1 Cp

2 Tc

3 Ss

DBL001-G051-160901 L857573-16 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:31	ST
Total Solids by Method 2540 G-2011	WG905425	1	09/06/16 12:36	09/06/16 12:42	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 15:03
 Received date/time 09/03/16 09:00

4 Cn

5 Sr

6 Qc

DBL001-G056-160901 L857573-17 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:34	ST
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 15:15
 Received date/time 09/03/16 09:00

7 Gl

8 Al

9 Sc

DBL001-G055-160901 L857573-18 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:37	ST
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 15:33
 Received date/time 09/03/16 09:00

DBL001-G054-160901 L857573-19 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:39	ST
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 15:48
 Received date/time 09/03/16 09:00

DBL001-G048-160901 L857573-20 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905582	1	09/07/16 09:55	09/07/16 16:42	ST
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 16:32
 Received date/time 09/03/16 09:00

DBL001-G043-160901 L857573-21 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 12:47	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 16:45
 Received date/time 09/03/16 09:00

SAMPLE SUMMARY



DBL001-G036-160901 L857573-22 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 12:49	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/01/16 17:03
 Received date/time 09/03/16 09:00

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

DBL001-G050-160902 L857573-23 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 12:52	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 09:25
 Received date/time 09/03/16 09:00

DBL001-G049-160902 L857573-24 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 12:55	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 09:39
 Received date/time 09/03/16 09:00

DBL001-G044-160902 L857573-25 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:03	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 09:54
 Received date/time 09/03/16 09:00

DBL001-G045-160902 L857573-26 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:06	LTB
Total Solids by Method 2540 G-2011	WG905426	1	09/06/16 12:26	09/06/16 12:34	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 10:11
 Received date/time 09/03/16 09:00

DBL001-G040-160902 L857573-27 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:09	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 10:25
 Received date/time 09/03/16 09:00

DBL001-G037-160902 L857573-28 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:12	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL

Collected by Kyle Dimpel
 Collected date/time 09/02/16 10:41
 Received date/time 09/03/16 09:00

SAMPLE SUMMARY



DBL001-G013-160902 L857573-29 Solid

Collected by
Kyle Dimpel Collected date/time
09/02/16 11:28 Received date/time
09/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:14	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL

1
Cp

2
Tc

3
Ss

DBL001-G007-160902 L857573-30 Solid

Collected by
Kyle Dimpel Collected date/time
09/02/16 11:46 Received date/time
09/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:17	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL

4
Cn

5
Sr

6
Qc

DBL001-G008-160902 L857573-31 Solid

Collected by
Kyle Dimpel Collected date/time
09/02/16 12:01 Received date/time
09/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 13:20	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL

7
Gl

8
Al

9
Sc

DBL001-G014-160902 L857573-32 Solid

Collected by
Kyle Dimpel Collected date/time
09/02/16 12:06 Received date/time
09/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG905974	1	09/08/16 09:17	09/08/16 12:07	LTB
Total Solids by Method 2540 G-2011	WG905427	1	09/06/16 13:37	09/06/16 13:46	MEL



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 15:36	WG905424

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.9		0.192	0.504	1	09/07/2016 15:28	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 15:36	WG905424

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.6		0.192	0.505	1	09/07/2016 15:41	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.5		1	09/06/2016 15:36	WG905424

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.56		0.193	0.508	1	09/07/2016 15:44	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 15:36	WG905424

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.2		0.192	0.505	1	09/07/2016 15:52	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	09/06/2016 15:36	WG905424

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.2		0.193	0.507	1	09/07/2016 15:55	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 15:36	WG905424

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	16.3		0.193	0.507	1	09/07/2016 15:58	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.4		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.8		0.193	0.508	1	09/07/2016 16:00	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.1		0.193	0.507	1	09/07/2016 16:03	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.2		0.192	0.506	1	09/07/2016 16:06	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.3		0.192	0.506	1	09/07/2016 16:09	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	15.8		0.192	0.506	1	09/07/2016 16:11	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	15.6		0.192	0.506	1	09/07/2016 16:14	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	18.1		0.192	0.505	1	09/07/2016 16:17	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.4		1	09/06/2016 12:42	WG905425

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	17.7		0.193	0.508	1	09/07/2016 16:25	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 12:42	WG905425

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.6		0.192	0.506	1	09/07/2016 16:28	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 12:42	WG905425

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	18.4		0.192	0.505	1	09/07/2016 16:31	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.4		0.192	0.505	1	09/07/2016 16:34	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.6		0.192	0.506	1	09/07/2016 16:37	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.1		0.192	0.506	1	09/07/2016 16:39	WG905582

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	09/06/2016 12:34	WG905426

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.4		0.192	0.504	1	09/07/2016 16:42	WG905582

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.29		0.192	0.505	1	09/08/2016 12:47	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 12:34	WG905426

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.0		0.192	0.505	1	09/08/2016 12:49	WG905974

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.3		0.194	0.509	1	09/08/2016 12:52	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.0		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.9		0.192	0.505	1	09/08/2016 12:55	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.70		0.192	0.506	1	09/08/2016 13:03	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	09/06/2016 12:34	WG905426

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.1		0.192	0.506	1	09/08/2016 13:06	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	09/06/2016 13:46	WG905427

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.7		0.192	0.507	1	09/08/2016 13:09	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	09/06/2016 13:46	WG905427

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.7		0.192	0.505	1	09/08/2016 13:12	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.0		1	09/06/2016 13:46	WG905427

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.4		0.194	0.510	1	09/08/2016 13:14	WG905974

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.5		1	09/06/2016 13:46	WG905427

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.5		0.193	0.508	1	09/08/2016 13:17	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	09/06/2016 13:46	WG905427

1 Cp

2 Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	13.0		0.191	0.504	1	09/08/2016 13:20	WG905974

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.9		1	09/06/2016 13:46	WG905427

¹ Cp

² Tc

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	18.2		0.192	0.505	1	09/08/2016 12:07	WG905974

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3161817-1 09/06/16 15:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

¹Cp

²Tc

³Ss

L857573-01 Original Sample (OS) • Duplicate (DUP)

(OS) L857573-01 09/06/16 15:36 • (DUP) R3161817-3 09/06/16 15:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	99.2	99.2	1	0.0717		5

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R3161817-2 09/06/16 15:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3161741-1 09/06/16 12:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00110			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L857573-07 Original Sample (OS) • Duplicate (DUP)

(OS) L857573-07 09/06/16 12:42 • (DUP) R3161741-3 09/06/16 12:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.4	98.6	1	0.130		5

Laboratory Control Sample (LCS)

(LCS) R3161741-2 09/06/16 12:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	



Method Blank (MB)

(MB) R3161740-1 09/06/16 12:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000800			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L857573-17 Original Sample (OS) • Duplicate (DUP)

(OS) L857573-17 09/06/16 12:34 • (DUP) R3161740-3 09/06/16 12:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	99.0	99.1	1	0.0109		5

⁷ Gl

⁸ Al

Laboratory Control Sample (LCS)

(LCS) R3161740-2 09/06/16 12:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

⁹ Sc



Method Blank (MB)

(MB) R3161745-1 09/06/16 13:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000700			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L857453-04 Original Sample (OS) • Duplicate (DUP)

(OS) L857453-04 09/06/16 13:46 • (DUP) R3161745-3 09/06/16 13:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	77.6	78.4	1	1.06		5

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3161745-2 09/06/16 13:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

⁹Sc



Method Blank (MB)

(MB) R3161992-1 09/07/16 15:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Lead	U		0.19	0.500

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3161992-2 09/07/16 15:23 • (LCSD) R3161992-3 09/07/16 15:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Lead	100	104	100	104	100	80-120			4	20

L857573-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857573-01 09/07/16 15:28 • (MS) R3161992-6 09/07/16 15:36 • (MSD) R3161992-7 09/07/16 15:38

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Lead	101	11.9	116	115	103	102	1	75-125			1	20

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3162161-1 09/08/16 11:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Lead	U		0.19	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3162161-2 09/08/16 12:01 • (LCSD) R3162161-3 09/08/16 12:04

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Lead	100	111	109	111	109	80-120			1	20

L857573-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857573-32 09/08/16 12:07 • (MS) R3162161-6 09/08/16 12:15 • (MSD) R3162161-7 09/08/16 12:17

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	101	18.2	125	113	106	94	1	75-125			10	20

⁷Gl

⁸Al

⁹Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
-----------	-------------

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

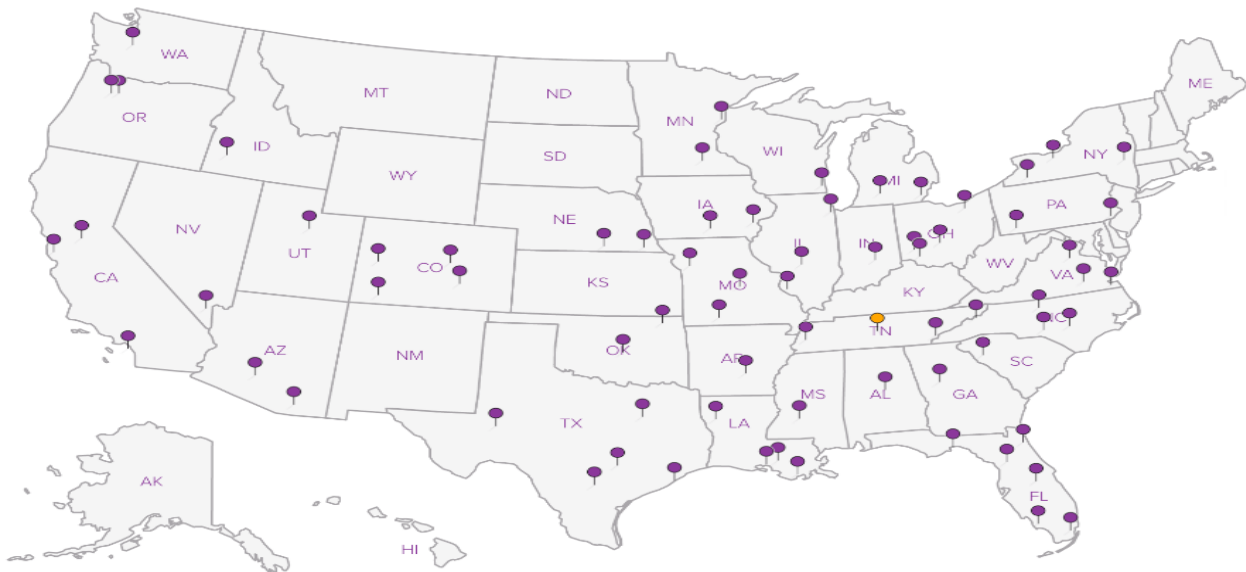
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Company Name/Address:
McGinley and Associates
 815 Maestro Drive
 Reno, NV 89511

Billing Information:
Same

Analysis / Container / Preservative

Chain of Custody Page 3 of 4



L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Report to:
 Tony Dimpel

Email To:
 tdimpel@mcgin.com

Project Description:
 Ascente Project

City/State Collected:
Reno, NV

Phone: **775-829-2245**
 Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
Kyle Dimpel

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):
 Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
 ___ Same Day200%
 ___ Next Day100%
 ___ Two Day50%
 ___ Three Day25%

Date Results Needed
 Email? ___ No Yes
 FAX? ___ No ___ Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS										
DBL001-G043-160901	Comp	SS		160901	1645	1	X	X										
DBL001-G036-160901	Comp	SS		160901	1703	1	X	X										21
DBL001-G050-160902	Comp	SS		160902	0925	1	X	X										22
DBL001-G049-160902	Comp	SS		160902	0939	1	X	X										23
DBL001-G044-160902	Comp	SS		160902	0954	1	X	X										24
DBL001-G045-160902	Comp	SS		160902	1011	1	X	X										25
DBL001-G040-160902	Comp	SS		160902	1025	1	X	X										26
DBL001-G037-160902	Comp	SS		160902	1041	1	X	X										27
DBL001-G013-160902	Comp	SS		160902	1128	1	X	X										28
DBL001-G007-160902	Comp	SS		160902	1146	1	X	X										29
																		30

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
 Flow _____ Other _____

Remarks: **Report all concentrations on a wet & dry-weight basis**


Relinquished by: (Signature) <i>Kyle Dimpel</i>	Date: 9/2/16	Time: 1346	Received by: (Signature) <i>Ally Freitas</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: (lab use only) <i>ck 10</i>
Relinquished by: (Signature) <i>Ally Freitas</i>	Date: 9/2/16	Time: 1650	Received by: (Signature) <i>Munt</i>	Temp: °C <i>Amb</i> Bottles Received: <i>32=402</i>	COC Seal Intact: ___ Y ___ N ___ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9-3-16	Time: 0906

Company Name/Address:
McGinley and Associates
 815 Maestro Drive
 Reno, NV 89511

Billing Information:
Same


Analysis / Container / Preservative

Chain of Custody Page 4 of 4



YOUR LAB OF CHOICE

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Report to:
 Tony Dimpel

Email To:
 tdimpel@mcgin.com

Project Description:
 Ascente Project

City/State Collected:
Reno, NV

Phone: **775-829-2245**
 Fax:

Client Project #
DBL001

Lab Project #

Collected by (print):
Kyle Dimpel

Site/Facility ID #
DBL001

P.O. #

Collected by (signature):
 Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
 ___ Same Day200%
 ___ Next Day100%
 ___ Two Day50%
 ___ Three Day25%

Date Results Needed
 Email? ___ No Yes
 FAX? ___ No ___ Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Lead	TS										
DBL001-G008-160902	Comp	SS		160902	1201	1	X	X										
DBL001-G014-160902	Comp	SS		160902	1206	1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										
	Comp	SS				1	X	X										

L# **L857673**

Table #

Acctnum: **MCGINRV**

Template:

Prelogin:

TSR:

Cooler:

Shipped Via: **Fedex**

Rem./Contaminant	Sample # (lab only)
	31
	32

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
 Flow _____ Other _____

Remarks: **Report all concentrations on a wet & dry-weight basis**

Relinquished by: (Signature)
Kyle Dimpel

Relinquished by: (Signature)
Ally Fuentes

Relinquished by: (Signature)

Date: **9/2/16**
 Date: **9/2/16**
 Date:

Time: **1340**
 Time: **1630**
 Time:

Received by: (Signature)
Ally Fuentes

Received by: (Signature)

Received for lab by: (Signature)

Samples returned via: UPS
 FedEx Courier _____

Temp: **Amb** °C Bottles Received:

Date: _____ Time: **0910**

Hold #

Condition: (lab use only)
CS10

COC Seal Intact: ___ Y ___ N ___ NA

pH Checked: _____ NCF: _____

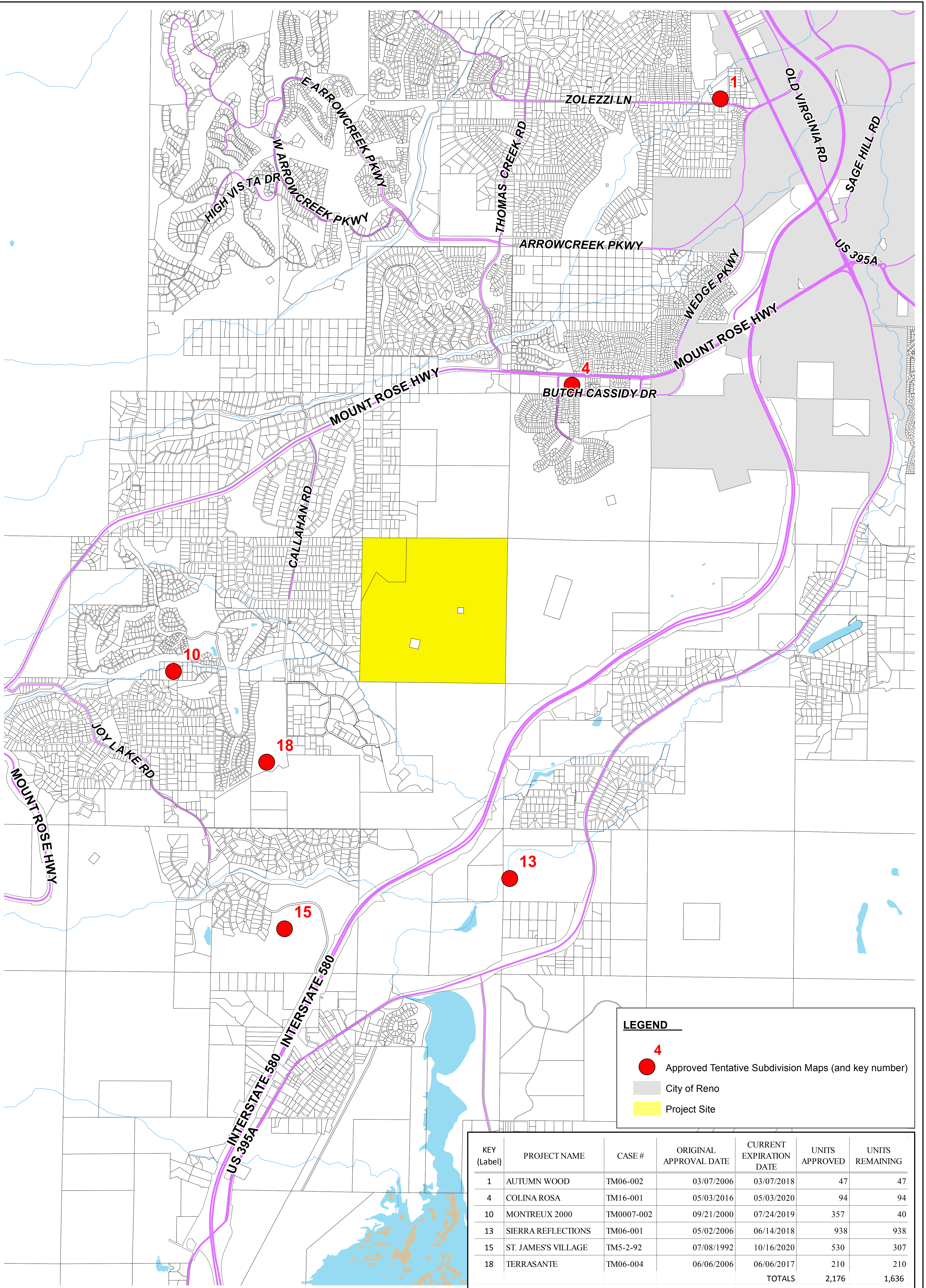


YOUR LAB OF CHOICE

Cooler Receipt Form

Client:	MCGZNRNV	SDG#	L857573
Cooler Received/Opened On:	9/3 /2016	Temperature Upon Receipt:	AMB °c
Received By: Michael Witherspoon			
Signature: <i>M. Witherspoon</i>			

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			<input checked="" type="checkbox"/>
Were custody papers properly filled out?	<input checked="" type="checkbox"/>		
Did all bottles arrive in good condition?	<input checked="" type="checkbox"/>		
Were correct bottles used for the analyses requested?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent in each bottle?	<input checked="" type="checkbox"/>		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			<input checked="" type="checkbox"/>
If applicable, was an observable VOA headspace present?			<input checked="" type="checkbox"/>
Non Conformance Generated. (If yes see attached NCF)			<input checked="" type="checkbox"/>



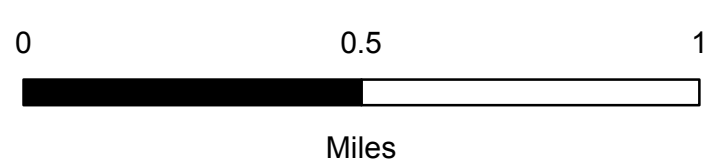
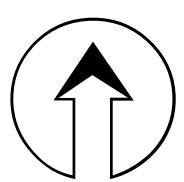
LEGEND

- **4** Approved Tentative Subdivision Maps (and key number)
- City of Reno
- Project Site

KEY (Label)	PROJECT NAME	CASE #	ORIGINAL APPROVAL DATE	CURRENT EXPIRATION DATE	UNITS APPROVED	UNITS REMAINING
1	AUTUMN WOOD	TM06-002	03/07/2006	03/07/2018	47	47
4	COLINA ROSA	TM16-001	05/03/2016	05/03/2020	94	94
10	MONTREUX 2000	TM0007-002	09/21/2000	07/24/2019	357	40
13	SIERRA REFLECTIONS	TM06-001	05/02/2006	06/14/2018	938	938
15	ST. JAMES'S VILLAGE	TM5-2-92	07/08/1992	10/16/2020	530	307
18	TERRASANTE	TM06-004	06/06/2006	06/06/2017	210	210
TOTALS					2,176	1,636

SOURCE: Community Services Department, Planning and Development Division

**Planning and Development
Community Services Department**



**Approved Residential Subdivisions
FAWN LANE VICINITY**

**WASHOE COUNTY
NEVADA**

Post Office Box 11130
Reno, Nevada 89520



December, 2016
(775) 328-3600

1

WHITNEY VILLAGE
17 LOTS

Sierra Village 65 Lots
Tioga Village 59 Lots
Donner Village 84 Lots
Whitney Village 17 Lots
TOTAL 225 Lots

	ENHANCED LANDSCAPE		SIDEWALK
	REVEGETATED LANDSCAPE		COS = COMMON OPEN SPACE
	NATIVE LANDSCAPE		PED/EQ = PEDESTRIAN/EQUESTRIAN TRAIL
	ROADS		PED ONLY = PEDESTRIAN ONLY TRAIL
			NOTEWORTHY CUT-CROPPING OR GROUP OF ROCKS
			TH = TRAILHEAD
			PROPOSED SEWER LIFT STATION

TIOGA VILLAGE
59 LOTS

SIERRA VILLAGE
65 LOTS

DONNER VILLAGE
84 LOTS

A.P.N. 150-090-09
SHTILER, SCOTT

A.P.N. 150-282-02
ELLS, BARREL & JANEY

A.P.N. 100-242-01
KINZ, KENNETH & SHERRY

A.P.N. 150-211-11
MATH, PAUL & MARJORIE

A.P.N. 150-481-21
LIL, W. ROSE, STATES LP

A.P.N. 045-274-04
ANTILAKOS, WOLFE, H. & B

A.P.N. 045-274-04
CORRAL, STEVEN & BARBARA

A.P.N. 045-274-04
BROCKMAN FAMILY TRUST

A.P.N. 045-274-04
MUNDOCAL, DENNER

A.P.N. 045-274-04
JONES, UNGO TRUST

A.P.N. 045-274-04
WICKSTEIN, BRAY & PATRICK

A.P.N. 045-274-04
TERRILL, STEPHEN

A.P.N. 045-274-04
SCARRO, JOSH & ROBBIE

A.P.N. 045-274-04
NETZEL, WILLIAM K. JR

A.P.N. 045-274-04
WOOD DRIVE (PUBLIC)

A.P.N. 045-274-04
SHAWINA LANE (PUBLIC)

A.P.N. 045-274-04
PATTI LANE (PRIVATE)

A.P.N. 045-274-04
MARTIN & AILE

A.P.N. 045-274-04
EVARTS, MELVIN

A.P.N. 045-274-04
JOHN & DEANNA

A.P.N. 045-274-04
LUCKETT, JEFFREY

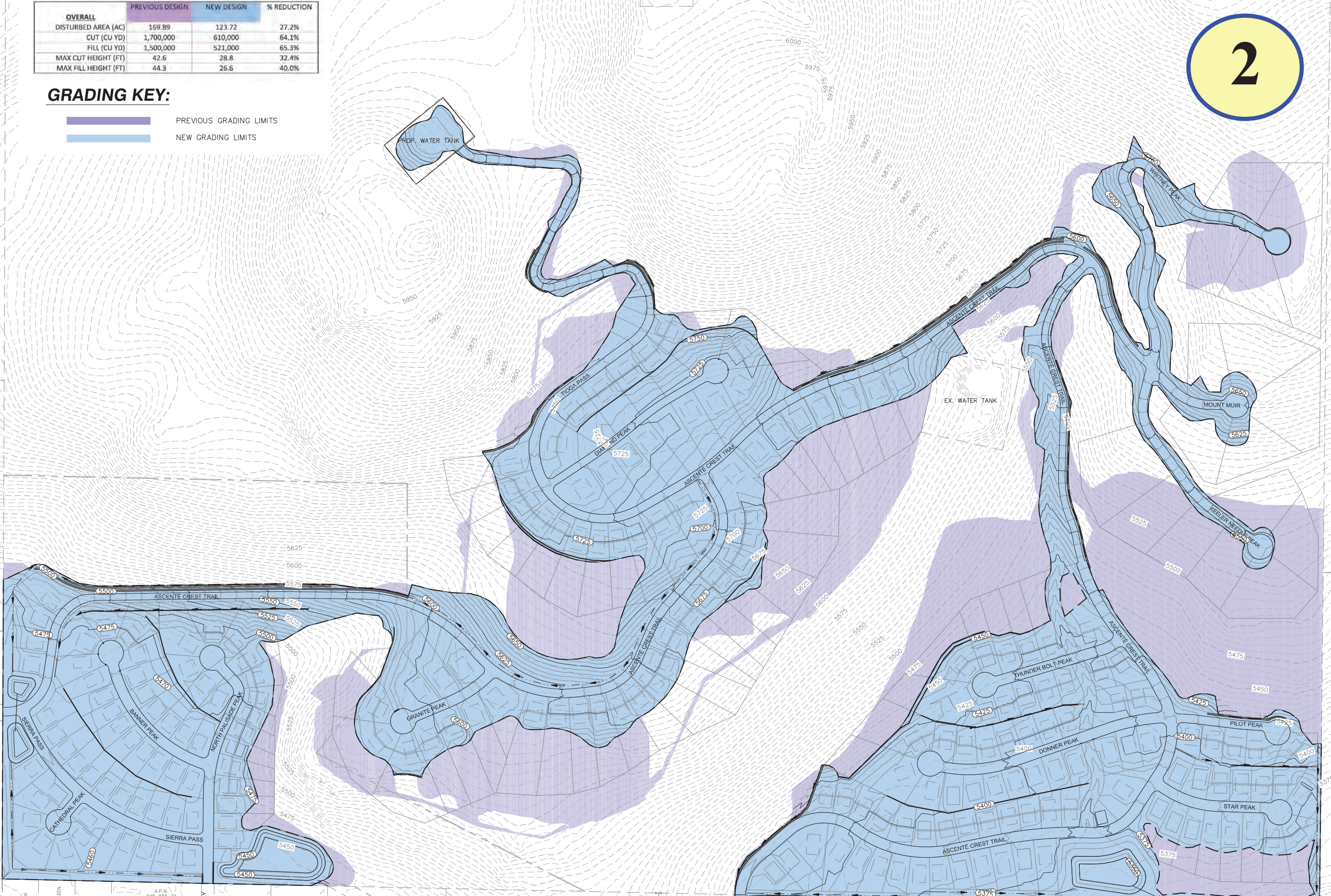
A.P.N. 045-274-04
MADSON FAMILY TRUST AGREEMENT

A.P.N. 045-274-04
HOFFMEYER, SCOTT & HARETTE

OVERALL	PREVIOUS DESIGN	NEW DESIGN	% REDUCTION
DISTURBED AREA (AC)	169.89	123.72	27.2%
CUT (CU YD)	1,700,000	610,000	64.1%
FILL (CU YD)	1,500,000	521,000	65.3%
MAX CUT HEIGHT (FT)	42.6	28.8	32.4%
MAX FILL HEIGHT (FT)	44.3	26.6	40.0%

GRADING KEY:

- PREVIOUS GRADING LIMITS
- NEW GRADING LIMITS



A.P.N. 150-090-09 SPITTLER & SCOTT

A.P.N. 150-242-02 L.S. DARREL & JANET

A.P.N. 150-242-01 L.S. KENNETH & SHERRY

FAWN LANE (PUBLIC)

A.P.N. 150-431-23 MOUNT ROOSE ESTATES LP

A.P.N. 045-555-08 WOOD, MICHAEL et al

A.P.N. 045-555-05 L. STEVEN & KATHLEEN

A.P.N. 045-555-03 DONALDSON, NEAL & SUSAN

A.P.N. 045-555-01 MUNGICAL, JENNIFER

A.P.N. 045-554-15 JONES LIVING TRUST

A.P.N. 045-554-14 SOLARO DAVID & MEGAN

A.P.N. 045-571-25 WORCESTER, BRIAN & PATRICIA

A.P.N. 045-571-40 DURHAM, STEPHEN

A.P.N. 045-582-31 DONALDSON, NEAL & SUSAN

A.P.N. 045-582-20 MORAN, MARTIN & JULIE

A.P.N. 045-582-32 EVARTE, MELVIN

A.P.N. 045-582-33 CONKLIN, OWEN & DEANNA

A.P.N. 045-690-27 HOFFMEYER, SCOTT & NANETTE

A.P.N. 045-UNITED OF A

A.P.N. 148-07 FUGUAY LA

proposed Roadway and Safety Improvements

3

New Fawn Lane/Mt. Rose Acceleration Lane

New Fawn Lane Traffic Calming

New Gated Emergency Vehicle Access

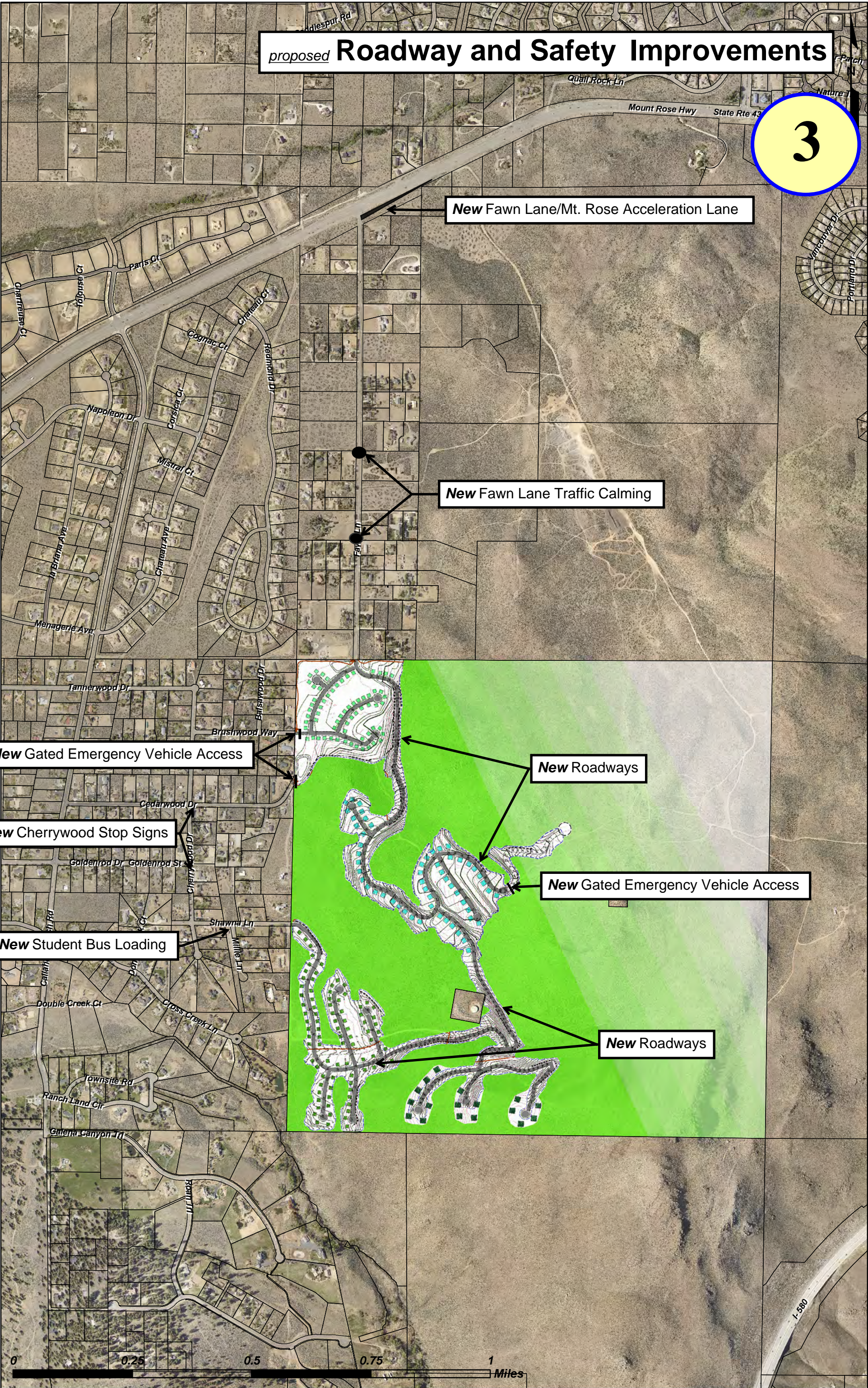
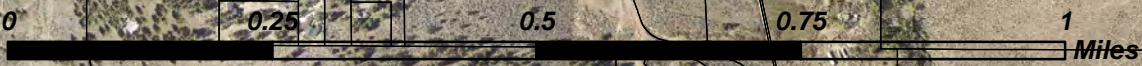
New Roadways

New Cherrywood Stop Signs

New Gated Emergency Vehicle Access

New Student Bus Loading

New Roadways



June 21, 2016

Symbio Development, LLC
6151 Lakeside Drive, Suite 1000
Reno, NV 89511

RE: Ascenté Community Information Meeting

This letter is provided as background information on drinking water issues for the Ascenté Community Information Meeting #1, scheduled for Saturday, June 25, 2016.

It is important to note that the Truckee Meadows Water Authority (TMWA) is a water purveyor, which is required to respond to developments approved by local governments. When, where and what type of growth occurs is solely within the land-use entitlement and planning functions of cities, counties and regional planning agencies. TMWA's water-supply planning is designed to facilitate delivery of safe and reliable water supplies, if and when land-use entitlements are granted. TMWA's integrated planning process ensures that long-term water resources, facility capacity and funding mechanisms are in place to meet current and future water supply and demand conditions.

TMWA took over the water system serving the Callahan Ranch area as of January 1, 2015. The water system was previously owned and operated by Washoe County. At TMWA, we recognized that we would need to implement programs to move treated surface water from the Truckee River and various creeks into the former Washoe County and STMGID systems due to their dependence upon groundwater and the continued decline in water levels aggravated by the ongoing drought. Please refer to "TMWA's Plan for Groundwater Sustainability on the Mt. Rose Fan" (copy attached) mailed to area residents in July of 2015.

Since taking over, TMWA has implemented new rules for water rights dedication to mitigate new groundwater pumping. The adopted rules, water rights dedication policies and Water Service Facility Charges for this area require developers to dedicate supplemental surface water supplies when dedicating groundwater for new service in the area. Supplemental surface water resources (Truckee River, Whites and Thomas Creeks) are a key component of the area's water resource management plan and are necessary to ensure a sustainable water supply for existing customers, domestic well owners and new development in the area.

Earlier this spring, TMWA completed construction of the **Arrowcreek / Mt. Rose Conjunctive-Use Phase 1 Facilities** as described in the Groundwater Sustainability Plan. These improvements are operational and have been delivering Truckee River water to the Callahan Ranch area as of about May 4, 2016. These improvements do not provide 100% of the water supply, but have allowed us to reduce pumping at several wells in the Arrowcreek and Mt. Rose water systems.

TMWA is also expanding its **Aquifer Storage and Recovery (ASR) Program** in the area. ASR occurs during the fall, winter and spring when water use in the community drops to approximately one-fourth of its peak summer usage, making Truckee River water available for recharge. ASR is the process of injecting treated surface water into the groundwater aquifer when the wells are not in use. The more water we can recharge and store during the off-peak season, the more water we will have available during the summer. It's like money in the bank.

*Truckee Meadows Water Authority is a not-for-profit, community-owned water utility,
overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.*

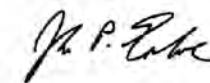
Recently, as part of the ASR program, TMWA performed rehabilitation work (preventive maintenance) on a well referred to as Tessa East, off of Napoleon Drive. TMWA had a drilling contractor working on the well for several weeks, but we did not deepen the well. In addition, we made improvements at the westernmost of the two wells (Tessa West) which will allow us to recharge the well with treated surface water this coming fall and winter. TMWA also reduced the pumping rate at the two Tessa wells by about 40% to further reduce local impacts to nearby domestic wells.

Future plans to bring supplemental surface water resources to the area as described in the Groundwater Sustainability Plan include a new water main along Arrowcreek Parkway, and construction of a small drinking water treatment plant off of Whites Creek. By expanding our ASR Program and supplementing the local groundwater supplies with Truckee River and creek water in the near future, TMWA's goal is to actually pump less groundwater from the Mt. Rose and Galena fan aquifer than we do today.

In regard to the proposed **Ascenté development, TMWA understands that Phase 1 will be less than 300 homes** and that groundwater rights are proposed to be dedicated to serve the Phase 1 project. The new rules for water rights dedication will mitigate new groundwater pumping from the development, and the groundwater sustainability improvements which TMWA is implementing will allow TMWA to recharge the wells and supplement the local groundwater supplies with Truckee River and creek water. **As a result, the project will have a net zero impact on the groundwater resources on an annual basis.**

Lastly, TMWA's policy is that "growth pays for growth." In practice, that means the service plans developed for growth do not negatively impact existing water users, and where practical, result in improvements to the water system as a whole. To that end, TMWA will require the Ascenté improvements to integrate with the existing water system in the Callahan Ranch area, and will require Ascenté to participate in TMWA's groundwater stabilization efforts and **fund their share of existing and future facilities** as described in this letter.

Sincerely,

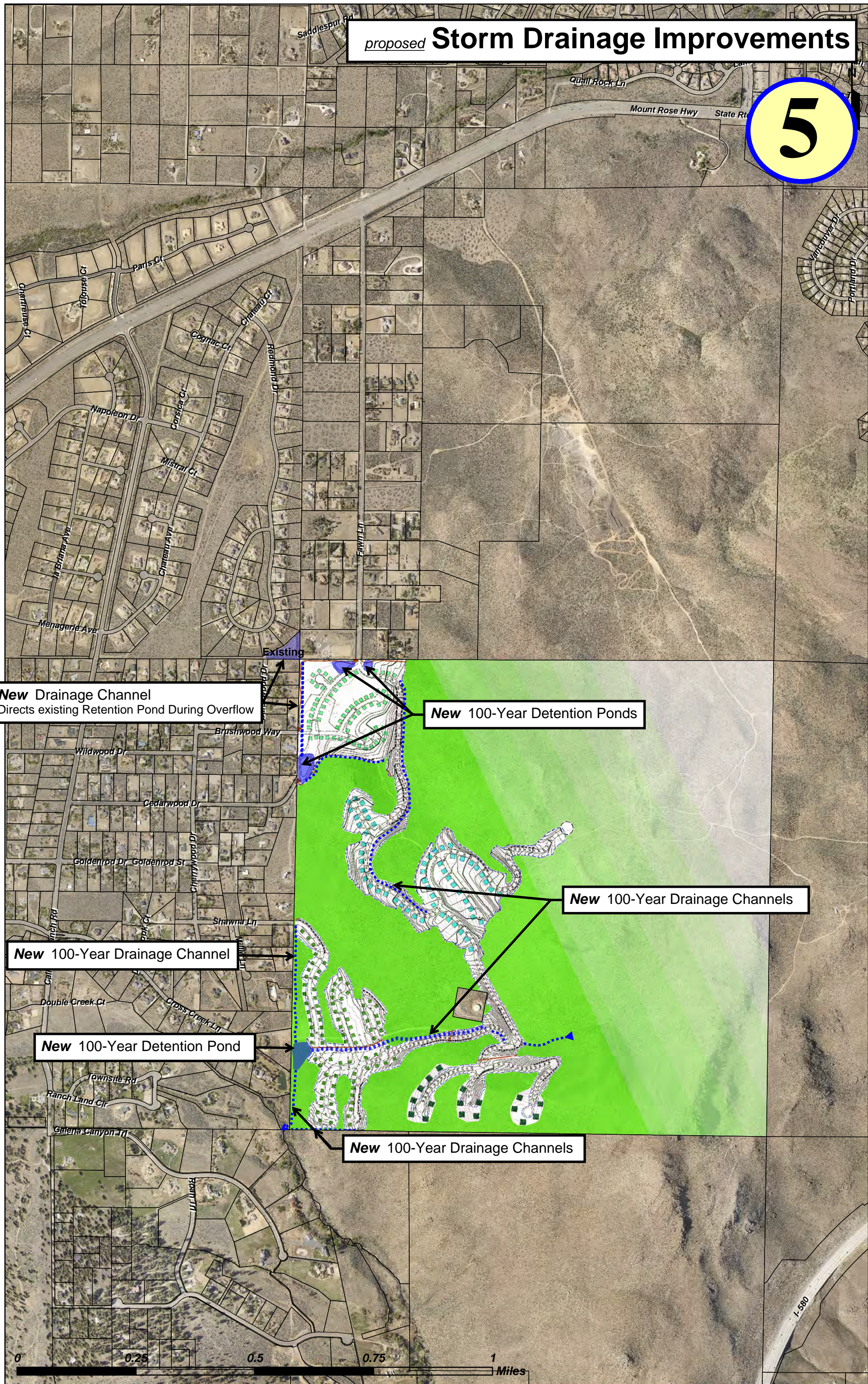


John P. Enloe, P.E.
Director, Natural Resources Planning and Management

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overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.*

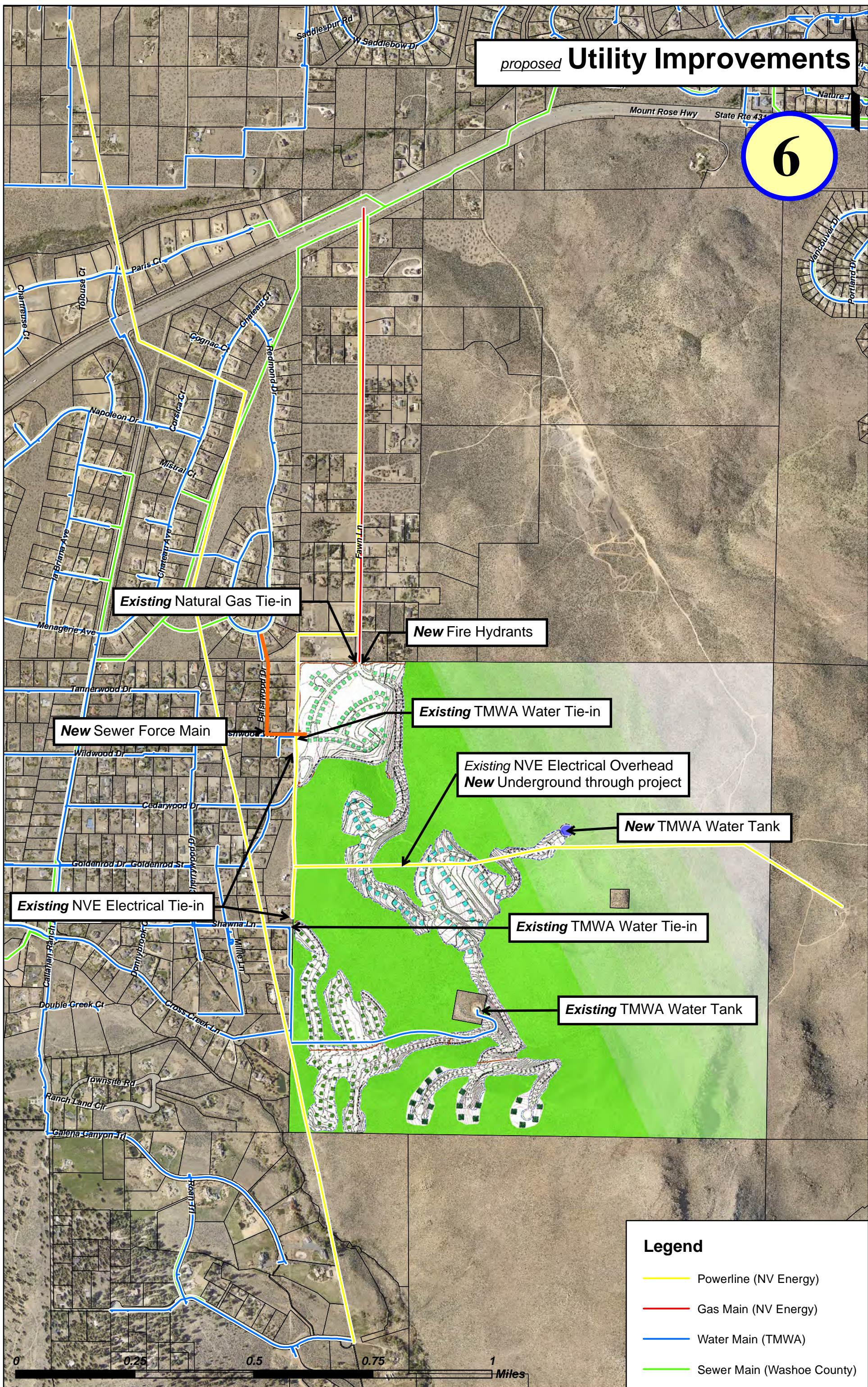
proposed **Storm Drainage Improvements**

5



proposed **Utility Improvements**

6



Existing Natural Gas Tie-in

New Fire Hydrants

New Sewer Force Main

Existing TMWA Water Tie-in

Existing NVE Electrical Overhead
New Underground through project

New TMWA Water Tank

Existing NVE Electrical Tie-in

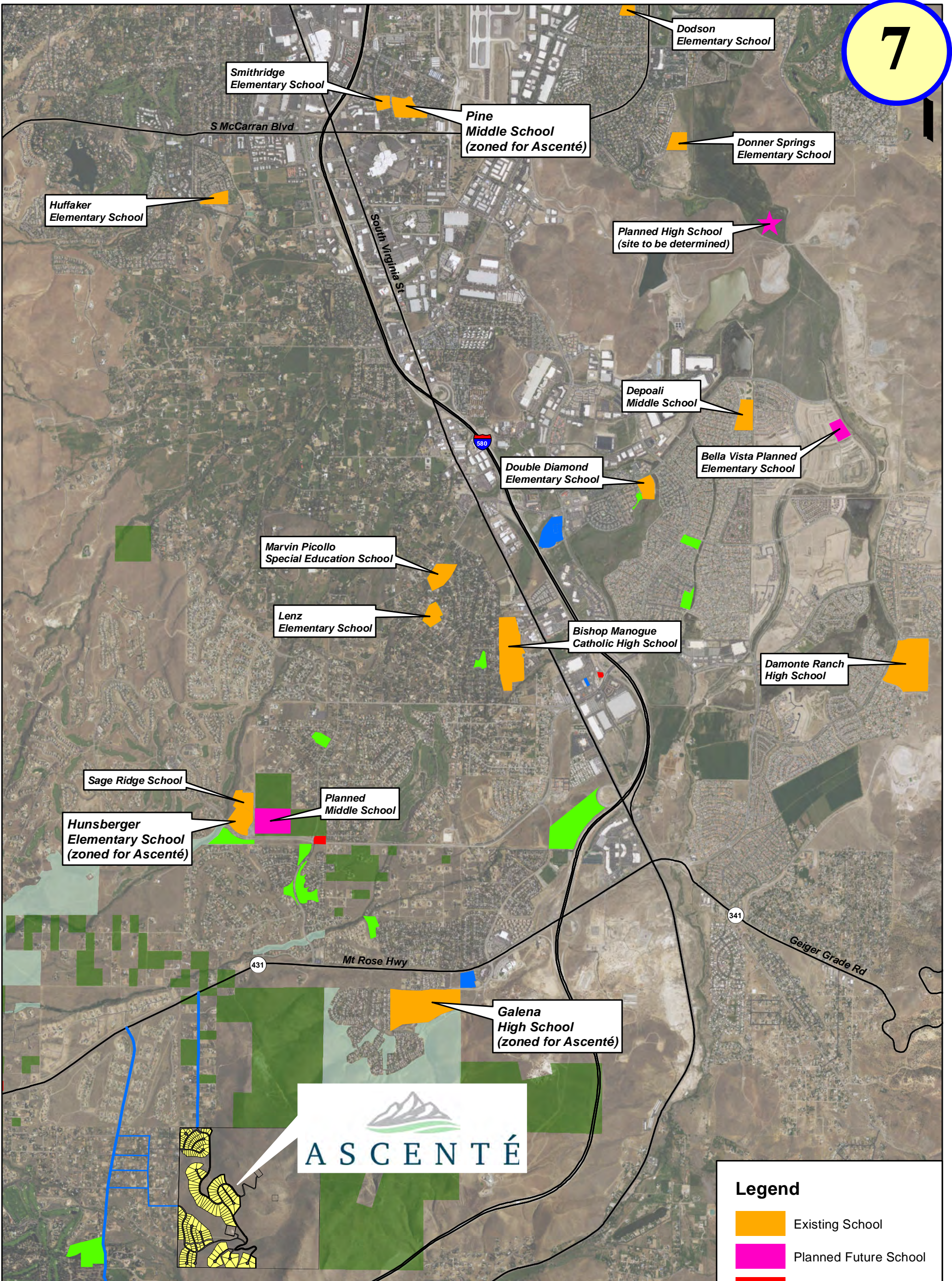
Existing TMWA Water Tie-in

Existing TMWA Water Tank

Legend

- Powerline (NV Energy)
- Gas Main (NV Energy)
- Water Main (TMWA)
- Sewer Main (Washoe County)

0 0.25 0.5 0.75 1 Miles



Legend

- Existing School
- Planned Future School
- Fire Station
- Urgent Care
- City/County Park
- Washoe County Parcel
- USFS Managed Land
- Collector, Existing
- Local Access

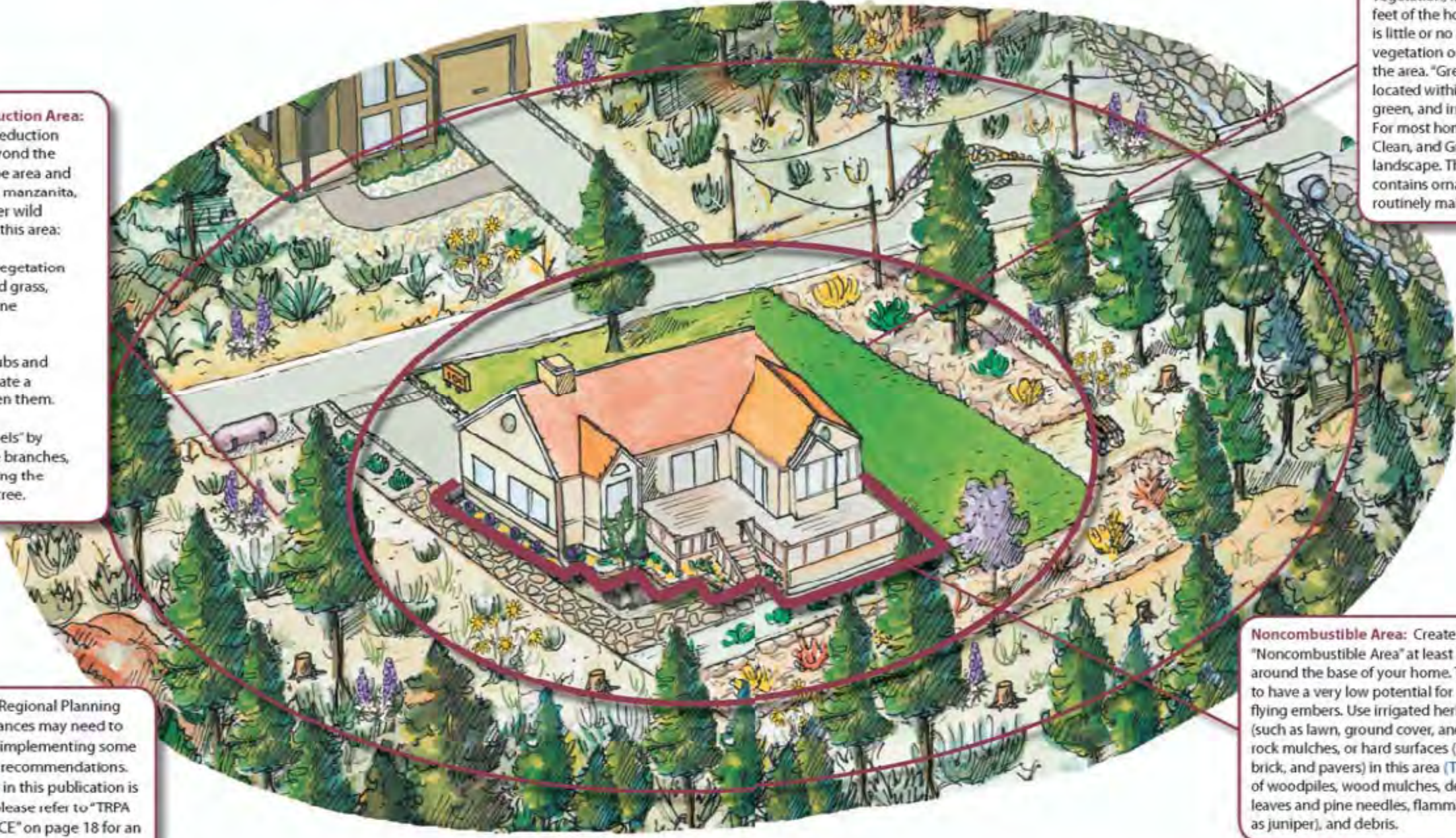
Ascenté Student Generation Projections									
Washoe County School District Data on Existing Student Capacity as of Oct. 1, 2016									
Information provided by: Mike Boster - School Planner 775-789-3810 (mboster@washoeschools.net)									
Ascenté Ph. 1 (225 Homes)			Student Generation by WCSD Public Schools						
School	Grades	Student Capacity w/Modular	Existing Students Oct. 1, 2016	Existing Capacity	Student Generation per Home	Ph. 1 Ascenté Students	Existing PLUS Ascenté Students	Existing PLUS Ascenté Capacity	
Hunsberger	Elementary	819	758	93%	0.149	34	61	792	97%
Pine	Middle	1,096	1,020	93%	0.046	10	Total	1,030	94%
Galena	High	1,692	1,450	86%	0.075	17	Students	1,467	87%

Defensible Space Zone

Wildland Fuel Reduction Area: The Wildland Fuel Reduction Area usually lies beyond the residential landscape area and is where sagebrush, manzanita, Jeffrey pine, and other wild plants grow. Within this area:

- Remove all dead vegetation (dead shrubs, dried grass, fallen branches, pine needles, etc.).
- Thin out thick shrubs and trees (TRPA) to create a separation between them.
- Remove "ladder fuels" by removing low tree branches, removing or pruning the shrubs under the tree.

Lean, Clean, and Green Area: For a distance of at least 30 feet from the home, there should be a "Lean, Clean, and Green Area." "Lean" indicates that only a small amount of flammable vegetation, if any, is present within 30 feet of the house. "Clean" means there is little or no accumulation of dead vegetation or flammable debris within the area. "Green" requires that plants located within this area are kept healthy, green, and irrigated during fire season. For most homeowners, the Lean, Clean, and Green Area is the residential landscape. This area often has irrigation, contains ornamental plants, and is routinely maintained.



Please Note: Tahoe Regional Planning Agency (TRPA) ordinances may need to be considered when implementing some of the Living With Fire recommendations. If a recommendation in this publication is followed by (TRPA), please refer to "TRPA and DEFENSIBLE SPACE" on page 18 for an explanation.

Noncombustible Area: Create a "Noncombustible Area" at least 5 feet wide around the base of your home. This area needs to have a very low potential for ignition from flying embers. Use irrigated herbaceous plants (such as lawn, ground cover, and flowers) (TRPA), rock mulches, or hard surfaces (such as concrete, brick, and pavers) in this area (TRPA). Keep it free of woodpiles, wood mulches, dead plants, dried leaves and pine needles, flammable shrubs (such as juniper), and debris.

proposed Trail and Sidewalk Improvements

9

