



Board of Adjustment Staff Report

Meeting Date: December 5, 2019

Agenda Item: 8C

SPECIAL USE PERMIT CASE NUMBER: WSUP19-0020 (Mt. Rose Expansion)

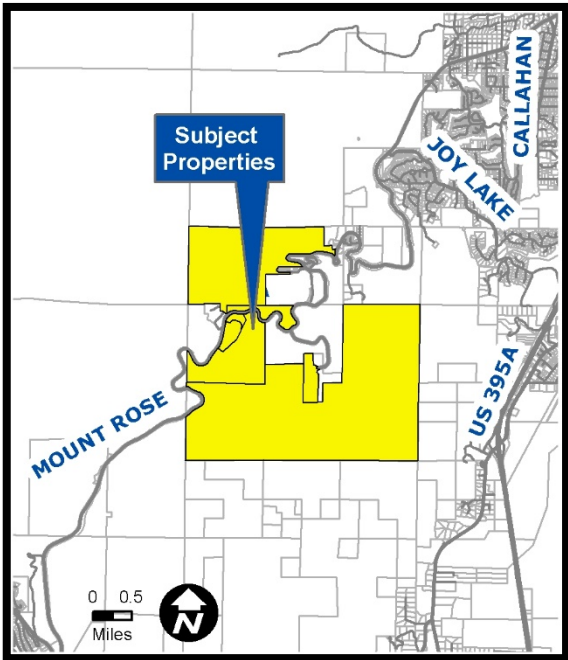
BRIEF SUMMARY OF REQUEST: Improvements to the Mt. Rose Ski Resort

STAFF PLANNER: Chris Bronczyk;
 Sophia Kirschenman
 Phone Number: 775.328.3612
 E-mail: cbronczyk@washoecounty.us;
skirschenman@washoecounty.us

CASE DESCRIPTION

For possible action, hearing, and discussion of a special use permit for improvements to Mt. Rose Ski Tahoe ski resort. In order to accommodate specific improvements within the resort area the applicant is requesting to vary several grading standards. Project elements include replacing and expanding a maintenance building; building a first aid and ski patrol station; expanding the existing Winters Creek Lodge; and repurposing several existing buildings. The proposal includes the excavation of ±9,900 cubic yards of earthen material, and disturbance of a ±3-acre area. The total amount of cut, fill and disturbed area includes impacts associated with the construction of a 5 million gallon snowmaking water tank, which is being considered under a separate special use permit application, WSUP19-0021. The subject site is located on privately-owned lands and lands owned by the United States Forest Service (USFS). The USFS has recently completed a final environmental impact statement (EIS) for the proposed expansion.

Applicant:	Mt. Rose Development Company
Property Owners:	Mt. Rose Development Company and US Forest Service
Location:	Main access to the site is ±11.4 miles from the intersection of Mt. Rose Hwy and Thomas Creek Rd.
APNs and Parcel Sizes:	048-112-12: ±340.9 acres; 048-112-13: ±41.4 acres; 048-112-14: ±15.9 acres; 048-112-15: ±67.68 acres; 048-050-11: ±945.3 acres; 048-111-11: ±68.3 acres; 048-120-22: 2551.6 acres
Master Plan:	Rural (R); Open Space (OS); Commercial (C)
Regulatory Zone:	Parks and Recreation (PR); Open Space (OS); Tourist Commercial (TC)
Area Plan:	Forest
Citizen Advisory Board:	South Truckee Meadows/Washoe Valley
Development Code:	Authorized in Article 810, <i>Special Use Permits</i> and Article 438, <i>Grading Standards</i>
Commission District:	2 – Commissioner Lucey



STAFF RECOMMENDATION

APPROVE

APPROVE WITH CONDITIONS

DENY

POSSIBLE MOTION

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve with conditions Special Use Permit Case Number WSUP19-0020 for Mt. Rose Ski Tahoe, having made all five findings in accordance with Washoe County Code Section 110.810.30.

(Motion with Findings on Page 15)

Staff Report Contents

Special Use Permit.....3

Vicinity Map.....4

Site Plan.....5

Project Evaluation5

South Truckee Meadows/Washoe Valley Citizen Advisory Board (STM/WV CAB) 13

Reviewing Agencies 13

Recommendation 15

Motion 15

Appeal Process 15

Exhibits Contents

Conditions of ApprovalExhibit A

Applicant MemoExhibit B

Washoe-Storey Conservation MemoExhibit C

Engineering and Capitol Projects Memo.....Exhibit D

CAB MinutesExhibit E

Applicant CAB MemoExhibit F

Amended Project Application Exhibit G

Special Use Permit

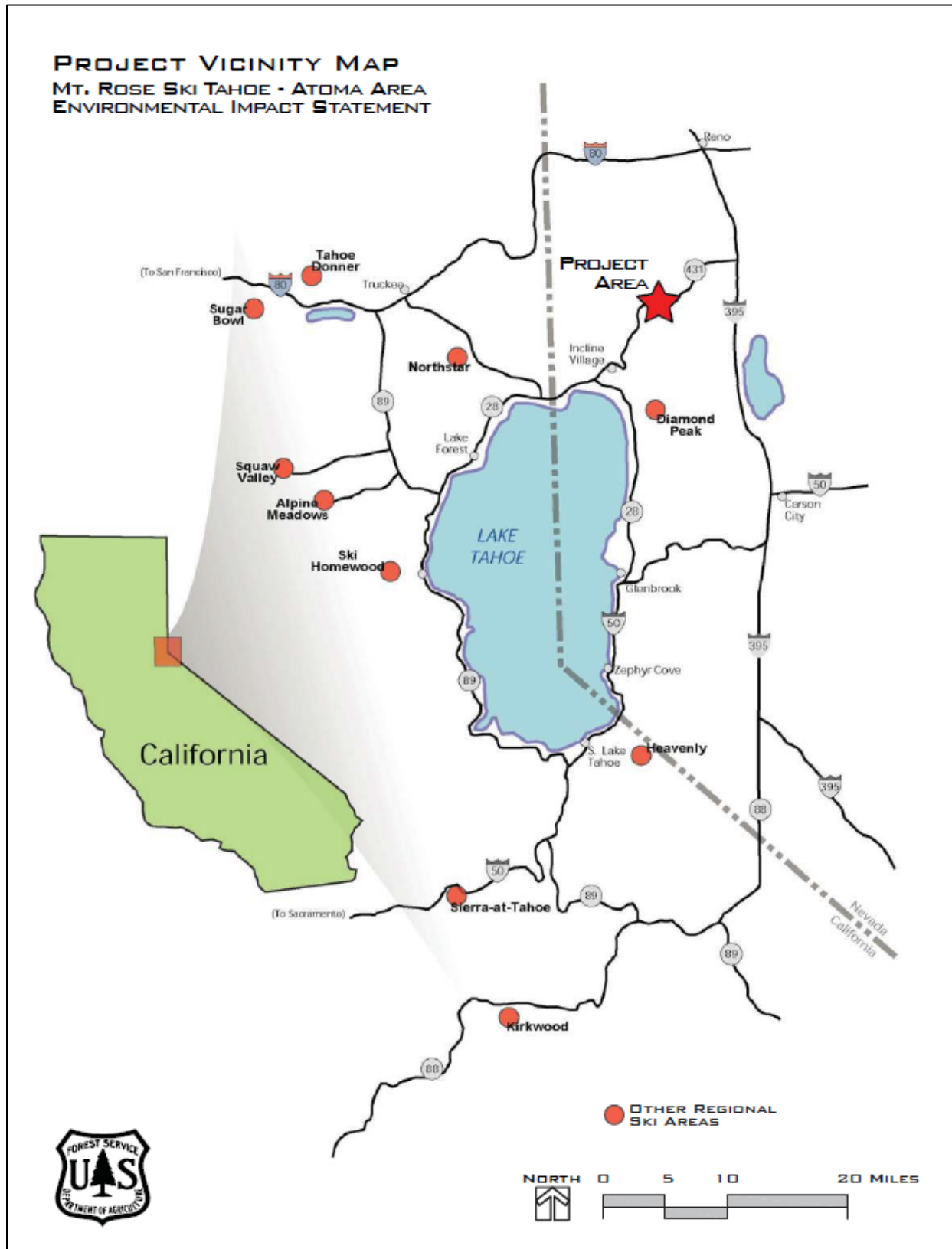
The purpose of a special use permit is to allow a method of review to identify any potential harmful impacts on adjacent properties or surrounding areas for uses that may be appropriate within a regulatory zone; and to provide for a procedure whereby such uses might be permitted by further restricting or conditioning them so as to mitigate or eliminate possible adverse impacts. If the Board of Adjustment 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.

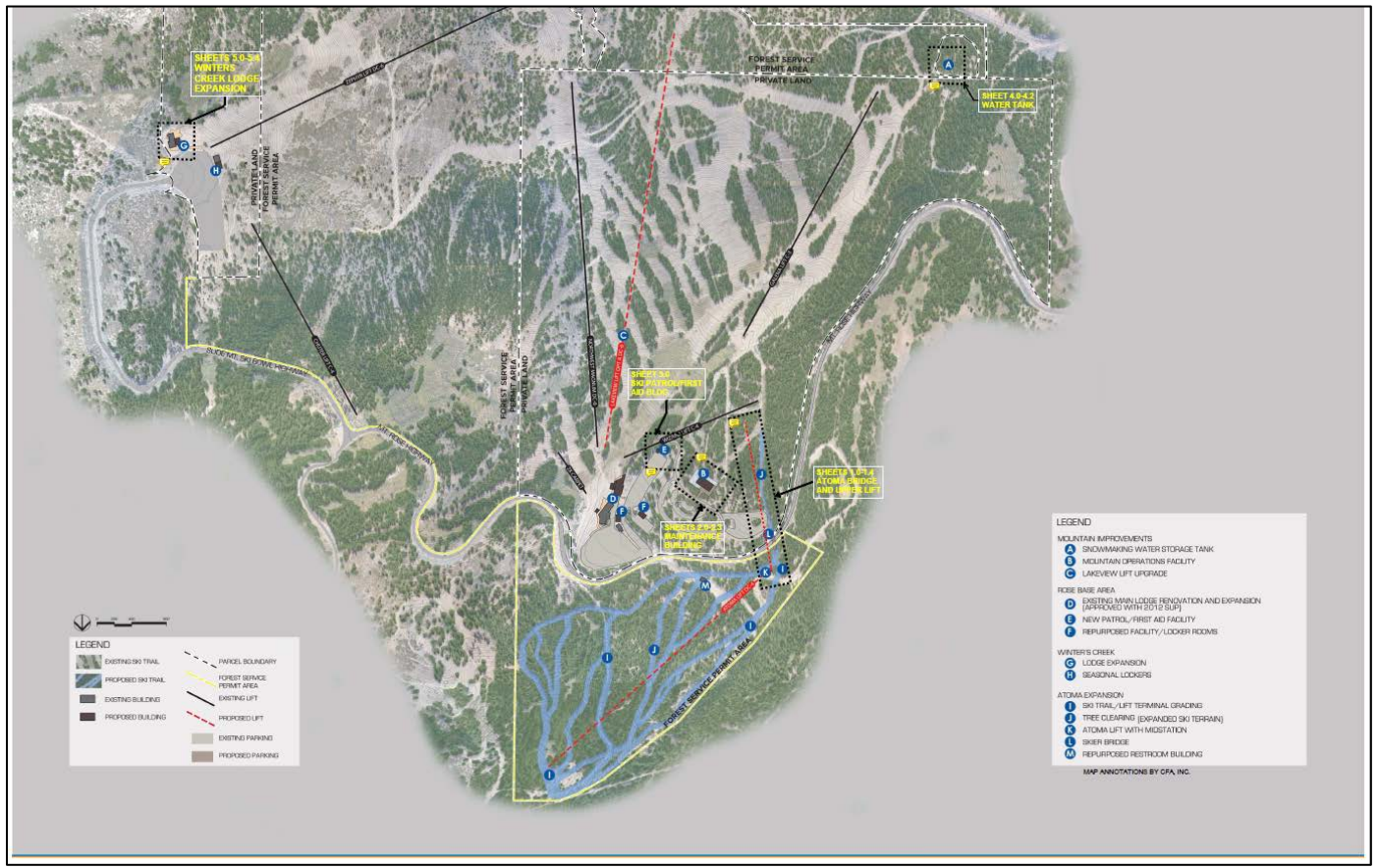
The conditions of approval for Special Use Permit Case Number WSUP19-0020 are attached to this staff report and will be included with the action order, if approved.

The subject properties are designated as Parks and Recreation (PR), Open Space (OS), and Tourist Commercial (TC). The proposed expansion of the Mt. Rose Ski Resort, which is classified as a Destination Resort use, is permitted in the PR and TC regulatory zones with a special use permit per WCC 110.302.05.03. Therefore, the applicant is seeking approval of this SUP from the Board of Adjustment.

Additionally, the SUP ordinance allows variances to be granted in conjunction with the approval process per WCC 110.810.20(e). The applicant is seeking variances of landscaping and grading requirements. The Board of Adjustment will also be ruling on this/these request(s).



Vicinity Map



Site Plan

(Atoma Expansion is not part of this SUP)

Project Evaluation

Mt. Rose Ski Tahoe is a destination resort ski area located in the southwest corner of Washoe County. The ski resort is located off of Mt. Rose Highway, and is located within the Forest Area Plan, the Mt. Rose Resort Services Area (MRRSA), and is located off of the Mt. Rose Scenic Corridor. Mt. Rose Ski Tahoe operates on both private and public lands located within the Humboldt-Toiyabe National Forest and are requesting several improvements as well as modifications to development standards.

Project elements include replacing and expanding a maintenance building; building a first aid and ski patrol station; expanding the existing Winters Creek Lodge; and repurposing several existing buildings. Additionally, the proposal includes the excavation of ±9,900 cubic yards of earthen material and disturbance of a ±3-acre area. Of this earthen material, 752 cubic yards is anticipated for the Maintenance Building and 449 cubic yards is anticipated for the Winters Creek Lodge Expansion. Signage information was included in the special use permit application packet, however, due to lack of information provided for the sign review, a building permit review will be required. Therefore, staff is not reviewing the signs as part of the special use permit.

The improvements will be completed over an 8-year timeframe. The proposed improvements are not anticipated to result in significantly increased traffic, per a traffic study included in the application materials. As such, there are no additional parking spaces proposed. The applicant anticipates that the first improvements will be the construction of the 5-million-gallon water tank, which is being reviewed under WSUP19-0021, the Winters Creek Lodge Expansion, and the construction of a new maintenance building.

The requested improvements are not anticipated to have any negative impacts to the adjoining properties. The applicant has submitted the project for review to the United States Forest Service (USFS) and the USFS environmental impact statement (EIS) has been provided to staff. These improvements will provide an enhanced experience for the visitors to the existing Mt. Rose ski resort.

Final Environmental Impact Statement

A Final Environmental Impact Statement (FEIS) has been submitted by the applicant as part of the special use permit submittal. The federal environmental review process is being conducted by the USDA Forest Service, which is also working with Nevada Department of Transportation as a cooperating agency. The FEIS is dated February 2019.

The FEIS was prepared to analyze and disclose the environmental impacts associated with the ski area projects proposed by Mt. Rose Development Company. Mt. Rose Ski Tahoe is located on private National Forest System (NFS) land on Slide Mountain in the Carson Range of the Sierra Nevada Mountains. The ski resort operates in accordance with the terms and conditions of a special use permit (SUP) which is administered by the Carson Ranger District, United States Forest Service. Mt. Rose Ski Tahoe is located within Management Area 2 (Carson Front). The SUP totals 544 acres.

The USFS's 1986 Forest Plan recognized that recreation is considered important to the quality of life to people within the community. Management Area 2 provides diverse recreation opportunities, with intensive recreation management emphasis prescribed on NFS land along the Mt. Rose Highway. This includes semi-primitive motorized and non-motorized experiences, as well as for the allowance of expanding existing ski areas, subject to accepted master plans as required in the 1986 Forest Plan.

There are a wide variety of environmental impacts associated with the proposed project. An EIS is required to disclose what those impacts are, to consider viable alternatives, and to determine whether the impacts associated with a proposed action can be mitigated to an acceptable level. The final EIS and the draft Record of Decision (ROD) have been published in February 2019. The draft ROD identifies Alternative #3 as the selected alternative. Alternative #3 includes the project elements we are reviewing in this special use permit application.

The final step in this process is for the Forest Service to submit the final ROD, which, according to the applicant, should be issued in the next several months. The final ROD was issued recently for the proposed water tank; therefore, the water tank has been fully approved and gone through the entire federal process. While the final ROD hasn't been released for the other project elements, they do have support from the Forest Service.

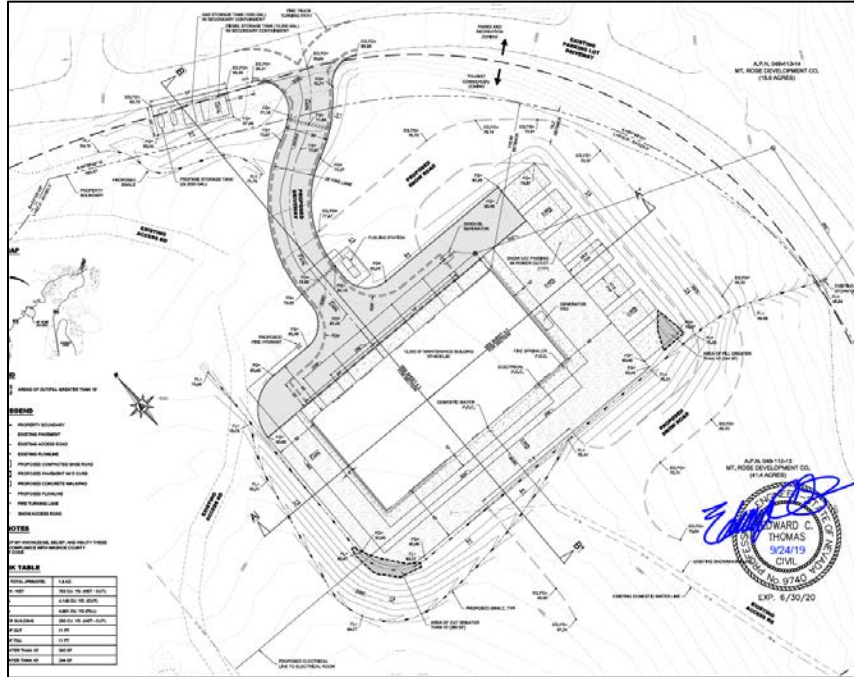
New Maintenance Building

The applicant is requesting to construct a new maintenance building which will be roughly 12,000 square feet. It is intended to replace the existing 5,000 square foot maintenance building that was approved in 2012 under SB11-015. The proposed maintenance building will be accessible from the existing parking lot driveway. The maintenance building site location was chosen due to it having the least ground disturbance requirement and was far enough from the existing power lines to not cause any conflict. The plans provided to staff regarding the proposed maintenance building indicates two areas that would be in violation of the following regulations found within Article 438, *Grading Standards*.

110.438.45(a) *Grading shall not result in slopes in excess of, or steeper than, three horizontal to one vertical (3:1).*

110.438.45(c), *Finish grading shall not vary from the natural slope by more than ten (10) feet in elevation*

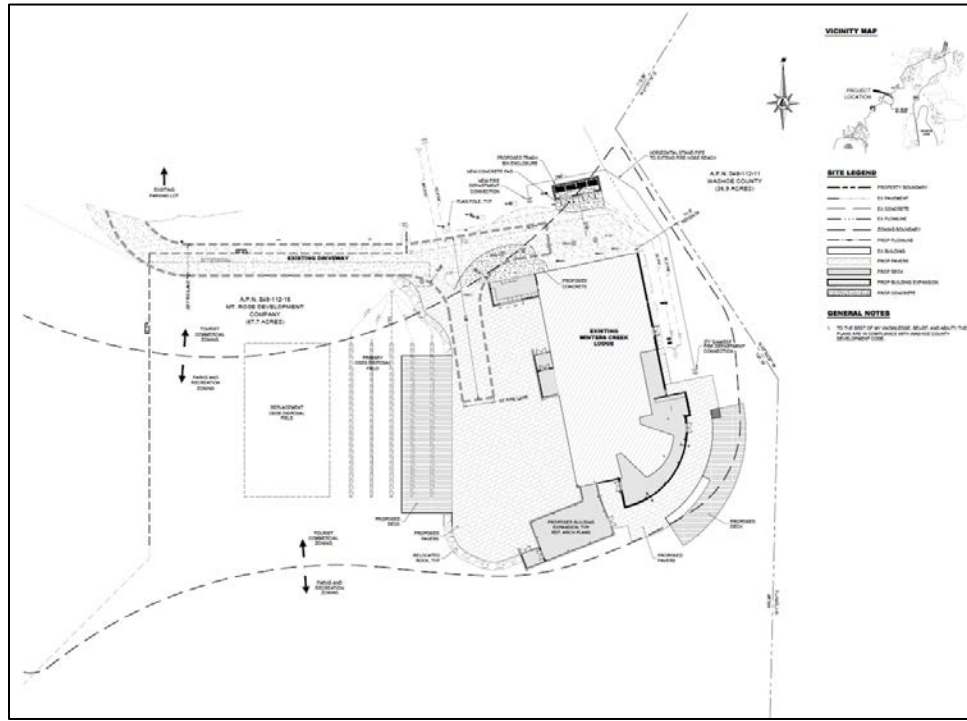
The southwest corner of the maintenance building has an area of cut greater than 10 feet and totals of ±380 square feet of disturbance; the southwest corner has an area of fill greater than 10 feet and totals to ±244 square feet of disturbance. Additionally, 2:1 slopes are shown on the entire southern portion of the maintenance building. The applicant states that this is specifically to reduce scarring and land disturbance within this area. The western portion of the maintenance building does provide 3:1 slopes. Staff supports varying these requirements for the maintenance building.



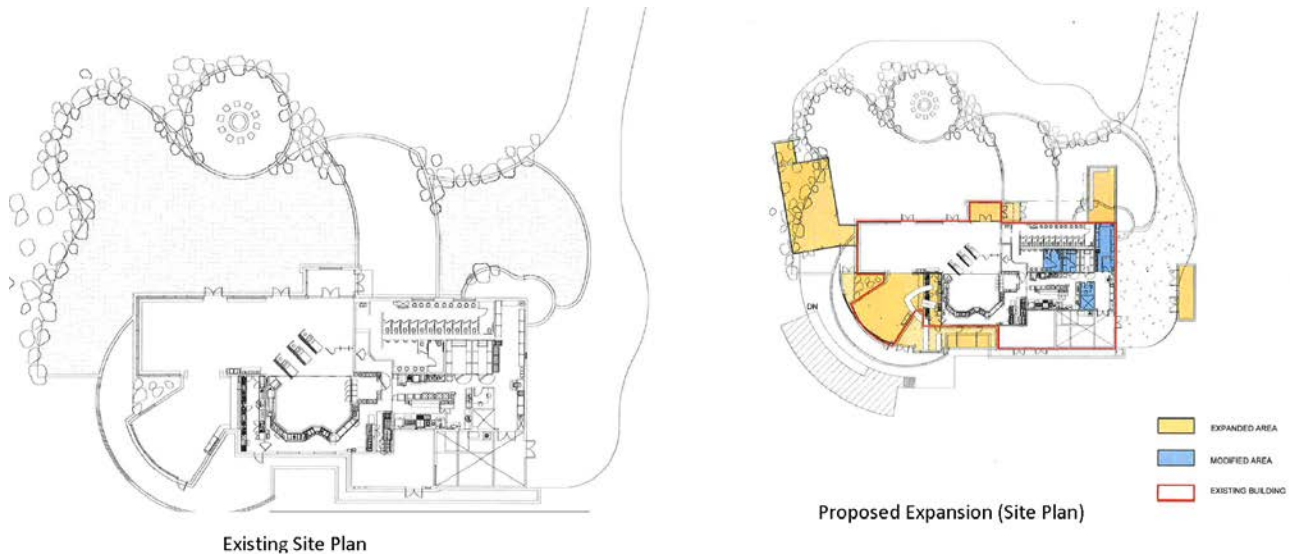
Site Plan (Maintenance Building)

Winters Creek Lodge Expansion

The Winters Creek Lodge is located on the Slide Mountain side of the ski resort and is accessed by State Route 878, which provides a 1 mile paved road to the existing parking lot on the Slide Mountain side. The existing lodge is approximately 7,980 square feet in size; the proposal intends to expand the Winters Creek Lodge by approximately 3,140 square feet, for a new area of 11,120 square feet in total. The proposed expansion will allow for additional restaurant and bar seating, as well as an extension to a new outdoor deck to accommodate additional seating. The proposal also includes a new trash enclosure pad and necessary utility connections.



Site Plan (Winters Creek Lodge)



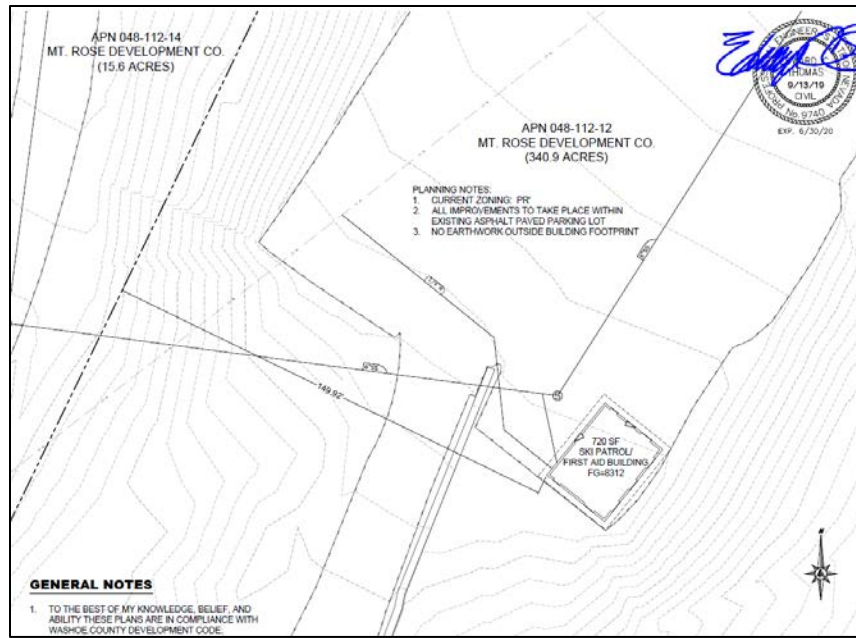
Winters Creek Lodge Side by Side

First Aid/Ski Patrol Building

The applicant is proposing a 720 square foot first aid/ski patrol building. The first aid building is to be located on a previously paved area near the edge of the existing parking lot for ease of access for ski patrol and ambulance access. This proposed structure will replace the mobile first aid unit that Mt. Rose Ski Tahoe has utilized in previous seasons.

WCC Section 110.412.10 allows for Parks and Recreation use types to be exempt from Article 412, *Landscaping*; with the exception of parking and loading areas associated with these uses. The first aid/ski patrol building will be located on the edge of a parking lot and will be surrounded

by forest vegetation. Staff supports the waiver request of the landscaping code in regards to the first aid/ski patrol building.



Site Plan (First Aid/Ski Patrol Building)

Repurposing Existing Buildings

The proposal indicates that there will be 3 existing buildings to be repurposed. The existing vehicle maintenance building is proposed to become an employee locker facility, while the existing employee locker facility is planned to transition into a guest and passholder locker facility. The existing lift maintenance facility at Slide is planned to become both an employee and guest locker facility. With the current application, there are no additional plans to expand these 3 buildings.

Forest Area Plan Policies

The Forest Area Plan addresses special use permit requirements and development standards. The following goals and policies are relevant to the proposed application.

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.

Staff Comment: The application did not provide a plan for the control of noxious weeds; however as part of the conditions of approval the applicant will be required to submit a plan to the Planning Division prior to issuance of building or grading permits (Condition 1(e)). In addition, FSM 2081.02 and the Sierra Nevada Forest Plan Amendment (SNFPA) require an invasive plant risk assessment for any ground disturbing action or activity. The Regional Noxious Weed Management Strategy was also used to develop Management Requirements for noxious weeds.

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.

Staff Comment: The applicant presented to the Southwest Truckee Meadows/Washoe Valley Citizen Advisory Board on October 3, 2019. The applicant has provided a memo to staff (Exhibit F) to satisfy this requirement.

F.2.5 Any lighting proposed must show how it is consistent with current best practice “dark-sky” standards. In subdivisions established after the date of final adoption of this plan the use of streetlights will be minimized.

Staff Comment: The proposed application will have to conform to dark sky standards, and Article 414, *Noise and Lighting Standards*.

F.2.6 Street lights, security lights, and other outdoor lighting should be powered by solar or other renewable energy sources whenever possible. Proposals to utilize traditional energy sources must explain why alternative sources are not possible

Staff Comment: Minimal lighting is proposed as part of the application request. Lighting will be limited to areas attached or directly adjacent to buildings, where a traditional wired source of power is already available. Provision of solar light standards is technologically feasible, but with Mt. Rose Ski Tahoe being a winter operation, coverage of small solar panels to operate light poles is seen to be impractical.

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.

Staff Comment: The proposal does not include any new roadways or significant driveway extensions due to the location of the proposed facilities in proximity to existing improvements and/or access points. The proposal includes the repurposing of three existing buildings for pass-holder and staff lockers, which provides an efficient use of natural resources and minimizes ground disturbance and grading associated with the project.

F.2.14 Washoe County is working with regional partners to ensure that the County’s Development Code reflects best practices for wildland fire prevention and management for development activities in the wildland suburban interface. Prior to the amendment of the Development Code to incorporate the relevant codes and practices, applicants for any discretionary approval must show how their project will manage the potential threat of wildland fire. Plans that propose the use of defensible space must include a maintenance plan for that space that demonstrates how that area will be maintained and managed for the life of the project.

Staff Comment: The proposed maintenance building is the largest new building proposed in this SUP application. An area of at least 40 feet will be kept clear of vegetation to provide a drivable surface around the proposed maintenance building.

F.4.2.j. Development Constraints. Activities and development within areas of the MRRSA that have slopes of 30% or greater shall be limited to those associated with access, utilities and ski resort operations consistent with Policy 1.1.8 of the 2007 Truckee Meadows Regional Plan. Development within the MRRSA must be consistent with plans and procedures adopted by Washoe County to implement Policy 2.2.1 of the 2007 Truckee Meadows Regional Plan.

Staff Comment: The proposed application is related to ski resort operations within the Mt. Rose Ski Tahoe resort.

F.4.2.i. Accessory Uses. Accessory uses must not meet or exceed the scale of the primary ski resort use within the MRRSA. They will be designed to meet the needs of the anticipated customer base of the resort and not be of a size or scale such that they would promote the development of properties surrounding the resort.

Staff Comment: The proposed Mt. Rose expansion consists of numerous accessory uses that are meant to facilitate better use, and customer satisfaction with the primary Mt. Rose Ski Tahoe resort. All proposed uses within the expansion application do not exceed the scale of the primary ski resort use.

F.4.2.n. Sustainability. All new construction shall use construction best practices to implement “green” development standards that are appropriate for the location of the resort.

Staff Comment: Water usage for snowmaking predominately goes back into the ground through snowmelt and collection of runoff and percolation back into the ground for recharge of the aquifer.

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.

Staff Comment: This special use permit addresses hillside development, grading standards and potential waivers, major grading thresholds, and Policy 2.1 requirements.

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.

Staff Comment: The Washoe County Parks Planner has reviewed the proposed application and no trail connections or trail easements were required as part of the conditions of approval.

F.12.2 Development in the Forest planning area will comply with all local, state and federal standards regarding air quality.

Staff Comment: The applicant will be required to secure air quality permits, as necessary, per condition of approval 1(k).

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.

Staff Comment: The proposed special use permit was routed to the Division of Air Quality and no comments of denial were received. No degradation of air quality is anticipated. The applicant will be required to obtain an air quality permit with the grading permit.

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.

Staff Comment: The application materials included a conceptual drainage report and a geotechnical summary, prepared by Black Eagle Consulting, Inc. This consulting firm has previously completed geotechnical investigations throughout the Mt. Rose Ski Tahoe premises. These studies informed the summary presented in the application. Since this proposal includes a number of project elements to be completed in phases Staff have concluded that it is reasonable for the full geotechnical investigations to be conducted in phases as well, for each project element. Thus, a full geotechnical investigation for the proposed improvements must be completed prior to issuance of building or grading permits and the final plans must incorporate all recommendations included in the investigation, per condition of approval 1(i).

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.

Staff Comment: The Nevada Department of Wildlife was part of the agency review process. No comments, conditions, or recommendations of denial were received.

F.14.2 Any development that has the potential to negatively impact an established wildlife migration route or critical habitat, including but not limited to traditional mule deer migration routes,

deer winter range, federally classified Threatened and Endangered species and the Pacific Flyway for migratory birds and their associated habitat must demonstrate how that project will protect the integrity of the migration route or habitat.

Staff Comment: The Nevada Department of Wildlife, and the Nevada Division of Forestry, Endangered Species Division were part of the agency review process. No comments, conditions, or recommendations of denial were received.

Goal Twenty: Maintain and enhance the value of wetlands and their associated habitats for their groundwater recharge, aesthetic, environmental, educational, recreational, effluent reuse, stormwater runoff and flood control purposes. Washoe County will act to ensure the best possible balance between these wetland area uses.

F.20.1 All development will meet or exceed the standards for wetland development and impact established by state and federal agencies responsible for wetlands management.

Staff Comment: The Forest Area Plan Development Suitability Map indicates that there are delineated wetlands as determined by the U.S. Army Corps of Engineers, C.W.A. Section 404 Wetlands. The applicant will be required to contact the U.S. Army Corps of Engineers regarding development within the wetland area.

The applicant submitted an additional statement regarding this policy:

As noted under Policy F.20.2, There are no wetland areas in association with the amended request as the ATOMA area has been removed from the application request and will be submitted at a later time. However, it should be noted that the USACOE was consulted and the wetlands were delineated as part of the review of Alternatives 2 and 3 during the Draft EIS process. The following comment and response is provided in Appendix D of the FEIS on page D-9:

7.2 The DEIS does not disclose whether the U.S. Army Corps of Engineers was consulted on the wetlands delineation conducted for the Proposed Action, nor does it include Section 404 of the CWA in Table 1: "Permits Associated with the Action Alternatives". We suggest that the FEIS explain how the extent of jurisdictional waters would be verified and how the Forest Service would ensure that proposed project activities comply with the permit requirements of Section 404 of the CWA. [Comment Letter 52]

F.20.2 Land use proposals that include wetlands areas must demonstrate how they are consistent with Goal Twenty.

Staff Comment: There are no wetland areas in association with the amended request as the ATOMA area has been removed from the application request and will be submitted at a later time. The design of the Winters Creek Lodge takes advantage of the afternoon solar access through large windows facing west, reducing the heating requirement. As the facility is predominately a winter use facility, this heating aspect is important. The ski area location provides a short drive option for skiing, which reduces VMT for downhill winter sports. Mt. Rose Ski Tahoe is largely a locals resort. Travel to other resorts in the Lake Tahoe region would require a double or greater travel distance, thus increasing the carbon footprint associated with the one day of skiing, which is accommodated by the beneficial proximity of Mt. Rose Ski Tahoe.

Land Use and Transportation Element

LUT.23.4 Where appropriate, ensure that public lands are retained for beneficial uses such as groundwater recharge, conservation of habitats, open space, recreation and other community uses.

Staff Comment: The proposed special use permit allows for further recreation and community uses on public lands (United States Forest Service land).

South Truckee Meadows/ Washoe Valley Citizen Advisory Board (STMWVCAB)

The proposed project was presented by the applicant's representative at the regularly scheduled Citizen Advisory Board meeting on October 3, 2019. The CAB minutes have been attached and can be found as Exhibit E.

Reviewing Agencies

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

- Washoe County Community Services Department
 - Planning and Building Division
 - District Attorney, Civil Division
 - Engineering and Capital Projects Division
 - Traffic
 - Utilities/Water Rights
 - Parks and Open Spaces
- Washoe County Health District
 - Emergency Medical Services
 - Air Quality
 - Environmental Health Services Division
- Washoe County Regional Animal Services
- US Fish and Wildlife
- US Forest Service
 - Carson Ranger District
 - State Office
 - Lake Tahoe Basin Management Unit
- State of Nevada
 - Division of Environmental Protection
 - Division of Forestry Endangered Species
 - Division of Parks
 - Division of State Lands
 - Division of Water Resources
 - Department of Transportation
 - Department of Wildlife
 - Historic Preservation Office (SHPO)
- Truckee Meadows Fire Protection District
- South Truckee Meadows/Washoe Valley Citizen Advisory Board
- Regional Transportation Commission
- Washoe-Storey Conservation District
- Washoe County Sheriff

Two out of the thirty above listed agencies/departments provided comments and/or recommended conditions of approval in response to their evaluation of the project application. Two additional agencies provided responses but did not provide any conditions of approval. A **summary** of each agency's comments and/or recommended conditions of approval and their contact information is provided. The Conditions of Approval document is attached to this staff report and will be included with the Action Order.

- Washoe County Planning and Building Division addressed the time frame for completion, safety issues, and operational conditions
Contact: Chris Bronczyk, 775.328.3612, cbronczyk@washoecounty.us
- Washoe County Engineering and Capital Projects addressed the construction improvements, and operational conditions that will be in effect for the life of the project.
Contact: Leo Vesely, 775.328.2313, lvesely@washoecounty.us

Staff Comment on Required Findings

WCC Section 110.810.30, Article 810, *Special Use Permits*, requires that all of the following findings be made to the satisfaction of the Washoe County Board of Adjustment before granting approval of the request. Staff has completed an analysis of the special use permit application and has determined that the proposal is in compliance with the required findings as follows.

1. Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Forest Area Plan.

Staff Comment: The proposal is consistent with the Master Plan and the Forest Area Plan.

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

Staff Comment: The existing improvements on the project site will adequately serve the proposed new uses. The proposed project was reviewed by relevant agencies and no conditions were received regarding additional required improvements.

3. Site Suitability. That the site is physically suitable for a destination resort use type, and for the intensity of such a development.

Staff Comment: The site is physically suitable for the construction of the proposed development. Mt. Rose Ski Tahoe currently operates at this location and expansion of their operations is appropriate.

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

Staff Comment: As proposed and with the Conditions of Approval, the proposed uses are expected to create minimal impacts and not cause significant detriment or injury to the public, adjacent properties, or surrounding area.

5. 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 installations are located within the required noticing distance; therefore, this finding does not apply to this project.

Recommendation

After a thorough analysis and review, Special Use Permit Case Number WSUP19-0020 is being recommended for approval with conditions. Staff offers the following motion for the Board's consideration.

Motion

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve with conditions Special Use Permit Case Number WSUP19-0020 for Mt. Rose Ski Tahoe, having made all five findings in accordance with Washoe County Code Section 110.810.30:

1. **Consistency.** That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Forest Area Plan;
2. **Improvements.** That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;
3. **Site Suitability.** That the site is physically suitable for a destination resort use type, and for the intensity of such a development;
4. **Issuance Not Detrimental.** That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area;
5. **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.

Appeal Process

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

Applicant: Mt. Rose Development Company
22222 Mt. Rose Highway
Reno, NV 89511

Representatives: CFA, Inc
1150 Corporate Boulevard
Reno, NV 89502



Conditions of Approval

Special Use Permit Case Number WSUP19-0020

The project approved under Special Use Permit Case Number WSUP19-0020 shall be carried out in accordance with the conditions of approval granted by the Board of Adjustment on December 5, 2019. Conditions of approval are requirements placed on a permit or development by each reviewing agency. These conditions of approval may require submittal of documents, applications, fees, inspections, amendments to plans, and more. These conditions do not relieve the applicant of the obligation to obtain any other approvals and licenses from relevant authorities required under any other act.

Unless otherwise specified, all conditions related to the approval of this 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 Building 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 institution 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 Building Division

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

Contact Name – Chris Bronczyk, 775.328.3612, cbronczyk@washoecounty.us

- a. 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 special use permit.
- b. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit. The Planning and Building Division shall determine compliance with this condition.
- c. The applicant shall submit complete construction plans and building permits shall be issued within ten (10) years from the date of approval by Washoe County. The applicant shall complete construction within the time specified by the building permits. Compliance with this condition shall be determined by the Planning and Building Division.
- d. A note shall be placed on all construction drawings and grading plans stating:

NOTE

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

- e. Prior to the issuance of building or grading permits, the applicant shall submit a noxious weed management plan, developed through consultation with the Washoe County District Health Department, the University of Nevada Cooperative Extension, the Washoe-Storey Conservation District, and/or the US Forest Service. The plan will be implemented on a voluntary compliance basis.
- f. All proposed lighting must adhere to Article 414, *Noise and Lighting Standards* requirements.
- g. All undeveloped disturbed areas shall be revegetated utilizing a native, dryland seed mix as reviewed and approved by the Forest Service. Revegetation shall occur as soon as practicable after construction.
- h. A revegetation plan shall be prepared to address soils and plants to restore project-related ground disturbance. The revegetation plan will be developed in coordination with the Forest Service and will include, at a minimum, appropriate revegetation options, seed mixes and goals for establishing success of revegetation for desirable species, as consistent with management requirement BO 1 in the FEIS.
- i. Prior to the issuance of building or grading permits, the applicant shall submit the geotechnical investigations related to the proposed maintenance building, and Winters Creek Lodge expansion. Final plans must incorporate all recommendations identified in the investigation.
- j. A restoration plan must be submitted to Washoe County Planning for areas that have been graded.
- k. The applicant shall secure any required air quality permits prior to construction.
- l. A revegetation plan must be submitted to Washoe County Planning, the revegetation plan will address soils, and plants to restore project-related ground disturbance.
- m. The following **Operational Conditions** shall be required for the life of the project.
 - i. Failure to comply with the conditions of approval shall render this approval null and void. Compliance with this condition shall be determined by Planning and Building.

- ii. This special use permit shall remain in effect until or unless it is revoked or is inactive for one year.

Washoe County Engineering and Capital Projects

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

Contact Name – Leo Vesely, P.E., 775.328.2041, 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. Silts shall be controlled on-site and not allowed onto adjacent property.
- b. All existing and proposed easements shall be shown on the site and/or grading plan.
- c. The applicant shall obtain from the Nevada Division of Environmental Protection a Stormwater Discharge Permit and submit a copy to the Engineering Division prior to issuance of a grading or building permit.
- d. The applicant shall complete and submit the Construction Permit Submittal Checklist and pay the Construction Stormwater Inspection Fee prior to obtaining a grading permit.
- e. A grading bond of \$2,000/acre of disturbed area shall be provided to the Engineering Division prior to any grading revegetation bond shall be provided to the Engineering Division prior to approval of the grading or building permit.
- f. Cut slopes, fill slopes, and berms shall be setback from parcel lines and access easements in accordance with Washoe County Code Article 438, unless otherwise specified/modified by the Washoe County Planning Division.
- g. All slopes steeper than 3:1 shall be mechanically stabilized to control erosion. As an alternative to riprap, an engineered solution (geo-fabric, etc.) may be acceptable.
- h. All disturbed areas left undeveloped for more than 30 days shall be treated with a dust palliative. Disturbed areas left undeveloped for more than 45 days shall be revegetated or mechanically stabilized. Methods and seed mix must be designed by a licensed landscape architect and approved by the County Engineer.

DRAINAGE (COUNTY CODE 110.416, 110.420, and 110.421)

- i. A detailed hydrology/hydraulic report prepared by a licensed engineer shall be submitted to the Engineering Division for review and approval prior to the approval of a grading or building permit. The report shall include the locations, points of entry and discharge, flow rates and flood limits of all 5- and 100-year storm flows impacting both the site and offsite areas and the methods for handling those flows. The report shall include all storm drain pipe and ditch sizing and rip-rap sizing calculations and a discussion of and mitigation measures for any impacts on existing offsite drainage facilities and properties.
- j. Standard reinforced concrete headwalls or other approved alternatives shall be placed on the inlet and outlet of all drainage structures and rip rap shall be used to prevent erosion at the inlets and outlets of all pipe culverts.
- k. The applicant shall provide pretreatment for petrochemicals and silt for all storm drainage from the site.

- I. 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.

TRAFFIC AND ROADWAY (COUNTY CODE 110.436)

Contact Name: Mitch Fink, (775) 328-2050, mfink@washoecounty.us

- m. Verify that any proposed signage meets AASHTO's sight triangle requirements for potential driver's view obstructions at the driveway intersection(s) with Mt. Rose Highway.

*** End of Conditions ***



LAND SURVEYORS
CIVIL ENGINEERS
LAND USE PLANNERS

September 27, 2019

VIA E-mail: CBronczyk@washoecounty.us
SKirschenman@washoecounty.us

Chris Bronczyk & Sophia Kirschenman
Washoe County Community Services Dept.
1001 E. Ninth Street
Reno, Nevada 89512

**RE: LDC19-0020 & LDC19-0021 (MT ROSE EXPANSION & MT. ROSE WATER TANK)
RESPONSE TO INITIALLY ISSUED COMMENTS AND LANDSCAPE WAIVER REQUEST**

Dear Chris and Sophia:

Thank you very much for your time to discuss the Mt. Rose Facility Expansion and Upgrade project on Tuesday, September 24th and to take a lengthy, but very helpful, site visit on the afternoon of Wednesday, September 25th. I hope that both the in-office meeting and site visit helped you to gain a better picture of what is proposed as part of this project. This letter is provided to address the initially presented comments and questions that were at each of these meetings/site visits.

Questions about Water Tank

Why is the tank proposed to be 5M Gallons? - The short and non-technical answer is that the tank has been sized based on the number of snowmaking guns that are currently in use and that the number of additional guns anticipated as required to handle the terrain expansion as is proposed with this application. Mt. Rose/Ski Tahoe currently has a 0.5M. Gallon Water Tank near the proposed site for the new, larger tank. Mt. Rose/Ski Tahoe does everything possible when mother nature is not cooperating with moisture to secure a base surface to begin to operate lifts and runs to the benefit and pleasure of the area skiing population, season passholders and tourists who are looking for downhill skiing recreation on their vacation. The current 0.5M Tank provides a limited amount of water to run snowmaking equipment and when the tank is drawn down to a minimal level, it is necessary that the system work at a less than optimal level, limiting the amount of water/snow that can be made even during optimal periods. As the system currently operates, one a few runs can receive snowmaking at any one time given the capacity of the water supply. The 5M Water Tank has been proposed through calculations running water at an optimal or near optimal rate on most to all of the ski runs that would be targeted to receive snowmaking without running into capacity problems. Additional information and calculations used to size the water tank will be provided by Mt. Rose/Ski Tahoe staff, but this generally covers the rationale and need for the tank. Due to the changing climate, m warmer and warmer temperatures area typical. As such covering the primary ski runs to get the

mountain open for one of our biggest winter tourist draws is beneficial not only to Mt. Rose/Ski Tahoe, but to the Region.

How many gallons of water does a snowmaking gun use? During our tour it was identified that the snowmaking guns put out water at a rate of approximately 100 gallons per minute (on average) but can operate between 40+/- GPM during times when water resources are low in the tank and 175+/- GPM during optimal temperature times. Again, this information will be verified by Mt. Rose/Ski Tahoe staff with the calculation assumptions for sizing the proposed water tank.

Questions about the Skier Bridge

Bridge Height - The skier access bridge to the north site new ski terrain will be 30 feet wide and will need to have a minimum vehicular clearance of 16.5 feet per NDOT requirements. The clearance height can and may ultimately be higher than the minimum requirement, but that will be determined and approved through the NDOT Permit that will be required for construction of the skier bridge. Above the clearance height for vehicles, there will be the actual bridge structure, a wall and fencing to ensure safe passage of skiers over the bridge. An additional 12-15+ feet of height between the bridge structure, wall and safety fencing is likely above the vehicle clearance height.

Ski Lift Alignment with Bridge (Clarification) - The alignment of the ski lift will be directly over the skier bridge, which will provide multiple benefits. (1) easier access if the lifts needed to be evacuated and (2) should something drop from the lift (a glove, ski pole, now from the lift cable or from skis) it would fall onto the ski trail rather than onto the highway or a passing vehicle.

Access to Federal Lands (Summer and Winter) – it was noted during the tour that parking lot 7, which is closest to the skier bridge would be used for visitors who wish to access the open public lands on the north side of Mt. Rose Highway. This is a popular cross-country ski area in the winter and a mountain bike and hiking area in the summer. Such visitors to the National Forest can park in Lot 7 (a parking lot map is included in Tab E at the end of the application document) and access the National Forest Lands by crossing the skier bridge during all seasons. Once across the bridge, there will be a gate to the west that identifies that visitors are crossing into non-patrolled National Forest land. This access plan provides a safe access means for patrons of Mt. Rose/Ski Tahoe and for general visitors to the area to cross Mt. Rose Highway and to gain access to the National Forest land on the north side of the highway.

Lighting on or near the Bridge? – There are no lights proposed on the skier access trail heading to the skier bridge nor on the skier bridge. I spoke to the Civil Engineer on the project, Ed Thomas, PE of Lumos & Associates and the 30-foot width of the bridge did not appear to meet NDOT requirements for any lighting under the bridge structure. Mt Rose does not offer night skiing and lighting around the ski area is very limited and will continue to be so with the proposed expansion and upgrade.

Signs

Directional signage is proposed in each of the parking lots, well outside of the front yard setback areas of the Mt. Rose and Winters Creek Lodge areas. The sign proposed within the Mt. Rose parking lot is a replacement of the existing directional sign separating lot 1 from lot 2. The signage elevation provided in the application materials for this Mt. Rose directional sign does show an electronic menu display (EMD). This elevation will be revised to not include the EMD as we would like to have the proposed signage approved with this application review. It is fully understood that the height of either of the proposed signs would need to meet the requirement of code and if an EMD is desired at any point in the future on either the Mt. Rose or Winters Creek Lodge directional signage, approval through a separately submitted administrative permit would be required.

Question About Revegetation

Mt. Rose/Ski Tahoe staff is always working to ensure that appropriate ground cover is present and has taken hold on their ski runs and other areas of disturbance. As could be seen on the site tour, erosion swales are constructed on the steeper runs to help manage run-off and to minimize erosion. This is coupled with the ongoing non-snow month management of appropriate seed mixture(s) to take hold and keep the soil in place on the hill. A seed mixture is provided in the project narrative and as such this mixture is regularly applied and is monitored for appropriate growth and desired result to manage erosion.

Waiver for Landscape Requirement at 1st aid station

Based upon conversations on the site visit, it is understood that all aspects of this application area are considered to have appropriate landscaping remaining after construction due to the site location in the middle of a National Forest. The one exception to this was the addition of a permanent first aid building at the southwestern corner of parking lot 3.

Section 110.412.10 of the Landscaping Code allows for exemptions from landscape requirements for uses in Parks and Recreation use types, which includes the designation resort land use. The one caveat to this exemption relates to parking and loading areas and it should be noted that the proposed first aid station is on the edge of a parking and loading area and has National Forest vegetation on two sides of the building. The addition of a landscape planter or planter around the building would not provide any significant benefit as these are areas where either snow is stored during the ski season or that are necessary for open and available access for emergency services. As such, a waiver to any landscape requirements for the first aid building is requested.

Previously Provided Landscaping at Winters Creek Lodge

While on the site tour, it was recognized that there were ornamental shrubs on the north and south sides of the existing lodge. The proposed expansion to the Winters Creek Lodge will impact some of those

ornamental shrub plantings and it is proposed that a requirement be placed on this project that the number of shrubs that will be displaced with the expansion be replaced in other appropriate locations around the expanded lodge. It is currently unknown how many shrubs will be displaced. As such, it is requested that any condition or requirement speak only to a shrub for shrub replacement. It should be noted that there was not appearance that any trees were planted as part of the original construction of the Winters Creek Lodge, only shrubs.

As noted in this letter/response, there is additional information that will come directly from Mt. Rose/Ski Tahoe regarding the water tank sizing and the Mt. Rose parking area directional signage. Should you have any questions regarding this response letter or any portion of the application, please feel free to contact me at 775-856-7073.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. David Snelgrove', with a long horizontal line extending to the right.

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



Washoe-Storey Conservation District

Bret Tyler Chairmen
Jim Shaffer Treasurer
Cathy Canfield Storey app
Jean Herman Washoe app

1365 Corporate Blvd.
Reno NV 89502
775 857-8500 ext. 131
nevadaconservation.com

October 9, 2019

Washoe County Community Services Department

C/O Chris Bronczyk, Planner & Sophia Kirschenman, Park Planner

1001 E Ninth Street, Bldg A

Reno, NV 89512

R: WSUP19-0020 Mt. Rose Expansion

Dear Chris and Sophia,

In reviewing the special use permit for the Mt. Rose Expansion, the Conservation District has the following comments.

The 2:1 slopes that are stabilized with rip rap, smaller rock should be placed in the voids to eliminate the undermining of smaller rodents.

In the mapping and treatment of noxious weeds, please send the areas and treatment schedule to the Conservation District. A monitoring of the control area should continue for a minimum of three years.

Revegetation of graded areas, and slopes will occur to the acceptance of Washoe County, US. Forest Service and the Conservation District for hydro seeding late fall and early spring for natural moisture of seed. We recommend a monitoring plan in place for three years with photos send to both Washoe County and the Conservation District.

All cut off ditches to protect created slopes from upstream runoff have 6 inch rip rap in the flow line to reduce sediment flow.

We agree that all swales for the project utilize 6 inch rip rap to remove pollutants as well as reduce down stream sediment flow.

The Conservation District supports the 6 to 8 inch rock on the side slopes of the ponds perimeter for both snow making ponds.

To protect the several intermittent and perennial streams, utilize the Washoe County Best Management Practices using waddles and sediment barriers for erosion sediment control.

Thank you for providing us the opportunity to review the project that may have impacts on our natural resources.

Sincerely,

Tyler-Shaffer



WASHOE COUNTY

COMMUNITY SERVICES DEPARTMENT

Engineering and Capital Projects

1001 EAST 9TH STREET
RENO, NEVADA 89512
PHONE (775) 328-3600
FAX (775) 328.3699

Date: November 07, 2019

To: Chris Bronczyk, Planner
Sophia Kirschenman, Park Planner

From: Leo Vesely, P.E., Licensed Engineer

Re: Special Use Permit Case *WSUP19-0020 – Mt. Rose Facilities Expansion*
APNs 048-112-12, 13, 14 & 15, 048-120-22

GENERAL PROJECT DISCUSSION

Washoe County Engineering staff has reviewed the above referenced application. The Special Use Permit is for grading to facilitate the expansion of facilities at the Mt. Rose Ski Resort. The Engineering Division recommends approval with the following comments and conditions of approval which supplement applicable County Code and are based upon our review of the site and the application prepared by CFA Incorporated and Lumos & Associates. The County Engineer shall determine compliance with the following conditions of approval.

For questions related to sections below, please see the contact name provided.

GENERAL CONDITIONS

Contact Information: Leo Vesely, P.E. (775) 328-2041

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. Silts shall be controlled on-site and not allowed onto adjacent property.
2. All existing and proposed easements shall be shown on the site and/or grading plan.
3. The applicant shall obtain from the Nevada Division of Environmental Protection a Stormwater Discharge Permit and submit a copy to the Engineering Division prior to issuance of a grading or building permit.
4. The applicant shall complete and submit the Construction Permit Submittal Checklist and pay the Construction Stormwater Inspection Fee prior to obtaining a grading permit.
5. A grading bond of \$2,000/acre of disturbed area shall be provided to the Engineering Division prior to any grading revegetation bond shall be provided to the Engineering Division prior to approval of the grading or building permit.
6. Cut slopes, fill slopes, and berms shall be setback from parcel lines and access easements in accordance with Washoe County Code Article 438.



INTEGRITY



EFFECTIVE
COMMUNICATION



QUALITY
PUBLIC SERVICE

Subject: **WSUP19-0020 – Mt. Rose Facilities Expansion**
Date: November 07, 2019
Page: 2

7. All slopes steeper than 3:1 shall be mechanically stabilized to control erosion. As an alternative to riprap, an engineered solution (geo-fabric, etc.) may be acceptable.
8. All disturbed areas left undeveloped for more than 30 days shall be treated with a dust palliative. Disturbed areas left undeveloped for more than 45 days shall be revegetated or mechanically stabilized. Methods and seed mix must be designed by a licensed landscape architect and approved by the County Engineer.

DRAINAGE (COUNTY CODE 110.416, 110.420, and 110.421)
Contact Information: Leo Vesely, P.E. (775) 328-2041

1. A detailed hydrology/hydraulic report prepared by a licensed engineer shall be submitted to the Engineering Division for review and approval prior to the approval of a grading or building permit. The report shall include the locations, points of entry and discharge, flow rates and flood limits of all 5- and 100-year storm flows impacting both the site and offsite areas and the methods for handling those flows. The report shall include all storm drain pipe and ditch sizing and rip-rap sizing calculations and a discussion of and mitigation measures for any impacts on existing offsite drainage facilities and properties.
2. Any increase in storm water runoff resulting from the development and based upon the 5 and 100-year storm flows shall be detained on site.
3. Standard reinforced concrete headwalls or other approved alternatives shall be placed on the inlet and outlet of all drainage structures and rip rap shall be used to prevent erosion at the inlets and outlets of all pipe culverts.
4. The applicant shall provide pretreatment for petrochemicals and silt for all storm drainage from the site.
5. 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.

TRAFFIC AND ROADWAY (COUNTY CODE 110.436)
Contact Information: Mitch Fink, (775) 328-2050

1. Verify that any proposed signage meets AASHTO's sight triangle requirements for potential driver's view obstructions at the driveway intersection(s) with Mt. Rose Highway.

UTILITIES (County Code 422 & Sewer Ordinance)
Contact Information: Tim Simpson, P.E. (775) 954-4648

1. No comments



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/Washoe Valley Citizen Advisory Board held October 3, 2019 6:00 p.m. the South Valleys Library at 15650A Wedge Parkway, Reno, Nevada.

1. *CALL TO ORDER/ DETERMINATION OF QUORUM - Meeting was called to order at by Tom Burkhart at 6:00 p.m.

Member: Marge Frandsen, Shaun O’Harra, Kimberly Rossiter, Tom Burkhart, David Snelgrove (rescued himself as he was the representative for the application). A quorum was determined.

Absent: Wesley Mewes (excused), Patricia Phillips (excused)

2. *PLEDGE OF ALLEGIANCE - the Pledge of Allegiance was recited.

3. *GENERAL PUBLIC COMMENT AND DISCUSSION THEREOF- There were no requests for public comment.

4. APPROVAL OF AGENDA FOR THE MEETING OF October 3, 2019 (for Possible Action) - Kimberly Rossiter moved to approve the agenda for **October 3, 2019**. Shawn O’Harra seconded the motion to approve the agenda. The motion passed unanimously.

4. APPROVAL OF MEETING MINUTES FOR THE SPECIAL MEETING OF SEPTEMBER 12, 2019 (for Possible Action) - Shawn O’Harra moved to approve the meeting minutes for September 12, 2019. Kimberly Rossiter seconded the motion to approve meeting minutes. Marge Frandsen abstained. The motion passed.

6. DEVELOPMENT PROJECTS– The project description is provided below.

6.A. Special Use Permit Case Number WSUP19-0020 (Mt. Rose Expansion)- Request for community feedback, discussion and possible action to forward community and Citizen Advisory Board comments to Washoe County staff on a request for the expansion of Mt. Rose Ski Resort into the Atoma Wilderness area north of the Ski Resort across the Mt. Rose Highway, as well as other improvements to the resort area. In order to expand the resort area the applicant is requesting to vary several grading standards. Project elements include replacing and expanding a maintenance building; upgrading and replacing the Lakeview chairlift; removing the existing Atoma building and constructing the new Atoma ski lift and facilities; clearing vegetation for new ski runs; building a first aid and ski patrol station; expanding the existing Winters Creek Lodge; repurposing several existing buildings; and constructing a ±30 ft. wide skier bridge over Mt. Rose Highway with a minimum vehicle clearance of 16.5 ft. to connect the existing ski resort to the new Atoma ski terrain. The proposal includes the excavation of ±13,000 cubic yards of earthen material, importation of ±47,000 cubic yards of fill material, and disturbance of a ±40-acre area. The total amount of cut, fill and disturbed area includes impacts associated with the construction of a 5 million gallon snowmaking water tank, which is being considered under a separate special use permit application, WSUP19-0021. The subject site is located on privately-owned lands and lands owned by the United States Forest Service (USFS). The USFS has recently completed an environmental impact statement (EIS) for the proposed expansion. (for Possible Action)

- Applicant\Property Owner: Mt. Rose Development Company and US Forest Service
- Location: Main Access site is +/-11.4 miles from Mt. Rose Hwy and Thomas Creek Rd.

- Assessor's Parcel Number: 048-112-12; 048-112-13; 048-112-14; 048-112-15; 048-050-11; 048-111-11; 048-120-22
- Staff: Sophia Kirschenman, Planner, 775-328-3623; skirschenman@washoecounty.us and Chris Bronczyk, Planner, 775-328-3612; cbronczyk@washoecounty.us
- Reviewing Body: Tentatively scheduled for the Board of Adjustment on November 7, 2019

And

Special Use Permit Case Number WSUP19-0021 (Mt. Rose Water Tank) – Request for community feedback, discussion and possible action to forward community and Citizen Advisory Board comments to Washoe County staff on a request to modify and vary grading and setback standards and approve major grading to facilitate the construction of a 5 million gallon water tank for snowmaking purposes at the Mt. Rose Ski Resort. The proposal includes the excavation of 5,720 cubic yards of earthen material and the disturbance of 3.2 acres. The subject site is located on privately-owned land and lands owned by the United States Forest Service.

- Assessor's Parcel Number: 048-112-12; 048-120-22
- Staff: Sophia Kirschenman, Planner, 775-328-3623; skirschenman@washoecounty.us and Chris Bronczyk, Planner, 775-328-3612; cbronczyk@washoecounty.us
- Reviewing Body: Tentatively scheduled for the Board of Adjustment on November 7, 2019

Dave Snelgrove, Applicant Representative with CFA, provided a Powerpoint slideshow:

- He provided some history of the mountain
- He provided an overview of the ski run map with proposed additions
- This is part of the Washoe County Forest Area Plan
- He showed existing and expanded ski area boundary map with a combination of private and public land. 120 acres on US Forest service land will be expanded into the resort.
- Special Use Permit for lodge expansion, water tank, maintenance building, Lakeview chairlift replacement, grading, trail and site preparation, first aid facility, repurposing of existing buildings for employee and passholder locker space.
- In the ATOMA Area – new chairlift
- Skier bridge
- Grading for terrain transition to skier bridge crossing Mt. Rose
- Snowmaking coverage on trails with and to ATOMA area
- Remove existing ATOMA building and restore parking lot to natural contours
- ATOMA restroom facility
- Two SUP Cases WSUP19-0020 and WSUP19-0021
- He reviewed the project overview
- He showed the Winters Creek Lodge Expansion
- Water tank is its own Special Use Permit included in one application. Proposed 5Million Gallon water tank for improved snow making capability.
- He reviewed the ATOMA Area Expansion – needed transition terrain to allow for advanced beginners to prepare for true intermediate runs; wind protected zone; natural snow collection area; gladed open zones mixed with narrow trails.
- He reviewed the Skier access trail & Skier Bridge and showed a simulation.
- He reviewed a Maintenance building
- He spoke about phasing.
- He said the SUP will be good until 2027.

Kimberly Rossiter asked about restroom facilities. The Resort Representative explained the location. She asked about where the kids will be in the lodge. The marketing representative said the expansion allows for more room for the Far West kids and patrons during bad weather.

Shaun O’Harra asked if they plan to expand more after this. The Resort Representative said no, it’s restricted because of the US Forest Service wilderness. He said we are maxed out with terrain and parking, and cannot expand outside the ATOMA area. He said they cannot grow much bigger than what we have. No plans for mid or mountain lodges at this time.

Tom Burkhart asked about US Forest Service approval. Dave Snelgrove said we are in the process with them currently. The Resort Representative said they are waiting on the State Preservation Office to submit their final comments. He said they are waiting on that last piece.

MOTION: Shaun O’Harra moved to recommend to forward Board and citizen comments to Washoe County Staff regarding Special Use Permit Case Number WSUP19-0020 (Mt. Rose Expansion) and Special Use Permit Case Number WSUP19-0021 (Mt. Rose Water Tank) and recommend approval. Kimberly Rossiter seconded the motion. The motion carried unanimously.

6. *BOARD MEMBER ITEMS –

Shaun O’Harra asked if someone could come out to talk about a stop light at Montreux and Bordeaux. Chris Bronczyk advised him that NDOT recently conducted a study and the numbers were below the threshold to install a traffic signal. He said another study could happen again 2-5 years.

7. *GENERAL PUBLIC COMMENT AND DISCUSSION THEREOF – None

ADJOURNMENT– the meeting adjourned 6:39p.m.

Cab members present: 5
Staff present: 2
Public members present: 4
Elected officials present: 0



**LAND SURVEYORS
CIVIL ENGINEERS
LAND USE PLANNERS**

November 7, 2019

Chris Bronczyk & Sophia Kirschenman
Washoe County Community Services
1001 E. Ninth Street
Reno, Nevada 89512

RE: WSUP19-0020 & WSUP19-0021 – RESPONSE TO ADVISORY BOARD COMMENTS

Dear Chris and Sophia:

Per Policy F.2.3 of the Forest Area Plan, it is required that all applicants present their application requests to the appropriate Citizen Advisory Board (CAB) and must submit a statement to staff regarding how the final proposal responds to the community input received from the CAB.

The application requests were presented to the STMWV CAB on October 3, 2019. The applications, although separated by Washoe County case numbers were presented under one presentation, noting that there is a separate SUP request for the proposed water tank from the remainder of the proposed improvements. Only one question was presented after the presentation. Both application requests were recommended unanimously for approval by the STMWV CAB.

The only question that was presented prior to the vote by the CAB was: Are there additional plans for expansion of Mt. Rose Ski Tahoe beyond what is requested?

Paul Senft, General Manager of Mt. Rose Ski Tahoe answered that there are currently not more plans for expansion.

Should you have any questions regarding this letter please feel free to contact me at 775-856-7073 (desk) or 775-737-8910 (cell).

Respectfully submitted,

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

xc: Paul Senft, Mt. Rose Ski Tahoe, General Manager

**WSUP19-0020
EXHIBIT F**

MT. ROSE SKI TAHOE FACILITY EXPANSION AND UPGRADE SPECIAL USE PERMIT



PREPARED FOR:



PREPARED BY:



DATE: SEPTEMBER 16, 2019
AMENDED: OCTOBER 24, 2019

JOB NUMBER: 19-062.00

WSUP19-0020
EXHIBIT G

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Project Narrative - Table of Contents

Property Location/Site Area	1
Special Use Permit Requests	1
Project Background.....	3
Project Overview	4
Phasing Plan.....	4
Federal and State Review.....	5
Master Plan and Zoning.....	5
Signage and Lighting	7
Parking.....	8
Traffic	8
Signage	8
Revegetation	11
Existing Site Conditions	12
Special Use Permit Findings.....	16

Appendices

Washoe County Dev, SUP Application Forms	A
Project Architectural Exhibits & Photo Simulations	B
Reduced Overall Plan Exhibit & Civil Engineering Maps	C
Project Reports.....	D
Winters Creek Lodge Preliminary Septic System Analysis	
Conceptual Drainage Report for Mt. Rose Maintenance Building	
Conceptual Drainage Report for Galena Water Tank	
Conceptual Drainage Report for Winters Creek Lodge Expansion	
Geotechnical Summary	
Supporting Information	E
2012 SUP Approval Letter with Conditions (SB11-015)	
Assessor's Parcel Map Sheets	
Assessors Information Sheets	
Proof of Property Tax Payment	
State Water Permits and Certificate Information Sheets	
2009 NDEP Approval for East Bowl/Winters Creek Lodge Septic System	
Mt. Rose Ski Tahoe Peak Parking Lot Usage 2013-2018	

Map Envelope

Full Size Maps



MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Property Location/Site Area

Mt. Rose/Ski Tahoe is a destination resort ski area that is located in the southwest corner of Washoe County approximately 25 miles south of Reno and approximately 32 miles north of Carson City (refer to the Project Vicinity Map provided on page 2 of this Project Narrative). The ski resort is accessed via the Mt. Rose Highway (NV Route 431) from either I-580 to the east or NV Route 28, which runs along the northern and eastern shore of Lake Tahoe to the west. There are two main access points to the resort, one directly off Mt. Rose Highway to the Mt. Rose main lodge and one to an access road to the Winters Creek Lodge.

This destination resort is contained on both private and public lands and the overall ski area and existing improvements are located on portions of the following parcels. Ownership of each of the parcels along with the parcel number is provided in the following table.

Assessor's Parcel Number	Owner	Private/Public Land
048-112-12 thru 15	Mt. Rose Development Company	Private
048-120-22	USFS	Public

Special Use Permit Requests

This application specifically requests the following special use permits and modification to some of the code standards from the Washoe County Development Code.

Timeframe Requested -- The past approval (SB11-015) was granted for a period of 15-years as it similarly provided a multi-project expansion and upgrade plan. See Project Background for a more complete overview of this approval. It is requested that approval of these additions and upgrades to the Mt. Rose Ski Tahoe Resort be granted an 8-year approval. The rationale for this length of approval is multifaceted. (1) The construction season can be very short at higher elevations and some of these improvements will take multiple years to accomplish; (2) the ability to improve is directly tied to financial benefits gained during the prior ski season. If the season was good and highly profitable, there would have been more snow and a longer season, which shortens the construction window. Conversely, if the season was bad and low on profitability, there would have been less snow, which would tend to lengthen the construction window; and (3) finally, the requested timeframe of 8 years for the approval of this special use permit would match the year that the 2012 special use permit approval (SB11-015) will expire. An anticipated project phasing plan is provided in the Phasing Plan section of this narrative.

Special use permit for the allowance for expansion and upgrade to a Destination Resort within the TC and PR zoning districts.

Special use permit for the allowance of a utility service (5-million-gallon snowmaking water tank) within a PR zone.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Special use permit for the allowance of the setback of the water tank to be less than is typically required in the PR zoning designation – justification is that the uses on both sides of the water tank are contained within the Mt. Rose Ski Tahoe ski area boundary (as defined by the USFS) and the USFS NEPA approval for location of the water tank will require that a minimal amount of ground disturbance be provided with the construction of the facility. The 7.8-foot setback, rather than the 15 or 20 foot setback that would be required (depending upon whether a side, rear or front yard is applicable) helps to minimize the overall ground disturbance on USFS land and keep the project within the boundaries stipulated by the USFS NEPA approval.

The following special use permit requests and modifications are associated with Washoe County Grading Code

110.438.35(a)(1)(i)(c) Grading of an area of more than four (4) acres on a parcel of any size (SUP)

110.438.35(a)(1)(ii)(B) Importation of one thousand (1,000) cubic yards or more whether the material is intended to be permanently located on the project site or temporarily stored on a site for relocation to another, final site

110.438.35(a)(2)(i)(C) Grading of more than two (2) acres on any size parcel

110.438.35(a)(3) Any driveway or road that traverses any slope of thirty (30) percent or greater (steeper)

This occurs with grading that is proposed for the proposed driveway access into the maintenance building.

G110.438.35(a)(4) Grading to construct a permanent earthen structure greater than four and one-half (4.5) feet in height within the required front yard setback, or greater than six (6) feet in height on the remainder of the property. The height of an earthen structure is measured from existing grade at the time of permit issuance

There are graded slopes that are greater than 4.5 feet in height at the Water Tank and Maintenance Building. This occurs at the ski lift unloading stations and at the proposed water tank.

The following standards are requested for modification allowance as the Mt. Rose Ski Tahoe resort (as would any ski area) operates and functions differently than most other uses within the County. Much of the modification allowance request relates to providing skiable slopes, rather than abrupt drop-offs and is primarily for skier safety.

110.438.45(a) Grading shall not result in slopes in excess of, or steeper than, three horizontal to one vertical (3:1).

2:1 slopes are necessary and will be stabilized with rip-rap along areas to minimize the overall disturbed area. Such may be incorporated in association with the grading around the proposed water tank and maintenance building and at in small areas of grading, or at the edge of any graded trail. If 3:1 slopes were

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

required to be used, the amount of ground disturbance and scarring would be required to be substantially greater.

110.438.45(b) Within the required yard setbacks fills shall not differ from the natural or existing grade by more than forty-eight (48) inches.

This requirement is exceeded along the property line frontage for the driveway to the proposed maintenance building and along the north property line in association with the proposed water tank construction.

110.438.45(c) Finish grading shall not vary from the natural slope by more than ten (10) feet in elevation.

This occurs on the maintenance building and the water tank sites.

110.438.45(e) Within the side and rear yard setback areas of any parcel with a residential use or zoned for residential use, as well as the front yard setback of any parcel zoned for commercial or industrial use, retaining walls are limited to a maximum height of six (6) feet.

Retaining walls will exceed this height allowance for the proposed water tank.

110.438.50(a) The use of riprap and gabions as a mechanical stabilization for cut slopes is prohibited, except where essential for safe access, for passage within the rights-of-way of public roads, and for storm drainage control device(s).

Slopes of 2:1 or walls may be used where the balance between and limiting of overall ground disturbance on federal land becomes an issue.

Project Background

Mt. Rose Ski Tahoe has a long history dating back to the 1930's when Wayne Paulson built and operated the Mt. Rose Upski and Ski School Tyrol in the area that is now operated by the City of Reno as the Sky Tavern Ski School. During this time, devoted skiers would hike from the area that would become Sky Tavern up to the 9,700' peak of Slide Mountain and would ski the slopes that are now Mt. Rose Ski Tahoe. Over the years, the State of Nevada connected the Mt. Rose Highway all the way over the Mt. Rose Summit to Lake Tahoe, which opened the vehicular access to the area that is now Mt. Rose Ski Tahoe. Two ski areas operated at the mountain between 1964 and 1987 (The Slide Mountain Ski Area and the Mt. Rose Ski Area). The two ski areas were joined in 1987. The joined ski area continues to have a slow and steady growth.

In 2012, the most recent expansion approval was granted by the Washoe County Board of Adjustment under SB11-015. This approval granted the following improvements:

- The allowance for the removal of two lifts (Ponderosa and Galena) and the replacement of those lifts with a single new ski lift.



MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

- The extension of the existing Lakeview Ski Lift,
- Expansion of the mountain terrain to include new ski trails and a new surface lift,
- Expansion of the existing Mt. Rose Lodge by approximately 30,000+/- s.f.,
- Relocation of a 5,000+/- s.f. maintenance building, the construction of two snowmaking ponds,
- Construction of a relocated access road off Mt. Rose Highway,
- Construction of a new 3,000+/- s.f. on mountain restaurant,
- Construction of a 15,000+/- s.f. seasonal locker building, and
- Construction of a new terrain park ski lift on the Slide side of the resort.

The special use permit approval was granted on February 2, 2012 and holds a 15-year approval timeframe due to the broad nature of the facilities for improvement or upgrade and the short construction season at the 8,260' elevation and above.

Project Overview

A Mt. Rose Concept Plan/Overall Plan is provided with this application that shows the conceptual location for all the proposed improvements. The improvements are broken down into Private Land or Public Land improvements in the following list.

Private Land Improvements

- New Maintenance Building +/-12,000 s.f. (Replaces the +/-5,000 s.f. maintenance building approved under the 2012 approval)
- New 1ST Aid/Ski Patrol
- Winters Creek Lodge Expansion
- Clearing of vegetation for grading and facilities on Private Land (8+/- Acres, per USFS EIS)
- Repurposing of Existing Buildings
 - o Existing Vehicle Maintenance Building to become Locker Facility
 - o Existing Employee Locker Facility to become guest or passholder locker facility
 - o Existing Lift Maintenance Facility at Slide to become Employee or Guest Locker Facility

Public Land Improvements

- 5M Gallon Water Tank
- Clearing of Vegetation for new Water Tank

Phasing Plan

Following is a draft phasing plan for the proposed improvements contained within this application request:



MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

	2020	2021	2022	2023	2024	2025	2026	2027
5M Gallon Water Tank								
New Maintenance Building								
Winters Creek Lodge Expansion								
Snowmaking Construction								
Repurposing of Existing Buildings								
Lakeside Chairlift								
<i>Note: Target timeframes are shown as likely start and completion windows. Actual timing based on financial ability to construct and the length of actual construction seasons.</i>								

Federal and State Review

The proposed project has been in review with the USFS since 2011 and is nearing completion of that review. A copy of the USFS Final Environmental Impact Statement (FEIS) has been provided with this application to the Washoe County staff for review and consideration along with this special use permit request. One of the requirements of the USFS in their issuance of a permit to Mt. Rose Ski Tahoe is that the project has appropriate and necessary state and local approvals. This process represents a portion of those approvals that will be required by the USFS.

The FEIS document does contain additional improvements beyond those containing in this Special Use Permit request. Specifically, expansion of ski terrain into the federal land north of the existing Mt. Rose Ski Tahoe boundary on APN is included, which involves the clearing of new ski trails, construction of a new high-speed, detachable ski lift, construction of a skier/pedestrian level bridge crossing the Mt. Rose Highway and grading in association with the skier bridge access, unloading stations for the new ATOMA lift. These improvements will be covered under a separate special use permit in the future.

Master Plan and Zoning

The land associated with the Mt. Rose Ski Tahoe Resort holds a variety of master plan and zoning designations. Following is an identification of the parcels that are in part or whole associated with the application request. The master plan and zoning designations contained on each parcel is listed.

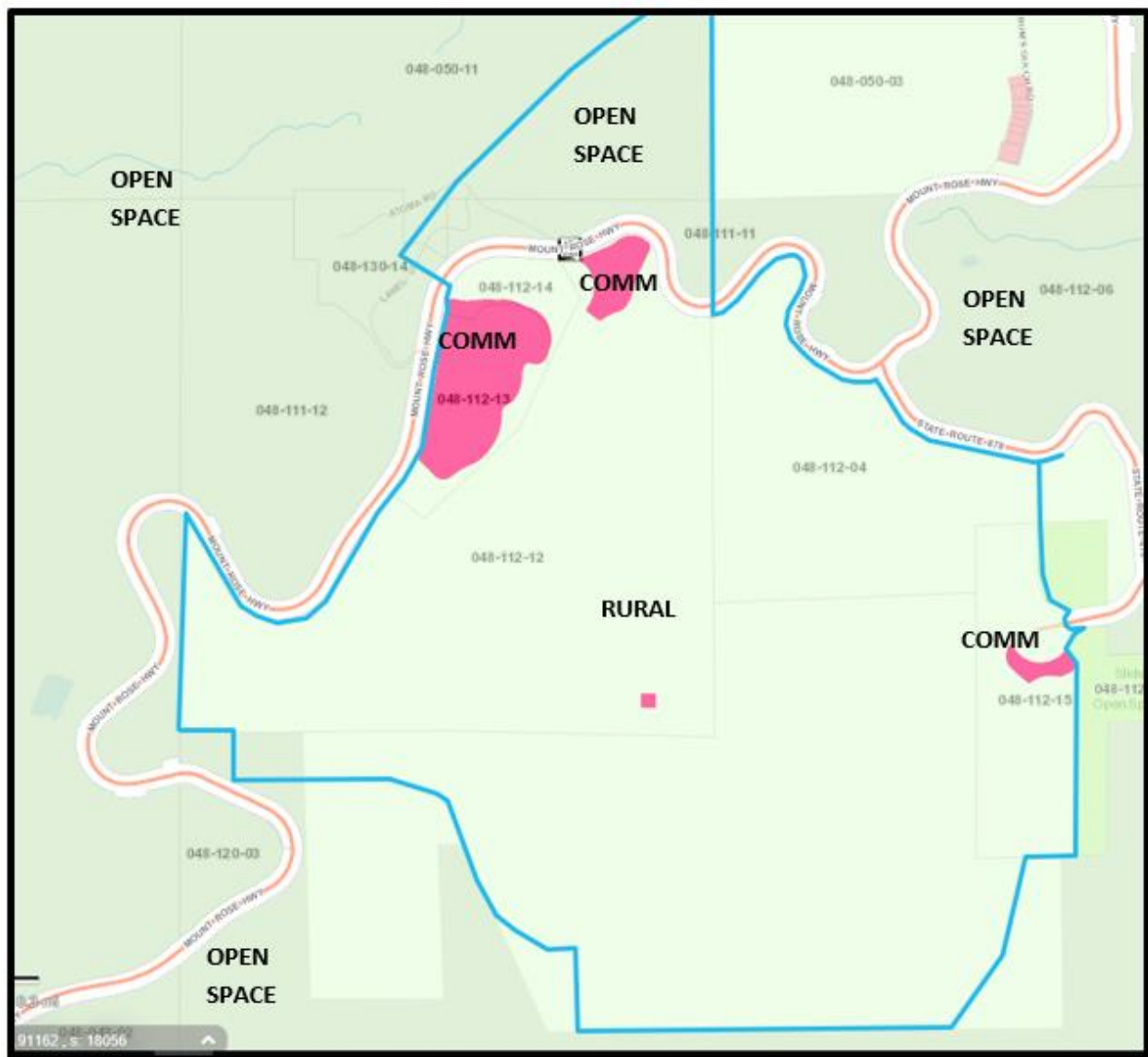
Assessor's Parcel Number	Owner	Master Plan Designation(s)	Zoning Designation(s)
048-112-12	Mt. Rose Development Company	Commercial & Rural	5% TC & 95% PR
048-112-13	Mt. Rose Development Company	Commercial & Rural	75% TC, 25% PR
048-112-14	Mt. Rose Development Company	Commercial & Rural	14% TC, 86% PR
048-112-15	Mt. Rose Development Company	Commercial & Rural	3% TC, 97% PR
048-120-22	USFS	Rural & Open Space	21% PR, 79% OS

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

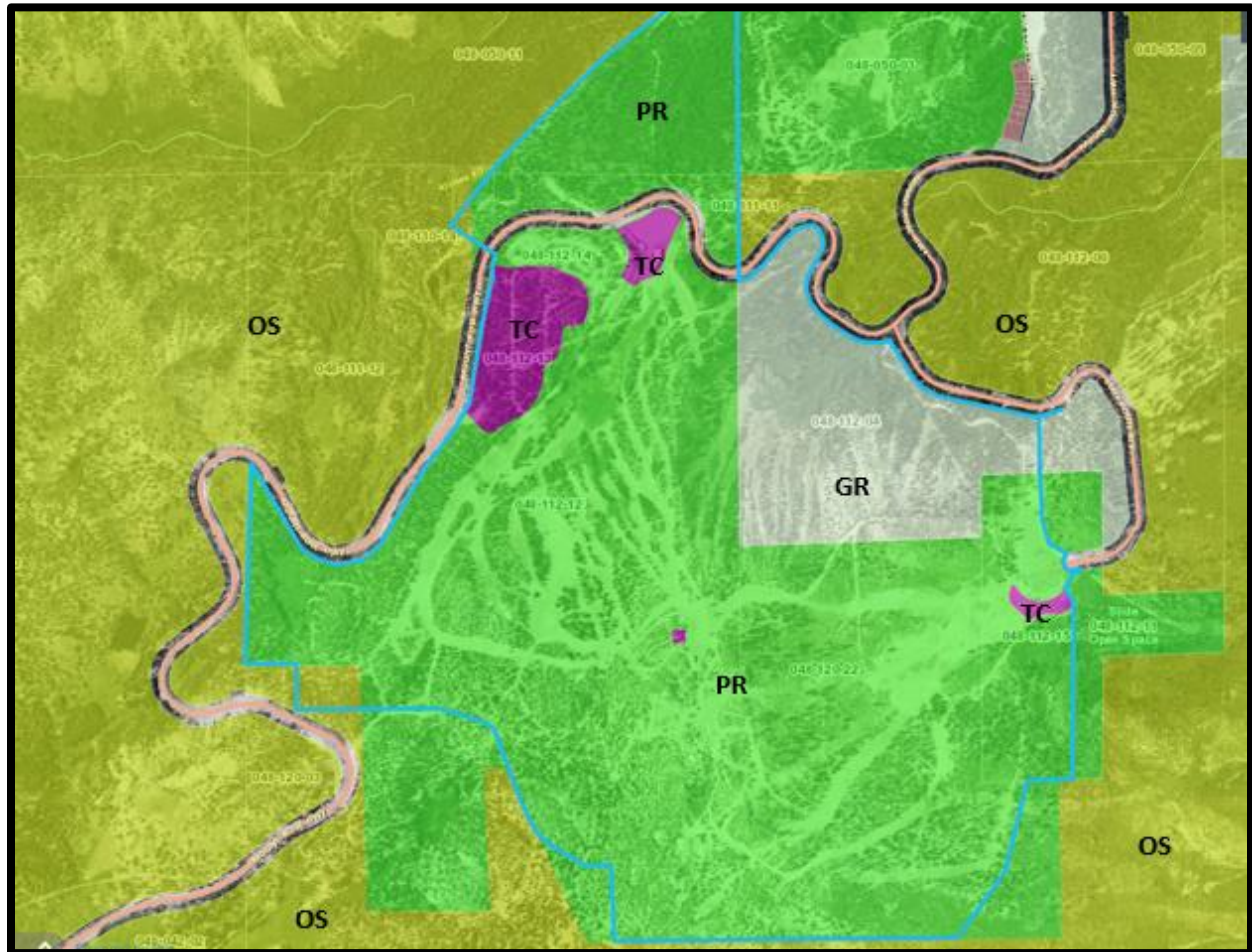
SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

The project proposes expansion and upgrade to an existing destination resort and a utility service (water tank) that are both allowed within the TC and PR zoning designation with the approval of a Board of Adjustment special use permit. The project area master plan and zoning maps are provided on the following page showing the approximate ski area boundary shown on each map. Ski area boundary is defined within the FEIS filed with the USFS and includes the ATOMA area, which is not requested as part of this application and will follow as a separate application.

Master Plan Map with Approximate Ski Area Boundary Lines



Zoning Map with Approximate Ski Area Boundary Lines



Signage and Lighting

Mt. Rose Ski Tahoe proposes modification of signage for direction of vehicles for parking within the existing parking lots. proposed sign elevations are provided on page 7 of this narrative. Although the signage elevation shows an Electronic Message Display (EMD), the applicant will not include the EMD with the signage and requests that this sign be part of the review and approval of this application. If an EMD is desired in the future, the applicant will submit the necessary Administrative Permit application for review.

Lighting will be provided only where necessary and would largely be for safety and access at buildings. No lighting is proposed on any of the ski runs associated with this application. Any lighting that is provided will be architecturally compatible with the lighting that is currently in use at Mt. Rose Ski Tahoe and/or

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

compatible with the associated building architecture and will be conformant with Article 414 of the Washoe County Code.

Parking

Article 410 of the Washoe County Code does not provide a specific parking requirement for a ski area nor a destination resort. The Mt Rose Ski Tahoe Resort has 2,500+/- parking spaces with 1,600+/- spaces located near the Mt Rose main lodge and 900+/- spaces located near the Winters Creek Lodge. Due to the fact that the primary use timeframe of the parking lots is during the winter when parking lots can be at least partially covered with snow or ice, the parking areas are not stiped and attendants or flaggers direct customers to parking spaces.

Mt. Rose Ski Tahoe keeps records of peak parking demand period and the past 6 ski season records are provided for the period of the Christmas and New Year periods (some of the heaviest skier periods). Parking is managed by Parking Attendants to help optimize the parking area used by each vehicle and to keep people parking in the closest and easiest access areas to the main lodge. A 15-day period is tallied each year during the peak visitor periods and the tallies noted how full each lot gets during each of these days. No tally is provided for the Winters Creek Lodge lot as that is one large parking lot containing 900+/- parking spaces.

Provided in Tab E is parking data for the Mt. Rose parking lots. Parking is tallied during the Christmas and New Year ski weeks, annually. Data for this period from 2013 to 2018 is provided in Tab E of this application. The data shows that the demand for parking very rarely exceeds the existing available parking during this peak season. Only two times during the past 6 years during this record keeping, peak timeframe have all the parking lot areas been identified to be "full".

Traffic

The proposed uses will have minimal additional impact on the traffic that is already attributable to Mt. Rose Ski Tahoe. In fact, many of the uses are entirely non-traffic generators (water tank, maintenance building, first aid station, locker room conversions).and will not increase traffic to a level that that meets the warrants of the Washoe County code necessitating a traffic report.

Signage

The application proposes two traffic directional signs. One of the signs (on the Mt. Rose/Main Lodge side of the project) is a replacement of an existing directional sign and a second sign is proposed on the Winters Creek Lodge side of the project also providing for vehicular directions to help with the overall flow of traffic into and out of the parking area.. Both signs will be a non-illuminated and the Mt. Rose side signage is a replacement of an older sign (pictured below) Both signs will be beneficial in allowing customers/visitors to Mt. Rose Ski Tahoe to quickly identify basic directional informaiton when entering the site During ski days, flaggers are also present to help direct traffic to available parking to aid in smooth movement of vehicles.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

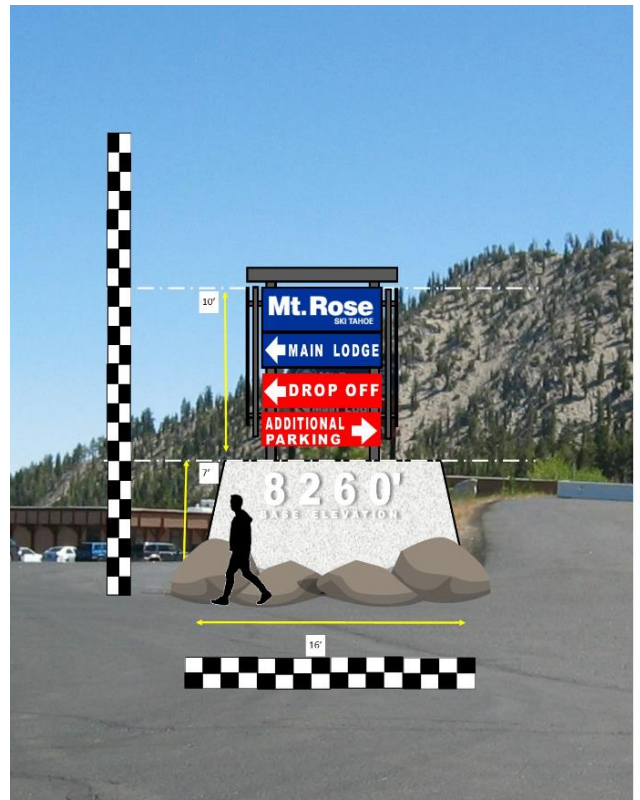
SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

The Mt Rose/Main Lodge replacement sign is to be located approximately 35 feet from NDOT ROW edge and approximately 120 feet from existing roadway pavement edge with Mt. Rose Highway, where the existing directional sign is placed.

Mt. Rose/Main Lodge and Parking Directional Signage



Existing Directional Sign



Proposed Directional Sign

Winters Creek Lodge Parking Signage

The proposed signage at the entry to the Winters Creek Lodge parking area will provide direction for vehicles through its location. Entering vehicles will travel to the right of the sign and exiting vehicles will travel to the left of the sign (when viewed from the sign front, toward the west). Currently there is no directional guide other than flaggers during the ski season and the main throat into the parking area can be quite confusing at times. The location of this signage is designed to help minimize the point of confusion and provide better direction and flow for vehicles.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)



MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Revegetation

Revegetation of graded areas will occur to the acceptance of Washoe County and the USFS (on forest service land). Following is a seed mixture that is proposed for use on the project.

Botanical Name	Common Name/Variety	PLS lbs./acre
<i>Achillea millefolium</i>	Yarrow	0.20
<i>Achnatherum occidentale</i>	Western needlegrass	1.00
<i>Artemisia tridentata</i> ssp <i>vaseyana</i>	Mtn. sagebrush	0.50
<i>Bromus carinatus</i>	California brome	4.00
<i>Elymus elymoides</i>	Blue wildrye 'Stanislaus'	4.00
<i>Elymus trachycaulus</i>	Slender wheatgrass, 'Pryor'	6.00
<i>Ericameria nauseosa</i>	Rubber rabbitbrush	1.00
<i>Poa secunda</i>	Sandberg bluegrass 'Sherman'	2.00
<i>Purshia tridentata</i>	Bitterbrush	3.00
Total		21.70

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Existing Site Conditions

Following are photos of the existing sites where the new facilities are proposed at the Mt. Rose Ski Tahoe Resort.

Maintenance Building Location Site Photos



View to the south of the proposed maintenance building location. Existing parking area in foreground.



View of Maintenance Building Site

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Water Tank Location Site Photos



View to the south west toward proposed tank location, behind existing tank.



View to the northeast from proposed tank location.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Winters Creek Lodge Site Photos



View of existing Winters Creek Lodge and patio to the southeast.



View of existing Winters Creek Lodge to the southwest.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)



View of the rear (east side) of Winters Creek Lodge – Existing bar area that will be expanded to the southeast can be seen in the projection out from the main building.

View of the front (west side) of Winters Creek Lodge



MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

First Aid Station Site Photo



First aid station is proposed to be located on the existing parking lot edge for ease of access in and out for ski patrol and for ambulance access.

Special Use Permit Findings

Article 810 of the Washoe County Development Code identifies findings that must be made in order to approve a special use permit. Following is an identification of each finding and the applicant's response as to how or why this finding is met with this request.

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

The proposed uses and grading proposed with this special use permit are consistent with the Parks and Recreation and Tourist Commercial zoning designations which is consistent with the Rural and Commercial Master Plan Designations on the property. More specifically, the policies, and associated findings, outlined in Goal Four: Mount Rose Resort Services Area (MRRSA) are addressed. In particular, F.4.2 (a-n) and the vision that the Mt. Rose Ski Resort is a long term planning project, with multiple component projects scattered across the resort area that will take years to complete due to the regulatory overviews of many governmental agencies, funding sources, and careful business acumen.

(2) The proposed development is consistent with the following policies of the Forest Area Plan:

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

The Mt. Rose Ski Tahoe is located within the Mt. Rose Resort Service Area as defined by the Forest Area Plan of the Washoe County Comprehensive Plan

Goal Four: Mount Rose Resort Services Area (MRRSA). To preserve the important role of resort destinations in the community character of the Forest planning area and to promote the economic viability of resort destination activities, the Mount Rose Resort Services Area is designated on the Character Management Plan map. In order to achieve this goal, the following policies will apply to this area:

Goal Four and the associated policies that are applicable with this application request are met with this project.

F.4.1 The parcels designated Mt. Rose Resort Services Area are identified on the Forest Master Plan map as Parks and Recreation (PR) and Tourist Commercial (TC).

This holds true at the time of this submittal.

F.4.2 Mt. Rose Resort Services Area Conceptual Development Standards. These standards and guidelines of the Mt. Rose Resort Services Area are intended to form the basis for the future development of the Mount Rose Resort Services Area. This language is not intended to represent the only alternative for accomplishing the concept it embodies.

- a. Applicability. The Mt. Rose Resort Services Area MRRSA applies to ±477.2 acres and includes but may not be limited to the properties identified on the Forest Area Plan Character Management Plan map identified as the Mount Rose Resort Services Area.

The proposed water tank is located just outside of the identified MRRSA boundary on the Forest Area Character Management Plan. This is acceptable, per this policy.

- b. Purpose and Intent. The purpose of the MRRSA is to establish and define the characteristics, uses and limitations for the long term master plan of the Mt. Rose-Ski Tahoe Resort in concert and consistent with the United States Forest Service (USFS) Plan that has been adopted by the USFS (Mt. Rose/Slide Mt. Master Development Plan, October 2003). Mt. Rose-Ski Tahoe has served for more than 44 years as the local ski resort for the residents of Washoe County. It has also benefited the tourism sector of the local economy by providing a recreational experience that is not typically found in close proximity to urban areas. The MRRSA is intended to recognize the long term needs of Mt. Rose-Ski Tahoe to modernize and remain competitive in the dynamic ski resort industry while assuring the goals and policies of the Truckee Meadows Regional Plan and the Washoe County Master Plan are achieved.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

The proposed improvements with this SUP will help to modernize the Mt. Rose Ski Tahoe Resort while meeting the policies of the TMRP and the Washoe County Master Plan.

- c. Procedures. Development within the MRRSA will follow the review procedures (i.e. tentative maps, special use and administrative permits) as they are established in the Washoe County Development Code for the land uses designations included in the MRRSA.

This SUP application and review process assure that this policy is being met.

- d. Land Use Designations. A possible approach to the designation of land uses is shown below. The ultimate designation of land uses will permit the establishment of various forms of lodging, including interval or timeshare units.

LAND USE DESIGNATION ACRES

Parks and Recreation 413.5 Tourist Commercial 44.7

The current SUP request does not include lodging nor timeshares that the resort has not grown to that level, yet.

- e. Circulation and Access. Mt. Rose – Ski Tahoe will continue to obtain vehicular access, both directly and indirectly, from Mt. Rose Highway (State Highway 341). The Mt. Rose Base Lodge side of the resort is served by a private internal loop road that will ultimately connect the Lodge, parking areas and condominiums. The Slide Lodge obtains access from a public road (State Route 878) that extend from its intersection with Mt. Rose Highway to the Slide Lodge and parking area. The existing accesses from Mt. Rose Highway to the Mt. Rose Base Lodge and Slide Bowl Lodge will remain. A third approved access to Mt. Rose, which is approximately one-quarter (1/4) mile south of the Mt. Rose Base Lodge access, will be constructed in 2009 pursuant to the approved special use permit. These three access points are designed to adequately handle the long-term needs of the resort.

No change to the points of access is proposed as part of this application.

- f. Employee Transportation and Housing. Because it is located in close proximity to an urban area, Mt. Rose-Ski Tahoe creates no significant demand for on-site employee housing. The approximately 40 full time employees of the resort own homes in the Truckee Meadows and Washoe Valley. Seasonal and part time employees consist of

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

college and high students that attend schools in the Truckee Meadows. The resort will provide on-site housing for care-taker, avalanche control and snow removal staff (3-6 units).

As necessary, sleeping arrangement can be made available for avalanche control or snow removal, but this is in major storm events and is a rare occurrence.

- g. Infrastructure. The MRRSA is currently served by a private water system, public sewerage (Washoe County) and electricity. This existing infrastructure, particularly the sewer and water improvements, is sized to meet only the level of development contemplated in the MRRSA. Therefore, it cannot promote the expansion of surrounding development outside the MRRSA.

The current water system supports the current development and the proposed additional construction with this application will not exceed the capacity of the existing systems.

- h. Primary Activity. The primary activity of the MRRSA is, and will remain, alpine skiing and associated snow sports that are a function of the elevation and topography of the site.

This is met with this SUP request.

- i. Design Criteria. Any development applications shall include details of the design criteria and architectural details of the project and will be consistent with the development standards for the specific land use designations as they are established in the Washoe County Development Code.

Architectural elevations of the proposed buildings have been provided with the application to be consistent with the existing architecture of the Mt. Rose Ski Tahoe Resort and with the design standards of the Washoe County Development Code.

- j. Development Constraints. Activities and development within areas of the MRRSA that have slopes of 30% or greater shall be limited to those associated with access, utilities and ski resort operations consistent with Policy 1.1.8 of the 2007 Truckee Meadows Regional Plan. Development within the MRRSA must be consistent with plans and procedures adopted by Washoe County to implement Policy 2.2.1 of the 2007 Truckee Meadows Regional Plan.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

Design of the component parts/projects associated with this SUP request have been located such that they are in appropriate areas within minimal impact on steeper slopes. The proposed site and grading plans with each of the projects associated meet this requirement.

- k. Residential Development. Residential uses will be primarily intended for transient guests who will use the ski resort and will consist of not more than 440 “ski-in/ski-out” condominium units.

The current SUP request does not include lodging nor timeshares that the resort has not grown to that level, yet.

- l. Accessory Uses. Accessory uses must not meet or exceed the scale of the primary ski resort use within the MRRSA. They will be designed to meet the needs of the anticipated customer base of the resort and not be of a size or scale such that they would promote the development of properties surrounding the resort.

No accessory uses are proposed.

- m. Mt. Rose Scenic Corridor. A 100-foot open space setback along the Mt. Rose Highway frontage will be provided to implement the objectives of the Mt. Rose Scenic Corridor established in the Forest Area Plan. With the exception of the two access driveways on Mt. Rose Highway and the existing Mt. Rose Lodge parking lot, this 100-foot setback will be retained as undisturbed open space.

No impact or grading is proposed within the 100-foot open spaces setback along the Mt. Rose Highway. A parking area directional sign is proposed to be replaced/upgraded and that is the only improvement that falls within this area and it is allowed as it is part and beneficial to the functionality of the parking lot.

- n. Sustainability. All new construction shall use construction best practices to implement “green” development standards that are appropriate for the location of the resort.

The resort has a runoff retention system that captures stormwaters and runoff such that it can be absorbed back into the ground, thus helping to recharge the aquifer.

F.4.3 The development standards of the MRRSA shall be implemented through either the special use permit or development agreement process as established in the Washoe County Development Code.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

This SUP application allows for the implementation of the development standards of the MRRSA.

Goal Six: Resources key to the preservation and implementation of the character described in the Character Statements will be protected and where possible, enhanced.

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.

The Mt. Rose Ski Tahoe Resort is a unique resource for primarily recreational activities and the goal of preserving and enhancing the area dovetails with this finding to support activities that contribute to the character of the area.

Goal 8: Maintain and enhance the scenic value of the State Route 431 corridor.

F.8.1 The State Route (SR) 431 corridor through the planning area is designated a Scenic Corridor as depicted on the Forest Character Management Plan map. The intent of the Scenic Corridor is to:

- a. Promote the preservation and enhancement of the scenic nature of the corridor.
- b. Limit and manage the establishment of uses incompatible with the scenic nature of the corridor.
- c. Ensure that development within the corridor does not diminish the distant vistas available along the corridor.
- d. Ensure that development within the corridor enhances the near vistas available along the corridor and does not create a tunnel effect.
- e. Promote the corridor as a community and regional asset.

The proposed improvements will not be visible from the Mt. Rose Highway corridor with the existing evergreen screening in the area. A photo simulation of the proposed 5M Gallon water tank is provided in this application as an example of the existing screening that the area possesses.

F.8.3 To enhance the visitor and resident experience, Washoe County will encourage recreational facilities such as trails, trailheads, and scenic viewpoints.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

The proposed improvements will allow for a better overall experience by upgrading existing facilities, relocating existing facilities to better service the site, and provide functional upgrades to the proposed expansion in a timely manner.

Goal 10: The Forest planning area will contain an extensive system of trails that integrates other recreational facilities, the Regional Trail System including the urban core of Reno and Sparks, public lands, schools, and transit facilities; and contributes to the preservation and implementation of the community character.

F.10.2 New trails will be designed to accommodate multiple uses including equestrian, pedestrian and bicycle traffic, unless severe technical, environmental, or economic hardships warrant consideration of a more limited use.

F.10.4 Parking will be provided at all trailheads unless technical or safety issues prevent the construction of parking facilities or it is determined that the parking facility cannot be adequately screened or buffered from adjacent residential properties. Points of access other than trailheads may be depicted on the Recreational Opportunities Plan map but do not require parking facilities.

A Washoe County Parks Trailhead exists in the Winters Creek Lodge parking lot at the north east corner of the parking area.

Goal 11 - Washoe County will cooperate with state and federal agencies in the management of public lands in the planning area.

F.11.1 Washoe County recognizes a growing pressure on public lands brought on by an increasing demand for outdoor recreational activities. Washoe County will work with the United States Forest Service to ensure that Management Plans for federal lands in the planning area consider the growing impact of recreational activities on residents of the area.

F.11.2 Washoe County will cooperate with the community and with other local agencies to explore establishing new funding sources and to enlist volunteers to help in the maintenance and operation of local recreation facilities.

This project is proposed on private and USFS land and is in the final stages of a USFS permit that includes review through federal and state level agencies for approval. The project is currently being reviewed by SHPO. As such, there has been, and is anticipated to be, continued cooperation with federal, state and local jurisdictions associated with the project.

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

(3) 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;

F.4.2(g) Infrastructure. The MRRSA is currently served by a private water system, public sewerage (Washoe County) and electricity. This existing infrastructure, particularly the sewer and water improvements, is sized to meet only the level of development contemplated in the MRRSA. Therefore, it cannot promote the expansion of surrounding development outside the MRRSA.

The Mt. Rose Ski Tahoe Resort is accessed via State Route 431/Mt. Rose Highway and provides safe and appropriate access to the property. The proposed improvements will have limited additional impact on utilities. The water tank is proposed such that an appropriate volume of water exists to service more of the snow making equipment simultaneously Mt. Rose Ski Tahoe has two private water systems (one serving the Mt. Rose Side of the hill and one serving the Slide Mt./Winters Creek Lodge side) that are regulated by NDEP and the Washoe County Health Department.

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

Skiing in the area of Mt Rose Ski Tahoe has been ongoing since the 1930's and the resort is an appropriate location for the proposed expansion that is presented in this application. The use is consistent with the uses in and around the area. Policy 4.2(b) of the Forest Area Plan cites that the purpose of the MRRSA is to establish and define the characteristics, uses and limitations for the long term master plan of the Mt. Rose-Ski Tahoe Resort in concert and consistent with the United States Forest Service (USFS) Plan that has been adopted by the USFS (Mt. Rose/Slide Mt. Master Development Plan, October 2003). Mt. Rose-Ski Tahoe has served for more than 44 years as the local ski resort for the residents of Washoe County. It has also benefited the tourism sector of the local economy by providing a recreational experience that is not typically found close to an urban area

(5) 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;

It is not foreseen that there will be any detrimental impact associated with the allowance of the proposed improvements. The new first aid station will assist in providing injured skiers with medical attention (off the slope) quicker than is the case, currently. The proposed uses are located on an area that has been defined by the USFS as the ski area boundary and the operation is bound by the rules and regulations put forth by

MT. ROSE/SKI TAHOE FACILITY EXPANSION & UPGRADE

SPECIAL USE PERMIT REQUEST NARRATIVE (AMENDED)

the USFS along with the rules of Washoe County. The proposed improvements are not foreseen to have any detrimental impact to the public health, safety or welfare.

(6) 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.

There are no military installations located in proximity to the proposed site area. As such, this finding is not applicable.

APPENDIX A

Washoe County Development Application

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

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

Mt. Rose Ski Tahoe Facility Expansion & Upgrade

Special Use Permit - Parcel Ownership Listing

Assessor's Parcel Number	Owner	Address	Contact Name and Phone Number
048-112-12 thru 15	Mt. Rose Development Company	22222 Mt. Rose Highway Reno, Nevada 89511	Paul Senft, General Manager Phone – 775-849-0704
048-120-22	USFS	1200 Franklin Way, Sparks NV 89431	William Dunkelberger & Marnie Bonesteel 775-331-6444

Property Owner Affidavit

Applicant Name: Mt. Rose Development Co.

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

STATE OF NEVADA)
COUNTY OF WASHOE)

I, Paul Senft
(please print name)

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

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

Assessor Parcel Number(s): 048-112-12 thru 15

Printed Name Paul Senft

Signed [Signature]

Address 22222 Mt. Rose Hwy
Reno NV 89511

County of Washoe
State of Nevada
Subscribed and sworn to before me this
12 day of September, 2019.

(Notary Stamp)

Deane R
Notary Public in and for said county and state
My commission expires: 2/13/2022



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

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

Property Owner Affidavit

Applicant Name: United States Forest Service

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

STATE OF NEVADA)
)
 COUNTY OF WASHOE)

I, William Dunkelberger

 (please print name)

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

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

Assessor Parcel Number(s): 048-050-11, 048-111-11 & 048-120-22

The signature of the Forest Service represents our acknowledgment of the affidavit and does not represent our approval of the project.

Printed Name WILLIAM A. DUNKELBERGER

Signed [Signature]

Address 1200 Franklin Way,

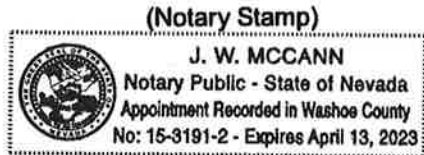
Sparks, NV 89431

Subscribed and sworn to before me this 3rd day of June, 2019.

[Signature]

 Notary Public in and for said county and state

My commission expires: 04/13/2023



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

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

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

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

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

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

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

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

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

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

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

9. Utilities:

a. Sewer Service	
b. Electrical Service	
c. Telephone Service	
d. LPG or Natural Gas Service	
e. Solid Waste Disposal Service	
f. Cable Television Service	
g. Water Service	

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

h. Permit #		acre-feet per year	
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

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

--

10. Community Services (provided and nearest facility):

a. Fire Station	
b. Health Care Facility	
c. Elementary School	
d. Middle School	
e. High School	
f. Parks	
g. Library	
h. Citifare Bus Stop	

**Special Use Permit Application
for Grading
Supplemental Information**
(All required information may be separately attached)

1. What is the purpose of the grading?

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

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

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

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

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

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

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

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

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

11. Are you planning any berms?

Yes	No	If yes, how tall is the berm at its highest?
-----	----	--

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

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

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

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

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

--

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

--

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

Yes	No	If yes, please attach a copy.
-----	----	-------------------------------

APPENDIX B



MT ROOSE WINTERS CREEK LODGE

CONCEPT DESIGN

bull stockwell allen
ARCHITECTURE + PLANNING + INTERIORS



Located between Reno and Lake Tahoe, Mt Rose has the highest base elevation in the area. The existing Winters Creek Lodge is approximately 8000 sf and was constructed in 2009, on the east side of the ski area as a second access point to the ski area from the Mt Rose Highway. In this location the building is uniquely positioned to take advantage of dramatic views toward the ski mountain and east towards the Washoe Valley and beyond.

The lodge's primary function during the ski seasons is as a food and beverage outlet with restrooms that serve the day skiers. The building contains a full-service kitchen, scramble type serving area and bar. The interior spaces can expand to the extensive out door decks in good weather. In addition, the building program, scenic location and proximity to Reno make it a destination for conferences, weddings and other event throughout the non-ski seasons.

Due to the popularity of lodge venue, the resort has worked with Bull Stockwell Allen to prepare an expansion strategy to accommodate more users. The basic approach is to create larger the seating and bar areas and outdoor seating with limited modifications to the kitchen and back of house areas. The overall Scope of Work for the Projects is outlined in the attached conceptual design package. The project schedule starts construction in Spring 2020, for project opening in Winter 2020.



PROJECT OVERVIEW

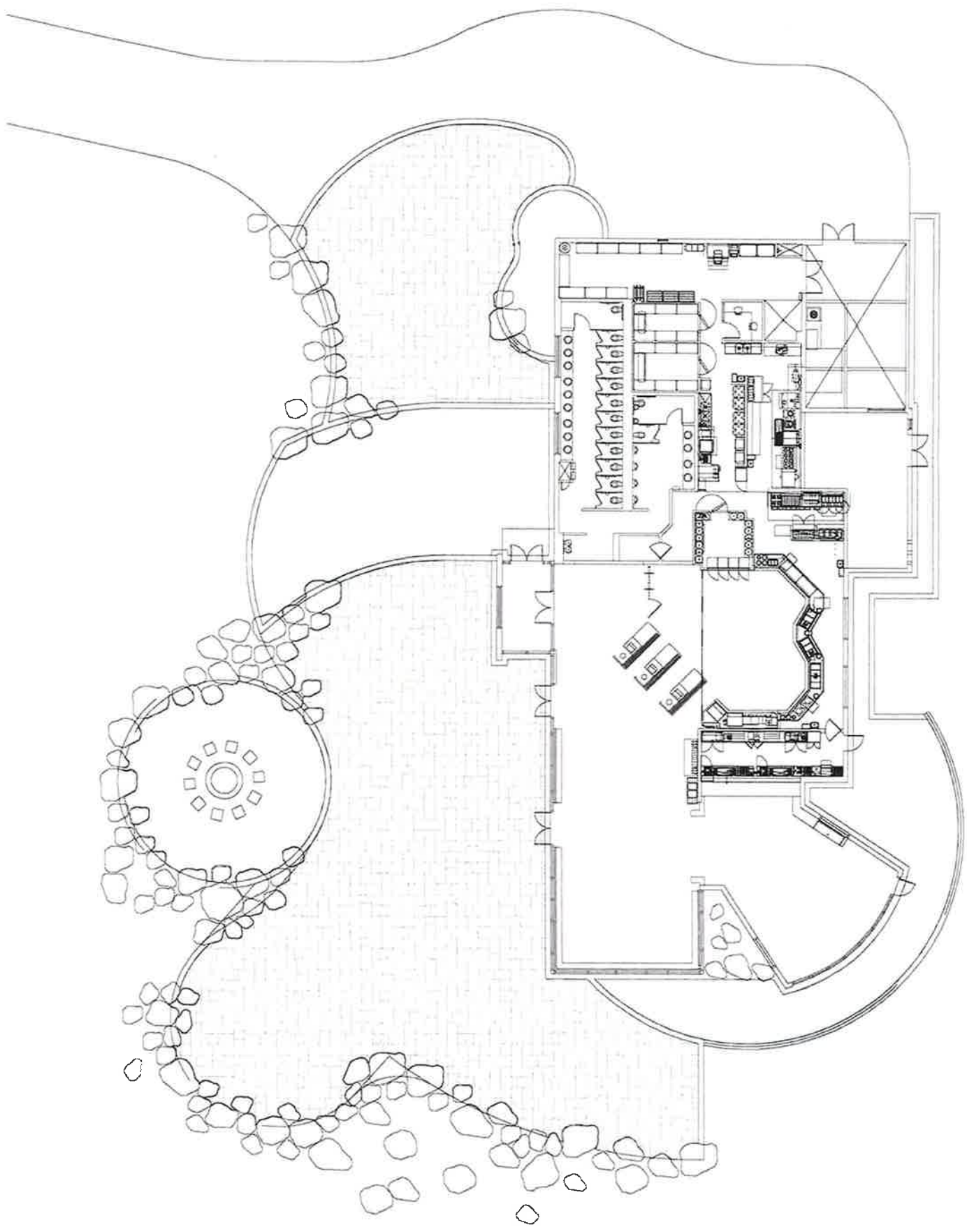
WINTERS CREEK LODGE

JULY 2019



bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS





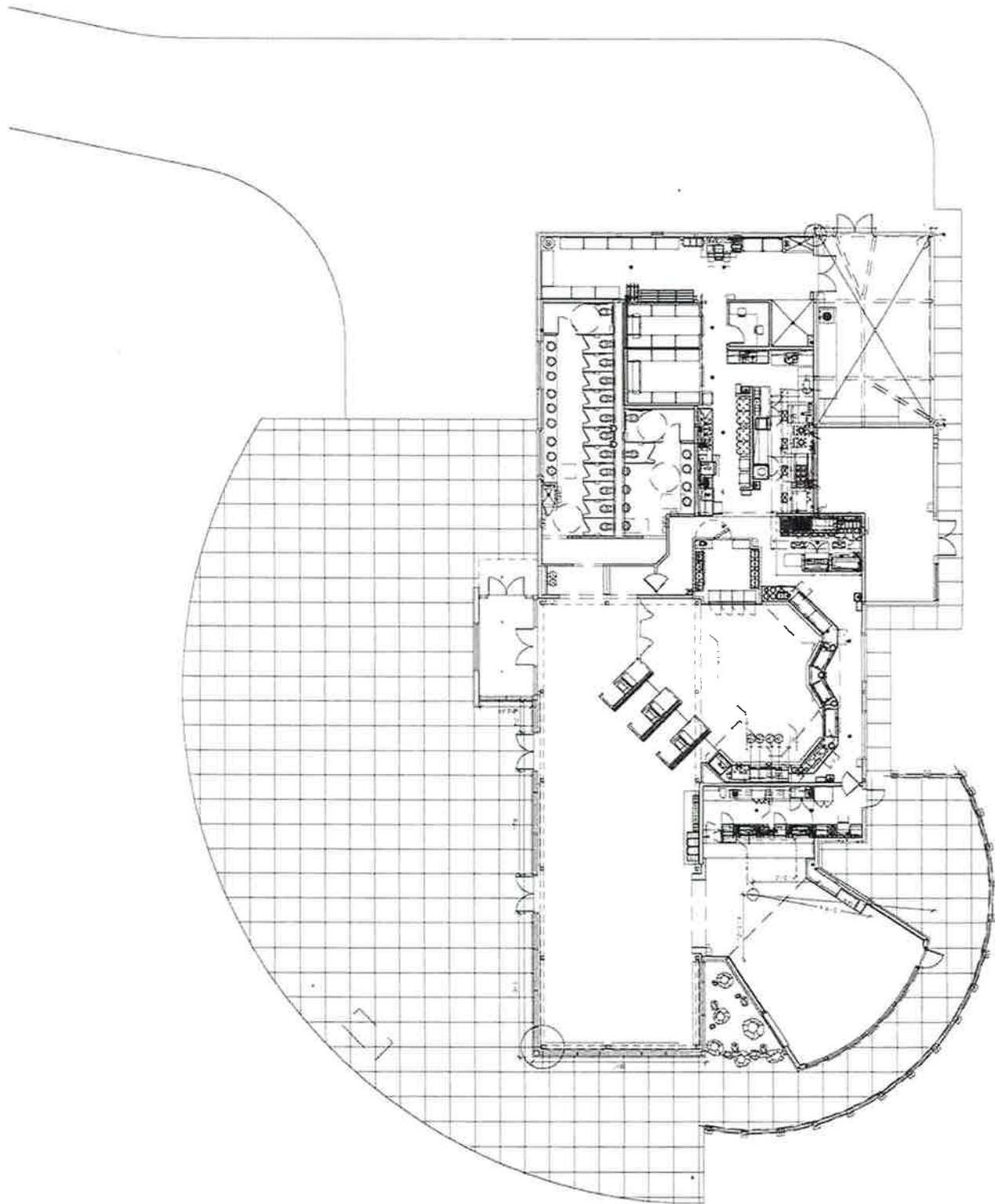
SITE OVERVIEW AND SCOPE

WINTERS CREEK LODGE
JULY 2019



bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS





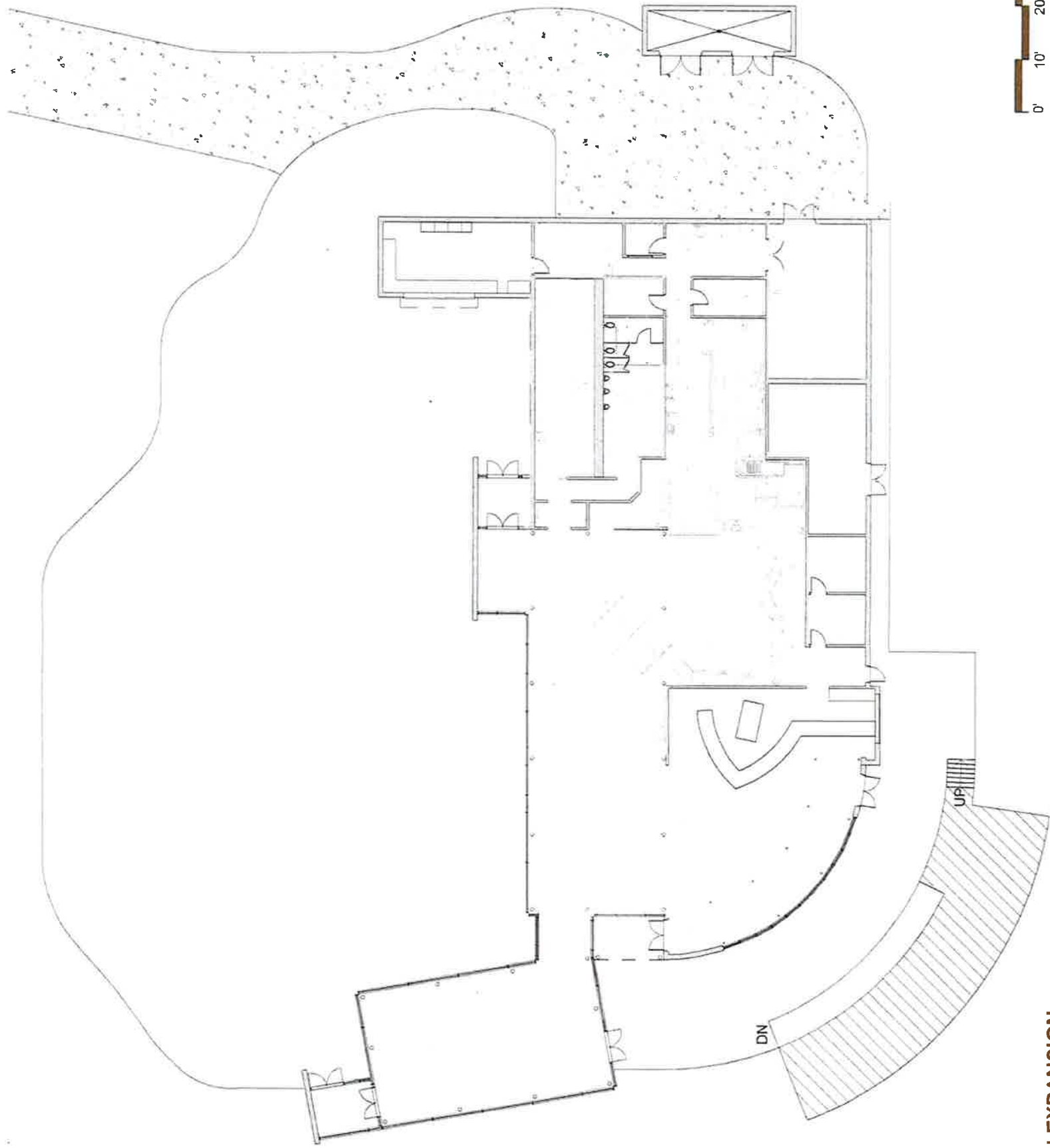
EXISTING FLOOR PLAN

WINTERS CREEK LODGE

JULY 2019



bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS



PROPOSED FLOOR PLAN EXPANSION

WINTERS CREEK LODGE

JULY 2019



bull stockwell allen
ARCHITECTURE + PLANNING + INTERIORS

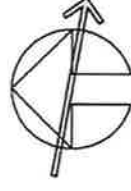
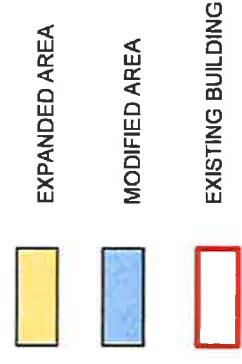
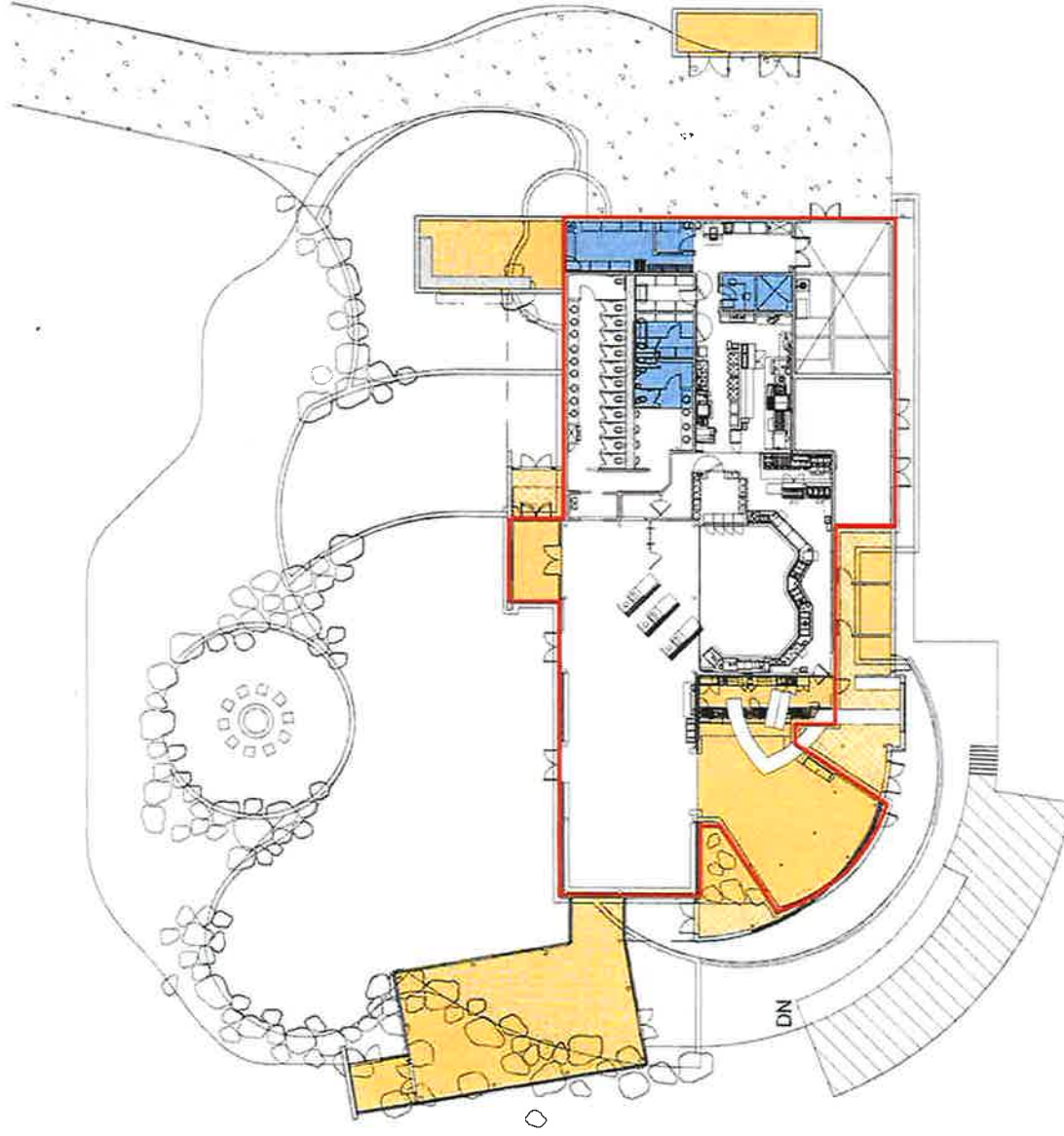


EXISTING LODGE	
Dining Room	1250 sf
Entry and Cashiers	860 sf
Bar	1075 sf
Kitchen & Scramble	2690 sf
Vestibule	150 sf
Men	230 sf
Women	475 sf
Mechanical	450 sf
Circulation Walls Support	800 sf
Total	7980 sf

Dining Terrace	11200 sf
Bar Terrace	1290 sf

EXPANDED LODGE	
Dining Room	1250 sf
Entry and Cashiers	860 sf
Dining Expansion	1250 sf
New Bar	1606 sf
Kitchen & Scramble	2580 sf
Barbeque Expansion	460 sf
Expanded Vestibule	275 sf
New Vestibule	115 sf
Expanded Men	360 sf
Women	475 sf
Mechanical	450 sf
Circulation Walls Support	1275 sf
Total	11120 sf

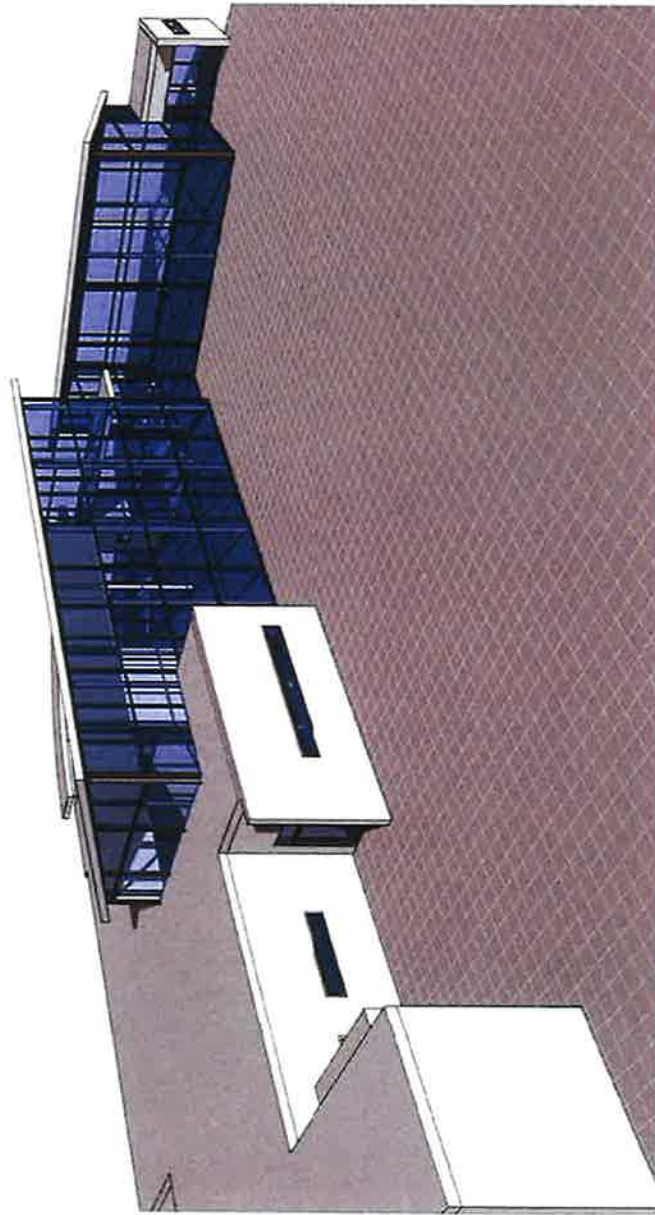
Trash Enclosure	330 sf
Dining Terrace Expansion	13950 sf
New Bar Terrace	2100 sf
New Deck	1510 sf



PLAN DIAGRAM AND AREA SUMMARY

WINTERS CREEK LODGE

JULY 2019



VIEW TOWARDS ENTRY AND DINING



VIEW TOWARDS NEW DINING EXPANSION

EXTERIOR VIEWS

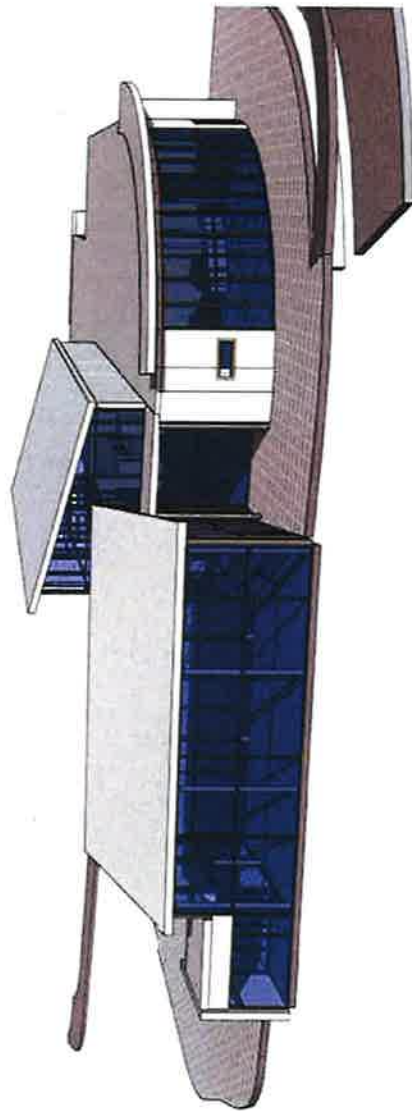
WINTERS CREEK LODGE

JULY 2019

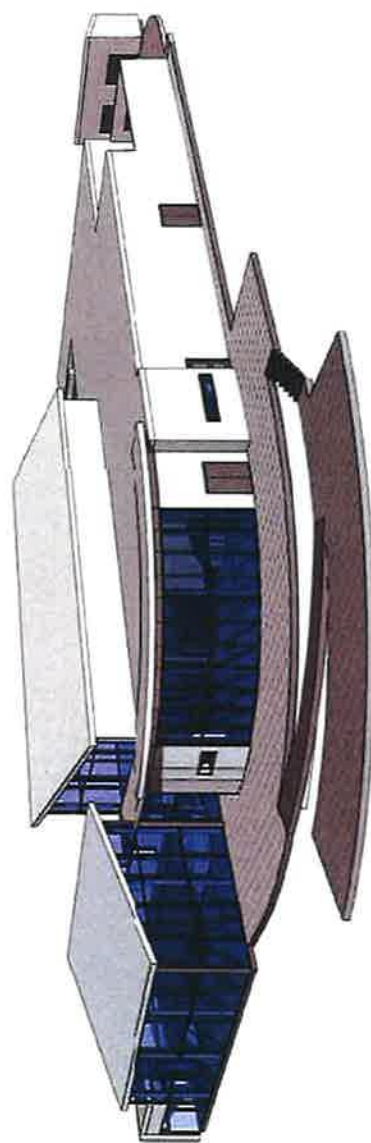


bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS





VIEW TOWARDS NEW DINING EXPANSION & BAR TERRACE



VIEW TOWARDS NEW BAR AND BAR TERRACE

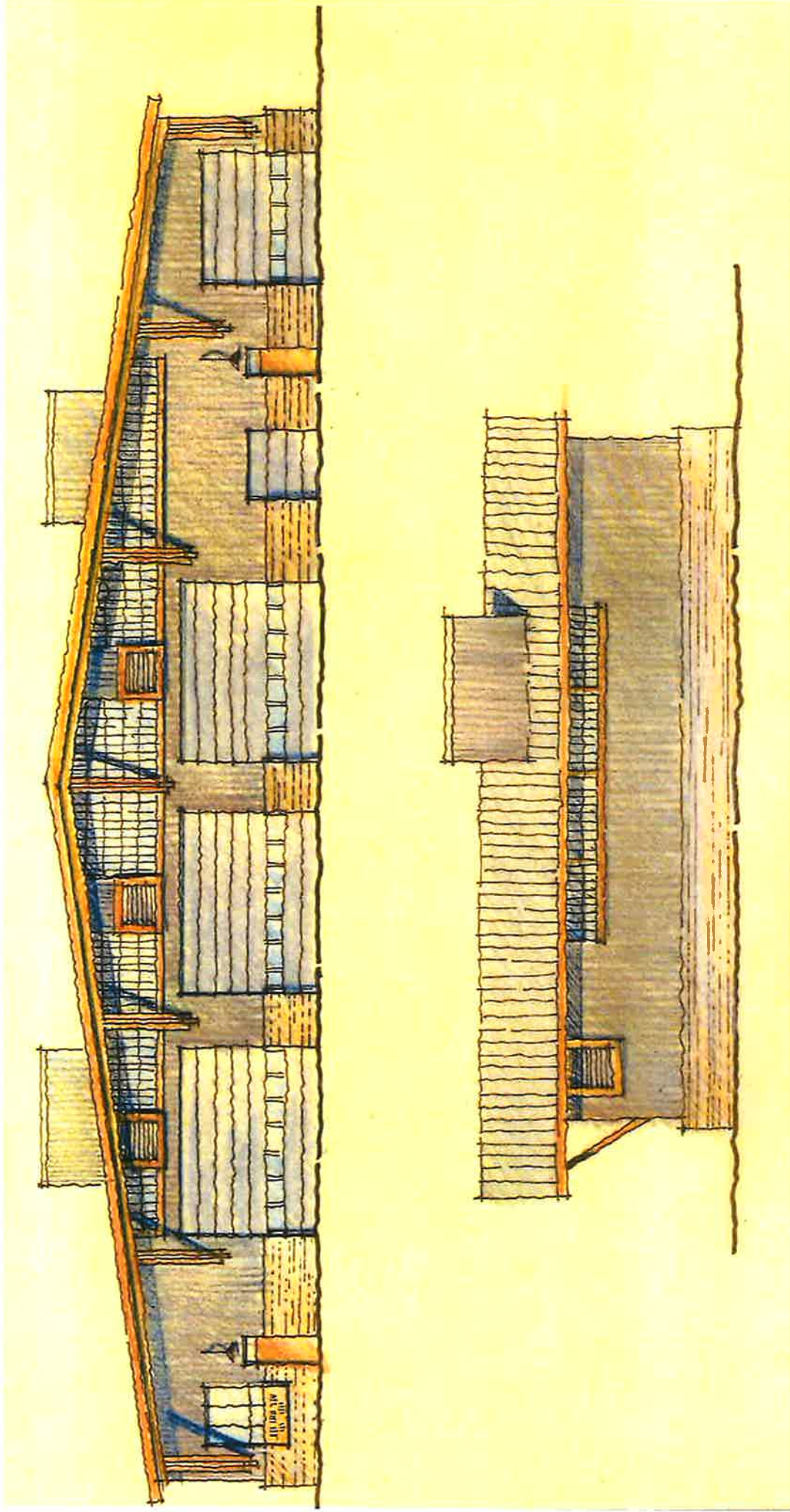
EXTERIOR VIEWS

WINTERS CREEK LODGE

JULY 2019

bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS





MAINTENANCE BUILDING

WINTERS CREEK LODGE

JULY 2019



bull stockwell allen
ARCHITECTURE • PLANNING • INTERIORS



APPENDIX C



LEGEND

MOUNTAIN IMPROVEMENTS

- A** SNOWMAKING WATER STORAGE TANK
- B** MOUNTAIN OPERATIONS FACILITY
- C** LAKEVIEW LIFT UPGRADE

ROSE BASE AREA

- D** EXISTING MAIN LODGE RENOVATION AND EXPANSION (APPROVED WITH 2012 SUP)
- E** NEW PATROL/FIRST AID FACILITY
- F** REPURPOSED FACILITY/LOCKER ROOMS

WINTERS CREEK

- G** LODGE EXPANSION
- H** SEASONAL LOCKERS

ATOMA EXPANSION

- I** SKI TRAIL/LIFT TERMINAL GRADING
- J** TREE CLEARING (EXPANDED SKI TERRAIN)
- K** ATOMA LIFT WITH MIDSTATION
- L** SKIER BRIDGE
- M** REPURPOSED RESTROOM BUILDING

MAP ANNOTATIONS BY CFA, INC.

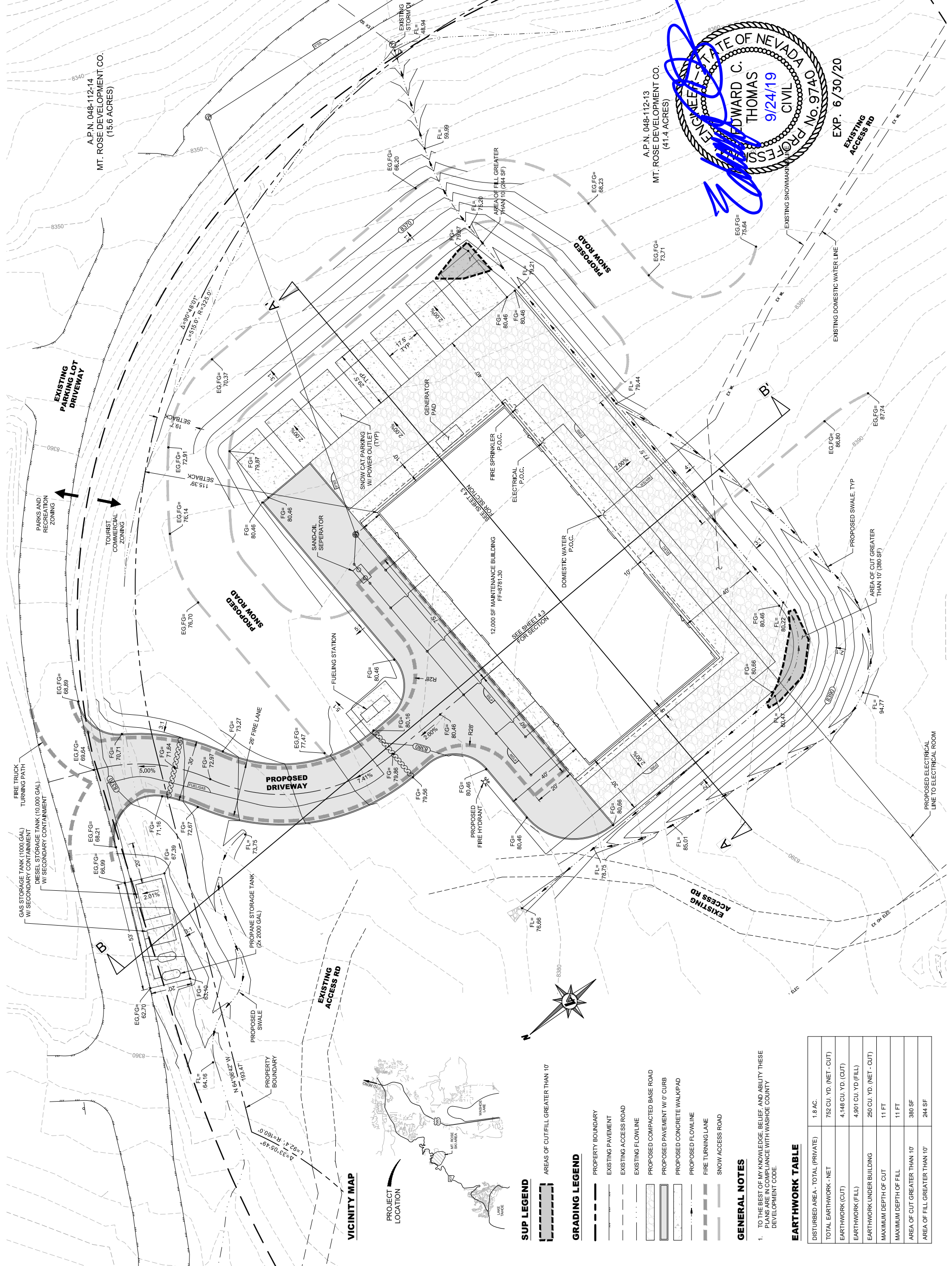
LEGEND

- EXISTING SKI TRAIL
- PROPOSED SKI TRAIL
- EXISTING BUILDING
- PROPOSED BUILDING
- ATOMA AREA (NOT A PART)
- PARCEL BOUNDARY
- FOREST SERVICE PERMIT AREA
- EXISTING LIFT
- PROPOSED LIFT
- EXISTING PARKING
- PROPOSED PARKING



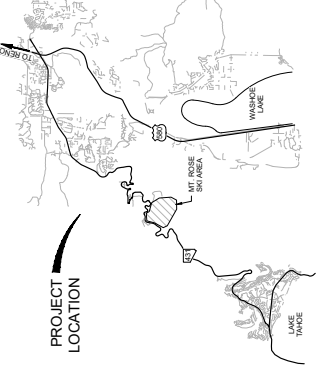
REV	DATE	DESCRIPTION	BY

BAR IS 1 INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
2.0
 DRAWN BY: KMK
 DESIGNED BY: ECT, KMK
 CHECKED BY: ECT
 JOB NO.: 9764.100



STATE OF NEVADA
 EDWARD C. THOMAS
 9/24/19
 CIVIL ENGINEER
 No. 9740
 EXP. 6/30/20

VICINITY MAP



SUP LEGEND

AREAS OF CUT/FILL GREATER THAN 10'

GRADING LEGEND

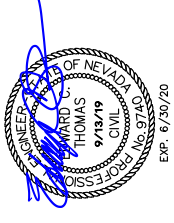
- PROPERTY BOUNDARY
- EXISTING PAVEMENT
- EXISTING ACCESS ROAD
- EXISTING FLOWLINE
- PROPOSED COMPACTED BASE ROAD
- PROPOSED PAVEMENT W/ 0' CURB
- PROPOSED CONCRETE WALKPAD
- PROPOSED FLOWLINE
- FIRE TURNING LANE
- SNOW ACCESS ROAD

GENERAL NOTES

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

EARTHWORK TABLE

DISTURBED AREA - TOTAL (PRIVATE)	1.8 AC.
TOTAL EARTHWORK - NET	752 CU. YD. (NET - CUT)
EARTHWORK (CUT)	4,148 CU. YD. (CUT)
EARTHWORK (FILL)	4,901 CU. YD. (FILL)
EARTHWORK UNDER BUILDING	250 CU. YD. (NET - CUT)
MAXIMUM DEPTH OF CUT	11 FT
MAXIMUM DEPTH OF FILL	11 FT
AREA OF CUT GREATER THAN 10'	380 SF
AREA OF FILL GREATER THAN 10'	244 SF



**SUP FOR MT. ROSE/SKI TAHOE
 FACILITIES EXPANSION AND UPGRADE
 MAINTENANCE BLDG - SEWER ALIGNMENT**

MT. ROSE/SKI TAHOE

PRELIMINARY
 NOT FOR CONSTRUCTION
 SEPTEMBER 2019

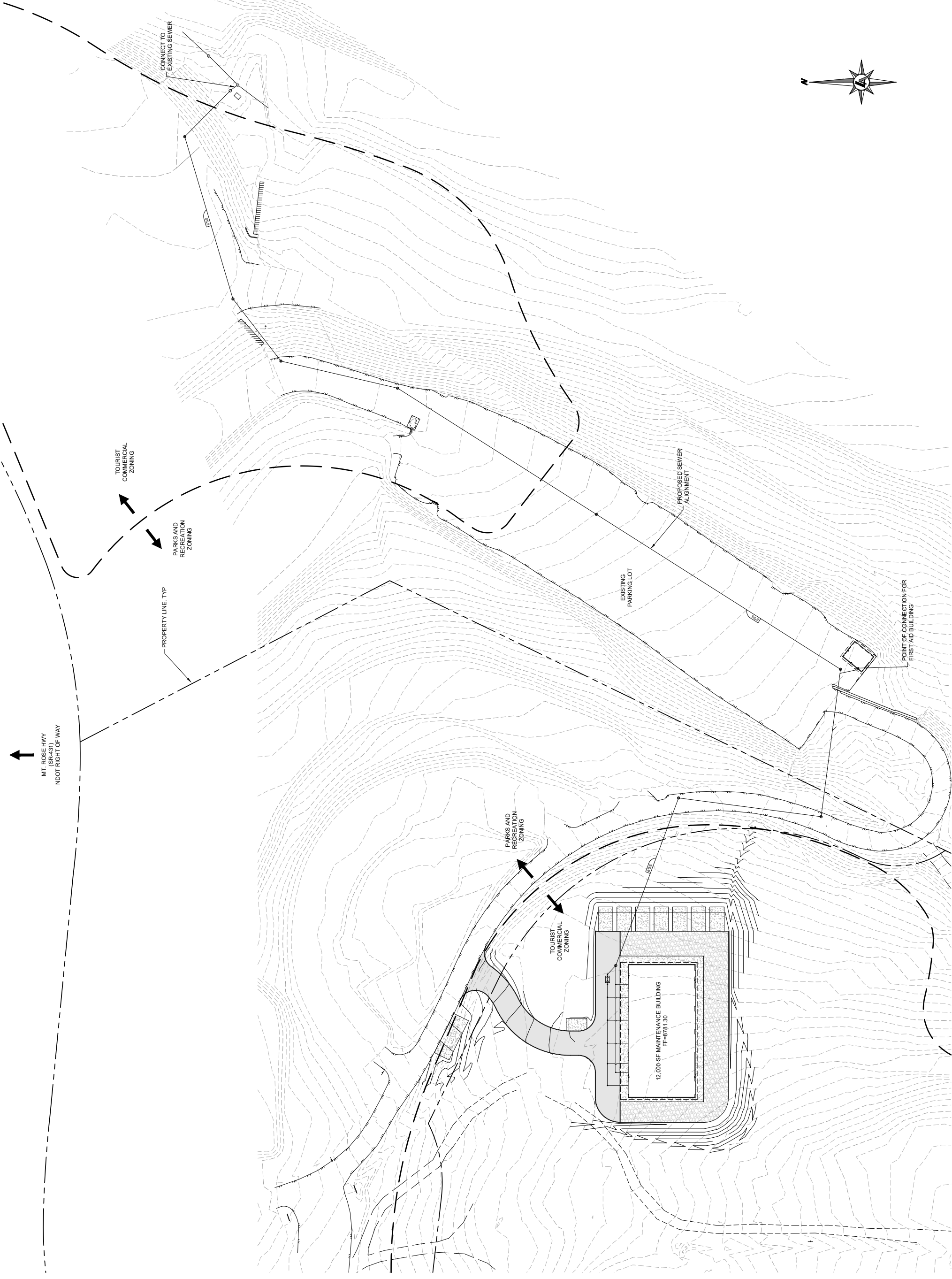
REV	DATE	DESCRIPTION	BY

BAR IS 1 INCH ON ORIGINAL DRAWING
 0 50'

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

2.1

DRAWN BY: KMK
 DESIGNED BY: ECT, KMK
 CHECKED BY: ECT
 JOB NO.: 9764.100





MT. ROSE/SKI TAHOE
WASHOE COUNTY
NEVADA

**SUP FOR MT. ROSE/SKI TAHOE
FACILITIES EXPANSION AND UPGRADE
MAINTENANCE BLDG - CROSS SECTIONS**

REV	DATE	DESCRIPTION	BY

PRELIMINARY
NOT FOR CONSTRUCTION
SEPTEMBER 2019

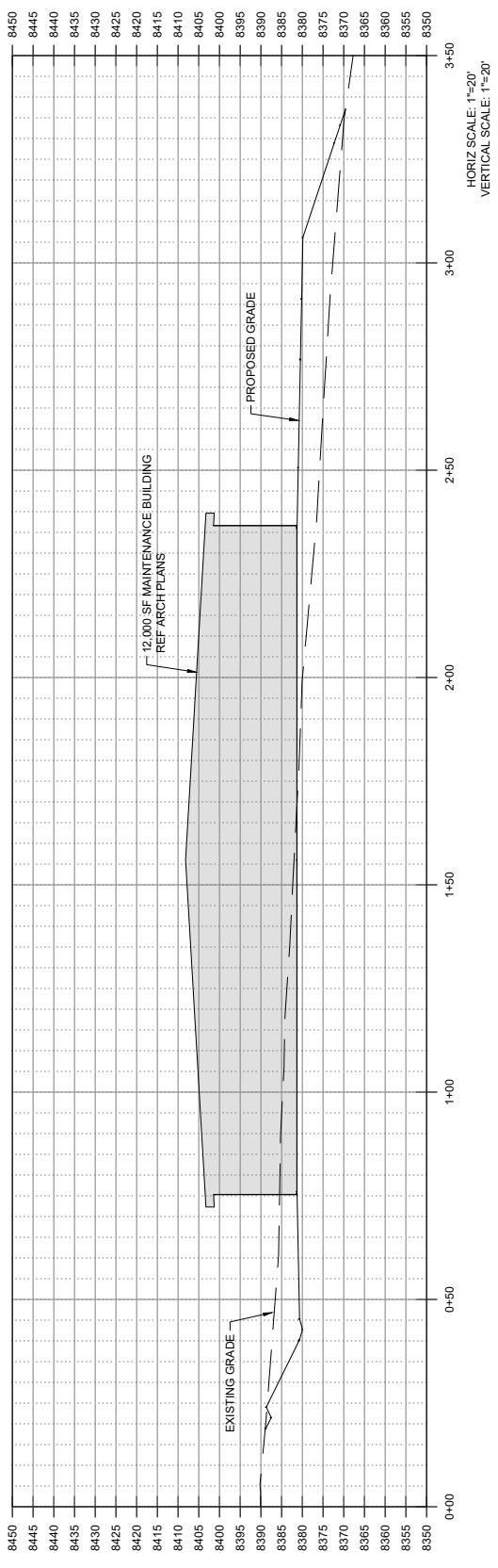
BAR IS 1 INCH ON ORIGINAL DRAWING
0
20'

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

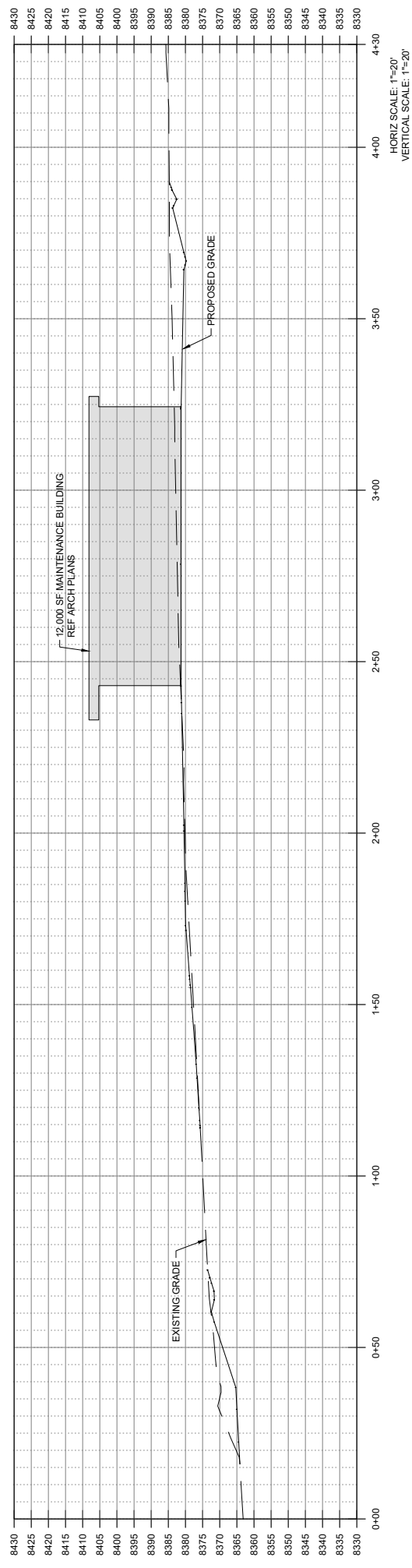
2.2

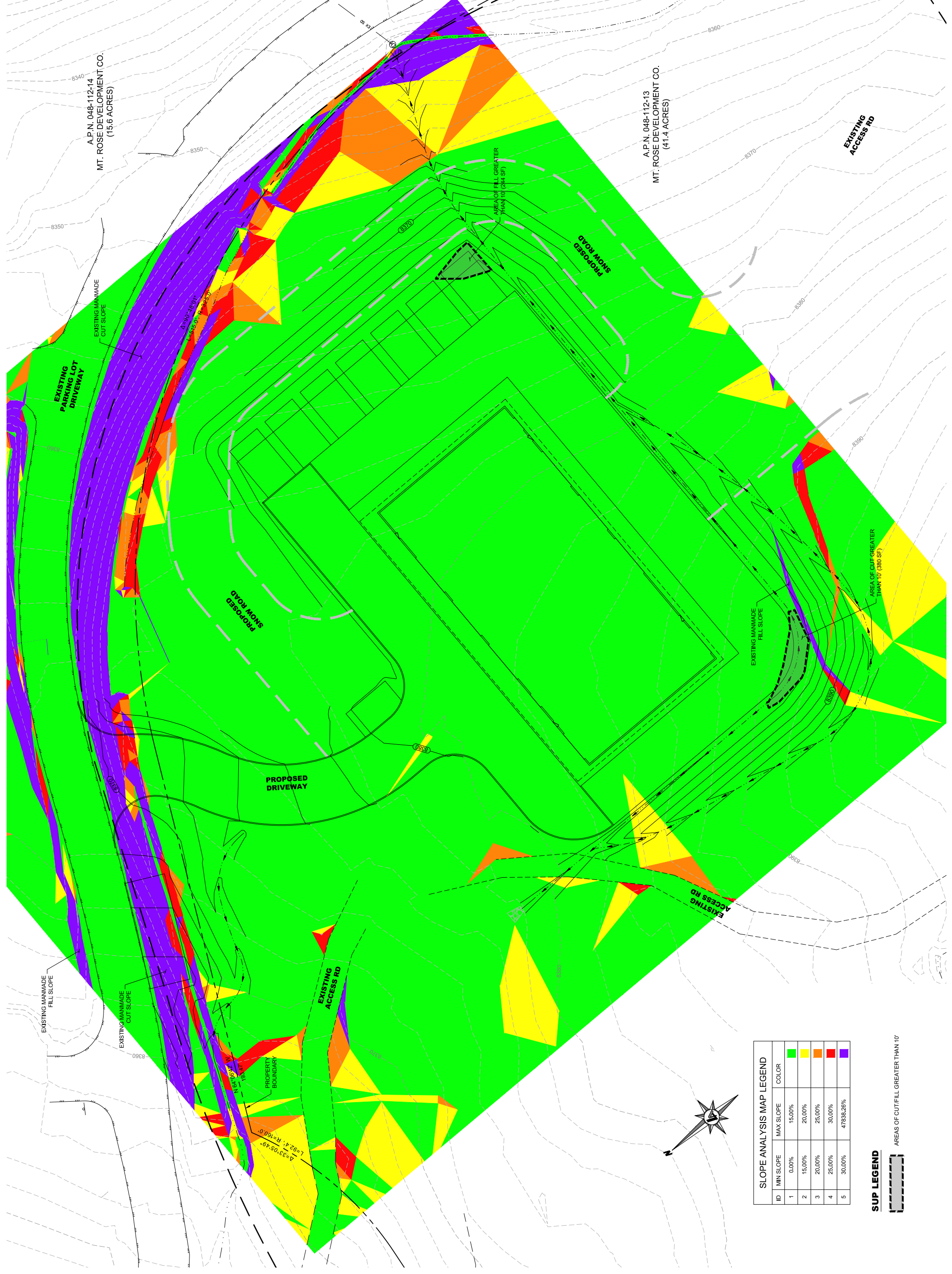
DRAWN BY: KMK
DESIGNED BY: ECT, KMK
CHECKED BY: ECT
JOB NO.: 9764.100

SECTION A-A'



SECTION B-B'



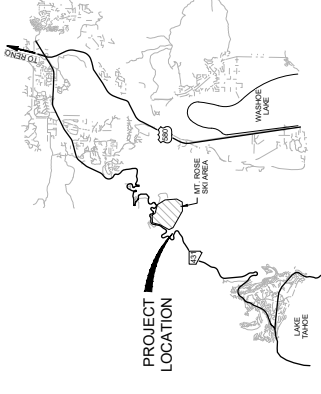


SLOPE ANALYSIS MAP LEGEND

ID	MIN SLOPE	MAX SLOPE	COLOR
1	0.00%	15.00%	Green
2	15.00%	20.00%	Yellow
3	20.00%	25.00%	Orange
4	25.00%	30.00%	Red
5	30.00%	47838.25%	Purple

SUP LEGEND
 [Dashed Line Symbol] AREAS OF CUT/FILL GREATER THAN 10'

VICINITY MAP



9229 PROTOTYPE DRIVE
RENO, NV 89521
TEL: 775.827.6111
WWW.LUMOSINC.COM



© LUMOS & ASSOCIATES, INC. THIS DRAWING IS THE PROPERTY OF LUMOS & ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF LUMOS & ASSOCIATES, INC. STRICTLY PROHIBITED. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT UNLESS THE PROJECT FOR WHICH IT WAS PREPARED.

RENO WASHOE NEVADA
MT. ROSE/SKI TAHOE
SUP FOR 5 MILLION GALLON WATER TANK
PRELIMINARY GRADING PLAN

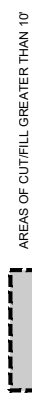
REV	DATE	DESCRIPTION	BY

PRELIMINARY
NOT FOR CONSTRUCTION
SEPTEMBER 2019

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
ORIGINAL DRAWING
SCALE: 1" = 20'

4.0
DRAWN BY: KMK
DESIGNED BY: KMK
CHECKED BY: ECT
JOB NO.: 9764-400

SUP LEGEND



AREAS OF CUT/FILL GREATER THAN 10'

GRADING LEGEND

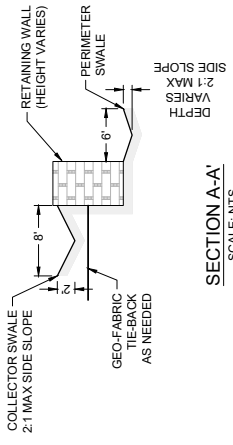
- PROPERTY BOUNDARY
- - - EX. ACCESS ROAD
- . - . EX FLOWLINE
- ▬ PROP. RETAINING WALL
- ▬ PROP. FLOWLINE
- ▬ PROP. CULVERT

GENERAL NOTES

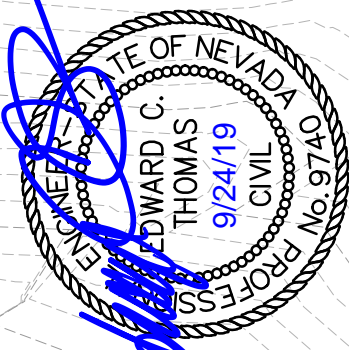
1. TO THE BEST OF MY KNOWLEDGE, BELIEF, AND ABILITY THESE PLANS ARE IN COMPLIANCE WITH WASHOE COUNTY DEVELOPMENT CODE.

EARTHWORK TABLE

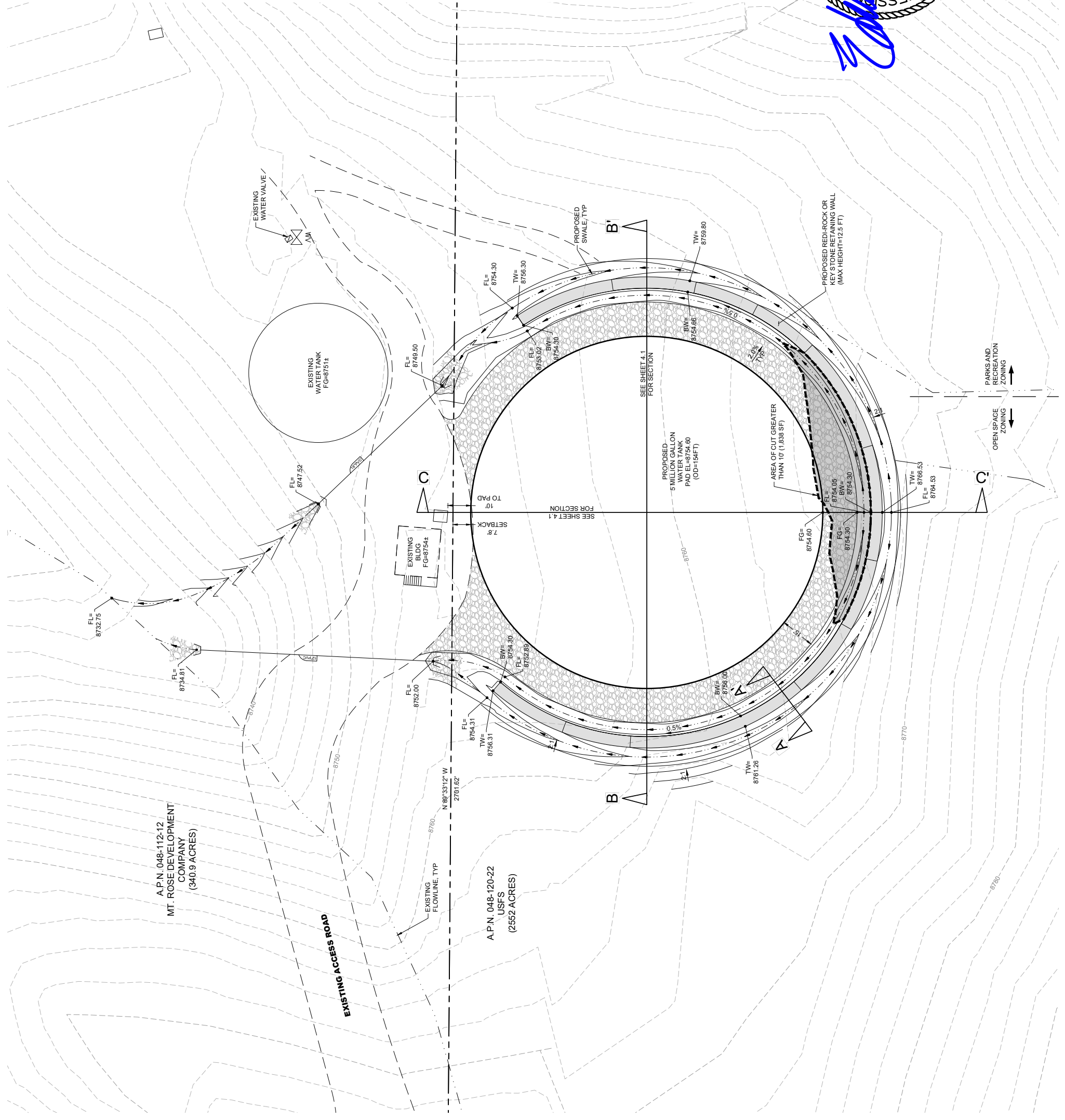
DISTURBED AREA - PRIVATE	0.03 AC.
DISTURBED AREA - USFS	0.87 AC.
TOTAL EARTHWORK VOLUME	5720 CU. YD. (CUT)
EARTHWORK UNDER TANK	3175 CU. YD. (CUT)
EARTHWORK NOT UNDER TANK	2545 CU. YD. (CUT)
MAXIMUM DEPTH OF CUT	12 FT
AREA OF CUT GREATER THAN 10'	1,838 SF



SECTION A-A'
SCALE: NTS



EXP. 6/30/20



A.P.N. 048-112-12
MT. ROSE DEVELOPMENT
COMPANY
(340.9 ACRES)

A.P.N. 048-120-22
USFS
(2552 ACRES)

PARKS AND RECREATION ZONING
OPEN SPACE ZONING



REV	DATE	DESCRIPTION	BY

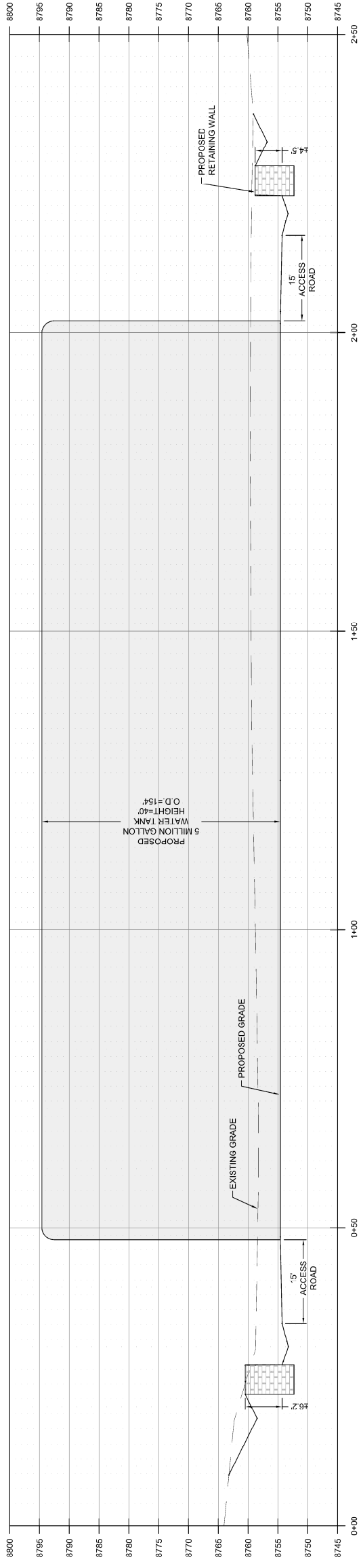
SCALE: 1"=20'
ORIGINAL DRAWING
NO. 20

IF NOT ONE INCH ON THIS SHEET,
ADJUST SCALES ACCORDINGLY

4.1

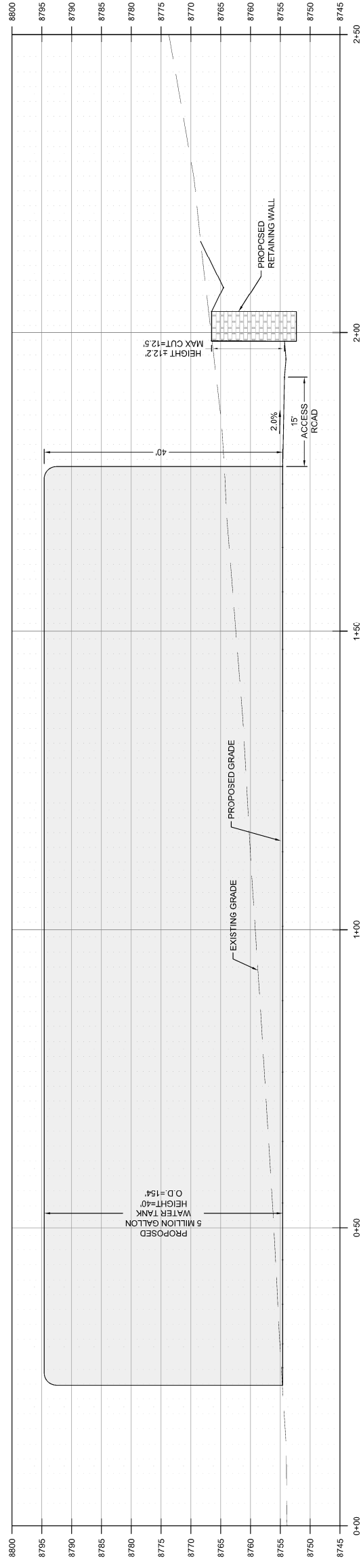
DRAWN BY: KMK
DESIGNED BY: KMK
CHECKED BY: ECT
JOB NO.: 9764-400

SECTION B-B' (EAST-WEST)



HORIZ SCALE: 1"=20'
VERTICAL SCALE: 1"=20'

SECTION C-C' (NORTH-SOUTH)



HORIZ SCALE: 1"=20'
VERTICAL SCALE: 1"=20'

REV	DATE	DESCRIPTION	BY

PRELIMINARY
 NOT FOR CONSTRUCTION
 SEPTEMBER 2019

SCALE: 1" = 20'
 ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

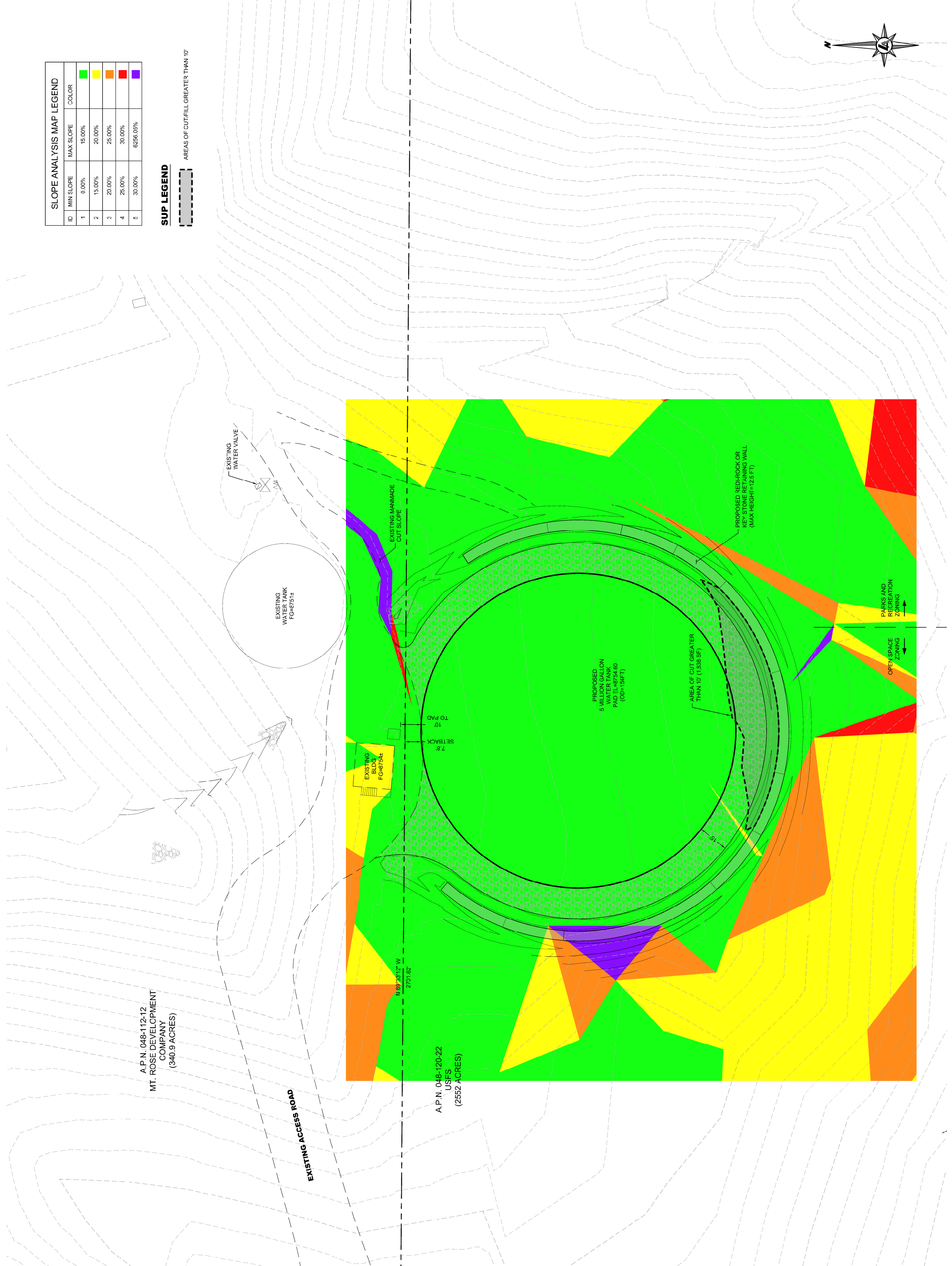
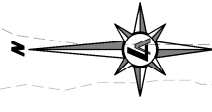
4.2

DRAWN BY: KMK
 DESIGNED BY: KMK
 CHECKED BY: ECT
 JOB NO.: 9764.400

SLOPE ANALYSIS MAP LEGEND

ID	MIN SLOPE	MAX SLOPE	COLOR
1	0.00%	15.00%	Green
2	15.00%	20.00%	Yellow
3	20.00%	25.00%	Orange
4	25.00%	30.00%	Red
5	30.00%	6256.05%	Purple

SUP LEGEND
 --- AREAS OF CUT/FILL GREATER THAN 10'

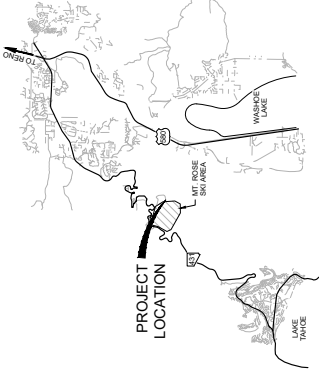


A.P.N. 048-112-12
 MT. ROSE DEVELOPMENT
 COMPANY
 (340.9 ACRES)

A.P.N. 048-120-22
 USFS
 (2552 ACRES)



VICINITY MAP

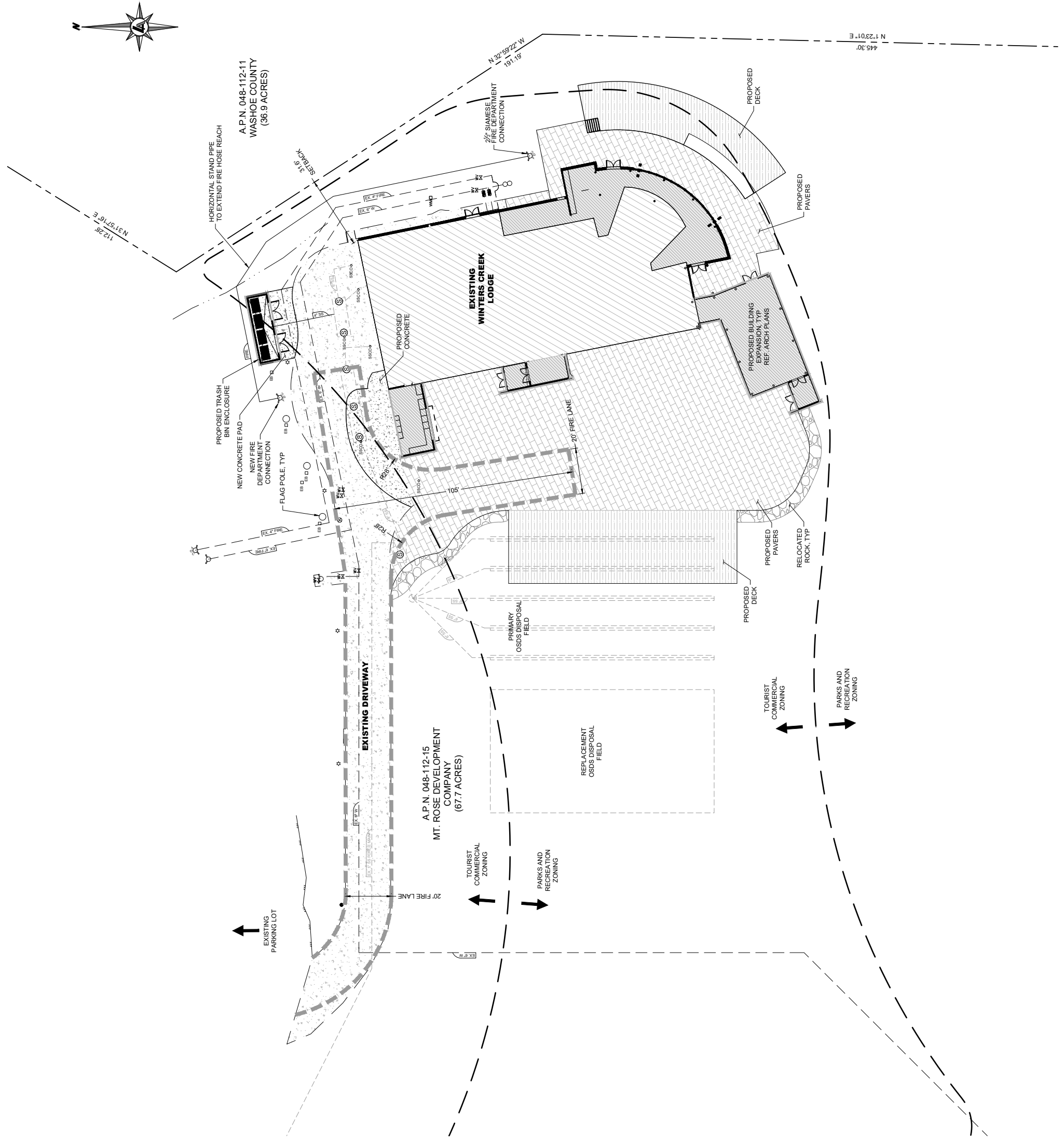


SITE LEGEND

- PROPERTY BOUNDARY
- EX PAVEMENT
- EX CONCRETE
- EX FLOWLINE
- ZONING BOUNDARY
- PROP FLOWLINE
- EX BUILDING
- PROP PAVERS
- PROP DECK
- PROP BUILDING EXPANSION
- PROP CONCRETE

GENERAL NOTES

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

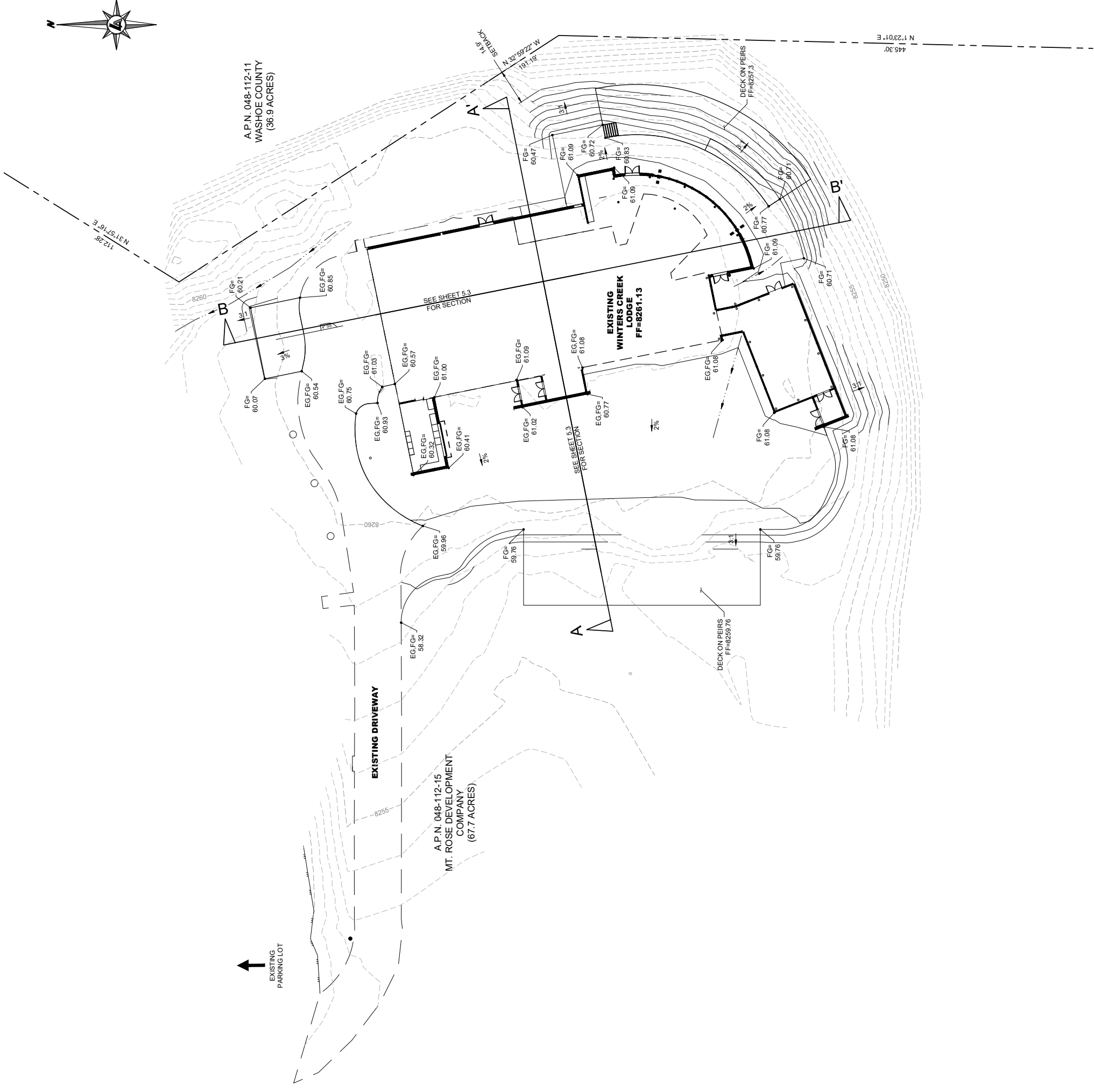


SITE LEGEND

- PROPERTY BOUNDARY
- EX PAVEMENT
- EX CONCRETE
- EX FLOWLINE
- PROP FLOWLINE

EARTHWORK TABLE - PRIVATE PROPERTY

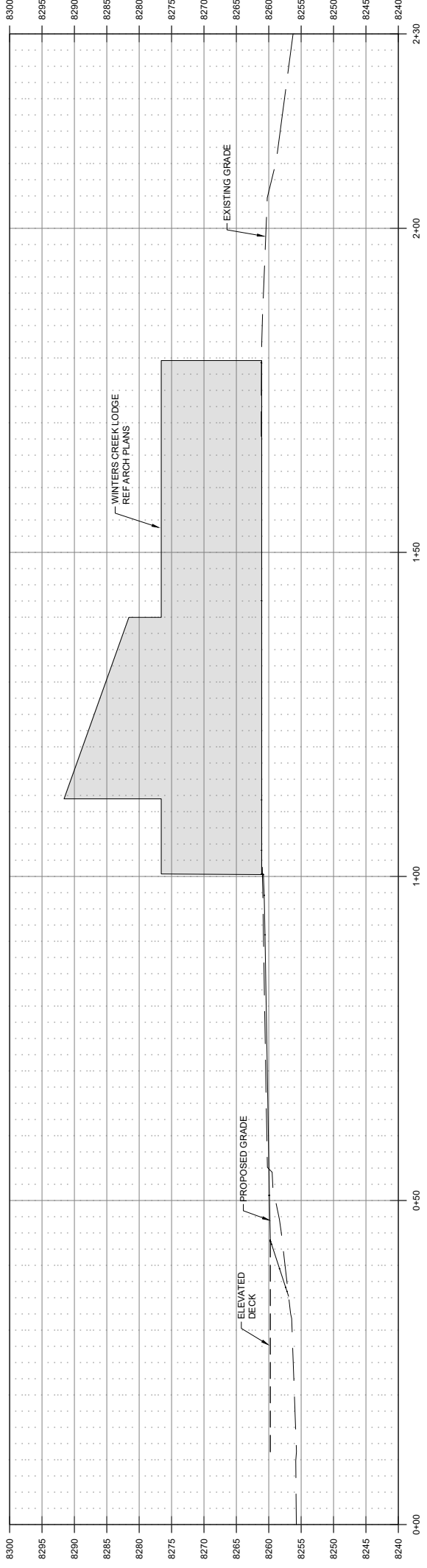
NEW DISTURBED AREA	0.28 AC.
TOTAL EARTHWORK VOLUME	449 CU. YD. (NET-FILL)
TOTAL EARTHWORK (CUT)	29 CU. YD. (CUT)
TOTAL EARTHWORK (FILL)	478 CU. YD. (FILL)
MAXIMUM DEPTH OF FILL	4 FT
MAXIMUM DEPTH OF CUT	0.5 FT
AREA OF CUT/FILL GREATER THAN 10'	0 SF



REV	DATE	DESCRIPTION	BY

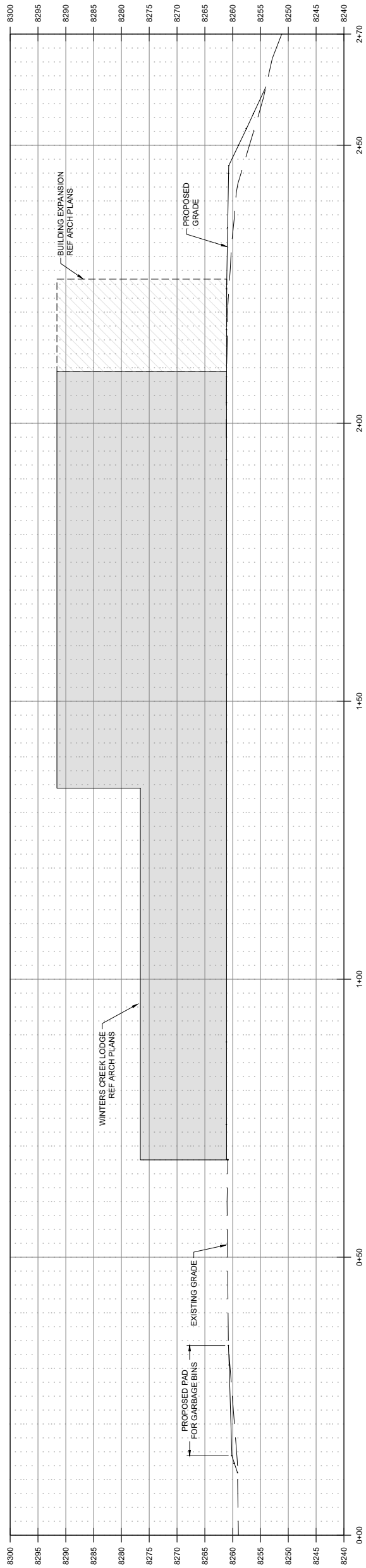
PRELIMINARY
 NOT FOR CONSTRUCTION
 SEPTEMBER 2019

SECTION A-A'



HORIZ SCALE: 1"=20'
 VERTICAL SCALE: 1"=20'

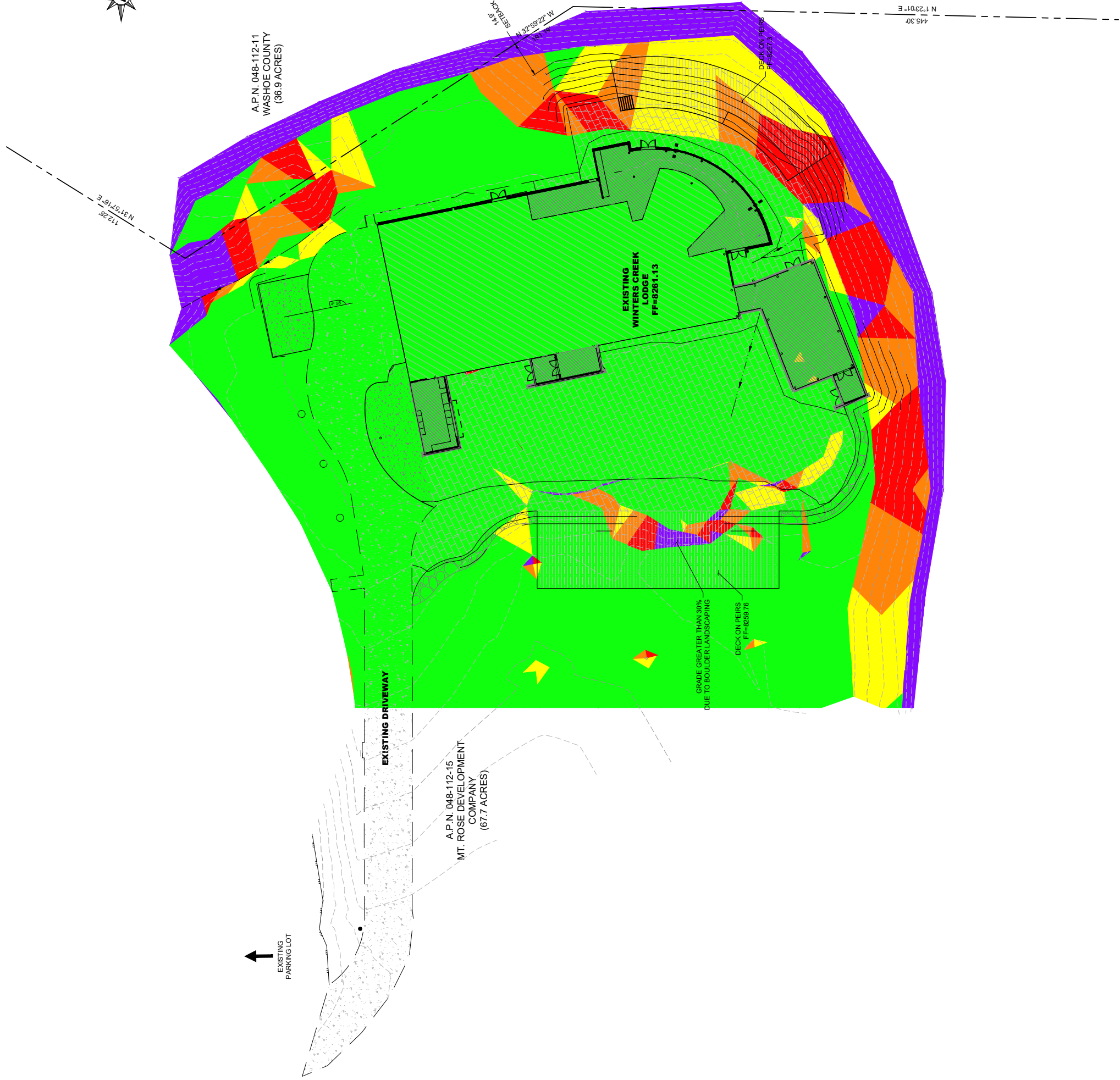
SECTION B-B'



HORIZ SCALE: 1"=20'
 VERTICAL SCALE: 1"=20'

SLOPE ANALYSIS MAP LEGEND

ID	MIN SLOPE	MAX SLOPE	COLOR
1	0.00%	15.00%	Green
2	15.00%	20.00%	Yellow
3	20.00%	25.00%	Orange
4	25.00%	30.00%	Red
5	30.00%	99999900.00%	Purple



APPENDIX D



Reno
9222 Prototype Drive
Reno, Nevada 89521
775.827.6111

September 6, 2019

Kris Klein, P.E.
Washoe County Community Services
1001 E. 9th Street
Reno, NV 89520

**Subject: Mt. Rose Special Use Permit Application
Winters Creek Lodge Preliminary Septic System Analysis**

Dear Ms Klein:

Mt. Rose/Ski Tahoe constructed its Winters Creek Lodge in 2010. Community sanitary sewer is not readily available at the Winters Creek Lodge site, so the lodge and adjacent maintenance building are served by a commercial septic system. The system was designed by Black Eagle Consulting and was permitted through the Nevada Division of Environmental Protection (NDEP).

The existing septic system consists of a 3,000 gallon grease interceptor for the lodge's kitchen, a 1,000 gallon septic tank for just the maintenance building, a 6,000 gallon septic tank for just the lodge, a dosing tank, and a 5-trench standard disposal field. Effluent from the maintenance building septic tank is pumped to the dosing tank prior to discharge into the disposal field.

In their May 27, 2009 report titled, "Commercial Septic System Design Report, East Bowl Ski Lodge and Maintenance Building, Mt. Rose Ski Tahoe Resort, Washoe County, Nevada," Black Eagle Consulting describes the design criteria for the on-site disposal system. Black Eagle considered two methods for sizing the septic tank for the lodge. The first method, defined by NDEP, calls for sizing the tank based upon the larger of the daily flow calculated by fixture units or by use and occupancy tables. The second method as described by NDEP Fact Sheet WTS-23 allows for the septic tank to be sized based upon actual flow data.

The fixture unit method indicated a septic tank capacity 4,925 gallons. The use and occupancy table method gave wildly varying results of 10,000 to 30,000 gallons for septic tank sizing. The WTS-23 method resulted in a septic tank capacity of 4,097 gallons.

Black Eagle determined that the use and occupancy method was not representative of actual use and rejected its results entirely. They determined that historic water usage was used as a proxy for wastewater generation and applied a 25% safety factor was along with an additional 20% growth factor for an estimated flow rate of 5,945 gallons per day. From this they selected a 6,000 septic tank as an appropriate size which allowed for a reasonable amount of growth at the facility.

In the fixture unit method, Black Eagle calculated a total of 157 fixture units. According to Appendix H of the International Plumbing Code, for 100 fixture units, a 3,500 gallon septic tank is required. For fixture units in excess of 100, the septic tank must be increased in size by 25 gallons per fixture unit above 100. The result is $(3,500 \text{ gallons}) + [(57 \text{ f.u.})(25 \text{ gal/f.u.})] = 4,925 \text{ gallons}$.

In its proposed expansion, Mt. Rose/Ski Tahoe does not intend to expand its kitchen facilities, but it does intend to add three urinals and one water closet to the men's restroom. These additional fixtures will result in the need for an additional 300 gallons of capacity for the septic tank. $\{(3 \text{ urinals})(2 \text{ f.u./urinal}) + [(1 \text{ WC})(6 \text{ f.u./WC})]\} * (25 \text{ gal/f.u.}) = 300 \text{ gallons.}$

Adding the additional septic tank capacity to the originally-computed septic tank capacity results in a septic tank size of 5,225 gallons. This is still less than the 6,000 gallon septic tank capacity.

Based upon the above calculations, the proposed expansion of the Winters Creek Lodge will not exceed the capacity of the existing commercial septic system.

If you have any questions, please do not hesitate to contact me at 775.827.6111.

Sincerely,

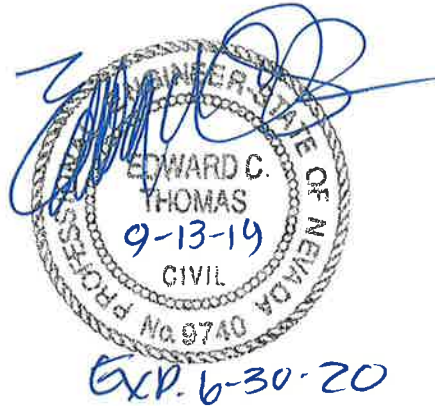


Edward C. Thomas, P.E., LEED AP
Senior Engineer



Exp. 6-30-20

CONCEPTUAL DRAINAGE REPORT
For
MT. ROSE
MAINTENANCE BUILDING



Prepared For:

**Mt. Rose/Ski Tahoe
PO Box 5838
Tahoe City, CA 96145**

Prepared By:

**Kristin Kramer, P.E.
Ed Thomas, P.E.**



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

**JN 9764.300
September 2019**

TABLE OF CONTENTS

1.	Introduction.....	1
1.1.	Existing Site Description	1
1.2.	Proposed Project Description	2
1.3.	FEMA FIRM Panels	2
2.	Methodology	2
3.	Historic Drainage System	3
4.	Proposed Drainage System.....	3
5.	Water Quality.....	4
6.	Conclusions.....	4
7.	References	5

[File Doc: L:\LAProj\9764.400 - Galena Water Tank\Civil\Hydrology\Report\9764.400-Conceptual Drainage Report.docx]

LIST OF FIGURES

Figure 1: Vicinity Map.....	1
-----------------------------	---

LIST OF TABLES

Table 1: Selected Rational C Values	2
Table 2: Existing Peak Flow Summary	3
Table 3: Proposed Subbasin Peak Flow Summary.....	3
Table 4: Concentration Point Peak Flow Summary.....	4

TABLE OF APPENDENICES

A	Background Data
A.1	Effective FIRM Panels
A.2	NOAA Data
B	Hydrologic & Hydraulic Calculations
C	Drainage Exhibits

1. INTRODUCTION

This document is presented as a Conceptual Drainage Report in support of the proposed 12,000 sq. ft. maintenance building for Mt. Rose Ski Tahoe. This report is to provide support for the Special Use Permit (SUP) for the developed area as required by Washoe County.

Mt. Rose Ski Tahoe intends to develop upon assessor parcel numbers (APNs) 048-112-13 and 048-112-14, owned by Mt. Rose Development Company. The subject area is bound by Mount Rose Highway to the north/west and the Mt. Rose ski area to the south/east. An existing parking lot, owned and maintained by Mt. Rose, is located near the proposed tank site. Refer to Figure 1 for a vicinity map of the area. The disturbed area accounts for approximately 4.4 acres. The entire project is within Section 19, Township 17 and Range 19.

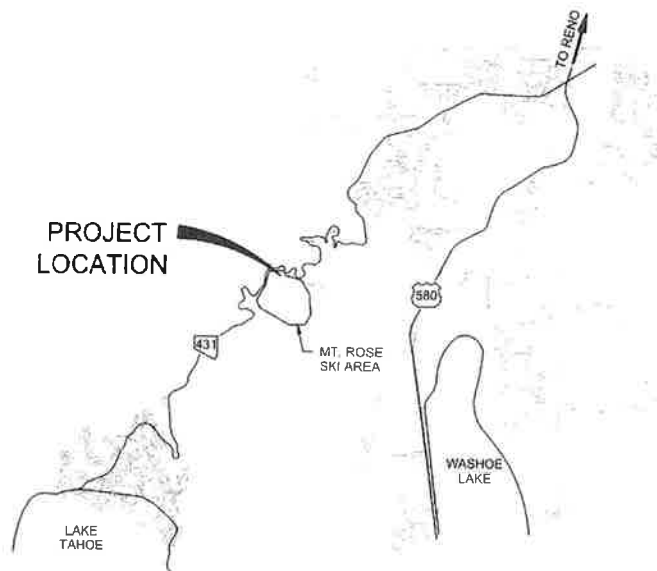


Figure 1: Vicinity Map

1.1. Existing Site Description

The site is located on the northern portion of the Mt. Rose ski area. An existing paved parking lot with access driveways is located directly north of the project site. Dirt/gravel access roads above the project site provide connectivity to the existing facilities in the ski area. With exception to these improvements, the rest of the project site is currently undeveloped, with groundcover consisting of forest coverings. The topography is moderate in the area of the future building, with slopes around 10 percent. The site drains generally to the north and as overland flow prior to entering existing swales at the paved roadway.

1.2. Proposed Project Description

The proposed maintenance building and surface improvements will be developed upon approximately 4.4 acres. The design will feature a paved driveway, perimeter gravel access road, concrete walkways, snow cat parking, utility pads, and drainage improvements. Drainage improvements extend to collector swales around the site. On the uphill side of the cut slope, two collector swales route flow away from the high point. A small swale along the perimeter access road will collect nuisance flow from the building and gravel access. The swales to the east directed flow to an existing drop inlet at the paved roadway. The swales to the west and north direct flow to an existing roadside swale.

1.3. FEMA FIRM Panels

Based on a review of the Flood Insurance Rate Map Index (panel 32031C3325G dated March 2009), the site is in an un-mapped area of the Federal Emergency Management Agency (FEMA). The project site is, therefore identified as Flood Hazard Zone X (unshaded), which is defined as areas determined to be outside the 500-year floodplain. A FIRMette of the project site is included in Appendix A.

2. METHODOLOGY

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

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

Where:

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

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

Table 1: Selected Rational C Values

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87
Gravel	0.25	0.50
Paved	0.88	0.93

3. HISTORIC DRAINAGE SYSTEM

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

Table 2: Existing Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
E_overall	Overall	3.91	0.05	0.30	1.49	3.36	0.29	3.94

As a result of the analysis, it was determined 3.94 cfs is generated from the existing site for the 100-year storm event. All calculations can be found in Appendix B.

4. PROPOSED DRAINAGE SYSTEM

Development of the project will involve the construction of the maintenance building, paved driveway, access road, concrete sidewalk/pads, and drainage swales. The uphill runoff will enter collector swales, located at the top of the cut slope. Nuisance flow generated from the building roof and access road will be collected in minor swales. All swales will tie in to the existing drainage system, near the paved parking lot.

To appropriately size drainage swales, the proposed site was divided into five sub-basins. In addition, an overall drainage basin was delineated to provide a comparison to the existing condition. Reference the proposed drainage exhibit in Appendix C for the proposed drainage schematic. Composite Rational C-values were determined based upon percentage of post-development land cover. The peak runoff rate calculated for the individual drainage basins is summarized in Table 3. Flows at specific concentration points (CPs) are included in Table 4.

Table 3: Proposed Subbasin Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
P_overall	Overall	3.91	0.23	0.44	1.97	4.39	1.80	7.56
P_01	to CP_01	0.14	0.05	0.30	2.22	4.97	0.02	0.21
P_02	to CP_02	0.25	0.61	0.72	2.37	5.30	0.36	0.95
P_03	to CP_03	0.3	0.26	0.48	2.01	4.48	0.16	0.65
P_04	to CP_04	0.12	0.05	0.30	2.13	4.76	0.01	0.17
P_05	to CP_05	0.12	0.05	0.30	2.10	4.69	0.01	0.17

Table 4: Concentration Point Peak Flow Summary

CP ID	Description	Q ₅ [cfs]	Q ₁₀₀ [cfs]
CP_01	P_01 + P_02	0.38	1.16
CP_02	P_02	0.36	0.95
CP_03	P_03 + P_04	0.17	0.82
CP_04	P_04	0.01	0.17
CP_05	P_05	0.01	0.17

The 100-year peak rate of runoff for the entire site was determined to be 7.56 cfs. This is a 3.62 cfs increase from the existing condition. Natural Resources Conservation Service Web Soil Survey was used to determine the Hydrologic Soil Group (HSG). The entire site is classified a Group A, indicating soils having the highest infiltration rates (with low runoff potential). As the proposed condition results in a small generated flow and low runoff potential is apparent, stormwater detention is determined unnecessary.

The Manning's equation was used to size the collector swales, with an additional 6 inches of freeboard. Riprap sizing for the swales was performed per equations in the TMRDM. Calculations have determined a Class 150 riprap with a 12 inch thickness will be sufficient for the swale design. Twelve inches of Class C riprap will be used for the bedding material. Outlet protection design will be provided at the time of final design. All calculations can be found in Appendix B.

5. WATER QUALITY

As required by the TMRDM, Low Impact Development (LID) methods of treating runoff will be required to address water quality. Flow-based controls will be designed to treat runoff from the 2-year storm event (WQ_F). A portion of the improved areas will drain to proposed swales. Riprap calculations for the swales have been performed to determine median stone diameter of 6 inches (Class 150). In all swales, the WQ_F produces a depth of flow that is less or approximately equal to the diameter. The swales will effectively remove pollutants to meet the Truckee Meadows Structural Controls Design and Low Impact Development Manual [3].

6. CONCLUSIONS

The project, as proposed, will allow for the construction of the maintenance building for Mt. Rose Ski Tahoe. Drainage improvements to the site shall convey anticipated flows via a network of swales and overlaid flow. Development of the project will result in a minor increase to generated flow. As the site is located entirely in HSG A, stormwater detention facilities have been determined unnecessary. Water quality of the runoff will all be controlled by swales along the access road and near the driveway. The design and hydrologic studies of the proposed tank have been conducted in compliance with the drainage guidelines for Washoe County and TMRDM.

7. REFERENCES

- [1] Washoe County, "Truckee Meadows Regional Drainage Manual," Reno, 2009.
- [2] National Oceanic and Atmospheric Administration (NOAA), "Atlas 14 Precipitation-Frequency Atlas," 2018. [Online]. Available: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk.
- [3] NCE, "Truckee Meadows Structural Controls Design and Low Impact Development Manual," Reno, NV, April 2015.
- [4] Washoe County, "Washoe County Development Code," Reno, 2019.

Appendix A

BACKGROUND DATA

National Flood Hazard Layer FIRMette



39°19'52.96"N



119°53'0.05"W

Uses The National Map: Orthimagery. Data refreshed April, 2019



Legend

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

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, A
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, A of 1% annual chance flood with average depth less than one foot or with drain areas of less than one square mile
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes, Zone X
- Area with Flood Risk due to Levee Zone X

OTHER AREAS

- Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone X

GENERAL STRUCTURES

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

OTHER FEATURES

- Cross Sections with 1% Annual Chanc
- Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/5/2019 at 11:39:38 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



POINT PRECIPITATION FREQUENCY ESTIMATES

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

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.79 (1.56-2.09)	2.23 (1.96-2.62)	2.92 (2.51-3.42)	3.55 (3.02-4.14)	4.56 (3.79-5.36)	5.46 (4.42-6.53)	6.53 (5.06-7.93)	7.82 (5.81-9.78)	9.92 (6.86-12.8)	11.9 (7.76-15.8)
10-min	1.36 (1.19-1.60)	1.70 (1.48-1.99)	2.22 (1.91-2.60)	2.70 (2.30-3.16)	3.47 (2.89-4.08)	4.16 (3.36-4.97)	4.97 (3.85-6.04)	5.96 (4.42-7.45)	7.55 (5.23-9.74)	9.05 (5.91-12.0)
15-min	1.12 (0.980-1.32)	1.40 (1.23-1.64)	1.84 (1.58-2.15)	2.23 (1.90-2.61)	2.87 (2.38-3.38)	3.44 (2.78-4.10)	4.10 (3.18-4.99)	4.92 (3.65-6.16)	6.24 (4.32-8.05)	7.48 (4.88-9.94)
30-min	0.758 (0.660-0.888)	0.944 (0.826-1.11)	1.24 (1.06-1.45)	1.50 (1.28-1.76)	1.93 (1.60-2.27)	2.32 (1.87-2.76)	2.76 (2.14-3.36)	3.31 (2.46-4.14)	4.20 (2.91-5.42)	5.04 (3.29-6.69)
60-min	0.469 (0.409-0.549)	0.584 (0.511-0.685)	0.765 (0.658-0.896)	0.930 (0.794-1.09)	1.20 (0.993-1.41)	1.43 (1.16-1.71)	1.71 (1.33-2.08)	2.05 (1.52-2.57)	2.60 (1.80-3.35)	3.12 (2.04-4.14)
2-hr	0.314 (0.280-0.354)	0.391 (0.348-0.438)	0.490 (0.432-0.548)	0.572 (0.501-0.644)	0.695 (0.594-0.783)	0.802 (0.668-0.918)	0.924 (0.750-1.08)	1.09 (0.854-1.30)	1.37 (1.02-1.69)	1.63 (1.17-2.09)
3-hr	0.264 (0.237-0.294)	0.328 (0.298-0.365)	0.400 (0.359-0.445)	0.459 (0.411-0.510)	0.536 (0.474-0.602)	0.603 (0.523-0.682)	0.672 (0.574-0.769)	0.784 (0.656-0.911)	0.965 (0.788-1.15)	1.14 (0.902-1.41)
6-hr	0.206 (0.184-0.228)	0.255 (0.229-0.284)	0.309 (0.275-0.346)	0.350 (0.310-0.392)	0.402 (0.352-0.454)	0.441 (0.381-0.501)	0.477 (0.405-0.547)	0.518 (0.433-0.603)	0.575 (0.471-0.679)	0.624 (0.504-0.750)
12-hr	0.147 (0.131-0.165)	0.185 (0.164-0.207)	0.229 (0.203-0.257)	0.263 (0.231-0.297)	0.309 (0.268-0.351)	0.343 (0.294-0.393)	0.378 (0.318-0.439)	0.413 (0.341-0.484)	0.457 (0.367-0.548)	0.490 (0.385-0.598)
24-hr	0.125 (0.109-0.146)	0.157 (0.137-0.184)	0.200 (0.174-0.235)	0.236 (0.204-0.277)	0.286 (0.244-0.336)	0.327 (0.276-0.384)	0.369 (0.309-0.437)	0.414 (0.342-0.494)	0.478 (0.386-0.574)	0.529 (0.420-0.643)
2-day	0.081 (0.069-0.097)	0.102 (0.087-0.123)	0.134 (0.113-0.161)	0.160 (0.135-0.193)	0.198 (0.164-0.238)	0.229 (0.189-0.276)	0.262 (0.213-0.319)	0.298 (0.239-0.365)	0.350 (0.274-0.433)	0.392 (0.301-0.493)
3-day	0.064 (0.055-0.076)	0.082 (0.070-0.097)	0.109 (0.093-0.129)	0.131 (0.111-0.156)	0.164 (0.138-0.195)	0.191 (0.159-0.228)	0.221 (0.182-0.264)	0.254 (0.206-0.305)	0.301 (0.238-0.367)	0.340 (0.264-0.419)
4-day	0.055 (0.048-0.065)	0.071 (0.061-0.084)	0.096 (0.082-0.113)	0.117 (0.100-0.138)	0.147 (0.124-0.173)	0.173 (0.145-0.203)	0.201 (0.166-0.237)	0.231 (0.189-0.275)	0.276 (0.220-0.333)	0.314 (0.246-0.382)
7-day	0.038 (0.032-0.045)	0.049 (0.042-0.058)	0.067 (0.057-0.079)	0.082 (0.070-0.096)	0.104 (0.087-0.122)	0.122 (0.102-0.143)	0.141 (0.117-0.166)	0.162 (0.133-0.193)	0.193 (0.155-0.232)	0.219 (0.173-0.264)
10-day	0.031 (0.026-0.036)	0.040 (0.034-0.047)	0.055 (0.047-0.065)	0.067 (0.057-0.079)	0.084 (0.071-0.098)	0.098 (0.082-0.115)	0.113 (0.094-0.133)	0.129 (0.106-0.152)	0.151 (0.122-0.181)	0.170 (0.136-0.205)
20-day	0.021 (0.018-0.024)	0.027 (0.024-0.031)	0.037 (0.032-0.042)	0.044 (0.038-0.051)	0.055 (0.047-0.063)	0.063 (0.054-0.073)	0.072 (0.061-0.084)	0.082 (0.068-0.096)	0.095 (0.078-0.112)	0.105 (0.086-0.126)
30-day	0.017 (0.015-0.020)	0.022 (0.019-0.026)	0.030 (0.026-0.035)	0.036 (0.031-0.042)	0.045 (0.038-0.052)	0.051 (0.044-0.059)	0.059 (0.049-0.068)	0.066 (0.055-0.077)	0.076 (0.063-0.090)	0.085 (0.069-0.101)
45-day	0.014 (0.012-0.016)	0.018 (0.016-0.021)	0.025 (0.021-0.028)	0.029 (0.025-0.033)	0.036 (0.031-0.041)	0.041 (0.035-0.047)	0.046 (0.039-0.053)	0.052 (0.044-0.060)	0.060 (0.049-0.069)	0.066 (0.054-0.077)
60-day	0.012 (0.010-0.014)	0.016 (0.014-0.018)	0.021 (0.018-0.025)	0.025 (0.022-0.029)	0.031 (0.026-0.035)	0.035 (0.029-0.040)	0.039 (0.032-0.045)	0.043 (0.035-0.050)	0.048 (0.040-0.056)	0.052 (0.043-0.062)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
 Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
 Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

Appendix B

HYDROLOGIC & HYDRAULIC COMPUTATIONS

LUMOS ASSOCIATES
 9222 PROTOTYPE DRIVE
 RENO, NV 89521

MT. ROSE MAINTENANCE BUILDING
 CONCEPTUAL DRAINAGE REPORT
 COMPOSITE RUNOFF COEFFICIENTS

CALC: KMK
 9764.300-Rational
 9/5/2019

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87
Gravel	0.25	0.50
Paved	0.88	0.93
-		
-		
-		

Subbasin ID	E_overall	P_overall	P_01	P_02	P_03	P_04	P_05
Drainage Direction	Overall	Overall	to CP_01	to CP_02	to CP_03	to CP_04	to CP_05
Total Area, A [ac]	3.91	3.91	0.14	0.25	0.30	0.12	0.12

Composite Areas [ac]	E_overall	P_overall	P_01	P_02	P_03	P_04	P_05
Forest	3.91	2.82	0.14	0.03	0.11	0.12	0.12
Roof	0.00	0.30	0.00	0.15	0.00	0.00	0.00
Gravel	0.00	0.28	0.00	0.06	0.15	0.00	0.00
Paved	0.00	0.51	0.00	0.01	0.04	0.00	0.00
-							
-							
-							

Area Check	✓	✓	✓	✓	✓	✓	✓
------------	---	---	---	---	---	---	---

Composite C₅	0.05	0.23	0.05	0.61	0.26	0.05	0.05
Composite C₁₀₀	0.30	0.44	0.30	0.72	0.48	0.30	0.30

Subbasin ID	E_overall	P_overall	P_01	P_02
Drainage Direction	Overall	Overall	to CP_01	to CP_02
Area, A [sf]	170319.6	170319.6	6098.4	10890
Area, A [ac]	3.91	3.91	0.14	0.25

Coef.	C	Composite C ₅	0.05	0.23	0.05	0.61
		Composite C ₁₀₀	0.30	0.44	0.30	0.72

Initial Overland	T _i	Flow Runoff Coefficient, C ₅ "R"	0.05	0.23	0.05	0.61
		Flow Length, L [ft] ¹	420	440	100	110
		Land Slope, s [%]	6.0	12.7	9.7	2.0
		Initial Overland Time: T_i [min]	21.37	14.01	8.86	7.32

Travel Time	T _t	Flow Length, L [ft]	300	70	130	90
		Channel Slope, s [%]	8.67	7.14	9.23	0.50
		Travel Time Coefficient ³	1.50	1.50	1.50	1.50
		Average Velocity, V ₅ [ft/s]	4.42	4.01	4.56	1.06
		Travel Time: T_t [min]	1.13	0.29	0.48	1.41

ToC & Intensity		Land Classification (Urban or Vegetated)	Vege.	Urban	Vege.	Urban
	T _c	Time of Concentration, T _c [min]	22.50	14.30	9.34	8.74
	Urban. Check	Required? - Y/N	N	Y	N	Y
		Total Length: L _{total} [ft]	-	510	-	200
		Time of Concentration - Check, T _{c,check} [min]	-	12.8	-	11.1
	T _{c,final}	Final ToC, T_{c,final} [min]	22.50	12.83	10.00	8.74
	I ²	2-yr Intensity I ₂ [in/hr]	1.14	1.50	1.70	1.81
		5-yr Intensity I ₅ [in/hr]	1.49	1.97	2.22	2.37
100-yr Intensity I ₁₀₀ [in/hr]		3.36	4.39	4.97	5.30	

Flow	Q	2-yr Flow, Q ₂ [cfs]	0.22	1.37	0.01	0.28
		5-yr Flow, Q ₅ [cfs]	0.29	1.80	0.02	0.36
		Design 100-yr Flow, Q₁₀₀ [cfs]	3.94	7.56	0.21	0.95

¹ Maximum of 500 feet

² From NOAA Atlas 14

³ From Figure 701 TMRDM

$$T_i = \frac{1.8(1.1 - R)L_o^{1/2}}{s^{1/3}}$$

$$T_t = \frac{L}{60V}$$

$$T_{c,check} = \frac{L_{total}}{180} + 10$$

Subbasin ID	P_03	P_04	P_05
Drainage Direction	to CP_03	to CP_04	to CP_05
Area, A [sf]	13068	5227.2	5227.2
Area, A [ac]	0.30	0.12	0.12

Coef.	C	Composite C ₅	0.26	0.05	0.05
		Composite C ₁₀₀	0.48	0.30	0.30

Initial Overland	T _i	Flow Runoff Coefficient, C ₅ "R"	0.26	0.05	0.05
		Flow Length, L [ft] ¹	35	160	140
		Land Slope, s [%]	2.0	11.9	7.9
		Initial Overland Time: T_i [min]	7.09	10.48	11.25

Travel Time	T _t	Flow Length, L [ft]	380	115	
		Channel Slope, s [%]	0.50	9.00	
		Travel Time Coefficient ³	1.50	1.50	
		Average Velocity, V _s [ft/s]	1.06	4.50	
		Travel Time: T_t [min]	5.97	0.43	

ToC & Intensity		Land Classification (Urban or Vegetated)	Urban	Vege.	Vege.
	T _c	Time of Concentration, T _c [min]	13.07	10.90	11.25
	Urban. Check	Required? - Y/N	Y	N	N
		Total Length: L _{total} [ft]	415	-	-
		Time of Concentration - Check, T _{c,check} [min]	12.3	-	-
	T _{c,final}	Final ToC, T_{c,final} [min]	12.31	10.90	11.25
	I ²	2-yr Intensity I ₂ [in/hr]	1.53	1.63	1.60
		5-yr Intensity I ₅ [in/hr]	2.01	2.13	2.10
		100-yr Intensity I ₁₀₀ [in/hr]	4.48	4.76	4.69

Flow	Q	2-yr Flow, Q ₂ [cfs]	0.12	0.01	0.01
		5-yr Flow, Q ₅ [cfs]	0.16	0.01	0.01
		Design 100-yr Flow, Q₁₀₀ [cfs]	0.65	0.17	0.17

- ¹ Maximum of 500 feet
- ² From NOAA Atlas 14
- ³ From Figure 701 TMRDM

$$T_i = \frac{1.8(1.1 - R)L_o^{1/2}}{s^{1/3}}$$

$$T_t = \frac{L}{60V}$$

$$T_{c,check} = \frac{L_{total}}{180} + 10$$

Swale ID	SWALE_01	SWALE_02	SWALE_03	SWALE_04	SWALE_05
Description	P_01 + P_02	P_02	P_03 + P_04	P_04	P_05
2yr Flow, Q₂ [cfs]	0.29	0.28	0.13	0.01	0.01
5yr Flow, Q₅ [cfs]	0.38	0.36	0.17	0.01	0.01
Design 100yr Flow, Q₁₀₀ [cfs]	1.16	0.95	0.82	0.17	0.17
Shape	Triangular	Triangular	Triangular	Triangular	Triangular
Side Slope, z	2	2	2	2	2
Bottom Width, b	0	0	0	0	0
Longitudinal Slope, s [ft/ft]	0.050	0.010	0.005	0.067	0.080
Vegetation	Rip-Rap	Rip-Rap	Rip-Rap	Rip-Rap	Rip-Rap
Manning's n, n	0.035	0.035	0.035	0.035	0.035
Calculated Normal Depth, y _o [ft]	0.43	0.54	0.58	0.20	0.19
Area, A [ft ²]	0.37	0.58	0.67	0.08	0.07
Design Velocity, v [fps]	3.15	1.64	1.22	2.18	2.33
Top Width, T [ft]	1.71	2.15	2.32	0.79	0.76
Hydraulic Radius, R _h [ft]	0.21	0.27	0.29	0.10	0.10
Froude Number, F _r	1.20	0.56	0.40	1.22	1.33
<i>Supercritical Check</i> ¹	<i>YES</i>	<i>NO</i>	<i>NO</i>	<i>YES</i>	<i>YES</i>
Selected Freeboard, FB _{req} [ft]	0.50	0.50	0.50	0.50	0.50
Top Width Required, T _{req} [ft]	3.7	4.1	4.3	2.8	2.8
Top Width Rounded, T [ft]	4.0	5.0	5.0	3.0	3.0
Selected Top Width, T [ft]	5.0	5.0	5.0	5.0	5.0
Design Depth, D [ft]	1.25	1.25	1.25	1.25	1.25
Channel Freeboard, FB [ft]	0.82	0.71	0.67	1.05	1.06
Meets Required Freeboard?	✓	✓	✓	✓	✓

¹ Channels with a Froude number within a range of 0.86 and 1.13 should be designed as a supercritical channel.

$$R_H = A/T \quad F_r = \frac{V}{(gD)^{1/2}}$$

$$Q = \frac{1.486}{n} A R_H^{2/3} S^{1/2}$$

Channel/Swale Riprap Sizing

From Truckee Meadows Regional Drainage Manual (eq. 842)

$$D_{50} = \frac{(0.05)v^2(s^{0.34})}{(S_s - 1)^{1.332}}$$

Where

- v Channel velocity [fps]
- S Longitudinal channel slope [ft/ft]
- S_s Specific gravity of rock = 2.50
- D₅₀ Rock size [ft]

Input			Calculated			Selected		
Channel ID	v [fps]	S [ft/ft]	S _s [ft/ft]	D ₅₀ ¹ [ft]	D ₅₀ ¹ [in]	Riprap Class	D ₅₀ ² [in]	Riprap Thick. [in]
SWALE_01	3.15	0.050	2.5	0.10	1.3	CL 150	6.0	12
SWALE_02	1.64	0.010	2.5	0.02	0.2	CL 150	6.0	12
SWALE_03	1.22	0.005	2.5	0.01	0.1	CL 150	6.0	12
SWALE_04	2.18	0.067	2.5	0.06	0.7	CL 150	6.0	12
SWALE_05	2.33	0.080	2.5	0.07	0.8	CL 150	6.0	12

- ¹ Design requirement for D₅₀
- ² Selected value for D₅₀ per Standard Specifications
- ³ All channel sections to use a Class C riprap for bedding with a 12-inch thickness

TABLE 200.07.04-I

Percentage by Mass Passing Sieve	Sieve Size (Inches)					
	Class 150	Class 300	Class 400	Class 550	Class 700	Class 900
100	10	20	30	40	48	60
70 - 85	9	18	27	36	45	54
30 - 50	6	12	18	24	30	36
5 - 15	2	5	7	12	18	24
0	1	2	3	6	8	12
D ₅₀ ⁽¹⁾	6	12	16	22	28	35

1. Mean Stone Size

Appendix C

DRAINAGE EXHIBITS

LEGEND

- PROPERTY LINE
- EXISTING PAVEMENT
- PROPOSED ROADWAY
- EXISTING CULVERT/SD
- PROPOSED CULVERT/SD
- HYDRO SUBBASIN
- TIME OF CONCENTRATION PATH
- PROPOSED SWALE
- EXISTING SWALE

NOTES

- RAINFALL DEPTHS (FROM NOAA):
 5YR24HR = 2.63 IN
 100YR24HR = 4.71 IN

SUBBASIN SUMMARY

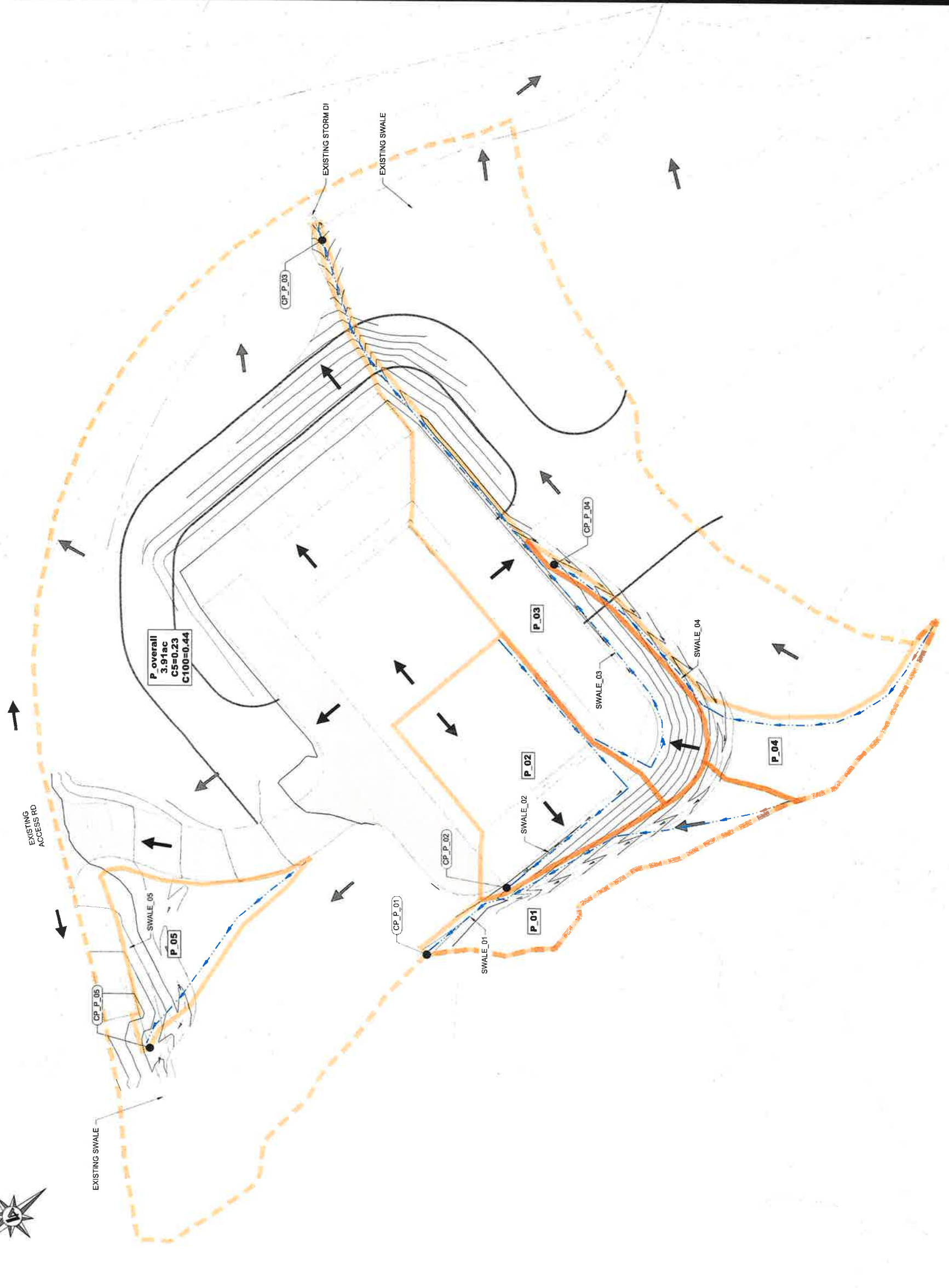
Basin ID	Area [ac]	C _s	C ₁₀₀	Q _s [cfs]	Q ₁₀₀ [cfs]
P_Overall	3.91	0.23	0.44	1.80	7.56
P_01	0.14	0.05	0.30	0.02	0.21
P_02	0.25	0.81	0.72	0.36	0.85
P_03	0.3	0.26	0.48	0.16	0.65
P_04	0.12	0.05	0.30	0.01	0.17
P_05	0.12	0.05	0.30	0.01	0.17

SWALE SUMMARY

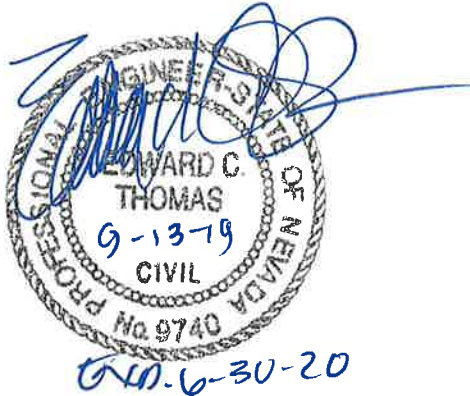
Swale ID	Shape	Side Slope	Top Width [ft]	Q ₁₀₀ [cfs]	Q _s [cfs]
SWALE_01	TRI	2	5	1.16	0.38
SWALE_02	TRI	2	5	0.95	0.36
SWALE_03	TRI	2	5	0.82	0.17
SWALE_04	TRI	2	5	0.17	0.01
SWALE_05	TRI	2	5	0.17	0.01

CONCENTRATION POINT SUMMARY

CP ID	Description	Q ₁₀₀ [cfs]	Q _s [cfs]
CP_01	P_01 + P_02	1.16	0.38
CP_02	P_02	0.95	0.36
CP_03	P_03 + P_04	0.82	0.17
CP_04	P_04	0.17	0.01
CP_05	P_05	0.17	0.01



CONCEPTUAL DRAINAGE REPORT
For
MT. ROSE
GALENA WATER TANK



Prepared For:

**Mt. Rose/Ski Tahoe
PO Box 5838
Tahoe City, CA 96145**

Prepared By:

**Kristin Kramer, P.E.
Ed Thomas, P.E.**



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

**JN 9764.400
September 2019**

TABLE OF CONTENTS

1.	Introduction.....	1
1.1.	Existing Site Description	1
1.2.	Proposed Project Description	2
1.3.	FEMA FIRM Panels	2
2.	Methodology	2
3.	Historic Drainage System	3
4.	Proposed Drainage System.....	3
5.	Water Quality.....	4
6.	Conclusions.....	4
7.	References	4

[File Doc: L:\LAProj\9764.400 - Galena Water Tank\Civil\Hydrology\Report\9764.400-Conceptual Drainage Report.docx]

LIST OF FIGURES

Figure 1: Vicinity Map.....	1
-----------------------------	---

LIST OF TABLES

Table 1: Selected Rational C Values	2
Table 2: Existing Peak Flow Summary	3
Table 3: Proposed Peak Flow Summary	3

TABLE OF APPENDICES

A	Background Data
A.1	Effective FIRM Panels
A.2	NOAA Data
B	Hydrologic & Hydraulic Calculations
C	Drainage Exhibits

1. INTRODUCTION

This document is presented as a Conceptual Drainage Report in support of the proposed 5 million gallon water storage tank for Mt. Rose Ski Tahoe. This report is to provide support for the Special Use Permit (SUP) for the developed area as required by Washoe County.

Mt. Rose Ski Tahoe intends to develop upon assessor parcel numbers (APN) 048-120-22 (owned by the United States Forest Service) and 048-112-12 (owned by Mt. Rose Ski Tahoe). The subject area is bound by Mount Rose Highway to the south/west and the Mt. Rose ski area to the north/east. An existing water tank and maintenance building, owned and maintained by Mt. Rose, is located near the proposed tank site. Refer to Figure 1 for a vicinity map of the area. The disturbed area accounts for approximately 3.2 acres, with 1.9 acres being located on USFS property. The entire project is within Section 20, Township 17 and Range 19.

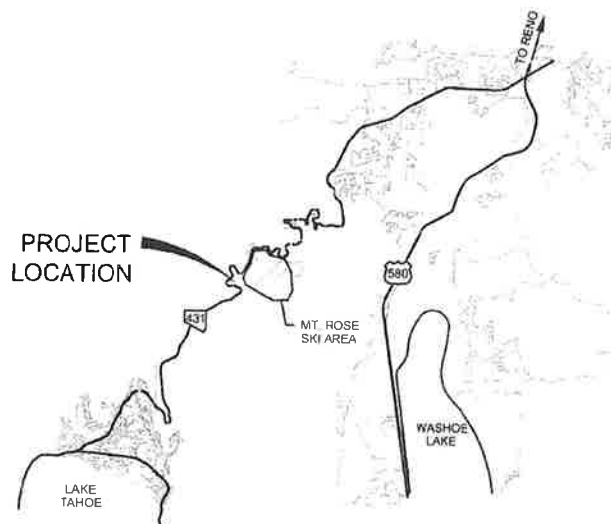


Figure 1: Vicinity Map

1.1. Existing Site Description

The site is located on the southwest corner of the Mt. Rose ski area. An existing maintenance building and water tank are located directly north of the project site. Dirt/gravel access roads provide connectivity to the existing facilities from Mt. Rose Highway. In addition, an existing ski run borders the project site to the east. With exception to these improvements, the rest of the project site is currently undeveloped, with groundcover consisting of forest coverings. The topography near the future tank footprint is around five percent while the uphill watershed has more severe slopes, ranging from 20-50 percent. The site drains generally to the north as overland flow prior to entering an existing swale in the north.

1.2. Proposed Project Description

The proposed 5 million gallon water tank will be developed upon approximately 3.2 acres. The design will feature a tank pad, perimeter access road, retaining wall and drainage improvements. Drainage improvements extend to collector swales and culvert structures. On the uphill side of the retaining wall, two collector swales route flow from the high point to the culverts in the north. A small swale along the perimeter of the tank access road will collect nuisance flow from the tank roof. The swales are directed to culverts at the existing access roads. Runoff will ultimately be routed to an existing drainage swale north of the tank site. Grading improvements will not impact the existing ski run to the east.

1.3. FEMA FIRM Panels

Based on a review of the Flood Insurance Rate Map Index (panel 32031C3325G dated March 2009), the site is in an un-mapped area of the Federal Emergency Management Agency (FEMA). The project site is, therefore identified as Flood Hazard Zone X (unshaded), which is defined as areas determined to be outside the 500-year floodplain. A FIRMette of the project site is included in Appendix A.

2. METHODOLOGY

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

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

Where:

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

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

Table 1: Selected Rational C Values

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87

3. HISTORIC DRAINAGE SYSTEM

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

Table 2: Existing Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
Overall	Overall	13.2	0.05	0.30	1.84	4.06	1.21	16.07

As a result of the analysis, it was determined 16.07 cfs is generated from the existing site for the 100-year storm event. All calculations can be found in Appendix B.

4. PROPOSED DRAINAGE SYSTEM

Development of the project will involve the construction of the water tank, access road, retaining wall, drainage swales, and culverts. The uphill runoff will enter collector swales, located at the top of the retaining wall. Nuisance flow generated from the water tank roof and access road will be collected in a minor swale at the bottom of the retaining wall. Culverts will collect flows from the east and west swales, and direct flow to the existing swale in the north.

To appropriately size drainage facilities, the proposed site was divided into two sub-basins. Reference the proposed drainage exhibit in Appendix C for the proposed drainage schematic. Composite Rational C-values were determined based upon percentage of post-development land cover. The peak runoff rate calculated for the developed portion of the site is summarized in Table 3.

Table 3: Proposed Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
Poverall	Overall	13.2	0.08	0.32	1.84	4.06	1.83	17.06
P_01	East Swale	10.25	0.07	0.31	1.84	4.06	1.25	12.98
P_02	West Swale	2.95	0.11	0.34	1.89	4.20	0.60	4.22

The 100-year peak rate of runoff for the entire site was determined to be 17.06 cfs. This is a 1 cfs increase from the existing condition. Natural Resources Conservation Service Web Soil Survey was used to determine the Hydrologic Soil Group (HSG). The entire site is classified a Group A, indicating soils having the highest infiltration rates (with low runoff potential). As the proposed condition results in minimal changes to land cover and low runoff potential is apparent, stormwater detention is unnecessary.

Culvert structures for the east and west areas have been evaluated using Autodesk Hydraflow Express Extension. Outlet protection design will be provided at the time of final design. The Manning's equation was used to size the collector swales, while ensuring 6 inches of freeboard. All calculations can be found in Appendix B.

5. WATER QUALITY

As required by the TMRDM, Low Impact Development (LID) methods of treating runoff will be required to address water quality. Flow-based controls will be designed to treat runoff from the 2-year storm event (WQ_F). All improvements to the site drain to a proposed swale. Riprap calculations for the swales have been performed to determine median stone diameter of 6 inches (Class 150). In all swales, the WQ_F produces a depth of flow that is less or approximately equal to the diameter. The swales will effectively remove pollutants to meet the Truckee Meadows Structural Controls Design and Low Impact Development Manual [3]. The LID manual's Design Guidance Worksheets and riprap calculations are included in Appendix B. As a result, the design and analysis will provide water quality treatment of all on-site runoff.

6. CONCLUSIONS

The project, as proposed, will allow for the construction of a water tank for Mt. Rose Ski Tahoe. Drainage improvements to the site shall convey anticipated flows via a network of swales and culverts. Development of the project will result in a negligible increase in impervious ground cover. In addition, the site is located entirely in HSG A. As a result, stormwater detention facilities have been determined unnecessary. Water quality of the runoff will all be controlled by swales along the proposed retaining wall and access road. The design and hydrologic studies of the proposed tank have been conducted in compliance with the drainage guidelines for Washoe County and TMRDM.

7. REFERENCES

- [1] Washoe County, "Truckee Meadows Regional Drainage Manual," Reno, 2009.
- [2] National Oceanic and Atmospheric Administration (NOAA), "Atlas 14 Precipitation-Frequency Atlas," 2018. [Online]. Available: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk.
- [3] NCE, "Truckee Meadows Structural Controls Design and Low Impact Development Manual," Reno, NV, April 2015.
- [4] Washoe County, "Washoe County Development Code," Reno, 2019.

Appendix A

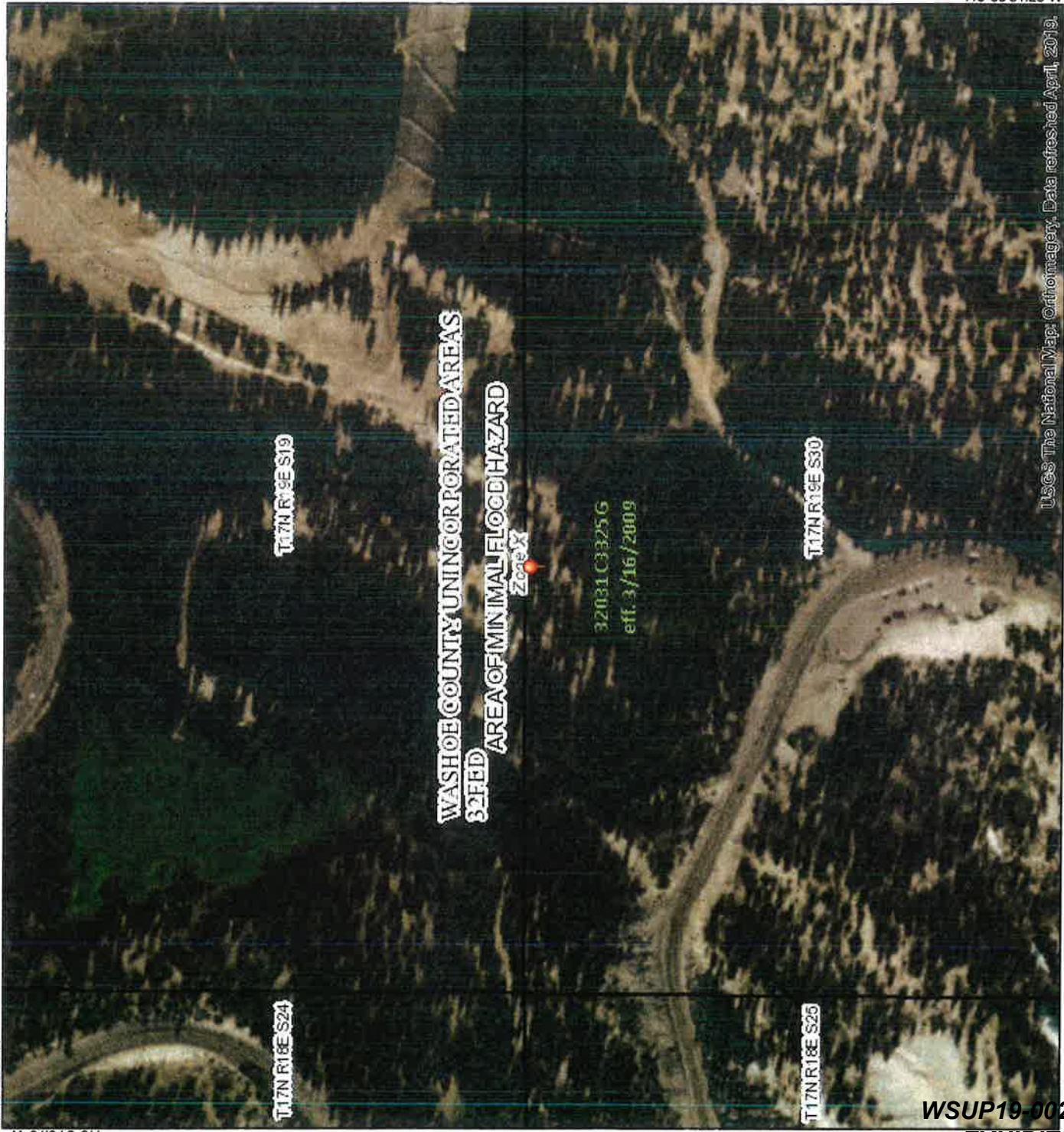
BACKGROUND DATA

National Flood Hazard Layer FIRMette



39°19'12.61"N

119°54'8.70"W



WSUP19-0020
EXHIBIT G

USGS The National Map: Orthomimagery. Data refreshed April, 2019.



39°18'44.78"N

119°53'31.25"W

Legend

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

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AH, A1, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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

OTHER AREAS

- Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone X

GENERAL STRUCTURES

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

OTHER FEATURES

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

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/15/2019 at 8:47:15 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



* source: ESRI Maps
 ** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

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

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aeriels](#)

PF tabular

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

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.84 (1.60-2.14)	2.28 (1.99-2.68)	2.98 (2.57-3.48)	3.61 (3.08-4.21)	4.64 (3.86-5.44)	5.56 (4.50-6.60)	6.64 (5.17-8.03)	7.97 (5.93-9.88)	10.1 (7.03-12.9)	12.1 (7.98-16.0)
10-min	1.39 (1.22-1.63)	1.73 (1.52-2.03)	2.27 (1.96-2.65)	2.75 (2.35-3.21)	3.53 (2.94-4.14)	4.23 (3.43-5.03)	5.05 (3.94-6.11)	6.06 (4.52-7.52)	7.69 (5.36-9.83)	9.24 (6.07-12.2)
15-min	1.15 (1.00-1.34)	1.44 (1.26-1.68)	1.88 (1.62-2.19)	2.28 (1.94-2.65)	2.92 (2.43-3.42)	3.50 (2.83-4.16)	4.18 (3.25-5.05)	5.01 (3.73-6.22)	6.36 (4.43-8.13)	7.64 (5.02-10.0)
30-min	0.776 (0.676-0.906)	0.966 (0.846-1.13)	1.26 (1.09-1.47)	1.53 (1.31-1.79)	1.97 (1.64-2.30)	2.35 (1.91-2.80)	2.81 (2.19-3.40)	3.37 (2.51-4.18)	4.28 (2.98-5.47)	5.14 (3.38-6.76)
60-min	0.480 (0.419-0.560)	0.598 (0.524-0.700)	0.781 (0.673-0.912)	0.948 (0.811-1.11)	1.22 (1.01-1.43)	1.46 (1.18-1.73)	1.74 (1.36-2.10)	2.09 (1.56-2.59)	2.65 (1.84-3.39)	3.18 (2.09-4.19)
2-hr	0.322 (0.288-0.362)	0.400 (0.357-0.449)	0.500 (0.443-0.560)	0.584 (0.513-0.657)	0.709 (0.608-0.798)	0.818 (0.686-0.936)	0.944 (0.771-1.10)	1.11 (0.878-1.32)	1.40 (1.05-1.71)	1.66 (1.21-2.11)
3-hr	0.271 (0.244-0.301)	0.337 (0.307-0.374)	0.410 (0.369-0.455)	0.469 (0.422-0.521)	0.549 (0.486-0.615)	0.618 (0.538-0.698)	0.691 (0.593-0.789)	0.804 (0.676-0.932)	0.988 (0.810-1.17)	1.16 (0.929-1.42)
6-hr	0.213 (0.191-0.236)	0.264 (0.238-0.293)	0.319 (0.285-0.356)	0.361 (0.321-0.403)	0.414 (0.364-0.466)	0.454 (0.394-0.514)	0.491 (0.420-0.561)	0.534 (0.450-0.619)	0.595 (0.493-0.699)	0.648 (0.529-0.775)
12-hr	0.154 (0.137-0.172)	0.193 (0.172-0.216)	0.238 (0.211-0.267)	0.274 (0.241-0.308)	0.321 (0.279-0.364)	0.357 (0.307-0.407)	0.394 (0.332-0.454)	0.429 (0.356-0.502)	0.475 (0.385-0.567)	0.509 (0.404-0.618)
24-hr	0.134 (0.117-0.157)	0.169 (0.148-0.197)	0.215 (0.188-0.251)	0.254 (0.220-0.297)	0.308 (0.264-0.360)	0.351 (0.299-0.411)	0.397 (0.335-0.467)	0.446 (0.371-0.528)	0.514 (0.419-0.613)	0.569 (0.456-0.686)
2-day	0.087 (0.075-0.104)	0.111 (0.095-0.133)	0.145 (0.123-0.173)	0.174 (0.147-0.208)	0.215 (0.180-0.257)	0.249 (0.206-0.299)	0.286 (0.234-0.345)	0.325 (0.263-0.394)	0.382 (0.302-0.469)	0.428 (0.332-0.534)
3-day	0.069 (0.059-0.081)	0.088 (0.075-0.104)	0.117 (0.100-0.138)	0.141 (0.120-0.167)	0.176 (0.149-0.209)	0.206 (0.172-0.244)	0.238 (0.196-0.284)	0.273 (0.222-0.327)	0.324 (0.258-0.393)	0.366 (0.286-0.450)
4-day	0.059 (0.051-0.070)	0.076 (0.065-0.090)	0.102 (0.088-0.121)	0.125 (0.107-0.147)	0.157 (0.133-0.185)	0.184 (0.155-0.217)	0.214 (0.178-0.253)	0.247 (0.202-0.293)	0.295 (0.235-0.356)	0.335 (0.263-0.408)
7-day	0.041 (0.035-0.048)	0.053 (0.045-0.062)	0.072 (0.061-0.084)	0.088 (0.075-0.103)	0.111 (0.094-0.130)	0.130 (0.109-0.152)	0.151 (0.125-0.178)	0.174 (0.142-0.206)	0.206 (0.166-0.248)	0.234 (0.185-0.282)
10-day	0.033 (0.028-0.039)	0.043 (0.037-0.050)	0.059 (0.050-0.069)	0.072 (0.061-0.084)	0.090 (0.075-0.105)	0.104 (0.087-0.122)	0.120 (0.100-0.141)	0.137 (0.113-0.162)	0.161 (0.130-0.193)	0.181 (0.145-0.218)
20-day	0.022 (0.019-0.026)	0.029 (0.025-0.034)	0.039 (0.034-0.045)	0.047 (0.041-0.054)	0.059 (0.050-0.067)	0.067 (0.057-0.078)	0.077 (0.065-0.089)	0.087 (0.073-0.102)	0.101 (0.083-0.119)	0.112 (0.091-0.133)
30-day	0.018 (0.016-0.021)	0.024 (0.021-0.028)	0.032 (0.028-0.037)	0.039 (0.033-0.045)	0.048 (0.041-0.055)	0.055 (0.047-0.064)	0.063 (0.053-0.073)	0.070 (0.059-0.082)	0.082 (0.067-0.096)	0.090 (0.073-0.108)
45-day	0.015 (0.013-0.017)	0.020 (0.017-0.022)	0.026 (0.023-0.030)	0.032 (0.027-0.036)	0.039 (0.033-0.044)	0.044 (0.038-0.050)	0.050 (0.042-0.057)	0.056 (0.047-0.064)	0.064 (0.053-0.074)	0.070 (0.058-0.083)
60-day	0.013 (0.011-0.015)	0.017 (0.014-0.020)	0.023 (0.019-0.026)	0.027 (0.023-0.031)	0.033 (0.028-0.038)	0.037 (0.031-0.043)	0.041 (0.035-0.048)	0.045 (0.038-0.053)	0.051 (0.042-0.060)	0.055 (0.046-0.066)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

Appendix B

HYDROLOGIC & HYDRAULIC COMPUTATIONS

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87
Rangeland	0.20	0.50
-		
-		
-		

Subbasin ID	E _{overall}	P _{overall}	P_01	P_02		
Drainage Direction	Overall	Overall	East Swale	West Swale		
Area, A [ac]	13.20	13.20	10.25	2.95		

Composite Areas [ac]	Forest	13.20	12.78	10.04	2.74		
	Roof	0.00	0.42	0.21	0.21		
	Rangeland	0.00	0.00	0.00	0.00		
	-						
	-						
	-						

Area Check	✓	✓	✓	✓		
------------	---	---	---	---	--	--

Composite C₅	0.05	0.08	0.07	0.11		
Composite C₁₀₀	0.30	0.32	0.31	0.34		

Subbasin ID	Overall	Poverall	P_01	P_02
Drainage Direction	Overall	Overall	East Swale	West Swale
Area, A [sf]	574992	574992	446490	128502
Area, A [ac]	13.20	13.20	10.25	2.95

Coef.	C	Composite C ₅	0.05	0.08	0.07	0.11
		Composite C ₁₀₀	0.30	0.32	0.31	0.34

Initial Overland	T _i	Flow Runoff Coefficient, C ₅ "R"	0.05	0.05	0.05	0.05
		Flow Length, L [ft] ¹	500	500	500	500
		Land Slope, s [%]	28.00	28.00	28.00	27.00
		Initial Overland Time: T_i [min]	13.92	13.92	13.92	14.09

Travel Time	T _t	Flow Length, L [ft]	740	740	740	370
		Channel Slope, s [%]	15.14	15.81	15.81	8.38
		Travel Time Coefficient ³	1.50	1.50	1.50	1.50
		Average Velocity, V ₅ [ft/s]	5.84	5.96	5.96	4.34
		Travel Time: T_t [min]	2.11	2.07	2.07	1.42

ToC & Intensity	T _c	Time of Concentration, T _c [min]	16.03	15.99	15.99	15.51
	Urban. Check	Required? - Y/N	Y	Y	Y	Y
		Total Length: L _{total} [ft]	1240	1240	1240	870
		Time of Concentration - Check, T _{c,check} [min]	16.9	16.9	16.9	14.8
	T _{c,final}	Final ToC, T_{c,final} [min]	16.03	15.99	15.99	14.83
	I ²	2-yr Intensity I ₂ [in/hr]	1.11	1.11	1.11	1.15
		5-yr Intensity I ₅ [in/hr]	1.84	1.84	1.84	1.89
100-yr Intensity I ₁₀₀ [in/hr]		4.06	4.06	4.06	4.20	

Flow	Q	2-yr Flow, Q ₂ [cfs]	0.73	1.11	0.76	0.36
		5-yr Flow, Q ₅ [cfs]	1.21	1.83	1.25	0.60
		Design 100-yr Flow, Q₁₀₀ [cfs]	16.07	17.06	12.98	4.22

¹ Maximum of 500 feet

² From NOAA Atlas 14

³ From Figure 701 TMRDM

$$T_i = \frac{1.8(1.1 - R)L_o^{1/2}}{s^{1/3}}$$

$$T_t = \frac{L}{60V}$$

$$T_{c,check} = \frac{L_{total}}{180} + 10$$

Swale ID	TMRDM Equation	SWALE_01	SWALE_02	
Adjacent Roadway/Superpad		East Swale	West Swale	
5yr Flow, Q₅ [cfs]		1.25	0.60	
Design 100yr Flow, Q₁₀₀ [cfs]		12.98	4.22	
Shape		Triangular	Triangular	
Side Slope, z		2	2	
Bottom Width, b		0	0	
Longitudinal Slope, s [ft/ft]		0.010	0.010	
Vegetation		Rip-Rap	Rip-Rap	
Manning's n, n		0.035	0.035	
Calculated Normal Depth, y _o [ft]		1.43	0.94	
Area, A [ft ²]		4.11	1.77	
Design Velocity, v [fps]		3.16	2.38	
Top Width, T [ft]		5.73	3.76	
Hydraulic Radius, R _h [ft]		0.72	0.47	
Froude Number, F _r	eq802	0.66	0.61	
<i>Supercritical Check</i> ¹		<i>NO</i>	<i>NO</i>	
Freeboard-Subcritical, FB _{sub} [ft] ²	eq849	0.65	0.59	
Freeboard-Supercritical, FB _{super} [ft] ³	eq856	1.09	1.06	
Required Freeboard, FB _{req} [ft]		0.50	0.50	
Top Width Required, T _{req} [ft]		7.7	5.8	
Top Width Rounded, T [ft]		8.0	6.0	
Selected Top Width, T [ft]		8.0	8.0	
Design Depth, D [ft]		2.00	2.00	
Channel Freeboard, FB [ft]		0.57	1.06	
Meets Required Freeboard?		✓	✓	

¹ Channels with a Froude number within a range of 0.86 and 1.13 should be designed as a supercritical channel.

² For subcritical flow, the minimum freeboard shall be determined by Eqn. 849, but shall not be less than 6 in.

³ For supercritical flow, the minimum freeboard shall be determined by Eqn. 856, but shall not be less than 6 in.

$$R_H = A/T \quad F_r = \frac{V}{(gD)^{1/2}}$$

$$Q = \frac{1.486}{n} AR_H^{2/3} S^{1/2}$$

Culvert Report

Culvert_01 (East)

Invert Elev Dn (ft) = 8747.50
 Pipe Length (ft) = 75.00
 Slope (%) = 2.67
 Invert Elev Up (ft) = 8749.50
 Rise (in) = 18.0
 Shape = Circular
 Span (in) = 18.0
 No. Barrels = 1
 n-Value = 0.012
 Culvert Type = Circular Concrete
 Culvert Entrance = Groove end projecting (C)
 Coeff. K,M,c,Y,k = 0.0045, 2, 0.0317, 0.69, 0.2

Calculations

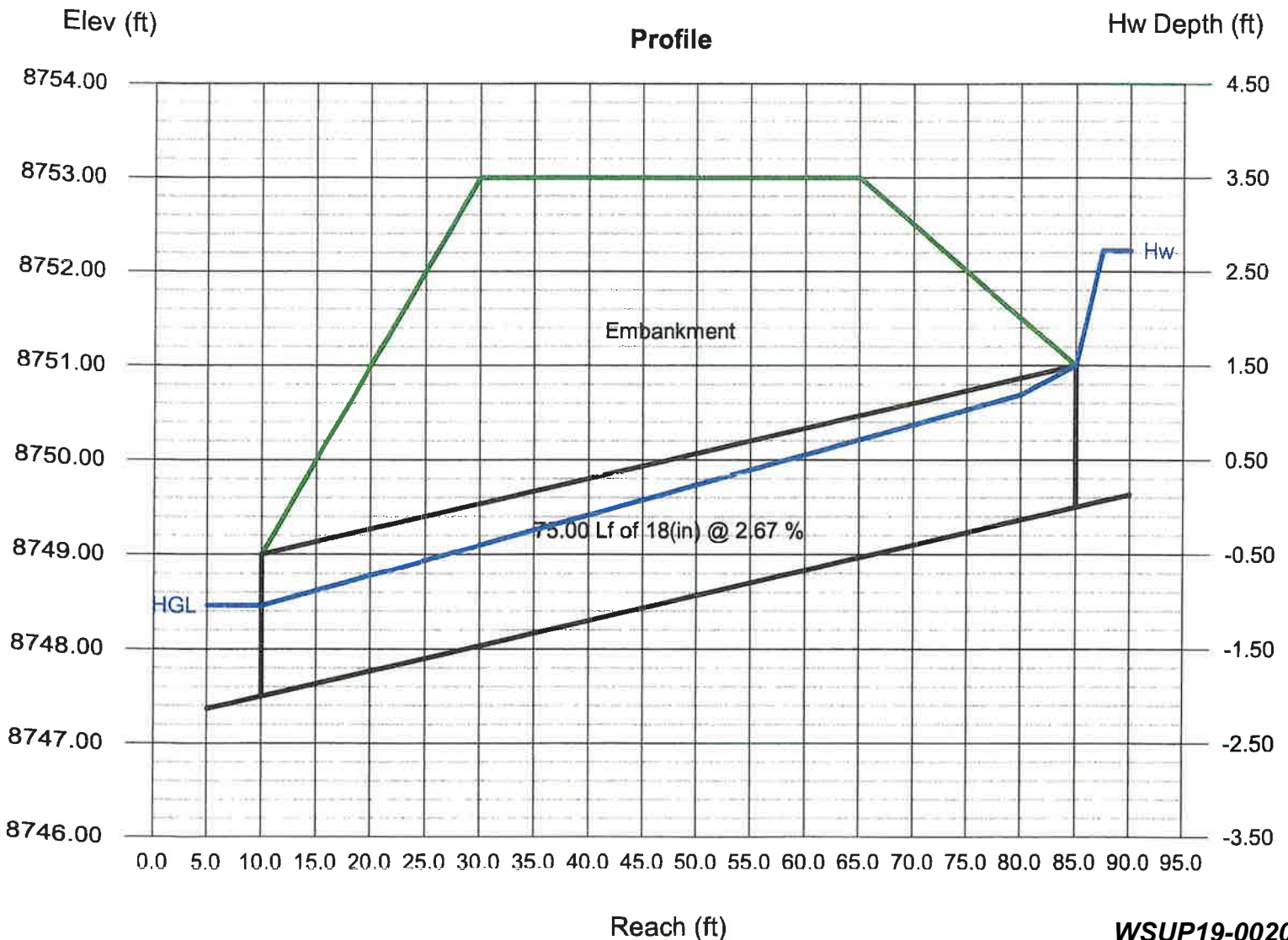
Qmin (cfs) = 12.98
 Qmax (cfs) = 12.98
 Tailwater Elev (ft) = Normal

Highlighted

Qtotal (cfs) = 12.98
 Qpipe (cfs) = 12.98
 Qovertop (cfs) = 0.00
 Veloc Dn (ft/s) = 10.91
 Veloc Up (ft/s) = 7.75
 HGL Dn (ft) = 8748.46
 HGL Up (ft) = 8750.85
 Hw Elev (ft) = 8752.23
 Hw/D (ft) = 1.82
 Flow Regime = Inlet Control

Embankment

Top Elevation (ft) = 8753.00
 Top Width (ft) = 35.00
 Crest Width (ft) = 10.00



Culvert Report

Culvert_02 (West)

Invert Elev Dn (ft) = 8734.80
 Pipe Length (ft) = 102.00
 Slope (%) = 16.86
 Invert Elev Up (ft) = 8752.00
 Rise (in) = 12.0
 Shape = Circular
 Span (in) = 12.0
 No. Barrels = 1
 n-Value = 0.012
 Culvert Type = Circular Concrete
 Culvert Entrance = Groove end projecting (C)
 Coeff. K,M,c,Y,k = 0.0045, 2, 0.0317, 0.69, 0.2

Calculations

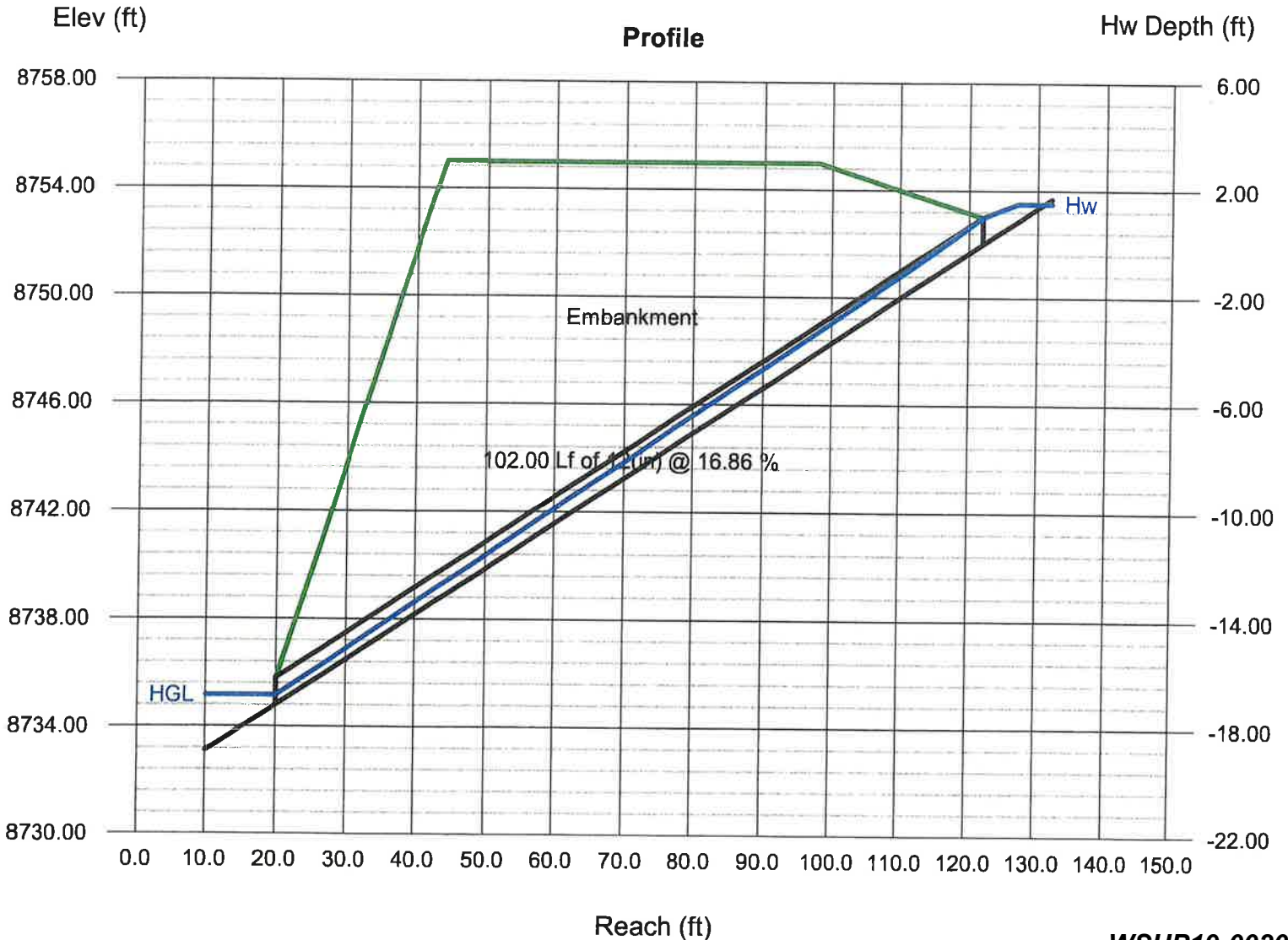
Qmin (cfs) = 4.22
 Qmax (cfs) = 4.22
 Tailwater Elev (ft) = Normal

Highlighted

Qtotal (cfs) = 4.22
 Qpipe (cfs) = 4.22
 Qovertop (cfs) = 0.00
 Veloc Dn (ft/s) = 16.95
 Veloc Up (ft/s) = 5.84
 HGL Dn (ft) = 8735.15
 HGL Up (ft) = 8752.87
 Hw Elev (ft) = 8753.52
 Hw/D (ft) = 1.52
 Flow Regime = Inlet Control

Embankment

Top Elevation (ft) = 8755.00
 Top Width (ft) = 54.00
 Crest Width (ft) = 150.00



Channel/Swale Riprap Sizing

From Truckee Meadows Regional Drainage Manual (eq. 842)

$$D_{50} = \frac{(0.05)v^2(s^{0.34})}{(s_s - 1)^{1.332}}$$

Where

- v Channel velocity [fps]
- S Longitudinal channel slope [ft/ft]
- S_s Specific gravity of rock = 2.50
- D₅₀ Rock size [ft]

Channel ID	v [fps]	S [ft/ft]	S _s [ft/ft]	Calculated		Selected		
				D ₅₀ ¹ [ft]	D ₅₀ ¹ [in]	Riprap Class	D ₅₀ ² [in]	Riprap Thick. [in]
SWALE_01	3.16	0.01	2.5	0.06	0.7	CL 150	6.0	12
SWALE_02	2.38	0.01	2.5	0.03	0.4	CL 150	6.0	12

- ¹ Design requirement for D₅₀
- ² Selected value for D₅₀ per Standard Specifications
- ³ All channel sections to use a Class C riprap for bedding with a 12-inch thickness

TABLE 200.07.04-I

Percentage by Mass Passing Sieve	Sieve Size (Inches)					
	Class 150	Class 300	Class 400	Class 550	Class 700	Class 900
100	10	20	30	40	48	60
70 - 85	9	18	27	36	45	54
30 - 50	6	12	18	24	30	36
5 - 15	2	5	7	12	18	24
0	1	2	3	6	8	12
D ₅₀ ⁽¹⁾	6	12	16	22	28	35

1. Mean Stone Size

Appendix C

DRAINAGE EXHIBITS

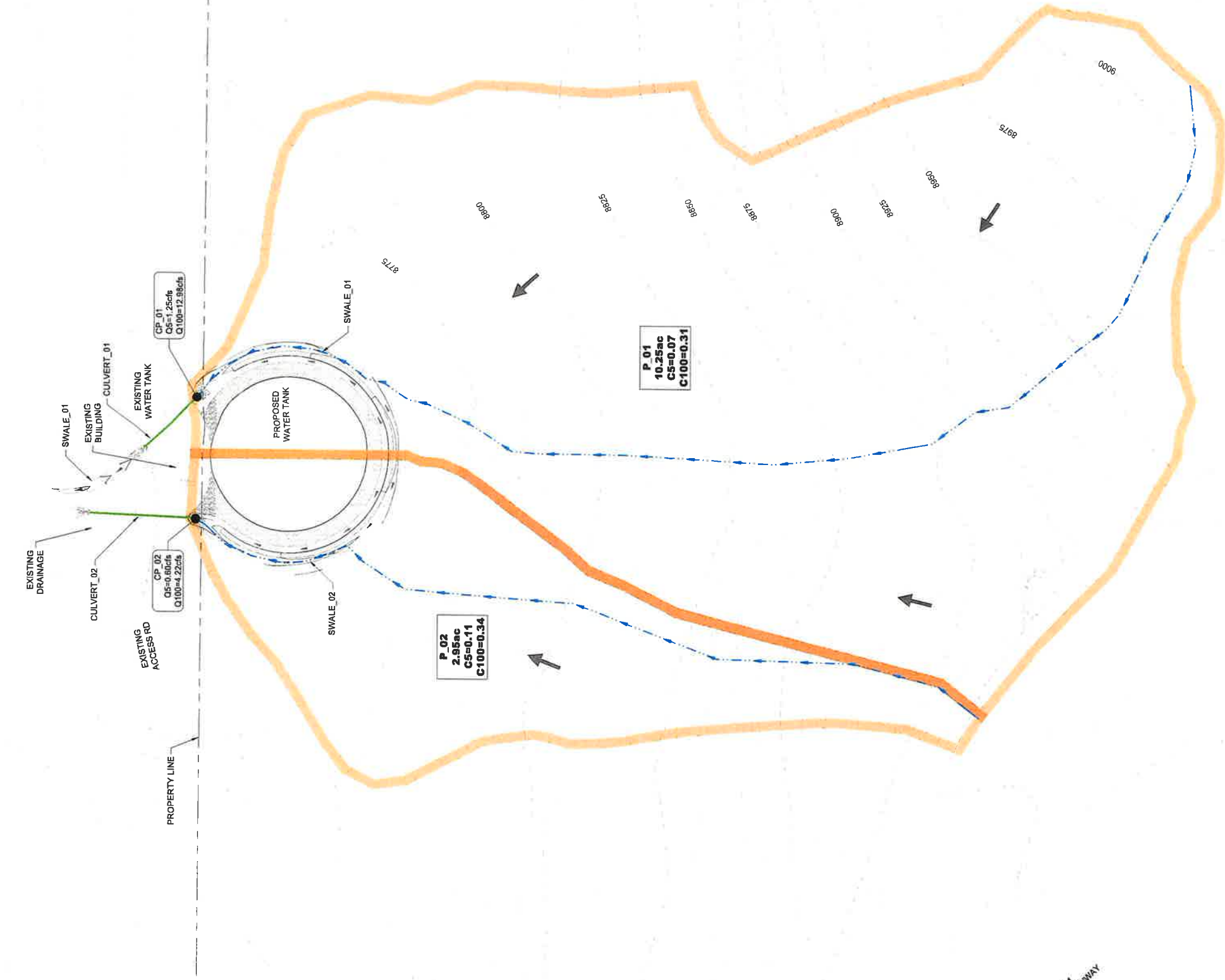
LEGEND

- PROPERTY LINE
- EXISTING PAVEMENT
- PROPOSED ROADWAY
- EXISTING CULVERT/SD
- PROPOSED CULVERT/SD
- HYDRO SUBBASIN
- TIME OF CONCENTRATION PATH
- PROPOSED SWALE
- EXISTING SWALE



NOTES

1. RAINFALL DEPTHS (FROM NOAA):
 5YR24HR = 2.63 IN
 100YR24HR = 4.71 IN



SR431
Mt. Rose Highway

© LUMOS & ASSOCIATES, INC. THIS DRAWING IS THE PROPERTY OF LUMOS & ASSOCIATES, INC. USE OR REPRODUCTION OF THIS DRAWING, IN WHOLE OR IN PART, WITHOUT THE WRITTEN PERMISSION OF LUMOS & ASSOCIATES, INC. IS STRICTLY PROHIBITED. THIS DRAWING IS NOT TO BE USED FOR ANY PROJECT OTHER THAN THE PROJECT FOR WHICH IT WAS PREPARED.

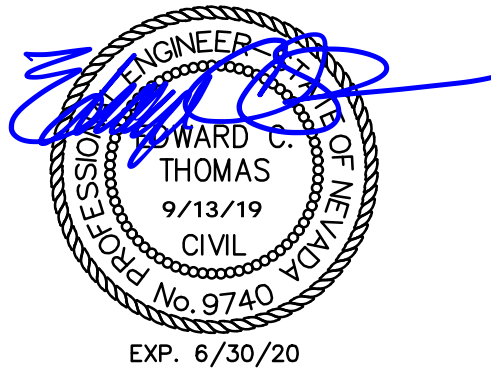
REV	DATE	DESCRIPTION	BY

PRELIMINARY
 NOT FOR CONSTRUCTION

BAR IS 1/8" ON ORIGINAL DRAWING
 0 80'
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

D2.0
 DRAWN BY: KMK
 DESIGNED BY: KMK
 CHECKED BY: ET
 JOB NO.: 9784-400

CONCEPTUAL DRAINAGE REPORT
For
MT. ROSE/SKI TAHOE
WINTERS CREEK LODGE EXPANSION



Prepared For:

**Mt. Rose/Ski Tahoe
PO Box 5838
Tahoe City, CA 96145**

Prepared By:

**Kristin Kramer, P.E.
Ed Thomas, P.E.**



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

**JN 9764.400
September 2019**

TABLE OF CONTENTS

1.	Introduction.....	1
1.1.	Existing Site Description	1
1.2.	Proposed Project Description	2
1.3.	FEMA FIRM Panels	2
2.	Methodology	2
3.	Historic Drainage System	3
4.	Proposed Drainage System.....	3
5.	Water Quality.....	4
6.	Conclusions.....	4
7.	References	4

[File Doc: L:\LAProj\9764.200 - Winters Creek Lodge Schematics\Civil\Hydrology\Report\9764.200-Conceptual Drainage Report.docx]

LIST OF FIGURES

Figure 1: Vicinity Map.....	1
-----------------------------	---

LIST OF TABLES

Table 1: Selected Rational C Values	2
Table 2: Existing Peak Flow Summary	3
Table 3: Proposed Peak Flow Summary	3

TABLE OF APPENDICES

A	Background Data
A.1	Effective FIRM Panels
A.2	NOAA Data
B	Hydrologic & Hydraulic Calculations
C	Drainage Exhibits

1. INTRODUCTION

This document is presented as a Conceptual Drainage Report in support of the building expansion and associated improvements for the Winters Creek Lodge. This report is to provide support for the Special Use Permit (SUP) for the developed area as required by Washoe County.

Mt. Rose Ski Tahoe intends to develop upon assessor parcel numbers (APN) 048-112-15 (owned by Mt. Rose Development Company). The subject area is bound by an existing parking lot to the north, the Mt. Rose ski area to the west, and undeveloped land to the south and east. The existing lodge is owned and operated by Mt. Rose/Ski Tahoe. Refer to Figure 1 for a vicinity map of the area. The disturbed area accounts for approximately 2.6 acres, all located on private property. The entire project is within Section 0, Township 17 and Range 19.

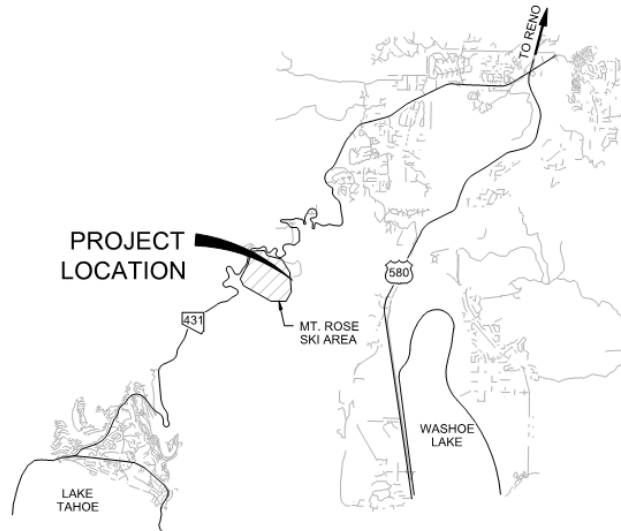


Figure 1: Vicinity Map

1.1. Existing Site Description

The site is located on the east corner of the Mt. Rose ski area. An existing 1 mile paved road (State Route 878) provides access to the Winters Creek Lodge from Mt. Rose Highway (SR-431). The facility includes a restaurant/bar area and hardscaped outdoor seating space. Existing utilities extend to a primary OSDS disposal field west of the building in addition to water and fire connections. Areas adjacent to the improvements consist of natural gravel soils with sparse vegetation coverings. The topography around the building is mild with slopes under 5 percent and generally drains away from the building as sheet flow. Terrain quickly drops to the east, with more severe slopes, ranging from 20-50 percent. The entire site is within the Winters Creek drainage subbasin, which routes flows directly to Washoe Lake, prior to entering Steamboat Creek and ultimately the Truckee River.

1.2. Proposed Project Description

The proposed building expansion will allow for additional restaurant capacity and bar seating. In addition, improvements at the southeast corner will extend to a new outdoor deck seating to accommodate more patrons. To the west of the building, additional hardscaped area and a second elevated deck will be included. The design will also feature a new trash enclosure pad and necessary utility connections. Drainage patterns for the proposed condition will mimic the historic conditions, and route flow away from the building as sheet flow.

1.3. FEMA FIRM Panels

Based on a review of the Flood Insurance Rate Map Index (panel 32031C3325G dated March 2009), the site is in an un-mapped area of the Federal Emergency Management Agency (FEMA). The project site is, therefore identified as Flood Hazard Zone X (unshaded), which is defined as areas determined to be outside the 500-year floodplain. A FIRMette of the project site is included in Appendix A.

2. METHODOLOGY

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

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

Where:

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

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

Table 1: Selected Rational C Values

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87
Paved	0.88	0.93
Natural Coverage, Gravel	0.25	0.50

3. HISTORIC DRAINAGE SYSTEM

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

Table 2: Existing Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
E_overall	Overall	1.09	0.57	0.71	2.33	5.35	1.46	4.16

As a result of the analysis, it was determined 4.16 cfs is generated from the existing site for the 100-year storm event. All calculations can be found in Appendix B.

4. PROPOSED DRAINAGE SYSTEM

Expansion of the existing lodge and associated improvements will slightly increase the impervious area. Drainage patterns will mimic the historic conditions to sheet flow away from the building at minimal slopes.

To evaluate the proposed site, a single drainage basin was delineated. Reference the proposed drainage exhibit in Appendix C for the proposed drainage schematic. Composite Rational C-values were determined based upon percentage of post-development land cover. The peak runoff rate calculated for the developed portion of the site is summarized in Table 3.

Table 3: Proposed Peak Flow Summary

Subbasin ID	Description	Area [ac]	C ₅	C ₁₀₀	I ₅ [in/hr]	I ₁₀₀ [in/hr]	Q ₅ [cfs]	Q ₁₀₀ [cfs]
P_overall	Overall	1.09	0.73	0.82	2.64	6.04	2.11	5.39

The 100-year peak rate of runoff for the entire site was determined to be 5.39 cfs. This is a 1.2 cfs increase from the existing condition. Natural Resources Conservation Service Web Soil Survey was used to determine the Hydrologic Soil Group (HSG). The entire site is classified a Group A, indicating soils having the highest infiltration rates (with low runoff potential). As the proposed condition results in minimal changes to land cover and low runoff potential is apparent, stormwater detention is unnecessary.

All calculations can be found in Appendix B.

5. WATER QUALITY

As required by the TMRDM, Low Impact Development (LID) methods of treating runoff will be required to address water quality. Flow-based controls will be designed to treat runoff from the 2-year storm event (WQ_F). The design will effectively remove pollutants to meet the Truckee Meadows Structural Controls Design and Low Impact Development Manual [3]. As a result, the design and analysis will provide water quality treatment of all on-site runoff.

6. CONCLUSIONS

The project, as proposed, will allow for the expansion of the Winters Creek Lodge. Grading improvements to the site shall convey anticipated flows away from the building via sheet flow. Expansion of the facility will result in a slight increase in impervious ground cover, resulting in an approximately 1cfs increase to 100-year peak flow. The Natural Resource Conservation Service was used to assess the HSG which resulted in the site entirely within Group A. As a result, stormwater detention facilities have been determined unnecessary. Water quality of the runoff will all be controlled in the final design. The design and hydrologic studies of the proposed tank have been conducted in compliance with the drainage guidelines for Washoe County and TMRDM.

7. REFERENCES

- [1] Washoe County, "Truckee Meadows Regional Drainage Manual," Reno, 2009.
- [2] National Oceanic and Atmospheric Administration (NOAA), "Atlas 14 Precipitation-Frequency Atlas," 2018. [Online]. Available: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk.
- [3] NCE, "Truckee Meadows Structural Controls Design and Low Impact Development Manual," Reno, NV, April 2015.
- [4] Washoe County, "Washoe County Development Code," Reno, 2019.

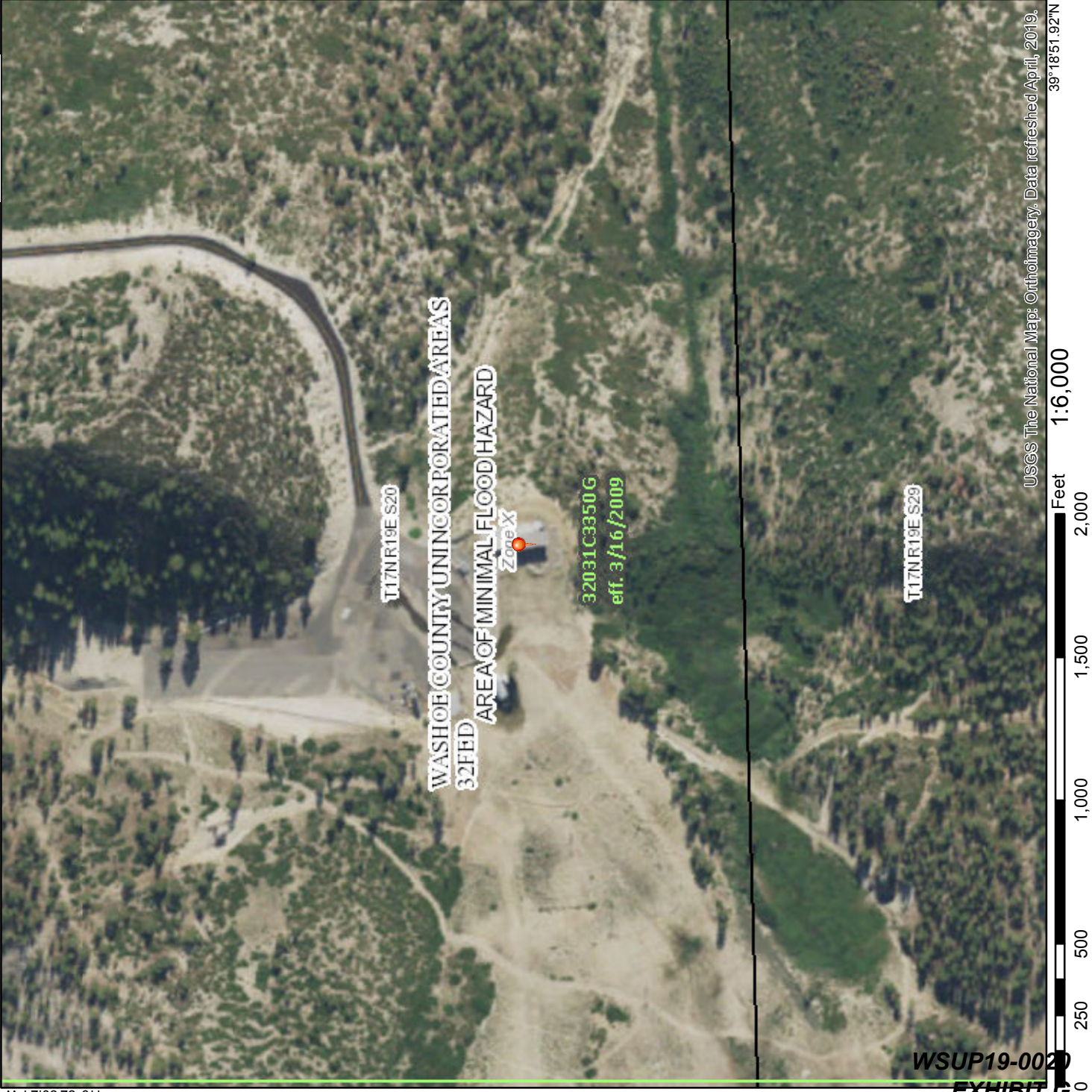
Appendix A

BACKGROUND DATA

National Flood Hazard Layer FIRMette



39°19'19.75"N



WSUP19-0020
EXHIBIT G

USGS The National Map: Orthoimagery. Data refreshed April, 2019.



119°51'52.79"W

Legend

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

SPECIAL FLOOD HAZARD AREAS



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

OTHER AREAS OF FLOOD HAZARD



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

OTHER AREAS



Area of Minimal Flood Hazard *Zone X*
Effective LOMRS
Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES



Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

OTHER FEATURES



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

MAP PANELS



Digital Data Available
No Digital Data Available
Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **9/11/2019 at 6:49:05 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



NOAA Atlas 14, Volume 1, Version 5
Location name: Washoe Valley, Nevada, USA*
Latitude: 39.3183°, Longitude: -119.8698°
Elevation: 8291.01 ft**



* source: ESRI Maps
 ** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

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

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.61 (1.39-1.88)	2.00 (1.75-2.36)	2.64 (2.26-3.11)	3.23 (2.75-3.79)	4.18 (3.46-4.93)	5.04 (4.04-6.05)	6.04 (4.66-7.38)	7.26 (5.35-9.13)	9.23 (6.36-12.0)	11.1 (7.19-14.7)
10-min	1.22 (1.06-1.43)	1.52 (1.33-1.79)	2.00 (1.72-2.36)	2.45 (2.09-2.88)	3.18 (2.63-3.76)	3.83 (3.08-4.60)	4.60 (3.54-5.62)	5.53 (4.08-6.95)	7.03 (4.84-9.10)	8.41 (5.47-11.2)
15-min	1.01 (0.880-1.19)	1.26 (1.10-1.48)	1.66 (1.42-1.95)	2.03 (1.72-2.38)	2.62 (2.18-3.11)	3.17 (2.54-3.80)	3.80 (2.93-4.64)	4.57 (3.37-5.74)	5.80 (4.00-7.52)	6.96 (4.52-9.26)
30-min	0.682 (0.592-0.800)	0.848 (0.740-1.00)	1.12 (0.958-1.31)	1.36 (1.16-1.60)	1.77 (1.46-2.09)	2.13 (1.71-2.56)	2.56 (1.97-3.12)	3.08 (2.27-3.87)	3.91 (2.69-5.06)	4.68 (3.04-6.24)
60-min	0.422 (0.366-0.495)	0.525 (0.458-0.619)	0.691 (0.593-0.814)	0.845 (0.719-0.993)	1.09 (0.906-1.29)	1.32 (1.06-1.58)	1.58 (1.22-1.93)	1.90 (1.40-2.39)	2.42 (1.67-3.13)	2.90 (1.88-3.86)
2-hr	0.282 (0.250-0.317)	0.349 (0.310-0.393)	0.440 (0.388-0.494)	0.516 (0.450-0.582)	0.630 (0.536-0.711)	0.730 (0.604-0.836)	0.842 (0.680-0.984)	0.997 (0.776-1.21)	1.26 (0.931-1.58)	1.49 (1.07-1.95)
3-hr	0.233 (0.208-0.260)	0.289 (0.262-0.324)	0.355 (0.318-0.397)	0.408 (0.365-0.456)	0.480 (0.421-0.539)	0.539 (0.466-0.612)	0.603 (0.511-0.692)	0.705 (0.587-0.824)	0.873 (0.707-1.06)	1.03 (0.810-1.31)
6-hr	0.175 (0.156-0.196)	0.218 (0.195-0.244)	0.266 (0.236-0.298)	0.302 (0.267-0.340)	0.349 (0.304-0.395)	0.383 (0.329-0.437)	0.416 (0.351-0.479)	0.453 (0.375-0.529)	0.505 (0.410-0.600)	0.550 (0.438-0.667)
12-hr	0.122 (0.109-0.137)	0.153 (0.136-0.172)	0.191 (0.169-0.215)	0.220 (0.193-0.248)	0.258 (0.223-0.294)	0.287 (0.245-0.329)	0.316 (0.265-0.367)	0.345 (0.284-0.406)	0.383 (0.306-0.460)	0.411 (0.322-0.504)
24-hr	0.095 (0.083-0.111)	0.119 (0.104-0.140)	0.152 (0.132-0.178)	0.179 (0.154-0.210)	0.216 (0.185-0.254)	0.247 (0.209-0.290)	0.279 (0.233-0.330)	0.312 (0.257-0.373)	0.359 (0.290-0.433)	0.397 (0.314-0.484)
2-day	0.060 (0.051-0.071)	0.076 (0.065-0.090)	0.098 (0.084-0.118)	0.117 (0.099-0.141)	0.144 (0.120-0.173)	0.166 (0.137-0.201)	0.190 (0.155-0.231)	0.215 (0.173-0.264)	0.251 (0.197-0.312)	0.281 (0.215-0.355)
3-day	0.048 (0.041-0.057)	0.061 (0.053-0.073)	0.081 (0.070-0.096)	0.098 (0.083-0.116)	0.122 (0.103-0.144)	0.142 (0.118-0.168)	0.163 (0.135-0.195)	0.187 (0.152-0.224)	0.221 (0.175-0.269)	0.249 (0.194-0.307)
4-day	0.042 (0.036-0.050)	0.054 (0.047-0.064)	0.073 (0.063-0.085)	0.088 (0.076-0.103)	0.110 (0.094-0.130)	0.129 (0.109-0.152)	0.150 (0.125-0.177)	0.173 (0.141-0.204)	0.206 (0.164-0.247)	0.233 (0.183-0.283)
7-day	0.029 (0.025-0.034)	0.037 (0.032-0.044)	0.051 (0.043-0.059)	0.062 (0.053-0.072)	0.078 (0.066-0.091)	0.091 (0.076-0.106)	0.105 (0.087-0.123)	0.121 (0.099-0.142)	0.143 (0.115-0.171)	0.162 (0.129-0.195)
10-day	0.023 (0.020-0.027)	0.030 (0.026-0.036)	0.042 (0.036-0.048)	0.050 (0.043-0.059)	0.063 (0.053-0.073)	0.073 (0.061-0.085)	0.084 (0.070-0.098)	0.096 (0.079-0.113)	0.112 (0.091-0.134)	0.126 (0.101-0.152)
20-day	0.016 (0.014-0.018)	0.020 (0.018-0.023)	0.028 (0.024-0.032)	0.033 (0.029-0.038)	0.041 (0.035-0.047)	0.047 (0.040-0.054)	0.054 (0.045-0.062)	0.060 (0.051-0.071)	0.070 (0.058-0.083)	0.078 (0.063-0.093)
30-day	0.013 (0.011-0.015)	0.017 (0.014-0.019)	0.022 (0.019-0.026)	0.027 (0.023-0.031)	0.033 (0.028-0.038)	0.038 (0.032-0.044)	0.043 (0.036-0.050)	0.048 (0.040-0.056)	0.056 (0.046-0.066)	0.062 (0.050-0.074)
45-day	0.010 (0.009-0.012)	0.013 (0.012-0.015)	0.018 (0.016-0.020)	0.022 (0.019-0.024)	0.026 (0.023-0.030)	0.030 (0.026-0.034)	0.034 (0.029-0.039)	0.038 (0.032-0.044)	0.043 (0.036-0.050)	0.047 (0.039-0.056)
60-day	0.009 (0.008-0.010)	0.012 (0.010-0.014)	0.016 (0.013-0.018)	0.019 (0.016-0.021)	0.023 (0.019-0.026)	0.025 (0.022-0.029)	0.028 (0.024-0.033)	0.031 (0.026-0.036)	0.035 (0.029-0.041)	0.038 (0.031-0.045)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

Appendix B

HYDROLOGIC & HYDRAULIC COMPUTATIONS

Landcover Classification	C ₅	C ₁₀₀
Forest	0.05	0.30
Roof	0.85	0.87
Paved	0.88	0.93
Natural Coverage, Gravel	0.25	0.50
-		
-		
-		

Subbasin ID	E _{overall}	P _{overall}
Drainage Direction	Overall	Overall
Total Area, A [ac]	1.09	1.09

Composite Areas [ac]	E _{overall}	P _{overall}
Forest	0.00	0.00
Roof	0.20	0.29
Paved	0.37	0.56
Natural Coverage, Gravel	0.52	0.24
-		
-		
-		

Area Check	✓	✓
------------	---	---

Composite C₅	0.57	0.73
Composite C₁₀₀	0.71	0.82

Subbasin ID	E_overall	P_overall		
Drainage Direction	Overall	Overall		
Area, A [sf]	47480.4	47480.4		
Area, A [ac]	1.09	1.09		

Coef.	C	Composite C ₅	0.57	0.73		
		Composite C ₁₀₀	0.71	0.82		

Initial Overland	T _i	Flow Runoff Coefficient, C ₅ "R"	0.57	0.88		
		Flow Length, L [ft] ¹	130	115		
		Land Slope, s [%]	3.5	2.0		
		Initial Overland Time: T_i [min]	7.14	3.37		

Travel Time	T _t	Flow Length, L [ft]				
		Channel Slope, s [%]				
		Travel Time Coefficient ³				
		Average Velocity, V ₅ [ft/s]				
		Travel Time: T_t [min]	0.00	0.00		

ToC & Intensity		Land Classification (Urban or Vegetated)	Urban	Urban		
	T _c	Time of Concentration, T _c [min]	7.14	3.37		
	Urban. Check	Required? - Y/N	Y	Y		
		Total Length: L _{total} [ft]	130	115		
		Time of Concentration - Check, T _{c,check} [min]	10.7	10.6		
	T _{c,final}	Final ToC, T_{c,final} [min]	7.14	5.00		
	I ²	2-yr Intensity I ₂ [in/hr]	1.77	2.00		
		5-yr Intensity I ₅ [in/hr]	2.33	2.64		
		100-yr Intensity I ₁₀₀ [in/hr]	5.35	6.04		

Flow	Q	2-yr Flow, Q ₂ [cfs]	1.11	1.60		
		5-yr Flow, Q ₅ [cfs]	1.46	2.11		
		Design 100-yr Flow, Q₁₀₀ [cfs]	4.16	5.39		

¹ Maximum of 500 feet

² From NOAA Atlas 14

³ From Figure 701 TMRDM

$$T_i = \frac{1.8(1.1 - R)L_o^{1/2}}{s^{1/3}}$$

$$T_t = \frac{L}{60V}$$

$$T_{c,check} = \frac{L_{total}}{180} + 10$$

Appendix C

DRAINAGE EXHIBITS

LEGEND

- PROPERTY LINE
- EXISTING PAVEMENT
- PROPOSED ROADWAY
- EXISTING CULVERT/SD
- PROPOSED CULVERT/SD
- HYDRO SUBBASIN
- TIME OF CONCENTRATION PATH
- PROPOSED SWALE
- EXISTING SWALE

NOTES

1. RAINFALL DEPTHS (FROM NOAA):
 5YR24HR = 3.65 IN
 100YR24HR = 6.69 IN



NEVADA
 WASHOE COUNTY
 MT. ROSE/SKI TAHOE
 SUP FOR MT. ROSE/SKI TAHOE
 CONCEPTUAL DRAINAGE REPORT
 EXISTING DRAINAGE EXHIBIT

REV	DATE	DESCRIPTION	BY

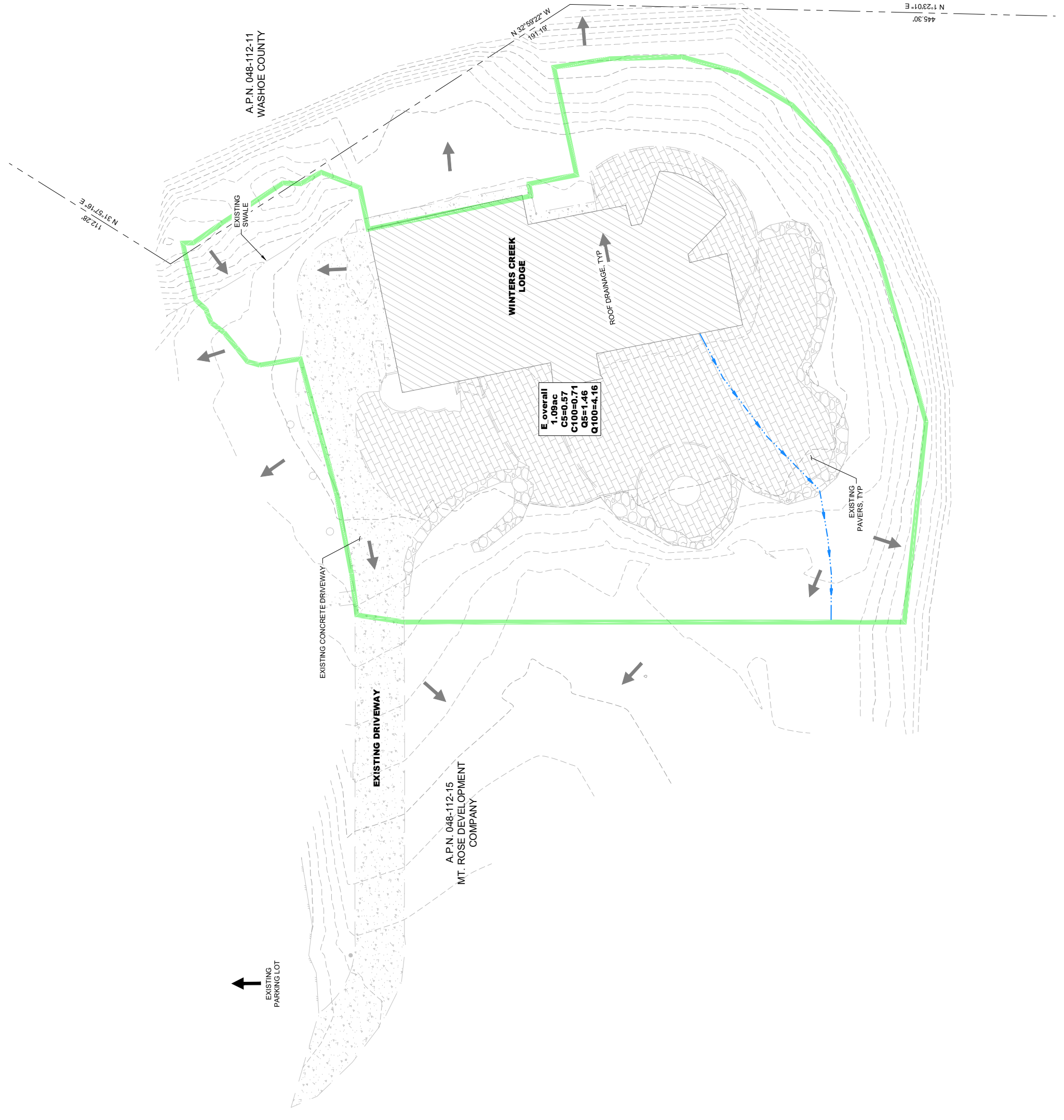
PRELIMINARY
 NOT FOR CONSTRUCTION

SCALE: 1" = 100' INCLON
 ORIGINAL DRAWING
 207

IF NOT ONE INCH ON THIS SHEET,
 ADJUST SCALES ACCORDINGLY

D1.0

DRAWN BY: KMK
 DESIGNED BY: KMK
 CHECKED BY: ECT
 JOB NO.: 9764-400



REV	DATE	DESCRIPTION	BY

SCALE: AS SHOWN
 ORIGINAL DRAWING
 20'

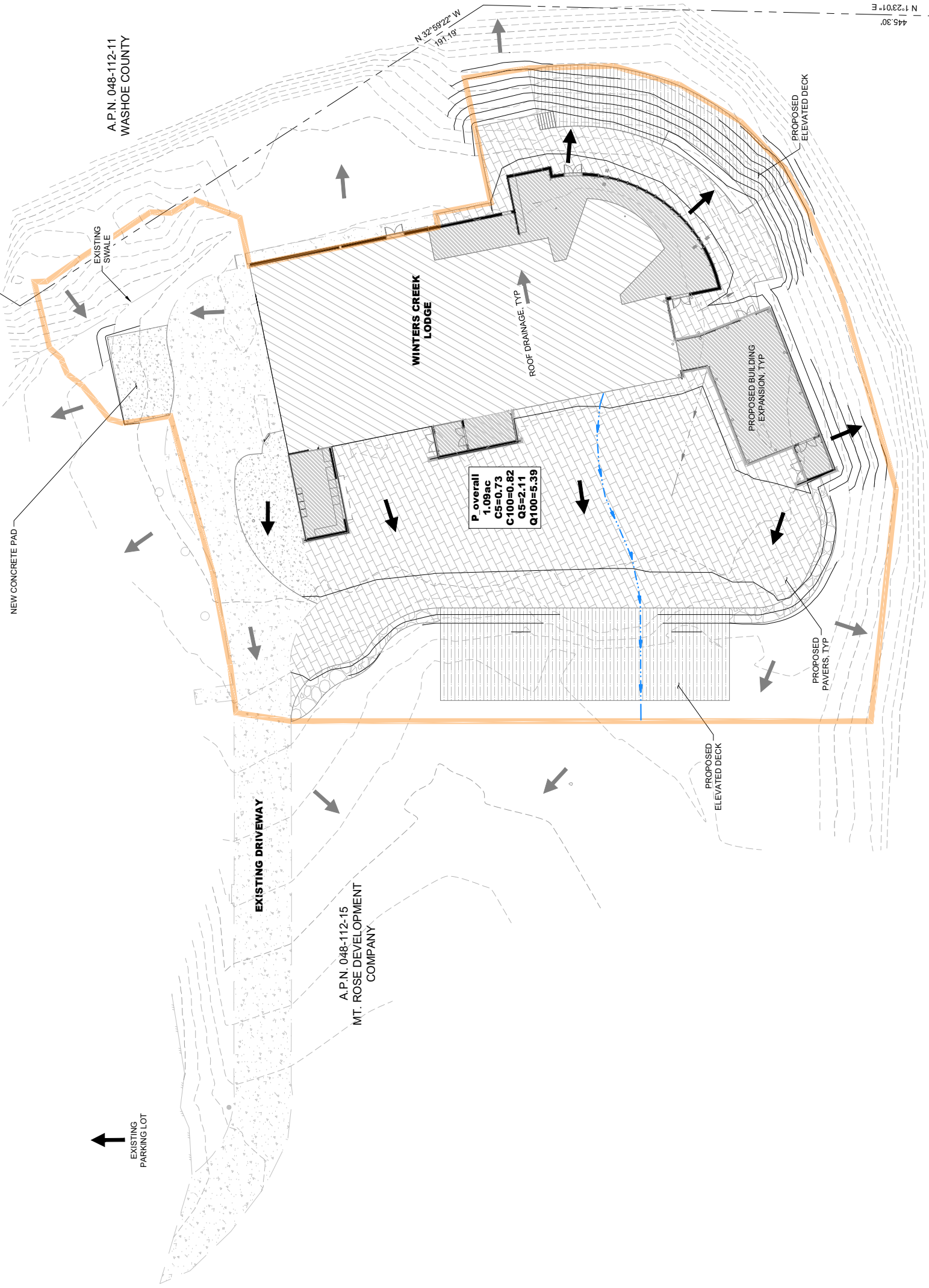
IF NOT ONE INCH ON THIS SHEET,
 ADJUST SCALES ACCORDINGLY

D2.0
 DRAWN BY: KMK
 DESIGNED BY: KMK
 CHECKED BY: ECT
 JOB NO.: 9764-400

- LEGEND**
- PROPERTY LINE
 - EXISTING PAVEMENT
 - PROPOSED ROADWAY
 - EXISTING CULVERT/SD
 - PROPOSED CULVERT/SD
 - HYDRO SUBBASIN
 - TIME OF CONCENTRATION PATH
 - PROPOSED SWALE
 - EXISTING SWALE



- NOTES**
- RAINFALL DEPTHS (FROM NOAA):
 5YR24HR = 3.65 IN
 100YR24HR = 6.69 IN



Mr. Paul Senft
Mt. Rose Ski Tahoe
22222 Mt. Rose Highway
Reno, NV 89511

Project No.: 0094-12-1
September 10, 2019

**RE: Geotechnical Summary
Mt. Rose Ski Tahoe Improvements
Washoe County, Nevada**

Dear Mr. Senft:

Black Eagle Consulting, Inc. (BEC) is pleased to present this geotechnical summary of the proposed Mt. Rose Ski Tahoe Improvements project to be constructed within the overall ski resort premises located on Mt. Rose Highway in Washoe County, Nevada. The projects are in initial planning and development, and an application for a special use permit is planned to be submitted to Washoe County. The project will ultimately involve the design and construction of a 5-million-gallon water storage tank located within the southwestern limits of the premises, the Atoma Expansion including new lifts and a pedestrian (skier/ boarder) bridge crossing Mt. Rose Highway, a proposed maintenance building located southwest of the west parking lot, a proposed addition to the Winters Creek Lodge located in the eastern portion of the premises, and various ancillary buildings throughout the developed portions of the Mt. Rose Ski Tahoe premises. This geotechnical summary report is to be used for planning and special use submittal purposes and will need to be supplemented with field exploration, laboratory testing, and geotechnical analyses for the final design and construction of specific projects that are planned in the improvements. It is our understanding the improvements will be completed in phases.

Black Eagle Consulting, Inc. has previously completed geotechnical investigations throughout the Mt. Rose Ski Tahoe premises, including expansions to the east and west parking lots, the East Water Tank, the East Bowl and Chutes lift improvements, percolation testing and septic design for the Winters Creek Lodge, and the Mt. Rose Highway Upper Access Drive.

Black Eagle Consulting, Inc. is currently beginning work on geotechnical investigations for the currently proposed water tank, maintenance building, and Winters Creek Lodge expansion projects. We are also currently providing geotechnical consulting services for the initial planning and preliminary design of the proposed bridge across Mt. Rose Highway.

Project Description

As noted above, the project will involve the design and construction of several improvements throughout the overall Mt. Rose Ski Tahoe premises. The proposed 5-million-gallon water tank will be a bolted steel storage tank that will be founded on Portland cement concrete (PCC) shallow ring foundations, and the base will be placed on compacted aggregate base. The tank is expected to be 150 feet in diameter; as such, interior footings may be necessary to support the roof. The maintenance building will be a single-story, 12,000-square-foot, wood-framed or concrete masonry unit block structure that will be supported on PCC shallow footings and will have a PCC slab-on-grade floor. The lodge expansion will include a 1- or 2-story, wood-framed addition supported on



Black Eagle Consulting, Inc.
Geotechnical & Construction Services

1345 Capital Boulevard, Suite A
Reno, Nevada 89502-7140

Tel: 775/359-6600

Fax: 775/359-7766

Email: mail@blackeagleconsulting.com

**WSUP19-0020
EXHIBIT G**

PCC shallow footings with a PCC slab-on-grade floor. The maintenance building and addition are expected to require minimal cuts and fills on the order of 3 feet. The Atoma Expansion will involve opening new ski terrain north of Mt. Rose Highway. Site improvements will include construction of a new ski lift with a mid-station that spans Mt. Rose Highway, tree clearing, conversion of an existing building to restrooms, and a bridge across Mt. Rose Highway (Atoma Bridge) under the ski lift crossing. Grading for the improvements is expected to vary but is generally expected to be less than 10 feet of cuts and fills except for the water tank, where mainly cuts of up to 15 feet will occur. These cuts will be supported by a segmental block retaining wall.

Site Conditions

The overall Mt. Rose Ski Tahoe site is located in the Carson Range between Reno and Lake Tahoe and consists of approximately 1,100 acres of mountainous terrain on Slide Mountain in Washoe County, Nevada. The site is located in Sections 18, 19, 20, 29 and 30, Township 17 North, Range 19 East, Mt. Diablo Meridian. The ski area is currently located south of Mt. Rose Highway and is proposed to be expanded to the north of the highway.

The overall site area includes steep terrain surrounding Slide Mountain sloping east down to Washoe Valley and sloping north down to Galena Creek. Overall vertical relief is over 1,500 feet, but local relief within specific project areas is limited to less than 30 feet. The land is sparsely to heavily vegetated by pine forest with limited underbrush. Portions of the main and east base areas include asphalt concrete pavement parking areas and driveways along with associated stormwater facilities. Within the base areas are multiple lodge and maintenance facilities. Public master utilities are present in the area with the exception of water and sewer which are provided by well and on-site disposal, respectively.

Geologic and General Soil Conditions

The site lies on the northern and eastern slopes of Slide Mountain in an area mapped by the Nevada Bureau of Mines and Geology (NBMG) as *Undivided granitic pluton(s?) (Cretaceous)*, *Glacial deposits (late Pleistocene)*, and *Landslide deposits (Holocene to late Pleistocene)* (Hinz et. al, 2014). In general, the vast majority of the site is granitic bedrock; however, the main and east base areas, where most development is planned, are surfaced by glacial deposits. A landslide deposit is located along the northern flank of Slide Mountain at the base of the area known as the "Chutes." The majority of the proposed development areas are within glacial deposits described by the NBMG as *Unsorted of poorly sorted sand, gravel, and boulders (till)*. *Granitic rocks typically moderately to highly weathered. Surfaces typically smoother, with fewer preserved boulders, relative to Qgm₂. Equivalent to the Tahoe Till of Blackwelder (1931)*. The water tank site and portions of the Atoma Expansion include granitic bedrock described as *Composed of granite, granodiorite, quartz monzonite, monzodiorite, and diorite. Locally contains abundant mafic enclaves (up to 50% by volume)*. No development is proposed in the landslide deposits.

Based on previous exploration in the area, the site materials are generally non-plastic silty sand with gravel soils in a cobble-boulder matrix. The granitic bedrock typically has a weathering rind several feet thick of grus, making it excavatable through intermediate depths (5 to 10 feet). Hard bedrock materials can be present locally.



While groundwater lies at considerable depths, seasonal snowmelt seepage is common during spring and early summer and is possible through fractured rock at any time of the year.

Geologic Hazards

The Mt. Rose Ski Tahoe lies within an area with a high potential for strong earthquake shaking. The seismic design criteria for proposed structures will be addressed in the geotechnical investigations for specific projects that are being performed or will be performed by BEC.

No Earthquake Hazards Map is available for the project location. The geologic map (Hinz et. al, 2014) and the NBMG's *MyHazard's* web-mapping tool (NBMG, 2019) identify the nearest fault approximately 1/2 mile east of the Winters Creek Lodge area. This fault, the Little Valley fault, is mapped as being Holocene in age. Based on the available mapping, no additional fault investigation or mitigation in the form of building/structure setbacks is necessary for the structures proposed in the improvements.

The area is mapped as Zone X, or areas determined to be outside the 500-year flood plain (Federal Emergency Management Agency, 2009a and 2009b). Depending on specific terrain features, debris flows are possible in canyons and ravines during flash flooding events. As noted previously, landslide deposits are mapped in the area, but no development is currently planned within these areas.

The site should exhibit a moderate potential for dust generation during dry months. No other geologic hazards were identified.

Discussion and Conclusions

The site is geotechnically suitable for the proposed improvement projects. Soils within the main and east base areas are expected to be granular sand and gravel deposits with considerable cobbles and boulders and to contain non-plastic to low plasticity fines with no or low expansion potential. Isolated areas (water tank site and new lift towers/ stations) should expect to encounter granitic bedrock with varying degrees of weathering/hardness. The granular soils and granitic bedrock will provide adequate foundation support for the proposed improvements when properly prepared. When excavated, the native granular materials can be reused as structural fill. The presence of bedrock, cobbles and boulders should be anticipated and will result in excavation difficulty. The geotechnical constraints associated with oversized cobbles and boulders or bedrock will be addressed in BEC's individual geotechnical investigation reports.



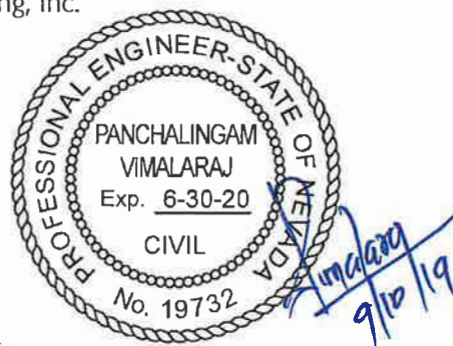
Closing

This report has been prepared in general accordance with accepted geotechnical practices to provide an overall geotechnical summary and expected constraints for the planning of the proposed improvements. As noted earlier, individual, project-specific geotechnical investigations will be completed with detailed geotechnical recommendations for the design and construction of the proposed improvements.

We appreciate having the opportunity to work with you on this project. If you have any questions regarding our findings, please contact us.

Sincerely,

Black Eagle Consulting, Inc.



Vimal P. Vimalaraj, P.E.
Engineering Division Manager

Copies to: Addressee (1 copy and PDF via email)
Mr. David Snelgrove, A.I.C.P., CFA, Inc. (6 copies and PDF via email)
Mr. Edward Thomas, P.E., LEED AP, Lumos and Associates (PDF via email)

JP:PV:cjr

References

Federal Emergency Management Agency (FEMA), 2009a (March 16, 2009), *Flood Insurance Rate Map 32031C3325G, Washoe County, Nevada.*

FEMA, 2009b (March 16, 2009), *Flood Insurance Rate Map 32031C3350G, Washoe County, Nevada.*

Hinz, N.H., Ramelli, A.R., and Faulds, J. E., 2014, *Preliminary Geologic Map of the Mt. Rose Quadrangle, Washoe County, Nevada*, Nevada Bureau of Mines and Geology, Open-File Report 14-7.

Nevada Bureau of Mines and Geology (NBMG), 2019, *My Hazard's* web-mapping tool, located at <https://gisweb.unr.edu/MyHAZARDS/>, accessed September 2019.



APPENDIX E



Board of Adjustment Action Order

Special Use Permit Case No. SB11-015

Decision: Approval with Conditions
Decision Date: February 2, 2012
Applicant: Mount Rose Ski Tahoe
Assigned Planner: Trevor Lloyd - Senior Planner
Washoe County Department of Community Development
Phone: 775.328.3620
E-Mail: tlloyd@washoecounty.us

Project Description: To allow the phased improvements to the Mt. Rose Ski Tahoe ski resort. The proposed improvements include the removal of two existing ski lifts (Ponderosa and Galena) and the replacement with a new single ski lift, the extension of an existing ski lift (Lakeview lift), expansion of the mountain terrain to include new ski trails and a new surface lift, the expansion of the existing Rose lodge by approximately $\pm 30,000$ square feet, the relocation of a $\pm 5,000$ square foot maintenance building, the construction of two snowmaking ponds, the construction of a relocated access road off of Mt. Rose Hwy., the construction of a new $\pm 3,000$ square foot on mountain restaurant, the construction of a $\pm 15,000$ seasonal locker building and the construction of a new terrain park ski lift on the slide side of the resort. The proposed improvements are projected to be phased over a 15 year timeframe.

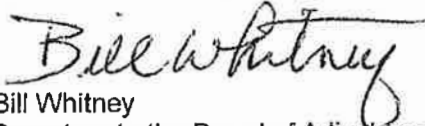
Notice is hereby given that the Washoe County Board of Adjustment granted approval with conditions of the above referenced case number based on the findings in accordance with Washoe County Development Code Article 810. If no appeals have been filed within 10 days after the date of decision, the approval by the Washoe County Board of Adjustment is final. If filed, an appeal stays any further action on the permit until final resolution of the appeal. If the end of the appeal period falls on a non-business day, the appeal period shall be extended to include the next business day. An appeal shall be filed in accordance with the provisions found in Article 810 of the Washoe County Development Code.

This Action Order of approval is granted subject to the attached conditions and Washoe County development standards. Please contact the planner assigned to your project at the above-referenced phone number within 7 days of receipt of this Order to review the steps necessary to satisfy the Conditions of Approval. A business license, certificate of occupancy or final approval shall not be issued until all of the Conditions of Approval (attached) are satisfied. Additionally, compliance shall be required with all federal, state and local statutes, ordinances and regulations applicable to the approved project.

This Action Order does not authorize grading or building without issuance of the necessary permits from the Washoe County Building and Safety Department.

To: Mount Rose Ski Tahoe
Subject: Special Use Permit Case No SB11-015
Date: February 3, 2012
Page: 2

Washoe County
Community Development



Bill Whitney
Secretary to the Board of Adjustment

BW/TL/ds (SB11-015 Mount Rose Ski Tahoe Action Order)

Attachments:

- Conditions of Approval

xc: Representatives: Lisa Foster, lfnevada@sbcglobal.net

Action Order xc: Greg Salter, Esq., District Attorney's Office; Carol Buonanoma, Assessor's Office (CAAS); Theresa Wilkins, Assessor's Office; Don Jeppson, AIA, Department of Building & Safety; Jim Shaffer, Environmental Health Services, District Health Department; Alan Reich, P.E., Department of Water Resources; Kimble Corbridge/Leo Vesely, P.E., Public Works Department, Engineering Division; Kurt Latipow, Washoe County Fire Services Coordinator; Mark Regan, Sierra Fire Protection District; West Washoe Valley Citizen Advisory Board, Chair, Galena Steamboat Citizen Advisory Board



Conditions of Approval

Special Use Permit Case No. SB11-015

The project approved under Special Use Permit Case No: SB11-015 shall be carried out in accordance with the Conditions of Approval granted by the Board of Adjustment on February 2, 2012. Conditions of Approval are requirements placed on a permit or development by each reviewing agency. These Conditions of Approval may require submittal of documents, applications, fees, inspections, amendments to plans, and more. These conditions do not relieve the applicant of the obligation to obtain any other approvals and licenses from relevant authorities required under any other act.

Unless otherwise specified, all conditions related to the approval of this 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 Department of Community Development.

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.

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 District Health Department must be appealed to the District Board of Health.

- **The RENO-TAHOE AIRPORT AUTHORITY is directed and governed by its own Board. Therefore, any conditions set by the Reno-Tahoe Airport Authority must be appealed to their Board of Trustees.**
- **The REGIONAL TRANSPORTATION COMMISSION (RTC) is directed and governed by its own board. Therefore, any conditions set by the Regional Transportation Commission must be appealed to that Board.**

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

Washoe County Community Development

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

Contact Name – Trevor Lloyd, 775.328.3620

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit. The Department of Community Development shall determine compliance with this condition.
- b. The applicant shall submit building plans and complete construction of all phases of this project within 15 years from the approval date by Washoe County. In order to demonstrate progress, the applicant shall complete at least one improvement within each five year increment.
- 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 special use 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. Prior to any ground disturbing activity, the applicant shall submit a landscaping/architectural design plan to the Department of Community Development for review and approval by the Design Review Committee. Said

plan shall address, but not be limited to: type and color of building materials, general architectural design, and signage and exterior lighting if applicable.

- f. The following **Operational Conditions** shall be required for the life of the project/business:
1. This special use permit shall remain in effect until or unless it is revoked or is inactive for one year.
 2. Failure to comply with the conditions of approval shall render this approval null and void. Compliance with this condition shall be determined by the Department of Community Development.
 3. The applicant and any successors shall direct any potential purchaser/operator of the site and/or the special use permit to meet with the Department of Community Development to review conditions of approval prior to the final sale of the site and/or the special use permit. Any subsequent purchaser/operator of the site and/or the special use permit shall notify the Department of Community Development of the name, address, telephone number, and contact person of the new purchaser/operator within 30 days of the final sale.
 4. This special use permit shall remain in effect as long as the business is in operation and maintains a valid business license.
- g. The applicant shall provide signage/markers and rope or fencing around each of the snowmaking ponds at all times to provide warnings and keep people away from the ponds.

Washoe County Department of Public Works

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

Contact Name – Leo Vesely, 775.328.8032

- a. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted to the County Engineer for approval 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), pollution control, slope stabilization, and mosquito abatement. Placement or disposal of any excavated materials shall be indicated on the grading plan. Silts shall be controlled on-site and not allowed onto adjacent properties.
- b. For construction areas larger than 1 acre, the owner/developer shall obtain from the Nevada Division of Environmental Protection a Stormwater Discharge Permit for construction and submit a copy to the Engineering Division prior to issuance of a grading permit.
- c. For construction areas larger than 1 acre, the owner/developer shall complete and submit the Construction Permit Submittal Checklist, the Performance Standards Compliance Checklist and pay the Construction Stormwater

- Inspection Fee prior to obtaining a grading permit. The County Engineer shall determine compliance with this condition.
- d. All disturbed areas left undeveloped for more than 30 days shall be treated with a dust palliative. Disturbed areas left undeveloped for more than 45 days shall be revegetated. Methods and seed mix must be approved by the County Engineer with technical assistance from the Washoe-Storey Conservation District. The applicant shall submit a revegetation plan to the Washoe-Storey Conservation District for review.
 - e. A grading bond of \$1,500/acre of disturbed area shall be provided to the Engineering Division prior to any grading.
 - f. Cross-sections indicating cuts and fills shall be submitted when applying for a grading permit. Estimated total volumes shall be indicated.
 - g. The developer shall provide documentation of access to the site to the satisfaction of the County Engineer.
 - h. Approved Encroachment Permits shall be obtained from the Nevada Department of Transportation (NDOT), for use of State right-of-way and a copy of said permit sent to the Engineering Division. The County Surveyor shall determine compliance with this condition.
 - i. A detailed hydrology/hydraulic report prepared by a registered engineer shall be submitted to the Engineering Division for review and approval. The report shall include the locations, points of entry and discharge, flow rates and flood limits of all 5- and 100-year storm flows impacting both the site and offsite areas and the methods for handling those flows. The report shall include all storm drain pipe and ditch sizing calculations and a discussion of and mitigation measures for any impacts on existing offsite drainage facilities and properties.
 - j. Any increase in storm water runoff resulting from the site grading and based upon the 5 and 100-year storms shall be detained and/or mitigated on site to the satisfaction of the County Engineer.
 - k. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage from the site to the satisfaction of the County Engineer.
 - l. 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 sli, 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 be responsible for determining compliance with this condition.
 - m. A note shall be placed on the improvement plans stating that at no time shall natural drainage be impeded.

- n. 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.
- o. Any existing easements or utilities that conflict with the project shall be relocated, quitclaimed, and/or abandoned, as appropriate. The County Engineer shall determine compliance with this condition.
- p. 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.

Washoe County Department of Water Resources (DWR)

- 3. The following conditions are requirements of the Department of Water Resources, which shall be responsible for determining compliance with these conditions.

Contact Name – Alan Reich, 775.954.4600

- a. The applicant shall dedicate necessary water rights for the requested uses prior to issuance of building permit(s). The dedication of water rights shall be in accordance with Article 422 and the Forest Area Plan. Water rights must be in good standing with the State of Nevada Division of Water Resources and the point of diversion, place and manner of use must be acceptable to the DWR. The subject water rights will then be made available to the Applicant via a water sale agreement, which will then lease the water rights back to the Applicant for 99 years, at no cost to the Applicant.
- b. The applicant shall pay all applicable fees resulting from Special Assessment District 29 (SAD29).
- c. Improvement plans shall be reviewed and approved by DWR prior to the release of building permits. They shall be in compliance with Washoe County Design Standards or design standards acceptable to Washoe County, NAC445A, and be designed by a Professional Engineer licensed to practice in the State of Nevada.
- d. Inspection of all sanitary sewer improvements shall be accomplished by DWR staff or the Engineer of Record.
- e. All fees shall be paid in accordance with Washoe County Ordinance prior to the release of building permits.
- f. All applicable sanitary sewer connection fees shall be paid prior to release of any building permits.
- g. A master sanitary sewer report for the entire proposed project shall be prepared and submitted by the applicant's engineer at the time of the initial submittal for the first phase which addresses:
 - i. the estimated sewage flows generated by the project(s),
 - 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,
 - v. and proposed collection line sizes, on-site and off-site alignment, and half-full velocities.
- h. No building permits shall be released until an application for service is received and a sewer lateral permit is issued.
 - i. No permanent structures (including rockery or retaining walls, building's, etc.) shall be allowed within or upon any County maintained utility easement.
 - j. A 20-foot minimum sanitary sewer and access easement shall be granted to Washoe County over any public sanitary sewer facilities not located in a dedicated right of way.
 - k. A 12-foot wide all weather sanitary sewer access road shall be constructed to facilitate access to public sanitary sewer manholes not within a paved street.

Washoe County District Health Department

- 4. The following conditions are requirements of the District Health Department, 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 District Health Department must be appealed to the District Board of Health.

Contact Name – Bryan Tyre, 775.328.2434

- a. Construction plans and equipment specifications for any foodhandling facilities, detailing food storage and preparation areas, shall be submitted to the health District for review and approval prior to the issuance of a building permit. Foodhandling facilities shall comply with requirements stipulated in the Washoe County District Board of Health Regulations Governing Food Establishments and with requirements of the appropriate disposal service.
- b. Garbage facilities, dumpsters, and compactors shall have raised washdown pads which drain into a sanitary sewer. Refer to Sections 100.025 and 100.040 of the Washoe County District Board of Health Regulations Governing Food Establishments.
- c. All land disturbing activities during construction phases, such as, but not limited to, grading, excavation, cut and fill, etc., must be done with effective dust control measures consistent with Washoe County District Board of Health Regulations Governing Air Quality Management, Section 040.030. Disturbances greater than 1 acre in size must obtain an approved dust control plan prior to beginning work.

Washoe County District Health Department – Vector Borne Diseases

- 5. The following conditions are requirements of the District Health Department, 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 District Health Department must be appealed to the District Board of Health.

Contact Name – Jim Shaffer, 775.328.2434

- a. The proposed snow making ponds will require the standard detail of placing 6-8 inch rock on the side slopes of the ponds perimeter.
- b. Prior to approval of any grading permit and or building permit the above detail designs is required on the civil plans.

Sierra Fire Protection District

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

Contact Name – Mark Regan, 775.849.1108

- a. Have a Wildfire Hazard Mitigation Plan in place before construction begins.
- b. Meet fire flow requirements for the Rose Base Lodge expansion. 3,750gpm duration of 4 hours. New water tanks will meet NFPA 22 and new fire service mains will meet NFPA 24.
- c. Provide remote FDC to the Rose Base Lodge and mountain restaurant.
- d. Update the fire hydrants to a Storz steamer port in place of a 4.33 x 5" port.
- e. New buildings to be built to meet the 2006IFC and Washoe County Chapter 60. Fire sprinklers are required in Rose Base Lodge, mountain restaurant, seasonal locker room and the new maintenance building.
- f. Need to provide approved transportation up to the mountain restaurant. The fire equipment can't access the restaurant.
- g. Provide a supply of firefighting equipment on site of the mountain restaurant

*** End of Conditions ***



Feet
0 1000 2000 4000 6000 8000
1 inch = 800 feet

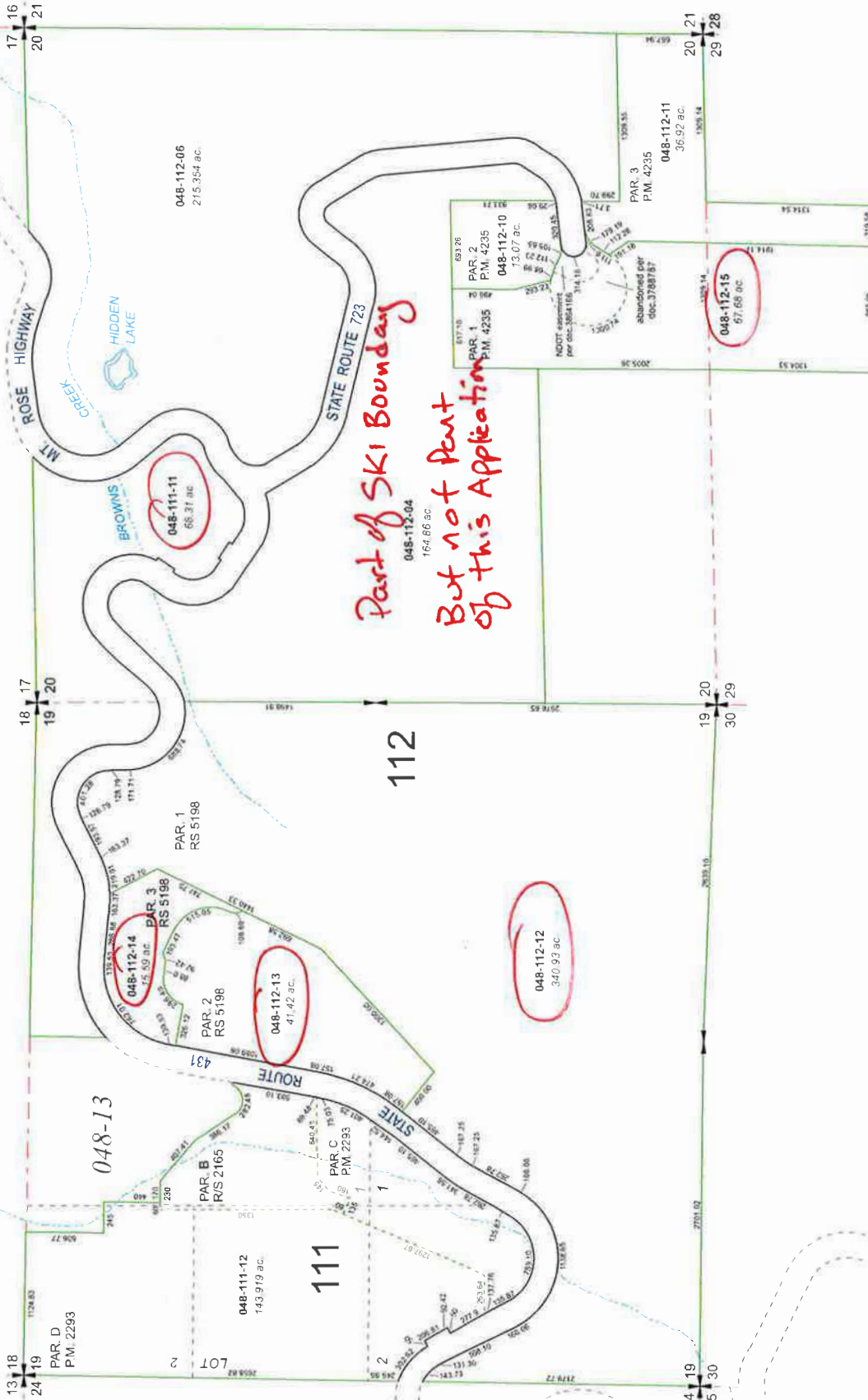


created by: KSB 2/02/2010
last updated: KSB 2/16/10, CFB 4/01/10

area previously shown on map(s)
045-52

NOTE: This map was prepared for the use of Washoe County Assessor for assessment, and is not intended for any other purpose. It is a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

SECTION 19 & PORTIONS OF SECTIONS 20 & 29, T17N - R19E

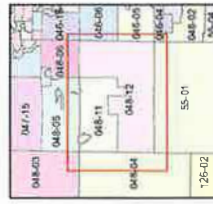


*Part of Ski Boundary
But not part
of this Application*

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
Joshua G. Wilson, Assessor
1001 East Ninth Street
Reno, Nevada 89402
(775) 326-2231

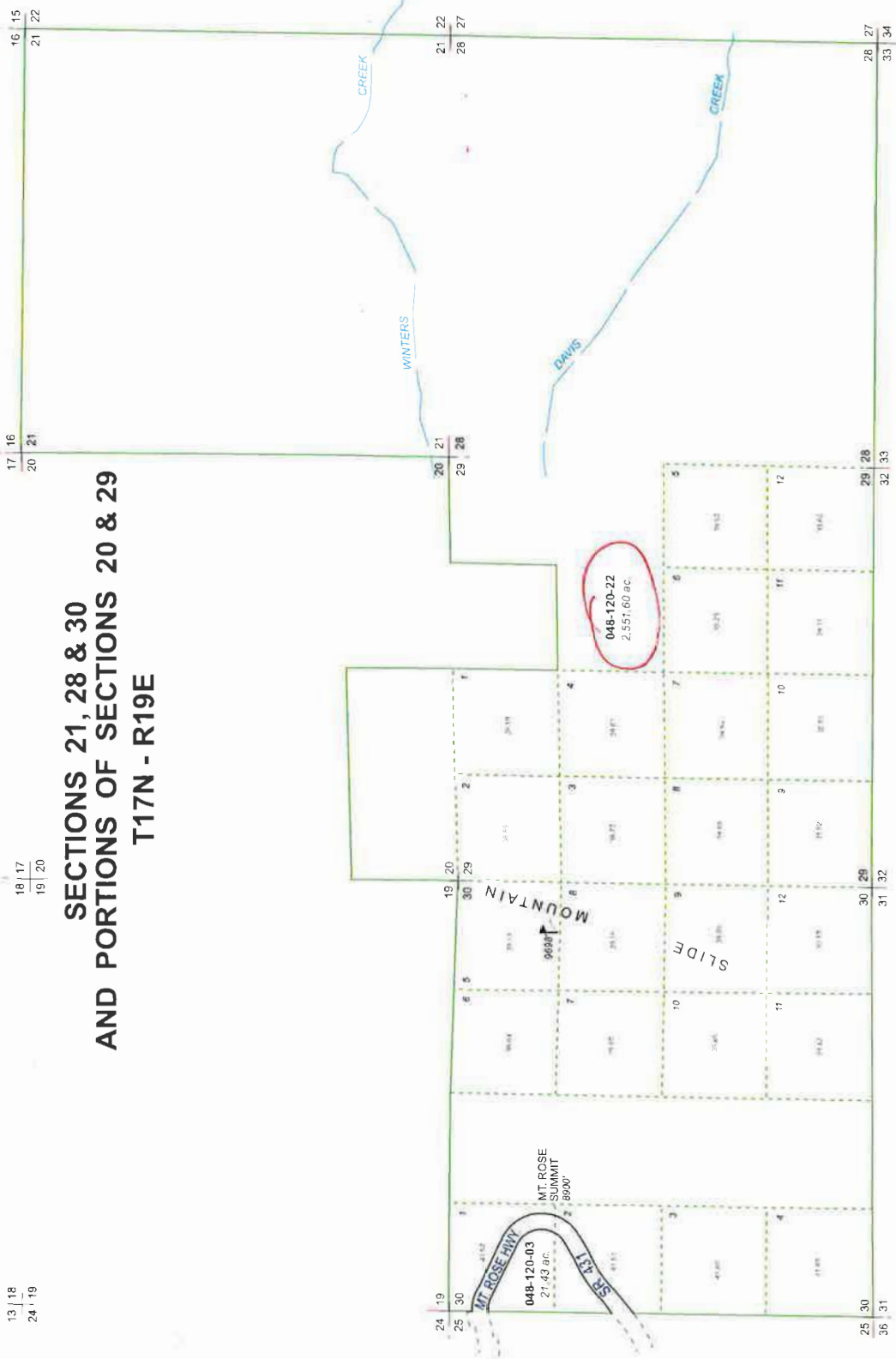


Scale
0 500 1000 1500
1 inch = 1,320 feet



created by: TWT 10/14/2009
last updated:
area previously shown on maps)

NOTE: This map was prepared for the use of Washoe County Assessor for assessment and illustrative purposes only. It does not represent any other official record and should not be relied upon as to the sufficiency or accuracy of the data delineated hereon.



Bill Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Washoe County Parcel Information

Parcel ID 04811212	Status Active	Last Update 9/12/2019 2:07:27 AM
Current Owner: MT ROSE DEVELOPMENT CO 22222 MOUNT ROSE HWY RENO, NV 89511	SITUS: 22222 MOUNT ROSE HWY WCTY NV	
Taxing District 4000	Geo CD:	
Legal Description		
Range 19 SubdivisionName _UNSPECIFIED Township 17 Section 19 Lot 1 Block		

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/19/2019	2019	\$0.00	\$0.00	\$0.00	\$0.00
INST 2	10/7/2019	2019	\$26,043.80	\$0.00	\$0.00	\$26,043.80
INST 3	1/6/2020	2019	\$26,043.80	\$0.00	\$0.00	\$26,043.80
INST 4	3/2/2020	2019	\$26,043.80	\$0.00	\$0.00	\$26,043.80
Total Due:			\$78,131.40	\$0.00	\$0.00	\$78,131.40

Tax Detail

	Gross Tax	Credit	Net Tax
State of Nevada	\$5,465.64	\$0.00	\$5,465.64
Truckee Meadows Fire Dist	\$17,361.46	\$0.00	\$17,361.46
Washoe County	\$44,744.35	\$0.00	\$44,744.35
Washoe County Sc	\$36,603.75	\$0.00	\$36,603.75
PLEASANT VALLEY WATER BASIN	\$0.86	\$0.00	\$0.86
Total Tax	\$104,176.06	\$0.00	\$104,176.06

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2019	2019171974	B19.72038	\$26,044.66	8/23/2019

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to: (775) 328-3642

Address change requests may also be mailed to: Washoe County Assessor 1001 E 9th Street Reno, NV 89512-2845

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Bill Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Washoe County Parcel Information

Parcel ID	Status	Last Update
04811213	Active	9/12/2019 2:07:27 AM
Current Owner: MT ROSE DEVELOPMENT CO 22222 MOUNT ROSE HWY RENO, NV 89511		SITUS: 0 MOUNT ROSE HWY WASHOE COUNTY NV
Taxing District: 4000	Geo CD:	
Legal Description		
Township 17 Section 19 Lot 2 Block Range 19 SubdivisionName _UNSPECIFIED		

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/19/2019	2019	\$0.00	\$0.00	\$0.00	\$0.00
INST 2	10/7/2019	2019	\$493.74	\$0.00	\$0.00	\$493.74
INST 3	1/6/2020	2019	\$493.73	\$0.00	\$0.00	\$493.73
INST 4	3/2/2020	2019	\$493.73	\$0.00	\$0.00	\$493.73
Total Due:			\$1,481.20	\$0.00	\$0.00	\$1,481.20

Tax Detail

	Gross Tax	Credit	Net Tax
State of Nevada	\$123.22	(\$18.96)	\$104.26
Truckee Meadows Fire Dist	\$391.42	(\$72.51)	\$318.91
Washoe County	\$1,008.77	(\$155.24)	\$853.53
Washoe County Sc	\$825.24	(\$127.00)	\$698.24
PLEASANT VALLEY WATER BASIN	\$0.86	\$0.00	\$0.86
Total Tax	\$2,349.51	(\$373.71)	\$1,975.80

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2019	2019172464	B19.72042	\$494.60	8/23/2019

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to: (775) 328-3642

Address change requests may also be mailed to:
Washoe County Assessor
1001 E 9th Street
Reno, NV 89512-2845

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Bill Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Washoe County Parcel Information

Parcel ID 04811214	Status Active	Last Update 9/12/2019 2:07:27 AM
Current Owner: MT ROSE DEVELOPMENT CO 22222 MOUNT ROSE HWY RENO, NV 89511		SITUS: 0 MOUNT ROSE HWY WASHOE COUNTY NV
Taxing District 4000	Geo CD:	
Legal Description Township 17 Section 19 Lot 3 Block Range 19 SubdivisionName _UNSPECIFIED		

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/19/2019	2019	\$0.00	\$0.00	\$0.00	\$0.00
INST 2	10/7/2019	2019	\$1,230.86	\$0.00	\$0.00	\$1,230.86
INST 3	1/6/2020	2019	\$1,230.85	\$0.00	\$0.00	\$1,230.85
INST 4	3/2/2020	2019	\$1,230.85	\$0.00	\$0.00	\$1,230.85
Total Due:			\$3,692.56	\$0.00	\$0.00	\$3,692.56

Tax Detail

	Gross Tax	Credit	Net Tax
State of Nevada	\$258.31	\$0.00	\$258.31
Truckee Meadows Fire Dist	\$820.52	\$0.00	\$820.52
Washoe County	\$2,114.65	\$0.00	\$2,114.65
Washoe County Sc	\$1,729.94	\$0.00	\$1,729.94
PLEASANT VALLEY WATER BASIN	\$0.86	\$0.00	\$0.86
Total Tax	\$4,924.28	\$0.00	\$4,924.28

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2019	2019172482	B19.72036	\$1,231.72	8/23/2019

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to: (775) 328-3642

Address change requests may also be mailed to: Washoe County Assessor 1001 E 9th Street Reno, NV 89512-2845

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Bill Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Washoe County Parcel Information

Parcel ID	Status	Last Update
04811215	Active	9/12/2019 2:07:27 AM
Current Owner: MT ROSE DEVELOPMENT COMPANY 22222 MOUNT ROSE HWY RENO, NV 89511		SITUS: 21333 MOUNT ROSE HWY WCTY NV
Taxing District 4000	Geo CD:	
Legal Description Range 19 Lot 1 SubdivisionName _UNSPECIFIED Township 17		

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/19/2019	2019	\$0.00	\$0.00	\$0.00	\$0.00
INST 2	10/7/2019	2019	\$5,154.30	\$0.00	\$0.00	\$5,154.30
INST 3	1/6/2020	2019	\$5,154.30	\$0.00	\$0.00	\$5,154.30
INST 4	3/2/2020	2019	\$5,154.30	\$0.00	\$0.00	\$5,154.30
Total Due:			\$15,462.90	\$0.00	\$0.00	\$15,462.90

Tax Detail

	Gross Tax	Credit	Net Tax
State of Nevada	\$1,081.70	\$0.00	\$1,081.70
Truckee Meadows Fire Dist	\$3,435.99	\$0.00	\$3,435.99
Washoe County	\$8,855.31	\$0.00	\$8,855.31
Washoe County Sc	\$7,244.21	\$0.00	\$7,244.21
Total Tax	\$20,617.21	\$0.00	\$20,617.21

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2019	2019172015	B19.45091	\$5,154.31	8/13/2019

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to:
(775) 328-3642

Address change requests may also be mailed to:
Washoe County Assessor
1001 E 9th Street
Reno, NV 89512-2845

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Bill Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Washoe County Parcel Information

Parcel ID 04805011	Status Active	Last Update 9/12/2019 2:07:27 AM
Current Owner: UNITED STATES OF AMERICA NONE RENO, NV 00000	SITUS: 0 MOUNT ROSE HWY WCTY NV	
Taxing District 4000	Geo CD:	
Legal Description		
Range 19 SubdivisionName _UNSPECIFIED Section 18 Township 17		

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/19/2019	2019	\$0.00	\$0.00	\$0.00	\$0.00
Total Due:			\$0.00	\$0.00	\$0.00	\$0.00

Tax Detail

	Gross Tax	Credit	Net Tax
<u>State of Nevada</u>	\$562.47	(\$562.47)	\$0.00
<u>Truckee Meadows Fire Dist</u>	\$1,786.66	(\$1,786.66)	\$0.00
<u>Washoe County</u>	\$4,604.63	(\$4,604.63)	\$0.00
<u>Washoe County Sc</u>	\$3,766.87	(\$3,766.87)	\$0.00
Total Tax	\$10,720.63	(\$10,720.63)	\$0.00

Payment History

No Payment Records Found

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to: (775) 328-3642

Address change requests may also be mailed to:
Washoe County Assessor
1001 E 9th Street
Reno, NV 89512-2845

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Account Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

CollectionCart

Collection Cart	Items	Total	Checkout	View
	0	\$0.00		

Pay Online

No payment due for this account.

Washoe County Parcel Information

Parcel ID	Status	Last Update
04811111	Active	9/12/2019 2:07:27 AM

Current Owner:
UNITED STATES OF AMERICA

NONE
RENO, NV 00000

SITUS:
22215 MOUNT ROSE HWY

Taxing District
4000

Geo CD:

Legal Description

Range 19 SubdivisionName _UNSPECIFIED Section 20 Township 17

Tax Bill (Click on desired tax year for due dates and further details)

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2019	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2018	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total					\$0.00

Disclaimer

- **ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See Payment Information for details.

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

 **Payment Information**

 **Special Assessment District**

 **Installment Date Information**

 **Assessment Information**

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Account Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

CollectionCart

Collection Cart	Items	Total	Checkout	View
	0	\$0.00		

Pay Online

No payment due for this account.

Washoe County Parcel Information

Parcel ID	Status	Last Update
04812022	Active	9/12/2019 2:07:27 AM

Current Owner:
UNITED STATES OF AMERICA

NONE
RENO, NV 00000

SITUS:
22900 MOUNT ROSE HWY
WASHOE COUNTY NV

Taxing District
4000

Geo CD:

Legal Description

SubdivisionName _UNSPECIFIED Section 20 21 Township 17 Range 19

Tax Bill (Click on desired tax year for due dates and further details)

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2019	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2018	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total					\$0.00

Disclaimer

- **ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See Payment Information for details.

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845





THE STATE OF NEVADA
PERMIT TO APPROPRIATE WATER

Name of applicant: MT ROSE DEVELOPMENT COMPANY
Source: UNDERGROUND
Basin: PLEASANT VALLEY
Manner of Use: RECREATIONAL
Period of Use: OCTOBER 1ST TO MAY 1ST
Priority Date: 10/22/2010

APPROVAL OF STATE ENGINEER

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

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. This well shall be equipped with a two (2) inch opening for measuring depth to water. If the well is flowing, a valve must be installed and maintained to prevent waste. A totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of water begins, or before the Proof of Completion of Work is filed. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

A separate totalizing meter must be installed and the amount of water pumped from this source for quasi-municipal and snowmaking purposes shall be reported separately. The Permittee shall keep monthly records of the amount of water pumped from this well for both uses and the consumptive use portions must be calculated. These records must be submitted to the State Engineer on an annual basis within 30 days after the end of each calendar year. Under no circumstances shall the maximum net consumptive use duty of 131.669 acre-feet annually be exceeded.

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

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

The totally combined duty of water that may be withdrawn from the well under Permit 67914, Certificate 17118; Permit 67915, Certificate 17119; Permit 67916, Certificate 17120; Permit 67917, Certificate 17121; Permit 67918, Certificate 17122; Permits 79024 and 80237 shall not exceed 386.669 acre-feet annually and the net consumptive use duty of water under these permits shall not exceed 131.669 acre-feet annually.

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

(Continued on Page 2)

The place of use of this permit is limited to that area lying totally within the Pleasant Valley Hydrographic Basin (6-088).

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

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, **and not to exceed 0.60 cubic feet per second for non-consumptive purposes (snowmaking).**

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

March 26, 2012

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

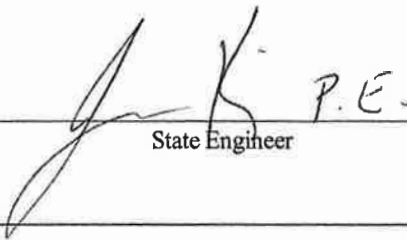
March 26, 2016

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, JASON KING, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 8th day of June, A.D. 2011



State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

General Information

Application: 67914 Status: CERTIFICATE Certificate: 17118 [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE
Water Resource Specialist:	Michael M...		

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
		Y	
Source:	UNDERGROUND	Source Description:	
Project Name:		Decree Name:	
Use:	QUASI-MUNICIPAL	Period End:	1231
Period Start:	0101		

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SW	SW	19	17N	19E
Duty Balance:	31.669/AFA	Div Balance:	0.0438	Well Log Nos.: 17118
Acre-Feet Storage:	0	Well Logs:		
Remarks:				

General Information

Application: 67915 Status: CERTIFICATE Certificate: 17419 [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE
Water Resource Specialist:	M. T. M.		

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
		Y	

Source:	UNDERGROUND	Source Description:	
Project Name:		Decree Name:	
Use:	QUASI-MUNICIPAL		
Period Start:	0101	Period End:	1231

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SW	SW	19	17N	19E

Duty Balance:	4.99 AFA	Div Balance:	0.01	Well Log Nos.:	
Acre-Foot Storage:	0	Well Logs:			
Remarks:					

General Information

Application: 67917 Status: CERTIFICATE Certificate: 17121 [Start new search](#)

General

Owner(s):	MT, ROSE DEVELOPMENT COMPANY	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE
Water Resource Specialist:	Albi, Nico		

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
		Y	

Source:	UNDERGROUND	Source Description:	
Project Name:		Decree Name:	
Use:	QUASI-MUNICIPAL		
Period Start:	0101	Period End:	1231

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SW	SW	19	17N	19E

Duty Balance:	31.669 AFA	Div Balance:	0.0438	Well Log Nos.:	
Acres-Feet Storage:	0	Well Logs:			
Remarks:					

General Information

Application: 67918 Status: CERTIFICATE Certificate: 17122 [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE
Water Resource Specialist:	Michelle M...		

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
		Y	

Source:	UNDERGROUND	Source Description:	
Project Name:		Decree Name:	
Use:	QUASI-MUNICIPAL	Period End:	1231
Period Start:	0101		

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SW	SW	19	17N	19E
Duty Balance:	31.669 AFA	Div Balance:	0.0438	
Acre-Feet Storage:	0	Well Logs:	Well Log Nos.: / /	
Remarks:				

General Information

Application: 79024 Status: CERTIFICATE Certificate: 19859 [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE
Water Resource Specialist:	MELISSA MARR		

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
1	Y	Y	Y

Source:	UNDERGROUND	Source Description:	
Project Name:		Decree Name:	
Use:	QUASI-MUNICIPAL		
Period Start:	0101	Period End:	1231

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SW	SW	19	17N	19E

Duty Balance:	31.669 AFA	Div Balance:	0.0438	Well Log Nos.:	
Acre-Feet Storage:	0	Well Logs:			
Remarks:					

Point of diversion

General Information

Application: **68664** | Status: CERTIFICATE | Certificate: **18254** : [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	WASHOE VALLEY - 089
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE

Previous Applications (Base Rights)

Change of App No.	POD	POU	MOU
25682		Y	

Source:	SPRING	Source Description:	UNNAMED SPRING #2	<i>Zephyr Springs Slide Mt.</i>
Project Name:		Decree Name:		
Use:	COMMERCIAL	Period End:	1231	
Period Start:	0101			

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
NW	NE	29	17N	19E

Duty Balance:	21.34 AFA	Div Balance:	0.03	
Acre-Feet Storage:	0	Well Logs:		Well Log Nos.:
Remarks:				

General Information

Application: 25724 | Status: CERTIFICATE | Certificate: 9629 | [Start new search](#)

General

Owner(s):	MT. ROSE DEVELOPMENT COMPANY	Basin:	WASHOE VALLEY - 089
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE

Previous Applications (Base Rights)

No previous applications found

Source:	SPRING	Source Description:	UNNAMED SPRING NO. 1
Project Name:		Decree Name:	
Use:	COMMERCIAL		
Period Start:	0101	Period End:	1231

Brewer's Slide Mt.

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
SE	NW	29	17N	19E

Duty Balance:	36.182331 AFA	Div Balance:	0.05
Acre-Feet Storage:	0	Well Logs:	Well Log Nos.:
Remarks:			

General Information

Application: **19098** | Status: CERTIFICATE | Certificate: **6630** | [Start new search](#)

General

Owner(s):	MT ROSE DEVELOPMENT CO.	Basin:	PLEASANT VALLEY - 088
Sub Basin:		Basin Status:	DESIGNATED
Region:	TRUCKEE RIVER BASIN	County:	WASHOE

Previous Applications (Base Rights)

No previous applications found

Source:	UNDERGROUND	Source Description:	<i>Kit Carson</i>
Project Name:		Decree Name:	<i>Rose Side</i>
Use:	QUASI-MUNICIPAL	Period End:	1231
Period Start:	0101		

Point of Diversion Information:

Qtr-Qtr:	Qtr:	Section:	Township:	Range:
NW	SE	19	17N	19E

Duty Balance:	4.818173 AFA	Div Balance:	0.2	Well Log Nos.:
Acre-Foot Storage:	0	Well Logs:		
Remarks:				



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

June 23rd, 2009

Dal Hunter, Ph.D., P.E.
Black Eagle Consulting
1345 Capital Blvd.
Reno, NV 89502

SUBJECT: **Plans Approval** of the proposed 6,000 gallon & 1000 gallon OSDS systems for Mountain Rose Ski Resort, located in Washoe County, Nevada. **GNEVSODS09-L-40223**

Mr. Hunter:

The Nevada Division of Environmental Protection (NDEP) has reviewed your letter and plans, dated June 23rd, 2009. Upon review, NDEP hereby approves the plans for the construction of a 6,000 gallon & 1000 gallon OSDS system along with their corresponding absorption systems for Mountain Rose Ski Resort, located in Washoe County, Nevada. Please verify by letter, and engineer's stamp (Nevada P.E.), that construction of these septic systems was completed according to the approved plans. A Notice of Inclusion (NOI) application must be filed when these new system is built in order to be included under the general permit **GNEVOSDS09**. **Please note that this approval is for the treatment & disposal of domestic sewage only; industrial waste disposal is strictly prohibited**. The approval to construct these OSDS systems expires on June 23rd, 2010.

As a reminder, additions, modifications and/or repairs to any commercial septic system, excluding emergency repairs or actions to protect human life and the environment, shall be designed by a professional engineer certified by the State of Nevada, and be submitted and approved by NDEP prior to any work taking place. In the case of emergency repairs, the responsible party shall notify the NDEP within one (1) business day, and in writing in five (5) business days of the reason for repairs and actions taken.

If you have any questions or if there is anything else you would like me to help you with, please contact me at (775) 687-9468.

Respectfully;

Alexi Lanza, P. E.
Permits Branch - Bureau of Water Pollution Control
Nevada Division of Environmental Protection

Copies: Mt. Rose Ski Tahoe – Attn. Paul Senft – G.M. – 22222 Mt. Rose Highway, Reno, NV 89511
File GNEVSODS09-L-40223

WSUP19-0020
EXHIBIT G

Mt. Rose Ski Tahoe Peak Parking Lot Usage 2013-2018

Following is parking data provided by parking lot attendants to Mt. Rose Ski Tahoe Management for parking use at the Mt. Rose Parking Lots during the holiday peak seasons between 2013 and 2018. The use of parking during peak season times rarely ever reaches capacity. Only two times during the past 6 years have all of the parking lot areas been identified to be "full" December 29, 2015 and December 30, 2018 were the only days where the lots were identified to be full.

Guest parking-meter 2013

	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan
#7	EMP 1/2	EMP 3/4	EMP 3/4	EMP 1/2	EMP 3/4	EMP 3/4	EMP 3/4	empty	empty	empty	empty	empty	empty	empty	empty
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4D full	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4C 3/4	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4B 1/2	empty	empty	empty	empty	empty	empty	empty	Employee	Employee	Employee	empty	empty	Employee	Employee	empty
#3	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#2	empty	empty	empty	empty	empty	empty	empty	empty	empty	1/4 full	Employee	Employee	empty	empty	Employee
Lot #1	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty

	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan
Total visits	2,469	3,318	3,169	2,394	2,853	3,171	3,090	2,567	2,123	1,778	1,292	2,028	1,879	1,726	1,005
Ticket buyers	1,604	2,828	2,605	1,904	2,385	2,635	2,454	1,881	1,734	1,322	705	1,567	1,333	846	289
PH	865	490	564	490	468	536	636	686	389	456	587	461	546	880	716

Guest parking-meter 2014

	Sun 21-Dec	Mon 22-Dec	Tues 23-Dec	Wed 24-Dec	Thur 25-Dec	Fri 26-Dec	Sat 27-Dec	Sun 28-Dec	Mon 29-Dec	Tues 30-Dec	Wed 31-Dec	Thur 1-Jan	Fri 2-Jan	Sat 3-Jan	Sun 4-Jan
Sky Tavern	N/A	N/A	N/A	N/A	Employee	Employee	Employee	Employee	Employee	Employee	Employee	Employee	N/A	N/A	N/A
#7	EMP 1/2	EMP 3/4	EMP 3/4	EMP 1/2	empty	empty	empty	empty	empty	empty	empty	empty	EMP 1/2	EMP 1/2	EMP 1/2
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4D full	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4C 3/4	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4B 1/2	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#3	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#2	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
Lot #1	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty

	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan
Total visits	1,666	3,193	3,830	1,880	3,952	4,713	5,177	4,447	3,693	2,264	3,133	3,517	4,451	3,510	2,362
Ticket buyers	1,026	2,325	2,747	1,603	2,938	3,698	3,698	3,167	3,329	1,528	2,041	2,023	3,022	1,980	723
PH	640	868	1,083	277	1,014	1,015	1,341	1,280	364	736	1,092	1,494	1,429	1,530	1,639

Guest parking-meter 2015

	Sat 19-Dec	Sun 20-Dec	Mon 21-Dec	Tues 22-Dec	Wed 23-Dec	Thur 24-Dec	Fri 25-Dec	Sat 26-Dec	Sun 27-Dec	Mon 28-Dec	Tues 29-Dec	Wed 30-Dec	Thur 31-Dec	Fri 1-Jan	Sat 2-Jan	Sun 3-Jan
Sky Tavern	N/A	N/A	N/A	N/A	N/A	N/A	Employee	Employee	Employee	Employee	Employee	Employee	N/A	N/A	N/A	N/A
#7	EMP 75%	EMP 75%	empty	empty	empty	empty	empty	75%	75%	75%	100%	empty	EMP 60%	EMP 60%	EMP	empty
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4 D full	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4 C 3/4	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4 A&B 1/2	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	EMP
#3	75%	75%	empty	10%	empty	empty	empty	empty	empty	empty	empty	empty	empty	75%	75%	75%
#2	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
Lot #1	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty

Midweek	0	0	3	39	170	36	69	5	5	100	142	103	116	69	0	2
Total Passes	0	0	80	755	1983	799	1551	1542	2119	795	1644	1377	1730	1454	1504	1841
My pass	NA	NA	1	0	1	0	0	0	0	1	0	0	0	0	NA	NA
Dependents	28	22	1	14	29	20	42	24	38	30	36	21	32	27	40	41
Total Impact	28	22	4	53	199	56	111	29	43	130	178	124	148	96	40	43

Guest parking-meter 2016

	Sat 17-Dec	Sun 18-Dec	Mon 19-Dec	Tues 20-Dec	Wed 21-Dec	Thur 22-Dec	Fri 23-Dec	Sat 24-Dec	Sun 25-Dec	Mon 26-Dec	Tues 27-Dec	Wed 28-Dec	Thur 29-Dec	Fri 30-Dec	Sat 31-Dec	Sun 1-Jan
Sky Tavern	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Employee	Employee	Employee	Employee	Employee	Employee	N/A
#7	EMP 50%	empty	empty	empty	empty	empty	empty	Employee	Employee	empty	10%	10%	10%	empty	empty	empty
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty				empty	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty					empty	empty	empty
#4 D full	empty	empty	empty	empty	empty	empty	empty	empty						empty	empty	empty
#4 C 3/4	empty	Employee	Employee	Employee	Employee	Employee	Employee	Employee	empty					empty	empty	empty
#4 A&B 1/2		Employee	Employee	Employee	Employee	Employee	Employee	Employee	empty					empty	empty	Employee
#3		10%	10%	10%	10%		empty									empty
#2							empty									empty
Lot #1							10%									10%
Midweek	4	5	223	202	69	204	8	4	7	4	11	13	12	5	3	3
My pass	1	0	12	5	6	7	3	0	1	1	2	2	2	4	0	0
Dependents	25	35	21	21	9	30	8	40	39	3	0	0	0	0	0	0
Total Passes	2446	2369	1382	1246	1761	1813	290	2149	1489	2228	1463	1666	1494	1692	2045	616
Total Impact	29	40	244	223	78	234	16	44	46	7	11	13	12	5	3	3

Guest parking-meter 2017

	Sat 16-Dec	Sun 17-Dec	Mon 18-Dec	Tues 19-Dec	Wed 20-Dec	Thur 21-Dec	Fri 22-Dec	Sat 23-Dec	Sun 24-Dec	Mon 25-Dec	Tues 26-Dec	Wed 27-Dec	Thur 28-Dec	Fri 29-Dec	Sat 30-Dec	Sun 31-Dec
Sky Tavern	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	empty	Employee	EE 184	EE 193	EE 176	N/A	N/A
#7	empty	empty	empty	empty	empty	empty	empty	Employee	Employee	Employee	empty	empty	empty	Employee	Employee	Employee
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	10%	empty	empty	empty
#4 D full	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty
#4 C 3/4	empty	Employee	Employee	Employee	empty	Employee	Employee	Employee	empty		empty			empty	empty	empty
#4 A&B 1/2	Employee	Employee	Employee	Employee	Employee	Employee	Employee	Employee	empty					empty	empty	empty
#3	10%	10%	10%	10%	empty	10%	10%	10%							10%	10%
#2					Employee											
Lot #1																
Total Visits	1955	2279	981	1213	906	1946	2429	2955	3648	3219	3376	4289	4191	3510	2917	3471
Tickets	505	550	360	791	356	864	854	1361	2349	1929	2277	3288	3186	2442	1924	1705
Season Pass	1450	1729	621	422	550	1082	1575	1594	1299	1290	1099	1001	1005	1068	993	1766

Guest parking-meter 2018

	Sat 22-Dec	Sun 23-Dec	Mon 24-Dec	Tues 25-Dec	Wed 26-Dec	Thur 27-Dec	Fri 28-Dec	Sat 29-Dec	Sun 30-Dec	Mon 31-Dec	Tues 1-Jan	Wed 2-Jan	Thur 3-Jan	Fri 4-Jan	Sat 5-Jan	Sun 6-Jan
Sky Tavern	N/A	N/A	N/A	N/A	EE's 208	EE's 209	EE's 208	EE's 209	EE's 199	empty	empty	empty	empty	empty	N/A	N/A
#7	EE's 238	EE's 224	EE's 216	EE's 202	empty	empty	empty	empty	10%	empty	empty	empty	empty	10%	empty	empty
#6	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	10%	empty	empty
#5	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	10%	empty	empty
#4 D full	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	empty	10%	empty	empty
#4 C 3/4	empty	empty	empty	empty	empty	empty	empty	10 vehicles		EE's 184	EE's 176	EE's 179	EE's 166	EE's 204	EE's 211	EE's 189
#4 A&B 1/2	empty		empty	empty	10 vehicles					Employee	Employee	Employee	Employee	Employee	Employee	Employee
#3	10%	10%	10%	10%						10%	10%	10%	10%	10%	10%	10%
#2	10%		10%							10 vehicles	10%	10%	10%	10%		empty
Lot #1			10%							10%	10%					empty
Slide	100 vehicles	20%	30%	50%	40%	100 vehicles	120 vehicles	35%	85%	35%	30%	20%	55%	45%	0%	0%
Total Visits	2365	2948	2326	3499	3196	3605	3772	3593	4834	2627	2461	2980	4146	2986	1369	1821
Tickets	905	1857	1637	1723	2006	2762	2648	2261	2524	1672	1181	1757	2790	1435	637	464
Season Pass	1460	1091	689	1776	1190	843	1124	1332	2310	955	1280	1223	1356	1551	732	1357
all pass ok ----->																
EE's working	325	321	288	281	312	288	292	320	290	272	234	234	237	260	308	274
EE's PV	1.37	1.43	1.33	1.39	1.50	1.38	1.4	1.4	1.45	1.47	1.32	1.3	1.42	1.27	1.45	1.44
Premier pass only ----->																
all pass ok ----->																
\$49 ticks																



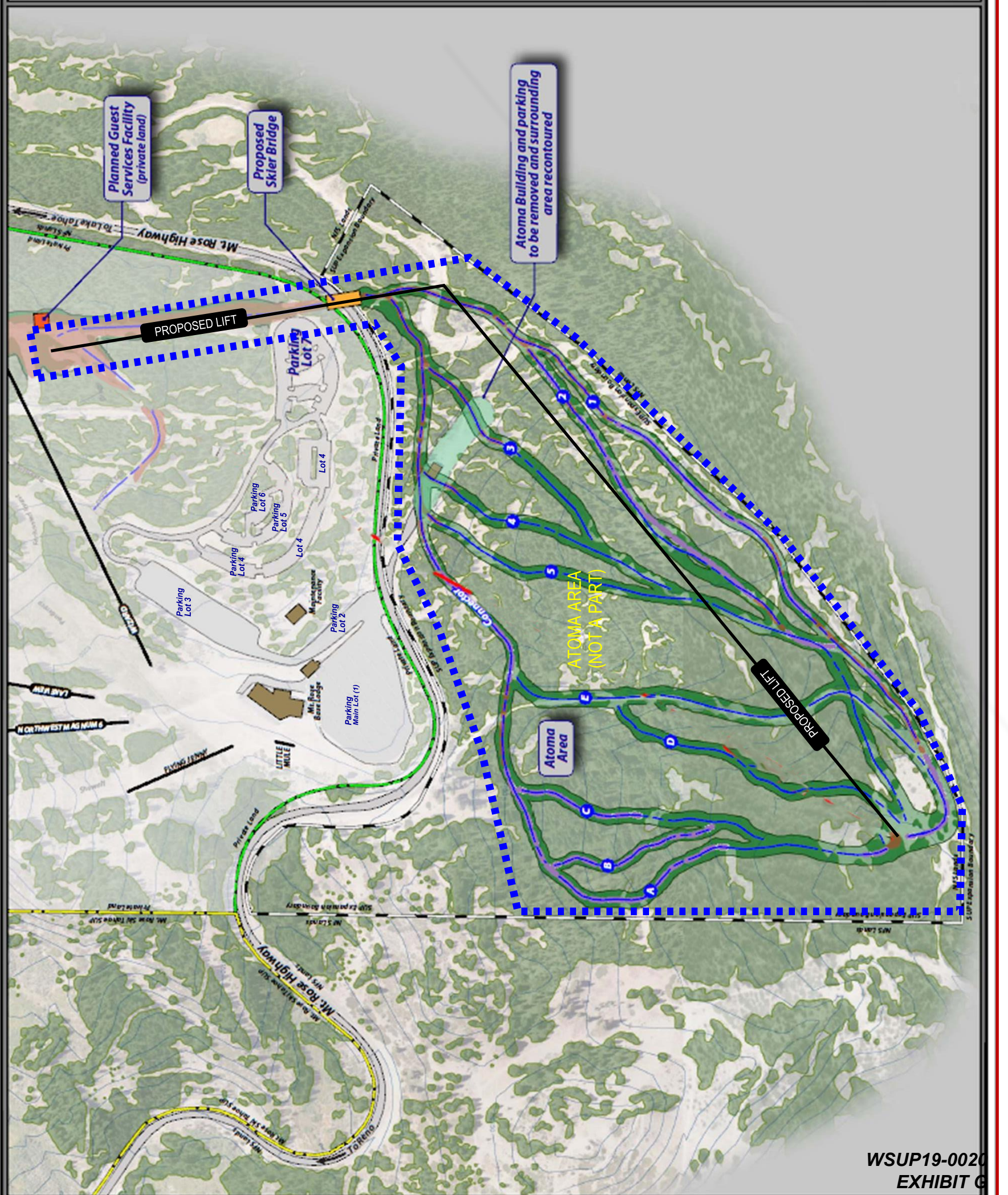
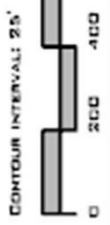
MT. ROSE SKI TAHOE - ATOMA
ENVIRONMENTAL IMPACT STATEMENT

FIGURE 3
ALTERNATIVE 2
PROPOSED ACTION
ATOMA DETAIL

LEGEND:

- Existing Trail
- Proposed Trail Clearing
- Proposed Trail Grading
- Proposed Snowmaking Install Disturbance
- Planned Facilities
- SUP Bound
- Proposed Bound Expansions
- Private Bound
- Existing Lift
- Proposed Lift
- Proposed Buildings and R.

Note:
Snowmaking coverage is proposed for trails 1, 2, Connector trail (USFS Lands), and planned for trails on the Rose side of the Mt. Rose Highway



Planned Guest Services Facility (private land)

Proposed Skier Bridge

Atoma Building and parking to be removed and surrounding area recontoured

PROPOSED LIFT

PROPOSED LIFT

ATOMA AREA (NOT A PART)

Atoma Area