

**ADDENDUM TO THE NORTH VILLAGE SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT**

Limelight Hotel

June 21, 2022



Lead Agency:

Town of Mammoth Lakes

437 Old Mammoth Road

Mammoth Lakes, CA 93546

Contact: Ms. Kimberly Cooke

Senior Planner

Phone: (760) 965-3638

Email: kcooke@townofmammothlakes.ca.gov

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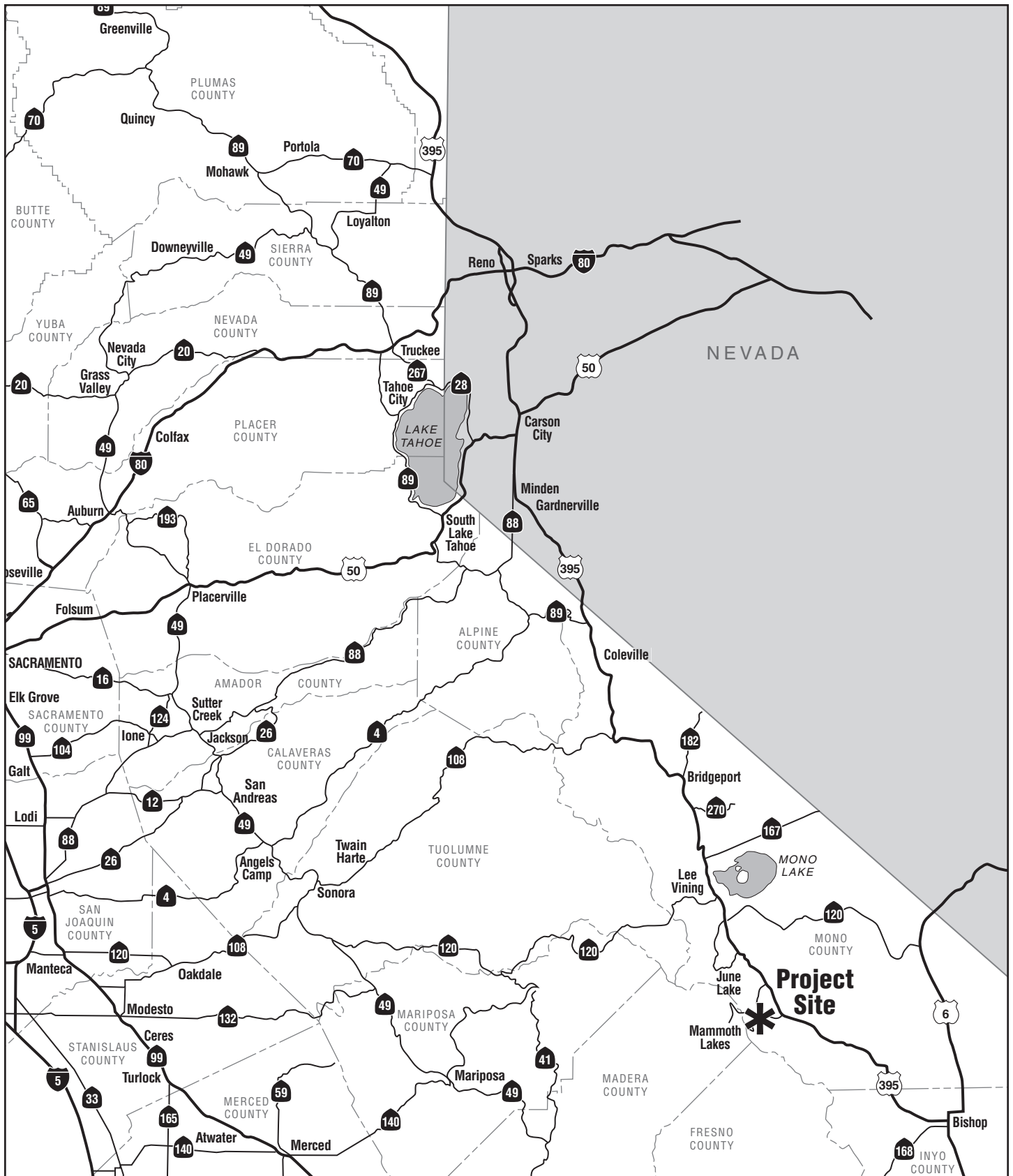
1.0 INTRODUCTION

Limelight Mammoth LLC (the Applicant) has requested approval of a Tentative Tract Map, Use Permit, and Design Review application to develop a 185,754 square foot, 166-unit condominium hotel (herein referenced as “Limelight Hotel”) at the Mammoth Hillside site within the North Village Specific Plan (NVSP) area. The Mammoth Hillside site has current entitlements for a 193-unit condominium hotel (considered as Phase 1). As part of the entitlement process for Phase 1, the Town of Mammoth Lakes (Town) approved an Addendum to the North Village Specific Plan (Mammoth Hillside Addendum) for the purpose of the California Environmental Quality Act (CEQA). The Town of Mammoth Lakes has determined that the Limelight Hotel Application is consistent with the Mammoth Hillside Project considered as part of the Mammoth Hillside Addendum (refer to Appendix A, CEQA Limelight Hotel Conformance Checklist), with the exception of a proposed renewable direct use geothermal system to offset use of other fuels for building systems (such as heating/cooling, water heating, de-icing, etc.). As such, the new geothermal well system (Modified Project) is the subject of this Addendum.

1.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Limelight Hotel is located in the Town of Mammoth Lakes, which is situated within the eastern portion of the Sierra Nevada Range, in southwestern Mono County, California. Regional access to the town is provided via U.S. Highway 395, which is approximately three miles east of the town. The town is served primarily by State Route 203, which acts as a connector to U.S. Highway 395; refer to Exhibit 1-1, Regional Vicinity. The site is also located within the northwestern portion of the town, at the northwest corner of Canyon Boulevard and Lake Mary Road; refer to Exhibit 1-2, Site Vicinity.

The project site is currently vacant and vegetated. The site is designated by the *Town of Mammoth Lakes General Plan* (General Plan) as a Specific Plan (NVSP) and zoned by the *Town of Mammoth Lakes Municipal Code* (Municipal Code) as North Village Specific Plan (NVSP). To the east of the site, across Canyon Boulevard, is lodging and condominiums (8050 Residence Club and Mammoth Fireside), as well as commercial uses (Mammoth Mountain Ski Area gondola building, retail, and Mammoth Brewing Company), all zoned NVSP. To the south are townhomes and condominiums (Mammoth View Villas and the Canyon Ski and Racquet Club), zoned Residential Multi-Family 2. To the west, across Lakeview Boulevard, are condominiums (Mammoth Estates). To the north is the Westin Monache Resort, zoned NVSP.



NOT TO SCALE

Michael Baker
INTERNATIONAL

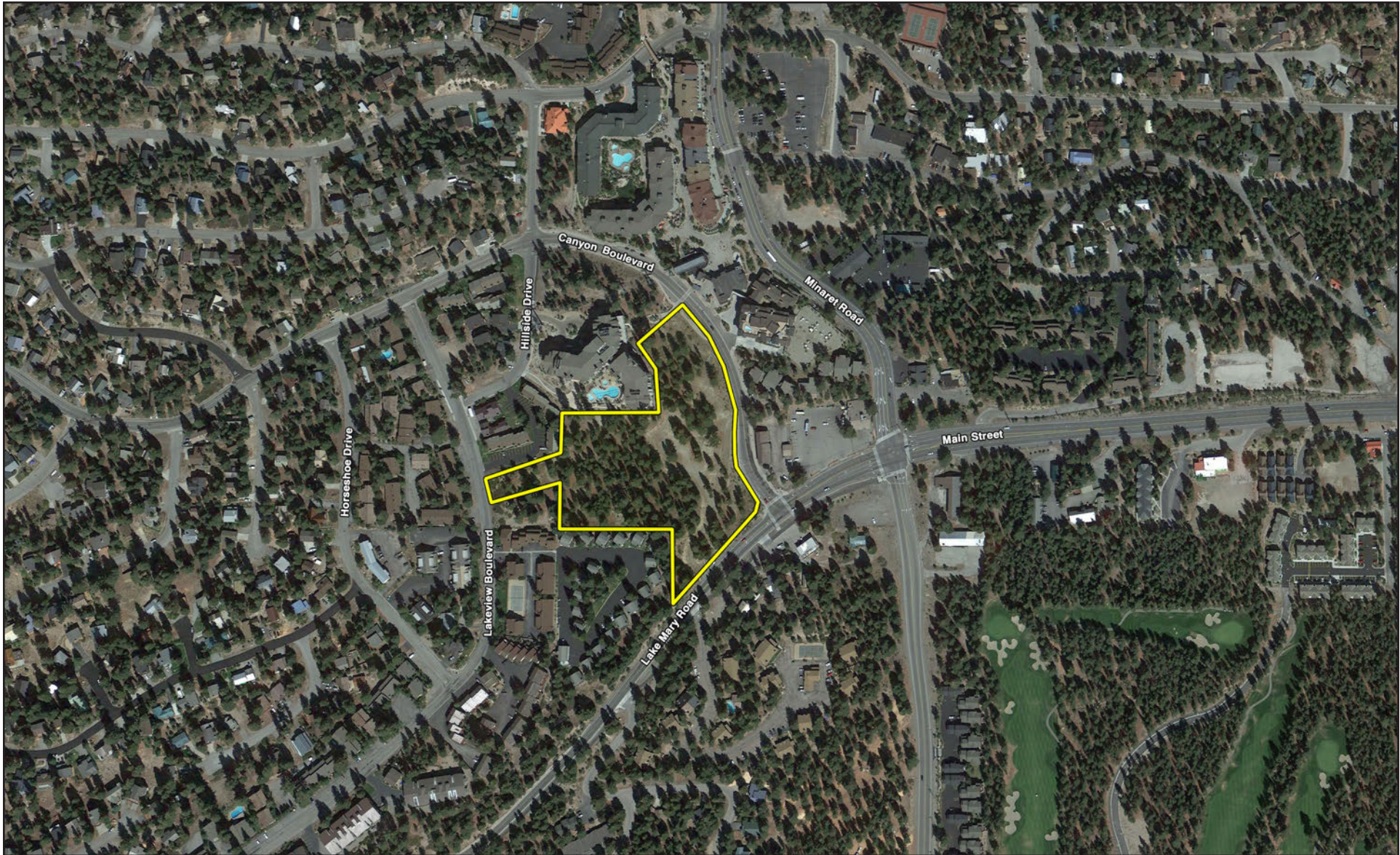


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LIMELIGHT HOTEL ADDENDUM TO THE NORTH VILLAGE SPECIFIC PLAN

Regional Vicinity

Exhibit 1-1



Source: Google Earth, 2017.
- Project Site

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LIMELIGHT HOTEL ADDENDUM TO THE NORTH VILLAGE SPECIFIC PLAN

Site Vicinity

Exhibit 1-2



1.2 PREVIOUS ENVIRONMENTAL DOCUMENTS

North Village Specific Plan and EIR

The objective of the NVSP is to “create a set of land use designations and development standards which will facilitate the development of “North Village” as a concentrated, pedestrian-oriented activity center with limited vehicular access...development will be oriented toward year-round uses and visitor activity.” The Town of Mammoth Lakes (Town), as the Lead Agency under the California Environmental Quality Act (CEQA), determined that an Environmental Impact Report (EIR) was required for the NVSP prior to its adoption. The Town certified the NVSP Final EIR in 1991.

The NVSP was adopted by the Town in 1991, and has been amended several times, most recently in 2014 for the Inn at the Village project and in 2017 for the Mammoth Hillside project. The NVSP establishes development regulations for approximately 64 acres located around Minaret Road, Main Street/Lake Mary Road, and Canyon Boulevard. The intent of the NVSP is to develop a cohesive, pedestrian-oriented resort activity node, and to provide a year-round focus for visitor activity within the town. The Town, as the Lead Agency under the CEQA, determined that an EIR was required for the NVSP prior to adoption. The EIR was prepared in conformance with CEQA (California Public Resources Code [PRC] Section 21000 et seq.); CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.); and the rules, regulations, and procedures for implementation of CEQA, as adopted by the Town. The purpose of the EIR was to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to reduce potentially significant effects of the NVSP.

The Final Environmental Impact Report North Village Specific Plan (1991 PEIR), dated February 1991, was certified along with the adoption of the NVSP in 1991. In 1994, the North Village Specific Plan Environmental Impact Report Addendum, dated May 1994, was prepared for an amendment to the NVSP, and in 2000, the Subsequent Program Environmental Impact Report for the North Village 1999 Specific Plan Amendment (1999 SPEIR), dated October 13, 2000, was certified for an update to the NVSP.

The Mammoth Hillside Project has had multiple Amendments to the 1999 SPEIR, which include the following:

- Environmental analysis was completed for the Approved TTM project as a part of original entitlements approved in 2006 (TTM 36-235 and UPA 2005-09). At that time, the project was reviewed and considered to be in conformance with the 1999 SPEIR (State Clearinghouse No. 99-092082).
- An Addendum to the 1999 SPEIR was prepared in 2014 in association with UPA 2007-14.
- An Addendum to the 1999 SPEIR was prepared in association with a General Plan Amendment (GPA) and North Village Specific Plan (NVSP) Amendment for a density increase and lot coverage increase on April 12, 2017.

The current certified mitigation measures that are applicable to the Mammoth Hillside project site are provided in Appendix B, Mammoth Hillside Mitigation Monitoring and Reporting Program.



1.3 PROJECT ENTITLEMENT HISTORY

Density and Lot Coverage Transfer from Mammoth Hillside to East Village/South Hotel Site (2004) - In 2004, when both the Mammoth Hillside project site and the East Village/South Hotel site (east of Minaret Road and south of Forest Trail, also in the NVSP) were owned by Intrawest California Holdings, a density and lot coverage transfer was recorded. Through the density transfer, a total of 87.04 rooms were transferred to the East Village/South Hotel site. Through the lot coverage transfer, 14,881.9 square feet of lot coverage was transferred to the East Village/South Hotel site. The density and lot coverage were transferred from 15, 17, and 49 Canyon Boulevard, all of which are in the Plaza Resort zone of the NVSP. The transfer covenants were signed by both Intrawest and the Town of Mammoth Lakes and there were no fees or payments recorded in association with the transfers. The NVSP allows density and lot coverage transfers to be executed though a deed restriction recorded against the properties with the Town as a signatory (NVSP, 2.e.ii, page 37 and 3.a, page 38).

Tentative Tract Map 36-235 and Use Permit 2005-09 (Resolution No. PC 2006-01) - The Town's Planning and Economic Development Commission (PEDC) approved TTM 36-235 and UPA 2005-09 on January 12, 2006, which authorized the two-phase Mammoth Hillside project. Phase I was approved for a 193-unit (325 bedrooms) condominium hotel with understructure parking for 259 vehicles and three check-in surface parking spaces with full-time valet parking services, spa, pool and patio facilities, meeting facilities, restaurant/bar, and associated landscape improvements on five parcels of land consisting of approximately seven acres. Phase II was proposed as a townhome development with 41 units (107 bedrooms). Phase II was not entitled by Resolution No. PC 2006-11 and requires a separate tentative tract map and use permit application.

An additional 36 bedrooms of affordable housing were approved, 27 of which were required for affordable housing mitigation. The additional nine units qualified the project for a 35 percent state density bonus. The affordable housing rooms required for mitigation were exempted from the overall density calculations, pursuant to the NVSP's Housing Element.

After the project was approved, it was discovered that the property was 0.07 acres smaller than originally calculated. The result was a reduction in the overall property density of five bedrooms. Thus, the total allowable density of the Mammoth Hillside project as entitled in 2006, for Phase I and II, was 427 rooms (previously 432 rooms). The affordable housing mitigation required for the 35 percent state density bonus was also reduced to 35 bedrooms. An appeal of the PEDC's decision to approve TTM 36-235 and UPA 2005-09 was reviewed by the Town Council on February 15, 2006. The Council voted to uphold the approval.

Use Permit 2007-11 (Resolution No. PC 2007-22) - On February 13, 2007, UPA 2007-11 was approved by the PEDC. The Use Permit allowed tandem parking and mechanical parking lifts to be included in the underground parking garage design. At the time of the original project approval, the garage layout included parking spaces and drive aisles that did not meet Town standards. However, pursuant to Ordinance 2006-11, approved in December 2006, tandem parking and mechanical parking lifts were allowed through a Use Permit process.

As a part of this Use Permit application, the proposed parking structure was redesigned to meet the requirements of Ordinance 2006-11. A revised mix of units was also included that reduced the number of parking spaces required and accommodated the 50 parking spaces for the 8050 Residence Club (required by a private agreement) within the parking garage design. The number of units for Phase I was reduced to 127 units (291 rooms), a reduction of 34 rooms. Condition of



Approval #1 in Resolution 2007-22 notes that the final number of units permitted to be constructed under the original approval (Resolution No. PC 2006-01) may be limited by the available parking in the Mammoth Hillside garage.

Use Permit 2007-14 (Resolution No. PC 2008-02) - Later in 2007, a Use Permit application for an alternative housing mitigation plan was approved. The alternative housing mitigation plan allowed for the payment of an in-lieu fee for the 35 bedrooms of affordable housing instead of constructing the affordable housing on-site. The findings provided in Resolution 2008-02 described that an additional 30 percent on top of the established in-lieu fee would be paid. The total in-lieu mitigation fee agreed upon was \$5,586,000. It was determined that the mitigation plan resulted in a greater community benefit and that 35 percent state density bonus would remain.

UPA 2007-14 was approved by the PEDC on February 13, 2008. An appeal of the approval was heard by the Town Council on April 2, 2008. The Town Council voted to affirm the PEDC's approval with the condition that Mammoth Lakes Housing, Inc. complete the units required for mitigation in the low- or moderate-income range within five years of payment of the in-lieu fee. This condition was amended in 2015 (see Amendment to TTM 36-235, UPA 2005-09, UPA 2007-11, and UPA 2007-14, and associated Time Extension Request (TER 15-003), Fees, below).

Concept Review 15-002 - A Concept Review (CR) application, was submitted on June 29, 2015, to review the conditions of approval of the existing entitlements for the Mammoth Hillside project. In the application, it was noted that several of the conditions were "barriers to development and financing", and that if those were amended or removed, where appropriate, it might facilitate progress on the project.

CR 15-002 was discussed and routed to applicable Town staff and agencies at the Development Review Committee on July 7, 2015. There was consensus among staff that some of the conditions were either no longer relevant or should be changed to reflect the most current conditions as standardized by the Town. It was also recommended that if the three resolutions for the Mammoth Hillside project were to be amended, that they be combined into one resolution to simplify and clarify the conditions.

On September 9, 2015, the PEDC reviewed the proposed amendments at a public workshop and there was consensus from the PEDC that the amendments to the entitlement conditions were reasonable.

Amendment to TTM 36-235, UPA 2005-09, UPA 2007-11, and UPA 2007-14 and associated Time Extension Request (TER 15-003) (Resolution No. PC 2015-09) - In accordance with CR 15-002, the PEDC reviewed amendments to the approved Tentative Tract Map and Use Permits at a public hearing on December 9, 2015. The PEDC voted unanimously to approve the amendments and the associated Time Extension Request (TER 15-003). The existing project entitlements expire on July 12, 2022.

The following amendments to the entitlement conditions of approval were made:

- *Four- or Five-Star Hotel Operator* - Condition 2 of Resolution No. PC 2006-01, requiring that the project have a contract with a four- or five-star hotel operator prior to the issuance of a Certificate of Occupancy, was deleted because any product yielding Transient Occupancy Tax at this location may meet the anticipated objective.



- *Pedestrian Bridge* - Condition 10 of Resolution No. PC 2006-01, referencing a pedestrian bridge over Canyon Boulevard to connect the project site to the Gondola Building and the Village Plaza, was deleted because the pedestrian bridge is not required by the Town or by the NVSP.
- *8050 Residence Club 50 Parking Spaces* - Resolution No. PC 2007-22 referenced a private parking agreement with the owners of the 8050 Residence Club (Mammoth 8050, LLC), which requires that the Mammoth Hillside project provide 50 parking spaces within the underground parking garage. The resolution was amended to indicate acknowledgement, but not requirement, of the private parking agreement.
- *Fees* - There were references throughout the resolutions to required affordable housing mitigation fees and development impacts fees. In the resolutions, these conditions referenced specific fee amounts (e.g., \$5,586,000 for in-lieu housing mitigation fees). The related conditions were amended to require payment of affordable housing mitigation fees and development impact fees in place at the time of building permit submittal or issuance, as applicable, in accordance with conditions applied to current development projects. Payment of the standard affordable housing mitigation fees resulted in the loss of the 35 percent state density bonus, as the previous fee amount of \$5,586,000 was considered to be a significant community benefit comparable to that of the provision of on-site, inclusionary housing.
- *Pedestrian Area or Transit Shelter* - A revised Condition 23 of Resolution No. PC 2006-01 was incorporated to require participation in the creation of a pedestrian area of interest or transit shelter located at the north easterly portion of the property along Canyon Boulevard.
- *Current Standards* - Conditions were updated as necessary to reflect current standards and best practices in the Planning and Engineering Divisions. For example, conditions regarding landscaping were revised to reference the Water Efficient Landscape Ordinance.

Concept Review 16-001 - A Concept Review (CR) application was submitted in 2016 to obtain feedback on a request to increase the density of the Mammoth Hillside site from 317 rooms to 403 rooms to facilitate the development of a future hotel project. The request was reviewed and discussed at a joint workshop of the PEDC and Town Council on September 21, 2016.

General Plan Amendment (GPA) 16-001 and District Zoning Amendment (DZA) 16-002 - On May 10, 2017, the PEDC approved the Mammoth Hillside Addendum Project. The project added modifications to the 1999 SPEIR with respect to the 6.9-acre Mammoth Hillside project site. These modifications included the following:

- *Density Increase* - The Mammoth Hillside site is located in the Plaza Resort (PR) and Specialty Lodging (SL) zones of the NVSP. The allowed density in the PR Zone is 80 rooms/acre, and the allowed density in the SL Zone is 48 rooms/acre. This results in a maximum density of 404 rooms for the Mammoth Hillside site. However, as previously noted in 2004, 87 rooms of density were transferred from the Mammoth Hillside site to the South Hotel site, located in the PR Zone. This density transfer did not increase the overall density allowed in the PR Zone, thereby reducing the allowed density on the Mammoth Hillside site to 317 rooms ($404 - 87 = 317$). The covenant documenting this density transfer explicitly states that it does not impair the Mammoth Hillside site from increasing density on the site by any legal means.



The addendum increased density in the PR Zone of the NVSP by 87 rooms to restore the Mammoth Hillside site to its maximum allowable density of 404 rooms. This increased the overall allowed NVSP density by 2.6 percent or to 3,404 rooms ($3,317 + 87 = 3,404$).

- Lot Coverage Increase - The allowed lot coverage in the PR Zone is 75 percent, and the allowed lot coverage in the SL Zone is 60 percent. This results in a maximum lot coverage of approximately 195,171 square feet for the Mammoth Hillside site. However, in 2004, 14,881.9 square feet of lot coverage was transferred from the Mammoth Hillside site to the South Hotel site, located in the PR Zone. This lot coverage transfer did not increase the overall lot coverage allowed in the PR Zone, thereby reducing the allowed lot coverage on the Mammoth Hillside site to 180,289.1 square feet ($195,171 - 14,881.9 = 180,289.1$). The covenant documenting this lot coverage transfer explicitly states that it does not impair the Mammoth Hillside site from increasing lot coverage on the site by any legal means.

The addendum increased lot coverage in the PR Zone of the NVSP by 14,881.9 square feet to restore the Mammoth Hillside site to its maximum allowable lot coverage of approximately 195,171 square feet. This would increase the overall PR Zone lot coverage by 2.3 percent ($14,881.9 \text{ square feet} / 645,233 \text{ square feet} = 2.3 \text{ percent}$).

The following amendments to the entitlement conditions of approval were made:

- Town of Mammoth Lakes General Plan Amendment – A General Plan Amendment was required for the increase in density proposed as part of the Mammoth Hillside Addendum Project. The General Plan specifies the maximum overall number of rooms allowed in the NVSP. The General Plan Amendment increased the maximum overall number of rooms allowed in the NVSP from 3,317 to 3,404, which is an increase of 87 rooms. Additionally, the buildout table of the NVSP described in the Town of Mammoth Lakes General plan would be amended to include corrected calculations regarding the maximum allowable rooms and units within the NVSP.
- North Village Specific Plan Amendment – Pursuant to the Administrative Procedures in the NVSP and Zoning Code Chapter 17.116, Specific Plans, an amendment to the NVSP was required for the increase in density and lot coverage proposed.

Limelight Hotel TTM 22-002, UPA 22-001, DR 22-001 - An entitlement application was submitted for the development of a 185,754-square foot condominium hotel (Limelight Hotel) within the NVSP area. The Limelight Hotel would have a mix of hotel and residential uses consisting of 151 room hotels and 15 residential units. Additional amenities would include a town dining hall, meeting space, lobby, ski club lounge, and a fitness center. The Applicant has also conducted a feasibility study for drilling renewable direct use geothermal energy system on-site. This system requires drilling and operating two geothermal wells, one producer to bring hot fluid to the surface and one injector located within the Limelight Hotel property. The heat from the fluid passing through the system would be used for the building systems requiring heat, replacing gas or electric use. The wells would be drilled and operated under the geothermal permitting authority of California Department of Conservation Geologic Energy Management Division (CalGEM), reporting production and injection, who is the responsible agency for ensuring the lawful and safe drilling and operation of the wells. This renewable energy system could be used to provide heat, electricity, hot water, de-icing, and other beneficial uses within the Limelight property.

As currently proposed, the Town of Mammoth Lakes has determined that the Limelight Hotel buildout assumptions and project features are consistent with that considered as part of the



Mammoth Hillside Addendum, with the exception of the proposed geothermal well system, which is the subject of this addendum.

2.0 DESCRIPTION OF PROJECT MODIFICATIONS

2.1 ADDENDUM'S PURPOSE AND NEED

When an EIR has been certified or a negative declaration adopted for a project, no subsequent or supplemental environmental review documentation shall be required unless one or more of the following events occurs:

- 1) Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

When none of the above events has occurred, yet minor technical changes or additions to the previously adopted EIR or negative declaration are necessary, an addendum may be prepared (State CEQA Guidelines Section 15164[b]).

As discussed below, none of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of subsequent environmental review has occurred. This Addendum supports the conclusion that the proposed project modifications do not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, as discussed below, the proposed project modifications would not



result in any new or substantially increased significant environmental impacts, new mitigation measures, or new alternatives that would substantially reduce significant impacts. As a result, an addendum is an appropriate CEQA document for analysis and consideration of the proposed project modifications.

Circulation of an addendum for public review is not necessary (State CEQA Guidelines Section 15164, subdivision (c)); however, the addendum must be considered in conjunction with the adopted 1999 SPEIR (State Clearinghouse No. 99-092082) and 2017 Mammoth Hillside Addendum to the 1999 SPEIR by the decision-making body (State CEQA Guidelines Section 15164, subdivision (d)).

2.2 LOCATION OF PROJECT MODIFICATIONS

The proposed modifications would apply to the same approximately 6.9-acre project site identified in the NVSP. The project site is comprised of seven parcels located at the northwest corner of Canyon Boulevard and Lake Mary Road, in Mammoth Lakes, California.

2.3 COMPONENTS OF PROJECT MODIFICATIONS

The proposed modifications to the NVSP would include drilling and operating a geothermal well system on-site for the purpose of providing renewable heat energy solely for use within the property. It is acknowledged that the following subsections are consistent with the California Department of Conservation Geologic Energy Management's (CalGEM's) *CEQA Guidance for Operators Project Descriptions*, revised April 7, 2021.

Operator Name: Limelight Mammoth LLC

Environmental Settings

The NVSP area varies in topography, between 8,040 mean sea level (msl) and 8,070 msl. The project site is currently vacant and vegetated. The site is designated by the General Plan as a Specific Plan (NVSP) and zoned by the Municipal Code as NVSP. To the east of the site, across Canyon Boulevard, is lodging and condominiums (8050 Residence Club and Mammoth Fireside), as well as commercial uses (Mammoth Mountain Ski Area gondola building and retail and Mammoth Brewing Company), all zoned NVSP. To the south are townhomes and condominiums (Mammoth View Villas and the Canyon Ski and Racquet Club), zoned Residential Multi-Family 2. To the west, across Lakeview Boulevard, are condominiums (Mammoth Estates). To the north is the Westin Monache Resort (zoned NVSP).

Currently, the project site is vacant and vegetated. Existing vegetation includes the Jeffrey Pine and Lodgepole Pine. According to the 1991 PEIR, there are approximately five species of concern that could potentially occur on-site, including the hoary draba (*Draba cana*), bog sedge (*Kobresia* sp.), Mono Milk Vetch (*Astragalus monoensis*), Mono Lake lupine (*Lupinus duranii*), and Mono County lupine (*Lupinus sublanatus*). The existing Jeffrey Pine would provide suitable habitat for multiple special-status bird species, including pygmy nuthatch (*Sitta pygmaea*), brown creeper (*Certhia americana*), white-headed woodpecker (*Dryobates albolarvatus*), and Clarks' nutcracker (*Nucifraga columbiana*).



Existing Geology

Mammoth Valley sits in the larger Mammoth Basin watershed and straddles the southwestern boundary of the Long Valley Caldera, which sits at the head of the Owens Valley. The towns of Old Mammoth and Mammoth Lakes lie within the upper reaches of Mammoth Valley, at the eastern base of Mammoth Mountain. The valley is surrounded to the south, west, and north by mountains, topping 12,500 feet above msl at Bloody Mountain to the south, and dropping to about 6,900 feet above msl at the eastern end of the valley where it empties into the Owens Valley. The eastern half of the valley is downdropped into the Long Valley Caldera, while the western portion, the Upper Mammoth Valley, lies outside the caldera ring. Long Valley Caldera is a geologically active area with several active magmatic/volcanic centers (Mammoth Mountain, Inyo Craters, and the rhyolite domes north of Mammoth Lakes), which provide the heat sources for geothermal systems in the area, the largest being the Basalt Canyon/Casa Diablo geothermal system.

The mountains directly to the north and west of Mammoth Valley are composed of Quaternary rhyolite and dacite domes (erupted between 150 and 50 thousand years ago), while the mountains to the south are composed of Pre-Tertiary (older than 66 million years) igneous intrusive and metamorphic rocks. Mammoth Valley itself forms a central glacial trough, which shallows to the east and is filled with Quaternary age (≤ 767 thousand years ago) volcanic, glacial, and alluvial deposits. Few surface faults have been mapped through the valley, due to the young cover deposits of glacial and alluvial fill; however, the project site sits above the region interpreted to be the location of the caldera ring fractures, which are a series of nested normal faults that extend several kilometers in depth.

Geothermal System Structure

The main geothermal system in the area, which has been the focus of development efforts for decades, is the Basalt Canyon/Casa Diablo system, which feeds the Casa Diablo power plants to the east and exists in a larger hydrologic system that is fed from the mountains surrounding the Mammoth Basin and flows eastward, down Mammoth Valley and into the Owens Valley.

The source of the Basalt Canyon/Casa Diablo geothermal system is structurally controlled, and the upwelling geothermal fluids ($>390^{\circ}\text{F}$) ascend along the caldera ring fractures and range front faults under West Moat Coulee, directly to the north of Mammoth Domes. Upon ascending into the Early Rhyolite, the bulk of the geothermal fluids flow out to the east, following the prevailing eastward groundwater gradient along a stratigraphically controlled path through the Early Rhyolites down Basalt Canyon and 2.5 miles out through the Casa Diablo geothermal field where they are produced to generate electricity.

However, some smaller portion of the geothermal fluids appear to leak out to the southwest from the rhyolite dome to partially underlie the Town of Mammoth Lakes and form smaller peripheral geothermal reservoirs. Temperature profiles and hot water produced in nearby wells indicate the presence of geothermal reservoirs underlying the area directly east of the Limelight property (less than 1,000 feet from the center of the project site).

Existing Geothermal Reservoirs

The geothermal system which underlies the Town appears to consist of two reservoirs, as evidenced by temperature rollovers in nearby wells as well as hot water produced in the vicinity:



- A shallow geothermal reservoir of approximately 120-125°F from 400 to 800 feet below ground surface (bgs), which is also the reservoir that the Mammoth Community Water District wells produce from; and
- A deeper geothermal reservoir with maximum temperatures of approximate 170°F, at approximately 1,400 feet bgs. This reservoir appears to be within the Early Rhyolite rock units. The Early Rhyolite also appears to be the principal pathway for hydrothermal fluids flowing to Casa Diablo.

Existing Watershed Conditions

The Town is located within the Mammoth Groundwater Basin's sphere of influence. Locally, existing groundwater traverses through the project site and travels eastward toward and through the non-geothermal aquifer. This shallow aquifer responds rapidly to precipitation and houses a few wells for domestic water. A geothermal well(s) would drill through and seal off any interaction with groundwater aquifers, therefore not affecting such, to access the deeper geothermal reservoir.

Project Proposal

As discussed previously, the Limelight Hotel proposes a new hotel and residential condominium units within the NVSP area. The proposed Modified Project would install two geothermal wells, a production well and an injection well, at the Limelight Hotel project site to serve as a source of renewable energy to solely serve on-site development. The proposed geothermal system would be used to provide heat and electricity for the use of the Limelight Hotel development. The project would install two graded pads at the surface for initial well drilling operations (ranging in size, depending on the rig, from approximately 100 by 200 feet to as large as 200 by 250 feet). The two drilled geothermal wells would connect to the existing underground geothermal reservoir. The production well would extract geothermal fluids to the surface, while the injection well would pump cooled geothermal fluid back into the reservoir to maintain the reservoir pressure. The geothermal wells would have cemented casing through the shallow warm aquifer and any other shallow potable aquifers to eliminate the possibility of interaction with the aquifer that is used for municipal water. The project phases include site preparation, geothermal well drilling, geothermal well testing, and ongoing geothermal well operations, which are regulated by CalGEM, to maintain the geothermal heat system for the Limelight hotel facilities.

Construction Activities

Approximately two acres of the development site would be disturbed by the proposed geothermal wells. The two graded pads (up to approximately 200 feet by 250 feet) are within the disturbed area for the hotel. They would be constructed and then reclaimed or put to use within the hotel build out. The remaining wellheads and surface connections would become part of the hotel facilities. Each well would be drilled at different depths. Although the geothermal reservoir is expected to be encountered at an estimated depth of 1,400 feet bgs, the proposed geothermal wells are planned to a maximum depth of 2,000 feet to ensure encounter with the geothermal reservoirs and feed/injections zones. Final depth of each well would be determined based on drilling results. Each wellhead and the required surface equipment for operations would be sited in an area of 75 feet by 75 feet. The proposed injection well would pump cycled/geothermal water into the geothermal reservoir at a flow rate of 85 to 250 gallons per minute (gpm) to maintain temperatures within the reservoir between 140 to 175°F. In order to avoid well interference and



to sweep the largest possible volume of rock to extract the heat, the proposed geothermal wells would be located as far apart from each other as feasibly possible on the hotel site. Accordingly, the proposed interference well would be constructed on site where no building improvements would be constructed on or over the geothermal wells and where such geothermal wells may be easily accessed. More specifically, the proposed geocoordinates are:

- Well Number 1 approximate location: 37°38'52.6"N 118°59'05.8"W
- Well Number 2 approximate location: 37°38'54.8"N 118°59'08.1"W

The proposed construction activities for the geothermal system/wells would require planning/permitting, site preparation, drilling and rig testing of the first well, drilling and rig testing of the second well, and well testing. These activities would occur over a period of approximately 89 calendar days. The Planning and Permitting stage begin once well permits are submitted and is expected to occur for two weeks, and are anticipated to require the following State, regional, and local permits and approvals: CalGEM and Town of Mammoth Lakes (surface disturbance).

The site preparation would occur for a duration of four weeks to grade the drilling pads and road access. Once site preparation is complete, the drilling and rig test of the first well would commence and occur over a duration of 19 days. Rig testing and all excavation and drillings for the first geothermal well would occur during this stage. The drilling and rig test of the second well would occur over a duration of 15 days and would involve the same activities that occurred for the first well. Well testing would be the final stage of the proposed Modified Project and would occur over a duration of 38 days. The flow of both the production well and an injection well would be tested during this stage. Note, each well drilled for the project would be permitted as a geothermal well under CalGEM with a process to convert wells to an injection status based on the drilling and testing results and project needs. The drilling time and casing depths would be similar for both wells, with the same target formation.

Construction activities for the initial drilling and construction of the wells would require a drilling rig (mast approximately 100 feet in height) and drilling services including, mud logging (collection of drilling and geologic information), drilling fluids, cementing services for casings, solids control and containment for sumpleless drilling, site services (trash, water, restrooms, lights), drilling water and fuel delivery, and consumable materials (drilling mud, cement, casings, wellhead). Water-based drilling fluids would be utilized. Approximately 126,000 to 210,000 gallons of fresh water would be required per well and two 500-barrel tanks would be installed as storage on-site. Other construction-related equipment would include a trailer for a drilling supervisor to live on-site with office space, water storage bins for drilling water, and a laydown area for casings and equipment not in use. Drilling crews would live off-site with 12-hour shifts and five-man crews. Total personnel on-site during the drilling period would be approximately 10 workers per shift.

Drilling activities are anticipated to occur 24 hours per day, seven days a week until complete, which would be contained to the graded pads (approximately 200 feet by 250 feet). Drilling and completion of each well (24-hour operations) is anticipated to occur for a duration of 15 days for each well, with several rig move days between wells (daylight only) if the drilling is successful. After the well drilling is complete, rig-on testing would require an air compressor package and services and pressure/temperature downhole survey services. Drilling residues such as cuttings, fluids, and solid waste would be contained and disposed of according to California waste guidelines (tested and transported to appropriate waste facility). Transportation and delivery of waste would be limited to daylight hours.



During well testing, reinjection of fluids into the second well would occur for a period of 24 to 48 hours after both geothermal well tests are complete. In case the well is flowing during the 24- to 48-hour testing, alternative disposal such as the Town's stormwater system would be utilized if feasible. If this is required, the fluids are expected to be low total dissolved solids (TDS) and contain no organic material. It will be field chemistry tested and filtered prior to disposal. The volume of the fluid is expected to be between 7,000- and 14,400-gallons total.

Operational Activities

During operations, the geothermal wells would be incorporated into the hotel facilities. Connection points from the wells to the hotel would be dependent on the final layout of the hotel. However, the goal is to utilize underground connections. The wellheads would be at ground level or several feet above ground level and be connected by pipelines (expected less than six inches in diameter). The wellheads and pump controls are expected to be contained in an area of approximately 10 square feet. Periodic maintenance would be required through the life of the geothermal wells and would require a small drilling rig within a working area of approximately 100 feet by 150 feet. Maintenance activities may include downhole pump replacements approximately every five years, though geothermal wells are designed to last 30 years or longer in operation with regular maintenance.

Best Management Practices

The proposed Modified Project would be required to comply with existing State and local laws and regulations, including implementation of required best management practices (BMPs). The proposed drilling, operation, and permanent sealing and closure (plugged and abandonment) of geothermal wells are required to comply with CalGEM's *Statutes & Regulations*, dated January 2020, or as amended at the time of future permits. BMPs would include an adequate drilling fluid program, casing program, spill contingency plan, appropriate well identification signage, installation of well safety devices, keeping of well records, ongoing testing activities during construction and operations, and appropriate plugging and abandonment at closure. Further, as part of the Town of Mammoth Lakes Municipal Code (Municipal Code) Section 8.24.050(F)(10), geothermal drilling waste and cuttings shall be disposed of in a manner approved by the Lahontan Regional Water Quality Board. Additionally, during 24-hour construction activities, construction noise would be minimized with sound barriers to the extent feasible.

Local Agency Requirements

The Modified Project would be subject to local permits/approvals including but not limited to:

- Permits for the drilling, operation, and permanent sealing and closure at the end of the well useful life under State requirements and procedures (CalGEM);
- Well Permit (Mono County)
- Tentative Tract Map (Town of Mammoth Lakes);
- Use Permit (Town of Mammoth Lakes);
- Design Review (Town of Mammoth Lakes); and
- Construction of Well Permit (Mammoth Community Water District).¹

¹ The Applicant will consult with the Mammoth Community Water District (MCWD) to determine if a permit will be required. Should a permit be required, the Applicant will obtain a well permit from the MCWD and provide any information needed for the District to make the required findings for approval as specified in the MCWD Code Book.



3.0 ENVIRONMENTAL ASSESSMENT

As discussed in Section 1.2, *Previous Environmental Documents*, for the purposes of this analysis, the proposed project modifications are compared to the certified 1999 SPEIR development scenario and/or the approved Mammoth Hillside Addendum development scenario. Potential environmental impacts resulting from the proposed project modifications, as compared to the development scenario presented in the certified 1999 SPEIR and Mammoth Hillside Addendum, are presented below for each environmental topic area considered in the 1999 SPEIR. Additional environmental topic areas were analyzed under the proposed project modifications, including Energy, Hazards and Hazardous Materials, and Wildfire. Implementation of the proposed project would not require any new mitigation measures compared to those recommended in the 1999 SPEIR and the Mammoth Hillside Addendum. Mitigation measures recommended within this analysis are the same as those presented in the 1999 SPEIR and only include those applicable to the proposed project modifications.

3.1 LAND USE

The 1999 SPEIR analyzed potential changes in the existing physical land use patterns and demand, both within the area and throughout the commercial areas of the town, as well as development of a more intensive use than the previous zoning and land uses within the vicinity of the NVSP area. The 1999 SPEIR concluded that the implementation of Mitigation Measures recommended in the 1994 PEIR Addendum (Mitigation Measures 4.4-1(a)-4.4-1 (c), 4.4-2, 4.4-3) would reduce impacts within the vicinity to a less than significant level. The Mammoth Hillside Addendum is consistent with what was analyzed in the SPEIR in that the Mammoth Hillside project site is approximately 6.9 acres within the Specific Plan area and is zoned Specialty Lodging (SL) and Plaza Resort (PR). Under the Mammoth Hillside Addendum, the Mammoth Hillside project site was modified through two components: 1) 87 room density increase to the NVSP, and 2) 14,881.9-square foot lot coverage increase in the PR Zone of the NVSP. Implementation of the density and lot coverage increases would result in a 2.6 percent increase in overall density in the NVSP and a 2.3 percent lot coverage increase in the PR Zone of the NVSP. The amendment restored the density and lot coverage allowed on the Mammoth Hillside site under the current NVSP zoning, which was reduced after a density and lot coverage transfer to the South Hotel site in 2004. The Mammoth Hillside Addendum determined that this nominal increase would not increase impacts related to land use beyond what was analyzed in the 1999 SPEIR.

The proposed project modifications involve drilling a closed-looped geothermal energy well system at the Mammoth Hillside project site. The proposed geothermal energy well system would be consistent with General Plan Policy M.9.C, which supports development of geothermal and solar heating opportunities for snow removal. Further, the proposed project modifications would comply with Municipal Code Section 8.24.050(F)(10), pertaining to construction permit requirements for the purposes of minimizing water quality impacts during installation of wells. As such, the proposed project modifications would not result in any new significant land use impacts that were not analyzed in the 1999 SPEIR or the Mammoth Hillside Addendum.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.



3.2 POPULATION AND HOUSING

Potential impacts to population and housing were fully analyzed within the 1999 SPEIR. The 1999 SPEIR concluded that with implementation of relevant housing policies and programs, there would be no significant impacts related to employment, population, and housing. The proposed modifications analyzed in the Mammoth Hillside Addendum were also determined development would not increase population and housing impacts beyond what was analyzed in the 1999 SPEIR.

The proposed Modified Project would construct, operate, and maintain a geothermal well system that would provide electricity and power solely to the project site. The proposed geothermal well system would not result in an increase in population growth or the need for new housing in the Town of Mammoth Lakes. The proposed Modified Project would not lead to an increase in population growth in the Town beyond what was analyzed in the 1999 SPEIR and the Mammoth Hillside Addendum.

Mitigation Program

No mitigation measures are applicable.

3.3 AESTHETICS/LIGHT AND GLARE

The potential impacts to visual character, scenic vistas and resources, and light and glare were fully analyzed in the 1999 SPEIR. The 1999 SPEIR analyzed design features such as building material and color palette, architectural design, frontage, building height, bulk and mass, landscape, as well as shade and shadow and surrounding views. The 1999 SPEIR concluded that implementation of recommended Mitigation Measure 5.3-1a through 5.3-1f and 5.3-1j, 5.3-1k, and 5.3-1m, which mitigate impacts on visual character, Mitigation Measures 5.3-2a and b, which mitigate impacts on scenic vistas and resources, and Mitigation Measures 5.3-3a through 5.3-3d, which mitigate impacts on light and glare, would reduce impacts to a less than significant level.

The proposed Modified Project would construct two graded pads and a geothermal well system. Initial drilling and construction would require a drilling rig (mast approximately 100 feet high). The proposed well heads that would be part of the geothermal well-system would be located in an enclosed area within the Limelight Hotel development site, and would be screened from public view. Construction activities would require nighttime construction for the drilling of the wells, which would occur 24 hours per day, seven days a week for 15 consecutive days per well. Proposed project modifications would also be required to comply with 1999 SPEIR Mitigation Measure 5.3-1c through 5.3-1f and 5.3-1j, which mitigate impacts on visual character (including implementation of screening techniques).

Operational exterior lighting (for security purposes) would be constructed as part of the Modified Project. Additional lighting would be needed at night for the drilling mast and the graded pads. However, these lighting features would be consistent with future on-site lighting considered as part of the 1999 SPEIR and the Mammoth Hillside Addendum. The Modified Project would be required to comply with 1999 SPEIR Mitigation Measures 5.3-3a, 5.3-3b, and 5.3-3d, which require shielding/screening techniques to minimize light spillover. As such, the Modified Project would not result in any new or potentially adverse aesthetic/visual impacts not previously considered and addressed.



Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed Project Modifications. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

Applicable Mitigation Measures

1999 SPEIR

- 5.3-1c Contour grading shall be used to blend manufactured slopes into the natural terrain. Grading shall be minimized to preserve existing landform and vegetation to the greatest extent possible.
- 5.3-1d The landscape design for the site shall maximize the use of existing vegetation, and where new plants are introduced, they shall include, and/or blend with, plants native to the Mammoth Lakes environment. Landscape plans for the site shall be completed by a certified landscape architect.
- 5.3-1e To the maximum extent practical, native trees and landscaping shall be concentrated around all structures located on the project site.
- 5.3-1f Grading techniques shall be used which minimize the area of disturbance and shall incorporate such methods as decorative retaining walls rather than slopes to minimize the area of disturbance.
- 5.3-1j Staging locations shall be indicated on project Building Permit and Grading Plans and shall be subject to review by the Town of Mammoth Lakes Community Development Director in accordance with Municipal Code requirements.
- 5.3-3a The Design Guidelines shall require that all exterior lighting be designed and located so as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the degree feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses.
- 5.3-3b Lighting used for various components of the development plan be reviewed under North Village Specific Plan design guidelines which shall include review of light intensity levels, fixture height, fixture location, and design.
- 5.3-3d Vegetative buffers shall be used to reduce light intrusion on residential development and on forested areas located adjacent to the project site.

3.4 TRAFFIC AND CIRCULATION

The 1999 SPEIR determined that after implementation of recommended mitigation measures, the previously analyzed project would result in less than significant impacts. It should be noted that the NVSP and the 1999 SPEIR utilized auto delay, LOS, and similar measurements for vehicular



roadway capacity and traffic congestion as the basis for determining significant impacts. In September 2013, the Governor's Office of Planning and Research (OPR) signed Senate Bill (SB) 743 into law, starting a process that would eliminate the LOS metric and identify Vehicle Miles Traveled (VMT) as the most appropriate CEQA transportation metric, along with the elimination of auto delay and LOS for CEQA purposes. The justification for this paradigm shift is that auto delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions. For the purposes of this analysis, transportation impacts for the Modified Project would be analyzed under the VMT transportation metric.

Transportation Policy Consistency Analysis

The 1999 SPEIR summarized the regional and local transportation plans that affect the NVSP, including the *Regional Transportation Plan* (dated December 1992), the *Mammoth Lakes Trail System Plan* (dated May 1991), the *Transit Design Study* (dated June 1993), and the *Main Street Promenade and Transportation Forecasting Model/Multi-Modal Transportation Plan* and determined that each form of transportation supports the Town's overarching goal to concentrate efforts for non-vehicular transportation modes to facilitate increased person trips. The 1999 SPEIR concluded that the future buildout of the NVSP would result in adverse impacts to this goal of the Town. Mitigation Measure 5.4-6 would require future development to participate on a fair share basis in the development and operation of a community-wide winter transit system. Similarly, the proposed modifications analyzed in the Mammoth Hillside Addendum also determined similar impacts, and proposed Mitigation Measures from the 1999 SPEIR.

Goal M.8 and Policy M.8.1 of the Mobility Element of the General Plan both aim to create a linked year-round recreational and commuter pedestrian system by identifying and implementing pedestrian improvements that meet the Town's standards. Policy M.12.1 in the of the General Plan aims to expand and increase the reliability of transit service to meet community needs.

As a geothermal well system, the Modified Project would not generate additional pedestrians, bicyclists, or vehicles within the Limelight Hotel development site. The proposed geothermal wells would be located in an area of the Limelight Hotel development site that is secluded from the rest of the hotel, with restricted public access. These proposed modifications would not result in an increase in population or the development of new pedestrian, bicycle, or transit facilities. As such, these proposed modifications would not result in an increase in pedestrians, bicyclists, and transit rides that would be beyond what was analyzed in the 1999 SPEIR. Accordingly, the Modified Project would not conflict with the Town's goal of promoting non-vehicular transportation modes, nor would it conflict with pedestrian, bicycle, and transit goals and policies that are outlined in the General Plan. Less than significant impacts would result in this regard.

Design Safety Hazard Analysis

The 1999 SPEIR analyzed the NVSP regarding design safety hazards, and determined that, overall, the buildout of the NVSP would not substantially increase hazards to vehicles, pedestrians, and bicyclists associated with proposed design features (i.e., roundabout) or increased pedestrian activity.

The proposed Modified Project would be located in an enclosed area within the Limelight Hotel development site. The proposed Modified Project would not introduce new roadway, bicycle, or pedestrian facilities, and would not alter the existing and planned roadway, pedestrian, or bicycle facilities that were analyzed in the 1999 SPEIR. Lastly, the proposed Modified Project would not introduce new designs or modifications to any of these transit facilities. Therefore, the Modified



Project would not introduce new transportation-related safety hazards that would be beyond what was analyzed in the 1999 SPEIR. Less than significant impacts would occur in this regard.

Vehicle Miles Traveled (VMT) Screening Analysis

The 1999 SPEIR established 106,600 VMT as the threshold for projects within the Town. The 1999 SPEIR also determined that the buildout of the 1999 NVSP would result in an additional 2,800 VMT, resulting in a total of 109,400.

As discussed, the Modified Project would not result in unplanned population growth in the Town beyond what was analyzed in previous environmental documents. While the geothermal well system would require routine maintenance that would result in additional vehicle trips, the increase would be nominal. Therefore, the Modified Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Less than significant impacts would result in this regard.

Conclusion

The proposed Modified Project would not result in any increase in development intensity than that considered for full buildout of the NVSP, nor any changes to the transit system. The proposed modifications would not result in any conflicts with existing plans, ordinances, or policies addressing transit, roadway, bicycle and pedestrian facilities. Lastly, the Modified Project would not result in a substantial increase in VMT. Therefore, less than significant impacts related to transportation would occur in this regard.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.

3.5 AIR QUALITY

Air Quality

The 1999 SPEIR determined that short-term air quality impacts associated with particulate emissions (fugitive dust) from construction activities would be mitigated to a less than significant level with implementation of standard dust control measures required by the Great Basin Unified Air Pollution Control District (Great Basin APCD). The 1999 SPEIR added that implementation of recommended Mitigation Measures 5.5-1a and 5.5-1b would further reduce short-term air quality impacts in this regard. In regard to long-term operational impacts, the 1999 SPEIR concluded that long-term air quality impacts from localized 8-hour carbon monoxide (CO) emissions would be reduced to a less significant impacts with implementation of Mitigation Measures 5.5-3a and 5.5-3b. The 1999 SPEIR concluded that implementation and buildout of the NVSP would exceed State and federal particulate matter less than 10 microns in diameter (PM₁₀) thresholds thereby creating a significant and unavoidable air quality impact, even with implementation of Mitigation Measures 5.5-2a through 5.5-2c. On a cumulative level, the project would contribute to a current violation of the State and federal PM₁₀ standards. The proposed modifications analyzed in the Mammoth Hillside Addendum were determined to result in no new impacts that were not analyzed in the 1999 SPEIR.

The proposed Modified Project would involve the installation of a geothermal energy well system. Construction activities would require site preparation, excavation, and drilling, which could result



in temporary construction-related air quality impacts from air pollutants emissions, some of which are criteria air pollutants. Typical emissions from well construction activities include CO, carbon dioxide (CO₂), total organic compounds (as methane) (CH₄), nitrogen oxides (NO_x), PM₁₀, and sulfur oxides (SO_x). However, it is acknowledged that the anticipated project construction activities for the geothermal system would be temporary and small in magnitude compared to the future buildout of the Limelight Hotel and NVSP. As discussed above, the Modified Project would also result require additional construction vehicles to haul and dispose excavated soils. However, these vehicle trips would be nominal compared to those required to buildout the Limelight Hotel and NVSP and thus, would not result in a significant increase in emissions compared to what was previously analyzed in the 1999 SPEIR. Nevertheless, Mitigation Measures 5.5-1a and 5.5-1b would be applicable to the Modified Project. As part of Mitigation Measure 5.5-1a, the project would be required to implement measures during construction activities to reduce fugitive dust emissions and ensure compliance with applicable Town and Great Basin APCD requirements. Implementation of Mitigation Measure 5.5-1b would ensure potential spot violations of CO standards and potential odor impacts are minimized during construction. Additionally, as a BMP, the project Applicant would prepare and submit to CalGEM an Equipment Emissions Mitigation Plan (EEMP) for managing diesel exhaust. The EEMP would identify actions to reduce diesel particulate, CO, hydrocarbons, and NO_x associated with construction activities. Additionally, the EEMP would require that all drilling related engines are appropriately tuned, do not idle for more than five minutes, and include control devices to reduce air emissions (i.e., particulate traps and oxidation catalysts). Thus, the implementation of Mitigation Measures 5.5-1a and 5.5-1b and applicable BMPs would reduce construction impacts to less than significant levels.

Operations could result in long-term operational air quality impacts from mobile sources. As a geothermal well system, routine maintenance would be infrequent and would not significantly increase anticipated mobile sources emissions beyond what was analyzed in the 1999 SPEIR, nor would it result in significant cumulative air quality impacts. As discussed in Section 3.4, Transportation, the proposed project modifications involve the construction and operation of a geothermal energy well system and would not result in substantial changes to generated VMT as quantified and analyzed in the 1999 SPEIR. As such, long-term operational air quality impacts from mobile sources would be less than significant.

Implementation of the Modified Project could result in a minor increase in stationary source emissions. A typical stationary pollutant emission that is associated with geothermal power production include hydrogen sulfide (H₂S).² Nonetheless, H₂S emissions are considered generally well-maintained for geothermal energy projects through on-site abatement. Additionally, the proposed geothermal wells would be secluded and screened from the public and implementation of Mitigation Measure 5.2-2a would require adherence to the applicable regulations pertaining to stationary criteria pollutants.

Further, since the certification of the 1999 SPEIR, the *Air Quality Management Plan for the Town of Mammoth Lakes* (1990 AQMP) has since been updated to the *2014 Update to the Air Quality Maintenance Plan and Redesignation Request for the Town of Mammoth Lakes* (2014 AQMP) prepared by the Great Basin APCD (dated May 2014). The 2014 AQMP was approved by the EPA and Mammoth Lakes was redesignated a maintenance area in attainment of the PM₁₀ National Standard on November 2, 2015. As such, the Modified Project would not result in a substantial increase in criteria pollutants, including hydrogen sulfide and PM₁₀, that would exceed

² United States Department of the Interior Bureau of Land Management, *Final Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States*, October 2008.



Great Basin APCD significance thresholds for criteria pollutant emissions during project operations.

With implementation of identified Mitigation Measures 5.5-1a and 5.5-1b, which mitigate short-term air quality impacts, and Mitigation Measure 5.2-2a, which would mitigate long-term PM₁₀ air quality impacts, the proposed Modified Project would not result in any new substantial adverse air quality impacts not previously considered and addressed in the 1999 SPEIR.

Greenhouse Gas Emissions

Although the 1999 SPEIR did not include a greenhouse gas (GHG) analysis, a supplemental environmental analysis of GHG impacts cannot be required absent new information on that front.³ Information on the effect of GHG emissions on climate was known long before the Town certified the 1999 SPEIR. Thus, the effect of GHG emissions on climate could have been raised when the Town considered the previous environmental documentation including the 1999 SPEIR. A challenge to an EIR must be brought within 30 days of the lead agency's notice of approval and no challenges were brought forward regarding the EIR and GHG emissions. (Pub. Resources Code, § 21167(b).) Under Public Resources Code section 21166(c), an agency may not require a supplemental environmental review unless new information, which was not known and could not have been known at the time the EIR was approved, becomes available. After a project has been subjected to environmental review, the statutory presumption flips in favor of the project proponent and against further review.⁴ "[S]ection 21166 comes into play precisely because in-depth review has already occurred [and] the time for challenging the sufficiency of the original EIR has long since expired ..." (*Id.*, 1050.) There is no competent evidence of new information of severe impact, and thus the Town may rely on an addendum. Accordingly, the Town finds that GHG impacts and climate change are not "new information" under Public Resources Code Section 21166.

Given the magnitude of the construction and operation of the proposed geothermal wells (as compared to full buildout of the Limelight Hotel and NVSP), GHG emissions associated with development of the Modified Project would be minimal. Additionally, as a renewable energy project, the proposed geothermal wells would result in a beneficial impact in contributing to State-mandated GHG reduction targets. As such, the proposed Modified Project would not result in any new substantial adverse GHG impacts not previously considered and addressed in the 1999 SPEIR.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

³ *Citizens for Responsible Equitable Environmental Development (CREED) v. City of San Diego*, (2011) 196 Cal.App.4th 515, 531.

⁴ *Moss v. County of Humboldt* (2008) 162 Cal.App.4th 1041, 1049-1050.



Applicable Mitigation Measures

1999 SPEIR

- 5.5-1a In order to reduce fugitive dust emissions, each development project shall obtain permits, as needed, from the Town and the State APCD and shall implement measures during grading and/or construction of the individual development sites to ensure compliance with permit conditions and applicable Town and APCD requirements.
- a) The individual development projects shall comply with State, APCD, and Town, ~~and Uniform Building Code~~ dust control regulations, so as to prevent the soil from being eroded by wind, creating dust, or blowing onto a public road or roads or other public or private property.
 - b) Adequate watering techniques shall be employed on a daily basis to partially mitigate the impact of construction-generated dust particulates.
 - c) Clean-up on construction-related dirt on approach routes to individual development sites/improvements shall be ensured by the application of water and/or chemical dust retardants that solidify loose soils. These measures shall be implemented for construction vehicle access, as directed by the Town Engineer. Measures shall also include covering, watering or otherwise stabilizing all inactive soil piles (left more than 10 days) and inactive graded areas (left more than 10 days).
 - d) Any vegetative ground cover to be utilized on the individual development sites/improvements shall be planted as soon as possible to reduce the amount of open space subject to wind erosion. Irrigation shall be installed as soon as possible to maintain the ground cover.
 - e) All trucks hauling dirt, soil or other loose dirt material shall be covered.
- 5.5-1b To reduce the potential of spot violations of the CO standards and odors from construction equipment exhaust, unnecessary idling of construction equipment shall be avoided.

3.6 NOISE

The 1999 SPEIR determined that buildout of the NVSP would generate noise from construction activities (i.e., truck hauling, excavation, grading) that may exceed the acceptable levels of noise exposure for the land uses surrounding the NVSP area, specifically the surrounding sensitive land uses. Additionally, operational activities (mobile source and stationary source) associated with buildout of the NVSP were determined to generate localized noise that could potentially exceed the acceptable levels of noise exposure for the land uses surrounding the NVSP area. As such, the 1999 SPEIR determined that upon implementation of Mitigation Measures 5.6-1a through 5.6-1c, development of the NVSP would not result in significant noise impacts during project construction. The 1999 SPEIR also determined that upon implementation of Mitigation Measures 5.6-2a through 5.6-3e, development of the NVSP would not result in significant noise impacts during operations. The proposed modifications analyzed in the Mammoth Hillside Addendum were determined to result in no new impacts that were not previously analyzed in the 1999 SPEIR.

The Modified Project would involve the construction of a geothermal well system. The proposed construction activities for the Modified Project would require planning/permitting, site preparation, drilling and rig testing of the first well, drilling and rig testing of the second well, and well testing.



Initial drilling and construction of the wells would require a drilling rig (mast approximately 100 feet high), and drilling services including, mud logging (collection of drilling and geologic information), drilling fluids, cementing services for casings, solids control and containment for sumpless drilling, site services (trash, water, restrooms, lights), drilling water and fuel delivery, consumable materials include drilling mud, cement, casings, wellhead. Drilling and completion of each well (24-hour operations) is anticipated to be 15 days each, with several rig move days between wells (daylight only). At the end of drilling the well, rig-on testing would require an air compressor package and services and pressure/temperature downhole survey company. Blowout protection equipment would not be required for this well, based on the predicted temperature.

The Modified Project would be required to comply with Mitigation Measure 5.6-1a, which requires adherence to the Town's construction hour limits with the exception of the drilling operations. The construction hour limits (7:00 a.m. and 10:00 p.m. from Monday through Saturday) have been modified below to be consistent with Town's current construction hour requirements, as outlined in Chapter 8.16.090, *Noise Prohibited Acts*, of the Municipal Code. Mitigation Measures 5.6-1b and 5.6-1c would also be applicable for the Modified Project. Mitigation Measure 5.6-1b would require all construction equipment used on-site to be muffled. Mitigation Measure 5.6-1c would require the construction contractor to provide temporary sound barriers around the drilling rig. The project would also be required to comply with CalGEM requirements, such as ensuring that all temporary sound barriers are at least a minimum height of 16 feet. Upon implementation of Mitigation Measures 5.6-1a through 5.6-1c and applicable noise reduction BMPs, the Modified Project would not result in any new or potentially adverse construction noise impacts not previously considered and addressed in the 1999 SPEIR.

In operation, the geothermal wells are incorporated into the hotel facilities and noise levels would be contained within the enclosure. Operational activities associated with the proposed Modified Project would be required to comply with Chapter 8.16.070, *Exterior Noise Limits*, of the Municipal Code, which limits noise levels to 55 dBA between 7:00 a.m. and 10:00 p.m. and 50 dBA between 10:00 p.m. and 7:00 a.m. for the multi-family residential properties adjacent to the site to the east, south, and west classified as "Suburban Multiple Dwelling Residential" per the Municipal Code.

As stated in Section 3.4, *Transportation*, the number of vehicle trips or VMT as a result of the Modified Project implementation would not be substantial or greater than what was previously analyzed in the Mammoth Hillside Addendum or the 1999 SPEIR. Thus, the Modified Project would result in minimal to no increase in noise levels from mobile sources. The Modified Project would not result in any new or potentially adverse stationary source noise impacts not previously considered and addressed in the 1999 SPEIR.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.



Applicable Mitigation Measures

1999 SPEIR

- 5.6-1a Pursuant to Chapter 8.16.090.B.6 of the Town's Noise Ordinance Municipal Code, construction activities shall be limited to the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday and prohibited on Sunday or holidays, or as otherwise permitted by Chapter 8.16.090 with the exception of the well drilling activities as approved by the Town Public Works Department.
- 5.6-1b Construction equipment shall be muffled or controlled, if required, to meet Chapter 8.16 requirements for maximum noise generated by construction equipment. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.
- 5.6-1c The construction contractor shall provide temporary sound barriers around pile driving and well drilling sites to the satisfaction of the Town Engineer ~~should such activities take place in areas within 400 feet of existing residential units~~, if required to meet Chapter 8.16 requirements.

3.7 GEOLOGY, SOILS, AND SEISMICITY

The 1999 SPEIR concluded that impacts regarding geology, soils, and seismicity would be less than significant with implementation of recommended mitigation measures. A preliminary geotechnical report was prepared based on conceptual plans by Sierra Geotechnical Services, Inc. in March 2004. The report indicated that project engineering is feasible; however, final grading and foundation plans should be reviewed to determine whether the conclusions of the report warrant reconsideration.

Seismic Hazards

According to the 1999 SPEIR while the project site is not located within a designated Alquist-Priolo Fault Zone, the project site is located within an approximate 10-mile distance from the Mono Lake, June Lake, and Hilton Creek fault zones, as well as a 2.5-mile distance from the South Boundary fault zone. Each of these historically active fault zones are Alquist-Priolo Fault Zones. Nevertheless, the project site is located within a highly seismically active region, and strong seismic ground shaking is likely to occur on-site. Implementation of Mitigation Measure 5.7-6 would require the completion of a geotechnical study, and would require recommendations to be included in the project design.

The Modified Project would include the drilling and installation of a new on-site closed-loop geothermal well system that would serve as a source of power solely for the property. The 1999 SPEIR determined that the risk of surface rupture, liquefaction, and landslides occurring on-site would be low. However, the project site is susceptible to ground shaking. The Modified Project must comply with 1999 SPEIR Mitigation Measure 5.7-6, which requires completion of a geotechnical investigation and implementation of any recommendations in the final design. All structures must be designed and built to at least the standards of the current Building Code Seismic Zone 4. With the implementation of 1999 SPEIR Mitigation Measure 5.7-6, impacts related to seismic hazards would be reduced to less than significant levels.

Unstable/Expansive Soils



Regarding soil hazards at the project site, the 1999 SPEIR determined that slopes within the NVSP area are generally less than five percent and therefore severe natural slope instabilities are absent. However, on-site collapsible/loose sandy soils could potentially affect the structural integrity of development in the NVSP area. Nevertheless, implementation of recommended mitigation measures, which include removal and recompaction of collapsible/loose sandy soil, would reduce impacts in this regard to less than significant levels.

The proposed Modified Project would also be subject to 1999 SPEIR Mitigation Measure 5.7-6, which requires completion of a geotechnical investigation and implementation of any recommendations in the final design. With compliance with the 1999 SPEIR Mitigation Measure 5.7-6, the project would be required to comply with any recommendations included for the purpose of soil stability. Thus, the proposed Modified Project would not increase impacts beyond those anticipated in the 1999 SPEIR.

Soil Erosion

According to the 1999 SPEIR, existing slopes on-site are very dense and manufactured. However due to natural process and human activities (i.e., excavation and drilling) impacts, soil could result into slope failure, and are therefore considered unstable. This soil instability would make the project site more prone to soil erosion. Additionally, these manufactured slopes would increase the likelihood for a landslide hazard. The 1999 SPEIR determined that with incorporation of an Erosion and Sediment Control Plan (Mitigation Measure 5.7-7), future development would employ erosion/sediment control measures, particularly during construction activities.

The Modified Project would include soil disturbing activities similar in character to the Mammoth Hillside Project. The Modified Project would be required to comply with Mitigation Measures 5.7-2a through 5.7-2c (which mitigate impacts on slopes and stability), Mitigation Measure 5.7-4 (which mitigates impacts related to erosion hazards), and Mitigation Measure 5.7-7 (which requires erosion/sediment control measures such as mulch, silt fencing, waddles, hay bales, and other erosion control devices). Thus, the Modified Project would not increase impacts beyond those anticipated in the 1999 SPEIR.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

Applicable Mitigation Measures

1999 SPEIR

- 5.7-1 Prior to issuance of grading or building permits, geotechnical studies shall be completed and their recommendations shall be incorporated in the project design, as stipulated in the Town's Safety Policy #26.
- 5.7-2a Soils and foundation analyses shall be approved by Town staff prior to final project design approval, as stipulated in the Town's Safety Policy #18. All measures required by the Town shall be incorporated into final grading and building plans.



- 5.7-2b The project ~~applicant~~ operator shall provide grading plans and receive approval from the Town Engineer. Said plans shall also show that new slopes within the project area are designed pursuant to slope requirements set forth within the Specific Plan and the standards of the Town's Municipal Code.
- 5.7-2c All work shall be overseen by a licensed Civil Engineer (CE), Certified Engineering Geologist (CEG), or similar appropriately qualified professional, who shall report to the Town Engineer in order to ensure the standards of the applicable Codes are met.
- 5.7-4 A comprehensive Erosion and Sediment Transport Control Plan shall be prepared by the project ~~applicant~~ operator and approved by the Town Engineer prior to the issuance of any grading or building permits. The Plan shall be included in the project design, as stipulated in the Town's Safety Policy #18. The Plan shall also meet the requirements of the Regional Water Quality Control Board and the Town Municipal Code.
- 5.7-6 The project ~~applicant~~ operator shall complete the geotechnical studies and incorporate their recommendations in the project design, as stipulated in the Town's Safety Policy #26. ~~All structures shall be designed and built to at least the standards of UBC Seismic Zone 4.~~
- 5.7-7 ~~Each~~ The project operator shall cooperate with the Town in designing and disseminating information to assist citizens and visitors in responding to emergency situations that are likely to arise (Safety Policy #31). All structures shall be designed and built to at least the standards of ~~UBC~~ the Current Building Code Seismic Zone 4.

3.8 HYDROLOGY AND DRAINAGE

The 1999 SPEIR concluded that impacts regarding hydrology and drainage would be less than significant with implementation of recommended mitigation measures. A preliminary drainage study was prepared by CFA, Inc., in November 2005 for the Mammoth Hillside Project. According to the drainage study, the drainage system would utilize drop inlets, swales, and grading to direct flows from the proposed structures. Erosion control and storm water treatment measures would be placed in areas of possible erosion.

The proposed Modified Project would not have the potential to result in substantial changes to drainage and runoff on- or off-site, compared to that considered as part of the Mammoth Hillside Project. The proposed Modified Project would be required to comply with Mitigation measures 5.8-2b and 5.8-3 pertaining to water quality best management practices (BMPs). As such, impacts pertaining to drainage and runoff would be less than significant.

Proposed drilling activities for installation of the wells could impact water quality during construction. However, the proposed Modified Project would be subject to the Municipal Code Section 8.24.050(F)(10). As such, the proposed Modified Project would be subject to construction permit requirements, including proper dispose all drilling waste and cuttings in a manner approved by the Lahontan Regional Water Quality Board. As such, impacts in this regard would be less than significant.



Groundwater Supplies

The 1999 SPEIR determined that, although the buildout of the NVSP would result in a decrease in the recharge area of the Mammoth Groundwater Basin, the buildout would not deplete groundwater resources. The proposed Modified Project would involve a closed-looped system in that cool freshwater would be injected back into the geothermal reservoir after extraction, via the proposed injection well. As such, the proposed geothermal well system would be balanced such that the geothermal reservoir would not be depleted. Geothermal is considered a renewable energy source, especially when maintained in this manner. Furthermore, the geothermal wells would not impact the groundwater. The proposed Modified Project geothermal system wells would produce fluids from 1,400 feet or greater and be sealed off from the upper aquifer. The geothermal well system is maintained through production from and offset by reinjection into the geothermal reservoir (not the groundwater supplies), which maintains a balance to the reservoir pressure.

The upper aquifer is the aquifer referenced in the *Groundwater Management Plan for the Mammoth Basin Watershed* (dated July 2005), and the proposed Modified Project does not utilize or impact such groundwater supplies. Therefore, the Modified Project would not conflict with such groundwater management plan and any potential impacts pertaining to groundwater supplies would be less than significant.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

Applicable Mitigation Measures

- 5.8-1b A more complete hydrology analysis for design purposes shall be required to be completed to estimate the amounts of runoff which will be required to be retained on-site for each development. The analysis shall be approved prior to issuance of a grading permit.
- 5.8-1c The following water conservation procedures shall be incorporated into project elements where feasible:
- Landscape with low water-using plants;
 - Install efficient irrigation systems that minimize runoff and evaporation and maximize the water that will reach the plant roots, such as drip irrigation, soil moisture sensors, and automatic irrigation systems; and
 - Use pervious paving material whenever feasible.
- 5.8-2a An Erosion and Sediment Control Plan shall be prepared by the project proponents of individual development projects prior to issuance of grading permits. The Plan shall be reviewed and approved by the Town of Mammoth Lakes and the Lahontan Regional Water Quality Control Board and be in accordance with the erosion control guidelines as contained in the *Mammoth Lakes SDMP* and be in compliance with the Water Quality Control Plan (for the Lahontan Region [Basin Plan]). General grading

activities, including those related to demolition and construction, would be regulated by the ~~Uniform~~ Current Building Code and Town of Mammoth Lakes Grading Ordinance. The required Erosion and Sediment Control Plan shall outline methods that will be implemented to control erosion and sediment transport from graded or cleared portions of the individual redevelopment/ improvement sites.

5.8-2d The Report of Waste Discharge shall contain a description of, and time schedule for implementation, for both the interim erosion control measures to be applied during project construction, and short- and long-term erosion control measures to be employed after the construction phase of the project. The descriptions shall include appropriate engineering drawings, criteria, and design calculations. The report guidelines are as follows:

- Drainage collection, retention, and infiltration facilities shall be constructed and maintained to prevent transport of the runoff from a 20-year, 1-hour design storm from the project site. A 20-year, 1-hour design storm for the Mammoth Lakes area is equal to 1.0 inch (2.5 cm) of rainfall in 1 hour.
- Surplus or waste materials shall not be placed in drainage ways or within the 100-year flood plain of surface waters.
- All loose piles of soil, silt, clay, sand, debris, or earthen materials shall be protected in a reasonable manner to prevent any discharge to waters of the State.
- Dewatering shall be done in a manner so as to prevent the discharge of earthen materials from the site.
- All disturbed areas shall be stabilized by appropriate soil stabilization measures by October 15 of each year.
- All work performed between October 15th and May 1st of each year shall be conducted in such a manner that the project can be winterized within 48 hours.
- Where possible, existing drainage patterns shall not be significantly modified.
- After completion of a construction project, all surplus or waste earthen material shall be removed from the site and deposited at a legal point of disposal.
- Drainage swales disturbed by construction activities shall be stabilized by the addition of crushed rock or riprap, as necessary, or other appropriate stabilization methods.
- All nonconstruction areas shall be protected by fencing or other means to prevent unnecessary disturbances.
- During construction, temporary erosion control facilities (e.g., impermeable dikes, filter fences, hay bales, etc.) shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff.



- Revegetated areas shall be regularly and continually maintained in order to assure adequate growth and root development. Physical erosion control facilities shall be placed on a routine maintenance and inspection program to provide continued erosion control integrity.
- Where construction activities involve the crossing and/or alteration of a stream channel, such activities shall be timed to occur during the period in which streamflow is expected to be lowest for the year.

3.9 BIOLOGICAL RESOURCES

The 1999 SPEIR determined that after implementation of recommended mitigation measures, development of the Approved TTM project would result in less than significant impacts. Potential impacts to species of concern, sensitive natural communities, wildlife corridors, and cumulative conditions were analyzed in the 1999 SPEIR. Mature trees removal and replacement was also addressed where tree removal is required to accommodate structures, access, and street frontage improvements.

The proposed Modified Project would not increase impacts beyond those anticipated in the 1999 SPEIR. Mitigation Measures 5.9-2a through 5.9-2j would still be applicable and would mitigate impacts relating to sensitive natural communities. With the implementation of these mitigation measures, as well as compliance with the Town's current regulations related to biological resources, potential impacts in this regard would not increase, compared to that analyzed in the Mammoth Hillside Addendum and the 1999 SPEIR.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

Applicable Mitigation Measures

1999 SPEIR

- 5.9-2a The project shall preserve existing native vegetation to the maximum extent feasible. Landscaping shall emphasize the use of native plants indigenous to the Jeffrey Pine-Fir Forest plant community. Whenever possible, native plants used on-site shall be selected for their replacement habitat value. Site designs shall be subject to the Design Review procedure of the Town.
- 5.9-2b Landscape materials shall be used that allow for the protection and preservation of existing trees. Native plant species, preferably from seed or cuttings from local plants, shall be used where possible. The Landscape Plan shall be approved by the Planning Director prior to issuance of any construction permits.
- 5.9-2c Irrigation, fertilization, and other landscape management practices shall be designed to minimize effects on existing trees and other vegetation.
- 5.9-2d To the extent possible, native vegetation shall be retained and protected during construction. A Revegetation Plan, prepared by a qualified Landscape Architect and



- approved by the Town of Mammoth Lakes, shall be completed prior to the commencement of the project which will describe in detail the species of trees and shrubs which will be used, where they will be planted, and in what numbers, and the methods of planting and maintenance which will ensure successful growth. It shall include a monitoring program to follow the progress of new plantings and ensure replacement of unsuccessful plants. Landscaping with native species of trees and shrubs shall be undertaken to enhance wildlife use of cleared areas.
- 5.9-2e Under AB3180, once mitigation plans designed to off-set habitat losses are approved and the specific areas where they will be located are identified, the proponent must provide a program to monitor their progress for a period of time (usually three to five years) deemed sufficient by the Planning Director to assure their successful development. Adequate security shall be deposited with the Town to ensure successful implementation of this measure.
- 5.9-2f All construction activities, including movement and storage of vehicles and the storage of building and other materials, shall be confined to areas slated for development. Care shall be taken during construction to avoid damage to vegetation and habitats not directly involved in project construction. Any vegetation inadvertently damaged outside of the area slated for development shall be replaced on a one-to-one basis on- or off-site. Off-site replacement shall require the approval of the Town Planning Director.
- 5.9-2g To prevent erosion and siltation into intermittent creeks, areas cleared of vegetation, fill or other materials shall be stabilized after clearing and grading. Hay bales, silt screens or similar devices shall be used to prevent siltation. To further protect the drainage system and prevent erosion, all grading and construction shall be completed during the summer months, or after October 15 of each year be in a condition to be stabilized within 48 hours should inclement weather threaten.
- 5.9-2h A Forest Condition Survey shall be conducted by a professional forester and approved by the Town of Mammoth Lakes, prior to the commencement of each individual development project. All trees greater than 12-inches DBH (Diameter breast height (54 inches above ground)) and significant stands on each project site shall be mapped prior to issuance of grading permits or clearing. A registered forester or arborist shall then determine the age and condition of these trees and whether they should be retained or removed based upon health and visual significance of the trees, except for removal required by approved improvements. Once this determination is made, those trees shall be retained and integrated into the design of each project. A program of specific protection measures shall be prepared by the developer and approved by the Town prior to issuance of any construction permits (e.g., construction fencing, grading controls, grading design, etc.). Any trees removed unavoidably by each final project approval shall be in accordance with Town policies. Off-site replacement shall require approval by the Town's Planning Director.
- 5.9-2i Slash generated from construction or thinning operations shall be hauled from the site concurrently with the operation to prevent a breeding site for IPS (bark beetle). Logs shall be removed from the site as soon as possible.
- 5.9-2j Construction and site development, such as grading ~~and trenching~~, shall be prohibited within the dripline of retained trees. Equipment shall not be stored or driven under



trees. Grading shall not cover the ground surface within the dripline of existing trees. Grading limits shall be clearly defined and protected.

3.10 PUBLIC SERVICES/UTILITIES

The 1999 SPEIR analyzed potential impacts to public services including fire, police, schools, parks, and other public facilities as well as potential impacts to utilities including wastewater, stormwater drainage facilities, water supply, and solid waste. The 1999 SPEIR concluded that development of the Mammoth Hillside Project would create increased demand on utilities and service systems serving the area; however, impacts would be less than significant with incorporation of Mitigation Measures 5.10 1a through 5.10-1c, 5.10-3, 5.10-4a, 5.10-7, 5.10-8, and 5.10-9.

As discussed above, the Modified Project would not result in an increase in population. As a result, the Modified Project is not anticipated to result in an increase in demand for public services. As a geothermal well system, the propose Modified Project is not anticipated to result in an increase in the need for water or stormwater infrastructure or the generation of wastewater, compared to that analyzed in the 1999 SPEIR. Further, the proposed Modified Project would result in a reduction in the need for energy services, compared to that analyzed in the 1999 SPEIR.

As a geothermal well system, the project would not impact existing wastewater, stormwater drainage facilities, and electric/telecommunication facilities compared to that analyzed in the 1999 SPEIR. Freshwater would be extracted from the deeper geothermal reservoir, which is not connected to the aquifer used by the Mammoth Community Water District (MCWD). As such, the proposed Modified Project would result in a reduction in utility services and supply, compared to that analyzed in the 1999 SPEIR.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.

3.11 CULTURAL RESOURCES

The 1999 SPEIR analyzed potential impacts to historical, archaeological, and paleontological resources, as well as the disturbance of human remains. The 1999 SPEIR determined that future development may disturb the cultural and archaeological resources as well as any human remains. Specifically, ground-disturbing activities and an increase in population would result in direct and indirect impacts, respectively. The 1999 SPEIR concluded that, impacts regarding cultural resources would be less than significant with implementation of Mitigation Measures 5.11-1a through 5.11-1e and 5.11-2. Similarly, the proposed modifications analyzed in the Mammoth Hillside Addendum were also determined to result in similar impacts.

It should be noted that the 1999 SPEIR did not analyze impacts to tribal cultural resources, as it was not required in the CEQA Guidelines at the time the EIR was prepared. It should be noted that the Town initiated the tribal consultant process for the purposes of SB 18 for the Mammoth Hillside Project January 17, 2017. Tribes listed on the California Tribal Consultation List prepared by Native American Heritage Commission (NAHC) for the Town were notified for the purposes of SB 18. As part of this process, each of the listed tribes were provided notification by the Town and the opportunity to consult with the Town regarding the Mammoth Hillside Project. The Walker



River Reservation and Bridgeport Indian Colony have expressed no interest in consultation for the project. The Bishop Tribal Council requested a current Cultural Resources Report for the proposed project, and the Town provided the most recent Archaeological Survey for the North Village in response. No other responses have been received.

The proposed Modified Project would construct a geothermal well system on-site. Site disturbance activities that may disturb archaeological, historical, and cultural resources would be similar to that identified in the 1999 SPEIR. Mitigation Measure 5.11-1e relating to archaeological/historical resources discoveries, and Mitigation Measure 5.11-2 pertaining to potential burial sites, would be applicable to the Modified Project. With the implementation of Mitigation Measures 5.11-1e and 5.11-2, potential impacts pertaining to cultural and tribal cultural resources in this regard would not increase, compared to that analyzed in the 1999 SPEIR. Thus, no new impacts are identified for the Modified Project and no new mitigation measures are required.

Mitigation Program

The following measures from the certified 1999 SPEIR would also be applicable to the proposed project. Any modifications to the original measures are shown in strikethrough for deleted text and new, inserted text is underlined.

Applicable Mitigation Measures

1999 SPEIR

- 5.11-1e In the event that a material of potential cultural significance is uncovered during grading activities on the project site, all grading in the area of the uncovered material shall cease and the project ~~applicant~~operator shall retain a professional archaeologist to evaluate the quality and significance of the material. Grading shall not continue in the area where a material of potential cultural significance is uncovered until resources have been completely removed by the archaeologist and recorded as appropriate.
- 5.11-2 If human remains are discovered, work shall cease and an appropriate representative of Native American Indian groups and the County Coroner shall both be informed and consulted, as required by State law.

3.12 ENERGY

The 1999 SPEIR did not evaluate energy resources as it was not required in the CEQA Guidelines at the time the EIR was prepared. However, Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Therefore, energy consumption impacts associated with buildout of the NVSP was previously analyzed in the 1999 SPEIR. Accordingly, the Town finds that energy is not “new information” under Public Resources Code Section 21166.

The proposed Modified Project would construct a closed-looped geothermal well system that would solely support the property as a source of renewable on-site energy. This renewable energy would be used to provide heat, electricity, hot water, de-icing, and other beneficial uses within the Limelight property. Thus, given the nature of the Modified Project, the proposed geothermal system would not result in substantial consumption of energy resources, but would rather promote



renewable energy generation. Although there would be electricity needed to power the proposed geothermal well system, this electricity used would be nominal and would be outweighed by the electricity generated during project operations. Therefore, the proposed Modified Project would not result in any new, different, or potentially adverse impacts to energy resources that were not previously considered and addressed in the 1999 SPEIR.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.

3.13 WILDFIRE

The 1999 SPEIR did not evaluate wildfire impacts, as it was not required in the CEQA Guidelines at the time the EIR was prepared. Therefore, the proposed Modified Project's impacts, as currently proposed, is discussed below.

According to the California Department of Forestry and Fire Protection *Mono County Fire Hazard Severity Zones in LRA Map*, the project site is not located within a State Responsibility Area (SRA) nor is it classified as a very high fire hazard severity zone.⁵ However, it is acknowledged that the site is situated within a "Locally Responsible Area Moderate" fire hazard zone.⁶ The proposed Modified Project would not result in an adverse effect which could impede emergency evacuation routes serving the Town. Additionally, project modifications would be subject to review by CalGEM to ensure the project complies with fire safety requirements. The Modified Project, along with the Limelight Hotel development, would also be subject to payment fees that are currently imposed by the Town and used to fund required fire suppression equipment. Further, the Modified Project would be consistent with the design and safety standards set forth in the permits for the drilling, operation, and permanent sealing and closure that would be submitted to CalGEM. Compliance with fire requirements, emergency vehicle access, and payment of required fees would reduce potential impacts associated with the Modified Project to less than significant levels. As such, impacts regarding wildfire would be less than significant.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.

3.14 HAZARDS/HAZARDOUS MATERIALS

The 1999 SPEIR determined the future buildout of the NVSP would result in less than significant impacts associated with potential accidental releases of hazardous materials that may be present in on-site soils, and accidental conditions involving the use, transport, or disposal of hazardous materials. The 1999 SPEIR also determined that the future buildout of the NVSP would not result in hazardous impacts pertaining to an airport land use plan or a nearby private airstrip, nearby school, and wildland fires. Similarly, the proposed modifications analyzed in the Mammoth Hillside Addendum were also determined to result in no new impacts.

⁵ California Department of Forestry and Fire Protection, *Mono County Fire Hazard Severity Zones in LRA Map*, https://osfm.fire.ca.gov/media/6724/fhszl06_1_map26.pdf, September 21, 2007, accessed April 4, 2022.

⁶ Ibid.



The proposed modifications would result in similar grading and construction activities to what was previously analyzed in the 1999 SPEIR and the Mammoth Hillside Addendum. However, the proposed Modified Project would involve drilling and operations of a geothermal well system on-site. The proposed Modified Project would be required to comply with existing State and local laws and regulations, including implementation of required BMPs. The proposed drilling, operation, and permanent sealing and closure (plugged and abandonment) of geothermal wells are required to comply with CalGEM's *Statutes & Regulations*, dated January 2020, or as amended at the time of future permits. BMPs would include an adequate drilling fluid program, casing program, spill contingency plan, appropriate well identification signage, installation of well safety devices, keeping of well records, ongoing testing activities during construction and operations, and appropriate plugging and abandonment at closure. Further, as part of Municipal Code Section 8.24.050(F)(10), geothermal drilling waste and cuttings shall be disposed of in a manner approved by the Lahontan Regional Water Quality Board. With the implementation of these BMPs and compliance to stated and regional regulations, potential impacts pertaining to the use, transport, or disposal of hazardous materials and/or the risk of upset or accidental conditions would be less than significant. As such, hazards and hazardous materials impacts associated with the proposed Modified Project would not increase, compared to that analyzed in the Mammoth Hillside Addendum and the 1999 SPEIR.

Mitigation Program

No mitigation measures were found to be feasible in the 1999 SPEIR for this topic area, and no new measures are feasible.



4.0 DETERMINATION/ADDENDUM CONCLUSION

As detailed in the analysis presented above, this Addendum supports the conclusion that the proposed addition of the geothermal well system to the approved Limelight Hotel development would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects. No new information has become available and no substantial changes to the circumstances (under which the project was being undertaken) since the certification of the 1999 SPEIR and the Mammoth Hillside Addendum has occurred. There are no new measures required and no new alternatives available that would substantially reduce the environmental effects beyond those previously described in the certified 1999 SPEIR and the Mammoth Hillside Addendum.



5.0 ADDENDUM PREPARATION SOURCES/REFERENCES

California Environmental Quality Act, 1970, as amended, Public Resources Code Sections 21000-21189.

California Department of Conservation, Geologic Energy Management, *Statutes and Regulations*, January 2020.

California Department of Forestry and Fire Protection, *Mono County Fire Hazard Severity Zones in LRA Map*, https://osfm.fire.ca.gov/media/6724/fhszl06_1_map26.pdf, September 21, 2007, accessed on April 4, 2022.

Geothermal Resource Group, *Limelight Hotel Geothermal Drilling Study*, June 2021.

Google Earth Maps, <http://maps.google.com>, accessed April 2022.

Netro Online, *Historical Aerials*, <https://www.historicaerials.com/viewer>, accessed April 5, 2022.

Town of Mammoth Lakes, *Final Environmental Impact Report North Village Specific Plan*, February 1991.

Town of Mammoth Lakes, *North Village Specific Plan*, 2000 (amended January 19, 2005, May 21, 2008, October 7, 2009, September 17, 2014, and December 3, 2014).

Town of Mammoth Lakes, *North Village Specific Plan Environmental Impact Report Addendum*, May 1994.

Town of Mammoth Lakes, *Subsequent Program Environmental Impact Report for the North Village 1999 Specific Plan Amendment*, October 13, 2000.

Town of Mammoth Lakes, *Town of Mammoth Lakes Municipal Code*, codified through Ordinance No.21-07, passed June 2, 2021.

Town of Mammoth Lakes, *Town of Mammoth Lakes General Plan 2007*, dated May 2007.

United States Department of the Interior Bureau of Land Management, *Final Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States*, October 2008.



APPENDIX A

CEQA Limelight Hotel Conformance Checklist



CEQA Limelight Hotel Conformance Checklist

Unit	Mammoth Hillside Addendum Project	Limelight Hotel ¹
Total Site Area	6.9 acres (4.0 acres for Phase 1) (2.9 acres for Phase 2)	4.0 acres for Phase 1
Maximum Allowable Density	404 rooms (320 rooms for Phase 1)	236 rooms
Maximum Site Coverage PR Zone and SL zone combined	Maximum site coverage 119,678 sq.ft.	110,450 sq.ft. = 63.2%
Maximum Building Floor Area	601,170 square feet (excluding structure parking) (348,000 square feet for Phase 1)	185,754 feet (excluding structure parking) ¹
Maximum Permitted Building Height ^{2,3,4,5}	75 feet ²	75 feet, 8 inches (roof plane) ² 8,150 elevation ³
Maximum Projected Height ^{2,3}	90 feet ³ 8,135 elevation ³	109 feet, 8 inches (highest point of roof) ³ 8,150 elevation ³
Parking Garage Height	Maximum 20 feet above natural grade	20 feet ⁶
Setbacks ⁷		
Lake Mary Road/Main Street		
0-24 feet	10 feet	60 feet
25-34 feet	20 feet	100 feet
35-54 feet	30 feet	100 feet
55 feet +	40 feet	100 feet
Canyon Boulevard Realignment		
0-24 feet	10 feet	10 feet
25-34 feet	20 feet	40 feet
35-54 feet	30 feet	40 feet
55 feet +	40 feet	40 feet



Unit	Mammoth Hillside Addendum Project	Limelight Hotel ¹
Specific Plan Boundaries		
0-24 feet	10 feet	50 feet
25-34 feet	20 feet	100 feet
35-54 feet	30 feet	100 feet
55 feet +	40 feet	100 feet

Notes:

¹ Limelight Hotel Project consists of Phase I development only.

² 80 feet max subject to additional review and approval per NVSP Table 4.

³ No building improvements constructed within the restricted area described on exhibits b and b-i (the "north restricted area") shall exceed an elevation of 8,130 feet above sea level. For purposes of the recorded covenant, "sea level" shall be determined based on the current datum used by the town of mammoth lakes as of the effective date of the covenant. Notwithstanding the foregoing, (i) for any building, an area of roof length up to but not more than twenty (20) percent of the length of the building, when measured in a straight line along the building's longest-axis at the buildings' first level above grade, may be constricted between 8,130 feet and **8,135** feet above sea Level. If a building has two or more levels which could be considered the "first level above grade", the first level above grade with the longest axis shall be the level to be measured; and (ii) antennae, chimneys, turrets, cupolas and similar roof appurtenances may have a maximum elevation between **8,130** feet and **8,135** feet above sea level.

⁴ NVSP Section 5.c, For buildings that cross a land use district boundary after merging parcels, the highest permitted and projected heights shall apply to the entire building, providing the majority of building area is within the most liberal district, subject to design review considerations as applied through the design review process. ⁵ NVSP Section 5.d, ...When all or a portion of a building sits above a parking garage, or when buildings front on the plaza in the PR district, building height shall be measured from the garage roof elevation or plaza elevation at the perimeter of the building.

⁶ NVSP Section 5.e, The plaza and parking garages shall be no more than 20 feet above natural grade at any point and shall be stepped, faced with storefronts or similarly treated to diminish the exposed height.

⁷ No setbacks required on internal side and rear lot lines of PR District.



APPENDIX B

Mammoth Hillside

Mitigation Monitoring and Reporting Program



MITIGATION MONITORING AND REPORTING CHECKLIST

1999 SPEIR Mitigation Number	Mitigation Measure	Implementation Responsibly	Timing	Monitoring Responsibility	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
AETHETICS/LIGHT AND GLARE							
5.3-1(c)	Contour grading shall be used to blend manufactured slopes into the natural terrain. Grading shall be minimized to preserve existing landform and vegetation to the greatest extent possible.	Operator/ Civil Engineer	Prior to Issuance of a Grading Permit	Community and Economic Development Department Planning Manager			
5.3-1(d)	The landscape design for the site shall maximize the use of existing vegetation, and where new plants are introduced, they shall include, and/or blend with, plants native to the Mammoth Lakes environment. Landscape plans for the site shall be completed by a certified landscape architect.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.3-1(e)	To the maximum extent practical, native trees and landscape shall be concentrated around all structures located on the project site.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.3-1(f)	Grading techniques shall be used which minimize the areas of disturbance and shall incorporate such methods as decorative retaining walls rather than slopes to minimize the area of disturbance.	Operator/ Civil Engineer	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.3-1(j)	Staging locations shall be indicated on project Building Permit and Grading Plans and shall be subject to review by the Town of Mammoth Lakes Community Development Director in accordance with Municipal Code requirements.	Operator	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.3-3(a)	The Design Guidelines shall require that all exterior lighting be designed and located so as to avoid intrusive effects on adjacent residential properties	Operator	Prior to Issuance of a Building Permit	Community and Economic Development			



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	and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the degree feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses.			Department Planning Manager			
5.3-3(b)	Lighting used for various components of the development plan be reviewed under North Village Specific Plan design guidelines which shall include review of light intensity levels, fixture height, fixture location, and design.	Operator	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.3-3(d)	Vegetative buffers shall be used to reduce light intrusion on residential development and on forested areas located adjacent to the project site.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
AIR QUALITY							
5.5-1(a)	In order to reduce fugitive dust emissions, each development project shall obtain permits, as needed, from the Town and the State APCD and shall implement measures during grading and/or construction of the individual development sites to ensure compliance with permit conditions and applicable Town and APCD requirements. a) The individual development projects shall comply with State, APCD, <u>and</u> Town, and Uniform Building Code dust control regulations, so as to prevent the soil from being eroded by wind, creating dust, or blowing onto a public road or roads or other public or private property. b) Adequate watering techniques shall be employed on a daily basis to partially	Operator/ Construction Contractor	Prior to Issuance of Grading or Building Permit/ During Construction	Public Works Director/ Designee			



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	mitigate the impact of construction-generated dust particulates. c) Clean-up on construction-related dirt on approach routes to individual development sites/improvements shall be ensured by the application of water and/or chemical dust retardants that solidify loose soils. These measures shall be implemented for construction vehicle access, as directed by the Town Engineer. Measures shall also include covering, watering or otherwise stabilizing all inactive soil piles (left more than 10 days) and inactive graded areas (left more than 10 days). d) Any vegetative ground cover to be utilized on the individual development sites/improvements shall be planted as soon as possible to reduce the amount of open space subject to wind erosion. Irrigation shall be installed as soon as possible to maintain the ground cover. e) All trucks hauling dirt, soil or other loose dirt material shall be covered.						
5.5-1(b)	To reduce the potential of spot violations of the CO standards and odors from construction equipment exhaust, unnecessary idling of construction equipment shall be avoided	Operator/ Construction Contractor	Prior to Issuance of a Grading or Building Permit/ During Construction	Public Works Director/ Community and Economic Development Department Planning Manager			
NOISE							
5.6-1(a)	Pursuant to Chapter 8.16.090.B.6 of the Town's Noise Ordinance Municipal Code, construction activities shall be limited to the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday and prohibited	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit and Building Permit	Public Works Director/ Building Official			



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	on Sunday or holidays, or as otherwise permitted by Chapter 8.16.090 <u>with the exception of the well drilling activities as approved by the Town Public Works Department.</u>						
5.6-1(b)	Construction equipment shall be muffled or controlled, if required, to meet Chapter 8.16 requirements for maximum noise generated by construction equipment. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Public Works Director			
5.6-1(c)	The construction contractor shall provide temporary sound barriers around pile driving <u>and well drilling</u> sites to the satisfaction of the Town Engineer should such activities take place in areas within 400 feet of existing residential units , if required to meet Chapter 8.16 requirements.	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Public Works Director			
GEOLOGY, SOILS, AND SEISMICITY							
5.7-1	Prior to issuance of grading or building permits, geotechnical studies shall be completed and their recommendations shall be incorporated in the project design, as stipulated in the Town's Safety Policy #26.	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit or Building Permit	Public Works Director			
5.7-2(a)	Soils and foundation analyses shall be approved by Town staff prior to final project design approval, as stipulated in the Town's Safety Policy #18. All measures required by the Town shall be incorporated into final grading and building plans.	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit or Building Permit	Public Works Director			
5.7-2(b)	The project applicant operator shall provide grading plans and receive approval from the Town Engineer. Said plans shall also show that new slopes within the project area are designed pursuant to slope requirements set forth within the Specific Plan and the standards of the Town's Municipal Code.	Operator/ Construction Contractor	Prior to Issuance of a Grading Permit	Public Works Director			



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5.7-2(c)	All work shall be overseen by a licensed Civil Engineer (CE), Certified Engineering Geologist (CEG), or similar appropriately qualified professional, who shall report to the Town Engineer in order to ensure the standards of the applicable Codes are met.	Operator/ Construction Contractor/ Civil Engineer/ Certified Engineering Geologist	Prior to Issuance of a Grading Permit or Building Permit	Public Works Director			
5.7-4	A comprehensive Erosion and Sediment Transport Control Plan shall be prepared by the project applicant <u>operator</u> and approved by the Town Engineer prior to the issuance of any grading or building permits. The Plan shall be included in the project design, as stipulated in the Town's Safety Policy #18. The Plan shall also meet the requirements of the Regional Water Quality Control Board and the Town Municipal Code.	Operator/ Construction Contractor/ Civil Engineer	Prior to Issuance of a Grading Permit or Building Permit	Public Works Director			
5.7-6	The project applicant <u>operator</u> shall complete the geotechnical studies and incorporate their recommendations in the project design, as stipulated in the Town's Safety Policy #26. All structures shall be designed and built to at least the standards of UBC <u>the Current Building Code</u> Seismic Zone 4.	Operator/ Construction Contractor/ Civil Engineer/ Certified Engineering Geologist	Prior to Issuance of a Grading Permit or Building Permit	Public Works Director			
5.7-7	Each The project <u>operator</u> shall cooperate with the Town in designing and disseminating information to assist citizens and visitors in responding to emergency situations that are likely to arise (Safety Policy #31). All structures shall be designed and built to at least the standards of UBC Seismic Zone 4.	Operator	Prior to Issuance of a Grading Permit or Building Permit/ During Construction/ During Operations	Community and Economic Development Department Planning Manager			



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HYDROLOGY AND DRAINAGE							
5.8-1(b)	A more complete hydrology analysis for design purposes shall be required to be completed to estimate the amounts of runoff which will be required to be retained on-site for each development. The analysis shall be approved prior to issuance of a grading permit.	Operator/ Civil Engineer	Prior to Issuance of a Grading Permit	Public Works Director			
5.8-1(c)	The following water conservation procedures shall be incorporated into project elements where feasible: • Landscape with low water-using plants; • Install efficient irrigation systems that minimize runoff and evaporation and maximize the water that will reach the plant roots, such as drip irrigation, soil moisture sensors, and automatic irrigation systems; and • Use pervious paving material whenever feasible.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.8-2(a)	An Erosion and Sediment Control Plan shall be prepared by the project proponents of individual development projects prior to issuance of grading permits. The Plan shall be reviewed and approved by the Town of Mammoth Lakes and the Lahontan Regional Water Quality Control Board and be in accordance with the erosion control guidelines as contained in the <i>Mammoth Lakes SDMP</i> and be in compliance with the Water Quality Control Plan (for the Lahontan Region [Basin Plan]). General grading activities, including those related to demolition and construction, would be regulated by the Uniform <u>Current</u> Building Code and Town of Mammoth Lakes Grading Ordinance. The required Erosion and Sediment Control Plan shall outline methods that will	Operator/ Civil Engineer	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager/ Lahontan RWQCB			



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	be implemented to control erosion and sediment transport from graded or cleared portions of the individual redevelopment/ improvement sites.						
5.8-2(d)	The Report of Waste Discharge shall contain a description of, and time schedule for implementation, for both the interim erosion control measures to be applied during project construction, and short- and long-term erosion control measures to be employed after the construction phase of the project. The descriptions shall include appropriate engineering drawings, criteria, and design calculations. The report guidelines are as follows: • Drainage collection, retention, and infiltration facilities shall be constructed and maintained to prevent transport of the runoff from a 20-year, 1-hour design storm from the project site. A 20-year, 1-hour design storm for the Mammoth Lakes area is equal to 1.0 inch (2.5 cm) of rainfall in 1 hour. • Surplus or waste materials shall not be placed in drainage ways or within the 100-year flood plain of surface waters. • All loose piles of soil, silt, clay, sand, debris, or earthen materials shall be protected in a reasonable manner to prevent any discharge to waters of the State. • Dewatering shall be done in a manner so as to prevent the discharge of earthen materials from the site. • All disturbed areas shall be stabilized by appropriate soil stabilization measures by October 15 of each year.	Operator/ Civil Engineer	Prior to Issuance of a Building Permit/ Operations	Community and Economic Development Department Planning Manager/ Lahontan RWQCB			



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	- All work performed between October 15th and May 1st of each year shall be conducted in such a manner that the project can be winterized within 48 hours. - Where possible, existing drainage patterns shall not be significantly modified. - After completion of a construction project, all surplus or waste earthen material shall be removed from the site and deposited at a legal point of disposal. - Drainage swales disturbed by construction activities shall be stabilized by the addition of crushed rock or riprap, as necessary, or other appropriate stabilization methods. - All nonconstruction areas shall be protected by fencing or other means to prevent unnecessary disturbances. - During construction, temporary erosion control facilities (e.g., impermeable dikes, filter fences, hay bales, etc.) shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff. - Revegetated areas shall be regularly and continually maintained in order to assure adequate growth and root development. Physical erosion control facilities shall be placed on a routine maintenance and inspection program to provide continued erosion control integrity. - Where construction activities involve the crossing and/or alteration of a stream						



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	channel, such activities shall be timed to occur during the period in which streamflow is expected to be lowest for the year.						
BIOLOGICAL RESOURCES							
5.9-2(a)	The project shall preserve existing native vegetation to the maximum extent feasible. Landscaping shall emphasize the use of native plants indigenous to the Jeffrey Pine-Fir Forest plant community. Whenever possible, native plants used on-site shall be selected for their replacement habitat value. Site designs shall be subject to the Design Review procedure of the Town	Operator/ Certified Landscape Architect	Prior to Issuance of a Grading Permit or any Construction Permit that would impact existing vegetation	Community and Economic Development Department Planning Manager			
5.9-2(b)	Landscape materials shall be used that allow for the protection and preservation of existing trees. Native plant species, preferably from seed or cuttings from local plants, shall be used where possible. The Landscape Plan shall be approved by the Planning Director prior to issuance of any construction permits.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.9.2(c)	Irrigation, fertilization, and other landscape management practices shall be designed to minimize effects on existing trees and other vegetation.	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			
5.9.2(d)	To the extent possible, native vegetation shall be retained and protected during construction. A Revegetation Plan, prepared by a qualified Landscape Architect and approved by the Town of Mammoth Lakes, shall be completed prior to the commencement of the project which will describe in detail the species of trees and shrubs which will be used, where they will be planted, and in what numbers, and the methods of planting and	Operator/ Certified Landscape Architect	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager			



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	maintenance which will ensure successful growth. It shall include a monitoring program to follow the progress of new plantings and ensure replacement of unsuccessful plants. Landscaping with native species of trees and shrubs shall be undertaken to enhance wildlife use of cleared areas.						
5.9.2(e)	Under AB3180, once mitigation plans designed to off-set habitat losses are approved and the specific areas where they will be located are identified, the proponent must provide a program to monitor their progress for a period of time (usually three to five years) deemed sufficient by the Planning Director to assure their successful development. Adequate security shall be deposited with the Town to ensure successful implementation of this measure.	Operator/ Monitor	Operations (3-5 years)	Community and Economic Development Department Planning Manager			
5.9.2(f)	All construction activities, including movement and storage of vehicles and the storage of building and other materials, shall be confined to areas slated for development. Care shall be taken during construction to avoid damage to vegetation and habitats not directly involved in project construction. Any vegetation inadvertently damaged outside of the area slated for development shall be replaced on a one-to-one basis on- or off-site. Off-site replacement shall require the approval of the Town Planning Director.	Operator/ Construction Contractor	Prior to Issuance of a Building or Grading Permit/ During Construction	Public Works Director/ Community and Economic Development Department Planning Manager			
5.9.2(g)	To prevent erosion and siltation into intermittent creeks, areas cleared of vegetation, fill or other materials shall be stabilized after clearing and grading. Hay bales, silt screens or similar devices shall be used to prevent siltation. To further protect the drainage system and prevent erosion, all grading and construction shall be completed during the summer months, or after October 15 of each year be	Operator/ Construction Contractor	During Construction	Public Works Director/ Community and Economic Development Department Planning Manager			



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	in a condition to be stabilized within 48 hours should inclement weather threaten.						
5.9.2(h)	A Forest Condition Survey shall be conducted by a professional forester and approved by the Town of Mammoth Lakes, prior to the commencement of each individual development project. All trees greater than 12-inches DBH (Diameter breast height (54 inches above ground)) and significant stands on each project site shall be mapped prior to issuance of grading permits or clearing. A registered forester or arborist shall then determine the age and condition of these trees and whether they should be retained or removed based upon health and visual significance of the trees, except for removal required by approved improvements. Once this determination is made, those trees shall be retained and integrated into the design of each project. A program of specific protection measures shall be prepared by the developer and approved by the Town prior to issuance of any construction permits (e.g., construction fencing, grading controls, grading design, etc.). Any trees removed unavoidably by each final project approval shall be in accordance with Town policies. Off-site replacement shall require approval by the Town's Planning Director.	Operator/ Construction Contractor/ Professional Forester or Arborist	Prior to Issuance of Grading Permit or Clearing/ Prior to Issuance of any Construction Permits	Public Works Director/ Community and Economic Development Department Planning Manager			
5.9.2(i)	Slash generated from construction or thinning operations shall be hauled from the site concurrently with the operation to prevent a breeding site for IPS (bark beetle). Logs shall be removed from the site as soon as possible.	Operator/ Construction Contractor	Prior to Issuance of a Building Permit/ During Construction	Public Works Director/ Community and Economic Development Department Planning Manager			
5.9.2(j)	Construction and site development, such as grading and trenching, shall be prohibited within the dripline of retained trees. Equipment shall not be stored or	Operator/ Construction Contractor	Prior to Issuance of a Building	Public Works Director/ Community and Economic			



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	driven under trees. Grading shall not cover the ground surface within the dripline of existing trees. Grading limits shall be clearly defined and protected.		Permit/ During Construction	Development Department Planning Manager			
CULTURAL RESOURCES							
5.11-1(e)	In the event that a material of potential cultural significance is uncovered during grading activities on the project site, all grading in the area of the uncovered material shall cease and the project applicant operator shall retain a professional archaeologist to evaluate the quality and significance of the material. Grading shall not continue in the area where a material of potential cultural significance is uncovered until resources have been completely removed by the archaeologist and recorded as appropriate.	Operator/ Construction Contractor/ Professional Archaeologist	During Construction	Community and Economic Development Department Planning Manager			
5.11-2	If human remains are discovered, work shall cease and an appropriate representative of Native American Indian groups and the County Coroner shall both be informed and consulted, as required by State law.	Operator/ Construction Contractor/ Professional Archaeologist	During Construction	Community and Economic Development Department Planning Manager			